Stereo Review's

$2.95

STEREO DIRECTORY & BUYING GUIDE® 1980

COMPLETE BUYING INFORMATION ON OVER 2000 MODELS

RECEIVERS • TURNTABLES • CARTRIDGES
TAPE DECKS • SPEAKER SYSTEMS
AMPLIFIERS • CAR STEREO

BONUS

- **HOW TO BUY, UPGRADE, AND MAINTAIN YOUR MUSIC SYSTEM**

Plus:

"Super" Discs

0 14024 14270 05
Stereo Directory

FROM DISCWASHER®

DiscKit™
Record Ecology from Discwasher

The DiscKit is total record care in lifetime storage. The DiscKit combines essential Discwasher record care products in a beautifully milled walnut tray with dustcover.

Organized Record Ecology

DiscKit includes:
— the Discwasher D3 Record Cleaning System
—the DC-1 Pad Cleaner
—the Zerostat Anti-Static Instrument
—the SC-1 Precision Stylus Cleaner

All mounted in the Discorganizer™ *, a walnut tray with smokey dustcover, which stores your Discwasher products in an extremely efficient and space-conservative manner. The Discorganizer also has spaces for an additional headshell, screwdrivers, etc.

Financial Ecology

DiscKit is a purchase of Discwasher ultimate record care products at a substantial savings over the same products purchased separately. For approximately the cost of eight quality records, you can get the DiscKit to preserve your entire collection.

*Discorganizer (walnut storage tray with dustcover) is available as a separate product.

DiscKeeper™
Precision Record Rack

A Proper Resting Place

DiscKeeper is an innovative storage system with capacity to hold approximately 50 valuable albums (your "active list" of recordings) with an unprecedented degree of convenience and safety. The DiscKeeper™ compression sections pull forward so that you can "page through" all of the stored albums, as in a record store, for front-cover examination and album retrieval.

Warp Not, Waste Not

Each storage section of the DiscKeeper has a calculated compression bar to hold records perfectly flat and upright. This compression system is to eliminate "shell warp" which is the warp caused by loosely storing albums at approximately 4° or greater of "lean" which may add permanent warp to the discs. By using the stored albums as a "cushion" and by having a very gentle compression system, DiscKeeper holds the albums perfectly upright and flat and without the possibility of warpage.

Quality on Your Wall

DiscKeeper is made of solid walnut, and custom-formed anodized aluminum in pleasing shades of natural wood and matte black. Simple wall-mounting hardware is included with each DiscKeeper, and creative applications will allow the storage system to be installed in multiples, on audio equipment racks, or attached back-to-back for greater capacity.

V.R.P.™
Valuable Recording Protector Record Sleeves

V.R.P.™ Record Sleeves are conventional in size and use. They simply do more than other record sleeves. V.R.P. benefits justify your investigation.

The V.R.P. Difference:

Smoothness. V.R.P. sleeves are extremely smooth for scratch-free record removal/replacement. They are significantly easier to use than paper or "polysleeves".

Oozeness. Most polysleeves and/or polylined paper sleeves show "stabilizer drift" where the economical additives in the plastic ooze onto records. V.R.P. sleeves are made of an incredibly stable material that protects, even under unusual conditions of heat and pressure, where polysleeves can gum the record surface and where paper sleeves will "texture" the record surface.

No static in store. V.R.P. sleeves are made of an anti-static material that reduces charge of records during storage, and most importantly causes minimal charge when the record is removed from the sleeve.

If your records are valuable, you should use the Discwasher V.R.P. Record Sleeves—protective inner sleeves that add to quality record life.

CIRCLE NO. 27 ON READER SERVICE CARD

SIX PROTECTORS

SC-1™
The Only Stylus Cleaner

The SC-1 is a stylus cleaning system with a precision, large diameter nylon brush and a magnifying mirror which retract into a walnut case for storage.

The Naked Truth

Discwasher's research shows that when a record is played, the delicate diamond stylus accumulates a glazing, or coating, of contamination and dust that is not apparent to the naked eye. The stylus then becomes a grinding, abrasive instrument rather than a precision tracking instrument. A dirty stylus becomes a serious threat to record life, as well as stylus life.

The Brush System

To clean a stylus properly, the brush must be stiff enough to remove the subtle waxy coatings, but gentle enough to avoid damaging delicate cartridge assemblies. Discwasher advises against any use of alcohol, which is extremely dangerous to some stylus diamond adhesives, and which also will harden the crucial rubber polymers which hold the cantilever in position, and radically change cartridge performance.

The SC-1 Stylus Cleaner uses nylon bristles bound together in a specific, calculated density to provide thousands of cleaning tip surfaces and proper stiffness for convenient and correct cleaning operations. Two drops of D3 fluid give extra cleaning action to the SC-1.

To See What You've Done

The SC-1 also has a magnifying mirror opposite the brush to inspect stylus for cleanliness, for lint particles in the cartridge opening, and to check cartridge/headshell leads without removing the headshell.

Zerostat®
Anti-Static Device

Zerostat is a truly effective, safe instrument for audiophiles and photographers to eliminate static on virtually any surface. With Zerostat, there are no clogging residues, no cartridges to replace, nothing to plug in, and no radioactivity.

The Charges of Life

All plastic records, dustcovers, and even special metal surfaces develop static charges with use. There are many ways to deal with these charges. Conductive liquid coatings have an extremely high risk on delicate vinyl recordings with clogging deposition and possible vinyl modification.

The Zerostat Instrument neutralizes surfaces of any charge by showering a large working area with positive charges on trigger squeeze, and with negative charges on trigger release. The sum is neutral. No buffing is needed, no coating is present, and no chemical modification takes place.

Try Our Piezo

The Zerostat Instrument operates by a dual piezo capsule pressurized by a patented roller cam system that forces electron coronae to be emitted from the gold-plated pin inside the insulated barrel section. A single pin is superior to double pin emitters for ion dispersion and "range" of delivery. Zerostat contains an internal safety "arc" system that limits output voltage to functional and yet safe limits. This internal arcing system (causing occasional "clicking" sounds) also allows the piezo crystals to last longer while giving maximum output.

Under the Cover

Tonearms and dustcovers have a mutual attraction because of electrostatic forces generated by the plastic surfaces and metal parts. A tonearm often can be lifted off the record by rubbing the dustcover. A simple squeeze and release of the Zerostat Instrument directed toward the dustcover will cause the static charge to be eliminated, and the tonearm/cartridge will be playing the record at the set stylus force. The Zerostat is a simple, easy and safe solution to static problems and static attraction—and very economical.

D'Stat®II
Turntable Mat

D'Stat II is a soft, felt-like turntable mat which actually eliminates electrostatic charges on the turntable, and which buffers the resonance interaction of records and standard mats.

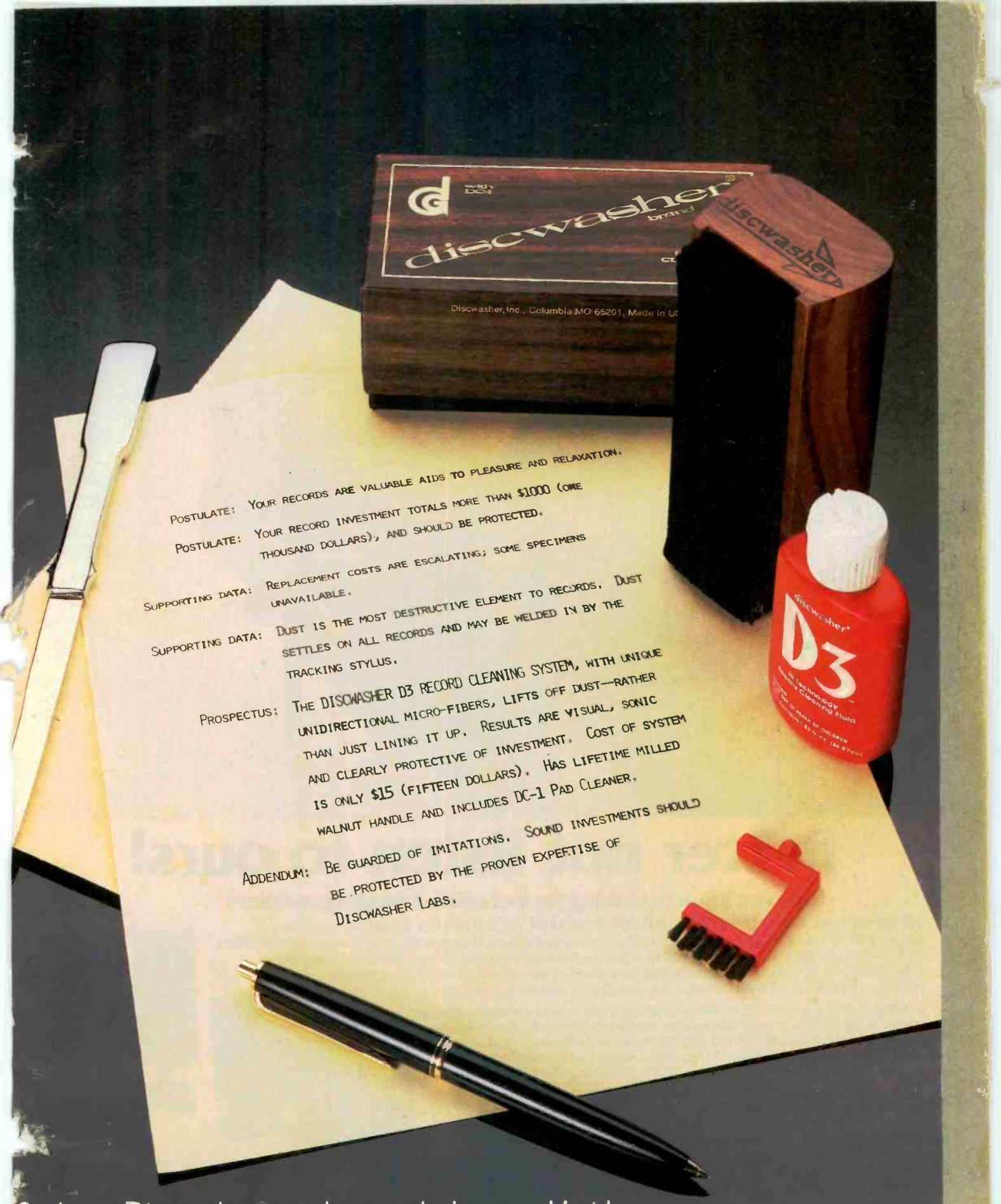
Tested as The Best

The Swedish Test Institute reported that the D'Stat II is the best of four accessory turntable mats tested in the reduction of electrostatic charges on the turntable. The uniquely conductive fibers of D'Stat II actually hold polar-charged electrons, and these internal fibers can therefore donate and receive charges whereas other turntable mats only act as conductors to pass around (equalize) static charges.

A Delicate Cushion

Recent research has shown that a cartridge sets up sonic resonances between a playing disc and a hard turntable surface. In addition, transfer of floor vibration through the turntable is magnified by the turntable surface to the disc and causes additive "flavors" of dishonest sound to enter the playback chain. D'Stat II buffers these subtle warps and allows the true characteristics of an audio system to be perceived.

PROTECT YOUR INVESTMENT WITH DISCWASHER®



POSTULATE: YOUR RECORDS ARE VALUABLE AIDS TO PLEASURE AND RELAXATION.

POSTULATE: YOUR RECORD INVESTMENT TOTALS MORE THAN $1000 (ONE THOUSAND DOLLARS), AND SHOULD BE PROTECTED.

SUPPORTING DATA: REPLACEMENT COSTS ARE ESCALATING; SOME SPECIMENS UNAVAILABLE.

SUPPORTING DATA: DUST IS THE MOST DESTRUCTIVE ELEMENT TO RECORDS. DUST SETTLES ON ALL RECORDS AND MAY BE WELDED IN BY THE TRACKING STYLUS.

PROSPECTUS: THE DISCWASHER D3 RECORD CLEANING SYSTEM, WITH UNIQUE UNIDIRECTIONAL MICRO-FIBERS, LIFTS OFF DUST—RATHER THAN JUST LINING IT UP. RESULTS ARE VISUAL, SONIC AND CLEARLY PROTECTIVE OF INVESTMENT. COST OF SYSTEM IS ONLY $15 (FIFTEEN DOLLARS). HAS LIFETIME MILLED WALNUT HANDLE AND INCLUDES DC-1 PAD CLEANER.

ADDENDUM: BE GUARDED OF IMITATIONS. SOUND INVESTMENTS SHOULD BE PROTECTED BY THE PROVEN EXPERTISE OF DISCWASHER LABS.

Seek out Discwasher® products at dealers worldwide who are interested in preserving your musical portfolio.

discwasher, inc.
1407 N. Providence Rd.
Columbia, Missouri 65201

Bought expensive speakers?

Better not listen to ours!

However, if you're looking for incredible sounding speakers at an affordable price, by all means do! You will find that for less money than you planned on spending you can get much better sounding speakers than you dreamed you could ever afford. Polk Audio loudspeakers have received worldwide praise because people recognize that they offer remarkable value. Critical acclaim such as the following makes it clear why Polk speakers have become famous for offering the best possible sound for the money.

"Polk Audio is a small, Maryland-based company whose speakers enjoy an enviable reputation among audiophiles who would prefer to own such exotica as the Beveridge System 2SW-1 ($7000 per pair) or Pyramid Metronome ($5200 per pair) but don't have the golden wallets to match their golden ears!" ***The Complete Buyer's Guide to Stereo/Hi-Fi Equipment***

"Audio experts know that the price of a speaker is not always directly proportional to its quality. Nowhere at CES was that fact more dramatically demonstrated than in room 900 of the Pick Congress where the folks from Polk Audio of Baltimore were demonstrating their speaker line..." ***High Fidelity Trade News***

"They (Polk 10's) are a high definition speaker system deserving the very best associated electronics. And at their price, they are simply a steal!" ***Audio Advisor-Audiogram***

Monitor 5 Monitor 7 Monitor 10

Real-Time Array 12 Reference Monitor System

Polk Audio loudspeakers, starting around $125 each, are available at the world's finest hi-fi stores. Write us for complete information on our products and the location of the Polk Audio dealer nearest you.
Polk Audio Inc. 1205 S. Carey St., Baltimore, Md. 21230 Dept. B8
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Monitor Series Loudspeakers

INCREDIBLE SOUND-AFFORDABLE PRICE

Stereo Review's

STEREO DIRECTORY & BUYING GUIDE® 1980

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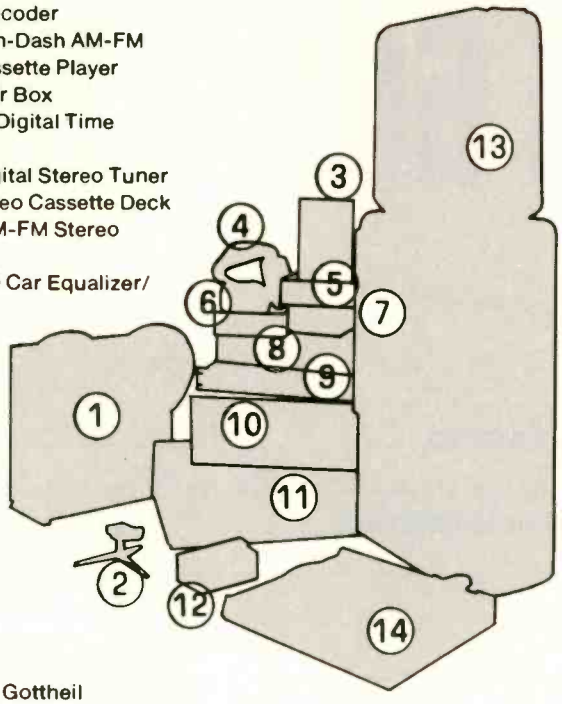
STEREO DIRECTORY & BUYING GUIDE is published annually by Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016. Philip B. Korsant, President; Furman Hebb, Executive Vice President; Philip Sine, Sr. Vice President and Secretary.

THE COVER

1. TEAC X-10R Open-Reel Tape Recorder
2. BEYER M818 Dynamic Microphones
3. ADS L300C Car Speaker
4. STAX SR-Sigma Electrostatic Earspeaker
5. dbx 21 Disc/Tape Decoder
6. CLARION PE-751B In-Dash AM-FM Stereo Receiver/Cassette Player
7. STAX SRM-1 Adapter Box
8. AUDIO PULSE 1000 Digital Time Delay System
9. NIKKO Gamma V Digital Stereo Tuner
10. EUMIG FL-1000 Stereo Cassette Deck
11. H.H. SCOTT 390R AM-FM Stereo Receiver
12. AUDIOVOX HCE-750 Car Equalizer/ Preamplifier
13. INFINITY Reference Standard 2.5 Speaker System
14. DUAL CS-731Q-60 Automatic Single-Play Turntable



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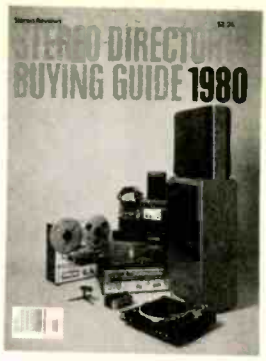

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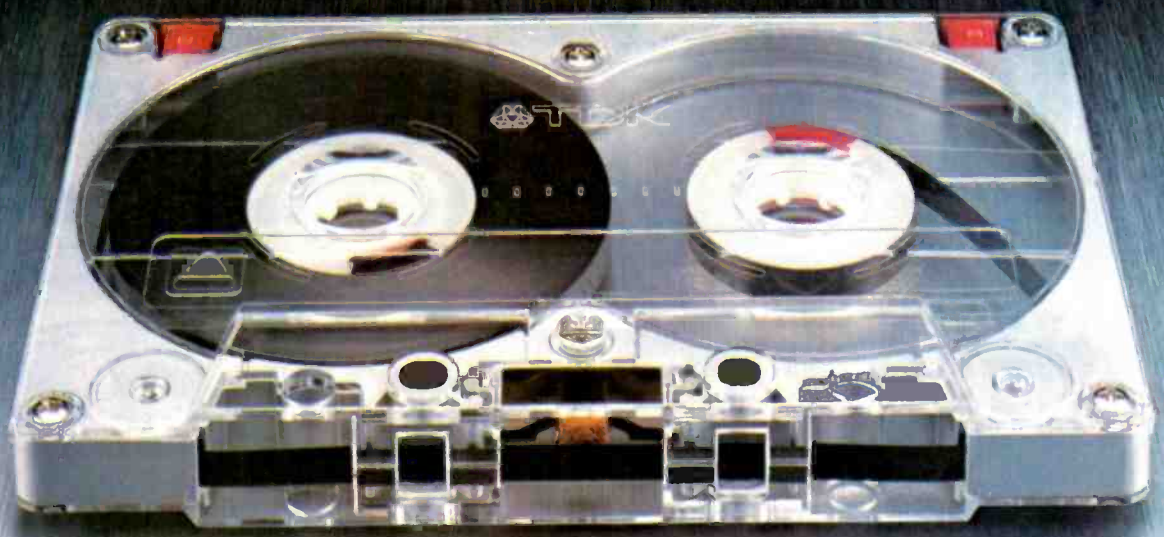
1980 STEREO DIRECTORY & BUYING GUIDE is published annually by the Ziff-Davis Publishing Company, One Park Avenue, New York, N.Y. 10016. Also publishers of Stereo Review, Popular Electronics, Electronic Experimenter's Handbook, Communications Handbook, and Tape Recording & Buying Guide.

Introducing TDK metal. The Music Mirror.



The era of metal particle tape has arrived. Metal-ready cassette decks are already in the stores, and more are on their way. There are also a number of metal cassettes on the market, and all of them have a high coercivity and remanence—their magnetic energy is roughly four times that of the best oxide tapes. But that does not mean that all metal cassettes are alike. Not by a long shot.

TDK's metal cassette, MA-R, looks, feels and performs like no other cassette. That's why we call it "The Music Mirror." We've used advanced manufacturing technology to solve the problems inherent in metal tape. If left untreated, metal particles oxidize upon contact with water vapor and oxygen in the atmosphere—they actually "rust." TDK has developed a unique way to coat each and every particle with a process that protects them from the atmosphere, even at the critical exposed edge of the tape. The result is a tape that is resistant to oxidation. In fact, the overall stability of MA-R is well within the limits that have been set for conventional cassettes. But superior tape is only part of MA-R's story. TDK's new Reference Standard Mechanism is so revolutionary in design and performance, that its influence will be felt for years to come.

For starters, there's the one-piece, die-cast metal main-frame. Metal is far more resistant to warpage than plastic, and unibody construction eliminates performance differences between the A and B sides. The frame and mechanism are sandwiched between two clear covers held in place by six computer-torqued, double-threaded locking screws that will not slip because of vibration.

MA-R's amazing mechanism is visible for all to see, thanks to a transparent slip sheet. Our unique double hub-clamp is an integral part of a strong and circular tape storage system. (MA-R's two clamps are color-coded red and black, as a visual reference).

Our newly-designed, seamless, water-wheel-type rollers rotate around stainless steel pins, which are micro-polished for circularity. Our new dual-spring pressure pad assembly allows for more flexibility, yet provides more horizontal support for uniform tape to head contact. MA-R even includes removable, replaceable erase-prevention lugs, a new standard in protection and flexibility.

Ask your TDK dealer to show you the new MA-R cassette. Hold it in your hands and feel its weight. Look at the ingenuity and precision of the shell and mechanism. Then listen to it perform in one of the new metal decks. All your senses will tell you that this isn't just another new cassette—it's one of the memorable audio products of our time. TDK Electronics Corp., Garden City, N.Y. 11530.

TDK.MA-R

The machine for your machine.

CIRCLE NO. 91 ON READER SERVICE CARD

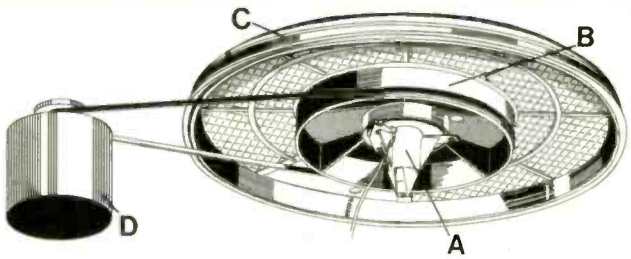
Philips Direct Con

Better than belt. Better than direct.

What's better than belt and direct drive? The best of both in one turntable. The specs of direct drive with the acoustic and mechanical isolation of a belt drive. Until now, unheard of. But now you can hear it all on Philips' exclusive, new Direct Control turntables.

How did Philips do it? The way you'd expect a worldwide leader in electronics to do it – with the world's best electronic technology.

PHILIPS' EXCLUSIVE DIRECT CONTROL ELECTRONIC DRIVE SYSTEM. In all Philips Direct Control turntables a minicomputer at the driving disc constantly checks and re-checks the platter speed. Instantly correcting for any variations in line voltage, frequency, pressure on the platter, temperature – even belt slippage. That's how all Philips Direct Control turntables keep the speed constant and accurate.



A 160 po e tacho generator (A) at the driving disc (B) electronically monitors the platter's (C) rate of rotation. The tachometer's d.c. signal is continuously compared to a stable d.c. reference signal. Any variations (+ or −) and the tachometer (A) instantly accelerates or slows the separate d.c. motor (D). Direct Control actually puts the driving disc into the electronic feedback loop for excellent speed stability.

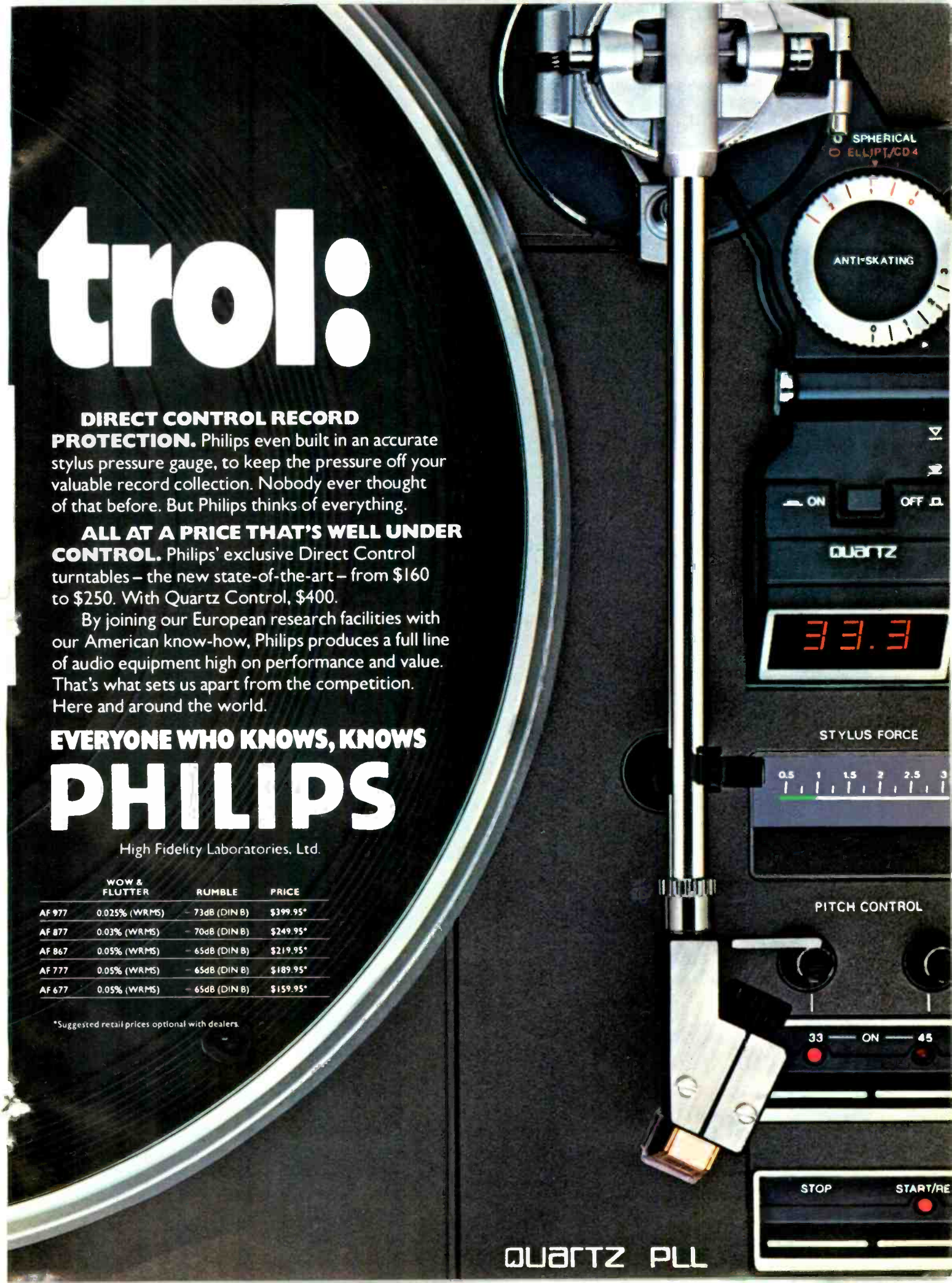
DIRECT CONTROL FREE-FLOATING SUBCHASSIS. Specially designed to give Philips Direct Control turntables superb acoustic and mechanical isolation. To cushion the platter, the tonearm – and protect your valuable records – from unexpected jolts, shocks and knocks. And to keep the rumble remarkably low.

DIRECT CONTROL = TOTAL TURNTABLE DESIGN. But Philips doesn't stop there. For us Direct Control is more than an exclusive new drive and suspension system – it's a completely new concept in total turntable design. Direct Control is specially designed straight, low mass, tubular aluminum tonearms, with very low friction bearings. To track even your most warped records accurately.

DIRECT CONTROL ELECTRONIC FEATURES. Direct Control means reliable electronic touch switches for silent, vibration-free operation. Accurate electronic pitch controls. Digital and LED indicators to monitor platter speed and identify functions. And photo-electronic sensors to initiate the automatic tonearm return.

CIRCLE NO 52 ON READER SERVICE CARD

hi fi
HIGH FIDELITY INTERNATIONAL



trol:

DIRECT CONTROL RECORD PROTECTION. Philips even built in an accurate stylus pressure gauge, to keep the pressure off your valuable record collection. Nobody ever thought of that before. But Philips thinks of everything.

ALL AT A PRICE THAT'S WELL UNDER CONTROL. Philips' exclusive Direct Control turntables – the new state-of-the-art – from $160 to $250. With Quartz Control, $400.

By joining our European research facilities with our American know-how, Philips produces a full line of audio equipment high on performance and value. That's what sets us apart from the competition. Here and around the world.

EVERYONE WHO KNOWS, KNOWS

PHILIPS

High Fidelity Laboratories, Ltd.

	WOW & FLUTTER	RUMBLE	PRICE
AF 977	0.025% (WRMS)	73dB (DIN B)	$399.95*
AF 877	0.03% (WRMS)	70dB (DIN B)	$249.95*
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AF 777	0.05% (WRMS)	65dB (DIN B)	$189.95*
AF 677	0.05% (WRMS)	65dB (DIN B)	$159.95*

*Suggested retail prices optional with dealers.

Have you ever heard all the FM you paid for? Even if you own a very sophisticated receiver, you rarely receive the FM it was built to deliver. The reasons boil down to the antenna. And that's why B·I·C invented The Beam Box, the first electronically directable FM antenna. Unlike the fixed dipole antenna, it can "face" all points on the compass. You simply tune to the signal's direction. And while it can't make a weak signal stronger, by discriminating it seems that it is. The Beam Box will virtually eliminate multipath reflections, and improve both stereo separation and signal-to-noise ratio. What's more, when you fine tune it to a signal's frequency, you tune out unwanted frequencies. For details write B·I·C|AVNET, Dept. B, Westbury, N.Y. 11590. **The Beam Box.®**

B I C™

Say "Bee-Eye-Cee". Think "Best-In-Components."

Series Z Changer-Turntables | Cassette Decks | SoundSpan™ Speaker Systems | The Beam Box.®

CIRCLE NO. 42 ON READER SERVICE CARD

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BCS, Bruce Creative Services Company
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continued on page 248

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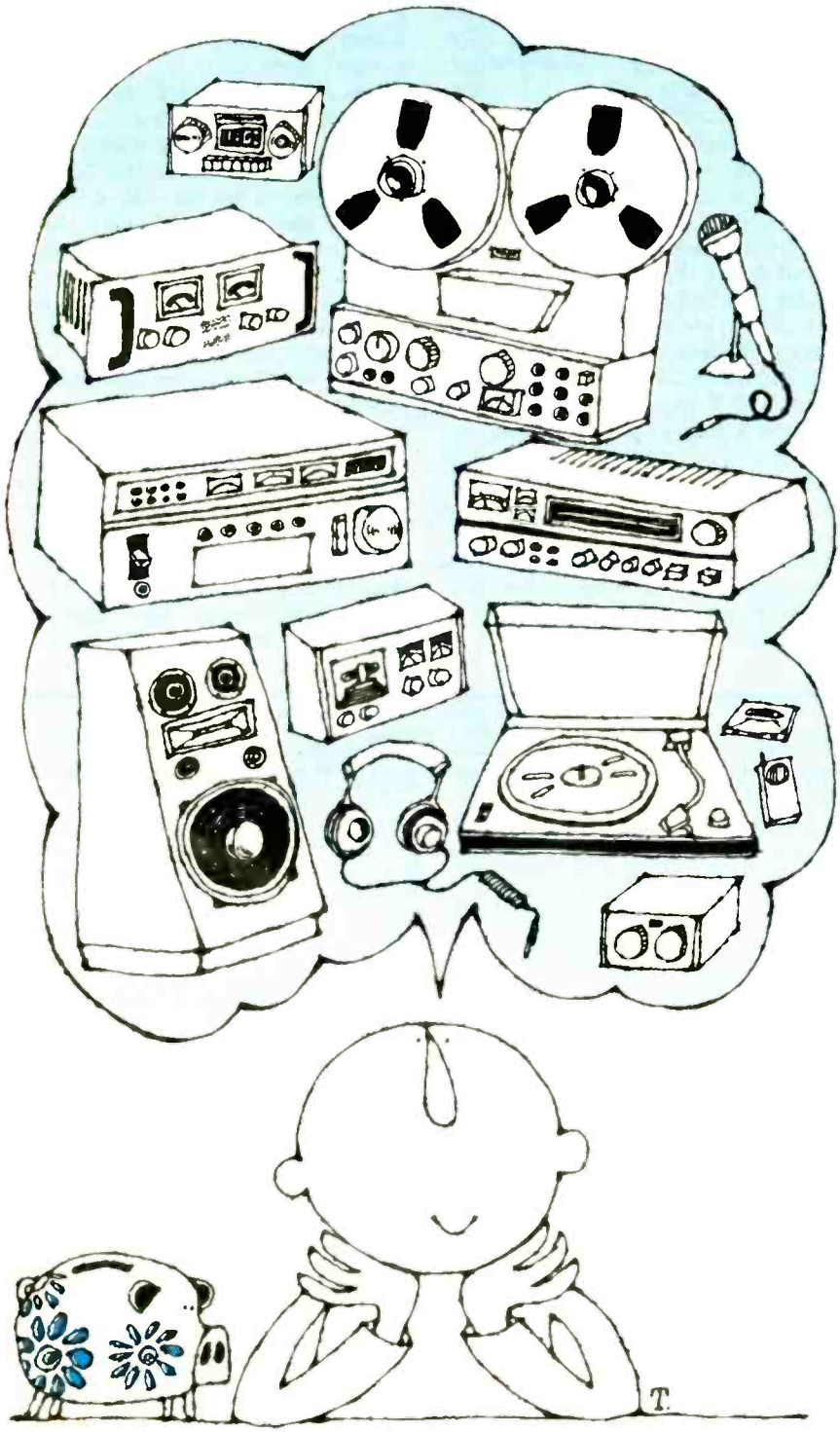
Getting Started in Component Stereo

Here is a systematic approach to making component buying decisions.



To the novice contemplating the purchase of his first stereo high fidelity component system, the thousands of units from which he must choose can easily seem like an ocean ready to overwhelm and confound him—and the number grows larger each year. To complicate the problem even more, the prices the consumer is likely to be substantial, a factor that makes the decision seem even more weighty. Let's say you've decided that a high-quality music-reproduction system belongs in your home, and you even have an idea how to spend in acquiring one. You are now faced with questions like: How do I begin? How many components do I need? What features are necessary and worthwhile, and which should I forgo in the interest of economy? Will I want to upgrade the system later (most new buyers eventually do)? If so, how can that be made easy to do?

In the next few pages, we will try to help you answer these questions. With what you will learn serving as a background and guide, and with the assistance of an informed, reputable audio dealer, you should be able to select a component system which will meet your requirements and provide you with many hours of enjoyable listening.

The Basic Components

Most first-time stereo component system buyers select a four-piece component system—two loudspeakers, a stereo receiver, and a turntable for playing records. The loudspeakers reproduce stereophonic sound with its principal spacial characteristics. The electrical power needed to activate or "drive" the loudspeakers is provided by a stereo receiver, which is really three components in one. It incorporates an AM-FM or FM tuner section which picks up the radio signals broadcast by stations in your area, a preamplifier-control section which handles the weak signals from your phonograph turntable system and selects such other program sources, and finally a power

amplifier that raises the program signals to power levels adequate for loudspeakers.

The turntable, too, is a compound component consisting of the platter and drive system, the tonearm, and the phonograph cartridge or "pickup" whose stylus (needle) traces the minute undulations contained in record grooves and translates them to electrical signals. All these subcomponents could be purchased separately, but most often the platter, drive system, and tonearm form an integrated unit and the pickup is added separately.

The subcomponents of a stereo receiver can be bought either as a separate tuner, preamplifier-control unit, and power amplifier, or as a tuner and an integrated amplifier that contains the preamplifier-control unit and the power amplifier. The receiver, with its all-in-one approach to the electronic section of a component system, nearly always turns out to be the least expensive route, but there are some trade-offs to be considered. Suppose you live in an area where there are few, if any, FM stations or FM programs to which you would care to listen. In that case, the unused FM tuner section may offset the economy of the receiver. You might be better off with an integrated amplifier, eliminating the radio entirely. Interconnections between components are standardized and fully compatible, so that if you later decide to add a tuner after all, you can easily do so. The dollar total of your purchases might then exceed that of a receiver, but you will have spread your buying over a longer period and will have purchased what you need only when you need it. Separate tuners, like receivers, can be had either with AM and FM reception capabilities or with FM only.

Another possible reason for choosing separates is that they lend themselves more readily to upgrading. For example, if your first system included a receiver with a 20-watt-per-channel power output rating and you decided to buy new loudspeakers that require much more power than that, you would have to trade in the entire receiver, even if its preamplifier-control and tuner sections were perfectly satisfactory. On the other hand, if you owned a separate tuner, a preamplifier control unit, and a power amplifier, only the power amplifier would have to be replaced.

Generally speaking, well-matched separates offer somewhat more control flexibility than do integrated receivers, and, in some cases, better sound quality, too. Over the past few years, however, the differences in sound quality have almost disappeared. As a first-time buyer, you are probably best off with a receiver—unless you have a cogent reason for choosing separates.

Controls, Features, and Tradeoffs. You may be awestruck by the profusion of controls and lights found on the front panels of receivers, preamplifiers and integrated amplifiers. These, which vary from model to model or from manufacturer to manufacturer, essentially serve two major functions. Some of them are used to alter tonal quality to suit the listener's tastes and acoustic requirements; others serve as a central switchboard, directing audio signals from records, tape, radio or even TV, to their destinations. Some controls may be invaluable to you, while others seem useless. All add to the cost.

Commonly found controls on receivers or integrated amplifiers are bass and treble tone controls. As their names suggest, they boost or cut either the bass frequencies or the treble frequencies of music. In most units, one control for bass and another for treble take care of both stereo channels. More expensive models may feature separate bass and treble controls for each stereo channel. Still more elaborate systems may add a third control which adjusts the intensity of mid-frequencies. A few receivers and amplifiers feature five or more separate controls, each governing just a small portion of the audible frequency spectrum. Some tone control systems also provide a means for varying the frequency at which the boost or cut begins.

The tape monitor circuit is controlled by another front-panel switch. It enables you to hook a tape deck into your system in such a way that you can listen to the program being recorded or to the playback of the recording. If you decide on a three-headed tape deck (which has separate record and playback tape heads), you may, using the tape monitor feature, also be able to monitor recordings a fraction of a second after they have been made. Almost all modern receivers have at least one tape monitor circuit, but some have two or even three. The additional circuit and its associated tape-copying switches will be useful if you plan to own a second tape deck (or can borrow one) and hope to be able to copy tapes from one machine to the next. Obviously, if you have no plans to own even a single tape deck you need not concern yourself with tape monitors.

All receivers, integrated amplifiers, and separate preamplifiers have a pair of phono input jacks or terminals that accept the cables from your turntable system. Some have *two* sets of phono inputs, which you might favor if you intend to ultimately own two record players: you might have a high quality single-play turntable system for your most precious records and serious listening, and a multiple-play record player, or changer, for more casual music use.

Other switches relate to record playing as well. For example, you may find a low-cut or infrasonic filter switch that cuts out any frequencies too low to be heard. More often than not, they are not part of the music but arise from turntable vibration or record warps. Eliminating these signals keeps your amplifier from wasting power on them and indirectly reduces distortion of reproduced music. High-cut filters reduce the audible effects of record surface noise, tape hiss and FM background noise, all of which are fairly concentrated at high frequencies. More often than not, such filters "throw away" some of the high frequency (treble) content in the music program and the noise. If your program sources are nice and quiet, a high-cut filter may not be important to you.

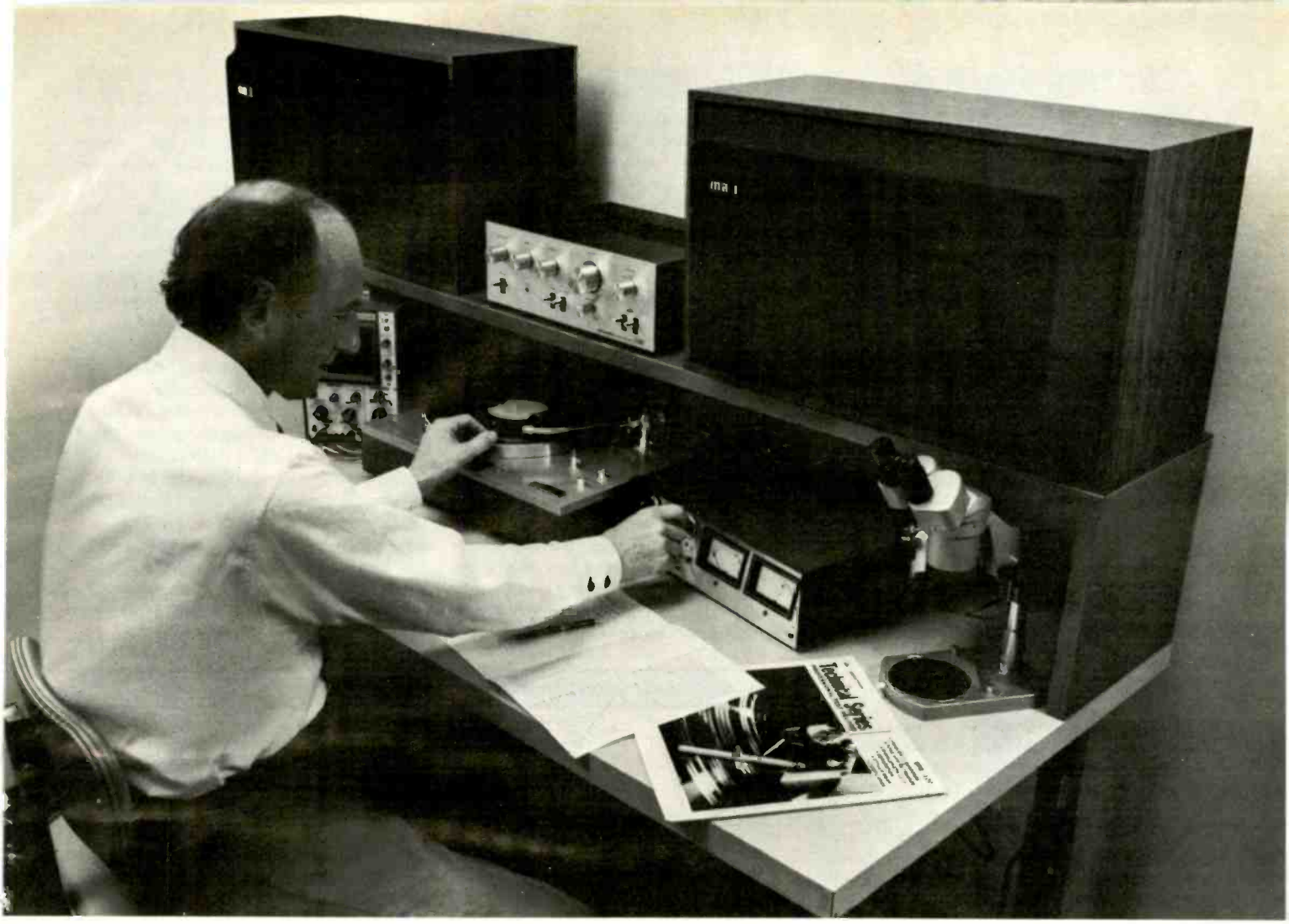
continued on page 16

TABLE I–GUIDE TO POWER-AMPLIFIER REQUIREMENTS FOR SPEAKER EFFICIENCY AND ROOM SIZE
Highest Sound Pressure Level (in dB) Possible for a Room of Indicated Volume (in cu. ft)

Amplifier Power (Continuous Watts per Channel)	Low-Efficiency Systems			Medium-Efficiency Systems			High-Efficiency Systems		
	2000 Cu Ft	3000 Cu Ft	4000 Cu Ft	2000 Cu Ft	3000 Cu Ft	4000 Cu Ft	2000 Cu Ft	3000 Cu Ft	4000 Cu Ft
10	94 dB	92 dB	91 dB	97 dB	95 dB	93 dB	102 dB	101 dB	100 dB
20	97 dB	95 dB	94 dB	100 dB	98 dB	96 dB	105 dB	104 dB	103 dB
35	99.5 dB	97.5 dB	96.5 dB	102.5 dB	101.5 dB	98 dB	107 dB	106 dB	105 dB
50	101 dB	99 dB	98 dB	104 dB	102 dB	100 dB	109 dB	108 dB	107 dB
75	103 dB	101 dB	100 dB	105 dB	103.5 dB	101.5 dB	110.5 dB	109.5 dB	108.5 dB
100	104 dB	102 dB	101 dB	107 dB	105 dB	103 dB	112 dB	111 dB	110 dB
125	105 dB	103 db	102 dB	108 dB	106 dB	104 dB	113 dB	112 dB	111 dB

Numbers given are for "average" room furnishings—neither too reflective nor too absorptive. Rooms having heavy draperies, rugs, and much upholstered furniture may require somewhat more power to achieve the sound levels shown. Overly "live" rooms may require a bit less power for the same results.
CAUTION: Not all speaker systems can safely accept all power levels shown. Check with the manufacturer regarding maximum power permissible.

(Courtesy of The Institute of High Fidelity)



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Getting Started . . .

The features we have discussed relative to the preamplifier and amplifier sections of a receiver (or in separate components) are summarized in Table I. That Table also indicates, in a general way, which features are likely to be found in low, medium and high-priced products. As a careful shopper you will want to find equipment that offers all the features and sound quality you need at the lowest possible price.

● ***Tuners and Tuner Modules.*** Most receivers and separate tuners have AM as well as FM reception capabilities, but the AM section of most such products is little more than a convenience for listening to news broadcasts, sporting events and other programs not normally available over FM channels. In most instances, manufacturers of tuners and receivers incorporate minimum-quality AM circuits in these products. AM radio, in any case, is too limited in frequency range and too susceptible to static and noise for a high fidelity program source. Unless you find it necessary to hear AM stations on your music system, you may want to sacrifice the AM radio feature in the receiver or tuner you choose.

An interesting feature which has recently found its way into a few receivers and many tuners is called frequency synthesizing. While not directly related to the sound quality and performance of the FM circuitry, this innovation does insure that stations will be tuned in optimally. Accurate tuning is important if minimum distortion is to be obtained. Frequency synthesis usually raises the cost of a product containing it materially, so unless you find it difficult to tune in FM stations accurately by ear or to use the tuning meters supplied, this extra convenience is not necessary.

Other FM tuner features to look for are summarized in Table II, along with their purpose or advantage. It is possible to spend as much money on a high-quality separate FM tuner as most audio enthusiasts spend on their complete component systems, but such expenditure is hardly sensible unless there are a lot of high-quality FM broadcasts in your area. Some stations, scattered across the U.S., transmit superb FM signals and use nothing but the best mint-condition recordings as program sources. If you are fortunate enough to live near such a station, you may want to spend a bit more on the FM section of your system.

● ***Power.*** "How much power will I need?" is perhaps the most difficult question faced by anyone about to purchase a high fidelity stereo system. The range of choice seems vast, running from as little as 10 watts per channel to several hundred watts per channel. If 10 watts of audio power is enough for some listeners, why do others require 200 watts, or even more? Surely they don't want the music 20 times as loud.

Loudness, in truth, is one of three factors that govern the amount of power you will need in the amplifier section of your system. Louder music reproduction takes more amplifier power, sometimes a lot more, as we shall see. The second factor is the size of your listening room. To fill an auditorium with realistic sound levels takes more audio power than it does to fill a 10′ × 12′ dorm or bedroom with the same intensity of sound. The third factor has to do with the loudspeakers you select for your stereo system. Some speakers can produce ear-shattering sound levels with just a few watts applied to them while others will only sound moderately loud when driven by a hundred or more watts of power.

It may surprise you to learn that a 50-watt amplifier, driving a given set of speakers in a given room will *not* produce twice the level of clean sound given by a 25-watt amplifier. To double the loudness of 25 watts you would have to substitute 250 watts. That's because the sense of loudness in human hearing is anything but linear. The 50-watt unit reaches its limits by producing sounds only slightly louder than those developed by the 25-watt unit.

Because loudness is logarithmic rather than linear, we use a logarithmic unit of measurement, the decibel (abbreviated dB) to measure relative sound levels. Doubling the power input to a speaker makes it deliver only 3 dB more sound output. (One dB is said to be the smallest level change that can be detected by the human ear.) The tenfold increase needed to double apparent loudness is expressed as a change of 10 dB.

Absolute sound levels can also be expressed in dB if a reference level is specified. In measurements of so-called Sound Pressure Level (SPL), 0 dB, the reference, is set at a level thought to be the threshold of human hearing (the quietest sounds we can detect). An SPL level of 130 dB or so is the threshold of pain—where sound intensity actually causes physical discomfort. In musical terms, if you attend a symphony concert and sit in the mid-orchestra section, you may be subjected to peak SPLs around 100 dB. Move up front or onto the conductor's podium and you may hear occasional SPLs of 110 dB. Measurements made in a popular discotheque have found SPLs that often reach 115 to 120 dB—perilously close to the threshold of pain.

With this information and your own listening preferences in mind, you can

TABLE II—PREAMPLIFIER/CONTROL SECTION FEATURES

FEATURE	PRICE RANGE			PURPOSE OR ADVANTAGE
	LOW	MEDIUM	HIGH	
Phono 1 & Phono 2 Inputs		x	x	Permits use of two separate record players
1 Tape Monitor Circuits & Switching	x			Add a Tape Deck or another audio accessory
2 Tape Monitor Circuits & Switching	x			Add two tape decks or one tape deck plus an audio accessory
Tape Dubbing		x	x	Copy tapes from one connected tape deck to another
Bass and Treble Tone Controls	x	x	x	Adjust response of system to compensate for other components, or to suit personal taste
Mid-Range Tone Control			x	Aids in emphasizing vocal music. Affords greater degree of control.
Selectable Bass & Treble Frequency Turnover Points			x	Permits trimming response at frequency extremes without affecting important mid-range frequencies
Low-Cut Filter	x	x	x	Reduces effects of turntable vibration, noise and rumble
High-Cut Filter	x	x	x	Reduces FM hiss, and tape and record noise with minimum effect on musical reproduction
Audio Muting			x	Fixed reduction of loudness, used when listening is interupted by phone call, doorbell, etc.
Loudness Control	x	x	x	Improves sound quality and balance when listening at low, "Background Music" loudness levels
Microphone Input		x	x	Lets you add voice sounds to other program sources
Pre-Amp Interconnections		x	x	Permits separate operation of these sections, or connection of accessories (e.g., equalizer, noise reduction unit etc.) between them

Low-efficiency speakers (those that require large amounts of power for loud sound levels) are not considered to be inferior designs. Again, there are tradeoffs. To make a small speaker system capable of strong bass output, the designer must give up efficiency. There are numerous small, sealed-box systems of low efficiency that illustrate this point while producing very fine sound. On the other hand, a large, floor-standing speaker might sound as good as one of the so-called book-shelf types while using just a small fraction of the amplifier power. The large speaker will probably cost more as well as take up more floor space, but its higher efficiency will allow a considerably smaller expenditure for a receiver or amplifier.

use Table III to predict the amplifier power you'll need. Notice that the table is divided into three major sections: using low, medium, or high efficiency speakers. Since the amplifier power requirements depend upon the efficiency of the speakers you select, the first components you need to choose are the loudspeakers. Start by listening to a variety of speaker systems which are in your price range, or perhaps a bit above. Compare two pairs of loudspeakers by listening alternately to each pair in what is called an "A-B" comparison test. Use music which is familiar to you, and make certain that the salesman adjusts the levels when switching from one pair to the other, so that you are judging sound quality and tonal balance rather than efficiency. After a few moments, you will be able to eliminate one of the two pairs. Repeat the process, matching a new candidate against the preferred earlier choice. Eventually you will zero in on the speaker pair that seems most right to your ears.

At this point, you will want to find out whether you have selected a high-efficiency pair, a medium efficiency system or a low-efficiency speaker pair. The speaker manufacturer's literature or the salesperson will advise you about this, and often make recommendations regarding suitable power capability for your amplifier or receiver. Alternatively, you can now use Table III to find the power needed to deliver the sound pressure levels you think you will need in your listening room. As a final check, hook up an amplifier or receiver which is rated at the power level you have calculated to the speakers of your choice. Turn up the volume to what you think is the loudest listening level you will ever require. Then turn it up even a bit further. Don't go too far, because an increase in loudness you can just about hear will take double the power. If sound remains undistorted and clear, with no break-up of peaks in the music, you have probably chosen an adequate power rating for your receiver or amplifier, which should be selected next.

● ***The Right Receiver or Amplifier.*** We have already dealt at some length with the features and controls found on most receivers and amplifiers. By now you should have decided which of these features are important to you and which you can do without. Incidentally, if your choice of speakers results in your needing a very high-powered receiver or amplifier and cost is no object, go right ahead and buy all the watts you need. If, on the other hand, the cost of adequate power is beyond your means, your only course is to seek out a pair of speakers that require less power.

Besides features and controls, you will be concerned with the performance specifications of the receiver or amplifier you choose. We have already discussed power ratings, but a statement of the wattage of a receiver or amplifier is not enough unless it is accompanied by a statement of maximum distortion levels, the range of frequencies over which that rated power can be delivered at or below its rated distortion, and the type of speaker "load" into which that power can be delivered (usually 8-ohms, the typical impedance of many speakers, but sometimes 4-ohms, a value of impedance common with some speaker designs).

There are many other performance specifications with which you will be confronted. Space does not permit a complete analysis of the importance of each of these specifications, but we have prepared some basic, if general guidelines in the form of Table IV, which lists the more important specifications for a tuner, amplifier, turntable, cassette tape deck and open-reel tape deck. While price is, of course, a factor in the performance of any product, it is not always essential to achieve the "best" level of performance for every one of the specifications. For example, consider the question of selectivity, listed in the tuner section of the table. Selectivity, stated in dB, is a measure of the tuner's (or tuner section's) ability to tune to a desired signal without encountering interference from other stations whose frequencies may be close to that of the desired signal. If you live in a crowded metropolitan area where several stations are positioned close to each other in frequency, this may be an important specification for you to consider and 80 or more dB of selectivity may indeed be essential. On the other hand, if you live in an area where there are few stations, widely spaced across the dial, a high order of selectivity is of less importance. You will want to concentrate on sensitivity, especially if your location is far from the transmitter. To learn more about

continued on page 20

TABLE III—FM TUNER FEATURES

FEATURE	PRICE RANGE			PURPOSE OR ADVANTAGE
	LOW	MEDIUM	HIGH	
Twin Tuning Meters		X	X	Permits more accurate tuning (and therefore lower distortion) in FM.
FM Muting	X	X	X	Eliminates interstation noise when tuning between FM signals.
Selectable I-F Bandwidth			X	Lowest distortion reception for uncrowded dial conditions; reduced interference from adjacent signals in crowded signal areas.
"MPX" Blend Switch		X	X	Reduced background noise when listening to weak-signal stereo FM stations.
Touch-Sensitive AFC Tuning Knob		X	X	Goes by various trade names, but assists in achieving center-tune accuracy; and reduces tuning error and possible long-term station drifting.
Variable Muting			X	Lets you set muting threshold level for reception and noise conditions.
Station Pre-Select Switches			X	Permits pre-programming of favorite stations and selection of them at the push of a single button.
Dolby FM (built in)		X	X	Useful for noise reduction in FM listening if some stations in your area use the Dolby system when broadcasting.

Even the most enlightened consumer can get eaten alive in the hi-fi jungle.

There are probably few places where the phrase "caveat emptor"— let the buyer beware—is more applicable than in high fidelity.

The average consumer walks into a hi-fi store only to be confronted by a morass of receivers, turntables and tape decks, running the gamut from the unaffordable to the unpronounceable. And to make matters worse, the salesman seems to speak some bizarre dialect about megahertz and transient response.

At Sony, we sympathize with the plight of the music lover caught in this rather distressing situation. And to this end we offer some reassurance:

Since 1949, Sony has been at the very forefront of high fidelity. (In fact, our name is derived from the Latin word "sonus" for sound.)

And while the technology has changed, one thing hasn't: Since the beginning we've never put our name on anything that wasn't the best.

The V4 receiver: You don't need an engineering degree to understand what makes it superior.

Put as clearly as possible, the V4 was designed for people who are as interested in getting good value as they are good sound.

In terms of power, for example, the V4 offers ample wattage to fill almost any size living room with clean, clear sound. (55 watts per channel at 8 ohms from 20 to 20,000 hertz, with less than 0.1% total harmonic distortion.)

It has absolutely no audible distortion.

The new Sony micro components: small in everything but performance.

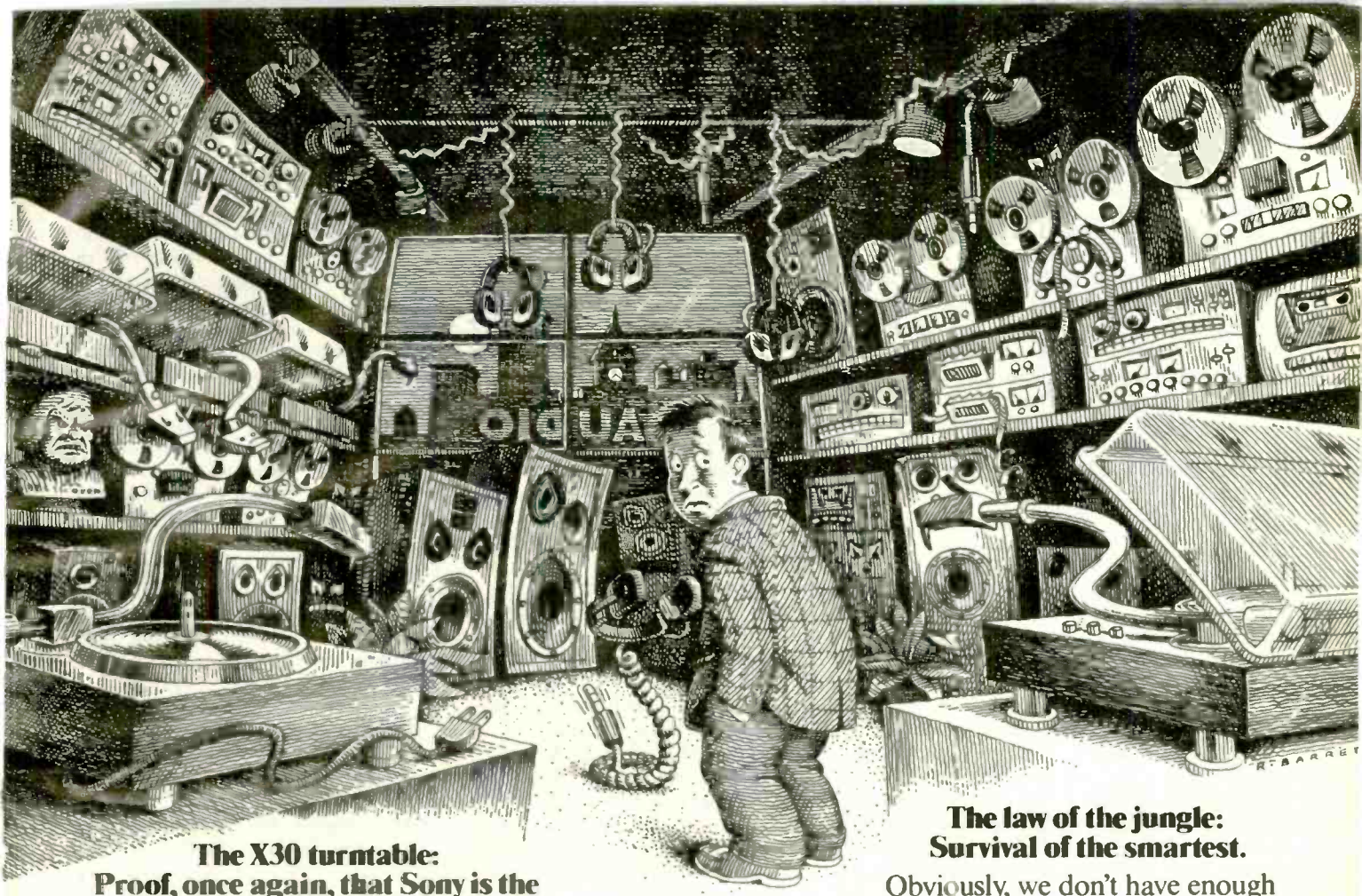
It features the same kind of "direct coupled" circuitry used in the most expensive professional broadcast amplifiers to ensure rich bass.

It's completely encased in metal to reduce interference.

It's capable of running two sets of speakers without straining, and has something called a "phase-locked-loop IC stereo multiplex stage" that guarantees extraordinary FM reception.

The V-4 Receiver: the latest from the company that founded the era of transistorized high fidelity.

All of which explains why if you pay a few dollars less for one of our competitor's receivers it's probably because you're getting less receiver.



The X30 turntable: Proof, once again, that Sony is the real pioneer in high fidelity.

Today, virtually all of the world's most expensive turntables feature "quartz lock." An electronic circuit that works like a quartz watch to ensure perfect turntable speed.

Now Sony has improved on this incredibly accurate system in the only way possible: by making it less expensive. But to buy the X30 on it's price alone would be selling it short.

Like today's most expensive turntables, the X30 features a direct-drive motor that eliminates pulleys and unreliable belts. But unlike models built by Pioneer and Technics, our direct-drive motor is both brushless *and* slotless—which means it's more accurate.

Instead of using an inexpensive particle-board base like many of our competitors, the X30's base is made of a Sony patented "bulk molding compound" that reduces acoustic feedback.

And we've even made the X30's platter mat slightly concave—so if your records are a bit warped, they won't sound that way.

SSU-2070 speakers: Sony remains one of the only hi-fi companies to produce our own speaker cones, crossover units, and even the cabinets themselves.

The X30 direct-drive turntable: it even compensates for warped records.

The law of the jungle: Survival of the smartest.

Obviously, we don't have enough space here to tell you the whole Sony hi-fi story.

Like the way our new micro components use Sony developed "pulse power supplies" that reduce distortion almost to the point of being unmeasurable.

Or the way our new SSU-2070 speaker system guarantees you'll hear every part of the music with distortion reducing carbon fiber speaker cones. And a computer-designed speaker arrangement that makes sure you hear the music exactly as it was recorded.

The point of all this, however, is that for over three decades Sony has built superior audio equipment. Extraordinary products whose reputation for quality, value and reliability is unsurpassed.

So even if you don't know watts from ohms, at least you'll be able to survive in the hi-fi jungle by knowing Sony.

For more information, or the name of your nearest Sony dealer, write us at Sony, P.O. Box CN-04050, Trenton, N.J. 08650.

SONY AUDIO

We've never put our name on anything that wasn't the best.

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CIRCLE NO. 34 ON READER SERVICE CARD

Getting Started . . .

the meaning and importance of specifications, we suggest that you read one of the many excellent books written on this subject. One such book, a purely instructional work that makes no attempt to sell or recommend particular products or brands, is *The Official Guide To High Fidelity*, published by the Institute of High Fidelity (IHF), a trade association of high fidelity component manufacturers. It can be obtained by mail, for $4.95, by writing to the IHF at 489 Fifth Avenue, New York, N.Y. 10017.

Choosing a Turntable

Record playing is likely to provide a large segment of your music programming. For this reason, you will want to select your turntable system with great care. Your first concern will be whether to select a single-play machine or one that can handle several records sequentially and automatically. These days, many of the machines designed to play several records sequentially can also be used as single-play turntable systems by installing alternate center-hole spindles supplied with the equipment. On the other hand, single-play turntable systems available today come with varying degrees of automation, including everything from automatic lift of the tonearm after completion of play to systems that initiate play, sense required speed and tone-arm set-down position, return the tonearm to its rest position after completion of play and even turn themselves off.

Aside from the many convenience features incorporated into modern turntables (and which may or may not be important to you, depending upon your budget and taste), there are a few fundamental performance specifications that you will need to evaluate before making your final selection. Speed accuracy is one: If a turntable rotates at incorrect speed, music will be reproduced too high or low in pitch. Many turntables come equipped with stroboscopic markings and speed adjustment controls to help you adjust the rotation of the platter to precise 33-1/3 or 45 revolutions per minute and also to enable you to alter speed by a few percent, should you wish, say, to play a musical instrument that is slightly out of tune along with a record. Besides rotating at correct overall speed, a turntable must also rotate with as steady a speed as possible. Wavering of speed, if it occurs at a relatively low rate, is called wow while more rapid fluctuations are termed flutter. Both sound unpleasant if present to any significant degree. Wow-and-flutter are often expressed in specification sheets as a single percentage value, and the lower that number, the better.

Noise generated by the motor that drives the turntable or by elements of the drive mechanism is called rumble. Such low frequency vibrations can be picked up by the phono cartridge, amplified by the preamplifier and amplifier of your stereo system and ultimately reproduced via the loudspeakers. In most cases, rumble is so low in frequency that it cannot be heard *directly*. However, it can overdrive the preamplifier, power amplifier, and loudspeaker, causing distortion of audible signals that are passing through. Rumble is specified as a negative number of decibels telling how much lower in sound level the rumble content is compared with a standardized tone. Thus, a −60 dB rumble figure is poorer than a −65 dB figure. When comparing numbers, be sure that they are all specified the same way—according to the ARRL, Din B, or other standard.

There are several methods for driving a turntable platter, the two most popular of which are belt-drive and direct drive. In a belt drive system, a rubber-like precision belt is used to transfer rotational energy from a relatively high speed motor shaft to the turntable platter itself. Direct-drive motors, on the other hand, rotate at the same speed as the turntable and their shafts are directly coupled to the platter. While manufacturers may insist that one of these methods is superior to the other, either system, when properly engineered, can give precise speed, low rumble, and low wow-and-flutter. As with all high fidelity components, you get pretty much what you pay for, and if your main concern is performance, you should be guided by the few turntable specifications listed in Table IV, adding those convenience features that are important to you and that you can afford.

● ***The Most Neglected Component.*** We come now to a component that plays a large role in determining the quality of sound you will get from your records—the phono cartridge. The cartridge, like the loudspeaker, is a transducer, but it works in reverse, converting mechanical motion (as it traces the undulations in the record groove) to equivalent electrical signals. Also like loudspeakers, cartridges are best judged by subjective listening tests. It is essential that the cartridge you select work compatibly in the tonearm of the turntable system you have chosen. Manufacturer's literature and your audio dealer can be helpful in assuring this. Clearly, a cartridge designed to play records properly with a downward tracking force of one gram or so would not work well in a tonearm whose friction can only be overcome by a downward tracking force of three or more grams.

Most high fidelity cartridges generate their output by varying the magnetic field cutting a set of fixed coils. These include the moving-magnet, moving-iron, and similar types that can be connected directly to the phono inputs on your amplifier or receiver. In others, aptly known as moving coil (MC) cartridges, the coils move and the magnetic field is fixed. These usually have very weak output and require either a step-up transformer or an additional preamplifier (sometimes called a pre-preamp or a head-amp) before they can be matched with ordinary amplifiers or receivers. These are generally more expensive than fixed-coil types, but some audio enthusiasts believe that the added cost is justified by what they consider a special sound.

Adding A Tape Deck

Beyond the basic set of components we have discussed thus far, perhaps the most popular additional component to be considered is a tape deck. Of the three tape deck formats you can choose—reel-to-reel, cassette or 8-track cartridge—by far the most popular for home systems is the cassette deck. Open-reel decks once ruled the market, but because of the improvements in cassette decks as well as in the tape formulations used for cassettes, reel-to-reel decks have largely become confined to semi-professional and professional recording applications. As for the 8-track cartridge format, most experts do not consider this endless-loop form of tape package to be capable of true high fidelity performance, and its last stronghold seems to be in automotive use. However, the cassette deck is gaining fast even there.

Modern cassette decks typically include a built-in noise reduction system such as Dolby and switching facilities that enable you to use a variety of tape formulations such as ferric oxide, ferric-chrome combinations, chromium dioxide (or equivalent) and, in many recently introduced models, pure metal particle tape. Most cassette decks combine recording and play functions in a single head, using a second head to erase material previously recorded on the tape. Some costlier decks offer separate record and play heads. This feature permits you to monitor recordings by means of the playback head an instant after they are made.

The chief virtue of the pure metal-particle tape is its ability to accept higher recording levels, particularly at the high-frequency end of the audio

spectrum, where previous tape formulations tend to impose limited dynamic range. If you hope to use this new formulation of tape, make certain that the cassette tape deck you purchase is specifically designed to handle it. Recordings made on metal tape can generally be played back on older machines, but such decks cannot properly record on the new metal tapes, nor can they erase it properly. At the moment, the cost of the new metal tape is approximately twice that of conventional high-quality tape formulations. Prospective purchasers should carefully weigh the advantages of this new tape versus its higher cost.

Table IV details the more important specifications for both cassette and open reel decks and gives you an idea of the performance you can expect in low, medium and high-priced machines of each type.

The Importance of a Balanced System

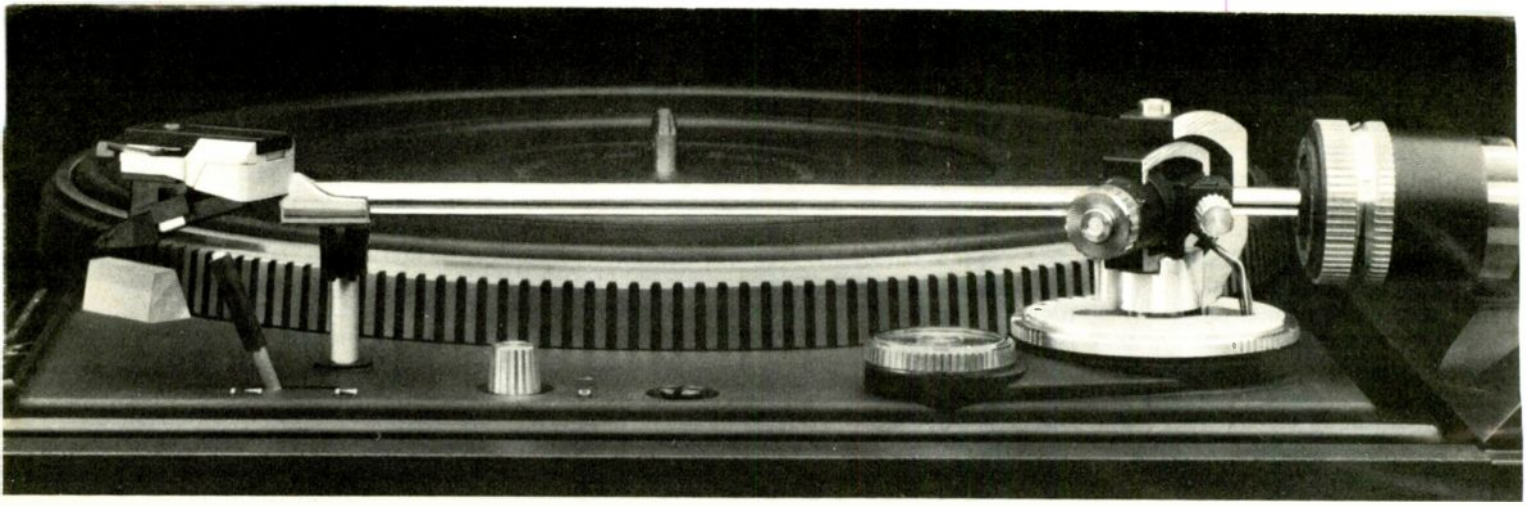
Whether you intend to spend $400 or $500 for your first component high fidelity system or several thousands of dollars, the importance of maintaining a good balance between the various components you purchase cannot be overstressed. If your budget is $500.00, for example, it would make little sense to spend $350.00 of that sum on a receiver and be left with only $150.00 for loudspeakers, turntable and cartridge. A general rule of thumb (but by no means a hard and fast one) is to apportion about 40% of your budget for the receiver, 25% for the record playing components and 35% for the loudspeakers in a basic system. For a five-piece system consisting of a pair of loudspeakers, an integrated amplifier, a separate tuner and a turntable system, you might try 25% for the receiver, 30% for the loudspeakers, 25% for the tuner and the remainder for the record playing components. In a system involving a separate amplifier and preamplifier, appropriate percentages might be 20% for the power amp, 15% for the preamp, 30% for the speakers, 18% for the tuner and the remainder for the turntable and cartridge. Tape recording facilities should be considered separately from the basic system, as should add-on components.

Armed with the foregoing information, and with the assistance of a reputable audio dealer, you should be in a good position to examine the models listed in the accompanying Directory. When you narrow down the models in each category to a group that meets your budget requirements, visit your local dealer and discuss your requirements and plans with him. Don't overlook the possibility of adding a set of stereo headphones to your basic system. Just about any system you are likely to choose has provisions for stereo headphone listening and many music lovers find that reproduction via headphones can provide a thoroughly enjoyable and "private" listening experience that is sometimes preferable to reproduction via loudspeakers. Then, too, if your taste in components exceeds your budget, you can put off the purchase of those ultimate (but high-priced) loudspeakers that have captured your ears and taste by starting out with just a pair of phones until such time as you can replenish your bank account and can afford the speakers of your choice.

If there is any final advice we can offer it is to keep your cool while buying and don't let yourself be rushed into anything. You'll presumably be listening to your system for a long time, so an extra day or two used to reach a sensible decision is entirely justified. If there is a conflict between the verdict of your ears and other information or advice, trust your ears—they're yours and you can't change them very much. Happy listening! ■

TABLE IV–TYPICAL SPECIFICATIONS OF HI-FI COMPONENTS

	LOW	MEDIUM	HIGH
TUNER (OR TUNER SECTION OF RECEIVER)			
IHF Sensitivity μV (dBf) (mono)	3.0 (14.7) or lower	2.0 (11.2) or lower	1.8 (10.3 or lower
50 dB quieting sensitivity μV (dBf), mono/stereo	10(25.2)/50/(39.1)	5(19.2)/40(37.2)	3(14.7)/30(34.7)
S/N (dB); mono; stereo	60/50	68/60	70/65
Selectivity (dB)	50 or more	60 or more	80 or more
Capture Ratio (dB)	3.0 or less	2.0 or less	1.3 or less
THD (%) (1 kHz, mono/stereo)	1.0/1.5 or less	0.5/0.8 or less	0.2/0.3 or less
Stereo Separation (dB, 1 kHz)	30 or more	35 or more	40 or more
AM Suppression (dB)	40 or more	50 or more	60 or more:
AMPLIFIER (OR RECEIVER AMP)			
Power Out/Channel (Continuous watts)	10-30	30-100	over 100
Rated THD (at full output) (%)	1.0 or less	0.5 or less	0.2 or less
Rated IM Distortion (%)	1.0 or less	0.5 or less	0.2 or less
Damping factor	10 or more	30 or more	50 or more
Phono Hum (dB below 10 mV input)	60 or more	65 or more	70 or more
Aux Hum (dB below rated output)	70 or more	75 or more	80 or more
TURNTABLE SYSTEMS			
Wow and Flutter (% Wrms)	0.15 or less	0.10 or less	0.05 or less
Rumble (dB, per Din B)	55 or more	60 or more	70 or more
CASSETTE DECKS			
Frequency Response (Hz±3dB)	50-12,000	30-15,000	20-18,000
Wow and Flutter (% Wrms)	0.2 or less	0.12 or less	0.1 or less
S/N (dB, less Dolby)	45 or more	48 or more	50 or more
OPEN-REEL DECKS			
Highest Speed (ips)	7½	7½	15
Freq. Response at highest speed (Hz ± dB)	40-15,000	30-20,000	20-21,000
S/N (dB)	50 or more	55 or more	60 or more
Wow and Flutter (%)	0.15 or less	0.1 or less	0.07 or less



All your records will sound better with Dual's new ULM tonearm and cartridge system.

Even if they look *like* this.

Although none of your records may be in such bad shape, many are probably warped enough to present serious problems to conventional turntables.

The high inertia of a typical tonearm and cartridge combination, with approximately 18 grams total effective mass, causes the stylus to dig in riding up the warp and to take off on the way down. Tracking angle and tracking force vary widely—as much as 30 percent. And a warp as small as 1.5mm (which is barely discernible) can generate harmonic distortion of 2.7 percent. That's audible!

These problems have now been solved by Dual's new Ultra Low Mass tonearm and cartridge system.

The potential for this solution has existed ever since the development of Dual's dynamically-balanced tonearm with its gyroscopic gimbal suspension and straight-line tubular design.

Dual's research into the effects of mass on record playback led to a collaboration with Ortofon. A cartridge was developed with substantially less mass than any in existence. It weighs just 2.5 grams, including mounting bracket and hardware.

At the same time, the mass of the Dual tonearm was further reduced so that a perfectly matched tonearm and cartridge system emerged. Its total effective mass is just 8 grams. That's less than half the mass of conventional tonearm and cartridge combinations.

Tracking a record with the same 1.5mm warp, the ULM system reduces harmonic distortion to only 0.01 percent. That's 270 times less than that produced by the conventional tonearm and cartridge.

Not only is the overall sound audibly improved, but stylus and record life are significantly extended.

To experience the demonstrable advantages of ULM, bring a badly warped record to your Dual dealer. Listen to it played with the ULM tonearm and cartridge. (All nine new Dual turntables feature this system.)

You will hear the difference that ULM can make on all your records.

For the complete ULM story, please write to United Audio directly.

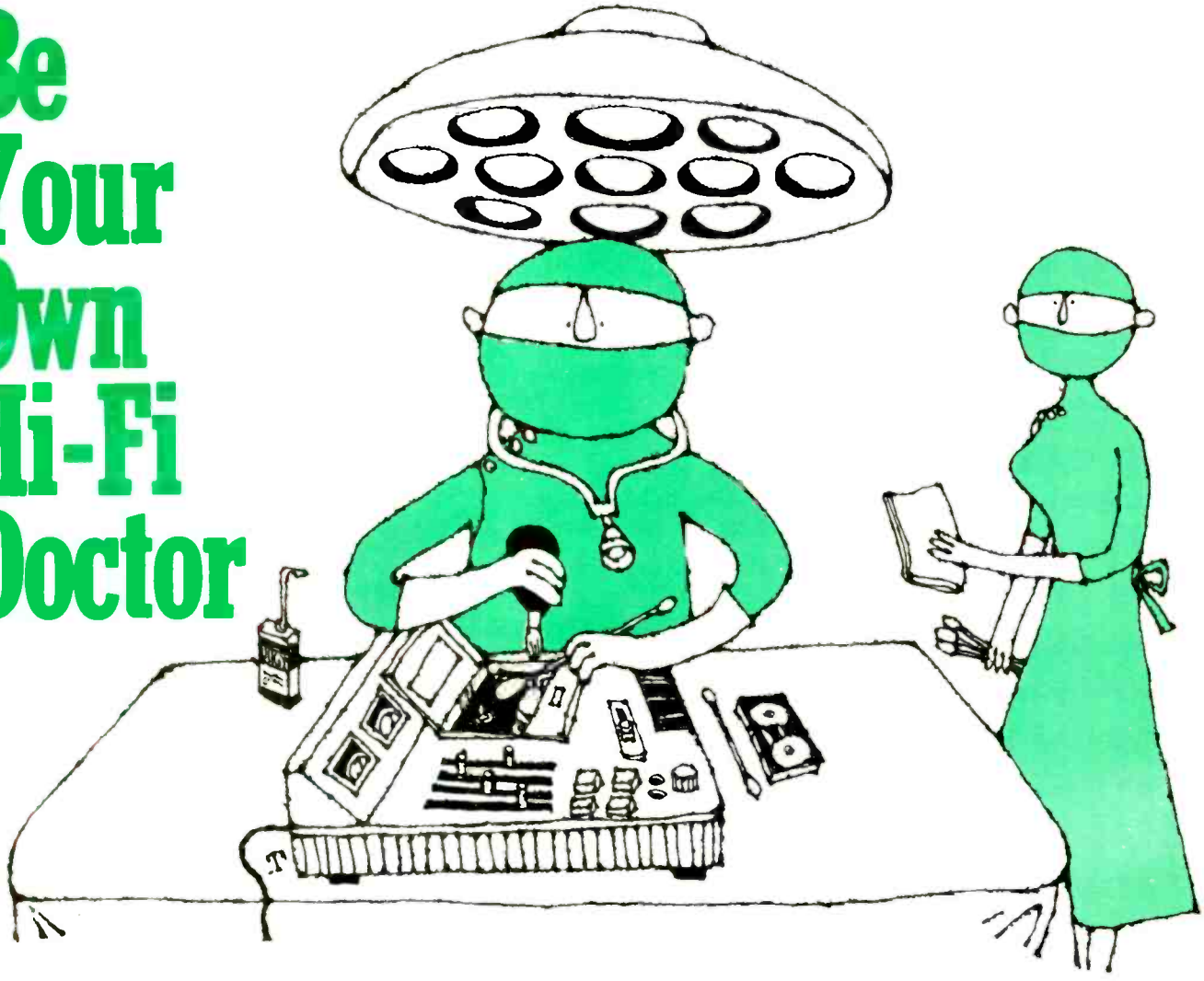
ULM.

A major breakthrough in record playback technology.

Dual

United Audio
120 So. Columbus Avenue
Mt. Vernon, New York 10553.

Be Your Own Hi-Fi Doctor



A stereo system needs periodic maintenance and an occasional touch of tender, loving care. An expert tells you what to check, what to clean, what to replace, and what to upgrade.

One of the advantages of owning a component high-fidelity system is that replacement of even a single component in that system can often make a significant difference in the sound of the system. Chances are good that if your system is five years old or older, a system that today costs no more would sound just a little better. Few product categories can boast such achievements in this age of monetary inflation.

On the other hand, if your system is relatively new and you feel that its sound quality is deteriorating noticeably, the fault may not lie with the components, but with your failure to maintain them properly. Preventive maintenance is as important for a stereo component system as it is for your automobile—and a lot less costly than corrective maintenance.

● ***Turntable and Record Maintenance.*** Modern record players require virtually no maintenance. Motors are usually permanently lubricated and should operate smoothly and quietly for many years. Cartridges, on the other hand, are subject to wear with steady use. More specifically, the stylus (which is in constant contact with the record grooves) will show signs of wear after hundreds of hours of use, even though the tip is made of industrial diamond. Periodic inspection of the stylus tip by your dealer, using a microscope designed for that purpose, can help to insure against a ragged stylus tip doing damage to your record collection. But unless your dealer can perform a point-by-point comparison of your stylus against a brand new one, he may not detect subtle wear that, while not dangerous to records, may cause loss of fidelity. To check on this we recommend cleaning your stylus with one of the special brushes and solutions sold for the purpose and comparing its sound with that of a replacement. If the new one sounds any better, use it and discard the original. Otherwise, return the original. Cleaning, incidentally, should be done more often than the sonic check.

continued on page 26

Killer!

That's a Jensen car audio system. That's the thrill of being there.

You've got to want the best. The max in music. The Killer. Then there's only one way to go.

The Jensen R430 car stereo receiver teamed with a Jensen Separates speaker system.

It all starts in the R430 Receiver. The AM/FM Stereo/Cassette unit that rivals many home receivers. Feather-touch electronic switches control Dolby® Noise Reduction, Loudness, Interstation Muting, and Local/Distance FM tuning.

A separate, trunk-mounted Power Amp gives you up to 60 watts RMS when you need it. The Bi-amplification mode distributes that power perfectly for knock-out realism.

More? Lots more. But look what the R430 teams up with.

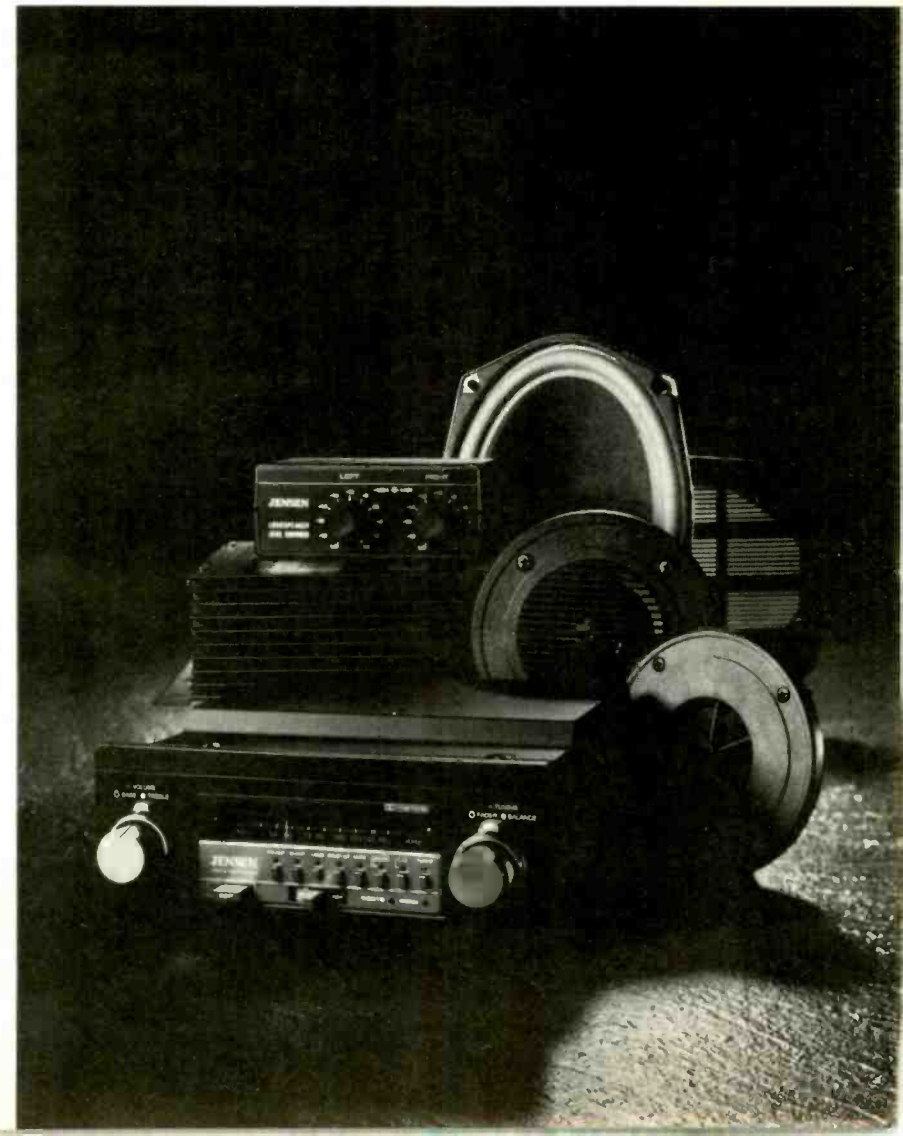
The Jensen Separates. The revolutionary car speaker system that gives a faultless interpretation of everything the R430 sends it.

Imagine individual woofers, tweeters, and midrange units custom positioned throughout your car... for unparalleled sound reproduction. Coupled with an under-dash control unit that lets you balance the music to your personal taste. That's the Separates.

Touch the "Bi-Amp" switch on the R430 Receiver and each individual woofer, tweeter and midrange gets the precise frequency range and power to put you right in the concert.

This system's a killer. That's the Jensen R430 Receiver and Separates.

That's the thrill of being there.



JENSEN

The thrill of being there.

For more information, write Jensen Sound Laboratories, 4136 N. United Parkway, Schiller Park, Ill. 60176

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CIRCLE NO. 17 ON READER SERVICE CARD

Hi-Fi Doctor . . .

Dozens of record care products are available, too. Some of these are simple brushes, designed to remove dust and dirt which collect in the grooves of records. Others are fluid solutions which are used in combination with felt pads or brushes to remove dust and dirt from record grooves. There are also devices and solutions which reduce the static charges that would otherwise build up on the surface of records and attract particles of dust and dirt to the record surface. Finally, there are products which when applied to a record surface, deposit a micro-thin friction-reducing coating which acts to reduce wear of record and stylus alike. One key to good record reproduction is freedom from dust and dirt—either on the record itself or on the stylus tip.

In addition to keeping your records clean, it is important to store them in their protective sleeves and jackets positioned vertically in an environment that is neither too hot nor too cold. The vinyl compound from which records are made will undergo warping when subjected to extremes of temperature.

● ***Tape and Tape Deck Care.*** Cassette tapes should always be stored in their plastic housings and should be kept in the same type of environment as records. Cassette shells have erasure protection tabs on the side opposite the head-access slots. These should be broken off if you plan to preserve whatever you have recorded onto a given cassette. To re-record the cassette, cover the hole exposed by the broken tab with a bit of cellophane tape.

A tape recorder requires as much if not more maintenance than any other single high fidelity component. The coatings of magnetic particles applied to the tape surface, no matter how well imbedded, leave deposits on the surfaces of the tape heads and other parts with which the moving tape comes in contact. Accordingly, these parts should be cleaned frequently—as often as every twenty to forty hours of use. Inexpensive tape-head cleaning kits consisting of cotton tipped sticks and cleaning fluid are readily available (often supplied with the machines themselves), though ordinary denatured alcohol applied to the tip of a cotton tipped stick works about as well. Most manufacturers of cassette tape decks describe proper cleaning procedure in the owner's manual for their particular machines. You would be well advised to follow these instructions.

Tape heads may, after extended use, become permanently magnetized to a degree. When this happens, sound reproduction from the deck may suffer and you may detect a noticeable increase in noise or hiss level. This noise can be *permanently* added to any tapes played on the machine. Tape heads should be periodically demagnetized, using a device called, appropriately enough, a head demagnetizer. This hand-held device usually operates from your household ac line although some battery models have recently been introduced as well. One is actually housed in a cassette shell that can be popped into the machine much as you would an ordinary cassette. Demagnetization takes but a few seconds.

Tapes that have been recorded at very high signal levels may be beyond the ability of your cassette to erase them completely when new recordings are made on the same tape. They can be more completely erased by means of a bulk eraser—a device which emits a strong alternating magnetic field when connected to an ac receptacle and is then turned on. Proper use of a bulk eraser is normally described in the instruction sheet accompanying it. Care should be exercised to keep the bulk eraser well away from recorded tapes you wish to preserve.

● ***Audio Electronics.*** There is little that the owner of a receiver, amplifier or preamplifier need do to keep the equipment in top operating condition. Occasional dusting off of the cabinets containing this type of equipment is nothing more than common sense, as is making sure that any components that produce heat are well ventilated. You can help to forestall problems with switches and controls by turning or flipping them through their full ranges every now and then. This will retard corrosion that could eventually cause noise and "dead spots."

Inspection of all connections to and from the receiver or amplifier is also an easy, worthwhile procedure. In time, plugs used on the ends of audio cables may become corroded so that good, low-resistance contact between plugs and jacks no longer exist. Plugs and jacks can be cleaned with fine sandpaper or steel wool. In some cases it is less trouble to replace cables having corroded plugs with new ones. Some audio specialists even offer gold-plated connectors which eliminate such problems permanently but are quite costly.

Unless a loudspeaker has been abused by excessive power input or rough handling, there is no reason why it should not perform like new for many years. If a loudspeaker does fail, it is best to have it serviced by the manufacturer or his authorized agency. The same applies to electronic components such as receivers, tuners, amplifiers and preamplifiers. (Although most solid-state (transistorized) components operate on fairly low supply voltages, there are dangerous voltages present inside most audio equipment chassis.) In general, makers of high-fidelity equipment offer reasonably comprehensive warranties that often represent additional, hidden value added to the component you have purchased.

● ***FM Antennas.*** Tuners and receivers can produce listenable audio from extremely weak FM signals, but they deliver better fidelity if the signal they receive is substantial. The flexible wire antennas normally "thrown in" with these products will work acceptably if properly oriented and used in relatively strong signal areas, but you can probably coax better performance from a set of "rabbit ears" with switchable reception pattern. Specially designed, tunable antennas, sometimes amplified, represent another step up. The pinnacle of FM reception is obtained at any given location with an outdoor, directional FM antenna—with or without amplification, depending on how strong the signals are.

In addition to providing a stronger signal, many outdoor antennas can favor desired signals while rejecting interfering signals from other directions. These include reflected signals from the same station, arriving a split second after the primary signal. Such "multipath" signals cause the "ghosts" sometimes visible on TV. In FM reception—particularly stereo—multipath signals lead to annoying distortion and sometimes loss of stereo separation or an increase in hiss. A good directional antenna can be oriented to receive signals directly from the transmitter while rejecting reflected signals that arrive at different angles. The cost of such an installation is usually but a small fraction of the total investment in audio equipment and is well worth it.

If installation of an outdoor FM antenna is prohibited in your location, the use of an existing TV antenna may prove almost as good. Coupling devices known as splitters permit simultaneous use of your TV antenna for both TV and FM. Beware, though, of TV antennas that have "traps" to filter out FM signals and prevent them from causing TV interference. And don't overlook cable TV systems. Many, though not all, are capable of supplying high-grade FM signals.

Upgrading Your System

Improving the sound quality of your component system doesn't necessarily

mean scrapping the whole thing and starting over. Sonic improvements can often be made by the substitution of one component for another or the incorporation of ancillary components into your existing system.

The most likely candidates for replacement, if your system is more than a few years old, are the phonograph cartridge and/or the loudspeaker systems. New materials and techniques have enabled phonograph cartridge designers to develop pickups that track record grooves more faithfully, cause less record wear, and exhibit better frequency response and lower distortion than did those of a few years ago. Take care, however, to ensure that your tonearm is compatible with the pickup you intend to buy. Or, you can upgrade both the pickup and the turntable.

While the sound of your loudspeakers may not have changed significantly since you purchased them, they are almost certainly the weakest link in your system. You may be tired of the compromises in their design, and further, your hearing and appreciation of faithful reproduction may be keener than when you bought the system. Fortunately, after investing in better speakers you need not necessarily discard the first pair. Most amplifiers and receivers are able to drive two pairs of speakers—although not necessarily at the same time—so that you can relegate the older pair to a secondary location such as a bedroom or den. Your new speakers will have to be at least as efficient as the old ones. If they are not, realistic volume levels may require a more powerful amplifier or receiver.

● ***Signal Processing Devices.*** In recent years, components have been developed whose sole purpose is to modify the signals being amplified by your basic receiver or amplifier. If this seems contradictory to the principle of faithful reproduction of sound (flat frequency response, etc.), bear in mind that most of the program material available has already been processed. For example, records, tapes, and FM broadcasts cannot deliver both the loudest and softest sounds you would hear in a live concert. Accordingly, engineers must *compress* the dynamics before transmitting or transcribing the music. It is possible, to a degree, to reverse the process by adding an electronic component known as an *expander* that makes louder signals louder and soft signals softer in an effort to restore the original dynamic range.

If you do live recording work with your tape deck, you are likely to run into the same problem with dynamic range that a recording engineer does. There are devices, known as *companders*, that comprise a matched compressor and expander. During the recording of live music you can compress the dynamic range so that extremes of level are not lost in the noise and do not cause overload; during playback, the signals are expanded to their original range of intensities.

Most of us can easily tell when we are listening to a recording in a small room as opposed to a concert in a large auditorium. Even if the full dynamic range is available, the acoustics of a listening room cannot approximate those of the concert hall—and our hearing detects the discrepancy. But devices have been developed that electronically approximate the sound field we perceive in a large auditorium. These devices, generally called audio time-delay units, delay the original recorded signals in much the same way that sound reflections from the walls, ceiling, and floor of a concert hall produce signals delayed with respect to the primary signals from on-stage. Electronic time delay units generally require a second pair of speakers, usually positioned at the rear or sides of the listening room, to which the delayed signals are routed. The two sets of signals combine in our hearing system to give the illusion that we are seated in a large listening space. Some time-delay units require additional power amplifiers, while others have the needed additional channels of amplification built right in. The secondary loudspeakers, however, need not have as wide a frequency response as the primary pair.

Bass and treble controls of the type found on most receivers can help to restore balance to an otherwise unbalanced sound, but they can only go so far, since each control affects a wide—often too wide—swath of frequencies. Manufacturers have addressed this problem by offering components known as equalizers. Easily inserted into the signal path of your system (via a tape-monitor circuit or between the preamplifier and power amplifier), equalizers are nothing more than elaborate tone controls. Graphic equalizers divide the audio spectrum into five, ten or even twenty or more small segments, each controllable by its own lever or knob. This fine resolution permits you to tailor the response of your system with far greater precision than that possible with simple bass and treble controls. Parametric equalizers are like conventional tone controls, in that they divide the audio spectrum into relatively few segments, but each segment can be varied in width and frequency location as well as in intensity. Graphic equalizers are, by and large, easier to use but properly used, either type can give virtually flat frequency response at your favorite listening chair.

Test records are often supplied with equalizers, but for true precision, test instruments known as real-time audio analyzers should be used in the adjustment process. Your audio dealer may offer this adjustment service or may be able to recommend a sound contractor who can do the job. There are even one or two such analyzers made for consumer use and, if the high-fidelity bug bites hard enough, you may want to purchase one some day.

Another type of signal processor, incredible as it may seem, removes audible "pops and clicks" from records without materially affecting the sounds contained in the grooves. These devices deal only with sharp pops and clicks and do not reduce record surface noise. But there are devices known as dynamic filters that distinguish between high-frequency noise and high frequencies of a musical nature, reducing the former but not the latter and thus quieting surface noise.

All of these and many more signal-processing devices are there to serve your musical needs. Many of them have minor side effects, so it pays to audition processors carefully to be sure you won't continually be annoyed with "errors" you might perceive. In general, the good done by signal processing far outweighs the harm. Which ones you add to your system will depend upon your listening requirements and your sophistication with respect to sound reproduction of music.

The Audio Future

Today, there is talk of entirely new approaches to sound reproduction. Already, we have examples of phonograph discs which were made from master tapes which were digitally recorded. Such master tapes can contain the full dynamic range of music, with ultra low levels of distortion and unmeasurable levels of wow-and-flutter.

Before long, the discs themselves will be digitally recorded. That will mean that an entirely new means of record playing will evolve—one which may possibly use a beam of laser light to "read" what's on the disc instead of the mechanical stylus we now use. And who can say when it will end? Digital recording may be superseded by still more amazing technology in the future. Complementing advanced and dedicated manufacturers whose engineers strive constantly to improve sound reproduction are an equally dedicated group of audiophiles who want the best equipment available. As a second- or third-time system buyer, or as an owner who seeks to upgrade his high-fidelity system, you are quite possibly one of them. ■

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CIRCLE NO. 71 ON READER SERVICE CARD

Specialty Disc: More Fidelity in Recording

By Harold A. Rodgers

Better records with low distortion and wide dynamic range may help your system realize its potential.

When Edison invented the phonograph, he established, in a manner of speaking, a pipeline extending from the recording studio to the home of anyone who owned a phonograph record and the equipment on which to play it. By modern standards, that pipeline had a lot of leaks, and many of us wonder how some of Edison's contemporaries could laud the sound produced by his apparatus as "indistinguishable from the original."

The advent of electrical recording sealed some of the worst leaks, and subsequent improvements in microphones and recording-studio equipment took care of most of the remainder. But in the meantime, home equipment had undergone a revolution too, leaving many audiophiles convinced that their music systems were capable of better performance than could be squeezed out of the records available. Record companies, for the most part, seem to have taken the position that the quality of their products was sufficient to satisfy the overwhelming majority of the market, and upgrading it for the benefit of the few whose playback equipment would let them hear the difference was simply not economically justified. And there the matter stood—until recently.

● ***The Making of a Disc.*** To understand the steps by which the modern, high-end, specialty disc came into being, it will be necessary to digress for a time and examine the way in which records are produced. By far the overwhelming majority of disc records begin life as tape recordings. Often, the original recording is made on 16, 24, or more separate tracks that are "mixed down" to make a two-channel version, but whatever its origins, the two-channel tape is the starting point for disc manufacture.

The signal from the tape is fed to a cutting lathe on which a lacquer blank rotates, much the way it would on any turntable. A stylus activated by the signal from the tape cuts a groove in the blank that corresponds to the signal. At this point, the lacquer master, as it is now called, is plated with metal. The metal master thus formed, bearing a negative impression of the original grooves, is then stripped away. In the next step, a metal mother is grown from the metal master by further plating. The mother, which bears a positive groove impression, is checked for quality and, in another plating operation, is used to make stampers that bear, once again, a negative impression. The stampers can then be locked into presses in which vinyl discs are formed.

● ***Re-enter Direct Cutting.*** Noting that some early electrical recordings—made before tape recorders were invented—had a "clarity and sparkle" missing from latter-day discs, some recording engineers and producers began to consider the tape-recording step suspect. Accordingly, they tried eliminating it, thus returning to the "primitive" technique of the Edison era—recording directly onto the lacquer. This, they found, produced a superior recording, but introduced numerous practical difficulties as well.

One notable problem is that while tapes can be cut, spliced, and edited, a lacquer disc cannot. In fact, once the cutting process begins, it must proceed without interruption or the entire side is lost. This meant that the musicians had to do a complete side at a time with no possibility of correcting errors, just as if they were performing live. The effect of this limitation is controversial. Some claim that knowing a take is "for real" and must be done perfectly produces an excitement akin to that of a real, live performance. Others object that pressure of this sort leads musicians to restrict their creativity and play in a conservative manner that results in a dull or "uptight" sound. Recorded examples can be found to support either of these arguments.

Another potential source of trouble is that the mastering engineer has to adjust the cutting pitch—the spacing between adjacent grooves—by hand. (When a tape master is transferred to disc, an extra "preview" head on the playback tape machine feeds the signal to a computer one revolution or so before it reaches the cutter head. The computer then sets the pitch automatically.) If the engineer tries to get too much material on a single side and puts the grooves too close together, a loud signal may cause overcutting and ruin the take. On the other hand, if he is too conservative and places the grooves farther apart than necessary, he may run out of recording time before the end of the selection, also ruining the take. All of this places an additional burden on the musicians, who must not surprise the engineer with any unplanned changes in loudness or tempo.

Perhaps the most serious limitation of direct cutting is that a metal master, of which there is only one, can only produce a limited number of stampers. Since stampers often have distressingly short lifetimes, its rare to find as many as 50,000 copies of a direct-cut edition. Here is a difficult economic situation in which the cost of a difficult and risky recording technique must be recovered from a limited amount of product. Small wonder that such discs are expensive items.

Specialty Discs . . .

● ***Keeping the Advantages of Tapes.*** The problems of direct cutting being as difficult as they are, it is not surprising that some specialty disc makers prefer to use tape for the original recording. Working on the premise that much of the signal degredation associated with tape is a result of aging, they make the transfer to the lacquer disc immediately after the master tape is recorded. Plating of the master disc is also done right away, as this too is felt to be a point at which aging can detract from sonic fidelity. Only the metal master is considered to be stable.

In another approach to the use of tape as a transfer medium, advanced compander systems operate on the signal before recording and after playback, reducing the noise level, extending dynamic range, and, by allowing lower recording levels, reducing distortion. Generally, these extremely careful tape transfers produce discs whose sonic characteristics place them a good cut above those ordinarily available. Many listeners find that their sound rivals, but does not quite equal, that of a well made direct cut. But unlike direct cuts, recordings made on tape can be edited, which allows errors to be removed.

Digital tape recording, a relative newcomer to the scene, has proved itself the most powerful tape recording system yet developed. With a 90-dB dynamic range and almost vanishingly small noise and distortion, digital recording challenges the human ear to detect its imperfections. In addition to these virtues, a digital master can be copied through an unlimited number of generations with remaining each dub sonically identical to the master. Although digital tapes must be edited electronically rather than by means of the time-tested razor blade and splicing block, they can be spliced in a way that is virtually undetectable by any means as long as there are no tattle-tale discrepancies of musical pitch or tempo between the joined segments.

Discs made as transfers from digital master tapes are available and have demonstrated excellent sound quality. They are so good that some observers speculate that digital transfers may drive direct cutting into obsolesence. Right now, though, direct cutting still has a large contingent of devoted followers.

● ***Upgrading Disc Transfers.*** The tape recorder is not the only component in the pipeline that allows fidelity to leak away. One notable source of distortion is the disc cutting process itself. Unfortunately, the signal cut into the disc by the cutting stylus is not a perfect replica of the signal delivered to the drive coils. As is the case with playback styli, the distortion the cutter produces is a function of the velocity with which it moves in tracing the groove, not the amplitude of the signal that is being cut. A playback stylus, of course, must trace the groove as it has been cut, with the disc rotating at the proper speed. Otherwise, the music will not be heard at the correct pitch and tempo.

During the cutting process, however, no one is listening. It makes no difference what speed the cutter runs at as long as the groove in the lacquer is properly cut. Therefore, it is possible to run both the tape playback and the cutting lathe at, say, half the normal speed. When this is done, the range of velocities to which the cutting stylus is subject is reduced by one-half. Now the cutter is operating where its distortion performance is considerably better. Another benefit, that cutting engineers appreciate, is that the power required to drive the cutter is reduced by a factor of four. The demands on the drive amplifier and cooling system are thereby markedly reduced.

Of course, there is more involved in half-speed cutting than just running the tape recorder and cutting lathe at reduced speed. Appropriate compensation must be made in the tape playback equalization and the RIAA disc preemphasis. These steps turn out to be well worth taking, for, as it turns out, the tape recorder too works better at half speed.

In many tape recorders, the tendency of the tape heads' inductance to roll off high-frequency response is compensated by networks that are resonant near 20 kHz. This maintains high-frequency response, but sharp transients may cause these networks to "ring" slightly and produce high-frequency smearing. At half-speed the spectra of these transients fall below the resonances, resulting in a cleaner playback.

Naturally enough, only recordings made on tape can be transferred to disc at half speed. This is being done with some new digital recordings, and some companies are leasing master tapes of notable records and reissuing them in half-speed-cut versions. These do not sound quite as good as direct cuts and digital transfers, or even analog tape transfers in which the tape has not been stored for a long time. But they are demonstrably better than the original commerical versions. And half-speed cutting can be applied to *any existing master tape.*

This points up what has so far been a dilemma for the prospective buyer of discs. At one end of the scale there are discs of maximum fidelity carrying performances by relative unknowns; at the other end there is the usual run of commercial discs carrying recordings of first-line artists. Bridging the gap somewhat are the half-speed-cut re-releases, but these are relatively few. Don't go away, though. Indications are that the artists and the technology are beginning to come together, as some of the major record companies are beginning to experiment with digital recording.

● ***Discs with Noise Reduction.*** No matter how advanced the technology used ahead of it, discs inherently have less dynamic range than music really demands. Rigorously cafeful manufacturing through all stages helps (that's part of what the hefty prices specialty discs command is for), but even then, the medium is limited. One interesting solution that has been tried is to apply noise reduction to the discs themselves. That is, the disc contains a highly compressed version of the recording, which, as it emerges from the phono preamp, is fed to an expander that returns the signal to its normal form, greatly reducing the noise from the disc in the bargain. The disadvantage here is that the expander is needed in the playback chain.

A system of this type—and a few encoded discs—was introduced by dbx several years ago, but never really caught on. The company has recently reintroduced the system, this time with a low-cost, disc-playback-only expander and a larger catalog of discs. It has been suggested that direct-cut and digitally-transferred discs with dbx encoding will be introduced soon. Telefunken has demonstrated that its High-Com II noise-reduction can be used in the same way, and, further, that it is more "compatible" in the sense that it is not as unpalatable to listen to undecoded as some other noise-reduction systems are. No commercial application of this system to discs has yet been made, however.

● ***Conclusion.*** Specialty discs of all types have evolved to meet a need in the market—the demand for disc records capable of doing justice to a fine home music-reproduction system. That does not necessarily mean that you need a very expensive system in order to hear the difference; it is audible on equipment of quite modest capabilities. It does mean that to hear *all* of the difference, your equipment will have to be first rate. And the difference can be stunning! Some audiophiles use specialty discs to challenge and test their systems. If low recorded distortion, wide dynamic range, and excellent frequency response interest you, try a specialty disc and see if your system is up to snuff. You can probably find some at your local audio salon.

continued on page 32

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Our most wanted deck. AM/FM Supertuner® Car Stereo with Cassette.

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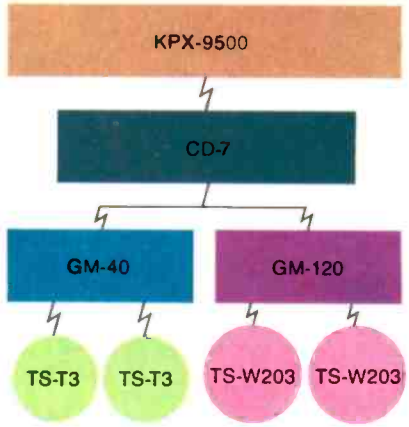
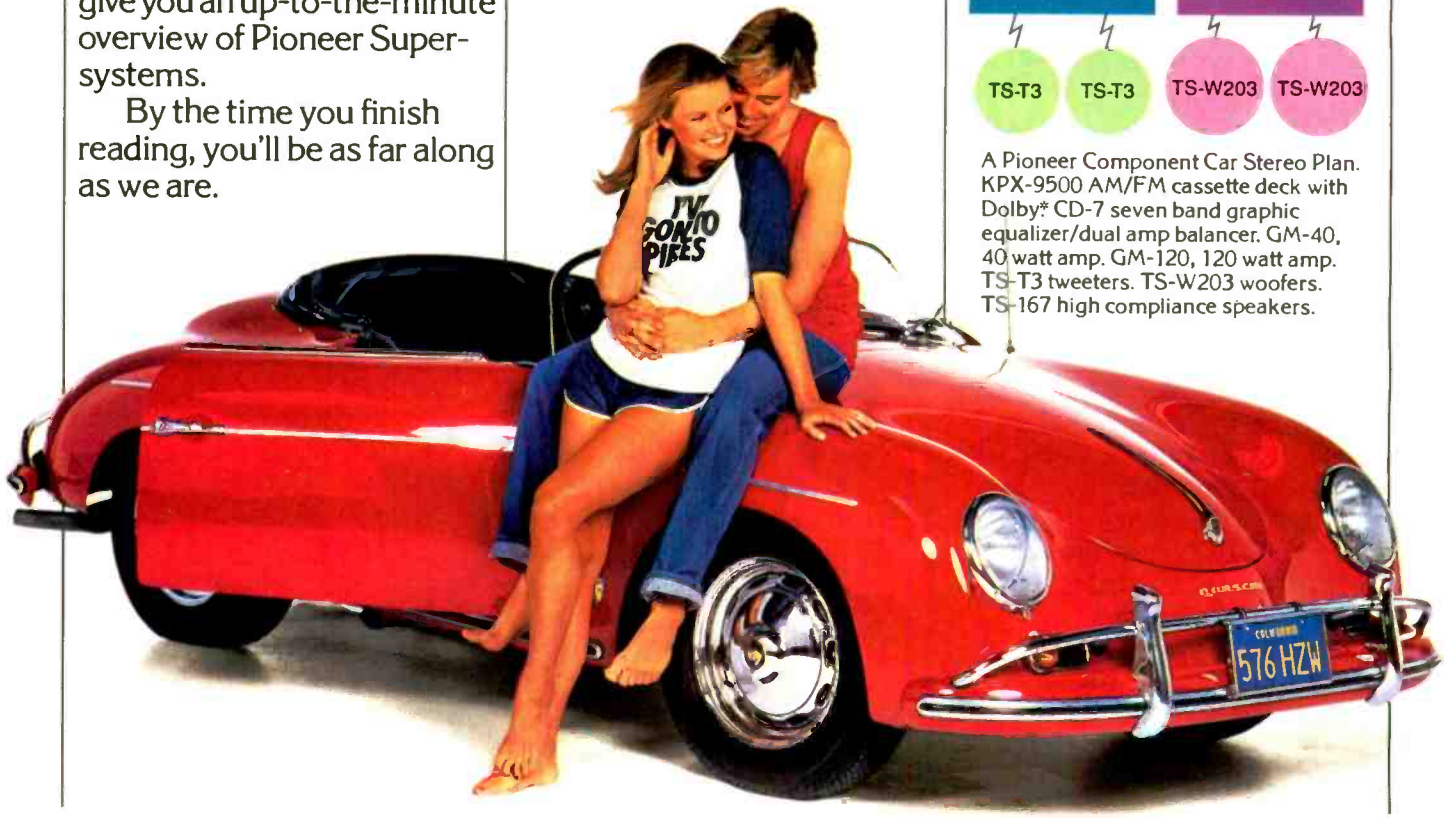
It begins with our KPX-9500. An in-dash AM/FM car stereo/cassette deck with Dolby* on tape and FM.



A Pioneer Component Car Stereo Plan. KPX-9500 AM/FM cassette deck with Dolby* CD-7 seven band graphic equalizer/dual amp balancer. GM-40, 40 watt amp. GM-120, 120 watt amp. TS-T3 tweeters. TS-W203 woofers. TS-167 high compliance speakers.



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CD-7. Seven band graphic equalizer/dual amp balancer.

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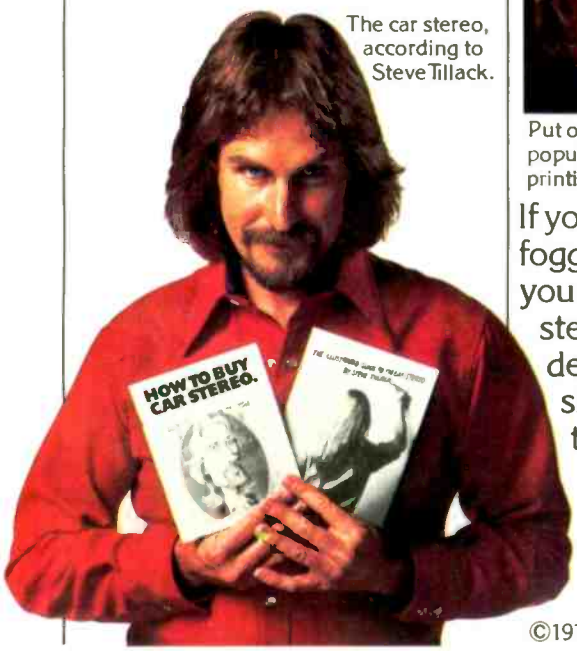

The car stereo, according to Steve Tillack.

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More Than Meets The Eye

Now that you've read how far we've come, it's time for us to grab you by the ear.

Call toll-free for your nearest Pioneer dealer at these numbers (800) 447-4700, or, in Illinois (800) 322-4400.

Because he has his greatest selection ever on hand right now.

Put our ears to your wall. Back by popular demand for the fifth printing.

If you're still a little foggy about where you fit into car stereo, your dealer can show you how to order an entire library of books by Steve Tillack, our resident car stereo authority. Including "How To Buy Car Stereo" and "All About Car Stereo Components." And be sure to ask about Pioneer T-shirts, visors and posters.

So get your ears down to your Pioneer dealer.

And hear how good car stereo sounds when it's pushed to the limits.

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The best sound going.

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Let us fit you to a T.

*Dolby is a registered trademark of Dolby Laboratories, Inc.

The new Sansui G-4700.

A double-digital receiver with all the right numbers.

Digital readouts and digital circuitry. Great specs. And the best price/performance ratio in the business. All the right numbers. That's the new Sansui G-4700. Just look what we offer:

Double-Digital Design: The front panel of the G-4700 has a bright electronic digital readout that shows the frequency of the station you've selected; and behind the front panel is one of the most advanced tuning systems in the world.

Sansui's patented Digitally Quartz-Locked Circuit uses a precise quartz crystal time base to keep your station locked in, even through many hours of listening or if you turn the receiver off and back on again.

Conventional quartz-controlled receivers use analog phase comparison circuits that can become inaccurate because of harmonic interference. Our system uses a new LSIC (Large Scale Integrated Circuit) digital processor that actually counts the vibrations of the quartz crystal to compare to the tuned frequency. The frequency is perfectly locked in the instant you find the station you want.

With this unique Digitally Quartz-Locked system, the G-4700 delivers high sensitivity (15dBf, mono); a better signal-to-noise ratio (75dB, mono); and a better spurious rejection ratio (70dB).

DC power amplifier: Power is ample for almost any speaker made, with 50 watts per channel, min. RMS, both channels driven into 8 ohms from 20 to 20,000Hz with no more than 0.05% THD.

And the wide bandwidth DC power amp circuit responds quickly to transient music signals for the most accurate and pleasing music reproduction. What you hear is clean and sharp, just the way it was recorded.

Electronic LED power meters: Don't worry if your present speakers can't handle 50 watts. The array of fast-acting LED's (Light Emitting Diodes) on the Sansui G-4700 lets you monitor and control the output level so you don't damage your speakers.

Electronic tuning meters: Two fluorescent readouts help to zero-in on each station with accuracy and ease. Both the signal strength and center-tune indicators operate digitally for precise station selection, and the nearby LED verifies that the quartz circuit has locked in your station.

Superb human engineering: A full complement of genuinely useful knobs, switches and jacks gives you complete control over what you hear and how you hear it.

Ask your authorized Sansui dealer to demonstrate the G-4700. Listen to the music. You'll love what you hear. Look at the numbers. You'll love what you see.

SANSUI ELECTRONICS CORP.
Lyndhurst, New Jersey 07071 · Gardena, Ca. 90247
SANSUI ELECTRIC CO., LTD., Tokyo, Japan
SANSUI AUDIO EUROPE S.A., Antwerp, Belgium
In Canada: Electronic Distributors

Sansui

CIRCLE NO. 12 ON READER SERVICE CARD

1 RECEIVERS

ADVENT

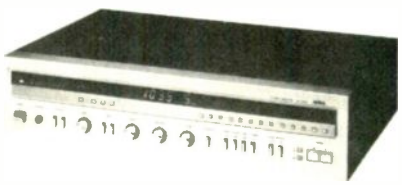
300 FM Stereo Receiver

Combines Holman phono preamp circuit, FM multiplex tuner, and 30-W power amplifier; FM sensitivity 2.5 μV; frequency response 20-20,000 Hz; power bandwidth 40-20,000 Hz; 15 W/ch continuous at rated output at 0.5% THD; stereo separation 35 dB; S/N 82 dB (phono); capture ratio 1.2 dB; spurious rejection 95 dB; inputs: phono, tape, aux.; controls: volume, balance, bass, treble, loudness, tape monitor, mono/stereo; front-panel headphone jack; black metal enclosure; 3½" H × 15⅞" W × 9" D (plus 1¾" for knob clearance) $289

AIWA

AX-7800U Stereo Receiver

Power amp: features nine-LED power indicator display (switchable signal-strength function) and two-speaker switching; 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.7% THD; damping factor 35 at 8 ohms from 20-20,000 Hz. Preamp: features bass and treble controls with turnover frequency switches; balance control; loudness switch; tape/source monitor switch; input selector with LEDs; frequency response ±0.5 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz ±1 dB (aux. and tape); S/N 80 dB (phono), 95 dB (aux. and tape). Tuner: features sensor-touch up/down FM tuning with hold scan and stop and LED frequency readout display; six-station memory preset with channel readout; nine-LED signal-strength display; mode and muting switches; auto/manual switch; AM/FM selector; FM IHF usable sensitivity 10.8 dBf (mono); 50-dB quieting 17.2 dBf (mono), 37.2 dBf (stereo); S/N 75 dB (mono), 70 dB (stereo); dist. 0.1% (mono), 0.2% (stereo); alternate channel selectivity 75 dB ±400 kHz; stereo separation 45 dB at 1000 Hz; AM usable sensitivity 250 μV/m (ferrite antenna), 25 μV (external antenna); AM S/N 50 dB; 4¹/₄" H × 20¹/₁₆" W × 17⁹/₁₆" D $590



AX-7700U Stereo Receiver

Power amp: features five-LED peak power indicator display and two-speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.1% THD; frequency response 20-30,000 Hz ±1 dB; damping factor 30 at 8 ohms from 20-20,000 Hz. Preamp: features bass and treble controls; hi filter; balance control; loudness switch; tape/source monitor switch; input selector; S/N 72 dB (phono), 90 dB (aux. and tape). Tuner: features five-LED signal-strength and three-LED tuning indicators; mode and muting switches; FM IHF usable sensitivity 11.2 dBf; 50-dB quieting 17.2 dBf (mono), 38.1 dBf (stereo); S/N 73 dB (mono), 68 dB (stereo); IHF dist. 0.25% (mono), 0.4% (stereo); alternate channel selectivity 65 dB ±400 kHz; stereo separation 38 dB at 1000 Hz; AM usable sensitivity 250 μV/m (ferrite antenna), 25 μV (external antenna); S/N 50 dB. 4¹⁵/₁₆" H × 17³/₄" W × 15⁵/₁₆" D $300

AX-7300U. Similar to AX-7700U minus power output meter display and high filter; 25 W/ch continuous under same conditions; FM tuner S/N 70 dB (mono), 65 dB (stereo); FM separation 30 dB at 1000 Hz; 6⅛" H × 16⁹/₁₆" W × 15¹/₁₆" D $210

AKAI

AA-R50 Stereo Receiver

Features dc amplifier with dual LED bar graph power meters with range selector; bass, midrange, and treble controls; tape 1 and 2 and dub 1-to-2 monitor selectors; A-B speaker switching; high and low filter selectors; FM Dolby de-emphasis and FM mute selectors; illuminated signal strength and tuning meters; AM, FM, phono, and aux. input selectors; balance control; loudness selectors. Amp: output 62 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.04% THD. FM tuner: IHF sensitivity 1.8 μV; IHF selectivity 70 dB. Walnut grain vinyl cover with silver panel; 5.9" H × 18.9" W × 14.2" D $450

AA-R40. Similar to AA-R50 minus midrange control and high and low filter selectors; power output 50 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.04% THD $400

AA-R30 Stereo Receiver

Features LED bar graph power indicator with range selector; tape 1 and 2 and dub 1-to-2 monitor switches; A-B speaker switching; AM, FM, phono, and aux. input selectors; bass and treble controls; balance control; loudness selectors; FM Dolby de-emphasis and FM mute selectors; signal strength and tuning meters. Amplifier output: 38 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.05% THD. FM tuner: IHF sensitivity 1.8 μV; IHF selectivity 60 dB. 5.6" H × 17.3" W × 12.2" D $300

AA-R20. Similar to AA-R30 without FM mute selector; power output 26 W/ch; FM tuner sensitivity 1.9 μV (IHF) $250

AUDIO PRO by INTERSEARCH

TA-150 Stereo Receiver

Computer-controlled AM-FM stereo receiver with interlock, memory, and logic functions performed by micro-computer. Features one adjustable control knob for volume, balance, treble, midrange, bass, tuning, presetting of stations, and setting of digital clock with selector buttons and optical readout. Power amp features double complementary differential input stage; 70 W/ch continuous, both channels driven into 8 ohms at 0.1% THD, 90 W/ch continuous, both channels driven into 4 ohms at 0.1% THD; frequency response 10-100,000 Hz +0/−3 dB; slew factor 30; S/N 90 dB; dynamic headroom 1 dB at 8 ohms. Preamp: features low and high filters, bass, midrange, and treble tone controls ±16 dB range, linear bypass and loudness controls, and two-deck tape monitoring, all with LEDs; input sensitivity/impedance 1.9 mV/47k ohms (phono 1), 110 mV/44k ohms (tape and aux.); phono overload 150 mV; frequency response ±0.5 dB from 20-20,000 Hz (phono RIAA), 16-200,000 Hz +0/−3 dB (tape and aux.); S/N 70 dB (phono), 80 dB (tape and aux.); THD 0.1%. Tuner features J-FET input and four-ganged tuning capacitor; 16-LED signal-strength bar display, center-tuning LEDs, five-station FM and two station AM preset, LED digital frequency/clock display, and FM muting; sensitivity 11 dBf (mono); 50-dB quieting sensitivity 15 dBf (mono), 30 dBf (stereo); capture ratio 1.2 dB max.; i-f response −55 dB; AM rejection 55 dB; selectivity 75 dB; stereo separation 40 dB at 1000 Hz; frequency response 30-15,000 Hz ±1 5 dB (mono and stereo); 75- and 300-ohm antenna connectors. Additional features include solid-state switches; full-printed circuitry; mechanical operator controls. 4¹/₂" H × 19¹/₂" W × 10¹/₄" D $1135

TPA-150. TA-150 without power amplifier $995

BANG & OLUFSEN

Beomaster 4400 FM Receiver

FM stereo receiver. Amp section: features dual power supplies, Bessel filter (designed to eliminate TID), and dc voltage overload protective relay with LED in power amp; bass and treble tone controls designed around active filter circuits; linear control; balance control; two-speaker handling; two-deck tape monitoring; low and high filters. 70 W/ch continuous into 4 ohms; frequency response 20-20,000 Hz; max. THD 0.1%; IM dist. 0.1%; input sensitivity/impedance. 2.2 mV/47,000 ohms (phono), 200 mV/470,000 ohms (tape); S/N (linear) 60 dB (phono), 65 dB (tape). Tuner section: features dual FETs in front end and i-f section with ceramic filters, double-tuned quadrature detector, and PLL stereo decoder; six-station FM preset; slidebar tuning; sensitivity for 50 dB quieting 18 dBf (mono), 38 dBf (stereo); THD at 50 dB quieting 1% max. (stereo, 6 kHz); S/N at 65 dBf 70 dB (mono), 67 dB (stereo); capture ratio 4 dB (mono); AM suppression 50 dB (mono); selectivity 1 dB (mono, adj. channel), 58 dB (mono, alternate channel); image response −69 dB (mono); i-f response −85 dB (mono). 117-V ac, 50-60 Hz, 30-310 W; 3¾" H × 22⅜" W × 11" D $850

Beomaster 2400 FM Receiver

Low-slung design with no visible knobs; electronic touch-control switching; preset FM station capability; wireless remote control. Amplifier section: 30 W/ch continuous power into 4 ohms from 20-20,000 Hz at 0.2% THD; IM dist. 0.15%;

1 RECEIVERS

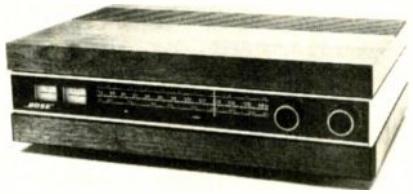
phono sensitivity 3 mV; S/N better than 60 dB phono, 65 dB tape; stereo separation 56 dB at 1 kHz, 38 dB from 250-10,000 Hz. Tuner section: usable sensitivity 19.2 dBf (5.0 μV) mono; 50-dB quieting sensitivity 38.9 dBf (47 μV) stereo, 18.5 dBf (4.6 μV) mono; S/N 70 dB mono, 66 dB stereo at 65 dBf; frequency response 30-15,000 Hz ±1.5 dB; THD at 50-dB quieting 1.0% or less; IM distortion 0.5% mono, 0.6% stereo; capture ratio 4.5 dB mono; alternate channel selectivity 58 dB; AM suppression 50 dB; i-f rejection 85 dB; spurious response rejection 87 dB; subcarrier suppression 45 dB at 19 kHz, 50 dB at 38 kHz; stereo separation 35 dB at 1 kHz, 29 dB at 100 Hz, 24 dB at 10 kHz. Front panel touch switches control two volume (with illuminated volume direction increase/decrease as volume does same), phono/tape selection and up to five preset FM stations with illuminated display; functions duplicated (except only four preset stations) on optional wireless remote. Additional controls under hinged top panel include main tuning dial, afc switch, bass, treble and balance controls; "volume memory" presets volume level when unit is turned on. 2½" H × 24¼" W × 9¾" D. $650

Beomaster 1900. 2400 less remote control unit..... ..... $550

BOSE

Spatial Control™ Receiver

Combines four bridged power amplifiers (or two stereo pairs), preamplifier, equalizer, compensation circuitry and two headphone amplifiers; designed to



enable listener to widen or narrow spatial sound image according to program material played. Power amp: features four direct-coupled power amplifiers; complete protection circuitry; two-speaker switching; 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.09% THD and IM dist.; power bandwidth 20-20,000 Hz; S/N (A weighted) 90 dB (inputs shorted). Preamp: features automatic CMOS switching logic gain and equalization controls through rear-panel programming of number and types of speakers being used with LED indicator (Bose 901 Speaker System designed to complement Spatial Control™ Receiver); ± low- and high-frequency slide controls with wide/narrow low-frequency range selector, source and room compensation selector, and low filter; balance slide control; narrow/wide spatial slide control with in/out selection and LED indicator; two-deck tape monitoring; input selectors with LEDs; input sensitivity/impedance 2.0 mV/47k ohms (phono), 200 mV/50k ohms (aux. and tape); frequency response ±0.3 dB (phono RIAA), 20-20,000 Hz +0.1/−0.5 dB (tape and aux.); S/N (A weighted) 83 dB (phono, inputs shorted); phono overload 145 mV. FM tuner: MOS FET front end; PLL multiplex stereo decoder; FM muting; mode selector with LED; loudness switch; signal-strength and FM tuning meters; IHF usable sensitivity 1.9 μV (mono), 3.3 μV (stereo); 50-dB quieting 3.5 μV (mono), 35 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); frequency response 30-15,000 Hz +0.2/−1.0 dB; THD 1.0% (mono), 0.25% (stereo); capture ratio 1.8 dB; alternate channel selectivity 70 dB; image rejection 80 dB; spurious rejection 100 dB; stereo separation 45 dB at 1000 Hz. AM 20-dB usable sensitivity 250 μV/m (ferrite antenna), 25 μV (external antenna); S/N 45 dB. Oiled walnut cabinet with all controls, except volume and tuning controls plus lighted meters and tuning dial, behind bottom front panel; 6⅜" H × 20½" W × 16⅜" D..... $799

550 Stereo Receiver

Features source and room compensation controls. Power amp: features dc circuitry; two-speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.3% THD and 0.09% IM dist.; power bandwidth 20-20,000 Hz; S/N 87 dB (A weighted). Preamp: features equalizer with low and high frequency slide controls, wide/narrow low-frequency switch, and low filter switch; balance slide control; tape monitor switch; input selector; input sensitivity/impedance 2.75 mV/47k ohms (phono), 150 mV/50k ohms (aux. and tape); S/N (A weighted) 76 dB (phono); frequency response ±0.5 dB (phono RIAA), 20-20,000 Hz +0.5 dB (aux. and tape); phono overload 100 mV at 1000 Hz, 1.0% THD. FM tuner: features mode switch, FM muting, and loudness switch; signal-strength and tuning meters; IHF usable sensitivity 2.0 μV (mono), 3.5 μV (stereo); 50-dB quieting 3.8 μV (mono), 40 μV (stereo); S/N 65 dB (mono), 60 dB (stereo); frequency response 30-15,000 Hz +1/−3 dB; THD 0.25% (mono), 0.5% (stereo); capture ratio 1.9 dB; alternate channel selectivity 60 dB; image rejection 65 dB; spurious rejection 80 dB; stereo separation 40 dB at 1000 Hz. AM 20-dB usable sensitivity 350 μV/m (ferrite antenna), 50 μV (external antenna); S/N 40 dB. Oiled walnut cabinet; 5¾" H × 18¼" W × 12¼" D $349

CALIBRE

240 Stereo Receiver

AM-FM stereo receiver with FM Dolby circuitry. Power amp: features two-speaker switching; 42 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist. Preamp: features bass and treble controls; balance control; two-way tape dubbing and monitoring; high filter; mute, mono, and loudness switches; phono S/N 80 dB (A weighted); phono overload 210 mV. Tuner: features three-LED signal-strength and FM tuning indicator display; FM IHF usable sensitivity 1.9 μV (mono), 2.5 μV (stereo); 50-dB quieting 2.8 μV (mono), 39.8 μV (stereo); THD at 1000 Hz 0.1%; S/N 72 dB; capture ratio 1.5 dB; alternate channel selectivity 66 dB..... $375

225. Similar to 240 without Dolby noise-reduction circuitry; 26 W/ch continuous under same conditions; FM alternate channel selectivity 60 dB. $280

215. Similar to 225 minus tape dubbing and LED signal-strength display; 16 W/ch under same conditions; FM S/N 68 dB $230

CONCEPT

12.0D FM Stereo Receiver

Amplifier section: 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; S/N (A weighted) 80 dB (phono); phono overload 220 mV. FM tuner section: IHF usable sensitivity 1.7 μV (mono), 3 μV (stereo); 50-dB quieting 2.7 μV (mono), 36 μV (stereo); S/N 72 dB (mono), 74 dB (stereo); THD 0.1% at 1000 Hz; capture ratio 0.8 dB; alternate channel selectivity 85 dB..... $900

7.5D Stereo Receiver

Amplifier: 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; S/N 80 dB (phono, A weighted); phono overload 220 mV. FM tuner: IHF usable sensitivity 1.7 μV (mono), 4.5 μV (stereo); 50-dB quieting 2.7 μV (mono), 36 μV (stereo); THD 0.1%; S/N 70 dB (mono), 72 dB (stereo); capture ratio 1 dB; alternate channel selectivity 80 dB $620

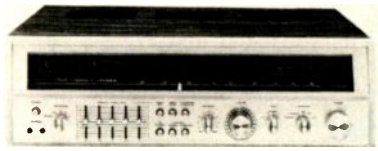
4.5D Stereo Receiver

Amplifier: 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; S/N 78 dB (phono, A weighted); phono overload 220 mV. FM tuner section: IHF usable sensitivity 1.8 μV (mono), 6 μV (stereo); 50-dB quieting 2.8 μV (mono), 38 μV (stereo); THD 0.1%; S/N 68 dB (mono), 72 dB (stereo); capture ratio 1.1 dB; alternate channel selectivity 78 dB ... $490

FISHER

RS2015 Stereo Receiver

Has five-band graphic equalizer. Amplifier section: 150 W/ch continuous power into 8 ohms



(20-20,000 Hz) at 0.05% THD; IM dist. 0.05%; power bandwidth 20-20,000 Hz; frequency response 20-20,000 Hz ±0.5 dB; phono sensitivity 2 mV; input impedance 50k ohms phono, 100k ohms others; max. phono input 220 mV; S/N (A-weighted) 78 dB phono, 95 dB others. Tuner section: FM usable sensitivity 9.8 dBf (1.7 μV); 50-dB quieting sensitivity 13.2 dBf (2.5 μV) mono, 35.9 dBf (34 μV) stereo; FM distortion 0.2-0.4% stereo, 0.1-0.3% mono; capture ratio 0.8 dB; selectivity 80 dB; AM suppression 65 dB; i-f rejection 100 dB; image rejection 90 dB; spurious response rejection 100 dB; subcarrier rejection 65 dB; stereo separation 45 dB at 1000 Hz, 40 dB from 100-10,000 Hz. AM section: sensitivity 300 μV/m; selectivity 40 dB; S/N 55 dB; image rejection 50 dB; i-f rejection 45 dB. Features power-level, signal-strength, and center-channel meters, Dolby de-emphasis (25 μsec) switch; two tape monitors with one-way dubbing; three speaker outputs; switchable FM muting; loudness; MPX and subsonic filters; calibrated volume control; illuminated function display $800

RS2010. Similar to RS2015. 100 W/ch at 0.09% THD; 200 mV max. phono input; S/N 76 dB phono, 90 dB aux. Tuner specs as for RS2015. Features same, but no tape-dub switch. 6¹¹/₁₆" H × 20⁵/₁₆" W × 14¼" D $600

RS2007. Similar to RS2010, but 75 W/ch; max. phono input 180 mV. Tuner: FM usable sensitivity 10.8 dBf (1.9 μV) mono; 50-dB quieting sensitivity 14.2 dBf (2.8 μV) mono, 36.8 dBf (38 μV) stereo; capture ratio 1.0 dB; selectivity 68 dB; S/N 70 dB mono, 66 dB stereo; AM suppression 55 dB; i-f rejection 100 dB; image rejection 56 dB; spurious response rejection 85 dB; subcarrier rejection 65 dB; FM distortion 0.15% mono, 0.2% stereo. Features same, with less elaborate function display, single-phono circuit, and two speaker outputs $500

RS2004A. Similar to RS2007 but 45 W/ch at 0.1% THD; IM dist. 0.1%; max. phono input 150 mV. Features same except single tape monitor, no power meters, no filters, no mono mode switch. 5⅞" H × 19¼" W × 14⅞" H..... $400

RS2003 Stereo Receiver

AM-FM stereo receiver with five-band graphic equalizer. Amplifier/equalizer: features two-speaker switching; tape/source monitor switch; volume/balance control; loudness contour switch; input selector with LED function display; equalizer defeat switch; 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; damping factor 40; input sensitivity/impedance 2 mV/50k ohms (phono), 150 mV/100k ohms (tape and aux.); frequency response ±0.5 dB from 30-15,000 Hz (phono), 20-20,000 Hz ±0.5 dB (aux.); S/N (IHF A) 76 dB (phono), 90 dB (tape and aux.); equalizer center frequencies set at 50, 250, 1000, 4500, and 15,000 Hz, ±10 dB boost or cut. Tuner: features signal-strength and center tuning meters; FM muting switch; FM usable sensitivity 1.9 μV (mono), 4.6 μV (stereo); 50-dB quieting 2.8 μV (mono), 38 μV (stereo); S/N 70 dB (mono), 66 dB (stereo); THD 0.15% (mono), 0.2% (stereo); frequency response 20-15,000 Hz ±0.5 dB; capture ratio 1.0 dB; alternate channel selectivity 68 dB ±400 kHz; image rejection 56 dB; i-f rejection 100 dB; spurious rejection 85 dB; stereo separation 45 dB at 1000 Hz; AM usable sensitivity

STAY TUNED

With the revolutionary new AIWA AX-7800 receiver!

Now AIWA proudly introduces an exceptional high fidelity receiver designed to make tuning faster, easier and more accurate than ever: the revolutionary new AX-7800. With the same quartz-locked digital-synthesized tuning system utilized on the most sophisticated and expensive FM tuners available today.

Now perfect tuning is as simple as pressing a button. There's no more fumbling or fidgeting with tuning knobs, dials and center tuning meters.

The new AIWA AX-7800 simply doesn't have any.

Instead, it provides an instant digital readout that's perfectly tuned to the actual station frequency being received.

Drift is impossible. Because AIWA's quartz crystal oscillator locks instantly and precisely into the center of each succeeding station's assigned frequency. Now when you tune the new AIWA AX-7800, you stay tuned.

With unerring accuracy that even separates weaker stations from their stronger neighbors. Something no conventional receiver with AFC can do.

AIWA's new AX-7800 is loaded w th features. Like Memory Tuning that lets you preset up to 6 FM and 6 AM stations. Like a highly visible 9-point LED peak power bar graph. Like independent bass and treble frequency turnover controls.

And the AX-7800's DC-power amplifier gives you 60 Watts per channel RMS at 8 ohms from 20Hz to 20KHz. With no more than 0.05% THD.

Right now, almost no receivers have all these advanced features. Regardless of price. That's why you'll be pleasantly surprised by the AX-7800's affordable price tag.

So stay tuned to the AIWA AX-7800 for easier tuning and easier listening. You won't find another receiver more in tune with the times than the revolutionary new AIWA AX-7800.

Upgrade to **AIWA**®

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Distributed in Canada by: SHRIRO (CANADA) LTD.

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1 RECEIVERS

300 μV/m. 5⅞" H × 19¼" W × 14⅞" D..... $330

RS2002. Similar to RS2003 without tuning meter; 20 W/ch continuous with 0.09% THD and IM dist.; damping factor 20..... $250

RS1035A Stereo Receiver

35 W/ch continuous sine wave into 8 ohms from 20-20,000 Hz with 0.2% THD and IM dist. Preamp section: frequency response 30-15,000 Hz ±1 dB (phono), 20-20,000 Hz ±1 dB (aux.); input sensitivity/impedance 2 mV/50k ohms (phono), 150 mV/100k ohms (tape and aux.); phono overload 110 mV at 1000 Hz, 1% THD; S/N (IHF A) 90 dB (tape, aux.), 75 dB (phono). FM tuner: usable sensitivity 4.6 μV (stereo); S/N 66 dB (stereo); capture ratio 1.0 dB; alternate channel selectivity 68 dB +400 kHz; image rejection 56 dB; i-f rejection 70 dB; stereo separation 40 dB at 1000 Hz; frequency response 20-15,000 Hz ±1.5 dB; AM sensitivity 300 μV/m; 6¹⁄₁₆" H × 19⅛" W × 13⅛" D..... $280

MC2500 Stereo Receiver

Amplifier section: 18 W/ch continuous power into 8 ohms (60-20,000 Hz) at 1% THD; IM dist. 0.5%; frequency response 20-20,000 Hz ±2 dB; phono sensitivity 2 mV (magnetic); 300 mV (ceramic); input impedance 50k ohms mag phono, 500k ohms ceramic phono, 100k ohms tape; mag phono max. input 100 mV; S/N 70 dB phono, 85 dB aux. Tuner section: FM usable sensitivity 14.1 dBf (2.8 μV); 50-dB quieting sensitivity 19.2 dBf (5.0 μV) mono, 38.3 dBf (45 μV) stereo; FM distortion 0.5% stereo, 0.3% mono; capture ratio 1.2 dB; selectivity 50 dB; AM suppression 55 dB; i-f rejection 65 dB; image rejection 56 dB; spurious response rejection 80 dB; subcarrier rejection 45 dB; stereo separation 35 dB at 1kHz, 30 dB at 100 Hz and 10 kHz; antenna 75 or 300 ohms. AM section: sensitivity 300 μV/m; selectivity 40 dB; S/N 50 dB; image rejection 45 dB; i-f rejection 45 dB. Features dual illuminated tuning meters, high filter, switchable loudness, two speaker outputs, magnetic and ceramic phono inputs. 5¹¹⁄₁₆" H × 20¹⁄₁₆" W × 10¼" D $200

HARMAN/KARDON

hk670 Stereo Receiver

Features "SMQ" tuning meter (indicates signal-strength, multipath distortion, and quieting); dual tape monitors with two-way dubbing; switchable tone defeat; high and subsonic filters, 25-μsec de-emphasis; FM muting and loudness; dual power supplies; headphone jack; two speaker output pairs. Amplifier: 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.03% THD and IM dist.; frequency response 2-150,000 Hz ±0.5 dB; damping factor 50 into 8 ohms; slew rate 60 V/μsec; square wave rise time 2.0 μsec at 20,000 Hz, tilt less than 5% at 20 Hz; phono sensitivity 2.0 mV; max. input 150 mV; S/N ("A") 90 dB (aux., tape), 85 dB (phono). Tuner section: FM usable sensitivity 10.8 dBf (1.9 μV) mono; 50-dB quieting sensitivity 14.7 dBf (3.0 μV) mono, 37.2 dBf (40 μV) stereo; FM S/N 75 dB; FM dist. 0.5% at 1000 Hz, 80% modulation..... $569

hk560. Similar to hk670, but 40 W/ch; damping factor 30; frequency response 3-100,000 Hz ±0.5 dB. Features similar, but low filter only, no de-emphasis switch, one-way tape dubbing, signal-strength meter only..... $399

hk450. Similar to hk560, but 30 W/ch at 0.1% THD and IM dist.; frequency response 2-80,000 Hz ±0.5 dB; 3.0 μsec rise time at 20,000 Hz; phono sensitivity 2.7 mV; max. input 75 mV; S/N ("A") 78 dB phono. FM tuner usable sensitivity 11.2 dBf (2.0 μV) mono; 50-dB quieting sensitivity 16.1 dBf (3.5μV) mono; FM S/N 70 dB. Features single tape monitor, no filter, no tone defeat..... $319

hk340. Similar to hk450, but 20 W/ch at 0.2% THD; square wave rise time 3.5 μsec at 20,000 Hz. FM tuner usable sensitivity 13.2 dBf (2.5 μV) mono; FM S/N 65 dB; FM dist. 0.75%. Features similar, but no mode or muting switches, single speaker output only, no tape monitor..... $249

HEATH

AR-1515 Stereo Receiver

Features digital readout and signal-strength and center-tune meters; secondary controls concealed behind fold-down front panel. Accepts Dolby FM module. Amplifier: 70 W/ch min. continuous into 8 ohms at 0.08% THD over 20-20,000 Hz; IM dist. less than 0.08% at full power; frequency response 8-45,000 Hz +0/−3 dB. Tuner: input sensitivity 2 mV (mag. phono), 200 mV (aux., tape, and dub); FM sensitivity 1.8 μV for 30 dB quieting; capture ratio 1.3 dB. 6³⁄₁₆" H × 21½" W × 15" D
Kit..... $600

AD-1504. Dolby FM module (kit)..... $40

AR-1429 Stereo Receiver

Amplifier: 35 W/ch min. continuous into 8 ohms at less than 0.1% THD over 20-20,000 Hz; IM dist. less than 0.2% at full power; frequency response 5-45,000 Hz +0/−1 dB at 1 W. Tuner: input sensitivity 2 mV (mag. phono), 200 mV (aux., tape, and tape monitor); FM sensitivity 3.5 μV (16.1 dBf); capture ratio 1.5 dB. Features two tuning meters, stereo indicator, main and remote speaker selection, and headphone jack. 4³⁄₄" H × 20" W × 13½" D.
Kit..... $350

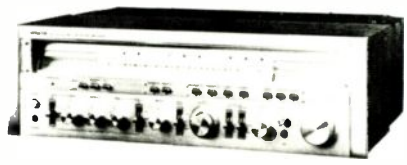
AR-1219 Stereo Receiver

15 W/ch min. continuous into 8 ohms at 0.5% THD over 20-20,000 Hz; frequency response 7-100,000 Hz ±1 dB; FM response 20-15,000 Hz ±1 dB; channel separation 40 dB typically, 35 dB min.; sensitivity 2 μV; capture ratio 2 dB; pre-assembled FM tuner section; stereo light; headphone jack; 3⅞" H × 17" W × 13" D.
Kit..... $200

HITACHI

SR-2004 Stereo Receiver

Power amp: features combined low- and high-power Class G amplification; dual power output meters;



three-speaker operation with LEDs; 200 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD and IM dist.; power bandwidth 10-40,000 Hz; damping factor 55 at 8 ohms. Preamp: features bass, midrange, and treble controls with switchable bass and treble turnover frequencies and tone defeat; low and high filters; balance control; −20/−40 dB switchable audio muting; two-way tape dubbing and monitoring; mic mixing with level control; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono 1 and 2), 150 mV/50k ohms (aux.), 150 mV/35k ohms (tape 1 and 2), 450 mV/120k ohms (DIN), 3 mV/50k ohms (mic); frequency response ±0.2 dB from 30-15,000 Hz (phono RIAA), 10-40,000 Hz ±1 dB (aux.); S/N (IHF A) 75 dB (phono), 90 dB (tape and aux.). Tuner: features dual-gate MOS FET and five-ganged linear frequency capacitors in front end; PLL ICs in FM multiplex circuit; FM mute/auto lock; wide/narrow i-f bandwidth selector; multipath switch; signal-strength and tuning meters; mode, loudness, and adaptor switches; FM usable sensitivity 1.5 μV (mono), 15 dBf (stereo); 50-dB quieting 12.5 dBf (mono), 36 dBf (stereo); S/N 75 dB (mono), 70 dB (stereo); dist. at 1000 Hz 0.1% (mono), 0.2% (stereo); frequency response 30-15,000 Hz ±1 dB; capture ratio 1.0 dB; alternate channel selectivity 85 dB; image and i-f rejection 115 dB; spurious rejection 120 dB; stereo separation 50 dB at 1000 Hz; AM sensitivity 15 μV (IHF). 7¼" H × 22¾" W × 17½" D..... $1095

SR-904 Stereo Receiver

Power amp: features Class G amplification; electronic power protection circuitry with LED; dual power meters; two-speaker switching; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.09% THD; power bandwidth 10-40,000 Hz; damping factor 45 at 1000 Hz, 8 ohms. Preamp: features bass, midrange, and treble controls; low and high filters; two-way tape dubbing and monitoring; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono), 200 mV/50k ohms (aux. and tape), 500 mV/80k ohms (DIN); phono overload 220 mV; S/N (IHF A) 75 dB (phono), 87 dB (aux. and tape); frequency response 30-15,000 Hz ±0.5 dB (phono), 8-40,000 Hz +0.5/−1.5 dB (aux.). Tuner: features dual-gate MOS FET and four-gang linear frequency variable capacitor in front end; PLL IC in multiplex circuit; auto-lock tuning; FM muting; mode switch with LEDs; signal-strength and tuning meters; FM usable sensitivity 1.6 μV (mono), 14 μV (stereo); 50-dB quieting 3.1 μV (mono), 34.5 μV (stereo); S/N 74 dB (mono), 68 dB (stereo); THD at 1000 Hz 0.15% (mono), 0.25% (stereo); frequency response 30-15,000 Hz ±1 dB; capture ratio 0.1 dB; alternate channel selectivity 80 dB; image rejection 85 dB; i-f and spurious rejection 100 dB; stereo separation 45 dB at 1000 Hz; AM sensitivity 20 μV (IHF), 300 μV (IHF, ferrite antenna). 5¾" H × 19¼" W × 15¾" D..... $630

SR-804. Similar to SR-904 minus midrange control, DIN input, LED input indicators, and tuner auto lock system; MOS FET and three-gang linear-frequency variable capacitor in front end; 50 W/ch under same conditions; damping factor 40 at 1000 Hz, 8 ohms; aux. frequency response 10-40,000 Hz ±1 dB; phono overload 250 mV; aux. and tape S/N 90 dB; FM usable sensitivity 1.64 μV (mono), 5.5 μV (stereo) and 50-dB quieting 3.9 μV (mono), 39 μV (stereo); FM frequency response 30-12,000 Hz ±0.5 dB; alternate channel selectivity 75 dB; image rejection 56 dB; i-f and spurious rejection 80 dB; AM ferrite antenna 370 μV/m; 5¼" H × 18⅛" W × 14³⁄₁₆" D..... $450

SR-604. Similar to SR-804 minus high filter and aux. input; has dual five-LED power logarithmic meter display, one-way tape dubbing, and subsonic filter; 35 W/ch with 0.05% THD; power bandwidth 10-30,000 Hz; phono input sensitivity/impedance 3 mV/50k ohms; phono overload 140 mV; phono S/N 70 dB; tape frequency response 10-30,000 Hz ±2 dB; FM usable sensitivity 1.8 μV mono; FM stereo HD 0.3% at 1000 Hz; alternate channel selectivity 76 dB; image rejection 50 dB; AM ferrite antenna sensitivity 300 μV/m; 5⅝" H × 17⅛" W × 13¾" D..... $350

SR 504 Stereo Receiver

27 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.08% THD; input sensitivity/impedance 2.5 mV/47,000 ohms (phono), 200 mV/40,000 ohms (tape, aux.); FM sensitivity 1.8 μV; FM alternate channel selectivity 60 dB; FM THD 0.15% (1 kHz, stereo); FM S/N 74 dB; stereo separation 74 dB (1 kHz); subsonic filter..... $280

SR-4010 Stereo Receiver

Power amp: features integrated hybrid IC circuitry; dual five-LED power logarithmic meter display (also combines functions of signal-strength and center-tuning) with meter select switch; power/speaker switch for main, remote, and phones; 25 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; power bandwidth 10-40,000 Hz; damping factor 30 at 1000 Hz, 8 ohms. Preamp: features bass, treble, and balance controls; loudness switch; tape/source monitor switch; input selector; input sensitivity/impedance 3 mV/50k ohms (phono), 150 mV/30k ohms (tape); phono overload 130 mV; frequency response ±0.5 dB (phono RIAA), 15-30,000 Hz ±2 dB (tape); S/N (IHF A) 75 dB (phono), 92 dB (tape). Tuner: features FET and three-gang variable tuning capacitor in FM front end; PLL IC FM multiplex circuit; subsonic filter; signal strength and tuning logarithmic display; FM usable sensitivity 1.9 μV (mono); 50-dB quieting

HIGH SPEED RECEIVERS: FASTER RESPONSE MEANS MORE ACCURATE SOUND.

The new Kenwood receivers actually outperform all other receivers, as well as our competitors' separate amplifiers and tuners in transient response.

The reason is Kenwood's exclusive technical breakthrough: Hi-Speed. It allows our receivers to react more quickly to musical changes. So what comes out of your receiver matches precisely what went in.

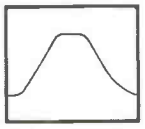
You'll hear the difference as dramatically accurate, open sound with superior imaging and detail. Like hearing an individual singer in a vocal group.

Hi-Speed is available in four models, all DC-amplified for clean bass response. Each one also has switchable wide and narrow IF bands for low-distortion FM reception, plus dual power meters.

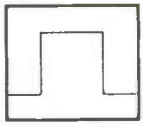
And each Hi-Speed receiver has unique individual features that make a real difference in the tonal quality of music. Like dual power supplies that eliminate crosstalk distortion. Or a pulse count detector that digitally reduces FM distortion by half while significantly reducing background noise. Or a built-in equalizer with ten turnover frequencies for full acoustic control.

Whichever model you choose, you'll be getting the most advanced receiver technology and performance available today. Advances far beyond the competition.

Your Kenwood dealer will be happy to demonstrate Hi-Speed, now.



Distorted waveform response produced by conventional receiver.



Square waveform response of Hi-Speed receiver.

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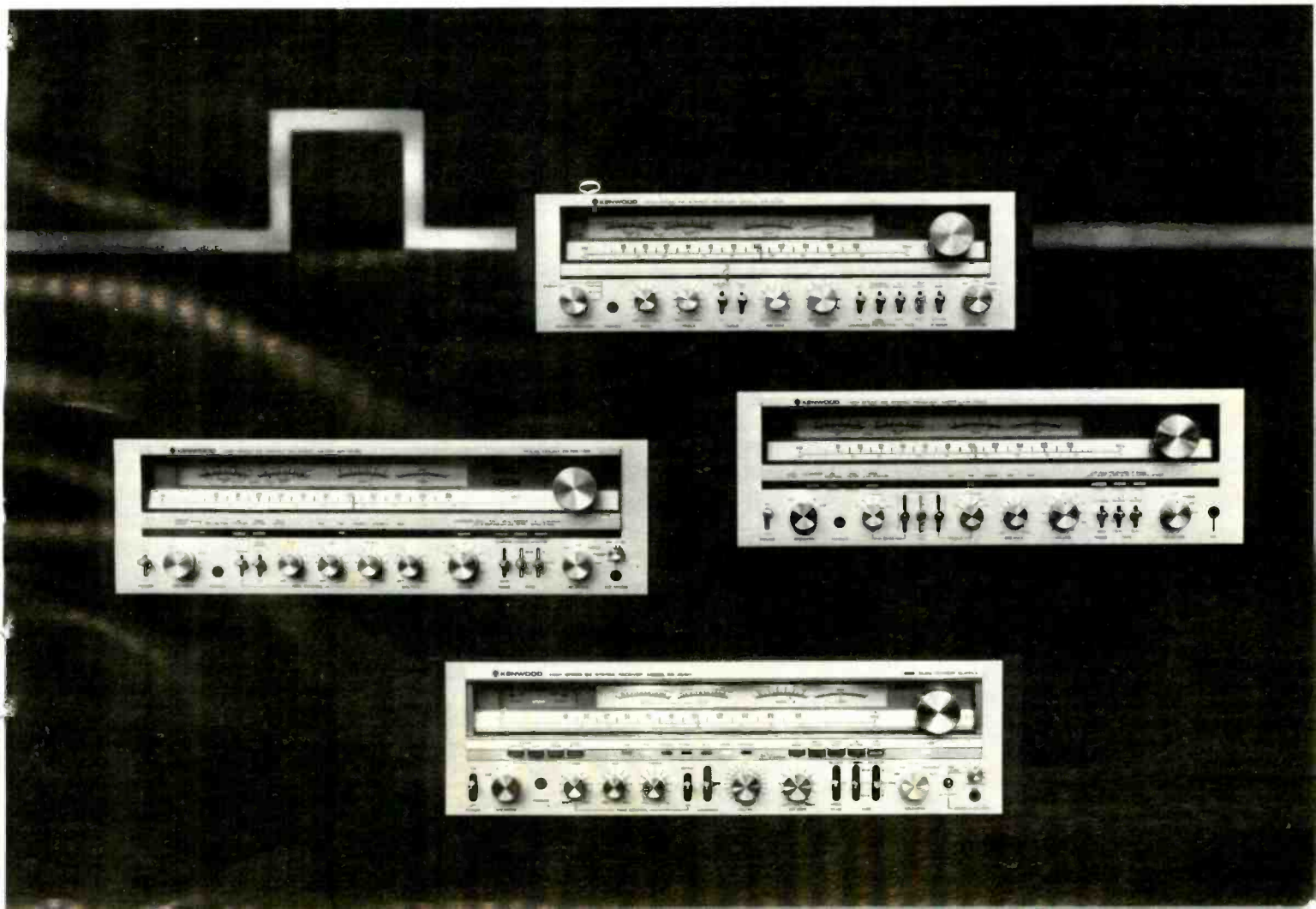
CIRCLE NO. 7 ON READER SERVICE CARD



1 RECEIVERS

sensitivity 3.9 μV (mono), 39 μV (stereo); S/N 75 dB (mono), 70 dB (stereo); THD at 1000 Hz 0.15% (mono), 0.3% (stereo); frequency response 30-12,000 Hz ±2 dB; capture ratio 1.0 dB; alternate channel selectivity 76 dB; image rejection 50 dB; i-f and spurious rejection 80 dB; stereo separation 40 dB at 1000 Hz; AM sensitivity 20 μV (IHF), 4¹/₁₆" H × 17¹/₈" W × 10¹⁵/₁₆" D..... $250

SR-2010. Similar to SR-4010 without power output and tuning meter display and subsonic filter; 15 W/ch with 0.3% THD and IM dist.; FM S/N 74 dB (mono), 68 dB (stereo); alternate channel selectivity 55 dB..... $200

SR 304 Stereo Receiver

18 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.08% THD; input sensitivity/impedance 2.5 mV/47,000 ohms (phono), 200 mV/40,000 ohms (tape, aux.); FM sensitivity 1.8 μV; FM alternate channel selectivity 56 dB; FM THD 0.3% (1 kHz, stereo); FM S/N 72 dB; stereo separation 40 dB (1 kHz); subsonic filter..... $240

JVC

JR-S501 Stereo Receiver

Integrated stereo receiver features dc power amplifier and five-band SEA graphic equalizer; four-gang

frequency-linear tuning capacitor and FET r-f amplifier in FM front end; PLL multiplex demodulator with pilot signal canceller; thumb-controlled lateral control for speed scanning and tuning; twin tuning and power meters; pushbutton source selectors with LED display/slider controls; two-deck dubbing; FM muting; mode/loudness/high and subsonic filters; speaker 1 and 2 switches. Amplifier: 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; THD 0.008% at half-rated power; IM dist. 0.001% at rated output; damping factor 70 at 8 ohms, 1000 Hz; input sensitivity/impedance 2.5 mV/47,000 ohms (phono), 250 mV/50,000 ohms (aux. and tape); S/N (IHF "A") 75 dB (phono), 95 dB (aux. and tape); frequency response 5-40,000 Hz +0/−1 dB; RIAA phono equalization ±0.2 dB from 20-20,000 Hz; phono overload 250 mV at 1000 Hz. FM tuner: usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 14.8 dBf (3.0 μV) mono, 37.2 dBf (39.7 μV) stereo; stereo separation 52 dB at 1000 Hz; 0.08% (mono) and 0.1% (stereo) at 1000 Hz; S/N (IHF "A") 78 dB mono, 70 dB stereo; capture ratio 1.0 dB; alternate channel selectivity 80 dB; image rejection 80 dB; i-f rejection 110 dB; frequency response 20-15,000 Hz +0.3/−0.8 dB. Equalizer center frequencies set at 40, 250, 1000, 5000, and 15,000 Hz with 12-dB boost or cut. 6⁹/₁₆" H × 22¹/₁₆" W × 16¹⁵/₁₆" D..... $730

JR-S401. Similar to JR-S501 but 85 W/ch under same conditions; aux. and tape input sensitivity/impedance 210 mV/50,000 ohms; phono overload 200 mV; one-way tape dubbing $630

JR-S301. Similar to JR-S401 except 60 W/ch under same conditions; aux. and tape input sensitivity/impedance 190 mV/50,000 ohms; phono overload 190 mV. FM tuner usable sensitivity 10.8 dBf (1.9 μV), stereo separation 50 dB at 1000 Hz, dist. at 1000 Hz 0.08% mono, 0.1% stereo, 55 dB image rejection, i-f rejection 80 dB; no PLL multiplex demodulator with pilot signal canceller, high filter, or phono switch; 6⁹/₁₆" H × 19³/₄" W × 14¹⁵/₁₆" D $500

JR-S201. Similar to JR-S301 except 35 W/ch under same conditions; THD and IM dist. 0.01%; aux. and tape input sensitivity/impedance 150 mV/50,000 ohms; phono overload 180 mV at 1000 Hz; signal-strength and center-tuning meters only. $390

R-S7 Stereo Receiver

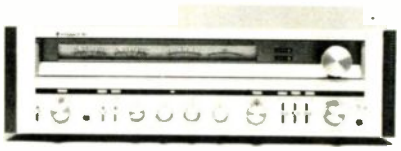
Power amp: features fully complementary OCL amp circuitry; triple power protection; two-speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; damping factor 45 from 20-20,000 Hz, 8 ohms. Preamp: features low-noise phono equalizer; bass and treble controls; balance control; loudness and source/tape monitor switches; input selector; input sensitivity/impedance 2.5 mV/47k ohms (phono), 170 mV/40k ohms (aux. and tape); phono overload 140 mV; S/N (IHF A) 82 dB (phono), 100 dB (aux. and tape); frequency response ±0.5 dB from 20-20,000 Hz (phono RIAA), 15-50,000 Hz ±1 dB (aux. and tape). Tuner: features PLL multiplex demodulator IC; double FM muting; signal-strength and FM tuning meters; mono switch; FM usable sensitivity 0.9 μV (mono); 50-dB quieting 1.5 μV (mono), 22.5 μV (stereo); frequency response 30-15,000 Hz +0.5/−1 dB; dist. at 1000 Hz 0.15% (mono), 0.3% (stereo); S/N (IHF A) 82 dB (mono), 70 dB (stereo); capture ratio 1.0 dB; alternate channel selectivity 65 dB ±400 kHz; image rejection 60 dB; i-f rejection 90 dB; AM sensitivity 300 μV/m (bar antenna), 30 μV (external antenna); 5⁷/₈" W × 17¹¹/₁₆" W × 13¹³/₁₆" D $300

R-S5. Similar to R-S7 minus FM tuning meter; output 25 W/ch under same conditions; damping factor 40 from 20-20,000 Hz, 8 ohms; aux./tape input sensitivity/impedance 120 mV/40k ohms; phono overload 120 mV; 5⁷/₈" H × 16⁹/₁₆" W × 13¹³/₁₆" D.. ..... $220

KENWOOD

KR-9050 DC Stereo Receiver

Power amp: features dc circuitry, dual peak power meters with left/right peak LEDs, and dual power supply; 200 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; IM dist. 0.0045%; slew rate 110 V/μsec; rise time



0.95 μsec; frequency response 0-280,000 Hz −3 dB; S/N 115 dB (A weighted); damping factor 50 from 20-20,000 Hz. Preamp: features bass, midrange, and treble controls with tone defeat; loudness switch; subsonic and high filters; −20 dB attenuator and 50-Hz boost switches; two-way tape dubbing with monitor switch; two-way three-speaker switching with LEDs; input selector with LEDs; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 200 mV/50k ohms (aux. and tape), 2.2 mV/50k ohms (mic); S/N (A weighted) 85 dB (phono 1 and 2), 110 dB (aux. and tape), 74 dB (mic); max. phono input 260 mV; frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 5-210,000 Hz −3 dB (aux. and tape). Tuner: features dual MOS FET front end; pilot canceller; PLL multiplex filter; i-f wide/narrow band selector with LEDs; signal strength and tuning meters; FM muting; FM servo lock with LED; FM usable sensitivity 1.7 μV; FM mono 50-dB quieting 2.8 μV, stereo 35 μV; S/N 83 dB (mono), 76 dB (stereo); THD 0.07% (mono), 0.08% (stereo); frequency response 20-15,000 Hz ±0.5 dB; capture ratio 1.0 dB; AM sensitivity 250 μV/m. Walnut veneer cabinet and silver panel; 6³¹/₃₂" H × 23¹¹/₁₆" W × 18⁵/₁₆" D $1150

KR-8050 DC Stereo Receiver

Power amp: features dc circuitry with dc coupled switch (also functions as subsonic filter), power boost switch, and dual peak power meters; 150 W/ch continuous (power boost on) or 120 W/ch continuous (power boost off), both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; IM dist. 0.005%; slew rate 200 V/μsec; rise time 0.9 μsec; damping factor 85 from 20-20,000 Hz. Preamp: features bass, midrange, and treble controls with tone defeat and 50-Hz boost; two-way speaker switching; high filter switch; two-way tape dubbing with monitor switch; mic level control; mode switch; input selector with LEDs; input sensitivity/impedance 2.5 mV/50k ohms (phono 1, 2), 200 mV/50k ohms (aux. and tape), 2.2 mV/50k ohms (mic); S/N (A weighted) 85 dB (phono 1 and 2), 108 dB (aux. and tape), 74 dB (mic); max. phono input 220 mV rms; frequency response 20-20,000 Hz ±0.2 dB (RIAA phono), 0-320,000 Hz −3 dB (aux. and tape). Tuner: features pulse count FM detector circuitry; dual-gate MOS FETs in front end; signal-strength and tuning meters; FM muting; wide/narrow i-f bandwidth selector; FM sensitivity threshold selector; FM usable sensitivity 1.8 μV; FM mono 50-dB quieting sensitivity 3.2 μV, stereo 38 μV; FM S/N 83 dB (mono), 75 dB (stereo); FM THD 0.07% (mono), 0.08% (stereo); FM frequency response 20-15,000 Hz +0.5/−1 dB; FM capture ratio 1.0 dB; AM usable sensitivity 250 μV/m. Simulated walnut grain cabinet; 6³/₄" H × 22¹⁵/₃₂" W × 16³/₁₆" D..... $820

KR-7050 DC Stereo Receiver

Power amp: features dc circuitry, dual peak power meters, and dc coupled switch (also functions as subsonic filter); 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; IM dist. 0.007%; slew rate 200 V/μsec; rise time 0.9 μsec; damping factor 100 from 20-20,000 Hz. Preamp: features bass, midrange, and treble slide controls with bass and treble turnover frequency controls and tone defeat; two-way speaker switching; two tape inputs with monitor and B-to-A tape dubbing; high filter; mode selector; balance and loudness controls; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 200 mV/50k ohms (aux. and tape), 3.6 mV/50k ohms (mic); S/N (A weighted) 85 dB (phono 1 and 2), 108 dB (aux. and tape), 72 dB (mic); max. phono input 200 mV rms; frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 0-320,000 Hz −3 dB (aux. and tape). Tuner: features dual MOS FET front end; PLL multiplex filter with pilot canceller circuit; wide/narrow i-f bandwidth selector; signal-strength and tuning meters; FM muting and front-panel 25-μsec de-emphasis switch; FM usable sensitivity 1.8 μV; FM 50-dB quieting sensitivity 3.5 μV (mono), 43 μV (stereo); S/N 83 dB (mono), 75 dB (stereo); THD 0.08% (mono), 0.09% (stereo); frequency response 30-15,000 Hz +0.5/−1 dB; FM capture ratio 1.0 dB; AM usable sensitivity 250 μV/m. Simulated walnut grain cabinet; 6³/₄" H × 21¹/₂" W × 16³/₁₆" D..... $660

KR-6050. Similar to KR-7050 without midrange control, bass and treble turnover frequency controls with tone defeat, dc coupled switch, and mic input; has rear-panel FM de-emphasis switch; power output 60 W/ch continuous; IM dist. 0.01%; slew rate 100 V/μsec, rise time 0.95 μsec, damping factor 40; preamp S/N (A weighted) 84 dB (phono 1 and 2), 105 dB (aux. and tape), aux. and tape frequency response 5-240,000 Hz −3 dB; 6¹/₁₆" H × 20¹/₁₆" W × 16³/₃₂" D $499

KR-5010 DC Stereo Receiver

Power amp: features dc circuitry and dual peak power meters; 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; IM dist. 0.02%; damping factor 28 from 20-20,000 Hz, 8 ohms. Preamp: features bass and treble controls; balance and loudness controls; two-way speaker switching; two tape monitors and B-to-A tape dubbing; high filter; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 150 mV/50k ohms (tape); S/N (A weighted) 82 dB (phono 1 and 2), 105 dB (tape); max. phono input 140 mV rms; frequency response ±0.3 dB from 20-20,000 Hz (RIAA phono), 5-170,000 Hz +0.5/−3 dB (tape). Tuner: features wide/narrow i-f band selector, FM tuning meter, and FM muting; FM usable sensitivity 1.8 μV; 50-dB quieting 3.5 μV (mono), 43 μV (stereo); S/N 76 dB (mono), 70 dB (stereo); THD 0.08% (mono), 0.09% (stereo); frequency response 30-15,000 Hz +0.5/−2 dB;

capture ratio 1 dB; AM sensitivity 10 μV. Simulated walnut grain cabinet; 5¹⁵/₃₂" H × 18¹⁷/₃₂" W × 14³/₃₂" D $399

KR-4010. Similar to KR-5010 without dual power meters and selectable i-f bandwidth; tuner section has signal-strength and tuning meters; power output 35 W; preamp S/N 81 dB (phono 1 and 2), 104 dB (tape) $330

KR-3010. Similar to KR-4010 without signal-strength meter and high filter; power output 27 W/ch with 0.05% THD; IM dist. 0.05%; tape S/N 102 dB and frequency response 7-150,000 Hz +0.5/−3 dB; FM tuner usable sensitivity 1.9 μV, 50-dB quieting sensitivity 3.8 μV (mono) and 45 μV (stereo); AM usable sensitivity 12 μV $280

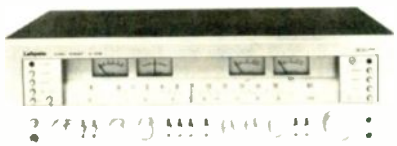
KS-4000R Stereo Receiver

Power amp: 14 W/ch continuous, both channels driven into 8 ohms from 40-20,000 Hz with 0.3% THD; preamp features bass, treble, and balance controls, one-way tape dubbing and two tape monitor switches, and AM/FM/phono input selector; tuner has tuning meter $199

LAFAYETTE

LR-120db Stereo Receiver

Features Dolby noise-reduction system; switchable turnover on bass and treble for extended range tone controls; dual reversible tape monitors for tape-to-



tape dubbing; signal-strength and FM center-tuning meters; left/right power meters; three-speaker capability; mic jack and mixing; two headphone jacks. Amplifier: 120 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.09% THD; hum and noise −90 dB (aux., tape), −70 dB (magnetic phono 1 and 2); input sensitivity for rated output 2.5 mV (phono high), 5 mV −10 mV (phono low), 150 mV (aux., tape), 5 mV/10,000 ohms (mic); phono overload 150 mV at rated output; tape output level 0.15 mV at rated input. FM tuner: usable sensitivity 17.2 dBf; alternate channel selectivity 80 dB at 1000 Hz; capture ratio 1.3 dB at 1000 Hz, stereo; stereo separation 45 dB at 1000 Hz, 1 mV in, 30% mod.; S/N 70 dB (Dolby off, stereo), 80 dB (Dolby on, stereo); spurious rejection 90 dB; image rejection 80 dB at 1000 Hz; i-f rejection 85 dB at 1000 Hz; tape output level 0.77 V. UL approved. 7" H × 21½" W × 17⅝" D $550

LR-9090 Stereo Receiver

Features variable microphone mixing with any program source; switchable turnover on bass and treble for extended range tone controls; dual reversible tape monitors for tape-to-tape dubbing. Amplifier: 90 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD; hum and noise −80 dB (aux., tape), −65 dB (phono, low), −60 dB (phono, high); input sensitivity for rated output 2.5 mV (phono, high), 5 mV (phono, low), 150 mV (aux., tape), 6 mV (mike); phono overload 180 mV (high), 360 mV (low); tape output level 0.15 V (at rated input). Tuner: FM sensitivity 21 dBf; alternate channel selectivity 80 dB (1 kHz); capture ratio 1.25 dB (1 kHz, 1 mV in, 30% mod.); FM dist. 0.2% (1 kHz, stereo); stereo separation 40 dB (1 kHz, 1 mV in, 30% mod.); S/N 67 dB (stereo); spurious response −90 dB; image response −80 dB (1 kHz); i-f response −90 dB (1 kHz); tape output level 0.77 V (1 kHz). AM section: sensitivity 20 μV; image response −60 dB (600 kHz); alternate channel selectivity 45 dB (1 kHz); S/N 45 dB (1 kHz); tape output level 0.3 V (1 kHz). UL approved. 6½" H × 20⅞" W × 16" D $500

Criterion Mk VII Stereo Receiver

Features dual tape monitors; low and high filters; electronic overload protection circuitry. Amplifier: 75 W/ch into 8 ohms from 20-20,000 Hz with 0.3% THD and IM dist.; hum and noise −90 dB (aux., tape), −70 dB (low phono), −65 dB (high phono); input sensitivity for rated output 2.5 mV (high phono), 5 mV (low phono), 150 mV (aux., tape); phono overload 300 mV (low phono), 150 mV (high phono), 10 V (aux.); tape output level 150 mV at rated input. FM tuner section: sensitivity 1.8 μV; alternate channel selectivity 80 dB; capture ratio 1.25 dB; FM dist. 0.25% at 1000 Hz, stereo; S/N 65 dB (stereo); spurious response −100 dB; i-f rejection 95 dB; image rejection 85 dB; tape output level 0.77 V. AM section: sensitivity 25 μV; image response −60 dB; alternate channel selectivity 50 dB; S/N 45 dB; tape output level 0.3 mV. $370

LR-5555A Stereo Receiver

Features variable microphone mixing with any program source; dual meters for signal strength and FM center tuning; bass, midrange, and treble controls. Amplifier: 55 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.3% THD; hum and noise −80 dB (aux., tape), −65 dB (phono, low), −60 dB (phono, high); input sensitivity for rated output 2.5 mV (phono, high), 5 mV (phono, low), 150 mV (aux., tape), 6 mV (mike); phono overload 150 mV (high), 300 mV (low); tape output level 0.15 V (at rated input). FM tuner section: FM sensitivity 21 dBf; alternate channel selectivity 80 dB (1 kHz); capture ratio 1.25 dB (1 kHz, 1 mV in, 30% mod.); FM dist. 0.4% (1 kHz, stereo); stereo separation 40 dB (1 kHz, 1 mV in, 30% mod.); S/N 67 dB (stereo); spurious response −85 dB; i-f response −80 dB (1 kHz); tape output level 0.77 V (1 kHz). AM section: sensitivity 20 μV; image response −60 dB (600 kHz); alternate channel selectivity 45 dB (1 kHz); S/N 45 dB (1 kHz); tape output level 0.3 V (1 kHz). 6½" H × 19¾" W × 14" D $350

Criterion Mk V Stereo Receiver

Features dual tape monitors, high filter, loudness switch, and separate signal strength and center tuning meters. Amplifier: 44 W/ch into 8 ohms from 20-20,000 Hz with 0.3% THD and IM dist.; hum and noise −85 dB (aux. and tape), −70 dB (magnetic phono); input sensitivity 4 mV for rated output (mag. phono), 150 mV (aux., tape); phono overload 180 mV; tape output level 150 mV at rated input. FM tuner section: sensitivity 2.0 μV; alternate channel selectivity 70 dB; capture ratio 1.5 dB; dist. 0.3% at 1000 Hz, stereo; S/N 65 dB; spurious response −75 dB; i-f rejection 80 dB; image rejection 55 dB; tape output level 0.77 V. AM section: sensitivity 25 μV; image response −40 dB; alternate channel selectivity 50 dB; S/N 45 dB; tape output 0.3 mV. $280

Criterion Mk III. Similar to Criterion Mk V except has one tape monitor and signal-strength meter only; 22 W/ch into 8 ohms from 20-20,000 Hz with 0.6% THD and IM dist.; hum and noise −75 dB (aux. and tape), −60 dB (magnetic phono). FM tuner dist. 0.4% at 1000 Hz, stereo; spurious response −70 dB. $160

Criterion Mk I. Similar to Criterion Mk III except 8 W/ch into 8 ohms from 20-20,000 Hz with 0.6% THD and IM dist.; hum and noise −70 dB (aux. and tape) $110

LR-3030A Stereo Receiver

Features dual tape monitors; derived four-channel built-in; dual tuning meters; three tone controls. Amplifier: 30 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.5% THD; hum and noise −75 dB (aux., tape), −60 dB (phono); input sensitivity for rated output 3.5 mV (phono, high), 7 mV (phono, low), 150 mV (aux., tape); phono overload 180 mV (high), 360 mV (low); tape output level 0.15 V (at rated input). FM tuner section: sensitivity 2 μV; alternate channel selectivity 70 dB; capture ratio 1.5 dB; FM dist. 0.4% (1 kHz, stereo); stereo separation 40 dB (1 kHz); S/N 65 dB (stereo); i-f response −80 dB; image response −55 dB; tape output level 0.77 V. AM section: sensitivity 25 μV; image response −40 dB; alternate channel selectivity 45 dB; S/N 45 dB; tape output level 0.3 V. 6½" H × 19¾" W × 14" D $260

LR-2020A Stereo Receiver

Features dual-purpose meter for signal strength and FM center tuning; NR (noise reduction) adaptor connections serve as second tape monitor. Amplifier: 20 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.6% THD; hum and noise −75 dB (aux., tape), −60 dB (phono); input sensitivity for rated output 4 mV (phono), 150 mV (aux., tape, NR adaptor); phono overload 180 mV; tape output level 0.15 V (at rated input). FM tuner section: sensitivity 23 dBf; alternate channel selectivity 70 dB; capture ratio 1.5 dB; FM dist. 0.4% (1 kHz, stereo); S/N 65 dB (stereo); spurious response −70 dB; i-f response −80 dB; image response −55 dB; tape output level 0.77 V. AM section: sensitivity 25 μV; image response −40 dB; alternate channel selectivity 45 dB; S/N 45 dB; tape output level 0.3 V. 5⅜" H × 16½" W × 11⅝" D $170

LR-1515A Stereo Receiver

Features signal strength/tuning meter; detent-type controls for volume, bass, treble; derived four-channel circuit built-in. Amplifier: 15 W/ch continuous into 8 ohms over 40-20,000 Hz with 0.7% THD; hum and noise −75 dB (aux., tape), −60 dB (phono); input sensitivity for rated output 4 mV (phono), 150 mV (aux., tape); phono overload 180 mV tape output level 0.15 V (at rated input). FM tuner section: sensitivity 25 dBf; alternate channel selectivity 60 dB; capture ratio 2 dB; FM dist. 0.8% (1 kHz, stereo); stereo separation 35 dB (1 kHz); S/N 63 dB (stereo); spurious response −70 dB; i-f response −80 dB; image response −50 dB; tape output level 0.77 V. AM section: sensitivity 25 μV; image response −40 dB; alternate channel selectivity 35 dB; tape output level 0.3 V. UL approved. 5⅜" H × 16½" W × 11⅝" D $140

LUX

R-1120 Stereo Receiver

Amplifier: 120 W/ch continuous power into 8 ohms with both channels driven (20-20,000 Hz); THD 0.03%; IM dist. no more than 0.05%; frequency response 10-60,000 Hz ±1 dB; input sensitivity 2.6 mV phono, 160 mV line; phono overload 175 mV; S/N, weighted (IHF "A") 94 dB phono, 95 dB line, unweighted, 66 dB (phono), 86 dB (line); filter frequencies (12 dB/oct) subsonic 15 Hz, low-cut 70 Hz, high-cut 7,000 Hz. FM tuner: FM sensitivity for 50 dB quieting, 14.1 dBf (2.8 μV) mono, 36.8 dBf (38.0 μV) stereo; IHF usable sensitivity 10.3 dBf (1.8 μV) mono, 17.2 dBf (4.0 μV) stereo; FM distortion 0.1-0.3% mono, 0.2-0.4% stereo; selectivity 80 dB; capture ratio 1.3 dB; stereo separation 42 dB at 1000 Hz; AM suppression 55 dB; image rejection 80 dB; i-f rejection 85 dB; S/N 74 dB mono, 70 dB stereo; SCA rejection 60 dB. AM section: usable sensitivity (IHF) 200 μV/m; image ratio 75 dB; i-f rejection 80 dB; S/N 52 dB; dist. 0.5%; selectivity 32 dB. Has loudness, peak indicator, speaker switch, tape dubbing switch $995

NOTICE TO READERS

Prices of items described are suggested prices only and are subject to change without notice. Actual selling prices are determined by the dealer.

1 RECEIVERS

R-1070 Stereo Receiver
Amplifier section: features dc and pre out/main in circuitry; LED peak level indicators; tape dubbing; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.015% THD; IM dist. 0.15%; frequency response 15-100,000 Hz; input sensitivity 2.7 mV (phono), 160 mV (tuner, aux., tape), 1.4 V (main in); phono overload 160 mV; S/N (IHF A) 86 dB (phono), 106 dB (tuner, aux., tape). FM tuner section: features wide/narrow i-f bandwidth selector; IHF usable sensitivity 1.8 μV (mono); S/N 75 dB; frequency response 30-15,000 Hz ±1 dB; AM suppression 62 dB. 7⅛" H × 19⅜" W × 16" D..... $795

R-1050 Stereo Receiver
55 W/ch continuous power into 8 ohms with both channels driven (20-20,000 Hz); THD and IM dist. 0.05%; frequency response 10-50,000 Hz +0/−1 dB. Features LED peak-power output indicators, signal-strength and center-channel tuning meters; speaker selector, tape dubbing switch, provision for plug-in Dolby decoder board; low-cut and high-cut filters; loudness compensation switch; two tape monitor circuits. FM specifications same as R-1120 except: IHF usable sensitivity (stereo) 18.2 dBf (4.6 μV); selectivity 70 dB; AM suppression 52 dB; spurious response rejection 90 dB; stereo separation 40-45 dB; AM specifications same as R-1120 except usable sensitivity rated for external antenna, 15 μV; 7⅛" H × 19⁹/₁₆" W × 14" D..... $595

R-1040 Stereo Receiver
Amplifier: 40 W/ch continuous power into 8 ohms with both channels driven (20-20,000 Hz); THD 0.03%; IM dist. 0.05% max.; frequency response 10-50,000 Hz +0/−1 dB. Features similar to R-1050, except single tuning meter, no Dolby provision, one tape monitor circuit. FM tuner: FM sensitivity for 50 dB quieting, 18.2 dBf (4.5 μV) mono, 39.8 dBf (51 μV) stereo; IHF usable sensitivity 11.2 dBf (2 μV) mono, 19 dBf (4.8 μV) stereo; FM distortion 0.2-0.3% mono, 0.3-0.5% stereo; selectivity 55 dB; capture ratio 1.2 dB; stereo separation 40-45 dB; AM suppression 50 dB; image rejection 55 dB; i-f rejection 70 dB; S/N 74 dB mono, 70 dB stereo; SCA rejection 60 dB. AM section: usable sensitivity (external antenna) 15 μV; image rejection 50 dB; i-f rejection 40 dB; S/N 50 dB. 7⅛" H × 19¹/₁₆" W × 13¹⁵/₁₆" D..... $495

R-1030 Stereo Receiver
Amplifier: 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and 0.1% IM dist.; frequency response 10-40,000 Hz −1 dB; input sensitivity 2.5 mV (phono), 15 mV (aux. and tape); S/N 85 dB. FM tuner: usable sensitivity 11.2 dBf (mono), 19 dBf (stereo); S/N 72 dB; frequency response 30-15,000 Hz +0/−1.5 dB; IM dist. 0.2%; i-f rejection 70 dB; AM suppression 50 dB $395

MARANTZ

2600 Stereo Receiver
300 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.03% THD, 400 W/ch continuous into 4 ohms at 0.05% THD; five-gang dual-gate MOS FET FM front end; quartz-lock FM tuning; PLL FM multiplex demodulator; full complementary direct coupled output; turbo-flow heat dissipation system; built-in 3-in oscilloscope display; peak indicators; plug-in Dolby FM capability; high- (9 kHz, 18 dB/octave) and low-frequency (15 Hz, 18 dB/octave) filters; independent tape-to-tape copy; 7" H × 19¼" W × 17⅛" D..... $1600

2385 Stereo Receiver
185 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.05% THD, 250 W/ch continuous into 4 ohms at 0.1% THD; five-gang dual-gate MOS FET FM front end; PLL FM multiplex demodulator; full complementary direct coupled output; peak indicators; plug-in Dolby FM capability; high- (9 kHz, 18 dB/octave) and low-frequency (15 Hz, 18 dB/octave) filters; independent tape-to-tape copy; 7" H × 19¼" W × 17⅛" D..... $1000

2330B Stereo Receiver
130 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.05% THD, 180 W/ch continuous into 4 ohms at 0.1% THD; four-gang dual gate MOS FET FM front end; PLL multiplex demodulator; full complementary direct coupled output; plug-in Dolby FM capability; high- (9 kHz, 18 dB/octave) and low-frequency (15 Hz, 18 dB/octave) filters; independent tape-to-tape copy; selectable tone turnover frequencies; 5⅜" H × 19¼" W × 15¼" D..... $800

SR6000 Stereo Receiver
Power amp: features dc circuitry; LED power output logarithmic display; two-speaker switching; 70 W/

ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.025% THD and IM dist.; damping factor 50 at 20 Hz. Preamp: features bass, midrange, and treble controls; 6 dB/octave low (20 Hz) and high (8000 Hz) filters; loudness switch; rec mode selector with two-way tape dubbing and monitoring; input sensitivity/impedance 2.7 mV/47k ohms (phono), 160 mV/25k ohms (high level); phono overload 225 mV; S/N (A weighted) 90 dB (phono), 98 dB (high level); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 10-70,000 Hz ±1 dB (high level). Tuner: features dual-gate MOS FET r-f front end; PLL FM multiplex demodulator with pilot canceller; Gyro-Touch™ tuning; FM muting/mode and mono/stereo switch; signal-strength/multipath and FM tuning meters; FM IHF usable sensitivity 1.7 μV (mono); 50-dB quieting 2.5 μV (mono), 35 μV (stereo); S/N 80 dB (mono), 72 dB (stereo); dist. at 1000 Hz 0.15% (mono), 0.2% (stereo); frequency response 30-15,000 Hz +0.5/−1 dB; capture ratio 1.0 dB; alternate channel selectivity 65 dB; image rejection 55 dB; i-f and spurious rejection 90 dB; stereo separation 45 dB at 1000 Hz; AM usable sensitivity 20 μV (IHF) and S/N 50 dB; 5½" H × 18⅜" W × 13⅞" D..... $550
SR4000. Similar to SR6000 minus rec mode selector and high filter; has one-way tape dubbing; 50 W/ch continuous under same conditions; frequency response ±0.3 dB (phono RIAA), 10-60,000 Hz ±1 dB (high level); S/N (A weighted) 88 dB (phono); phono overload 130 mV; FM IHF usable sensitivity 1.8 μV (mono); 50-dB quieting 2.7 μV (mono). 38 μV (stereo); FM S/N 78 dB (mono), 70 dB (stereo); stereo dist. at 1000 Hz 0.25%; i-f rejection 85 dB. $415

SR2000 Stereo Receiver
Power amp: features direct-coupled complementary output stage; dual power meters; two-speaker switching; 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; damping factor 36 at 20 Hz. Preamp: features bass, midrange, and treble controls; loudness switch; tape monitor switch; input selector; input sensitivity/impedance 2.7 mV/47k ohms (phono), 160 mV/25k ohms (high level); phono overload 130 mV; frequency response ±0.5 dB from 20-20,000 Hz (phono RIAA), 15-50,000 Hz ±1 dB (high level); S/N (A weighted) 86 dB (phono), 98 dB (high level). Tuner: features dual-gate MOS FET r-f front end; Gyro-Touch™ tuning; FM tuning meter; FM muting/mode and stereo/mono switch; FM IHF usable sensitivity 1.9 μV (mono); 50-dB quieting 2.8 μV (mono), 40 μV (stereo); S/N 75 dB (mono), 68 dB (stereo); dist. at 1000 Hz 0.15% (mono), 0.25% (stereo); frequency response 30-15,000 Hz +0.5/−1 dB; capture ratio 1.0 dB; alternate channel selectivity 62 dB; image rejection 50 dB; i-f rejection 85 dB; spurious rejection 90 dB; stereo separation 45 dB at 1000 Hz; AM usable sensitivity 20 μV and S/N 50 dB. 5½" H × 18⅜" W × 12¾" D..... $325
SR1000. Similar to SR2000 without midrange control; has separate balance and volume controls; 20 W/ch with 0.09% THD and IM dist.; damping factor 30 at 20 Hz; frequency response ±0.75 dB (phono RIAA), 15-40,000 Hz ±1 dB (high level); S/N (A weighted) 84 dB (phono), 96 dB (high level); FM 50-dB quieting 2.9 μV (mono), 42 μV (stereo); FM stereo dist. 0.3% at 1000 Hz; alternate channel selectivity 60 dB; i-f and spurious rejection 80 dB.. ..... $275

McKAY DYMEK

DR 44 Professional Receiver
Designed for commercial as well as military, industrial, and marine communications. Features Class D AM envelope detection; automatic adjusting threshold noise limiter for CW, RTTY, and SSB reception; crystal filters in first and second i-f amplifiers, mechanical filters in third i-f; CATV r-f power transistors and double-balanced diode ring mixer in r-f front end; quartz crystal PLL digital synthesis tuning with LED six-digit frequency readout display to 100 Hz; AM/USB/LSB/CW/RTTY (with external convertor) reception mode and i-f filter selectors. Sensitivity for 4000-Hz AM bandwidth varies from 1.0 μV from 400 kHz-20 MHz to 10 μV at 100 kHz for 10-dB S+N/N; image rejection 70 dB; r-f blocking 100 dB above 1 μV; cross modulation 65 dB to 1 μV; intermodulation 64 dB to 1 μV; hum and noise −55 dB below full output; HD 0.6% at 50% modulation, 1.5% at 90% modulation; audio output 2 W at 4 ohms. Options include r-f preselector, 600-ohm, 0-dBm balanced audio output, 400-Hz CW mechanical filter, and 1200-Hz RTTY mechanical filter. 7" H × 19" W × 15" D..... $1600
DR 55. Similar to DR 44 minus six-digit LED fre-

quency readout and mechanical filters for USB/LSB $800

DR 33C Professional AM Receiver
General coverage, AM/CW/SSB receiver with digital frequency synthesis and six-digit frequency readout to 100 Hz. Amplifier section: 2 W into 4 ohms, 1 V rms into 5000 ohms; internal 4-in monitor speaker with external speaker connectors; frequency coverage 50 kHz-29.7 MHz continuous; reception modes AM, upper and lower sideband, CW, RTTY (with external convertor); sensitivity for 4-kHz AM bandwidth varies from 1.0 μV (400 kHz-20 MHz) to 10 μV (100 kHz) for 10 dB (S+N)/N; image rejection 70 dB; r-f blocking 100 dB above 1 μV; cross-modulation 65 dB to 1 μV; intermodulation 65 dB above 1 μV; hum and noise 55 dB below full output; harmonic distortion 0.6% for 50% modulation, 1.5% for 90% modulation; max bandwidth 8 kHz. Features audio notch filter, i-f output jack, noise limiter, quartz-crystal PLL digital synthesis, independent selection of reception mode and i-f bandwidth, tuning meter. Options include r-f preselector, 600-ohm balanced audio output, 400-Hz CW and 1200-Hz RTTY filters, rack mount. 5.1" H × 17.5" W × 15" D..... $1500
DR 22C. Similar to DR 33C, but 5-digit, 1-kHz readout; no separate i-f filter switch; minimum band-

NEED MORE INFORMATION?

Write directly to the manufacturer or distributor. A list of names and addresses starts on page 9.

width 4 kHz, no 400- and 1200-Hz bandwidth filter options $995

NAD (USA)

7080 Stereo Receiver

Power amp: features eight high-current output transistors; filtered and regulated power supplies; main/remote speaker switching; 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; slew rate 40 V/μsec; damping factor 120 at 50 Hz, 8 ohms; S/N (A weighted) 104 dB. Preamp: features bass and treble controls with turnover frequency and tone defeat switches; infrasonic, high, and low filters; mono, mute, and loudness controls; two-way tape dubbing and monitoring with LEDs; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/50k ohms (high level); phono overload 200 mV; frequency response ±0.3 dB (phono RIAA), 20-20,000 Hz ±0.5 dB (high level); S/N (A weighted) 82 dB at 10 mV (phono), 95 dB (high level). Tuner: features dual-gate MOS FET front end; PLL IC multiplex demodulator; signal-strength and tuning meters; FM muting; FM IHF usable sensitivity 1.8 μV (mono); 50-dB quieting 3.0 μV (mono), 35 μV (stereo); S/N (A weighted) 74 dB (mono), 70 dB (stereo); frequency response 30-15,000 Hz ±0.5 dB; THD at 1000 Hz 0.2% (mono), 0.3% (stereo); capture ratio 1.0 dB; alternate channel selectivity 70 dB; image rejection 70 dB; i-f rejection 80 dB; stereo separation 40 dB at 1000 Hz; AM sensitivity 300 μV. 5.9" H × 19.3" W × 14.2" D $610

7060. Similar to 7080 minus turnover frequency switches and tone defeat, low filter, and audio muting; has one-way tape dubbing; 60 W/ch continuous under same conditions; slew rate 30 V/μsec; damping factor 100; S/N 103 dB (main amp), 80 dB at 10 mV (phono); high-level impedance 18k ohms; FM usable sensitivity 1.9 μV mono; 50-dB quieting 3.5 μV (mono), 45 μV (stereo); S/N 72 dB (mono), 68 dB (stereo); capture ratio 1.5 dB; alternate channel selectivity 62 dB ±400 kHz; image rejection 50 dB; i-f rejection 60 dB; 5.5" H × 17.7" W × 14.2" D $510

7045. Similar to 7060 except 45 W/ch continuous with 0.05% THD and IM dist.; slew rate 20 V/μsec; damping factor 75; high-level S/N 92 dB $415

7030. Similar to 7045 minus LED input indicators and one-way tape dubbing; 30 W/ch with 0.09% THD and IM dist.; slew rate 15 V/μsec; damping factor 50; phono overload 190 mV; high-level input impedance 50k ohms $320

NAKAMICHI

730 Receiver

Features touch-activated electronic switching for all functions; triple-transistor phono preamplifier; motor-driven variable capacitor for automatic tuning; four preset FM stations; SAW i-f filter; PLL MPX demodulator; Dolby FM; toroidal core power transformer. Specifications: 105 W/ch continuous sine wave into 8 ohms over 5-20,000 Hz with less than 0.02% THD, less than 0.004% IM dist.; phono equivalent input noise better than −137 dB; 50-dB quieting sensitivity 18.3 dBf (mono); capture ratio 1.5 dB; MPX separation better than 45 dB at 1000 Hz; 3½" H × 23¼" W × 14½" D $1200

RM-730. Optional wireless remote control system for 730 Receiver; uses pulse-code-modulated infrared light $190

530 Stereo Receiver

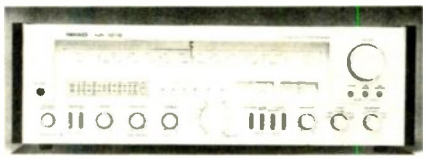
Amplifier: features triple-transistor phono preamp;

two-speaker switching; bass, treble, and balance controls; subsonic filter; mono, loudness, and audio muting switches; input selectors; tape monitor switch; 55 W/ch continuous sine wave into 8 ohms from 10-20,000 Hz with 0.02% THD and 0.002% IM dist.; phono equivalent input noise −138 dB. Tuner: features motor-driven FM variable capacitor for automatic tuning; four-station memory preset for FM; SAW i-f filter; PLL multiplex demodulator; FM muting (with LED), hi blend, and 20/40 dBf threshold switches; FM 50-dB quieting sensitivity 19.2 dBf (mono); capture ratio 1.5 dB; stereo separation 45 dB at 1000 Hz. 5⅛" H × 19¹¹⁄₁₆" W × 13¹³⁄₁₆" D $850

NIKKO

NR-1219 Stereo Receiver

Power amp: features dc circuitry; dual 12-LED power output bar display; two-speaker selector; electronic protection circuitry with LED; regulated



power supply; 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist; damping factor 50 into 8 ohms at 1000 Hz. Preamp features bass, midrange, and treble controls; loudness, audio muting, and subsonic and high filter switches; two-way tape monitoring and dubbing; input selector with LEDs. Tuner features T-locked tuning system with dual-gate MOS FET front end; signal-strength and tuning meters; mono, 25-μsec de-emphasis and FM muting switches; LED stereo and T-locked indicators; FM usable sensitivity 1.8 μV; FM separation 48 dB at 1000 Hz. Champagne gold panel with rosewood cabinet; 7" H × 21¾" W × 15" D $650

NR-1019. Similar to NR-1219 without audio muting and FM 25-μsec de-emphasis switch; has dual power output meters; 70 W/ch continuous under same conditions $540

NR-819. Similar to NR-1019 without dual power meters, midrange control; LED input select indicators, and two-way tape dubbing; has tape monitor switch; 45 W/ch continuous with 0.05% THD and IM dist; damping factor 40 at 8 ohms, 1000 Hz; 6" H × 20" W × 13" D $370

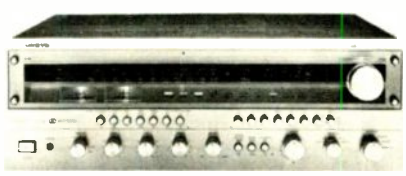
NR-719. Similar to NR-819 without high filter; 35 W/ch under same conditions $320

NR-519. Similar to NR-719 without signal-strength meter, mode switch, and T-locked tuning with LED; 20 W/ch continuous with 0.08% THD and IM dist.; damping factor 30; FM usable sensitivity 2.2 μV; separation 40 dB at 1000 Hz; 5¾" H × 17¾" W × 11" D $250

ONKYO

TX-8500 MK II Stereo Receiver

Features digital frequency readout (FM only), quartz-locked tuning (automatic optimum tuning af-



ter rough-hand tuning) with "Accutact" control (finger-contact sensing unlocks station), and seven FM station presets. Amplifier section: 160 W/ch continuous, both channels driven into 8 ohms at 0.05% THD and IM dist.; frequency response 3-30,000 Hz ±1 dB; phono sensitivity 2.5 mV; max. input 250 mV; input impedance 50,000 ohms, all inputs; S/N (A-weighted) 88 dB phono, 95 dB aux./tape. FM tuner section: usable sensitivity 9.3 dBf (1.6 μV) mono; 50-dB quieting sensitivity 14.7 dBf (3.0 μV) mono; S/N 70 dB mono, 65 dB stereo; distortion 0.15% mono, 0.3% stereo; selectivity 70 dB; i-f rejection 100 dB; image rejection 83 dB; stereo separation 40 dB at 1 kHz, 32 dB at 100-10,000 Hz. AM section: image rejection 55 dB; i-f rejection 55 dB; S/N 45 dB. Other features include linear dial scale; dual tuning meters; Dolby noise reduction; dual tape monitors with two-way dubbing; three speaker outputs; detented volume, bass, midrange, and treble controls; switchable subsonic, low and high filters, bass and treble turnover frequency; external-processor loop, audio mode and loudness compensation. 7⅜" H × 21³⁄₁₆" W × 18¹¹⁄₁₆" D $1000

TX-6500 MK II. Similar to TX-8500 MK II, but 100 W/ch under same conditions; IM dist. 0.1%; phono max. input 200 mV. FM section: usable sensitivity 9.8 dBf (1.7μV); stereo dist. 0.3%; image rejection 85 dB; spurious rejection 95 dB; subcarrier suppression 60 dB. Features similar, but no digital readout or station presets; tone control turnovers not switchable; de-emphasis switch for external Dolby unit. 7⅜" H × 21³⁄₁₆" W × 17⅛" D $650

TX-4500 MK II. Similar to TX-6500 MK II, but 60 W/ch at 0.1% THD under same conditions; IM 0.3%; frequency response 15-30,000 Hz ±1 dB. FM section: usable sensitivity 10.3 dBf (1.8 μV) mono, 18.3 dBf stereo; 50 dB quieting sensitivity 17.2 dBf (4 μV) mono, 37.2 dBf (40 μV) stereo; distortion 0.2% mono, 0.4% stereo; capture ratio 1.5 dB; image rejection 80 dB; spurious rejection 90 dB. AM section: image rejection 45 dB; i-f rejection 40 dB; S/N 40 dB. Features similar, but no midrange control, subsonic filter, and external-processor loop. 6⁷⁄₁₆" H × 21³⁄₁₆" W × 15⅞" D $480

TX-2500 MK II. Similar to TX-4500 MK II, but 40 W/ch under same conditions; frequency response 20-30,000 Hz ±1 dB; damping factor 40; max. phono input 150 mV rms. FM section: usable sensitivity 11.2 dBf (2.0 μV) mono, 19.2 dBf (5 μV) stereo; selectivity 60 dB; i-f rejection 80 dB; image rejection 45 dB; separation at 1 kHz 37 dB. AM i-f rejection 30 dB. Features similar, but no low filter; one-way tape dubbing; servo-lock instead of quartz-lock tuning. 6⅛" H × 19" W × 14⅜" D $355

TX-1500 MK II. Similar to TX-2500 MK II, but 17 W/ch at 0.3% THD and IM dist.; frequency response 20-20,000 Hz ±1 dB; damping factor 30; max. phono input 100 mV. FM usable sensitivity 12.4 dBf (2.3 μV) mono; 50-dB quieting sensitivity 18.3 dBf (4.5 μV) mono, 39.2 dBf (50 μV) stereo; distortion 0.25% mono, 0.5% stereo; stereo separation at 1 kHz 35 dB. Features similar, but no high filter or de-emphasis switch; single tuning meter. 5¹³⁄₁₆" H × 17¼" W × 12⅜" D $235

TX-20 Micro Stereo Receiver

Amplifier: features bass and treble controls; balance control; A and B speaker switch; high filter; loudness switch; input selector; mode switch with LED; source/tape monitor switch; 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD. Tuner: features four-ganged variable tuning capacitor and two dual-gate MOS FETs in front end; quartz servo-lock tuning with one-touch sensor control; LED signal-strength bar display; LED tuned/locked, flashing direction arrow, and stereo indicators; muting/lock switch. Front-panel lid covers all controls, with exception of tuning, volume, function selection, and monitor controls and dial; 3" H $330

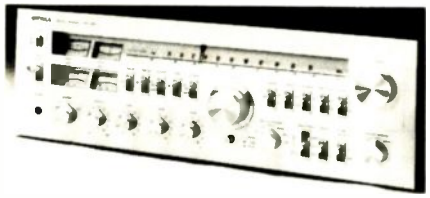
OPTONICA

SA-5901 Stereo Receiver

Power amp section: features dual power output meters, two-color LED power protection indicator, and three-speaker switching; 125 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD. Preamp: features bass, midrange, and treble controls with tone defeat and bass and treble turnover frequency switches; low-cut and high-cut filter switches; balance control; two-way tape dubbing and monitoring with rec out selector; −20-dB muting; loudness contour switch; input selector with separate phono 1 and 2 switch; RIAA deviation ±0.2 dB; phono overload 400 mV. Tuner: features PLL multiplex circuitry; Opto-lock tuning with LED; signal-strength and tuning meters; hi-blend, FM muting, and air-check calibrator switches; AM/FM select; FM IHF usable sensitivity

1 RECEIVERS

1.7 μV (mono); FM THD 0.1% (mono), 0.3% (stereo); S/N 84 dB (mono), 75 dB (stereo);FM IHF



selectivity 85 dB; brushed aluminum faceplate; 7.1" H × 21.6" W × 16" D $800
SA-5905. SA-5901 with ebony finish..... $800

SA-5601 Stereo Receiver
Power amp: features dual power output meters, three-speaker switching, and two-color LED power protection indicators; 85 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD. Preamp: features bass, mid-range, and treble controls; low- and high-cut filters; loudness contour; input selector with separate phono 1 and 2 switch; rec out selector; two-way tape dubbing with monitor; −20-dB audio muting; RIAA deviation ±0.2 dB; phono overload 280 mV; phono S/N 76 dB. Tuner: features Opto-lock tuning with LED indicator; signal-strength and tuning meters; hi-blend, FM muting, and air check calibrator switches; AM/FM switch; FM IHF usable sensitivity 1.7 μV; S/N 80 dB (mono), 73 dB (stereo); FM THD 0.1% (mono), 0.3% (stereo); IHF selectivity 80 dB; brushed aluminum faceplate; 7.2" H × 21.7" W × 15.9" D $620
SA-5605. Same as SA-5601 except with ebony finish..... $620

SA-5401 Stereo Receiver
Power amp: features two-speaker switching and two-color power protection LED indicator; 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.035% THD. Preamp: features bass and treble controls; low- and high-cut filters; −20-dB audio muting; mode and loudness switches; balance control; two-way tape dubbing and monitoring; input selector; RIAA deviation ±0.3 dB from 30-20,000 Hz; phono overload 240 mV; phono S/N 76 dB. Tuner: features Opto-lock tuning with LED; high-blend, FM muting, and air-check calibrator switches; signal-strength and tuning meters; FM sensitivity 1.8 μV; FM S/N 73 dB (mono), 68 dB (stereo); FM THD 0.2% (mono), 0.4% (stereo); FM IHF selectivity 72 dB; brushed aluminum finish; 6.5" H × 19.6" W × 15.3" D..... $470
SA-5405. Same as SA-5401 except with ebony finish..... $470

SA-5201 Stereo Receiver
Amplifier: features two-speaker switching; LED power protection indicator; bass and treble controls; low- and high-cut filters; balance control; mode switch; one-way tape dubbing with monitor switch; loudness switch; input selector; 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD; phono S/N 73 dB; phono overload 150 mV. Tuner: features signal-strength and tuning meters; air check calibrator; FM muting; FM IHF usable sensitivity 1.9 μV (mono); FM S/N 73 dB (mono), 67 dB (stereo); FM THD 0.2% (mono), 0.4% (stereo); FM IHF selectivity 60 dB; brushed aluminum faceplate; 6.4" H × 19.3" W × 15" D..... $360
SA-5205. Same as SA-5201 except with ebony finish..... $360

SA-5101 Stereo Receiver
Amplifier: features two-speaker switching; loudness control; one-way tape dubbing; 25 W/ch continuous into 8 ohms with 0.05% THD; phono S/N 73 dB; phono overload 150 mV. Tuner: features five-LED signal-strength and three-LED tuning meter display; FM muting and air check calibrator switches; FM IHF usable sensitivity 1.9 μV (mono); FM S/N 73 dB (mono), 67 dB (stereo); FM THD 0.1% (mono), 0.2% (stereo); FM IHF selectivity 60 dB; brushed aluminum faceplate; 5$^{31}/_{32}$" H × 17$^{5}/_{16}$" W × 11$^{1}/_{2}$" D..... $280
SA-5105. Same as SA-5101 but with ebony finish..... $280

PANASONIC

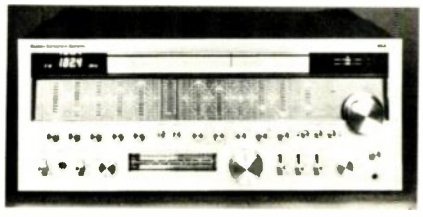
RA-7700 Receiver/Cassette Deck
AM-FM stereo receiver with built-in stereo cassette player/recorder. Power amp section: direct-coupled circuitry; two-speaker switching; 25 W/ch continuous, both channels driven into 8 ohms from 40-20,000 Hz with 0.07% THD. Preamp: features bass and treble controls; balance control; loudness switch; tape monitor switch. Tuner: features FET r-f front end; flywheel tuning; LED signal-strength/tuning meter; afc switch. Cassette deck: front-loading design with Dolby noise-reduction system; CrO_2 and normal tape selector; tape program sensor; flow meter for peak level/VU; recording level control with two volume controls; three-digit tape counter with reset; mic mixing with separate volume control; simulated wood cabinet..... $460-$510
RA-7800. Same as RA-7700 except has 8-track player/recorder instead of cassette ..... $450-$500

RA-7500 Receiver/Cassette Deck
AM-FM stereo receiver with built-in stereo cassette player/recorder. Power amp section: features direct-coupled circuitry; dual power meters; two-speaker switching; 15 W/ch continuous, both channels driven into 8 ohms from 40-20,000 Hz with 0.07% THD. Preamp: features bass and treble controls; tape monitor switch; mic mixing with separate volume control; loudness switch. Tuner: features FET r-f front end; flywheel tuning; afc tuning; signal-strength/tuning meter. Cassette deck features front-loading design with Dolby noise-reduction system; tape selector for CrO_2 and normal tapes; recording level control; two VU meters; three-digit tape counter. Simulated wood cabinet..... $385-$435
RA-7600. Same as RA-7500 except has 8-track player/recorder instead of cassette ..... $360-$410

RA-7100 Stereo Receiver
Power amp: features direct-coupled circuitry; dual power meters; two-speaker switching; 15 W/ch continuous, both channels driven into 8 ohms from 40-20,000 Hz with 0.07% THD. Preamp: features bass and treble controls; loudness switch; tape monitor switch. Tuner: features FET r-f front end; flywheel tuning; afc; signal-strength/tuning meter. Simulated wood cabinet..... $250-$300

JC PENNEY

MCS 3325 Stereo Receiver
Power amplifier section: features pure complementary SEPP OCL circuitry; dual LED instantaneous



power output bar display; two-speaker switching with LEDs; 8- and 4-ohm speaker impedance switch; 125 W continuous into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist. Preamp: includes ten-band graphic equalizer display with center frequencies set at 60, 240, 1000, 4000, and 16,000 Hz, ±10 dB boost or cut each channel has separate stepped controls for each band and separate tone defeat switch; loudness control; mic level control; LED-indicated input selector includes record level check; two-way tape dubbing and monitoring; frequency response ±0.3 dB from 30-20,000 Hz (phono RIAA); phono overload 200 mV; S/N 78 dB (phono). Tuner: features dual-gate MOS FET FM front end; PLL multiplex demodulator; FM quadrature detector; LED signal-strength and tuning indicators; LED-indicated quartz-lock tuning with LED digital FM readout display; Dolby noise-reduction adaptor switch; multiplex filter and FM muting switches; FM usable sensitivity 1.8 μV (mono); 50-dB quieting 3.0 μV (mono); S/N 75 dB mono; THD 0.1% (mono), 0.2% (stereo); frequency response 20-15,000 Hz; capture ratio 1 dB; alternate channel selectivity 80 dB; image rejection 85 dB; stereo separation 50 dB at 1000 Hz; AM sensitivity 300 μV/m and S/N 55 dB. 8$^{5}/_{32}$" H × 19$^{11}/_{16}$" W × 17$^{21}/_{64}$" D..... $900

MCS 3275 Stereo Receiver
AM-FM stereo receiver with 10-octave graphic equalizer. Amplifier: 80 W/ch, both channels driven into 8 ohms from 20-20,000 Hz with 0.25% THD; frequency response 5-60,000 Hz −2 dB, RIAA phono deviation +18.6/−19.6 dB from 30-20,000 Hz; input sensitivity 2.5 mV (phono), 150 mV (aux., tape, and Dolby in); phono overload 200 mV; output 150 mV (tape 1 and 2); S/N (IHF "A") 75 dB (phono), 100 dB (aux., tape, Dolby in); low (8 dB/octave at 20 Hz) and high (6 dB/octave at 12,000 Hz) filters. FM tuner: IHF usable sensitivity 1.9 μV; 30-dB quieting sensitivity 1.5 μV; THD 0.2% mono, 0.35% stereo; S/N 65 dB; alternate channel selectivity 60 dB; capture ratio 1.5 dB; image rejection 50 dB; i-f rejection 80 dB; stereo separation 45 dB at 1000 Hz, 40 at 100 Hz, 30 at 10,000 Hz. AM section: 20-dB quieting sensitivity 300 μV/m; alternate channel selectivity 30 dB; i-f rejection 35 dB; image rejection 50 dB; THD 1.0% at rated output. Equalizer frequencies set at 60, 240, 1000, 4000, and 16,000 Hz with ±10 dB range; separate tone defeat switch; LED readout. Unit features attenuated volume control; two-tape deck dubbing capability; −20 dB audio muting switch; FM Dolby adaptor switch; switchable speaker selector; left/right power meters; FM dipole antenna; headphone jack; quadrature detector for FM $600

MCS 3230 Stereo Receiver
Power amp: features two-way speaker switching; 32 W/ch continuous, both channels driven into 8 ohms from 4-20,000 Hz with 0.3% THD; IHF power bandwidth 30-22,000 Hz. Preamp: features bass and treble controls; balance control; tape monitor switch; loudness switch; input selector; input sensitivity/impedance 3.0 mV/47k ohms (phono), 250 mV/100k ohms (aux.), 400 mV/50k ohms (tape monitor); frequency response ±1 dB from 20-15,000 Hz (phono RIAA), 20-20,000 Hz ±1 dB (aux. and tape); S/N (IHF A) 70 dB (phono), 80 dB (tuner, aux., and tape). Tuner: features PLL multiplex demodulator; AM/FM signal-strength meter; FM muting; mode switch; flywheel tuning; FM usable sensitivity 2 μV (mono); 50-dB quieting sensitivity 5 μV (mono); S/N 70 dB; frequency response 50-15,000 Hz −3 dB; dist. 0.2% (mono); capture ratio 1.5 dB; alternate channel selectivity 60 dB ±400 kHz; image rejection 55 dB; stereo separation 40 dB at 1000 Hz; AM usable sensitivity 300 μV/m and S/N 45 dB. 6" H × 17$^{1}/_{4}$" W × 11$^{7}/_{8}$" D..... $230

PHILIPS

AH903 Stereo Receiver
Power amp section: features dual vertical fluorescent power output logarithmic displays with off/×1/

×0.1 display range selectors; two-speaker switching with LEDs; LED protection and safety indicators; 125 W/ch continuous, both channels driven

into 8 ohms from 20-20,000 Hz with 0.03% THD. Preamp section: features bass, midrange, and treble controls with tone defeat; low and high filters; −20-dB audio muting and loudness selectors; one-way tape dubbing with two-deck monitor selectors; balance control; mic mixing with level control; input selector with LED indicators. Tuner features digital tuning with LED frequency readout display; mode, adaptor, multiplex filter, and FM muting controls; LED signal-strength and tuning indicator displays. Brushed aluminum faceplate $750

AH901. Similar to AH903 without LED digital frequency readout, multiplex filter, midrange control, and tone defeat; 80 W/ch with 0.05% THD ... $550

AH787 Stereo Receiver

Amplifier section: 60 W/ch continuous power into 8 ohms at 0.04% THD, both channels driven; IM dist. 0.04%; damping factor 50; frequency response 15-30,000 Hz ±0.5 dB; phono sensitivity 2.5 mV; max. input 210 mV; input impedance phono 50k ohms, others 100k; S/N (A-weighted) 70 dB phono, 90 dB aux./tape. FM tuner section: usable sensitivity 9.8 dBf (1.7 μV) mono; 50-dB quieting sensitivity 14.1 dBf (2.8 μV) mono, 34.7 dBf (30 μV) stereo; S/N at 65 dBf, 70 dB mono, 65 dB stereo; FM distortion 0.15% mono, 0.25% stereo; capture ratio 1.3 dB; selectivity 75 dB; AM suppression 45 dB; i-f rejection 100 dB; image rejection 90 dB; spurious response rejection 100 dB; stereo separation 45 dB at 1kHz. AM section: sensitivity 300 μV/m (rod antenna); S/N 50 dB; selectivity 30 dB; image rejection 50 dB; i-f rejection 42 dB. Features switchable high and low features, mode, loudness, FM muting; dual tuning meters; detented bass and treble controls; dual tape monitors with two-way dubbing; three speaker outputs; illuminated function indicators. 6" H × 20¾" W × 15½" D $450

AH7871. Same as AH787 but in black $470

AH786. Similar to AH787, except 45 W/ch at 0.05% THD and IM dist.; FM usable sensitivity 10.3 dBf (1.8 μV). Features same, except high filter only and two speaker outputs $400

AH7861. Same as AH786 but in black finish . $420

AH785. Similar to AH786, except 30 W/ch at 0.08% THD under same conditions; IM dist. 0.07%; damping factor 30; frequency response 20-20,000 Hz ±0.5 dB; maximum phono input 150 mV. Tuner section: FM usable sensitivity 10.8 dBf (1. 9 μV); 50-dB quieting sensitivity 16.1 dBf (3.5 μV) mono, 37.7 dBf (42.0 μV) stereo; FM distortion (stereo) 0.3%; capture ratio 1.6 dB; selectivity 70 dB; AM suppression 45 dB; i-f rejection 90 dB; image rejection 70 dB; spurious response rejection 75 dB. AM S/N 45 dB; selectivity 20 dB; i-f rejection 45 dB. Features similar, but only one tape monitor. 5.5" H × 17.31" W × 13.25" D $280

AH7851. Black version of AH785..... $290

AH784. Similar to AH785, except 20 W/ch at 0.1% THD, same conditions; damping factor 25; FM usable sensitivity 11.2 dBf (2.0 μV) mono. Features similar except no high filter, single tuning meter. $220

AH7841. Black version of AH784..... $230

PIONEER

SX-1980 Stereo Receiver

Amplifier section: 270 W/ch continuous power into 8 ohms at 0.03% THD and IM dist., both channels driven; damping factor 40; frequency response 5-80,000 Hz +0/−1 dB; phono sensitivity 2.5 mV; max. input 300 mV; input impedance 50k ohms, all inputs, phono 1 switchable 10-50-100k ohms, 100-200-300-400 pF; S/N (A-weighted, inputs shorted) 87 dB phono (interference filter off), 100 dB aux./tape. FM tuner section: FM usable sensitivity 8.75 dBf (1.5 μV) mono; 50-dB quieting sensitivity 11.5 dBf (2.2 μV) mono, 36 dBf (34 μV) stereo; S/N 83 dB mono, 74 dB stereo at 65 dBf; FM distortion 0.07% mono, 0.1% stereo at 1000 Hz, 0.2% stereo and mono at 6000 Hz; capture ratio 1.0 dB; selectivity 80 dB; AM suppression 60 dB; i-f rejection 120 dB; image rejection 120 dB; spurious response rejection 120 dB; subcarrier rejection 65 dB; stereo separation 50 dB at 1000 Hz, 40 dB from 30-15,000 Hz; antenna 300-ohm and 75-ohm. AM section: sensitivity 300 μV/m (rod antenna), 15 μV (ext. antenna); S/N 55 dB; selectivity 26 dB; image rejection 70 dB; i-f rejection 70 dB. Features front-panel cartridge load impedance and capacitance controls (phono 1); two phono inputs (one doubles as mic input); dual tape monitors with two-way dubbing; separate main and sub bass and treble controls; dual power meters; quartz-lock tuning (unlocks when tuning knob is touched); dual tuning meters; function indicator lights; station memory markers; switchable high and low filters; tone defeat, mode, loudness; audio muting; FM muting; 25 μsec FM de-emphasis (external adaptor loop provided for Dolby); audible multipath circuit; phono filter for r-f interference. 8⁹/₁₆" H × 22" W × 19⁹/₁₆" D $1295

SX-1280. Similar to SX-1980. Amplifier section: 185 W/ch under same conditions; IM dist. 0.01%; damping factor 30; input impedance 50k ohms, all inputs; phono 1 adjustable 100, 200, 300, 400 pF; S/N 80 dB phono, 95 dB aux./tape. Tuner section: FM usable sensitivity 9.8 dBf (1.7 μV) mono; 50-dB quieting sensitivity 14.2 dBf (2.8 μV) mono, 36 dBf (34 μV) stereo; S/N 80 dB mono, 71 dB stereo at 65 dBf; distortion 0.1% mono, 0.15% stereo at 1 kHz; AM suppression 55 dB; i-f rejection 110 dB; image rejection 90 dB; spurious response rejection 100 dB. AM: S/N 55 dB; image and i-f rejection 40 dB. Features similar, but switch for phono 1 capacitance only, no phono interference filter. 7⅜" H × 21⅞" W × 18⅛" D..... $950

SX-1080. Similar to SX-1280. 120 W/ch, same conditions; 0.05% IM dist.; max. phono input 200 mV; S/N 76 dB phono, 90 dB aux./tape. Features same except no Phono 1 capacitance switch, single bass and treble controls with turnover switches. 6¹⁵/₁₆" H × 20¾" W × 17⁹/₁₆" D..... ... $750

SX-980. Similar to SX-1080, except 80 W/ch and no multipath switch..... ... $650

SX-880. Similar to SX-980 except 60 W/ch; S/N 76 dB phono, 95 dB aux./tape. FM section: usable sensitivity 10.3 dBf (1.8 μV) mono; 50-dB quieting sensitivity 16.2 dBf (3.6 μV) mono, 37.0 dBf (39.0 μV) stereo; S/N at 65 dBf 80 dB mono, 72 dB stereo; distortion at 65 dBf 0.07% mono, 0.15% stereo at 1 kHz; capture ratio 1.0 dB; selectivity 75 dB; AM suppression 50 dB; image rejection 65 dB; i-f rejection 90 dB; spurious response −65 dB; subcarrier rejection 55 dB; stereo separation 45 dB at 1 kHz, 35 dB from 30-15,000 Hz. Features similar, but low filter only, no FM de-emphasis, audio muting, tone defeat or turnover switches; single phono input, no mic input. 5½" H × 18⅞" W × 12⅝" D $475

SX-780. Similar to SX-880, except 45 W/ch. Features tape monitor indicator lights; dual-purpose single tuning meter; dual power meters; two speaker outputs; switchable low filter, FM muting, mode, loudness; two tape monitors with one-way dubbing. $375

SX-680. Similar to SX-780, except 30 W/ch at 0.1% THD, same conditions; 0.1% IM dist.; frequency response 10-60,000 Hz +0.5/−1.5 dB; S/N 75 dB phono, 90 dB aux./tape. FM section: usable sensitivity 10.8 dBf (1.9 μV); 50-dB quieting sensitivity 16.8 dBf (3.8 μV) mono, 37.0 dBf (39.0 μV) stereo; selectivity 60 dB; separation 40 dB at 1 kHz, 30 dB from 30-15,000 Hz. Features similar, but combined mode/FM mute switch, no filter, no dubbing. 5¹¹/₁₆" H × 17⅛" W × 12⅜" D $300

SX-580. Similar to SX-680, except 20 W/ch at 0.3% THD, same conditions; IM dist. 0.3%; S/N 73 dB phono, 90 dB aux./tape; features single tape monitor..... $225

4-Channel

QX-949A Four-Channel Receiver

Includes built-in CD-4 demodulator and decoders for regular matrix and SQ sources; continuous power output 40 W × 4 into 8 ohms over 20-20,000 Hz; power bandwidth (IHF, four channels driven) 7-40,000 Hz with 0.3% HD; frequency response 10-25,000 Hz ±1 dB (aux.); FM usable (IHF) sensitivity 1.8 μV; capture ratio 1 dB; selectivity 80 dB; HD 0.2% (mono), 0.4% (stereo); four-channel level indicator; outputs for four pairs of speaker systems and three tape decks; two turntable inputs and additional aux. source input..... .... $750

REALISTIC

STA-2100D Stereo Receiver

Amplifier section: features bass and treble controls; high and low filters; 120 W/ch continuous from 20-20,000 Hz with 0.05% THD; IM dist. 0.05% at 70 W; frequency response ±1.5 dB from 30-20,000 Hz (phono RIAA), 15-25,000 Hz ±1 dB (high level); input sensitivity 2, 4, or 8 mV (phono), 140 mV (high level); phono overload 220 mV; S/N 70 dB (phono), 75 dB (aux.). Tuner: features PLL multiplex demodulator; FM Dolby; 50-dB quieting 35 dBf (mono), 12 dBf (stereo); S/N 70 dB (mono), 75 dB (stereo); frequency response 20-15,000 Hz ±1.5 dB; THD at 1000 Hz 0.1% (mono), 0.05% (stereo); capture ratio 1.5 dB; alternate channel selectivity 75 dB; stereo separation 40 dB from 100-10,000 Hz. 6⅞" H × 20½" W × 16⅞" D $700

STA-2100 Stereo Receiver

Amplifier: 120 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.1% THD; frequency response 15-25,000 Hz ±2 dB; IM dist. 0.05%; S/N 70 dB (phono), 75 dB (aux.); phono overload 230 mV. FM tuner: IHF sensitivity 10.1 dBf (1.5 μV); capture ratio 1.5 dB; alternate channel selectivity 75 dB; stereo separation 52 dB at 1000 Hz; S/N 70 dB. AM section: sensitivity 200 μV/m; image rejection 60 dB; S/N 45 dB. Features two tape deck monitoring and dubbing capability; three tone controls with selectable bass and treble crossover points; switchable 25/75 μsec de-emphasis for FM Dolby B; switched and unswitched ac outlets; signal-strength and power meters; brushed aluminum front panel. 6⅞" H × 20½" W × 16⅞" D..... $600

STA-2000D. Similar to STA-2100 except with Dolby noise-reduction system; 75 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.18% THD; IM dist. 0.1%; FM tuner sensitivity 1.7 μV (IHF); FM stereo separation 48 dB at 1000 Hz; features similar less switchable 25/75 μsec de-emphasis for FM Dolby B; 6¹₄" H × 19¼" W × 16½" D..... $500

STA-240 Stereo Receiver

Amplifier: 60 W/ch continuous from 20-20,000 Hz with 0.05% THD; IM dist. 0.04% at 50 W; frequency response 20-50,000 Hz ±2 dB; input sensitivity 2.5 mV (phono); phono overload 250 mV; S/N 69 dB (phono), 90 dB (aux.). Tuner: features LED digital FM frequency readout display; S/N 66 dB; THD 0.1%; capture ratio 1.8 dB; alternate channel selectivity 70 dB; stereo separation 51 dB at 1000 Hz $430

STA-95 Stereo Receiver

Amplifier: 45 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.3% THD; frequency response 30-20,000 Hz ±1 dB; S/N 65 dB (phono), 80 dB (aux.); phono overload 150 mV. FM tuner: IHF sensitivity 11.2 dBf (2 μV); capture ratio 2 dB; alternate channel selectivity 50 dB; stereo separation 40 dB at 1000 Hz; S/N 60 dB. AM section: sensitivity 250 mV/m; image rejection 35 dB; S/N 40 dB. Features two tape monitors; front-panel tape dubbing; 25/75 μsec de-emphasis switch for Dolby; signal-strength and center-channel tuning meters; black finish front panel. 5⅞" H × 19⅞" W × 14½" D $400

STA-820 Stereo Receiver

Amplifier section: 40 W/ch continuous from 20-20,000 Hz with 0.06% THD; IM dist. 0.06% at 28 W; frequency response 10-50,000 Hz ±2 dB; input sensitivity 2.2 mV (phono); phono overload 200 mV; S/N 65 dB (phono), 87 dB (aux.). Tuner: S/N 69 dB, THD 0.5%; capture ratio 1.9 dB; alternate channel selectivity 57 dB; stereo separation 45 dB at 1000 Hz $360

STA-100 Stereo Receiver

Amp section: features bass and treble controls and tape monitoring and dubbing; 22 W/ch continuous from 20-20,000 Hz with 0.1% THD; frequency response ±2 dB from 50-20,000 Hz (phono RIAA), 20-20,000 Hz ±2 dB (high level); input sensitivity 2.2 mV (phono), 160 mV (high level); phono overload 120 mV; S/N 75 dB (aux.). Tuner: features FM Dolby de-emphasis; 50-dB quieting 39 dBf (mono),

1 RECEIVERS

14.2 dBf (stereo); S/N 65 dB (mono), 75 dB (stereo); frequency response 20-20,000 Hz ±0.5 dB (mono); THD at 1000 Hz 0.5% (mono), 0.1% (stereo); capture ratio 1.5 dB; alternate channel selectivity 65 dB; stereo separation 38 dB at 1000 Hz; 6" H × 17" W × 12½" D $280

STA-52B Stereo Receiver
Amplifier: 16 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.8% THD; frequency response 15-25,000 Hz ±2 dB; S/N 65 dB (phono), 68 dB (aux.). FM tuner: IHF sensitivity 13.2 dBf (2.5 μV); capture ratio 2 dB; alternate channel selectivity 65 dB; stereo separation 38 dB at 1000 Hz; S/N 65 dB. AM section: sensitivity 200 μV/m; selectivity 30 dB; image rejection 45 dB; S/N 45 dB. Features 25/75 μsec de-emphasis for Dolby; main/remote switching; DIN and standard tape input/output jacks; three tone controls; stereo reverse; semi-blackout dial with LED; signal-strength meter; ac outlet. 5¼" H × 17¼" W × 11¼" D $200

STA-7 Stereo Receiver
Amplifier: 10 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.5% THD; frequency response 15-30,000 Hz ± 2 dB; S/N 60 dB (phono), 65 dB (aux.); phono overload 100 mV; frequency equalization response for mini speakers +6.5 dB at 100 Hz. FM tuner: IHF sensitivity 14.2 dBf (2.8 μV); capture ratio 3 dB; selectivity 45 dB; stereo separation 34 dB at 1000 Hz; S/N 60 dB. AM section: sensitivity 200 μV/m; image rejection 45 dB. Features equalization circuit for 50-Hz low-end response with mini speakers (switchable for flat response with regular speaker systems); blackout dial; signal-strength meter; A/B speaker selections; stereo/mono; three tone controls; headphone jack; ac outlet; black front panel. 3½" H × 16½" W × 11½" D $160

REFERENCE by QUADRAFLEX

650FET R Stereo Receiver
Amplifier: 65 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.1% THD; IM dist. 0.02% at 1 W; S/N 80 dB (phono), 85 dB (tape and aux.); phono overload 200 mV; RIAA deviation ±0.25 dB; bass tone control range ±10 dB at 50 Hz with 150 Hz turnover and at 100 Hz with 300 Hz turnover, treble ±10 dB at 10,000 and 20,000 Hz. FM tuner: IHF sensitivity 9.8 dBf (1.7 μV) mono, 17.7 dBf (4.2 μV) stereo; 50-dB quieting sensitivity 13.5 dBf (2.6 μV) mono, 35.9 dBf (34 μV) stereo; channel separation at 1000 Hz 44 dB, 24 dB with multiplex blend; THD 0.1% mono, 0.15% stereo; S/N 72 dB; capture ratio 1 dB; alternate channel selectivity 72 dB; i-f rejection 95 dB; image rejection 60 dB. Features MOS FET front end, six equalization functions through turnover switch for presence control, separate LEDs; signal-strength and center-tuning meters; two-deck provisions for tape monitoring/dubbing; switchable speaker selector; hi-filter control; FM mute; overload indicator; headphone jack. 5⁹/₁₆" H × 18⁹/₁₆" W × 14" D..... $480
450R. Similar to 650FET R except 45 W/ch continuous under same conditions; IM dist. 0.04%; S/N 75 dB (phono), 80 dB (tape and aux.); FM tuner alternate channel selectivity 70 dB. Features separate turnover switch for presence controls with four equalization functions for tone control..... $400
300R. Similar to 450R except 30 W/ch continuous under same conditions; IM dist. 0.05%; phono overload 125 mV. FM usable sensitivity 10.3 dBf (1.8 μV) mono, 17.9 dBf (4.3 μV) stereo; 50-dB quieting sensitivity 14.2 dBf (2.8 μV) mono, 36.4 dBf (36 μV) stereo; THD 0.2% mono, 0.4% stereo; alternate channel selectivity 68 dB. Features similar minus clipping level indicator and turnover switch for presence control; 5¹⁵/₁₆" H × 17½" W × 12¼" D $310
240R. Similar to 300R except 24 W/ch continuous under same conditions; S/N 72 dB (phono), 78 dB (tape and aux.); phono overload 120 mV. FM tuner sensitivity (IHF) 10.8 dBf (1.9 μV) mono, 18.3 dBf (4.5 μV) stereo; THD 0.22% mono, 0.45% stereo; S/N 70 dB mono, 69 dB stereo. Features similar but no signal-strength meter and no LED mode indicators. 5¹³/₁₆" H × 16¹³/₁₆" W × 11³/₁₆" D..... $270
180R. Similar to 240R except 18 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.15% THD; S/N 70 dB (phono), 75 dB (tape and aux.). FM tuner 50-dB quieting 14.8 dBf (3.0 μV) mono, 36 8 dBf (38 μV) stereo; THD 0.25% mono, 0.5% stereo; alternate channel selectivity 65 dB; S/N 70 dB mono, 68 dB stereo. Features similar but less FM mute switch; 5⁹/₁₆" H × 16³/₄" W × 11⁹/₁₆" D $240

ROTEL

RX-1603 Stereo Receiver
Amplifier: 180 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD; frequency response 5-100,000 Hz ±3 dB; S/N (IHF "A") 75 dB (phono), 95 dB (tuner, tape). FM tuner: sensitivity for 50 dB quieting 11.5 dBf (2.1 μV) mono, 36 dBf (35 μV) stereo; FM usable sensitivity 8.9 dBf (1.5 μV) mono; capture ratio 1.0 dB. Features dual tuning meters; switchable tone control turnover frequencies; high-cut and dual-frequency low-cut filters; dual phono inputs; dual tape monitors with dubbing; stepped volume, bass, and treble control; loudness switch; adjustable phono sensitivity and impedance; FM muting switch, hi-blend switch; multipath metering switch; 25 μsec de-emphasis switch; LED function indicators; in rack-type chassis with handles. 7¹/₁₆" H × 23⁵/₈" W (panel) × 18⁷/₈" D $1100

RX-2002 Stereo Receiver
Power amp:features dc circuitry and dual FET two-stage direct-coupled OCL complementary output

circuitry; dual power supplies; dual nine-LED peak power indicator display; two-speaker switching; 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist. Preamp: features direct-coupled NF phono equalizer and tone control amp and phono moving-coil head amp; bass and treble controls with tone defeat; loudness switch; subsonic and high filters; −15 dB muting; tape monitor switch with two-way dubbing; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/30k ohms (tape); phono overload 260 mV. Tuner: features dual-gate MOS FET front end; quartz-lock FM tuning with LED; LED digital frequency readout; LED signal-strength and tuning display indicators; FM PLL multiplex with built-in pilot signal canceller; FM muting and 25-μsec de-emphasis switches; mode selector; FM usable sensitivity 1.6 μV (mono), 50-dB quieting sensitivity 38 μV (stereo); S/N 75 dB; capture ratio 1.0 dB; image rejection 85 dB, stereo separation 45 dB at 1000 Hz; AM sensitivity 200 μV/m (ferrite antenna); 5²⁵/₃₂" H × 19" W × 14³/₈" D $850
RX-2001. Similar to RX-2002 without mode selector and tone defeat; power output 75 W/ch continuous under same conditions; phono input impedance 50k ohms; phono overload 250 mV; FM usable sensitivity 1.7 μV (mono); image rejection 60 dB. $750

RX-604 Stereo Receiver
Power amp: features dc circuitry; dual power supplies; dual peak power meters; two-speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist. Preamp: features direct-coupled NF phono equalizer and tone control amplifier; bass and treble controls; subsonic filter; input select buttons with LEDs; loudness switch; −15-dB audio muting; tape monitor switch with one-way tape dubbing; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/35k ohms (tape); phono overload 160 mV. Tuner: features FM MOS FET front end; PLL multiplex; signal-strength/tuning meter; FM muting; FM useable sensitivity 1.9 μV (mono); 50-dB quieting 42 μV (stereo); S/N 70 dB; capture ratio 1.0 dB; image rejection 55 dB; stereo separation 45 dB at 1000 Hz; AM sensitivity 200 μV/m (IHF, ferrite antenna); 5¹¹/₁₆" H × 16¹³/₁₆" W × 13³/₃₂" D ... $400
RX-504. Similar to RX-604 minus audio muting and LED input indicators; output 40 W/ch continuous under same conditions $350
RX-404. Similar to RX-504 minus one-way tape dubbibg; has tape monitor selector; output 30 W/ch continuous with 0.06% THD and IM dist.; tape input sensitivity/impedance 150 mV/33k ohms; FM stereo 50-dB quieting 44 μV; stereo separation 40 dB at 1000 Hz; AM sensitivity 250 μV/m; 12⁷/₁₆" D $290

RV-555 Stereo Receiver
Amplifier: compact receiver with dc OCL power amplifier and dc NF phono equalizer and tone control amplifier; 20 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD, 24 W/ch into 4 ohms; frequency response 20-50,000 Hz; S/N (IHF "A") 75 dB (phono), 85 dB (tape and aux.); input sensitivity/impedance 2.8 mV/47,000 ohms (phono), 150 mV/50,000 ohms (tape, aux., and tuner). FM tuner: IHF sensitivity 2.0 μV mono, 47 μV stereo; alternate channel selectivity 50 dB; capture ratio 2.0 dB; S/N 70 dB mono; stereo HD 0.15% at 1000 Hz; stereo separation 35 dB at 1000 Hz; image rejection 40 dB; frequency response 30-15,000 Hz +0.5/-1 dB. AM IHF sensitivity 12.5 μV (ext. antenna). Features signal-strength tuning meter, front-panel function and connection facilities, and stereo indicator. Includes RS-555 two-way air-suspension bookshelf speakers..... $310
RV-C1. DC pulse-regulated converter for RV-555; converts to battery power supply $100

RX-1000 Stereo Receiver
Amp: features low-noise ICs; two-speaker switching; bass and treble controls; loudness and subsonic filter switches; tape monitor switch with one-way tape dubbing; 35 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.06% THD and IM dist.; frequency response 5-40,000 Hz +0/−1 dB. Tuner: features FM FET front end; PLL multiplex; LED signal-strength and tuning indicators; FM muting; mode switch; FM usable sensitivity 1.9 μV; 50-dB quieting 3.8 μV (mono); capture ratio 1.5 dB; selectivity 60 dB ±400 kHz; stereo separation 40 dB at 1000 Hz; i-f rejection 60 dB; AM sensitivity 200 μV/m; 3²⁷/₃₂" H × 16¹³/₁₆" W × 11¹³/₃₂" D..... $300

RX-203A Stereo Receiver
Amplifier: 20 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.5% THD, 24 W/ch into 4 ohms at 1000 Hz; frequency response 20-50,000 Hz ±3 dB; S/N (IHF "A") 75 dB (phono), 85 dB (tuner and tape); input sensitivity/impedance 2.5 mV/47,000 ohms (phono), 150 mV/50,000 ohms (tape, aux., tuner). FM tuner: IHF sensitivity 2.0 μV (mono), 48 μV (stereo); capture ratio 2.0 dB; alternate channel selectivity 50 dB; IHF S/N 70 dB (mono); stereo separation 35 dB at 1000 Hz; image rejection 40 dB; frequency response 30-15,000 Hz +0.5/−1 dB; HD 0.3% stereo at 1000 Hz. AM tuner IHF sensitivity: 12.5 μV (ext. antenna). Features dc OCL complementary power circuitry; dc NF phono equalizer and tone control amplifier; linear FM dial scale and signal-strength tuning meter; stereo indicator; facility for two speaker systems; headphone jack. 125 mm H × 400 mm W × 252 mm D $220

SAE

R18 Stereo Receiver
Amplifier: features LED power and tape output bar graph display; parametric equalizer; moving-coil phono input; 180 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD. Tuner: features digital frequency readout;

quartz-lock synthesized touch tuning; LED signal-strength and multipath bar graph display; five-station AM and FM memory preset; 50-dB stereo quieting 34.7 dBf; FM dist. 0.15% (stereo). Includes infrared remote control $1350

R12 Stereo Receiver

Amplifier: features LED power and tape output bar graph display; parametric equalizer with tape EQ; external processor loop input; moving-coil phono input; 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD. Tuner: features digital frequency readout; quartz-lock synthesized touch tuning; LED signal-strength and multipath bar graph display; 50-dB stereo quieting 34.7 dBf; FM dist. 0.15% (stereo). Includes infrared remote control $1100

R9 Stereo Receiver

Amplifier: features LED power output bar graph display; two-way tape dubbing; external processor input; bass, midrange, and treble controls; 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD. Tuner: features digital frequency readout; quartz-lock synthesized touch tuning; LED signal-strength and multipath bar graph display; 50-dB stereo quieting 36.1 dBf; FM dist. 0.22% (stereo)..... $800

R6 Stereo Receiver

Amplifier: features LED power and tape output bar graph display; two-way tape dubbing; external processor input; 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD. Tuner: features digital frequency readout; quartz-lock tuning; LED signal-strength and multipath bar display; 50-dB quieting 36.1 dBf (stereo); FM dist. 0.25% (stereo)..... $650

R3C Receiver

Features full complementary circuitry; dual speaker-switching capability; linear phase i-f filter; loudness switch; rumble filter; signal-strength and FM center tuning meters; separate bass and treble controls calibrated ±10 dB; balance control; headphone jack. Amplifier: 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.09% THD. Tuner: 50-dB quieting sensitivity 37.2 dBf (40 μV); FM dist. 0.25% stereo $335

SANKYO

SRC-4040 Stereo Receiver

Amplifier: 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.5% THD and IM dist.; power bandwidth 10-40,000 Hz, −3 dB at rated output; phono RIAA deviation +0.8/−0.8 dB from 20-20,000 Hz; sensitivity 2.5 mV (phono), 200 mV (aux. and tape); S/N 70 dB (phono), 80 dB (aux. and tape); damping factor better than 50 at 1000 Hz; output level 200 mV (tape), 500 mV (headphones). FM tuner section: IHF usable sensitivity 11.2 dBf (2 μV); 50-dB quieting sensitivity (IHF) 38.2 dBf (45 μV) stereo, 15.2 dBf (3.2 μV) mono; capture ratio 1.5 dB (IHF); alternate channel selectivity 78 dB; i-f rejection 70 dB; AM suppression 60 dB; stereo separation 50 dB at 1000 Hz; frequency response 20-15,000 Hz +0.5/−1.5 dB; S/N 68 dB stereo, 78 dB mono. AM section: usable sensitivity 25 μV (ext. antenna); S/N 60 dB. Features PLL multiplex circuitry; signal strength and tuning meters; high and low filters; slide-rule tuning dial; two-deck tape monitor capability; FM stereo indicator light; calibrated bass and treble controls (±5 dB); balance control; A or B, A+B speaker selector control; headphone jack. Silver or black chassis; 5¾" H × 17⅛" W × 13⅝" D..
..... $350

SRC-2020 Stereo Receiver

Amplifier: 20 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.5% THD and IM dist.; power bandwidth 10-40,000 Hz, −3 dB at rated output; phono RIAA deviation +0.8/−0.8 dB from 20-20,000 Hz; sensitivity 2.5 mV (phono), 200 mV (aux. and tape); S/N 70 dB (phono), 80 dB (aux. and tape); damping factor 40 at 1000 Hz; output level 200 mV (tape), 500 mV (headphones). FM and AM tuner specifications same as SRC-4040. Features A or B, A+B speaker selector control; FM stereo indicator light; signal strength and tuning meters; loudness switch; built-in FM muting; headphone jack. Silver or black chassis; 5¾" H × 17⅛" W × 13⅝" D $230

SANSUI

G-33000 DC Stereo Receiver

Features dc and "Diamond Differential dc" circuitry and independent separable housing for power amp, tuner, and preamp/control sections. Power amplifier: features four-way protection circuitry; dual LED power protector indicators; three power transformers; peak power meters (0.1-600 W); 300 W/ch continuous, both channels driven into 8 ohms from 5-20,000 Hz with 0.009% THD; THD and IM dist. 0.009%; frequency response 0-300,000 Hz +0/−3.0 dB; damping factor 60 into 8 ohms; slew rate 175 V/μsec; rise time 0.7 μsec. Preamp: features bass, midrange and treble tone controls with tone defeat and bass and treble turnover frequency selectors; 32-step master volume control; selectable phono impedance selector; two-way tape monitoring/dubbing; mic mixing; subsonic and high filters; four-channel adaptor/noise reduction; two-way speaker selection with LEDs; audio muting; loudness control; input selector with LEDs; preamp/power amp separation; remote power on/off switch; frequency response 20-20,000 Hz ±0.2 dB (RIAA), 5-50,000 Hz +0.2/−1.5 dB (aux.); input sensitivity/impedance 2.5 mV/33k, 47k, 100k ohms (phono 1), 2.5 mV/47k and 100k ohms (phono 2), 150 mV/47k ohms (aux.), 6 mV/10k ohms (mic); hum and noise −87 dB (phono), −105 dB (aux.); THD 0.002% at 1000 Hz (from aux.). Tuner: features dual-gate MOS FET front end and frequency-linear tuning capacitor; signal-strength and tuning meters; selectable wide/narrow i-f bandwidth controls; FM auto noise filter; FM muting switch; Dolby FM de-emphasis switch; AM bar antenna lever; 10-kHz whistle filter; FM sensitivity 15.0 dBf (stereo), 1.5 μV (IHF, mono); S/N 82 dB (mono), 77 dB (stereo); frequency response 30-15,000 Hz +0.2/−1.0 dB; dist. 0.07% at 1000 Hz (stereo, wide), 0.5% at 1000 Hz (stereo, narrow); capture ratio 0.9 dB. Simulated rosewood grain finish; 8¹⁵/₁₆" H × 25¹/₁₆" W × 21¹³/₁₆" D .....
..... $1900

G-22000. Similar to G-33000 except power output 220 W/ch continuous, both channels driven into 8 ohms from 5-20,000 Hz with 0.009% THD. $1400

G-9700 DC Stereo Receiver

Amplifier: features dc power amp; dual 12-LED bar graph peak-power level meters with range and mode

control; speaker power protector circuitry with auto shut-off; separate bass, midrange, and treble controls with tone defeat; two-way speaker switching; subsonic and high filters; loudness and balance controls; mic mixing; two-way tape monitoring and dubbing; output 200 W/ch continuous, both channels driven into 8 ohms with 0.02% THD; frequency response 0-200,000 Hz +0/−3 dB; rise time 1.4 μsec. Tuner: features digital quartz-locked tuning circuitry; fluorescent signal-strength and center tuning readouts, LED digital frequency readout; FM wide/narrow i-f bandwidth selector; audio muting; FM mode switch; FM auto noise filter; Dolby FM de-emphasis switch $1100

G-7700. Similar to G-9700 minus power meter range and mode selectors, midrange tone control, FM i-f bandwidth selector, and FM auto noise filter; has 15-segment LED peak power bar graph display and two-way tape dubbing; output 120 W/ch continuous with 0.025% THD; FM tuner sensitivity 1.7 μV (IHF); FM S/N 76 dB; FM dist. 0.1%; FM capture ratio 1.0 dB $800

G-6700. Similar to G-7700 except 90 W/ch; FM tuner sensitivity 1.9 μV (IHF); FM S/N 75 dB. $730

G-5700. Similar to G-6700 minus source monitor switch and high filter; power output 75 W/ch with 0.03% THD..... $630

G-4700. Similar to G-5700 minus tone defeat, audio muting, mic/line mixing, two-way tape dubbing and monitoring, and Dolby FM de-emphasis controls; has source/tape monitor switch; power output 50 W/ch continuous with 0.05% THD; FM tuner dist. 0.15%..... $430

G-7500 DC Stereo Receiver

Power amplifier: features dc circuitry; dc detection and overcurrent detection protector circuitry; dual peak power meters (0.1-200 W); output 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.025% THD; frequency response 0-200,000 Hz +0/−3 dB; damping factor 50 into 8 ohms; slew rate 60 V/μsec; rise time 1.4 μsec. Preamplifier: features FET differential equalizer; bass and treble tone controls with tone defeat; mic mixing; two-way tape dubbing and monitoring; subsonic and high filters; −20-dB audio muting switch; loudness control; four-channel/noise-reduction switch; frequency response ±0.2 dB from 20-20,000 Hz (RIAA phono), 5-50,000 Hz +0.2/−2 dB (aux.); hum and noise (IHF) −78 dB (phono), −95 dB (aux.); input sensitivity/impedance 2.5 mV/47k ohms (phono 1 and 2), 150 mV/47k ohms (aux.), 6 mV/10k ohms (mic). Tuner: features dual-gated MOS FET front end; PLL multiplex circuitry; signal-strength and tuning meters; FM muting and Dolby FM de-emphasis switches; FM sensitivity 1.8 μV (IHF, mono), 17 dBf (stereo); S/N 72 dB (mono), 68 dB (stereo); frequency response 30-15,000 Hz +0.2/−1 dB; dist. 0.13% at 1000 Hz (mono), 0.18% at 1000 Hz (stereo); capture ratio 1.0 dB. Simulated rosewood grain finish; 7⅛" H × 19¹⁵/₁₆" W × 16⅛" D..... $620

G-5500. Similar to G-7500 minus peak power meters and high filter; power output 60 W/ch with 0.03% THD; slew rate 56 V/μsec; FM tuner sensitivity 1.9 μV (IHF mono), 18 dBf (stereo); 7³/₁₆" H × 18⁹/₁₆" W × 16⅛" D..... $465

G-4500. Similar to G-5500 minus tone defeat, subsonic filter, audio muting, Dolby FM de-emphasis, 4-channel noise reduction selector, and two-way tape dubbing controls; power output 40 W/ch with 0.1% THD; damping factor 30 into 8 ohms; frequency response ±0.5 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz +1/−2 dB (aux.); hum and noise −75 dB (phono); mic input sensitivity/impedance 8 mV/10k ohms; FM tuner sensitivity 1.95 μV (mono, IHF), 19 dBf (stereo); dist. 0.15% at 1000 Hz (mono), 0.25% at 1000 Hz (stereo); capture ratio 1.3 dB; 6¹/₁₆" H × 17¹/₁₆" W × 14" D..
..... $320

G-3500. Similar to G-4500 except 26 W/ch continuous $270

TA-500 DC Stereo Receiver

Amplifier: features dc circuitry; two-way speaker switching; bass and treble controls; two-way tape monitoring; high and phono subsonic filters; loudness control; power output 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD; frequency response 0-70,000 Hz +1/−3 dB (aux.); hum and noise −75 dB (phono). Tuner features signal-strength and tuning meters; FM mode switch; FM muting; input selector; FM sensitivity 10.8 dBf (mono); S/N 75 dB at 65 dBf (mono), matte black finish; rack-mountable
..... $465

TA-300. Similar to TA-500 with tape/source monitor switch; power output 30 W/ch with 0.06% THD; frequency response 10-50,000 Hz +1/−3 dB (aux.)..... $340

4-Channel

QRX-9001 4-Ch AM-FM Stereo Receiver

Amplifier: 120 W/ch stereo, 60 W/ch quadraphonic, with all channels driven into 8 ohms (20-20,000 Hz); THD and IM dist. 0.3%; frequency response 20-30,000 Hz ±1 dB; channel separation 45 dB stereo, 20 dB adjacent, 30 dB diagonal on QS decoding or synthesizing, 20 dB between front channels, 12 dB center front to center rear on SQ; 40 dB left-to-right, 25 dB front to

rear on CD-4. Features Type-A QS vario-matrix decoder, QS synthesizer, SQ decoder, and CD-4 demodulator; four channel mode selector; balancing and separate bass and treble controls for front and back channels; Dolby noise reduction available for FM or tape use; mic mixing; "Peak Range" tuning indicator with 250-kHz calibrations; dual tuning meters, four power level meters; built-in Dolby calibration oscillator; allows simultaneous recording with and without Dolby encoding. FM tuner: FM sensitivity for 50 dB quieting, 15.6 dBf mono, 38 dBf stereo; IHF usable sensitivity 10.3 dBf (1.8 μV); distortion 0.3% mono, 0.4% stereo; selectivity 80 dB; capture ratio 1.5 dB; stereo FM separation 28-40 dB; AM suppression better than 50 dB; image rejection 75 dB; i-f rejection 95 dB; S/N 70 dB mono, 65 dB stereo. AM section: AM usable sensitivity 50 μV/m; selectivity 35 dB; image rejection 35 dB; i-f rejection 30 dB. 6⅞" H × 23⅜" W × 16⅜" D $1150

SANYO

PLUS 200 Stereo Receiver

Power amp section: features full input-to-output dc coupling; fluid convection radiator; dual power supplies; may be separated with optional "umbilical" cord; dual 12-LED peak power display with X0.01, X0.1, and X1 power display range selector; three-way speaker switching; 200 W/ch continuous, both channels driven into 4 or 8 ohms from 20-20,000 Hz with 0.009% THD; frequency response 7-100,000 Hz +0/−1 dB: S/N 110 dB (IHF A); damping factor 60; slew rate 170 V/μsec. Preamp section: features variable resistive and capacitive loading for MM cartridges (with selectors) and pre-preamp for moving-coil cartridges; bass, midrange, and treble controls with tone defeat and bass and treble turnover frequency selectors; two-way tape dubbing and monitoring; subsonic and high filters; −20-dB muting and loudness switches; input selector with LEDs; external processor loop control; input sensitivity/impedance 2.5 mV/47k ohms (phono MM), 250 μV/100 ohms (phono MC), 150 mV/47k ohms (aux. and tape); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 20-20,000 Hz ±0.3 dB (aux. and tape); S/N (IHF A) 97 dB (phono MM), 70 dB (MC), 95 dB (aux. and tape); max. phono input 250 mV rms (MM), 25 mV rms (MC). Tuner: features "sampling quartz locked" tuning with frequency readout display; seven-LED signal-strength/multipath/deviation bar graph display; narrow/wide i-f bandwidth selector; FM multiplex filter; quartz locked, 25-μsec, FM de-emphasis, and FM muting switches; FM usable sensitivity 1.8 μV (mono); 50-dB quieting 2.6 μV (mono), 36 μV (stereo); THD at 1000 Hz, mono 0.15% (narrow), 0.09% (wide), stereo 0.2% (narrow), 0.1% (wide); S/N 83 dB (mono), 78 dB (stereo); frequency response 20-15,000 Hz +0.5/−1 dB; alternate channel selectivity 80 dB (narrow) and 55 dB (wide) at ±400 kHz; capture ratio 1.8 dB (narrow), 1.2 dB (wide) $900

PLUS 130. Similar to PLUS 200 without variable resistive and capacitive loading controls for MM cartridges, FM deviation meter function, and FM multiplex filter switch in tuner section; power amp not separable; power output 130 W/ch continuous, both channels driven into 4 or 8 ohms from 20-20,000 Hz with 0.025% THD; damping factor 50; slew rate 150 V/μsec $700

PLUS 75 Stereo Receiver

Power amp: features dc, all-differential drive, and IC circuitry; dual seven-LED peak power bar graph display with X0.1 and X1 display range selector; two-way speaker switching; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; frequency response 7-100,000 Hz +0/−1 dB; S/N 110 dB (IHF A); damping factor 50; input sensitivity/impedance 1 V/47k ohms; slew rate 80 V/μsec. Preamp: features low-noise class-A phono preamp with moving-coil cartridge capability; bass, midrange, and treble controls with tone defeat and bass and treble turnover frequency selectors; subsonic and high filters; two-way tape dubbing and monitoring; −20-dB muting; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono MM), 250 μV/100 ohms (phono MC), 150 mV/47k ohms (aux. and tape); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 10-40,000 Hz ±0.5 dB (aux. and tape); S/N (IHF A) 85 dB (phono MM), 70 dB (phono MC), 95 dB (aux. and tape); max. phono input 200 mV (MM), 20 mV (MC). Tuner: features dual-gate MOS FET FM front end; "sampling quartz locked" tuning system with illuminated analog dial and LED digital frequency readout; quartz locked switch with LED; FM muting; five-LED signal-strength bar display; rear-panel de-emphasis switch; FM usable sensitivity 1.9 μV (mono); 50-dB quieting 2.7 μV (mono), 39 μV (stereo); S/N 75 dB (mono), 70 dB (stereo); THD at 1000 Hz 0.2% (mono), 0.3% (stereo); frequency response 20-15,000 Hz +1/−2 dB; alternate channel selectivity 75 dB; capture ratio 1.2 dB; stereo separation 45 dB at 1000 Hz; spurious rejection 80 dB; image rejection 70 dB; i-f rejection 90 dB; AM usable sensitivity 300 μV/m (ferrite, external antenna). 5¼" H × 18⅞" W × 11½" D $550

PLUS 55. Similar to PLUS 75 without midrange control, bass and treble turnover frequency selectors, and tone defeat; no −20-dB muting switch; moving-magnet phono preamp only; has five-LED power bar graph display and one-way tape dubbing; output 55 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist; damping factor 40; slew rate 60 V/μsec; aux. and tape frequency response 10-40,000 Hz ±1 dB; phono S/N 75 dB (IHF A); max. phono input 150 mV rms $400

JCX 2900K Stereo Receiver

Amplifier section: 120 W/ch continuous power into 8 ohms at 0.08% THD, both channels driven; power bandwidth 20-20,000 Hz; frequency response 20-30,000 Hz ±0.2 dB; phono sensitivity 2.5 mV; maximum input 300 mV; S/N (A-weighted) 70 dB phono, 90 dB aux./tape. FM tuner section: usable sensitivity 9.3 dBf (1.6μV) mono; S/N 78 dB mono or stereo; FM distortion 0.1% mono, 0.15% stereo at 1 kHz; capture ratio 1.0 dB; selectivity 80 dB; AM suppression 60 dB; i-f rejection 100 dB; image rejection 85 dB; spurious response rejection 90 dB; stereo separation 45 dB at 1000 Hz; antenna 300-ohm and 75-ohm. AM section: sensitivity 280 μV/m (rod antenna); S/N 55 dB; selectivity 33 dB; image rejection 65 dB; i-f rejection 80 dB. Features bass, midrange and treble tone controls; switchable bass and treble turnover; tone defeat; switchable low and high filters, audio muting, FM muting, hi-blend, mode, loudness; three speaker outputs; front-panel mic inputs with mixing; speaker and function indicator lights; two tape monitors with dubbing; detented volume control; signal-strength and tuning meters; two phono inputs. 6½" H × 21¼" W × 16¾" D $550

JCX 2600K. Similar to JCX 2900K except 85 W/ch at 0.1% THD, same conditions; FM usable sensitivity 10.3 dBf (1.8 μV); S/N 73 dB mono, 68 dB stereo; distortion 0.15% mono, 0.2% stereo at 1 kHz; stereo separation 43 dB at 1 kHz. Features similar, but two speaker outputs, no hi-blend. 6½" H × 21¼" W × 15" D $450

2050 Stereo Receiver

Power amp: features complementary Darlington-connected circuitry; dual power meters; two-way speaker switching; four-way output protection; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD. Preamp: features phono moving-magnet preamp; bass and treble controls; high and low filters; two-deck tape monitoring and dubbing; input selector with LEDs; input sensitivity/impedance 150 mV/47k ohms (aux. and tape), 2.5 mV (phono); frequency response ±0.2 dB from 30-15,000 Hz (phono RIAA), 10-40,000 Hz +0/−1 dB (aux. and tape); phono overload 150 mV; S/N (IHF A) 78 dB (phono), 95 dB (aux. and tape). Tuner: features dual-gate MOS FET front end; "sampling quartz-locked" tuning with LED locked indicator; signal-strength and tuning meters; mode/FM muting switch; FM usable sensitivity 1.9 μV (IHF); S/N 75 dB (mono), 70 dB (stereo); dist. 0.2% (mono) and 0.3% (stereo) at 1000 Hz; capture ratio 1.5 dB; alternate channel selectivity 70 dB; spurious rejection 80 dB; image rejection 70 dB; i-f rejection 90 dB; stereo separation 45 dB at 1000 Hz; AM sensitivity 300 μV/m. 5¼" H × 17¼" W × 10⅜" D $300

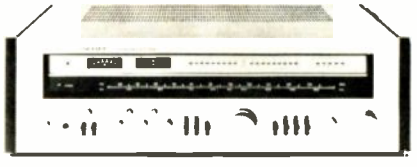
2033. Similar to 2050 minus low filter switch and quartz-locked tuning; tuner has analog tuning dial; output 33 W/ch; frequency response ±0.4 dB (phono RIAA), 20-40,000 Hz (aux. and tape); S/N (IHF A) 73 dB (phono) and 90 dB (aux. and tape); max. phono overload 130 mV $250

2016. Similar to 2033 minus dual power and center tuning meters, high filter, and two-way tape dubbing and monitoring; has tape/source monitor switch and one-way speaker switching; power output 16 W/ch continuous, both channels driven into 8 ohms from 40-20,000 Hz with 0.3% THD; frequency response ±0.8 dB from 30-15,000 Hz (phono RIAA), 10-30,000 Hz +0/−1 dB (aux. and tape); aux. and tape impedance 50k ohms; phono S/N 70 dB (IHF A); FM usable sensitivity 2.0 μV (IHF); S/N 70 dB (mono), 65 dB (stereo); dist. 0.3% (mono), 0.4% (stereo); capture ratio 3.0 dB; alternate channel selectivity 55 dB; spurious rejection 70 dB; image rejection 50 dB; i-f rejection 80 dB; stereo separation 40 dB at 1000 Hz $170

H. H. SCOTT

390R Stereo Receiver

Amplifier section: 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at

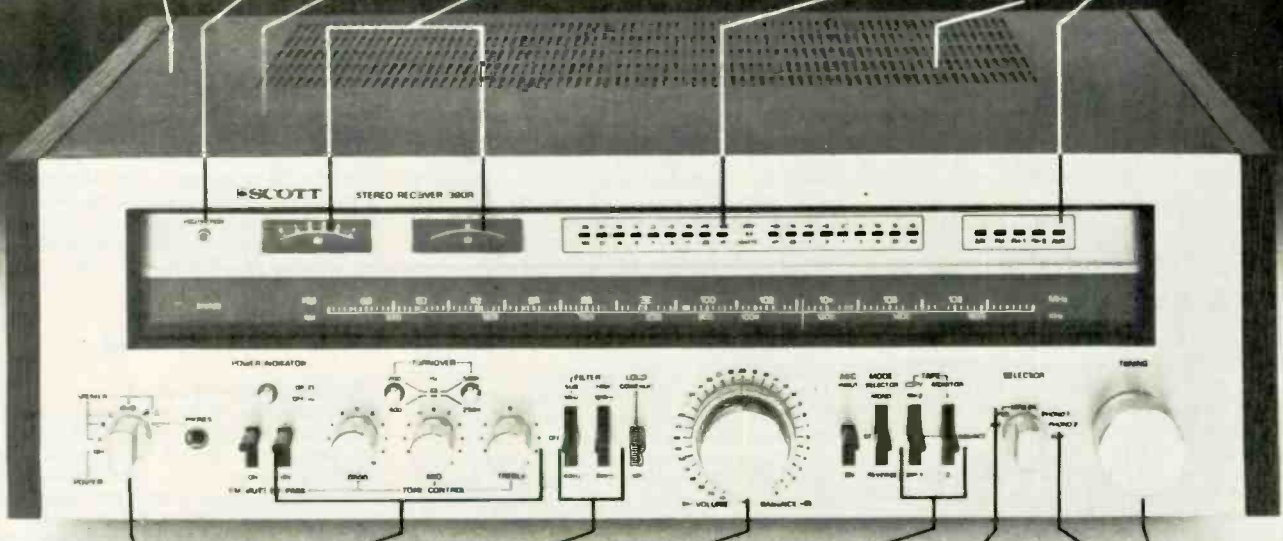


0.03% THD and IM dist.; damping factor 100; frequency response 20-20,000 Hz ±0.5 dB; phono sensitivity 2.5 or 5 mV switchable; max. input 300 or 600 mV; S/N (weighted, inputs shorted) 90 dB phono, 95 dB tape/aux. FM tuner section: IHF usable sensitivity 9.8 dBf (1.7 μV) mono; 50-dB quieting sensitivity 15.6 dBf (3.3 μV) mono, 35.6 dBf (33 μV) stereo; S/N 80 dB mono, 75 dB stereo; distortion 0.1% mono, 0.2% stereo; capture ratio 1.0 dB; selectivity 80 dB; i-f rejection 100 dB; image rejection 90 dB; spurious response rejection 100 dB; subcarrier rejection 74 dB; stereo separation 50 dB at 1kHz. AM section: sensitivity 150 μV/m (rod antenna); S/N 55 dB; selectivity 50 dB; image rejection 60 dB. Features 18-LED logarithmic power display calibrated in watts and dBW; detented volume, bass, midrange and treble controls with tone defeat and switchable bass and treble turnover; two-position subsonic and high filters; FM muting; loudness mode; dual tape monitors with two-way dubbing; two phono inputs with switchable sensitivity; LED function indicators; external-processor accessory loop; dual tuning meters; three speaker outputs; switchable 25/50/75 μsec de-emphasis. 6½" H × 22⅞" W × 15¾" D $775

380R. Similar to 390R, but 85 W/ch continuous under same conditions. Features similar, but subsonic and single-position high filters only; signal strength, tuning, and dual power meters; no loudness switch; two speaker outputs. 6" H × 20¾" W × 13¾" D $600

370R. Similar to 380R, but 60 W/ch at 0.05% THD and IM dist. under same conditions; damping factor 60; phono sensitivity 2.5 mV; max phono input 200 mV; S/N (weighted, inputs shorted) 85 dB phono, 90 dB aux./tape. FM tuner section: usable sensitivity 10.3 dBf (1.8 μV) mono; 50-dB quieting sensitivity 16.1 dBf (3.5 μV) mono, 36.3 dBf (36 μV) stereo; S/N 75 dB mono, 70 dB stereo; distortion 0.125% mono, 0.25% stereo; capture ratio 1.25 dB; selectivity 60 dB; i-f rejection 85 dB; image

If you can find a receiver that does more.



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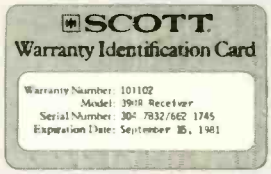
Scott's new 390R is perhaps the most complete receiver ever made.

A professional control center for your entire sound system, the 390R delivers a full 120 watts per channel min. RMS, at 8 ohms from 20-20,000 Hz with no more than 0.03% THD. And it offers more options, features and flexibility than you'll find on most separates.

Compare the Scott 390R with any other receiver on the market today. If you can find one that does more... buy it.



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1 RECEIVERS

rejection 65 dB; spurious response rejection 80 dB; subcarrier rejection 60 dB; stereo separation 45 dB at 1kHz. AM section: sensitivity 250 μV/m; S/N 50 dB; selectivity 45 dB; image rejection 60 dB. Features similar, but no tone defeat or turnover switches; low instead of subsonic filter, single phono input with fixed sensitivity. 6" H × 20¾" W × 11¹³/₁₆" D $500

350R. Similar to 370R, but 40 W/ch at 0.06% THD and IM dist., same conditions; FM capture ratio 1.5 dB; AM S/N 45 dB, selectivity 40 dB, image rejection 40 dB. Features similar, but no midrange control or LED input-select indicators, hi filter only, one-way tape dubbing. 5¼" H × 17¾" W × 11¹³/₁₆" D $400

330R. Similar to 350R except 25 W/ch at 0.08% THD and IM dist., same conditions; S/N 80 dB phono, 85 dB tape/aux.; max phono input 180 mV; damping factor 50; frequency response 20-20,000 Hz ±1.0 dB. FM tuner section: usable sensitivity 10.8 dBf (1.9 μV) mono; 50-dB quieting sensitivity 16.7 dBf (3.8 μV) mono, 37 dBf (39 μV) stereo; S/N 72 dB mono, 67 dB stereo; distortion 0.15% mono, 0.3% stereo; capture ratio 2.0 dB; selectivity 50 dB; i-f rejection 80 dB; image rejection 55 dB; spurious response rejection 78 dB; subcarrier rejection 58 dB. Features similar, but no power meters, has single tape monitor. 5¼" H × 17¾" W × 10¼" D $280

320R. Similar to 330R, but 15 W/ch at 0.1% THD and IM dist., same conditions. FM usable sensitivity 11.2 dBf (2.0 μV) mono; subcarrier rejection 45 dB. Features similar, but single tuning meter only (FM center-channel, AM signal-strength) $230

SHERWOOD

S-7650 CP Stereo Receiver

Amplifier section: 45 W/ch (16.5 dBW) continuous power into 8 ohms, 20-20,000 Hz at 0.2% THD; IM dist. 0.2%; frequency response 20-20,000 Hz ±0.5 dB; phono sensitivity 2.5 mV; max. phono input 160 mV; phono input 47k ohms, 220 pF; S/N (A-weighted) 80 dB phono (92 dB for 10 mV in), 95 dB aux.; damping factor 30. Tuner section: FM usable sensitivity 9.8 dBf (1.7 μV) mono; 50-dB quieting sensitivity 13.9 dBf (2.7 μV) mono, 36.8 dBf (38 μV) stereo; S/N 70 dB mono, 66 dB stereo; distortion 0.15% mono, 0.25% stereo, at 100% modulation; capture ratio 1.0 dB; selectivity 70 dB; AM rejection 60 dB; i-f rejection 90 dB; image response rejection 80 dB; spurious response rejection 95 dB; separation 40 dB at 1000 Hz, 30 dB from 20-10,000 Hz; antenna 300-ohm and 75-ohm. AM: sensitivity 15 μV; selectivity 25 dB; i-f rejection 40 dB; image rejection 40 dB; spurious response rejection 40 dB; frequency response −6 dB at 4000 Hz $425

S-7450 CP. Similar to S-7650 except 30 W/ch (14.8 dBW), same conditions; max phono input 140 mV. Tuner section: FM usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 15.6 dBf (3.3 μV) mono, 37.0 dBf (39 μV) stereo; selectivity 60 dB; AM rejection 55 dB; image rejection 55 dB; i-f rejection 75 dB; spurious response rejection 85 dB; AM sensitivity 20 μV $350

S-7250 CP. Similar to S-7450 except 20 W/ch (13.0 dBW), same conditions. Tuner section: FM usable sensitivity 10.8 dBf (1.9 μV) mono; 50-dB quieting sensitivity 16.1 dBf (3.5 μV) mono, 37.0 dBf (39 μV) stereo; spurious response rejection 80 dB $290

S-7150 CP. Similar to S-7250 CP except 15 W/ch continuous under same conditions; phono S/N 79 dB (IHF A); FM capture ratio 1.2 dB $230

SONY

STR-V7 Stereo Receiver

Direct-coupled dc power amplifier and MOS FET r-f front end with built-in Dolby FM decoder and FM bandwidth selector in FM tuner section. Amplifier: 150 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.07% THD and IM dist.; damping factor 40 at 8 ohms; input sensitivity/impedance 2.5 mV/50,000 ohms (phono 1), 0.25 mV/100 ohms (MC phono 2), 150 mV/100,000 ohms (aux. and tape); phono overload 250 mV (phono 1), 25 mV (phono 2); output level/load impedance 250 mV/4700 ohms; frequency response 5-50,000 Hz +0/−2 dB (aux. and tape), RIAA phono deviation ±0.5 dB; bass tone control ±10 dB at 100 Hz, treble tone control ±10 dB at 10,000 Hz; high (6 dB/octave above 9000 Hz) and low (6 dB/octave below 50 Hz) filters; S/N (IHF "A") 80 dB (phono 1), 100 dB (aux. and tape). FM tuner: usable sensitivity 9.3 dBf (1.6 μV); 50-dB quieting sensitivity 14.2 dBf (2.8 μV) mono, 37.3 dBf (40 μV) stereo; S/N 75 dB mono, 70 dB stereo; capture ratio 1.0 dB; alternate channel selectivity 80 dB (narrow), 50 dB (wide); image rejection 80 dB; i-f rejection 100 dB; AM suppression 60 dB; THD and IM dist. at 1000 Hz 0.08% mono, 0.15% stereo; frequency response 30-15,000 Hz +0.2/−1.5 dB; stereo separation 48 dB at 1000 Hz. AM section: sensitivity 100 μV (external antenna); S/N 50 dB; image rejection 40 dB; i-f rejection 40 dB. Features center-tuning meter with meter/switching for signal-strength indication; dual power meters; linear FM and AM dial scales; FM interstation noise muting switch; phono equalization circuitry for moving-coil cartridge phono input; connections for two phono sources, aux., and two tape decks with tape-to-tape dubbing in either direction; stepped attenuator volume control; stepped attenuator bass and treble controls; tone defeat switch; two speaker connections. 7⁹/₁₆" H × 20½" W × 17¾" D $900

STR-V6. Similar to STR-V7 minus built-in Dolby FM decoder and phono equalization circuitry for low-output (MC) cartridges; 115 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.07% THD and IM dist.; phono overload 200 mV; S/N (IHF "A") 75 dB (phono), 100 dB (aux. and tape) $700

STR-V5. Similar to STR-V6 minus FM bandwidth selector; 85 W/ch continuous into 8 ohms under same conditions; FM usable sensitivity 9.8 dBf (1.7 μV); 50-dB quieting sensitivity 14.5 dBf (2.9 μV) mono; alternate channel selectivity 75 dB; image rejection 80 dB $580

STR-V4. Similar to STR-V5 less phono equalizer stage for accurate RIAA response, aux. connection, and tone control defeat switch; linear FM dial scale. Amplifier: 55 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist.; tape input sensitivity/impedance 150 mV/50,000 ohms; frequency response 5-50,000 Hz+0.5/−2.0 dB (tape), RIAA phono deviation ±0.8 dB; phono S/N (IHF "A") 72 dB. FM tuner: usable sensitivity 10.8 dBf (1.9 μV); 50-dB quieting sensitivity 16.4 dBf (3.6 μV) mono, 37.9 dBf (43.0 μV) stereo; S/N 72 dB (mono), 68 dB (stereo); alternate channel selectivity 60 dB; image rejection 45 dB; i-f rejection 95 dB; mono THD and IM dist. at 1000 Hz 0.15%; frequency response 30-15,000 Hz+1.0/−2.0 dB; stereo separation 45 dB at 1000 Hz; 5¹¹/₁₆" H × 19¹¹/₁₆" W × 15⁷/₁₆" D $430

STR-V3. Similar to STR-V4 minus high and low filters and power meters; 35 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist $330

STR-V2. Similar to STR-V3 minus connections for phono, two tape decks with tape-to-tape dubbing, and two speakers; 25 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.3% THD and IM dist.; damping factor 30 into 8 ohms; S/N (IHF "A") 70 dB (phono), 100 dB (tape); FM mono THD and IM dist. 0.2% at 1000 Hz, stereo 0.3%; stereo separation 40 dB at 1000 Hz $260

STR-V1. Similar to STR-V2 minus loudness compensation switch; 25 W/ch continuous from 30-20,000 Hz with 0.2% THD and IM dist.; preamp frequency response ±1.5 dB (phono RIAA), 2-50,000 Hz +0.5/−2 dB; tape S/N 85 dB; FM tuner usable sensitivity 2.2 μV, 50-dB quieting 4.5 μV (mono), 45 μV (stereo); FM S/N 70 dB (mono), 65 dB (stereo); capture ratio 2.5 dB; alternate channel selectivity 35 dB; i-f rejection 90 dB; AM suppression 45 dB; stereo THD and IM dist. 0.8%; AM sensitivity 300 μV (external antenna); 5³/₄" H × 18¹/₈" W × 14⁵/₈" D $220

SYNERGISTICS

R301 Stereo Receiver

Power amp section: features discrete dc circuitry; two-speaker switching; 30 W/ch continuous, both channels driven into 8 ohms from 30-20,000 Hz with 0.5% THD and 0.15% IM dist. Preamp: features bass and treble controls; noise filter; source/tape monitor switch; mode and loudness switches; input selector with mic selection and jack; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/40k ohms (aux.), 6.0 mV/50k ohms (mic); frequency response ±1 dB from 20-20,000 Hz (phono RIAA and high level), 50-15,000 Hz ±2 dB (mic); S/N (IHF A) 78 dB (phono), 85 dB (aux.). Tuner: features FET r-f front end; PLL multiplex decoder; signal-strength and tuning meters; FM muting; FM IHF usable sensitivity 12 dBf; 50-dB quieting 16.11 dBf (mono), 37.2 dBf (stereo); S/N 68 dB (mono), 65 dB (stereo); frequency response 20-15,000 Hz ±2 dB; THD at 1000 Hz 0,3% (mono), 0.5% (stereo); capture ratio 1.5 dB; alternate channel selectivity 52 dB; stereo separation 40 dB at 1000 Hz; AM sensitivity 20 μV; 5⁹/₁₆" H × 18⁷/₁₆" W × 15⅛" D $275

R201. Similar to R301 minus mic input selection with jack, FM tuning meter, and FM mute; 20 W/ch under same conditions with 0.4% IM dist.; aux. input sensitivity/impedance 170 mV/30k ohms; phono RIAA ±1.5 dB; FM stereo 50-dB quieting 42.13 dBf; 5" H × 6½" W × 11½" D $225

TANDBERG

TR 2080 Stereo Receiver

Amplifier section: 80 W/ch continuous power into 8 ohms from 20-20,000 Hz at 0.05% distortion, both channels driven; dynamic intermodulation (DIM) 0.02%; rise time 1 μsec. AM tuner includes two MOS FETs and auto volume control. Features provision for two tape recorders, two phono, three pairs of speakers. Inputs have separate preamplifiers with adjustable sensitivity controls; mode switch; filters, tone and other controls can modify signals on Tape 2 output. Rosewood and black lacquer finishes available $1400

TR 2060. Similar to TR 2080, with 5-gang FM tuning; electronic pushbutton selection preset tuning for five FM stations; stereo decoder w/PLL oscillator; connections for two tape decks, one phono; direct-coupled amplifier; 60 W/ch at 0.09% THD and IM, 20-20,000 Hz into 8 ohms; TIM under 0.03%; slew rate 20 V/μsec; rise time 1 μsec $800

TR 2045. Similar to TR 2060. Five FM presets; high and low filters. 45 W/ch under same conditions; FM stereo S/N 74 dB; AM suppression 65 dB; stereo separation 40 dB $650

TECHNICS

SA-1000 Stereo Receiver

Amplifier section: 330 W/ch continuous power into 8 or 4 ohms (20-20,000 Hz) at 0.03% THD and IM dist.; frequency response 5-40,000 Hz +0/−1 dB; phono sensitivity 2.5 mV; input impedance phono 25k, 50k or 100k ohms; tape and aux. 47k ohms; S/N 97 dB (phono, 10 mV), 85 dB (phono, 2.5 mV), 100 dB (aux.). Tuner section: FM usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 12.8 dBf (2.4 μV) mono, 36.2 dBf (17.7 μV) stereo; FM distortion 0.1% at 1 kHz, 0.2% at 6 kHz, mono and stereo; capture ratio 1.0 dB; selectivity 85 dB; AM suppression 60 dB; i-f rejection

120 dB; image rejection 100 dB; spurious response rejection 110 dB; subcarrier rejection 70 dB; stereo separation 50 dB at 1000 Hz, 40 dB at 10,000 Hz; antenna 75-ohm coax connector. AM section: sensitivity 30 μV, 250 μV/m; selectivity 35 dB; image rejection 90 dB; i-f rejection 80 dB. Features LED power-level indicator arrays for each channel with display-range select; bass, treble and midrange controls; input-selection indicator lights; front-panel phono-impedance and capacitance selectors; tape dubbing; provisions for two tape recorders and two speaker pairs; switchable audio and FM muting; loudness compensation; high and low filters (boost and cut); MPX filter; hi-blend; center-channel and signal-strength meters. 7½" H × 14¹³/₁₆" W × 21³/₃₂" D $1700

SA-800. Similar to SA-1000. 125 W/ch at 0.04% THD and 0.03% IM dist.; phono input impedance 47k ohms; phono overload 200 mV; S/N 95 dB (phono, 10 mV), 83 dB (phono, 2.5 mV), 97 dB (aux.). Tuner section: FM 50-dB quieting sensitivity 13.2 dBf (2.5 μV) mono; THD 0.1-0.3% mono, 0.2-0.4% stereo; S/N 77 dB mono, 73 dB stereo; selectivity 80 dB; image rejection 85 dB; i-f rejection and spurious response rejection 100 dB; stereo separation 45 dB at 1 kHz, 35 dB at 10 kHz; 75-ohm and 300-ohm antenna terminals. AM image rejection 50 dB, i-f rejection 45 dB. Features same as SA-1000, but without phono input impedance and capacitance selectors. 6½" H × 22⅞" W × 15½" D $800

SA-700. Similar to SA-800 but 100 W/ch continuous power into 8 ohms, 110 W/ch into 4 ohms, at 0.04% distortion. No FM hi-blend or MPX filter. 6⁹/₁₆" H × 21¾" W × 15½" D..... $700

SA-600. Similar to SA-700, but 70 W/ch continuous power into 8 ohms, 80 W/ch into 4 ohms. FM section: usable sensitivity 10.8 dBf (1.9 μV); 50-dB quieting sensitivity 13.7 dBf (2.7 μV) mono, 37.2 dBf (38.7 μV) stereo; stereo distortion 0.3-0.4%; S/N 75 dB mono, 70 dB stereo; capture ratio 1.2 dB; selectivity 70 dB; AM suppression 55 dB; i-f rejection 90 dB; image rejection 70 dB; spurious response rejection 80 dB. Features similar, but without midrange control. 6³/₁₆" H × 19½" W × 12¹⁵/₁₆" D $530

SA-500. Similar to SA-600, but 55 W/ch continuous power into 8 ohms, 60 W/ch into 4 ohms under same conditions (20-20,000 Hz, 0.04% THD, both channels driven). Features same, except no program-selection indicator lights $430

SA-400. Similar to SA-500, but 45 W/ch continuous power into 8 ohms. Similar features, less LED power-level indicators. 5¹⁵/₁₆" H × 18½" W × 11¹³/₁₆" D $360

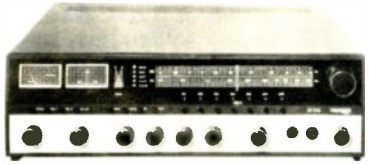
SA-300. Similar to SA-400, but 35 W/ch, continuous power into 8 ohms. Same features, except dual-purpose FM center-channel/AM signal-strength meter, high filter only, no tape dubbing switch ... $300

SA-200. Similar to SA-300, but 25 W/ch continuous power into 8 ohms. Similar features, but no high filter, only one tape monitor circuit..... $200

THORENS

AT-410 Stereo Receiver

Receiver features preset selectors for five FM and two AM stations. Amplifier section: 55 W/ch continuous, both channels driven into 8 ohms, from 20-20,000 Hz at 0.1% THD; damping factor 50; frequency response 20-20,000 Hz ±0.5 dB; phono sensitivity 2.5 mV; input impedances: phono 47k, tape 470k ohms; S/N 60 dB below 50 mW output power, phono or tape. FM tuner section: usable sensitivity 9.3 dBf (0.8 μV); DIN stereo sensitivity 34.7 dBf (30 μV) for 46-dB quieting; S/N 70 dB mono, 62 dB stereo (for 59.2 dBf input); FM distortion 0.3% mono, 0.5% stereo; capture ratio 1.5 dB; selectivity 70 dB; stereo separation 40 dB at 1 kHz; antenna 75-ohm and 300/240 ohm. AM sensitivity 10 μV for 6 dB S/N. Features dual tuning meters; electronic muted switching of inputs; switchable loudness plus two-position presence contour, FM muting, afc; three-position hi filter plus low filter; two DIN tape inputs plus front-panel connection for third; dubbing; tone controls affect Tape 1 output, but not Tape 2; separable amp and preamp sections; two speaker outputs; headphone jack; speaker selection A, B, A+B. Accessory rack mounts Thorens turntables atop unit. Black or chrome finish. 6" H × 17¾" W × 15½" D... $1350

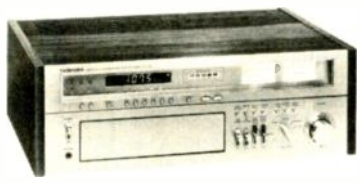


AT-403. Similar to AT-410 but FM only. 35 W/ch under same conditions; damping factor 35; S/N (below 50 mW) 58 dB. FM usable sensitivity 0.9 μV/75 ohms (10 3 dBf) mono; DIN stereo sensitivity 40 μV/75 ohms (43.2 dBf): S/N 67 dB mono, 62 dB stereo; capture ratio 1.8 dB; selectivity 60 dB. Features similar, but no filters, one tape monitor, amp and preamp not separable..... $1000

TOSHIBA

SA-7150 Stereo Receiver

Digital-synthesis-tuned receiver with digital frequency readout and six-station memory. Amplifier section: features OCL circuitry, toroidal power transformer, peak-reading power meters, and three-speaker switching; 150 W/ch continuous power into 8 ohms (20-20,000 Hz) at 0.05% or less THD and IM dist. (0.03% at half power); power bandwidth 5-35,000 Hz; frequency response 5-50,000 Hz +0/−0.5 dB; damping factor 50. Preamp: features bass and treble controls with turnover frequency switches and tone defeat; low and high filters; −20 dB audio muting; two-way tape dubbing and monitoring; mode switch; input selector; input sensitivity/impedance 2 5 mV/47k ohms (phono), 150 mV/47k ohms (aux. and tape); phono overload 350 mV rms at 1000 Hz frequency response ±0.2 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz +0.5/−1.5 dB (aux.). S/N 80 dB (phono), 95 dB (tape and aux.). Tuner section: features LED signal-level display; Dolby FM; FM muting; hi-blend. multipath listening check; wide/narrow FM i-f; FM usable sensitivity 9.8 dBf (1.7 μV); 50-dB quieting sensitivity 14.7 dBf (3.0 μV) mono, 37.6 dBf (42 μV) stereo; S/N 70 dB (stereo), 75 dB (mono); FM distortion 0.1% stereo, 0 08% mono; capture ratio 1.0 dB; selectivity 80 dB narrow, 50 dB wide; AM suppression 55 dB; i-f rejection 100 dB; spurious rejection 100 dB; image rejection 85 dB at 98 MHz; subcarrier rejection 70 dB; stereo separation 50 dB at 1000 Hz. AM sensitivity 350 μV/m (IHF, ferrite antenna), 30μV/m (IHF, ext. antenna); AM selectivity 30 dB; S/N 50 dB; image rejection 40 dB; i-f rejection 30 dB. Brushed aluminum front panel with speaker and tone controls behind retractable cover; walnut side panels; 7.9" H × 21.7 " W × 19.7" D $1100



SA-7100. Similar in styling and features to SA-7150, but with conventional tuning, linear dial, and signal and tuning meters; no tape level-set tone; has single i-f bandwidth (80 dB selectivity). Amplifier section: 100 W/ch continuous power. FM tuner section: stereo S/N 68 dB; distortion 0.2% stereo, 0.1% mono to 6 kHz; stereo separation 45 dB at 1kHz; AM sens tivity 300 μV/m; 7½" H × 21⁹/₁₆" W × 18½" D $670

SA-775 Stereo Receiver

Power amp: features fully complementary OCL amplifiers; dual power supplies; dual power output meters; two-speaker switching; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 5-50,000 Hz +0/−0.5 dB; damping factor 50. Preamp: features bass and treble controls with 400- and 2500-Hz turnover frequency switches; low and high filters; two-way tape dubbing and monitoring; input selector with LEDs; −20 dB audio muting; mode switch; balance control; input sensitivity/impedance 2.5 mV/47k ohms (phono 1 and 2), 150 mV/47k ohms (tuner, aux., tape); phono overload 350 mV at 1000 Hz; frequency response ±0.2 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz +0.5/−1 dB (aux.); THD 0.025%; S/N 80 dB (phono), 95 dB (tape and aux.). Tuner: features dual-gate MOS FET and four-gang linear tuning condenser in FM front end; PLL multiplex demodulator; flywheel tuning; FM muting and adaptor switches; signal strength and tuning meters; multipath and loudness switches; FM usable sensitivity 1.7 μV (mono); 50-dB quieting 3.0 μV (mono), 42 μV (stereo); S/N 75 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +0.5/−1.5 dB; dist. at 1000 Hz 0.1% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 80 dB; image rejection 85 dB; i-f and spurious rejection 100 dB; stereo separation 45 dB at 1000 Hz. AM sensitivity 300 μV/m and S/N 50 dB. Brushed aluminum front panel with tone and speaker controls hidden behind retractable cover; walnut side panels; 7½" H × 12⅝" W × 18½" D $550

SA-850 Stereo Receiver

Power amp: features dc circuitry; triple-secondary power transformer and twin filter capacitors; two-speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; power bandwidth 10-35,000 Hz; damping factor 50. Preamp: features bass and treble controls with tone defeat; subsonic filter; loudness and mode switches; two-way tape dubbing and monitoring; input selector; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms (tuner, aux, tape); phono overload 200 mV rms at 1000 Hz; frequency response ±0.3 dB from 20-20,000 Hz (phono RIAA), 10-40,000 Hz +0.5/−1 dB (tuner, aux., tape); S/N 78 dB (phono), 95 dB (tape and aux.). Tuner: features PLL quartz crystal digital synthesizer tuning with up/down scan tuning and LED digital frequency readout; six-station memory preset for AM and FM; band and mode switches; five-LED signal-strength meter bar display; FM usable sensitivity 1.8 μV (mono); 50-dB quieting 3.2 μV (mono), 45 μV (stereo); S/N 72 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +0.5/−1.5 dB; dist. at 1000 Hz 0.15% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 80 dB; image rejection 60 dB; i-f rejection 90 dB; spurious rejection 75 dB; stereo separation 45 dB at 1000 Hz. AM sensitivity 300 μV/m (IHF, ferrite antenna) and S/N 50 dB. Brushed aluminum front panel with walnut side panels (amplifier controls hidden behind lower half of front panel); 4.5" H × 18.9" W × 15.4" D..... $520

SA-750 Stereo Receiver

Amplifier section: 50 W/ch continuous power into 8 ohms (20-20,000 Hz) at 0.08% THD, both channels driven; THD 0.05% or less at 25 W/ch; IM dist. 0.08% at rated power, 0.05% at 25 W/ch; power bandwidth 10-35,000 Hz; frequency response 10-40,000 Hz +0.5/−1 dB (aux.), 30-15,000 Hz ±0.3 dB (phono); S/N 72 dB phono, 95 dB tape/aux.; input impedance 47k ohms, all inputs; phono sensitivity 2.5 mV; phono overload level 200 mV; tape output 150 mV, DIN output 30 mV. Tuner section: FM usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 38.3 dBf (45 μV) stereo, 15.3 dBf (3.2 μV) mono; S/N 68 dB stereo, 75 dB mono; capture ratio 1.0 dB; selectivity 80 dB; i-f rejection 100 dB; image rejection 80 dB; spurious response rejection 100 dB; subcarrier rejection 60 dB; stereo separation 45 dB at 1000 Hz, 30 dB from 30-15,000 Hz; antenna 75 or 300 ohms. AM section: sensitivity 300 μV/m (IHF, ferrite antenna), 30 μV/m (IHF, ext. antenna); selectivity 35 dB; S/N 50 dB; image rejection 45 dB; i-f rejection 40 dB. Provisions for two tape decks with direct dubbing and two pairs of speakers; hi and low filters; switchable FM muting; switchable loudness; 25-μsec Dolby de-emphasis position for use with external Dolby decoder; two ac convenience outlets;

1 RECEIVERS

41-position volume attenuator. 5 11/16" H × 18 7/8" W × 15 3/4" D $380

SA-735. Similar to SA-750 minus low filter; has one-way tape dubbing; 35 W/ch. FM section: 10.8 dBf (1.9 μV) usable sensitivity; 50-dB quieting sensitivity 39.2 dBf (50 μV) stereo, 16 dBf (3.5 μV) mono; selectivity 65 dB; AM suppression 50 dB; i-f rejection 90 dB; image rejection 60 dB at 98 MHz; spurious rejection 75 dB. $300

SA-725. Similar to SA-735 minus one-way tape dubbing; has tape/source monitor switch; 25 W/ch under same conditions; damping factor 40; frequency response ± 0.5 dB (phono RIAA), 10-40,000 Hz ±1 dB (aux.); tape and aux. S/N 90 dB; FM mono S/N 70 dB; FM dist. 0.2% (mono), 0.3% (stereo); FM frequency response 20-15,000 Hz +0.5/−2.0 dB; FM i-f rejection 80 dB; FM stereo separation 40 dB at 1000 Hz; 5.7" H × 18.9" W × 13.4" D $250

YAMAHA

CR-3020 Stereo Receiver

Amplifier section: 170 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.1% THD, 200 W/ch into 4 ohms; IM dist. 0.03%;

damping factor 70; frequency response 0-100,000 Hz +2/−3 dB; phono sensitivity 2 mV (MM), 50 μV (MC); max. input levels 310 mV (MM in), 7.5 mV (MC); input impedance 47k, 68k, 100k ohms (phono 1, MM), 10 ohms (phono 2, MC), 50k ohms (others); S/N (IHF "A") 96 dB (MM phono), 85 dB (MC phono), 100 dB (aux., tape), 118 dB (power amp main in). Tuner section: FM usable sensitivity 11.2 dBf (2.0 μV) mono; 50-dB quieting sensitivity 15.3 dBf (3.2 μV) mono, 37.2 dBf (40 μV) stereo; FM S/N 80 dB mono, 75 dB stereo; FM dist. 0.07% mono or stereo at 1000 Hz (local), 0.2% mono, 0.6% stereo (DX); capture ratio 1.0 dB (local), 1.5 dB (DX); selectivity 60 dB (local), 80 db (DX); AM suppression 60 dB; i-f response −120 dB; image response −110 dB; spurious response 110 dB; subcarrier rejection 70 dB; stereo separation 52 dB at 1000 Hz (local), 30 dB (DX). AM section: sensitivity 300 μV/m (rod antenna); S/N 50 dB; selectivity 45 dB; image response −75 dB; i-f response −75 dB. Features dual tuning and power level meters (right-channel meter doubles as signal-strength indicator), meters also read tape output; independent input and recorder output select; independent headphone level control and main/rec-out monitor selection; dual tape monitors with two-way dubbing; bass, midrange and treble controls with switchable turnover frequency and defeat; separate volume and variable loudness-compensation controls; adjustable FM muting level; DX/Local/Auto select; recorder-calibration tone; audio muting; dual phono inputs with moving-coil head amp (switchable) on one; FM high-blend and Dolby-adaptor switches. 7 1/2" H × 24 3/4" W × 19 1/2" D $1500

CR-2040 Stereo Receiver

Power amp section: features dc circuitry; left/right peak-delay power meters; LED overload and half-power indicators; two-speaker switching; 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; power bandwidth 10-50,000 Hz; damping factor 40 at 1000 Hz, 8 ohms. Preamp section: features built-in moving-coil cartridge head amp; bass, presence (mid frequencies), and treble controls with own turnover frequency controls; loudness and balance controls; low and two high filters; −20-dB audio muting; two-way tape dubbing; input selector with separate phono load capacitance switch; input sensitivity/impedance 2.5 mV/100k, 68k, 47k, 33k ohms (phono MM), 100 μV/50 ohms (phono MC), 120 mV/40k ohms (aux. and tape); phono overload 270 mV (MM), 11 mV (MC); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 5-100,000 Hz +0.2/−2 dB (aux. and tape); HD 0.01% (MM), 0.05% (MC); IM dist. 0.02% (aux. and tape); S/N (IHF/new IHF) 95 dB/76 dB (MM), 86 dB/79 dB (MC), 100 dB/81 dB (aux. and tape). Tuner: features J-FET and four-gang tuning capacitor in front end; built-in automatic local/distant i-f selector with LEDs; PLL multiplex ic demodulator; signal-strength (switchable to right power output reading) and FM tuning meters; muting/optimum tuning system lock switch; mode and adaptor switches; FM IHF usable sensitivity 1.6 μV at 300 ohms, 0.8 μV at 75 ohms; 50-dB quieting 3.2 μV (mono), 35 μV (stereo), 25 μV (auto blend); S/N (IHF) 90 dB (mono), 84 dB (stereo); HD at 1000 Hz 0.07% (mono), 0.09% (stereo); frequency response 50-10,000 Hz ±0.4 dB; capture ratio 1.5 dB; alternate channel selectivity (IHF) 82 dB (DX), 48 dB (local); image rejection 80 dB; i-f and spurious rejection 100 dB; stereo separation 50 dB at 1000 Hz; AM tuner usable sensitivity 15 μV. Ebony wood veneer cabinet; 6 9/16" H × 22 13/16" W × 16" D. $860

CR-1040. Similar to CR-2040 except has separate phono MM/MC selector in place of phono load capacitance selector; no turnover frequency tone controls or LED half-power overload indicator; 80 W/ch continuous under same conditions; power bandwidth 10-40,000 Hz; phono MM input impedance 47k ohms; phono S/N (IHF A/new IHF) 88 dB/81 dB, aux. and tape new IHF S/N 83 dB; 6 9/16" H × 21 1/4" W × 15 3/16" D $660

CR-840. Similar to CR-1040 without built-in moving-coil head amp, power output meters, LED overload indicator, and audio muting switch; has one high filter; 60 W/ch under same conditions; phono overload 140 mV; phono frequency response ±0.4 dB from 20-20,000 Hz; phono harmonic dist. 0.02%; S/N (IHF A/new IHF), 94 dB/78 dB (phono), 100 dB/85 dB (aux. and tape); FM 50-dB quieting sensitivity 40 μV for stereo; FM S/N (IHF) 84 dB (mono), 80 dB (stereo); FM HD at 1000 Hz 0.08% (mono), 0.1% (stereo); 6 9/16" H × 20" W × 15 1/4" D $495

CR-640. Similar to CR-840 minus presence tone control, tuner adaptor switch, and optimum tuning system lock with LED; 40 W/ch under same conditions; aux. and tape S/N 86 dB (new IHF); FM image rejection 50 dB; spurious and i-f rejection 80 dB $395

CR-420 Stereo Receiver

Amplifier section: 22 W/ch continuous power into 8 ohms (20-20,000 Hz) at 0.05% THD and IM dist.; power bandwidth 10-40,000 Hz; frequency response 20-20,000 Hz ±1.5 dB; phono sensitivity 2 mV; input impedance 50k ohms (phono), 45k ohms (aux., tape); maximum input level (phono) 110 mV; S/N (A-weighted) 91 dB phono (10 mV, shorted), 97 dB aux. Tuner section: FM usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 16.1 dBf (3.5 μV) mono, 38 dBf (43.5 μV) stereo; FM distortion 0.8% stereo, 0.3% mono (max.); capture ratio 1.0 dB; selectivity 65 dB; AM suppression 56 dB; i-f rejection 75 dB; image rejection 50 dB; spurious response rejection 75 dB; stereo separation 40 dB at 1000 Hz, 30 dB from 50-10,000 Hz; antenna 75 or 300 ohms. AM section: IHF sensitivity 18 μV/m; selectivity 20 dB; S/N 50 dB (at 80 dB/m); image and AM suppression 40 dB; spurious response ratio 50 dB; distortion 0.6%. Separate input and tape out selectors; provision for two speaker pairs; continuously adjustable loudness compensation; relay speaker protectors; click-stop bass and treble; switchable high filter; built-in 10-Hz low filter; FM antenna terminals also serve for AM; combination FM center-channel/AM signal-strength meter. 6 3/8" H × 17 3/4" W × 12 3/4" D $310

CR-220. Similar to CR-420, but 15 W/ch; maximum phono input level 100 mV; frequency response +1.5/−2.0 dB, 20-20,000 Hz; S/N 90 dB phono, 96 dB tape and aux. FM section: usable sensitivity 11.2 dBf (2.0 μV) mono; 50-dB quieting sensitivity 17.3 dBf (4 μV) mono, 39.2 dBf (50 μV) stereo; AM suppression 52 dB; capture ratio 1.5 dB; selectivity 60 dB; S/N 70 dB mono, 65 dB stereo; max. mono distortion 0.4%; IM dist. 0.2% mono, 0.4% stereo. Provision for two speaker pairs; continuously variable loudness compensation; built-in subsonic filter; FM muting; single meter for FM center-channel, AM signal-strength. 5 3/4" H × 17 1/8" W × 12 7/8" D $235

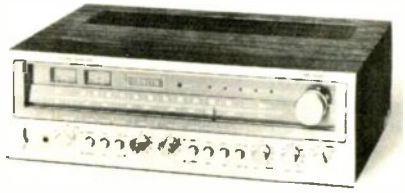
ZENITH

MC7051 Stereo Receiver

Power amp section: features direct-coupled OCL circuitry; two electrolytic capacitors; speaker overload protection circuit; two-speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; damping factor 40 from 20-20,000 Hz. Preamp: features bass, treble, and balance controls; high and low filters; two-way tape monitoring and dubbing; loudness switch; input selector with LEDs; input sensitivity/impedance 2.5 mV/50k ohms (phono 1, 2, and mic), 150 mV/50k ohms (aux. and tape); phono overload 125 mV at 1000 Hz; frequency response ±1 dB from 30-15,000 Hz (phono RIAA), 20-20,000 Hz ±1 dB (aux. and tape); S/N (IHF A) 75 dB (phono), 85 dB (aux. and tape). Tuner: features dual-gate MOS FET and four-gang variable capacitor in FM front end; FM muting and de-emphasis switches; signal-strength and tuning meters; mode switch with stereo FM LED; FM usable sensitivity 1.8 μV (mono), 5.5 μV (stereo); 50-dB quieting 3.0 μV (mono), 40 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); dist. 0.3% (mono), 0.5% (stereo); frequency response 30-15,000 Hz +0.6/−2 dB; capture ratio 1.0 dB; alternate channel selectivity 70 dB; spurious rejection 75 dB; image rejection 85 dB; i-f rejection 90 dB; stereo separation 45 dB at 1000 Hz; AM sensitivity 300 μV/m (IHF ferrite antenna), 30 μV (IHF external antenna). 6.01" H × 19.27" W × 14.96" D $360

MC7030 Stereo Receiver

Power amp section: features direct-coupled OCL circuitry; dual electrolytic capacitors; two-speaker switching; 15 W/ch continuous, both channels dri-



ven into 8 ohms from 20-20,000 Hz with 0.4% THD and IM dist.; damping factor 30 from 20-20,000 Hz. Preamp: features bass and treble controls; low and high filters; source/tape monitor switch; loudness control; input selector with magnetic or ceramic phono inputs and LEDs; input sensitivity/impedance 2.5 mV/50k ohms (magnetic phono), 150 mV/2M ohms (ceramic phono), 150 mV/50k ohms (aux. and tape); phono overload 125 mV at 1000 Hz; frequency response ±1 dB from 50-15,000 Hz (phono RIAA), 20-20,000 Hz ±1 dB (aux. and tape); S/N (IHF A) 65 dB (phono), 75 dB (aux. and tape). Tuner: features dual-gate MOS FET and three-gang variable capacitor in FM front end; signal-strength and tuning meters; manual FM afc and FM muting switches; mode switch with stereo FM LED; FM usable sensitivity 1.9 μV (mono), 6.0 μV (stereo); 50-dB quieting 4.5 μV (mono), 60 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); dist. 0.3% (mono), 0.5% (stereo); frequency response 30-15,000 Hz +0.6/−2 dB; capture ratio 1.0 dB; alternate channel selectivity 60 dB; spurious rejection 75 dB; image rejection 60 dB; i-f rejection 90 dB; stereo separation 40 dB at 1000 Hz; AM sensitivity 300 μV/m (IHF ferrite antenna), 30 μV (IHF external antenna); 5.31" H × 18.11" W × 11.81" D $230

2 AMPLIFIERS

2 PREAMPLIFIERS

AB SYSTEMS

The Nine Twelve Mixer Preamplifier
Features two-channel mike mixing on program or tape outputs; two-way tape dubbing with tape 1 and

2 and source and third-source monitor switch; input selector; external EQ switch; loudness and auto mute switches; timer delay output relay. Frequency response 5-100,000 Hz ±0.25 dB; rated output 4.0 V rms; THD and IM dist. 0.01%; S/N −84 dB (A); input sensitivity 2-10 mV (phono), −60 dBm (mic, dual balanced low- or high-impedance inputs), 250 mV (high level); phono overload 250 mV; tape monitor impedance 10k ohms; 1¾" H × 19" W × 9" D $525

ACCUPHASE

C-200 Stereo Preamplifier
Frequency response 20-20,000 Hz +0/−0.2 dB (high level), 20-20,000 Hz ±2 dB (low level); 0.5% dist. at rated output; hum and noise −74 dB (10 mV phono input); sensitivity variable over 2-6 mV (phono), 200 mV (aux.); high- and low-cut filters; built-in headphone amplifier; tape monitor/copy facilities; mike inputs on front panel; 6" H × 17½" W × 14" D $700
AWC-1. Walnut case $50

ACE AUDIO

3000 Stereo Preamplifier
2 V rated output into 10,000-ohm load, 8 V (max.); gain 20 dB (high-level inputs), 60 dB (phono input); phono overload 90 mV; frequency response 20-20,000 Hz ±0.1 dB, −1 dB at 1 and 75,000 Hz; harmonic and IM dist. 0.02% max.; hum and noise 90 dB below 0.8 V input (high level), 73 dB below 8 mV input (phono); RIAA phono equalization ±0.5 dB; input impedance 33,000 ohms (high level), 47,000 ohms (phono); output impedance 470 ohms; outputs: main, tapes 1 and 2; inputs: phono, tuner, aux., and tapes 1 and 2; volume and balance controls; three ac outlets (1000 W max.), one switched, two unswitched; 120- or 240-V ac, 5 W; 2¾" H × 14½" W × 7" D $250
Kit $156
3100. Similar to 3000 but uses external power supply $325

Basic Stereo Preamplifier
High-level inputs (FM, aux. 1 and 2): sensitivity 0.1 V for 1 V output; input impedance 41,000 ohms at full volume, 50,000 ohms at −20 dB setting; output impedance 100 ohms; harmonic and IM dist. 0.05% at 2 V output; frequency response 20-20,000 Hz ±0.1 dB; hum and noise 85 dB below 0.5 V input; output 10 V into 15,000 ohms. Phono input: sensitivity 2.2 mV for 1 V output; input impedance 47,000 ohms; harmonic dist. 0.05% (midband); RIAA equalization ±0.5 dB; hum and noise 70 dB below 10 mV input; overload 250 mV. Inputs: RIAA phono, FM, aux. 1 and 2, and tape monitor; outputs: main, tape; four ac outlets (three switched). 117-V ac (220-V models available, $5 additional), 5 W $168
BSPW High. Similar to BSP but +6 dB gain on all inputs $175

ADC

B-100 Stereo Preamplifier
Tube preamplifier with built-in moving-coil head amp; input sensitivity 0.5 mV (phono), 0.05 V (high level); phono input capacitance 50-430 pF; phono input impedance 25-100 ohms; phono overload 375 mV; frequency response 5-200,000 Hz ±0.1 dB; THD and IM dist. 0.09%; S/N 70 dB (phono) $1195

AGI

511A Stereo Preamplifier
Features bi-amplified phono stage; dual feedback system with electrolytic coupler and separate ac

feedback loop; no filters or tone controls; front-panel input select buttons, one-way tape dubbing with two-deck monitor switches, mono switch, and tone send selector (controls external processor loop for equalizers and other signal processors). Gain 33.0 dB ±0.25 dB at 1000 Hz (phono), 18.9 dB ±0.25 dB (high level), 40.1 dB ±0.25 dB at 1000 Hz (Option H high gain phono); input impedance 47k ohms (phono), 38k ohms (high level); phono overload at 1000 Hz 160 mV (phono), 70 mV (Option H high gain phono); max. output (into 10,000 ohms) 7 V (phono), 9.5 V (high level); output impedance 220 ohms at rec out (phono), 47 ohms (high level); hum and noise below 10 mV at 1000 Hz −88 dB (phono, A weighted), −80 dB (phono, unweighted), −106 dB below full output from 20-20,000 Hz (high level, unweighted); frequency response ±0.25 dB (RIAA phono), 20-20,000 Hz ±0.1 dB (high level); slew rate 250 V/μsec (phono), 50 V/μsec (high level); rise time at 2 V peak-to-peak 0.01 μsec max. (phono), 0.25 μsec max. (high-level); THD and IM dist. 0.005%; Option G (gold-finish panel and knobs) and Option H (high-gain phono stage) are available at no extra cost but must be requested at time of purchase of 511A; 5¼" H × 14" W × 10" D $495
Option F. High or low 12 dB/octave Butterworth filter at −3 dB user-specified frequency $50
Oak hardwood cabinet for 511A $70
Walnut hardwood cabinet for 511A $75

AIWA

SA-C22U Mini Stereo Preamplifier
Features differential circuit with dual positive and negative power supplies; defeatable bass and treble

controls; low filter; mode and −20-dB muting switches; source/tape monitor switch; loudness switch; balance control; input selectors with LEDs. Input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms (tuner, aux., tape); RIAA deviation ±0.2 dB from 20-20,000 Hz; S/N 80 dB (phono), 85 dB (tuner and aux.); 2¹³/₁₆" H × 8³/₁₆" W × 6⁷/₈" D $140

APT

Holman Preamplifier
Features dc phono preamp with FET/bipolar differential pair-input configuration; optional plug-in pre-preamp for moving-coil cartridges; three-tape deck input selector switch with two tape monitor loops and dubbing switches; 32-step attenuator volume control; variable mode control and balance control; tone defeat switch; high filter switchable between 40,000 and 8000 Hz (12 dB/octave rolloff); treble and bass controls; headphone amplifier output;

front-panel mute control. THD at rated output 0.01%, IM dist. 0.01% (SMPTE), TIM dist. 0.006%; frequency response 20-20,000 Hz ±0.5 dB; input sensitivity/impedance 5 mV rms/47,000, 100,000 ohms (phono 1 and 2), 320 mV rms/50,000 ohms (high level); 2.0 V rms output level; phono overload 150 mV rms at 1000 Hz, line input overload 10 V rms at 1000 Hz; gain 36.5 dB (phono to tape), 18 dB (high level to main); S/N ("A" weighted) 80 dB below input reference level of 10 mV rms at 1000 Hz (phono 1 and 2), 106 dB V (line). 3.12" H × 15.04" W × 8.19" D $502

2 PREAMPLIFIERS

AUDIO RESEARCH

SP-6A Stereo Preamplifier

Features segmented 2-dB gain control; front-panel mute switch; rear-panel gain range switch (−10 dB); separate on/off switch; indicator for three amp power receptacles. Max. input 700 mV at 1000 Hz (magnetic phono); input impedance 50,000 ohms (all inputs); output impedance 500 ohms at 1000 Hz (all outputs); rated output (IHF) 5 V rms from 20-30,000 Hz (all outputs), 60 V rms at 1000 Hz into 100,000-ohm load at 1.0% THD (main out); S/N 90 dB below 1 V rms input; frequency response 10-30,000 Hz ±0.25 dB (high level), RIAA phono deviation ±0.25 dB from 30-15,000 Hz; HD less than 0.03% at 5 V rms out (IHF); IM dist. less than 0.008% at 5 V rms out (IHF SMPTE); gain 34 dB (magnetic phono in to tape out), 60 dB (magnetic phono in to main out), 0 dB (high level in to tape out), 26 dB (high level in to main out). 5¼" H × 19" W × 10¼" D $1195

WC-4. Walnut-finished wood cabinet for SP-6A. $100

SP-4A Stereo Preamplifier

Features provisions for alternate compensation of magnetic phono sections; shielded power supply and head amp sections; main output turn-on delay; gold-contact switching controls. Frequency response 1-100,000 Hz +0/−3 dB; 2 V rated output (10 V overload); 0.005% THD and IM dist. at rated output; S/N 84 dB (phono, 10 mV input); sensitivity 0.1 V (high level), 2 mV (phono); phono overload 300 mV; tape impedance/output 2000 ohms/0.5 V. 3½" H × 19" W × 8½" D $1195

WC-2. Walnut finished wood cabinet for SP-4A. $90

SP-5 Stereo Preamplifier

Frequency response 1-100,000 Hz +0/−3 dB; 2 V rated output (10 V overload); 0.005% THD and IM dist. at rated output; S/N 80 dB (phono, 10 mV input); sensitivity 0.1 V (high level), 2 mV (phono); phono overload 300 mV; tape impedance/output 2000 ohms/0.5 V; 3½" H × 19" W × 8½" D.. $895

WC-2. Walnut finished wood cabinet for SP-5 ... $90

AUDIO SCIENTIFIC by SUPEREX

Two-Section Stereo Preamplifier

Dual-section Class A stereo preamplifier features independently housed power supply; variable phono capacitance loading; frequency response 5-100,000 Hz ±0.5 dB; dist. 0.001%; S/N 110 dB (A weighted) $350

AUDIRE

Diffet 1A Preamplifier

Features three switch positions for moving-coil cartridge: standard (47,000 ohms and 0 dB), medium-gain (40 ohms and +6 dB), and low-gain (500 or 47,000 ohms and +12 dB). Magnetic phono: RIAA ±0.25 dB from 20-20,000 Hz; phono overload 175 mV at 1000 Hz; HD 0.005% at 20 Hz and 0.008% at 20,000 Hz; output 15 V rms; gain 38.5 dB at 1000 Hz; S/N 93 dB. High level: frequency response 0-100,000 Hz +0/−0.25 dB; THD 0.005% at 3 V rms out; IM dist 0.001%; S/N 90 dB at 3 V rms out; gain 23 dB. Inputs: magnetic phono, tuner, aux., tape 1/2; outputs: two tape and two main; two switched and two unswitched ac outlets; volume, balance, short-wave selector, and short-wave power controls. 4¾" H × 19" W × 7" D. $577

Diffet 1. Similar to Diffet 1A minus provisions for moving-coil cartridges $522

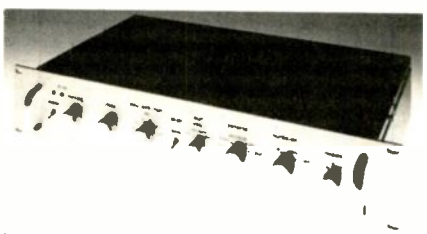
Legato Preamplifier

Features 18 dB/octave subsonic filter; two-way tape dubbing with copy/source record and tape/source monitor switches; input selector with separate phono 1/phono 2 selector. Frequency response ±0.25 dB from 20-20,000 Hz (phono RIAA), 0-100,000 Hz +0/−0.25 dB (high level); HD 0.005% at 3 V rms; S/N 90 dB; phono overload 150 mV at 1000 Hz; gain 38.5 dB (phono), 19.5 dB (high level); 1.75" H × 19" W × 7" D..... $330

BERNING by PRECEDENT

TF-10 Stereo Preamplifier

Features hybrid vacuum tube and transistor amplification circuitry; passive network phono equalization; power supply energy storage; direct coupling



and servo systems; tape output buffers; electronic mute control for remote-control muting; high-level, gain level, and balance controls; two-way tape dubbing with monitor select switch for all inputs; input selector with separate three-phono input switch. Frequency response ±0.25 dB from 20-20,000 Hz (phono RIAA, passive), 10-100,000 Hz +0/−1 dB (high level); noise −68 dB unweighted for 1 V out; THD and IM dist. 0.5%; gain 37 dB (phono MM), 24 dB (high level); input impedance 47k ohms (phono MM), 100k ohms (high level); output impedance 2k ohms; max. output 8 V into 10k ohms; phono overload 130 mV at 1000 Hz; 3½" H × 19" W × 12" D $1395

BGW

Model 203 Stereo Control Center

Gain 42 dB (phono to tape out, 1 kHz), 22 dB and 10 dB (high level to line out) with high-low gain switch set to high and low, respectively; frequency response 20-20,000 Hz ±0.2 dB (high level), ±0.25 dB of RIAA (phono); input impedance 47,000 ohms (phono), 90,000 ohms (high level); input overload 100 mV (phono, 1000 Hz), 10 V (high level); max. output 8 V rms into 600 ohms (line), 10 V rms into 5000 ohms (phono at tape out), 4 V rms into 5000 ohms (rated output); THD 0.01%; subsonic and scratch filters; front-panel tape copy and headphone jacks; provisions for remote MC preamp and ac power switching; active bass and treble tone circuitry; equalizer in/out jacks; 5¼" H × 19" W × 11¾" D $719

Cabinet $41

Model 103 Stereo Preamplifier

Gain 40 dB at 1000 Hz (phono to tape out), 24 dB (high level to line out); input impedance 47,000 ohms (phono), 90,000 ohms (high level); input overload 120 mV at 1000 Hz (phono), 4.5 V (high level); 100-dB dynamic range (phono); max. output voltage 8 V rms into 600 ohms (line out), 10 V rms into 5000 ohms (phono at tape out); THD less than 0.01% at rated output; noise −90 dB below rated output (high level to line out); frequency response 20-20,000 Hz ±0.25 dB (high level and phono RIAA). Features all-discrete circuitry; three-pole (18 dB/octave) subsonic filter; separate bass and treble tone controls equalized at ±15 dB at 50 and 15,000 Hz; front-panel defeat switch for removal of tone controls; four high-level inputs (tuner, aux., tape 1 and 2, equalizer phono); one switched and two unswitched ac outlets; full facilities for interfacing with two tape machines; 3½" H × 19" W × 10½" D $439

Cabinet $41

BOZAK

919 Mixer/Preamplifier

Designed to be used with the 929 power amplifier; features bass, treble, and midrange equalization; high and low filters; bass turnovers at 200 and 400 Hz; treble turnovers at 2000 and 4000 Hz; three simultaneous inputs with individual level controls (phono, mike, choice of tape, tuner, or aux.); separate bass, midrange, and treble controls for each channel; cue selector for monitoring each input separately; mode selector for stereo, reverse stereo, stereo blend, or stereo plus; response (RIAA phono equalization) 30-15,000 Hz ±0.5 dB; has full complement of inputs, outputs, and operating controls; matte black panel; optional walnut veneer enclosure extra $875

909 Preamplifier

Features plug-in circuits; all-silicon circuitry; active filters; flat or equalized switchable tape outputs; inputs: phono 1 and 2, tuner, aux., tape monitor 1 and 2; controls: bass and treble for each channel, balance, volume, lo/hi filters, EQ defeat, stereo/mono, tape dubbing; frequency response 20-20,000 Hz ±0.25 dB; dist. 0.1% IM and harmonic; S/N (unweighted) 80 dB (phono), 90 dB (high level); 12 V output into 600 ohms $490

CARVER

C-4000 Stereo Preamplifier

Features sonic audio hologram generator designed to recreate vector sound field present during original

recording and to locate musical instruments precisely in space; built-in three-channel time delay system with 25-W amp and user-selectable 60/80 msec initial delay and five primary delays; third-generation audio-correlator noise-reduction system and peak unlimiter; separate left and right bass and treble controls with turnover frequency switches and tone defeat; cartridge matching; two-way tape dubbing and monitoring; external signal processor input; infrasonic filter. Frequency response ±0.25 dB from 20-20,000 Hz (phono RIAA), 5-200,000 Hz −1 dB (high level); input sensitivity 0.85 mV (phono), 50 mV (high level); phono overload 150 mV at 1000 Hz; phono gain 35 dB. Noise reduction 20 dB from 2500-20,000 Hz, 10 dB from 200-20,000 Hz. Sonic hologram image resolution 5° arc in horizontal plane, 20° arc in vertical plane. Peak unlimiter total dynamic range recovery 6 dB. Time delay: delay time 85 msec max.; dist. 0.2%; bandwidth 20-10,000 Hz, feed forward to 19,000 Hz. 6¼" H × 19" W × 8" D $867

ABOUT PRICES. . . .

With repeal of Fair Trade Laws, manufacturers are now providing "Suggested Retail" or "Fair Retail Value" figures for the guidance of their dealers and customers. Prices in this Directory are those provided by the manufacturers under these conditions.

CONRAD-JOHNSON

Vacuum Tube Stereo Preamplifier
Features low-noise metal film resistors and polyester and mica capacitors in audio circuitry and vacuum tube design; two-deck tape monitoring with one-way dubbing; input selector for two phonos, tuner, tape, and aux.; mode control switch; two amplifier outputs. Frequency response 2-100,000 (bandpass), ±0.25 dB from 20-20,000 Hz (phono RIAA); S/N 70 dB below 10 mV in (phono), 84 dB below 2.5 V out (high level); THD and IM dist. 0.05%; gain 35 dB (phono), 28 dB (high level); max. output 25 V; phono overload 500 mV at 1000 Hz; 4¾" H × 14" W × 11¼" D $585

CROWN

DL-2 Control Center/Preamplifier
Three-piece stereo control preamp consisting of switching module with all controls, power supply, and phono module A (phono preamp stage for placement at turntable). Switching Module: features digital control-setting displays, digital interface for wireless remote control system, and eight dual-channel touch-button selectable inputs, including two for external signal processors and one mixable input. Specifications: frequency response into 10,000 ohms from 10-50,000 Hz ±0.1 dB and 1-100,000 Hz ±0.5 dB; 2.5 V rated output, 11 V rms max. before overload; phase response into 10,000 ohms from 20-20,000 Hz ±8 dB; hum and noise below rated output 97 max. (unweighted), 101 max. (A weighted); IM dist. 0.0003% max. below 10-V output; THD with 10,000-ohm load at rated output 0.0003% max. at 1000 Hz, 0.0008% max. from 20-20,000 Hz; input gain/impedance 20 dB ±0.2 dB/100k ohms; output impedance 50 ohms; three-circuit, ¼-in headphone jack with 1-ohm min. impedance, 17 V rms max. output, and frequency response from 10-50,000 Hz ±0.1 dB at rated output; 63.5 dB dynamic range gain on seven-segment LED displays; frequency adjust controls set at 20, 40, 80, 400, 800, 1600, 5000, 10,000, and 20,000 Hz; 18 dB/octave roll-off; 31-position switched attenuators for ±0.2 dB adjustment over 50-dB range; 7½" H × 17" W × 14" D. Power Supply: Seven switched and two unswitched ac outlets; three dc outlets; 3½" H × 17" W × 7½" D. Phono Module A: frequency response into 10,000 ohms 20-20,000 Hz ±0.25 dB (RIAA), 10-30,000 Hz ±0.1 dB (flat); phase response into 10,000 ohms 20-20,000 Hz ±5 degrees (RIAA), 20-20,000 Hz −12 degrees (flat); hum and noise −88 dB (RIAA unweighted), −94 dB (RIAA "A"), −84 dB (flat unweighted), −89 dB (flat "A"); IM dist. 0.0005% min. into 10,000 ohms, SMPTE at rated output; THD 0.002% min. into 10,000 ohms from 20-20,000 Hz at rated output; input gain from 30-50 dB, 2.5 V at 1000 Hz; input impedance 47,000 or 100,000 ohms; output impedance 600 ohms with max. 11 V rms; 3½" H × 1⅜" W × 6⅜" D. Switching Module and Power Supply have satinized aluminum front panel with charcoal Lexan inlay, other surfaces black anodized; Phono Module A has black anodized steel finish..... $2395

Straight Line One Preamplifier
Features precision-stepped gain control (2-dB steps); balance control; low filter; two-deck tape monitor buttons; dual-channel preamp overload indicators; input selector for phono, tuner, and aux. 1 and 2. Input sensitivity 2.5 mV (phono), 250 mV (high level); phono overload 33-330 mV; frequency response ±0.5 dB from 20-20,000 Hz (phono RIAA), 10-20,000 Hz ±0.1 dB (high level); THD 0.002%; IM dist. 0.0005%; 3½" H × 19" W × 12¼" D $599

DB SYSTEMS

DB-1A Preamplifier
THD less than 0.0008% from 20-20,000 Hz; IM dist. less than 0.001%; frequency response: (phono) 10-40,000 Hz ±0.07 dB; (high level) 2-50,000 Hz +0, −1 dB; S/N (IHF A weighted) 89 dB (phono), 90 dB (line); filters: (low cut) flat, 20 Hz, 36 Hz at 6 dB/octave (phono only), (high cut) flat, 5000 Hz, 10,000 Hz at 6 dB/octave; output impedance 1000 ohms; max. output voltage 6 V into 10,000 ohms; max. load for rated dist. 10,000 ohms/3000 pF; input sensitivity for 1 V output: phono 2 mV into 50,000 ohms/100 pF, high level 120 mV into 50,000 ohms; controls: selector, balance, volume, low cut, high cut, tape monitor (includes "mute" position); requires separate regulated power supply (included); 8.5" × 3.2" × 7" $400

DB-1Au. Same as DB-1A except with gold jacks..... $415

DBR-1A. Same as DB-1A except mounted in standard rack; requires DB-2 power supply $364

DB-2. Power supply; wired for 120 V or 240 V operation; supplies up to 300 mA at 33 V (includes protective current limiter)..... $62

DENON

PRA-1003 Control Amplifier
Silicon transistor stereo control amplifier. Equalizer: input sensitivity/impedance 2.5 mV/50,000 ohms (phono 1), 2.5 mV/30k, 50k, and 100,000 ohms (phono 2); 320 mV max. input; THD 0.003% at 3 and 20 V from 20-20,000 Hz; RIAA deviation ±0.2 dB from 20-20,000 Hz; S/N 86 dB (IHF "A"); separation 100 dB min. from 20-1000 Hz, 90 dB min. at 20,000 Hz; 35.6-dB gain. Control: input sensitivity/impedance 150 mV/50k ohms (tuner, aux., and phonos); 10-V max output; THD 0.003% at 3 V from 20-20,000 Hz, 0.007% at 10 V from 20-20,000 Hz; frequency response 10-100,000 Hz +0/−1 dB; S/N 100 dB min. (IHF "A"); stereo separation 100 dB min. at 20 and 1000 Hz, 85 dB min. at 20,000 Hz; gain control at 0, −10, and −20 dB; bass control 50 Hz +10 dB, treble 20,000 Hz +10 dB; 18 dB/octave low filter rolloff, 6 dB/octave high filter rolloff. Features independent REC FUNCTION knob to hook up with phono 1 or tuner, FETs and ICL input circuit with no coupling condenser, separate left/right equalizer amps, pure-complementary pushpull circuitry, and headphone amplifier; 170 mm H × 410 mm W × 270 mm D..... $550

EUMIG

C-1000 Stereo Preamplifier
Features dc circuitry; built-in moving-coil head amp; bass and treble controls with tone defeat; low-cut (15 and 70 Hz) and high-cut (8000 and 12,000 Hz) filter switches; loudness and mode switches; tape monitor switch with two-way dubbing; input selector. Frequency response 0-200,000 Hz ±1 dB (overall), ±0.5 dB from 20-20,000 Hz (phono RIAA); S/N 80 dB (moving-magnet), 70 dB (moving-coil), 100 dB (tuner, aux, tape); THD 0.005% from 20-20,000 Hz; black matte or chrome finish; 19-in rack mountable..... $580

DAVID HAFLER

DH-101 Streeo Preamplifier
Rated output 3 V; max. output 7 V; dist. 0.0006% (phono, 1 kHz, 3 V output), 0.001% (high level); slew rate 12 V/μsec; phono overload 200 mV (1 kHz); hum and noise (A weighted) −88 dB (phono, 1 kHz, 10 mV input), −90 dB (high level, 1 V); frequency response 2-20,000 Hz ±0.5 dB (phono), 20-20,000 Hz +0/−0.25 dB (high level); gain 34 dB (phono, 1 kHz), 20 dB ±1 dB (high level); input impedance 25,000 ohms (high level); bass and treble controls; provision for patching in external equipment; three switched ac convenience outlets; 3.25" H × 13.75" W × 8.38" D
Kit..... $200
Assembled $300

2 PREAMPLIFIERS

HARMAN/KARDON

Citation 17 Preamplifier
Incorporates equalizer section; high-frequency and subsonic filters; two tape monitor loops controlled by front-panel switches; two phono, three high-level aux., and tuner inputs; switching for two sets of speakers and two headphone jacks; stepped attenuation. Max. output 14 V rms into 2200 ohms; 0.002% THD and 0.0025% IM dist. at 2 V rms output; S/N 92 dB (2 V rms, high-frequency filter in); input sensitivity 2.8 mV for 2 V rms output; phono preamp: S/N 80 dB (10 mV input, 1 kHz); input sensitivity 2.8 mV for 2 V at tape output (1 kHz); overload 180 mV (1 kHz); 4¾" H × 16" W × 12" D $499
Citation 17s. Similar to Citation 17 but without equalizer section $349
CW-17. Walnut enclosure for 17 and 17s $40
P-11/17. Rack panel for 17 and 17s $30
Citation RPM. Rack panel mount for 17 and 17s $188
Citation CRM. Floor-standing rack mount for 17 and 17s $285

HEATH

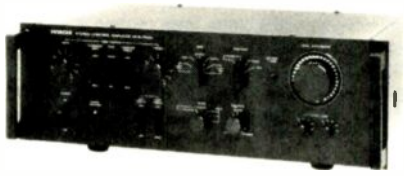
AP-1800 Stereo Preamplifier
Features built-in moving-coil cartridge head amplifier; switchable phono capacitance/input sensitivity selector; attenuator volume control; tone controls with two filters. Output 1.5 V; THD and IM dist. 0.02%; switches up to 1500 W using ac; 5¼" H × 19" W × 11¼" D.
Kit $380

AP-1615 Stereo Preamplifier
Basic preamp; THD and IM dist. 0.05%; −65 dB hum and noise (phono); frequency response 20-20,000 Hz +0/−0.2 dB; phono input 100 dB dynamic range; built-in subsonic filter; tape dubbing facilities; hi and lo filters; power on/off relay; solid walnut end panels; 4⁷/₃₂" H × 17½" W × 8" D.
Kit $140

HITACHI

HCA-8300 Preamplifier
Features bass and treble controls with tone defeat and bass and treble turnover frequency controls; low and high filters; two-way tape monitoring and dubbing; input selector with separate phono level adjustment; headphone level control; −5, −10, −20 dB gain selectors; loudness switch; mode control. Input sensitivity/impedance 2-6 mV/50k ohms (phono 1), 2 mV/50k ohms (phono 2), 100 mV/50k ohms (tuner, aux., tape); output level/impedance 1 V/600 ohms (pre out), 100 mV/600 ohms (tape out, PIN), 40 mV/80,000 ohms (tape out, DIN), 50 mV/8 ohms (headphones); frequency response 5-100,000 Hz ±1.5 dB (tuner, aux.), RIAA ±0.2 dB (phono); THD 0.01% (phono, 20 V at rec out; tuner, aux., 7 V at pre out); S/N 75 dB at 2 mV input (phono), 100 dB at 100 mV input (tuner, aux.), 100 dB at 100 mV input (tape); 6" H × 17⅛" W × 12⅛" D $350

HCA-7500 Preamplifier
Complementary push-pull, three-stage dc equalizer amplifier circuitry and three-stage dc push-pull FET differential tone control amplifier circuitry. Features bass and treble controls with turnover frequency selectors and tone defeat; low and high filter switches; two-way tape dubbing and monitoring; −20-dB muting; mode switch; input selector with two cartridge load controls. Specifications: input sensitivity/impedance 2 mV-6 mV/50k ohms (phono 1), 2 mV/50k ohms (phono 2), 100 mV/50k ohms (tuner, aux., tape 1 and 2); max. input level 350 mV at 1000 Hz (phono 1 and 2); output level/impedance 1 V/600 ohms (preamp out), 100 mV/600 ohms (tape out, PIN and DIN); max. output level more



than 7 V (preamp out); frequency response 20-20,000 Hz ±0.2 dB (phono 1 and 2), 5-100,000 Hz +0/−1 dB (tuner, aux., tape 1 and 2); THD 0.005% at 1 V, tape out (phono 1 and 2, tuner, and aux.); S/N (IHF "A") 87 dB (phono 1 and 2), 100 dB (tuner, aux., tape 1 and 2); residual hum and noise (preamp out) 8 mV; 6½" H × 18⅞" W × 13¾" D $350

HCA-6500 Preamplifier
Features bass and treble controls with tone defeat; left/center/right balance control; subsonic filter; two-way tape dubbing and monitoring; mode, loudness, and −20-dB muting switches; input selector. Input sensitivity/impedance 2.5 mV/50k ohms (phono), 150 mV/40k ohms (tuner, aux., tape); phono overload 150 mV; frequency response 20-20,000 Hz ±0.3 dB (phono), 20-20,000 Hz +0/−1 dB (tuner, aux., tape); S/N (IHF A) 83 dB (phono), 90 dB (tuner, aux., tape); HD 0.005%; 3¹/₁₆" H × 17⅛" W × 10¹³/₁₆" D $200

JVC

JP-S7 S.E.A. Preamplifier
Input sensitivity/impedance 2 mV/33,000, 47,000, or 100,000 ohms selectable (phono), 200

mV/80,000 ohms (tuner), 200 mV/70,000 ohms (aux.), 200 mV/50,000 ohms (tape); capacitance selectable, 100 or 330 pF; max. input 350 mV (phono, 1 kHz), 35 V (tuner, aux); rated output 1 V (output), 200 mV (tape); output impedance 600 ohms (output), 80 ohms (tape PIN), 70,000 ohms (tape DIN); THD 0.02% at 1 V output, 0.05% at 5 V output (1 kHz); S/N (IHF A) 75 dB (phono), 96 dB (tuner, aux., tape); frequency response ±0.3 dB from RIAA curve (phono), 15-100,000 Hz +0/−0.5 dB (tuner, aux., tape); S.E.A. graphic equalizer has 10 controls (one per octave) with ±12 dB range; subsonic and high filters; 6¹³/₃₂" H × 22¾" W × 10¹⁷/₃₂" D $750

EQ-7070 Phono Equalizer Preamp
Features built-in moving-coil head amplifier, high-gain equalizer amp with dc circuitry, and dual-FET push-pull dc amplifier; input selector with separate phono selector and cartridge load capacitance/resistance selectors; two-deck tape/source monitor switch; detented volume/balance control; LED standby and operation indicators. Input sensitivity/impedance 0.1 mV/11 ohms (phono 1 MC), 0.025 mV/2.5 ohms (phono 2 MC), 1.8 mV/100, 33k, 50k, 100k ohms (phono 1, 2, 3 MM), 160 mV/50k ohms (aux., tuner, and tape); phono overload 15 mV (MC 1), 3.8 mV (MC 2), 300 mV (MM 1, 2, 3) at 1000 Hz; frequency response 30-15,000 Hz ±0.2 dB (phono); S/N (IHF A) 73 dB (MC 1), 82 dB (MC 2), 85 dB (MM 1, 2, 3); THD 0.003% (MC 1), 0.005% (MC 2), 0.002% (MM 1, 2, 3); 2⁷/₁₆" H × 16⁹/₁₆" W × 14⅞" D $950

P-3030 Control Preamplifier
Input sensitivity/impedance 2 mV/100, 33,000, 47,000, and 100,000 ohms selectable (phono), 0.1 mV/30 ohms (MC phono), 140 mV/50,000 ohms (tuner, aux., tape); capacitance selectable 100, 220, 330, and 470 pF; output/impedance 140 mV/2000 ohms (tape), 1 V/600 ohms (rated), 20 V/600 ohms (max.); phono overload 300 mV rms (phono, 1 kHz), 15 mV rms (MC phono, 1 kHz); THD 0.005% (phono, aux., 10 V output), 0.05% (MC phono, 1 V output); frequency response ±0.3 dB from RIAA curve (phono), ±0.5 dB from RIAA curve (MC phono), 10-40,000 Hz ±0.5 dB (aux.); S/N (IHF A, 1 V output) 76 dB (phono), 66 dB (MC phono), 96 dB (aux., tuner); bass and treble tone controls; two switched and one unswitched ac convenience outlets; 2⅜" H × 16⁹/₁₆" W × 13¹¹/₁₆" D $440

KENWOOD

Audio Purist Group

L-07CII Control Preamplifier
Features low-level impedance circuitry, two independent phono equalizer amplifiers for moving-coil

and moving-magnet cartridges, and cascode differential buffer amplifier circuitry; bass and treble tone controls; 18-Hz subsonic filter; output switch; two-way tape dubbing; input selector. Frequency response ±0.2 dB from 20-20,000 Hz (RIAA phono 1) and from 30-20,000 Hz (RIAA phono 2), 1-350,000 Hz +0/−3 dB (tuner, aux., and tape play); THD 0.004% from 20-20,000 Hz at 1 V out (tuner, aux., tape), and at 3 V out (phono 1), 0.008% from 20-20,000 Hz at 1 V out (phono 2); input sensitivity/impedance 2.5 mV/50k ohms (phono 1), 0.2 mV/600 ohms (phono 2), 140 mV/25k ohms (tuner, aux., tape); S/N 90 dB (phono 1), 70 dB (phono 2), 108 dB (tuner, aux., tape); max. input 450 mV rms (phono 1), 40 mV rms (phono 2); includes low-impedance cable and remote power switch for connection to L-09M, L-07MII, and L-05M power amplifiers; 3¹⁵/₁₆" H × 18²⁹/₃₂" W × 13⅜" D $900

LUX

C-12 Preamplifier
Direct-coupled stereo preamplifier. Features DML-IC for dc drift suppression; volume control; linear equalizer; subsonic filter; input impedance adjuster; tape monitor, tape dubbing, and record off switch; audio attenuator with preset position; extra ac outlet (two switched and one unswitched). Output/impedance 1 V/100 ohms (pre out), 150 mV/100 ohms (rec. out); THD 0.005% (phono, rec. out, tuner, aux., monitor, pre out); IM dist. 0.002% (phono, rec. out, tuner, aux., monitor, pre. out); frequency response 20-20,000 Hz ±0.2 dB (phono 1 and 2), 1-200,000 Hz −0.5 dB (tuner, aux. 1 and 2, monitor 1 and 2); input sensitivity/impedance 2.3 mV/50,000 ohms (phono 1 and 2), 150 mV/50,000-60,000 ohms (tuner, aux. 1 and 2, monitor 1 and 2); S/N (IHF "A") better than 96 dB (phono 1, 2), better than 100 dB (tuner, aux. 1 and 2, monitor 1 and 2); phono overload 300 mV min. 3¹/₁₆" H × 17¼" W × 14⁹/₁₆" D $645

Laboratory Reference Series

Luxman 5C50 Stereo Control Preamp
Features linear equalizer, switch-selected subsonic notch filter circuitry, selectable sharp high frequency filters, tape dubbing and monitoring, muting switch. Output 1 V (pre out), 150 mV (rec. out), 18 V (max.); THD 0.005%; IM dist. 0.002%; frequency response RIAA ±0.2 dB (phono), 0.5-200,000 Hz +0/−0.5 dB (tuner, aux.); S/N

80 dB below 2.5 mV (phono, IHF A), 100 dB (tuner and aux., IHF A); input sensitivity for 1 V pre. out 2.5 mV (phono), 150 mV (tuner, aux.); input impedance 30,000, 50,000, 100,000 ohms (phono), 50,000 ohms (tuner, aux.); output impedance 500 ohms; crosstalk −80 dB (phono), −95 dB (tuner, aux.); phono overload 300 mV rms (1 kHz); residual noise 0.33 mV (phono), 5 μV (tuner, aux.); 4" H × 17.7" W × 16" D $895

MARANTZ

3250B Preamp/Control Console

Includes moving-coil head amplifier. THD and IM dist. 0.01% at 3-V output from 20-20,000 Hz. Features selectable tone turnovers; bass, midrange, and treble slide tone controls; independent tape-to-tape copy; two-recorder tape monitoring circuitry; low (18 dB/octave at 15 Hz) and high (18 dB/octave at 9000 Hz) filters. 5¾" H × 16⅜" W × 9¾" D $350

MERIDIAN by ANGLO-AMERICAN

101 Stereo Preamplifier

Features choice of moving-coil or standard pickup cartridge input; one-way tape dubbing with tape/source monitor switch; mono switch; optional input modules to optimize leading cartridges available. Input sensitivity 1.4 mV (phono), 450 mV (high level); phono overload 160 mV; frequency response 20-20,000 Hz ±0.5 dB (phono RIAA), 5-50,000 Hz ±0.5 dB (high level); THD and IM dist. 0.01%; chocolate brown textured enamel finish with gold-blocked lettering; 2" H × 5.5" W × 12.5" D ... $465

METRON

PR-1 Preamplifier

Features multiple-gang stepped attenuator volume control adjustable in 2-dB increments; separate stepped bass and treble controls ±10 dB; detented balance control; input selector switch with LED; tape monitor switch; tape dubbing switch; −20 dB muting switch; subsonic filter (−9 dB/octave at 10 Hz); headphone jack. Input sensitivity (IHF) 0.5 mV (phono 1 and 2), 55 mV (aux. and tuner), 62 mV (tape), 0.45 mV at 1000 Hz (mic); phono input impedance 47k ohms; phono overload 230 mV at 1000 Hz; THD and SMPTE IM dist. 0.01% (phono to main out), 0.005% (aux., tuner, tape to main out); RIAA phono deviation ±0.2 dB from 30-15,000 Hz, 5-200,000 Hz −3 dB (aux., tuner, tape 1 and 2), 50-20,000 Hz −3 dB (mic); S/N (IHF "A") phono 84 dB (weighted), 73 dB (unweighted), aux., tuner, and tape 92 dB (unweighted), mic 77 dB (weighted), 70 dB (unweighted). 2.8" H × 18.9" W × 14.2" D $500

MITSUBISHI

DA-P20 Stereo Preamplifier

Dual-mono docking preamplifier. Specifications: input sensitivity/impedance 0.1 mV/10 ohms (phono MC), 2.3 mV/60k ohms (phono MM), 150 mV/50k ohms (tuner, aux., tape 1/2); RIAA deviation ±0.2 dB from 20-20,000 Hz (phono MC, MM), +0/−0.5 dB from 10-100,000 Hz (tuner, tape 1/2); THD 0.005% (phono MC), 0.003% (phono MM), 0.002% (tuner, aux., tape 1/2); S/N (IHF "A") 77 dB into 47 ohms (phono MC), 84 dB, closed circuit (phono MM), 110 dB, closed circuit (tuner, aux., tape 1/2); channel separation 80 dB at 20,000 Hz for phono MC/MM, 100 dB for tuner and tape 1/2; phono overload 12 mV at 1000 Hz with 0.1% THD (phono MC), 290 mV (phono MM); output level/impedance 1 V/600 ohms rated, 18 V max., 150 mV/600 ohms (tape 1/2); load impedance 8-16 ohms. Features attenuator-type level controls: independent tone controls, tone-defeat, and output level controls for each channel; provisions for two tape decks with duplication and monitoring facilities from one to the other; subsonic filter; A, B or A+B speaker selections. 6¾" H × 16¾" W × 8" D. $430

M-PO1 Micro-Preamplifier

With built-in moving-coil head amp. Specifications: input sensitivity/impedance 100 μV/10 ohms (phono MC), 2.3 mV/50k ohms (phono MM), 150 mV/50k ohms (tuner, aux., tape 1/2); RIAA deviation ±0.2 dB from 20-20,000 Hz (phono), +0/−0.5 dB from 10-100,000 Hz (high level); THD at 1 V output from 20-20,000 Hz −20 dB 0.005% (phono MC), 0.003% (phono MM), 0.002% (high level); S/N (IHF "A") 77 dB (phono MC), 90 dB (phono MM for 10 mV out), 110 dB, closed circuit (high level); phono overload at 12 mV (MC), 290 mV (MM); output level/impedance 1 V/600 ohms, rated (preamp out), 150 mV/600 ohms at rated output (tape 1/2). Features digital tone controls with LEDs, provisions for two tape decks with tape duplication and monitoring facilities from one to the other, and gold-plated phono input terminals. 2¾" H × 10⅜" W × 9¾" D $370

DA-P10 Stereo Preamplifier

Two completely separate amplifiers for left and right channels; frequency response 30-15,000 Hz ±0.2 dB (phono, RIAA), 10-70,000 Hz +0/−0.5 dB (tuner, aux., play); channel separation 100 dB at 1 kHz, 80 dB at 20 kHz (phono), 85 dB at 20 kHz (tuner, aux., play); THD 0.05% max.; S/N (IHF A) 73 dB (phono), 90 dB (tuner, aux., play); phono overload 270 mV; input sensitivity/impedance 2.2 mV/50,000 ohms (phono 1 and 2), 150 mV/60,000 ohms (tuner, aux., play); output level 9 V max. (pre out, 50,000 ohms), 150 mV (rec out, 50,000 ohms), 50 mV (headphones, 8 ohms); 6¾" H × 16¾" W × 8" D $330

NAIM by AUDIOPHILE SYSTEMS

NAC 32 Preamplifier

Features input selector for moving-magnet and moving-coil phono cartridges, tuner, and two tape; volume and balance controls; mode switch; normal, mute, and tape monitor switch. Input sensitivity 2.0 mV (MM), 0.1 mV (phono MC), 75 mV (high level); max. phono overload 200 mV (MM), 10 mV (MC); frequency response 20-20,000 Hz ±0.5 dB; THD and IM dist. 0.02%; 3" H × 8" W × 12" D $920

NAC 12S Preamplifier

Features input selector for moving-coil phono cartridge, tuner, and tape; volume and balance controls. Input sensitivity 0.1 mV (phono), 75 mV (high level); phono overload 10 mV; frequency response 20-20,000 Hz ±0.5 dB; THD and IM dist. 0.02%; 3" H × 5" W × 12" D $650

NAKAMICHI

630 FM Tuner/Preamplifier

See Section 2, "Tuners," under Nakamichi, for details. $730

610 Stereo Control Preamplifier

Combines preamplifier circuitry, test circuitry, and mixing facilities; 19 different inputs with full dubbing and 5-in/2-out mixing; built-in sine wave tones, pink noise, phase check, and invert capabilities; remote speaker/amplifier selection; mike input attenuators; frequency response 30-100,000 Hz ±0.75 dB (mike), 20-100,000 Hz ±0.75 dB (aux.), RIAA ±0.3 dB (phono); S/N (IHF A) 65 dB (mike with 15-dB attenuation), 80 dB (phono re 1

2 PREAMPLIFIERS

mV), 93 dB (aux.); THD 0.01% (mike), 0.005% (phono and aux.) $660
610B. Same as 610 with black matte finish... $680
WC-600. Walnut cabinet for Nakamichi 600 Series components $55
RM-610. Remote control unit; permits switching of up to three speaker pairs or amplifiers from front-panel controls of preamplifier $90

410 Stereo Preamplifier
Frequency response 20-50,000 Hz ±0/−1.5 dB (aux., tape), RIAA ±0.3 dB (phono); S/N (IHF A) 102 dB (aux., tape), 80 dB (phono re 1 mV); phono overload 250 mV (1 kHz, 5 mV sensitivity); dist. 0.003%; switchable phono input sensitivity (1, 2, or 5 mV); defeatable active subsonic phono filter (−45 dB at 10 Hz); tone control circuitry bypass switch; variable contour control; 3 3/32" H × 16" W × 8 1/2" D $370
WC-400. Walnut cabinet for Nakamichi 400 Series components $30

NIKKO

Beta III Preamplifier
Discrete FET stereo preamplifier features bass and treble controls with defeat; 12 dB/octave and 6 dB/octave subsonic and low filter switch; two-way tape dubbing; 22k, 47k, and 100k ohm phono impedance selector and phono 2 level control; input selector. Input sensitivity 2.0 mV (phono 1 and 2), 110 mV (tuner and aux.); frequency response 10-50,000 Hz ±0.5 dB (high level), ±0.2 dB (phono RIAA); frequency response 10-50,000 Hz ±0.5 dB (high level), ±0.2 dB (phono RIAA); S/N (IHF A) 95 dB (phono 1 and 2), 100 dB (tuner and aux.); THD 0.004% (phono), 0.005% (tone); max. phono input 350 mV; matte black finish; 2 1/2" H × 19" W × 13" D $420

Beta II Preamplifier
Features calibrated dual-attenuator master volume control; balance control; two-way tape monitoring and dubbing system; tone defeat; −20 dB audio muting; switchable subsonic filter (−12 dB/octave); phono impedance selector; dual phono level controls. Input sensitivity/impedance 2.5 mV/22,000, 47,000, 100,000 ohms (phono), 150 mV/50,000 ohms (tuner, aux.); S/N 89 dB (phono), 100 dB (tuner, aux.); RIAA equalization ±0.2 dB, frequency response 10-100,000 Hz +0/−1 dB (high level); rated output 1.0 V; rack mountable; 2 1/2" H × 19" W × 11 1/2" D $240

ONKYO

P-303 Preamplifier
Features two mono amplifiers, separate moving-coil amplifier with provision for moving-magnet cartridge, and equalizer amplifier circuitry; 32-detent, 4-gang attenuator volume control; transient killer circuit with reed relay; power, volume, balance, tape monitor; phono/tuner selector, MM/MC cartridge, impedance selector (30,000, 50,000, and 100,000 ohms), and accessory terminal switch controls. Input sensitivity/impedance 100 μV/10 ohms (phono MC), 2.5 mV/30,000, 50,000, 100,000 ohms (switchable, phono MM), 150 mV/50,000 ohms (tuner, tape), 1.5 V/82,000 ohms (accessory receive); rated output/impedance 150 mV/2000 ohms (tape), 1.5 V/100 ohms (accessory send), 1.5 V (15 V max.)/600 ohms (output); frequency response 3.5-200,000 Hz +0/−1.5 dB (tuner), RIAA ±0.2 dB (phono); phono overload 330 mV rms at 1 kHz, 0.05% THD (phono MM), 13 mV rms at 1 kHz, 0.05% THD (phono MC); THD 0.006% (phono MM, 3 V output), 0.03% (phono MC, 3 V output); IM dist. 0.01%; S/N (IHF A) 70 dB (phono MC), 83 dB (phono MM), 100 dB (tuner). African wood veneer over Lauan plywood finish. 3 1/4" H × 17 3/4" W × 14 9/16" D $410
U-30. System selector unit provides additional input/output facilities to P-303: phono 1, 2, and 3; tuner (aux.) 1, 2, and 3; tape monitor 1, 2, Source; record mode channel 1 to 2, channel 2 to 1, rec, off; pre-out 1, 2, 1+2, off; mode stereo (normal, reverse)/mono (L+R, L, R); speakers 1, 2, 1+2, off; headphone; meter selector reads speaker output power (10 and 100 W), pre-out (dB-scale at 1 and 10 V), off. African wood veneer over Lauan plywood; 3 1/4" H × 17 3/4" W × 14 9/16" D $400
E-30. Audio equalizer provides additional frequency notches to P-303: 63 (45/32 switchable), 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz; max. switchable range ±5/+10 dB in 0.5/1 dB step; African wood veneer over Lauan plywood; 3 1/4" H × 17 3/4" W × 14 9/16" D $550

OPTONICA

SO-9205 Preamplifier
Features built-in moving-coil cartridge head amp; tone controls with tone defeat; switchable subsonic, low, and high filters; audio muting; two-way tape dubbing; loudness and mode switches; input selector with separate three-position phono impedance and phono capacitance selectors; LED indicators for inputs; S/N 90 dB (phono), 100 dB (aux.); phono overload 300 mV; ebony faceplate $350

PHASE LINEAR

4000 Series Two Stereo Preamplifier
Features single-pass noise-reduction and dynamic-range-recovery systems; frequency response 20-20,000 Hz ±0.4 dB (high level), RIAA phono deviation ±0.4 dB; gain 40 dB (phono), 20 dB (high level); S/N (IHF "A") 80 dB (phono), 85 dB (high level); two monitor switches for two-deck operation; separate dc headphone amplifier; 22-detent 2-dB stepped attenuator volume control; ultrasonic filter; switched outlets handle 1100 W. 7" H × 19" W × 10" D $700
Walnut side panels $50

3000 Series Two Stereo Preamplifier
Features CMOS logic memory system which switches critical signal paths to 14 relays; tactile pushbutton controls; phono 1 stage for moving-magnet cartridges and phono 2 stage for moving-coil cartridges; two-deck tape monitoring and dubbing facilities; noise reduction loop (processes noise ahead of tape monitor); subsonic filter (18 dB/octave at 15 Hz); dc headphone amplifier. Specifications: dist. less than 0.04% from 20-20,000 Hz; 2.0 V rms rated output; S/N 90 dB (phono MM), 78 dB (phono MC), 91 dB (high level); RIAA phono deviation +0.3/−0.3 dB, 20-20,000 Hz ±0.1 dB (high level); input impedance 47 000 ohms (phono MM), 50, 200, or 500 ohms (phono MC), 50,000 ohms (high level); phono overload 120 mV (MM), 12 mV (MC). 3 1/2" H × 19" W × 8" D $580

2000 Series Two Stereo Preamplifier
Features separate bass and treble tone controls for each channel, tone defeat, active equalizer and ambient recovery circuits, tone turnover controls; two tape monitor circuits; THD 0.05%; frequency response RIAA ±0.5 dB (phono); input sensitivity 40,000 ohms (high level), 47,000 ohms (phono, 50 pF); hum and noise −88 dB (high level, 2 V), −80 dB (low level, 10 mV); 5 1/2" H × 19" W × 6" D $300
Walnut side panels $50

PHILIPS

AH 572 Preamplifier
Features lighted function display; LED touch switches; memory lock; detented volume, bass, treble, and balance controls; separate phono preamps; front-panel play/record for Tape B; tape dubbing/monitoring; tone defeat; channel mode selector; headphone jack; phono 1/2, tape A/B, tuner, and aux. inputs; audio 1/2 and tape A/B outputs; four ac receptacles; high and low cut filters; muting. Input sensitivity 1.5-18 mV (phono, adjustable); THD and IM dist. 0.008%; S/N (A weighted) 75 dB (phono), 90 dB (tuner, aux., tape); phono overload 750 mV; frequency response RIAA ±0.25 dB (phono), 10-50,000 Hz ±0.5 dB (tuner, aux., tape); separation 55 dB; crosstalk −75 dB; output 2 V (rated), 12 V (max.), record output 200 mV. Silver chassis; 8" H × 18" W × 15" D $480
AH5721. Black chassis $500

PIONEER

SPEC-1 Stereo Preamplifier
Input sensitivity/impedance 2.5 mV/50,000 ohms (phono, mike), 150 mV/100,000 ohms (tuner, aux., tape); 0.05% THD at 2 V output; frequency response 30-15,000 Hz ±0.2 dB (phono), 10-70,000 Hz +0/−0.5 dB (tuner, aux., tape); tone controls; filters; mixing facilities; level adjust; input impedance selector; 6 7/8" H × 18 13/16" W × 16 3/16" D $650

RG DYNAMICS

Dimension 3 Stereo Control Preamplifier
Employs circuit designed to isolate cartridge-preamplifier interaction and minimize overload and TIM distortion; features bass and treble controls with tone defeat; subsonic filter; mode switch; LED-indicated input selector includes tape 1 and 2; two-way tape dubbing and monitoring; gold-plated phono input jacks; external signal processor loop. Phono input sensitivity/impedance 2 mV/47k ohms; gain 34 dB (phono), 20.5 dB (line); phono overload 200 mV at 1000 Hz (input sine wave); frequency response ±0.05 dB from 20-20,000 Hz (phono RIAA), 0.5-170,000 Hz ±3 dB (line); S/N 68 dB (phono, A weighted), 85 dB (line level); THD 0.01% at 1000 Hz (phono), 0.02% from 20-20,000 Hz (high level); silver panel with walnut side panels; 3 1/2" H × 18" W × 12" D $595

ROTEL

RC-5000 Stereo Preamplifier
Stereo dc amplifier configuration with dc NF phono equalizer and dc ND graphic equalizer; includes

built-in moving-coil head amplifier. Features 10-band octave equalizer ±10 dB from 100-10,000 Hz; four-gang attenuated volume control; independent recording selector; subsonic and supersonic filters; full tape dubbing with three tape decks; stereo mic mixing; two independent power supplies; gold-plated input jacks and input/output facility; third power supply for relays and headphone amplifier; two headphone jacks. THD and IM dist. 0.002% (aux.) from 20-20,000 Hz; S/N (IHF "A") 85 dB (phono), 95 dB (tuner and tape); input sensitivity/impedance 2-8 mV/30-100,000 ohms (phono 1), 2 mV/50,000 ohms (phono 2), 0.1 mV/32 ohms (phono MC), 150 mV/50,000 ohms (tuner, aux., tape), 5 mV/600 and 50,000 ohms (mic), 150 mV/600 ohms (main in); 12 dB/octave low filter at 15 and 60 Hz, 12 dB/octave high filter at 7000 and 24,000 Hz; 7 15/32" H × 19" W × 16 3/32" D $1600

RC-2000 Stereo Preamplifier
Four-block dc amplifier configuration with NF

phono equalizer and built-in moving-coil head amplifier. Features attenuated volume control; left/right bass and treble tone controls ±10 dB/octave from 100-10,000 Hz; independent recording selector; subsonic and supersonic filters; full tape dubbing with two tape decks; shielded split power supplies; gold-plated input jacks; headphone jack. THD and IM dist. 0.002% from 20-20,000 Hz; S/N (IHF "A") 80 dB (phono), 100 dB (tuner and tape); input sensitivity/impedance 2 mV/50,000 ohms (phono 1 and 2), 0.1 mV/32 ohms (MC phono), 150 mV/50,000 ohms (tuner, aux., and tape), 0.775 V/50,000 ohms (main in); 12 dB/octave low filter at 15 Hz, 12 dB/octave high filter at 24,000 Hz; 5⅜" H × 19" W × 13⅛" D..... $530

RC-1000 Stereo Control Amplifier
Features OP equalizer amplifier and moving-coil head amplifier. Equalizer: ten-band octave equalizer with center frequencies set at 32, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut. Preamp: features three-position phono load impedance selector switch; two-way tape dubbing and monitoring; subsonic filter; −15 dB muting; input sensitivity/impedance 2.5 mV/35k, 50k, 70k ohms (MM), 0.2 mV/30 ohms (MC), 150 mV/50k ohms (aux. and tuner); frequency response 5-70,000 Hz +0/−1 dB; THD 0.03%; S/N 75 dB (MM), 60 dB (MC), 90 dB (aux. and tuner); 3²⁷/₃₂" H × 16¹⁵/₁₆" W × 11¹³/₃₂" D. $320

SAE

2100 Stereo Parametric Preamp
Serves as complete control center; incorporates parametric equalizer; frequency response 20-20,000 Hz ±0.25 dB; THD and IM dist. 0.005%; S/N 95 dB (phono); stepped volume control; gain control; full tape EQ/dubbing facilities; speaker switching; scope outputs; four phono circuits with separate feedback gain controls; 7" H × 19" W × 8½" D $950

2100L. Same as 2100 but without parametric equalizer; has LED display which monitors output at tape, line, or power amp level..... $800

WMC-2. Unassembled walnut cabinet for 2100 and 2100L..... $50

2900 Stereo Parametric Preamp
Incorporates parametric equalizer, full tape EQ/dubbing facilities, relay muting, and feedback gain control; THD and IM dist. 0.01%; frequency response 20-20,000 ±0.25 dB (phono and high level); S/N 78 dB (phono), 95 dB (aux.); 5.25" H × 19" W × 3.5" D..... $500

WMC-4. Unassembled walnut cabinet $45

3000 Tone Control Preamplifier
Features two-stage phono circuit, full tape recording facilities and tape EQ, and 30 Hz, 12 dB/octave, and 100 Hz 6 dB/octave filters. Frequency response 20-20,000 Hz ±0.25 dB (phono and aux.); THD and IM dist. 0.02%; S/N 72 dB (phono), 85 dB (aux.). 5¼" H × 19" W × 3½" D..... $300

WMC-4. Unassembled walnut cabinet $45

SANSUI

CA-F1 DD/DC Preamplifier
Features "Diamond Differential dc circuitry" in phono equalizer section; phono moving-coil, phono moving-magnet, tuner, and aux. input selector; A-B speaker switching; tape 1, 2, and source monitor control; separate bass and treble controls with tone defeat switch; balance control; loudness contour; switchable subsonic filter control; main outputs can be fed to one or two power amps. Frequency response ±0.2 dB from 20-20,000 Hz (RIAA phono), 5-600,000 Hz (aux., tuner, and tape); THD 0.005%; S/N 90 dB (phono), 100 dB (aux., tuner, and tape); slew rate 50 V/μsec; rise time 0.6 μsec; phono overload 350 mV; nominal output 1 V; matte black finish with detachable rack-mount adaptors $495

SANYO

PLUS C55 Stereo Preamplifier
Features low-noise moving-coil pre-preamp, discrete op amp moving-magnet phono preamp/equalizer, and dc-coupled class-A circuitry; bipolar power supplies; passive volume and balance controls and passive subsonic filter switch; bass and treble controls with turnover frequency switches and tone defeat; two-way tape dubbing and monitoring; input and mode selectors. Input sensitivity/impedance 2.5 mV/47k ohms (phono MM), 100 μV/100 ohms (phono MC), 150 mV/47k ohms (aux. and tape); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 10-40,000 Hz ±0.5 dB (aux. and tape); S/N (IHF A) 85 dB (phono MM), 70 dB (phono MC), 100 dB (aux. and tape), max. phono input 250 mV rms (MM), 10 mV rms (MC); includes rack-mount handles; 1¾" H × 19" W (with handles) × 10½" D $250

H.H. SCOTT

Alpha 1 Preamplifier
Features bass, midrange, and treble controls with tone defeat and bass and treble turnover frequency controls; 12 dB/octave low (−3 dB at 40 and 80 Hz) and high (−3 dB at 8000 and 12,000 Hz) filters; mic mixing; −20-dB audio muting; two-way tape monitoring and dubbing. Input sensitivity 2.5 or 9 mV switchable (phono 1), 2.5 mV (phono 2), 750 μV max. variable (mic), 250 mV (tuner, aux., tape); input impedance 47k ohms (low level), 50k ohms (high level); frequency response 20-20,000 Hz ±0.5 dB (phono and mic), 15-35,000 Hz ±0.5 dB (tuner, tape, aux.); THD 0.05%; IM dist. 0.08% (SMPTE); S/N (A weighted) 75 dB (phono), 90 dB (tuner, tape, aux.); rated output level 2.5 mV; includes EIA rack-mount handles; 5¼" H × 19" W × 12½" D $400

SERIES 20

C-21 Stereo Preamplifier
Features left/right gain controls; source/tape monitor switch; cartridge resistance and capacitance controls; subsonic filter. Input sensitivity/impedance 2.5 mV/100, 10k, 25k, 50k, 75k, 100k ohms switchable (phono), 150 mV/50k ohms (aux. and tape); phono overload 300 mV at 1000 Hz; frequency response ±0.2 dB from 20-20,000 Hz (phono), 10-100,000 Hz +0/−0.2 dB (aux.); S/N (IHF A) 80 dB at 1 V out (phono), 100 dB at 1 V out (aux.); THD 0.006% at 1 V out, 0-dB gain (phono), 0.005% at 1 V out, 0 dB gain (aux.); 3³/₁₆" H × 16¹⁷/₃₂" W × 14¹/₁₆" D..... $390

SONY

TA-E88B Stereo Reference Preamplifier
Dual mono preamp features direct-coupled circuitry; built-in moving-coil head amp with separate power supply; dual-FETs and bipolar transistors in EQ and buffer amp stages; monitor switch for two tape decks and source; input selector with separate selectable phono input impedance control; subsonic filter; three-position audio muting; balance and mode controls. Input sensitivity/impedance 2.5 mV/50k ohms (phono 1), 2.5 mV/10k-100k ohms (phono 2), 0.125 mV/25 or 100 ohms (head amp), 150 mV/50k ohms (tuner, aux., tape); max. input 250 mV (phono 1 and 2), 12.5 mV (head amp); frequency response ±0.2 dB (phono RIAA), 0-500,000 Hz +0/−1 dB (tuner, aux., tape); THD and IM dist. 0.002%; S/N (IHF A) 88 dB (phono 1 and 2), 80 dB (head amp), 105 dB (tuner, aux., tape); 3⅛" H × 18⅞" W × 14½" D $1300

TA-E7B Preamplifier/Control Center
Stereo preamplifier features built-in head and phono equalizer amplifiers; two-peak average power meters with meter range switch; bass and treble controls with tone defeat and turnover frequency selectors; connections for tuner, two phono, two aux., two tape decks, and two pairs of preamp outputs; tape monitoring/dubbing facilities for two decks; front-panel Tape-2 connections; 32-tape attenuator volume control with −20-dB muting switch; rear-panel selectable phono input impedance for matching load requirements; stereo, reverse, L+R, L/R, and system check mode selector. Input sensitivity/impedance 2.5 mV/50,000 ohms (phono 1) and switchable 50k/100k ohms (phono 2), 0.125 mV/3 or 40 ohms switchable (head amp), 150 mV/50,000 ohms (tuner, aux., tape); max. input 250 mV at 1000 Hz with 0.01% THD (phono 1 and 2), 12.5 mV (head amp); output level/impedance 150 mV/1000 ohms (rec. out), 1.5 V/1500 ohms (pre out), 10 mW/3.3 ohms (headphone); THD and IM dist. 0.003%; frequency response 1-150,000 Hz +0/−1 dB (tuner, aux., and tape), RIAA phono deviation ±0.2 dB; S/N (IHF "A") at rated input 85 dB (phono 1 and 2), 75 dB (head amp), 105 dB (tuner, aux., and tape); bass tone control ±10 dB at 25 Hz with 150-Hz turnover and at 50 Hz with 300-Hz turnover; treble tone control ±10 dB at 20,000 Hz with 4000-Hz turnover and at 40,000 Hz with 8000-Hz turnover; high (12 dB/octave above 9000 Hz) and low (12 dB/octave below 30 Hz) filters; gold-plated phono inputs. 6³/₄" H × 18⅛" W × 12⅝" D..... $820

TA-E86B Stereo Preamplifier
Features direct-coupled circuitry; built-in moving-coil head amp; selectable phono input impedance selector; two pairs of preamp outputs include bass-boost/subsonic filter $600

SOUNDCRAFTSMEN

SP4002 Signal Processor/Preamp
Combination preamplifier and 10-band octave equalizer. Preamplifier section features two sepa-

2 PREAMPLIFIERS

rate phono preamps with variable cartridge loading (0-750 pF) and variable impedance (100/47,000 ohms); variable ±20 dB gain stage; S/N 97 dB; 300 mV overload; will accept moving-coil, variable-reluctance, or moving-magnet cartridges; six input sources; two external processing loops, equalizer and mono A+B mixing switchable to two tape or two line outputs; switchable tape monitoring/dubbing. Graphic equalizer: ±15 dB control/octave; spectrum-level control and LEDs for input-to-output balancing; EQ S/N 114 dB at full output; Tape 2 jack duplicated on front panel; click-stop stepped volume control; subsonic filter $699

PE2217R Stereo Preamplifier
Combines two discrete phono preamplifiers, discrete line amplifier, pushbutton patching, and equalizer. Features interlocked pushbuttons; discrete-octave equalization control (10 octaves/ch, ±12 dB); full spectrum level control/channel; zero-gain equalization balance; two or three tape deck dubbing capability with front-panel automatic LED tape monitoring input/out jacks; line/tape equalization selector; auto equalizer-defeat; two headphone jacks; mono selector; reverse/stereo mode; four switched and two unswitched ac outlets. Specifications: frequency response 5-100,000 Hz ±0.25 dB (high level), 20-20,000 Hz ±0.5 dB (phono); THD and IM. dist. 0.05% at 1 V; gain 63 dB (phono), 21 dB (high level); output impedance 600 ohms max. Equalizer: S/N 96 dB; frequency response 10-100,000 Hz ±0.25 dB. Silver/gold front panel in walnut side panels; 6" H × 19" W × 11" D . $549
PE2217. Same except silver/gold anodized front-panel; 5¼" H × 19" W × 11" D $549

SPECTRO ACOUSTICS

217R Preamplifier
Straightline design with no tone controls or equalization, for ultra-linear output response; front-panel-accessible cartridge-loading adjustments with 16 combinations to match and load most magnetic phono cartridges; high-level switching section permits choice of source, bidirectional-bypass copying in the tape-monitor section and stereo or mono operation; response: phono, 20-20,000 Hz ±0.5 dB; high-level, 20-20,000 Hz ±0.1 dB, 5-100,000 Hz ±1 dB; dist. 0.03% THD, 0.0075% IM at rated output; rack-mountable; 3½" H × 19" W × 7½" D. $285

TECHNICS

SU-9070 Preamplifier
Stereo dc preamplifier features built-in moving-coil head amp; three tape monitors with multi-way tape

dubbing; subsonic filter. Output voltage/impedance 20 V/600 ohms (pre out max.), 150 mV (rec out tape); frequency response 20-20,000 Hz +0/−0.1 dB (tuner, aux.), RIAA ±0.2 dB (phono); S/N (IHF A) 88 dB (phono MM), 72 dB (phono MC), 105 dB (tuner, aux.); THD 0.004%; input sensitivity/impedance 2.5 mV/47,000 ohms (phono MM), 60 μV/50 ohms (phono MC), 150 mV/47,000 ohms (tuner, aux.); max. phono input voltage (1 kHz, rms) 350 mV (phono MM), 8 mV (phono MC); 120-V ac, 60 Hz, 30 W; 3³¹/₃₂" H × 19" W × 14¹⁷/₃₂" D .. $460

THRESHOLD

NS 10 Preamplifier
Wide-bandwidth class A discrete design stereo preamplifier with 50,000,000-Hz active circuit bandwidth and 1,500,000-Hz bandpass capability; ac-

tive input devices biased to current levels and increases magnetic phono input transistor overload to 1 V at 20,000 Hz and 2 V at 100,000 Hz; tantalum capacitors and metal film resistors in signal path; sealed gold-contact switch modules; dual segment volume control individually adjusted for 0.5% tracking between segments; adjustable dual gain controls; two-deck selector switch with two-way tape dubbing. Frequency response 1.5 Hz-1 MHz; THD and IM dist. 0.01%; slew rate 100 V/μsec; S/N 85 dB (A weighted); phono overload 320 mV; 3.5" H × 19" W × 9.69" D $1045

SL 10 Preamplifier
Direct-coupled cascode/class A stereo preamplifier features built-in moving-coil pre-preamp with separate power supply; discrete design with tantalum and polystyrene capacitors in signal path; 20,000-μF supply regulation; individually adjustable rear-panel impedance and capacitance settings for phono input; tape monitor switch; channel balance control. Frequency response ±0.5 dB (RIAA phono), 0-500,000 Hz +0/−3 dB (high level); THD 0.012% from 20-20,000 Hz (phono), 0.003% from 20-5000 Hz (high level); SMPTE IM dist. 0.006% at 1 V out (phono), 0.008% at 10,000 Hz, 5 V out (high level); S/N (A weighted) 90 dB (phono); phono overload 320 mV at 1000 Hz; slew rate 150 V/μsec; 2.62" H × 19" W × 8" D..... $943

TOSHIBA

C15 Micro Stereo Preamplifier
Features high-gain dual FET dc amplifiers; bass and treble controls with tone defeat and EQ direct; mono, subsonic, and tape/source monitor switches; input selector. Input sensitivity/impedance 2.5 mV/47k ohms (phono 1 and 2), 150 mV/47k ohms (tuner, aux., tape); phono overload 300 mV rms at 1000 Hz; frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 10-100,000 Hz +0/−2 dB (tuner, aux., tape); dist. 0.01% at 1 V out; S/N (IHF A) 88 dB (phono), 106 dB (tuner, aux., tape); silver finish; 2.1" H × 10.1" W × 8.2" D $300
C15B. Black finish..... $310

SY-665 Stereo Preamplifier
Features built-in moving-coil FET head amp and two ics for tone control amp; bass and treble controls with tone defeat; subsonic filter; loudness and mode switches; two-way tape dubbing and monitoring; mic mixing; input selector with LEDs. Input sensitivity/impedance 2.5 mV/47k ohms (phono MM), 0.12 mV/39 ohms (phono MC), 150 mV/47k ohms (tuner, aux., tape); phono overload at 1000 Hz 250 mV (MM), 10 mV (MC); frequency response ±0.3 dB from 20-20,000 Hz (phono RIAA), 7-40,000 Hz ±1 dB (tuner, aux., tape); dist. 0.01% (aux.); S/N (IHF A) 80 dB (MM), 65 dB (MC), 95 dB (aux., tape, tuner); 3.8" H × 16.5" W × 9.3" D $200

SY-335 Stereo Preamplifier
Features twin-tape monitoring/duplicating facilities; 41-position click-stop volume control; microphone mixing with control/switch; mode and loudness switches; phono equalization amp. Max. output 1.0 V; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms (tuner, aux., tape 1, 2); THD 0.1%; 150 mV phono overload; RIAA deviation ±0.5 dB (phono), 20-40,000 Hz ±1 dB (aux.); S/N 80 ("A" weighted); three ac outlets. 3⁴/₃₂" H × 16½" W × 9½" D $120

TRIODE LABORATORY

MENTAT Stereo Preamplifier
Vacuum-tube high-resolution preamplifier with Class A cascode phono input section and Class A single-ended voltage high-level section; actively regulated high voltage power supply; actively regulated filament supply with timing network; switchable high/low network. Input impedance 47.5k ohms (phono), 100k ohms (high level); gain 44.5 dB (phono), 15 dB (high level); rated output 2 V from 20-20,000 Hz, 20k ohms (phono), 2.5 V from 1.5-200,000 Hz, 20k ohms (high level); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 1.5-200,000 Hz +0/−1.5 dB (high level); THD and IM dist. 0.05% at rated output; hum and noise below 5 mV in at 1000 Hz −65 dB (phono unweighted), −76 dB (high level, unweighted); phono overload 380 mV at 1000 Hz, 100k-ohm-load, 3.5" H × 19" W × 9.5" D $1250

SALESIA Stereo Preamplifier
Vacuum-tube stereo preamplifier; filament and plate voltage power supplies; input sensitivity 2 mV (phono), 0.2 V (high level); phono overload 300 mV; phono input impedance 47.5k ohms; frequency response 1.5-100,000 Hz +0/−1.5 dB; THD and IM dist. 0.05%; S/N 70 dB unweighted; 3.5" H × 15" W × 7" D..... $600

YAMAHA

C-2a Preamplifier
DC preamplifier features low-noise moving-coil cartridge head amplifier and low-noise dual FET phono equalizer with current noise reduction circuit and tone control amplifier circuitry; bass and treble controls; subsonic filter; −20-dB audio muting; mode switch; two-way tape dubbing; input selector with separate phono load resistance/capacitance selector. Input sensitivity/impedance 2.5 mV/100, 47k, 68k, 100k ohms variable (phono 1 MM), 100 μV/50 ohms (MC), 2.5 mV/47k ohms (phono 2 MM), 150 mV/47k ohms (aux., tuner, and tape); phono overload 350 mV at 1000 Hz (MM), 10 mV at 20,000 Hz (MC); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA, MM), ±0.3 dB from 20-20,000 Hz (MC), 10-100,000 Hz ±0.2 dB (aux., tuner, tape); THD 0.003% at 5 V out (MM to pre out), 0.01% at 5 V out (MC to pre out), 0.003% at 10-V out (aux., tuner, tape); IM dist. 0.003% at 10 V out (aux., tuner, tape); S/N (IHF A) 104 dB (phono MM), 92 dB (MC), 107 dB (aux., tuner, tape); 2¹/₃₂" H × 17" W × 12¹⁹/₃₂" D $950

C-4 Preamplifier
Features low-noise dc phono equalizer, moving-coil cartridge head amp, current noise-reduction circuit, and tone control amplifier circuitry; bass and treble controls with turnover frequency controls, tone defeat, and illuminated tone bypass switch; phone input with level control; low and high filter switches; mode buttons; two-way tape dubbing; illuminated −20-dB audio muting; input selector with separate phono input selector and two phono cartridge load resistance/capacitance selectors; two sets of pre-out terminals on rear panel with front-panel switches. Input sensitivity/impedance 2.5 mV/100, 33k, 47k, 68k, and 100k ohms (phono MM), 100 μV/50 ohms (MC), 150 mV/47k ohms (aux., tuner, tape); phono overload 285 mV at 1000 Hz (MM), 10 mV at 20,000 Hz (MC); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 5-100,000 Hz ±0.5 dB (tuner, aux., tape); THD 0.0035% at 2 V out (MM to pre out), 0.1% at 2 V out (MC to pre out), 0.0035% at 10 V out (aux., tuner, tape), 0.02% at 8 ohms, 12 mW out (phones out); IM dist. 0.005% at 10 V out (aux., tuner, tape); S/N (IHF A) 97 dB (MM), 91 dB (MC), 106 dB (aux., tuner, tape, tone bypass on), 100 dB (tone bypass off); 4½" H × 17⅛" W × 14¾" D..... $550

2 POWER AMPLIFIERS

AB SYSTEMS

The Four-Ten Power Amplifier
Features solid-state circuitry; RCA multiple emitter power transistors; dual ¼-in phono jack inputs; dc latch speaker protection; rear-panel input level controls; channel one and two level controls with LED indicator display; remote/sequential ac power control. 205 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.25% THD and IM dist., 410 W bridged into 16 ohms; frequency response 20-20,000 Hz ±0.25 dB; THD and IM dist. 0.1% from 0.25 W rated power, 20-15,000 Hz; hum and noise −101 dB; input sensitivity/impedance 0.75 V rms/25k ohms; crosstalk 80 dB down at 1000 Hz; 5¼" H × 19" W × 10³/₄" D $1095

205. Similar to The Four-Ten except 100 W/ch continuous under same conditions; no mono bridging $750

ACCUPHASE

P-300 Stereo Power Amplifier
150 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD (200 W/ch into 4 ohms); frequency response 20-20,000 Hz +0/−0.2 dB; hum and noise 100 dB below rated output; 6" H × 17½" W × 14" D $850

AWC-1. Walnut case $50

P-20 Stereo Power Amplifier
70 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD (100 W/ch into 4 ohms, 35 W/ch into 16 ohms); frequency response 20-20,000 Hz +0/−0.2 dB; hum and noise 100 db below rated output; output load impedance 4, 8, and 16 ohms; subsonic filter 18 dB/octave; cutoff frequency 17 Hz; incorporates two independent power supplies; front-panel stereo headphone jack; dual mounting handles; screw-type speaker terminals; 6" H × 19" W × 13¾" D $750

ACE AUDIO

35 × 2/Super Stereo Power Amplifier
36.5 W/ch into 4 or 8 ohms over 20-20,000 Hz with 0.12% HD; IM dist. 0.1% (full output), 0.05% (1 W output); sensitivity 1 V for rated output; frequency response 20-20,000 Hz ±0.2 dB at 1 W; hum and noise 90 dB below 36.5 W; rear-panel heatsink and perforated covers for cooling; 3⁷/₁₆" H × 14" W × 8½" D $212
Kit $150

8000 Subwoofer Mono Power Amplifier
Direct-coupled fully complementary mono amplifier designed to drive out 70-W subwoofer; 70 W continuous into 4 or 8 ohms from 20-10,000 Hz with 0.1% THD and IM dist.; frequency response 15-20,000 Hz ±0.1 dB; damping factor 70; slew rate 4 V/μsec; hum and noise −90 dB; input sensitivity/impedance 1.5 V/50k ohms; 7¼" H × 9½" W × 6½" D $189

ADC

B-200 Power Amplifier
Low-feedback all-FET Class A stereo power amplifier; 100 W/ch continuous into 8 ohms from 5-20,000 Hz with 0.2% THD and IM dist.; slew rate 150 V/μsec; sensitivity 1 V $995

ADCOM

GFA-1 Stereo Power Amplifier
Fully complementary bridged mode amplifier; toroidal transformer; dual power supplies; built-in protection relay and thermal overload switch. 200 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and 0.1% IM dist.; damping factor 200; slew rate 80 V/μsec; input sensitivity 1.5 V; black cabinet with vents on all sides; 8½" H × 10½" W × 6½" D $400

AIWA

SA-P22U Mini Power Amplifier
Mini stereo power amplifier features dc circuitry; toroidal power transformer with dual electrolytic capacitors; five-LED logarithmic power output display; two-speaker switching; self-resetting protection circuit. 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.06% dist.; frequency response 20-20,000 Hz ±0.2 dB; dist. 0.04% at 30 W, 1000 Hz; S/N 95 dB; input sensitivity/impedance 600 mV/47k ohms; damping factor 45 at 1000 Hz, 8 ohms; 2⁷/₈" H × 8⁹/₁₆" W × 8⁹/₁₆" D $210

AMBER BY H&H INTERNATIONAL

Series 70 Power Amplifier
Modular stereo power amplifier with built-in bridging circuit with rear-panel switch for mono operation; passive power supply with two massive filter capacitors; 70 W/ch into 8 ohms, 200 W mono into 8 ohms; THD and IM dist. 0.01%; frequency response 5-100,000 Hz −3 dB; slew rate 20 V/μsec; 5¼" H × 19" W × 8" D $475

APT

Apt 1 Power Amplifier
Features dc circuitry; mono bridging; rear-panel speaker load switch (from 2-16 ohms) with front-panel LED readout for adjustment; two-color LED readout for signal at output and overload detection; relay protection. 100 W/ch continuous, both channels driven into 4 or 8 ohms with 0.03% THD; dynamic headroom 3 dB at 4 or 8 ohms; frequency response 0-30,000 Hz +0/−0.5 dB; slew factor 10 at 20,000 Hz; output noise 80 dB below 1 W; crosstalk 70 dB at 1000 Hz between channels; dynamic range 103 dB; input sensitivity/impedance 90 mV rms (1 W)/50k ohms. Gray wrinkle baked enamel finish; 3.12" H × 16.9" W × 10.19" D $640

Apt 2 Power Amplifier
Class ABD power amplifier with 12-power MOS FETs in output stage and switching-mode power supply to form cascode action; speaker load switch (2-16 ohms); LED overload, speaker thermal index, and peak voltage level indicators; interchangeable input circuit board for optional inputs. 200 W/ch continuous, both channels driven into 4 or 8 ohms with 0.03% THD ..... approx. $1450

AUDIO RESEARCH

D-350B Stereo Power Amplifier
Linear two-channel power amplifier. Features power-line monitor meter with identified operating ranges; output power monitor meters; built-in speaker line fuse holders; logic circuitry; front-panel power supply fuses; three built-in fans. 350 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.25% THD; IM dist. less than 0.1% at rated output; S/N 110 dB (unweighted); input sensitivity/impedance 1.35 V rms/30,000 ohms. 10½" H × 19" W × 17¼" D. $3500

D-79 Power Amplifier
Vacuum tube power amplifier features cathode current bias adjust with separate controls/ch and LEDs; dual power monitors metered as safe operation/cau-

2 POWER AMPLIFIERS

tion markings; ac voltage meter; two front-panel line/fuse out, plate/fuse out, and screen/fuse out

controls. Output 75 W/ch continuous, both channels driven into 4, 8, or 16 ohms from 20-20,000 Hz with 1.0% THD; power bandwidth 15-40,000 Hz −3 dB; IM dist. 0.5% (SMPTE); S/N 90 dB below rated output (wide band, unweighted), 80 dB below rated output (line); input sensitivity/impedance 0.75 V rms/80k ohms nominal; damping factor 6; output regulation 1.75 dB, 16-ohm load to open circuit; includes rack-mount handles; 10½" H × 19" W × 17¼" D..... $3250

D-110B Power Amplifier
Linear two channel bridged mono amplifier. Features power-line monitor meters; built-in speaker line fuse holders; front-panel power supply fuses; three built-in fans. 100 W/ch continuous, both channels driven into 8 ohms from 1-20,000 Hz at 0.25% THD; IM dist. less than 0.05%; S/N 100 dB (unweighted); input sensitivity/impedance 1.5 V rms/30,000 ohms; load impedance 4 ohms; damping factor more than 200 at rated power. 10½" H × 19" W × 17¼" D..... $2750

D-100B Stereo Power Amplifier
100 W/ch continuous, both channels driven into 8 ohms over 1-20,000 Hz with 0.25% THD and 0.1% IM dist.; S/N 100 dB (phono, 10 mV input); sensitivity 1.5 V rms (high level); load impedance 4 ohms (min.); damping factor 200; 5¼" H × 19" W × 10½" D $1495
WC-3. Walnut finished wood cabinet for D-100B.... ..... $100

D-52B Power Amplifier
Linear two-channel power amplifier. Features built-in switch for bridged mono operation; front-panel power supply fuses. 50 W/ch continuous, both channels driven into 8 ohms from 1-20,000 Hz at 0.25% THD; IM dist. less than 0.1%; S/N 90 dB (unweighted); input sensitivity 1.1 V rms/30,000 ohms; damping factor 500 min. at rated power and load. 5¼" H × 19" W × 10½" D. $1195
WC-3. Walnut-finished wood cabinet for D-52B $100

AUDIO SCIENTIFIC by SUPEREX

1500 Power Amplifier
Class A power amplifier; features separate left and

right LED power output bar graph display with three-LED clipping and display range selector; 85 W/ch continuous; S/N 115 dB (A weighted); dynamic headroom 0.8 dB; clipping headroom 3.4 dB. $750

1560 Power Amplifier
Class A stereo power amplifier; 50 W/ch continuous; frequency response 8-150,000 Hz ±0.5 dB; S/N 115 dB (A weighted); dist. 0.005% at 50 W $550

AUDIRE

DM 700 Power Amplifier
Combines two bridged mono amplifiers on one chassis. Features dual power output meters with VU meter range selector switch and peak-clipping LED indicators. 350 W/ch, both channels driven into 8 ohms from 20-20,000 Hz, 500 W into 4 ohms; THD and IM dist. less than 0.05% at 350 W; frequency response at rated power 10-20,000 Hz ±0.2 dB; hum and noise −110 dB; slew rate 80 V/μsec min.; damping factor 300; input sensitivity/impedance 1.15 V/27k ohms. 5¾" H × 19" W × 17" D $1400

2M Power Amplifier
Features clipping LEDs, twin VU meters, VU meter range selector switch, and ac switch; 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz, 120 W/ch into 4 ohms; THD and IM dist. less than 0.05% at 100 W; power bandwidth 10-20,000 Hz ±0.2 dB; frequency response 10-60,000 Hz ±0.2 dB at 1 W; hum and noise −100 dB; damping factor 150; input sensitivity/impedance 1.0 V rms/33k ohms. Includes front-panel rack mount; 5¼" H × 15" W × 13" D ... $632
Model 2. Similar to 2M minus VU meters with selector switch and ac switch $495

Crescendo Power Amplifier
Discrete power amplifier features dual 12-LED vertical logarithmic power output display. 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 10-20,000 Hz ±0.2 dB; hum and noise −100 dB; slew rate 40 V/μsec; damping factor 150; input impedance 51,000 ohms; 5.25" H × 19" W × 9" D $350

BGW

Model 410 Power Amplifier
200 W continuous into 8 ohms; frequency response 20-20,000 Hz +0/−0.2 dB; THD 0.02%; IM dist. 0.02%; residual hum and noise −110 dB; slew rate 40 V/μsec.; rise time 3 μsec; input sensitivity 2 V for rated output; high speed relay activated arc-interrupter speaker protection; four-position speaker selector; low-impedance headphone jack; two input sensitivity controls; meter display of average responding LEDs (10 on each of two meters) with three-position (−20, −10, and 0 dB) meter sensitivity switch; 5¼" H × 19" W × 11¾" D $899
Model 210. Similar to Model 410 except 100 W/ch continuous and input sensitivity 1.4 V for 100 W. Features similar minus input sensitivity controls and headphone jack..... $659
Cabinet designed for either 410 or 210 ..... $45

BOZAK

929 Audio Power Amplifier
150 W/ch continuous sine wave into 8 ohms (20-20,000 Hz) at 0.2% THD; response at full output 20-20,000 Hz +0 dB/−0.2 dB; THD at 1000 Hz 0.1%; response 3-100,000 Hz +0/−3 dB (at 1 W); damping factor 100 at 20 and 1000 Hz; S/N (unweighted) 100 dB; input impedance 35,000 to 100,000 ohms (100k pot); two power meters; matte black front panel; optional walnut veneer enclosure extra; 7" H × 17¾" W × 12" D $925
929-V. Same as 929 without the meters $825

939 Audio Power Amplifier
70 W/ch continuous sine wave into 8 ohms (20-20,000 Hz) at 0.2% THD; frequency response 20-20,000 Hz +0/−0.2 dB; S/N (unweighted) 90 dB; subsonic switch; damping factor 100; input level controls; 32 dB gain; black front panel; optional walnut veneer enclosure extra..... $525

Professional Line

CMA-2-80 Power Amplifier
Stereo power amplifier features all-silicon solid-state circuitry; open and short-circuit protection; overheat protection. 80 W/ch continuous, 160 W continuous total output; frequency response 20-20,000 Hz ±0.5 dB; HD 0.5% from 20-10,000 Hz; noise −80 dB below rated output; input sensitivity 0.7 V for rated output; anodized brushed aluminum finish; 5¼" H × 19" W × 12" D $740
CMA-1-80. Mono version of CMA-2-80; frequency response 20-20,000 Hz ±1 dB; input sensitivity 1.0 V..... $575

CMA-2-65 Power Amplifier
Dual power amplifiers feature direct-coupled circuitry; electronically protected output; overheat protection. 65 W/ch continuous into 8 ohms, 130 W total; frequency response 20-20,000 Hz +0/−1 dB; THD 0.1% at 1000 Hz; IM dist. 0.2% (SMPTE); damping factor 100 at 20 and 1000 Hz; rise time 3 μsec; S/N 90 dB unweighted; input sensitivity 0.6 V; 5¼" H × 19" W × 10¼" D..... $575

BRYSTON

4B Stereo Power Amplifier
200 W/ch into 8 ohms (400 W/ch into 4 ohms, 800 W bridged into 8 ohms) over 20-20,000 Hz with 0.05% THD and 0.025% IM dist. at 200 W/ch; S/N 100 dB; crosstalk below 100 dB; slew rate 60 V/μsec; damping factor 500 (8 ohms, 20 Hz); input sensitivity/impedance 1.25 V/50,000 ohms; has bridging switch; each channel separated back to line cord; LED pilot light and overdrive (clipping) indicators; 5¼" H × 19" W × 13½" D..... $1295

3B Stereo Power Amplifier
100 W/ch into 8 ohms (200 W/ch into 4 ohms, 400 W bridged into 8 ohms) over 20-20,000 Hz with 0.05% THD and 0.025% IM dist. at 100 W/ch; S/N 100 dB; crosstalk below 100 dB; slew rate 60 V/μsec; damping factor 500 (8 ohms, 20 Hz); input sensitivity/impedance 1 V/50,000 ohms; has bridging switch; each channel separated back to line cord; LED pilot light and overdrive (clipping) indicators; 5¼" H × 19" W × 9" D..... $795

2B Stereo Power Amplifier
50 W/ch into 8 ohms (100 W/ch into 4 ohms, 200 W bridged into 8 ohms) over 20-20,000 Hz with 0.05% THD and 0.025% IM dist. at 50 W/ch; S/N 100 dB; crosstalk below 100 dB; damping factor 500 (8 ohms, 20 Hz); input sensitivity/impedance 0.75 V/50,000 ohms; has bridging switch; each channel separated back to line cord; LED pilot light and overdrive (clipping) indicators; 3½" H × 19" W × 10" D $495

CARVER

C-500 Power Amplifier
Features FET signal circuitry and extra output transistors; dual moving LED switchable peak/peak-hold bar graph display with VU ballistics; left/right sensitivity controls with +15 dB sensitivity display switch; LED overload indicator. 251 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.05% THD; IM dist. 0.06% at 200 W; frequency response 1-250,000 Hz ±0.25 dB; S/N 110 dB (A weighted); slew rate 80 V/μsec; dynamic range 70 dB. Brushed champagne gold finish with brown trim; 6¼" H × 19" W × 9¼" D $689

M-400 Power Amplifier
Features magnetic field circuitry that eliminates need for oversized heatsinks, power transformers,

and electrolytic capacitors; dual moving LED vertical peak level display with VU ballistics. 200 W/ch

continuous into 8 ohms from 1-20,000 Hz with 0.05% THD and 0.06% IM dist.; frequency response 1-250,000 Hz ± 0.25 dB; S/N 100 dB (A weighted); slew rate 80 V/μsec; dynamic range 50 dB. Brushed champagne gold finish with brown trim; 6¾" H × 6¾" W × 6¾" D $349

CONRAD-JOHNSON

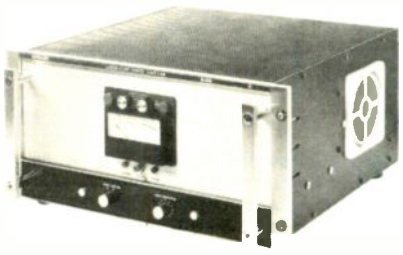
Vacuum Tube Power Amplifier

Features low-noise parts in audio circuitry and vacuum tube design; LED power indicator; 75 W/ch continuous, both channels driven into 4, 8, or 16 ohms from 30-15,000 Hz with 0.1% THD and IM dist., 150 W mono; frequency response 20-20,000 Hz +0/−0.5 dB; S/N 90 dB $985

CROWN

M-600 Power Amplifier

Monaural power amplifier features peak/average power meter with LEDs and adjustable thresholds;



changeable input control modules; short, mismatch, open circuit, high line voltage and input overload protection; turn-on delay. 600 W into 8 ohms over 1-20,000 Hz with 0.05% THD and 0.01% IM dist., 1000 W continuous into 4 ohms over 1-15,000 Hz with 0.05% THD; frequency response 0-100,000 Hz ±1 dB (1 W); input sensitivity 3.46 V rms ±1% for 600 W continuous into 8 ohms; hum and noise 120 dB below rated output; phase response +0/−15 degrees (0-20,000 Hz, 1 W into 8 ohms); damping factor greater than 800; input impedance 25,000 ohms ±30% (standard input); 120- and 240-V ac, 50-60 Hz, 80 W (idle), 1000 W (at rated output); fits 19-in standard rack mount; 8¾" H × 19" W × 16½" D $2195

M-2000. Consists of two M-600 units coupled together; 2000 W into 8 ohms over 1-15,000 Hz with 0.05% THD and 0.01% IM dist., 1200 W into 16 ohms over 1-20,000 Hz with 0.05% THD; frequency response 0-50,000 Hz ±1 dB (1 W into 8 ohms); input sensitivity 3.16 V rms ±1% for 2000 W into 8 ohms; hum and noise 115 dB below rated output; phase response +0/−20 degrees (0-20,000 Hz, 1 W into 8 ohms); damping factor greater than 250; 120- and 240-V ac, 50-60 Hz 160 W (idle), 3800 W (at rated output); 17½" H × 19" W × 16½" D $4390

SA-2 Power Amplifier

Features dual-LED input/output comparator display indicators; stereo/mono switch; remote mute; four on-board computers that analyze demand and immediate history of amplifier and load for max. output power; two-speed fan cooling. 220 W continuous into 8 ohms from 20-20,000 Hz with 0.05% THD and 0.01% IM dist; frequency response 0-80,000 Hz +0/−1.5 dB; S/N 110 dB (A weighted); 7" H × 19"W × 14¾" D..... $1595

PSA-2 Power Amplifier

Features dual-channel LED overload, signal, and standby indicators; LED power on; high-impedance balanced inputs; switchable high and low-pass filters (for true bi-amplification); 50 pulse/sec test tone generator; limiter compressor with variable threshold; five-sec turn on delay; mono/stereo switch; two-speed fan cooling. 220 W continuous into 8 ohms from 20-20,000 Hz with 0.05% THD and 0.01% IM dist; frequency response 0-80,000 Hz +0/−1.5 dB at 1 W; S/N 110 dB below rated output; 7" H × 19" W × 14¾" D..... $1495

DC-300A Stereo/Mono Amplifier

Single- or dual-channel power amplifier. Stereo mode: 155 W/ch into 8 ohms over 1-20,000 Hz with 0.05% THD and 0.01% IM dist.; frequency response 0-100,000 Hz ±1 dB (1 W into 8 ohms); input sensitivity 1.71 V ±2% for 155 W into 8 ohms; hum and noise 115 dB below rated output; phase response +0/−15 degrees (0-20,000 Hz, 1 W); damping factor greater than 750; input impedance 25,000 ohms ±30%; short, mismatch, open circuit, thermal, and input overload protection; 120-, 128-, 240-, 248-, and 256-V ac ±10%; 50-400 Hz, 40 W (idle), 510 W (at rated output); fits 19-in standard rack mount; includes IOC (input/output comparator); 7" H × 9¾" D $949

7R. Cabinet $55

D-150A Stereo/Mono Power Amplifier

Single- or dual-channel power amplifier. Stereo mode: 80 W/ch into 8 ohms over 1-20,000 Hz with 0.05% THD and 0.01% IM dist.; frequency response 0-100,000 Hz ±1 dB (1 W into 8 ohms); input sensitivity 1.19 V ±2% for 80 W into 8 ohms; hum and noise 110 dB below rated output; phase response +0/−15 degrees (0-20,000 Hz, 1 W); damping factor greater than 400; input impedance 25,000 ohms ±30%; short, mismatch, open circuit, thermal, and input overload protection; 120- and 240-V ac ±10%, 50-400 Hz, 30 W (idle), 250 W (at rated output); includes IOC (input/output comparator); 5¼" H × 17" W × 8¾" D..... $599

5R. Cabinet $45

PL-1 Power Amplifier

Features LED input-output comparator readout display; mono/stereo switch; 50 W continuous into 8 ohms from 20-20,000 Hz with 0.05% THD; 0.00095% IM dist. at 50 W; frequency response 5-100,000 Hz +0/−3 dB; S/N 110 dB below rated output; 3½" H × 19" W × 12¼" D $499

D-75 Power Amplifier

Single- or dual-channel power amplifier. Features two IOCs (input/output comparators), three meter indicators (two signal and one power), and separate signal and chassis grounds. Stereo: 35 W/ch continuous into 8 ohms from 20-10,000 Hz at 0.05% THD, 45 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.05% THD; frequency response 20-20,000 Hz ±0.1 dB and 5-100,000 Hz ±1.2 dB at 1 W into 8 ohms; IM dist. 0.05% max. from 0.01-0.25 W; slew rate 6 V/μsec; damping factor 400 from 0-400 Hz into 8 ohms; rated for 4- and 8-ohm loads, safely handles purely reactive loads; input sensitivity 0.9 V ±2% for 35 W into 8 ohms. Mono: 95 W continuous into 8 ohms from 20-20,000 Hz at 0.05% THD; frequency response at 1 W into 16 ohms from 20-20,000 Hz ±0.2 dB, from 6-50,000 Hz ±1 dB. General: hum and noise 106 dB below rated output from 20-20,000 Hz; phase response +10, −15 degrees from 20-20,000 Hz at 1 W; input impedance ±30% at 20,000 ohms (balanced), ±30% at 10,000 ohms (unbalanced), ±30% at 25,000 ohms (unbalanced phone jack); amplifier output protection volt-amp limiting circuit; ac voltages from 100-240 V ±10% between 50-400 Hz; 1¾" H × 19" W × 3" D.. $399

DB SYSTEMS

DB-6 Power Amplifier

Features Class A, FET, and digital circuitry; 12 dB/

CIRCLE NO. 49 ON READER SERVICE CARD

2 POWER AMPLIFIERS

octave subsonic filter; peak-clipping LEDs; electronic clamp (in place of relays). 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.003% THD, 60 W continuous into 4 ohms; THD 0.0008% at 1000 Hz; IM dist. less than 0.002%; frequency response 20-40,000 Hz +0/−1 dB; input sensitivity/impedance 1 V/50,000 ohms; S/N 112 dB at 1 V in (A weighted), 96 dB at 1 W into 8 ohms (A weighted); slew rate 15 V/μsec; damping factor greater than 400 from 20-1000 Hz, 40 at 20,000 Hz. 4.9" H × 16" W × 12.8" D $595

DB-6M. Similar to DB-6 except bridged mono amplifier with 140 W continuous with 0.008% THD, 225 W continuous into 4 ohms; slew rate greater than 30 V/μsec $650

DENON

POA-1003 Power Amplifier

100 W/ch continuous both channels driven into 4 ohms from 20-20,000 Hz at 0.03% THD, 85 W/ch continuous into 8 ohms; IM dist. 0.02%; power bandwidth 3-70,000 Hz; frequency response 0-100,000 Hz +0/−1 dB; input sensitivity/impedance 1 V rms/50k ohms; output impedance 0.04 ohms; damping factor 200 into 8 ohms; S/N 119 dB (IHF "A"); 6 dB/octave rolloff. Features cascode coupling at first stage, low noise FET differential amp, complementary ICL/OCL circuitry and left/right power transformer meters. 200 mm H × 410 mm W × 285 mm D $870

ELECTRO RESEARCH

A-75VI Power Amplifier

75 W/ch continuous into 8 ohms from 0-50,000 Hz with 0.1% THD and IM dist., 140 W/ch into 4 ohms; power bandwidth 0-400,000 Hz into 8 ohms; linear frequency response 0-200,000 Hz −0.3 dB; overload recovery 2.5 μsec; rise time 2.7 μsec; slew rate 105 V/μsec; input sensitivity/impedance 1.4 V rms/100,000 ohms (47 pF); output voltage ±40; S/N 100 dB (unweighted); features digital time meter for total operating hours; calibrator with input trim knobs to match A-75 to preamp or drive source; microswitch-activated power switch; load 1/2, normal/supply, standby, and reset/frequency indicators; 7" H × 19" W × 18" D $2185

EUMIG USA

M-1000 Power Amplifier

Time-processed dc circuitry with high-speed transistors in driver and output stages; switchable ca-

pacitor for electrostatic speakers; features dual 12-LED calibrated peak power display with X0.1 and X1 meter range selector, two-speaker switches, −30 dB attenuator, and left/right volume control. 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.0075% THD; frequency response 0-200,000 Hz ±1 dB; S/N 105 dB; damping factor 120 at 8 ohms, 1000 Hz; channel separation 70 dB from 20-30,000 Hz; matte black or chrome finish; 19-in rack-mount face plate $795

DAVID HAFLER

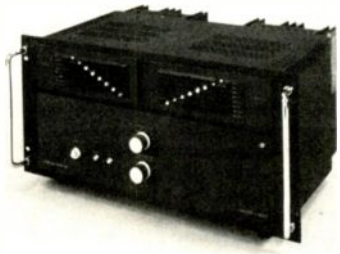
DH-200 Power Amplifier Kit

Features class AB output stages and symmetrical mirror-image complementary push-pull input-to-output circuitry; incorporates two assembled and tested amplifier modules; has mono bridging capability to 300-W conversion; 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; frequency response 1-100,000 Hz −3 dB at 1 W; damping factor 150 at 1000 Hz, 8 ohms; slew rate 30 V/μsec; rise time 2.5 μsec; input sensitivity/impedance 1.5 V rms/22,000 ohms; available in kit or assembled form.
Kit $300

HARMAN/KARDON

Citation 16a Power Amplifier

150 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.05% THD; power bandwidth 5-45,000



Hz, frequency response 4-120,000 Hz (1 W/ch); IM dist. 0.05%; damping factor 300 min.; slew rate 30 V/μsec; hum and noise −100 dB; separate power supplies for each channel; LED power output display; supplied with metal case; silver or black finish; 9¾" H × 19" W × 14" D $699

Citation 16as. Similar to Citation 16a but without LED display; black finish only $599

Citation RPM. Rack panel mount for 16a and 16as $188

Citation CRM. Floor-standing rack mount for 16a and 16as $285

Citation 19 Power Amplifier

100 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.08% THD; frequency response 5-45,000 Hz ±0.5 dB; IM dist. 0.08%; hum and noise −100 dB; damping factor 125; input sensitivity 1.25 V for rated output; may be bridged for 220 W into single 16-ohm load over 20-20,000 Hz with 0.16% THD; 5¼" H × 16" W × 14¾" D $499

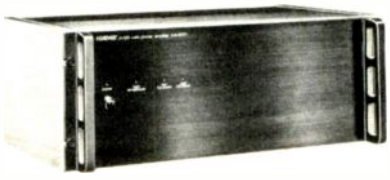
HEATH

AA-1640 Stereo Power Amplifier

200 W/ch min. continuous into 8 ohms at 0.1% THD over 20-20,000 Hz; frequency response 7-50,000 Hz +0/−1 dB, 5-100,000 Hz +0/−3 dB; IM dist. 0.1%; input sensitivity 1.5 V for full output; turn-on delay, relay, and fuses to protect speakers; optional peak-reading meters display output in dB and watts into 8 ohms; 7¼" H × 19" W × 18" D.
Kit $450
Optional Meters. Kit $60

AA-1600 Stereo Power Amplifier

Features left/right peak output, high temperature, and power on LEDs; 125 W/ch continuous into 8



ohms from 20-20,000 Hz with 0.05% THD, TIM, and IM dist.; frequency response 7-50,000 Hz ±1 dB; hum and noise −100 dB; 7⅛" H × 19" W × 13" D.
Kit $360

AA-1515 Stereo Power Amplifier

70 W/ch min. continuous into 8 ohms at 0.08% THD over 20-20,000 Hz; frequency response 8-45,000 Hz +0/−1 dB; input sensitivity 2 mV (phono), 150 mV (aux., tuner, tape, tape monitor, and tape dub); secondary controls concealed behind fold-down front panel; outputs for two speaker pairs; stereo headphone jack; lighted power meters and program legends; 6⅛" H × 17½" W × 14¼" D.
Kit $300

AA-1219 Stereo Power Amplifier

15 W/ch into 8 ohms at 0.5% THD over 20-20,000 Hz; phono, tape, tuner, and aux. inputs; tape monitor circuit; 3⅞" H × 12¾" W × 12" D.
Kit $120

HITACHI

HMA-8300 Power Amplifier

Features two-stage (low power output and high power output) Class G amplification; pure complementary OCL circuitry; two peak meters; left and right output level controls; subsonic filter; 200 W/ch continuous into 4 or 8 ohms over 20-20,000 Hz with 0.1% THD; frequency response 5-80,000 Hz ±1 dB; input sensitivity/impedance 1 V/50,000

ohms; load impedance 4-16 ohms; damping factor 50 (20-20,000 Hz, 8 ohms); channel separation 80 dB (1 kHz, 8 ohms); S/N 110 dB (IHF A network); 7⅜" H × 17⅛" W × 16" D $800

HMA-7500 Power Amplifier

MOS FET power amplifier with pure complementary dc OCL and two-stage differential circuitry systems. Features calibrated peak power meters, two-speaker switching, protection relay for power resistors and connected speakers, and subsonic filter. 75 W/ch, both channels driven into 8 or 4 ohms from 20-20,000 Hz at 0.01% THD; THD and IM dist. 0.01% at rated output; IHF power bandwidth 5-40,000 Hz at 0.01% THD; frequency response 0-200,000 Hz +0/−1 dB; input sensitivity/impedance 1 V/50,000 ohms; load impedance 4-16 ohms; damping factor 60; S/N 120 dB (IHF "A"); channel separation 105 dB at 1000 Hz, 70 dB at 100,000 Hz; output terminal 4-16 ohms (speaker A or B), 8-16 ohms (speaker A + B); one ac outlet. 6½" H × 18⅞" W × 14" D $500

HMA-6500 Power Amplifier

Features MOS FETs and direct-coupled circuitry; electronic power protection circuitry; dual power meters; two-speaker switching. 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; IM dist. 0.005% at half-rated output; frequency response 0-100,000 Hz +0/−1 dB (dc setting), 5-100,000 Hz +0/−1 dB (normal setting), input sensitivity/impedance 1 V/50k ohms; S/N 115 dB (IHF A); damping factor 50 at 1000 Hz, 8 ohms; 6" H × 17⅛" W × 12¹⁄₁₆" D $350

JVC

M-7070 Mono Power Amplifier

Features dc circuitry with power MOS FETs in output stage; Class-D power supply; 12-LED peak power bar graph display; two-speaker switching; 120 W into 8 ohms from 20-20,000 Hz with 0.003% THD, 240 W into 4 ohms; frequency response 0-100,000 Hz +0/−0.5 dB; S/N 120 dB

(IHF A); damping factor 200 at 8 ohms, 1000 Hz; input sensitivity/impedance 1 V/50k ohms; 6⁹/₁₆" H × 16⁹/₁₆" W × 14³/₁₆" D..... $1600

M-7050 Stereo Power Amplifier
Features Class A ICL dc circuitry; dual illuminated power meters; power supply with electrolytic capac-

itors; two-speaker switching. 150 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.003% THD and IM dist.; frequency response 0-300,000 Hz +0/−3 dB; S/N 120 dB (IHF A); damping factor 200 at 1000 Hz, 8 ohms; input sensitivity/impedance 1 V/47k ohms; 6⁹/₁₆" H × 16⁹/₁₆" W × 16³/₁₆" D..... $1500

M-3030 "DC" Stereo Power Amp
100 W/ch continuous both channels driven into 8 ohms over 20-20,000 Hz with 0.05% THD and IM dist. (130 W/ch continuous into 4 ohms); frequency response 0-100,000 Hz +0/−1 dB (1 W, "Direct" input); input sensitivity/impedance 1 V/50,000 ohms or more; S/N (IHF A) 116 dB; damping factor 75; output impedance 4-16 ohms; 6⁹/₁₆" H × 16⁹/₁₆" W × 11¹³/₁₆" D..... $730

KENWOOD

Audio Purist Group

L-09M Single-Channel Power Amp
300 W continuous into 8 ohms over 20-20,000 Hz with 0.02% THD; IM dist. 0.007%; frequency response 0-100,000 Hz +0/−2 dB; residual noise less than 35 μV; S/N 120 dB; triple push-pull class AB full complementary symmetry circuitry; chimney-type structural heat sinks; gold-plated screw-type pin plugs with special audio cable for preamp connection; remote power switch for control by L-07CII control amplifier; 6¹/₂" H × 19" W × 16¹/₈" D $700

L-07MII Power Amplifier
Features dc circuitry; single-channel power supply system; direct-drive method with short 1-m speaker cable for close positioning of power amp and speakers; pure complementary symmetrical push-pull circuitry with dual-gate FETs in input stages and constant-current supplies; gold-plated plugs and connectors; full protection circuitry. Output 150 W minimum continuous into 8 ohms from 20-20,000 Hz with 0.007% THD; IM dist. 0.003%; frequency response 0-600,000 Hz +0/−3 dB; S/N 120 dB short-circuited; damping factor 120 from 0-20,000 Hz, 8 ohms; slew rate ±170 V/μsec; rise time 0.55 μsec at ±1, 20, or 40 V; input sensitivity/impedance 1 V/50k ohms; 6³/₃₂" H × 7⁷/₈" W × 15¹¹/₃₂" D $600

L-05M. Similar to L-07MII except 100 W continuous into 8 ohms with 0.005% THD; IM dist. 0.001%; damping factor 150 from 0-20,000 Hz, 8 ohms..... $425

LUX

M-12 Stereo Power Amplifier
Direct-coupled stereo power amplifier. Features independent power supply for right/left channels; DML-IC to suppress dc drift; input capacitor in/out selector; attenuator for both channels. 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.006% THD and IM dist.; frequency response 0-100,000 Hz −1 dB; input sensitivity/impedance 600 mV/20,000 ohms; S/N better than 110 dB (IHF "A"); channel separation 80 dB; damping factor 150 into 8 ohms at 1000 Hz. 3³/₄" H × 17³/₁₆" W × 12¹³/₁₆" D..... $795

B-12 Mono Power Amplifier
Direct-coupled mono power amplifier. Features power supply for left/right channels; DML-IC to suppress dc drift; input capacitor in/out selector; input attenuator. 150 W continuous into 8 ohms from 20-20,000 Hz with 0.006% THD and IM dist.; frequency response 0-100,000 Hz −1 dB; input sensitivity/impedance 900 mV/20,000 ohms; S/N better than 110 dB (IHF "A"); damping factor 120 into 8 ohms at 1000 Hz. 3³/₄" H × 17³/₁₆" W × 12¹³/₁₆" D $645

Laboratory Reference Series

Luxman 5M21 DC Stereo Power Amp
Features pure dc design; class A/B output stage; separate dual polarity supplies for each channel; speaker and amplifier protection circuits; electrostatic/normal speaker switch. 100 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.008% THD and IM dist.; frequency response 0-100,000 Hz +0/−1 dB; damping factor 80 (8 ohms); input sensitivity 890 mV; input impedance 50,000 ohms; residual hum and noise 0.1 mV; crosstalk −90 dB (1 kHz); S/N (IHF A) 120 dB; slew rate 30 V/μsec; 5.8" H × 17.7" W × 16" D $1295

MARANTZ

300DC Power Amplifier
Fully complementary, dc amplifier. 152 W/ch continuous into 8 ohms at 0.03% THD, 190 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.05% THD; features dc circuitry for zero phase-shift distortion; two illuminated 3¹/₄-in VU meters; separate left/right gain controls; LED peak indicators; ac-dc input coupling switch. 5³/₄" H × 16³/₈" W × 11¹¹/₁₆" D..... $725

170DC Power Amplifier
Fully complementary, dc amplifier. 86 W/ch continuous into 8 ohms at 0.03% THD, 108 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.05% THD; features dc circuitry for zero phase-shift distortion; two illuminated 3¹/₄-in VU meters; separate left/right gain controls; LED peak indicators. 5³/₄" H × 16³/₈" W × 11¹¹/₁₆" D..... $450

MERIDIAN by ANGLO AMERICAN

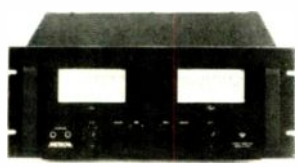
103D Stereo Power Amplifier
Fully complementary and cascade-type circuitry; dual power supplies; 45 W/ch into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist.; S/N 90 dB (CCIR); chocolate brown textured enamel finish with gold-blocked lettering; 4" H × 11" W × 12" D $699

103. Similar to 103D except has one power supply; 35 W/ch under same conditions; 2" H × 5.5" W × 12" D $485

105 Mono Power Amplifier
Has outboard power supply that may be collated next to speakers; full electronic protection; 100 W continuous into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist.; S/N 90 dB (CCIR); chocolate brown textured enamel finish with gold-blocked lettering; 2" H × 11" W × 12" D..... $449

METRON

A-4000 Power Amplifier
Features two illuminated peak power meters cali-



brated to 50 dB; level controls adjustable in 1-dB increments; two input switches with LED; A/B speaker selector switches with LED; dimmer switch; two headphone jacks. 350 W continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist., 550 W continuous into 4 ohms; frequency response 2.5-200,000 Hz −3 dB, 5-100,000 Hz −1 dB; S/N greater than 115 dB (A weighted); slew rate 50 V/μsec; damping factor min. 200; nominal input sensitivity/impedance 2.0 V/10,000 ohms. 7.87" H × 18.9" W × 18.5" D $1600

M-200 Power Amplifier
Features illuminated power averaging meters calibrated to +3 dB at clipping point; stepped 2-dB level controls; protection indicator. 125 W continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist., 240 W continuous into 4 ohms; frequency response 2500-200,000 Hz −3 dB, 5-100,000 Hz −1 dB; S/N greater than 105 dB (unweighted); slew rate 70 V/μsec; damping factor min. 175 at 100 Hz into 8 ohms; input sensitivity/impedance 1.4 V/10,000 ohms. 5.875" H × 19" W × 13" D..... $600

MITSUBISHI

DA-A15DC Dual-Mono Power Amplifier
Direct-coupled and can amplify dc signals; 150 W/ch into 8 ohms from 20-20,000 Hz with 0.01%

THD; IM dist. 0.008% at rated power; frequency response 20-20,000 Hz ±0.1 dB at rated power; input sensitivity/impedance 1 V variable/50,000 ohms; damping factor 100; channel separation 100 dB at 1000 Hz, 80 dB at 20,000 Hz; S/N (IHF "A") 123 dB; 6³/₄" H × 16³/₄" W × 11¹/₄" D..... $700

DA-A10DC. Similar to DA-A15DC, but 100 W/ch into 8 ohms; S/N (IHF "A") 122 dB..... $470

DA-A7DC. Similar to DA-A10DC except 75 W/ch under same conditions; 6³/₈" H × 16³/₄" W × 9¹/₄" D... ..... $330

DA-M10. Power output level meter unit for DA-A15DC, DA-A10DC, and DA-A7DC amplifiers; power amplifier function controls on meter unit front panel; 6³/₄" H × 16³/₄" W × 4⁷/₈" D..... $170

M-A01 Micro-Power Amplifier
70 W/ch continuous, both channels driven into 8 ohms from 15-20,000 Hz at 0.01% THD; THD 0.006% at 1 W/ch; IM dist. 0.008% at rated power; power bandwidth 10-60,000 Hz (IHF) at 0.05% THD; frequency response 20-20,000 Hz ±0.1 dB at rated power; input sensitivity/impedance 1 V/50k ohms; damping factor 100 from 20-20,000 Hz; S/N at rated power 123 dB closed circuit (IHF "A"); slew rate 30 V/μsec. Features dc amplification, peak-level LED indicators, and large heat sinks. 5¹/₈" H × 10³/₈" W × 9³/₈" D..... $500

NAIM by AUDIOPHILE SYSTEMS

NAP 250 Power Amplifier
Features gain decoupling capacitor and passive single pole filter with no slew rate limit within bandwidth; heavy aluminum extruded heatsink; toroidal main transformers; four regulated power supplies. 70 W continuous into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; frequency response 5-40,000 Hz ±3 dB; transient capability 400 VA; sensitivity 1.6 V; impedance 22k ohms; can dirve reactive loads with phase angles from −90° to +9° with no appreciable distortion change; 5" H × 17" W × 12" D..... $2000

NAP 160. Similar to NAP 250 except has built-in 24-V regulated power supply (powers Naim

2 POWER AMPLIFIERS

preamps); 50 W under same conditions; transient capability 250 VA; sensitivity 1.4 V $1070

NAKAMICHI

620 Stereo Power Amplifier
100 W/ch continuous sine wave into 8 ohms over 5-20,000 Hz with 0.01% THD and 0.002% IM dist.; frequency response 5-100,000 Hz ±0.5 dB; S/N 120 dB (IHF A); class B operation with "complete-mirror" push-pull circuitry; complete speaker and power transistor protection; peak indicating lamps with selectable triggering points; 6¾" H × 15¾" W × 9⅜" D $740

BA-100. Self-powered unit permits bridging of Nakamichi 420 and 620 power amplifiers for monaural operation; single unit connects stereo outputs of preamplifier to two power amplifiers for stereo operation; bridged 620 is rated at 350 W min. continuous sine wave into 8 ohms over 5-20,000 Hz with 0.05% THD, bridged 420 is rated at 120 W min. continuous sine wave into 8 ohms over 5-20,000 Hz with 0.05% THD; bridged Nakamichi amplifiers are stable with loads of 8 ohms or more; 2¼" H × 7⅓" W × 3¾" D $75

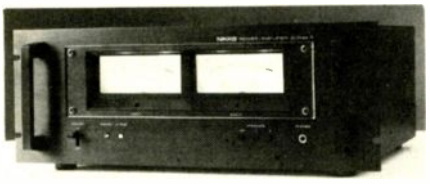
BA-150. Same as BA-100 but powered by PS-100 Power Supply $65

PS-100 Power Supply. Provides ±10 V dc to operate the BA-150 and other Nakamichi BlackBox Series components; can power up to 6 components $75

420 Stereo Power Amplifier
50 W/ch min. continuous sine wave into 8 ohms over 5-20,000 Hz with less than 0.02% THD and 0.002% IM dist.; frequency response 5-50,000 Hz +0/−1 dB; S/N 110 dB (IHF A); damping factor 100; unconditional load stability; full amplifier and loudspeaker protection; 3³/₃₂" H × 16" W × 8⅞" D $390

NIKKO

Alpha VI Power Amplifier
DC stereo power amplifier features mono bridging; pair of FETs coupled to cascade amp and current



source and differential amp coupled to cascode amp and current mirror and triple Darlington configuration with four parallel SEPP output stages; separate power supplies and regulated power supply for input and voltage translator stages; dual peak power meters; A-B speaker switching; two-speed cooling fan; power limiters and wide-gap relay protection circuitry with LED overload and high-temperature indicators. Output 300 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD and IM dist., 650 W bridged with 0.02% THD; damping factor 150 at 8 ohms, 1000 Hz; S/N 115 dB (IHF A); input sensitivity 1 V; matte black finish; 7⁹/₁₆" H × 19" W × 18⁹/₁₆" D $1400

Alpha III Power Amplifier
Features dc MOS-FET transistors; front-panel logarithmic LED readouts for left and right channels; built-in protection circuitry. 80 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.008% THD; IM dist. 0.01%; S/N 115 dB ("A"); damping factor 80 into 8 ohms; rack mountable; 5¹/₁₆" H × 19" W × 11⁹/₁₆" D $540

Alpha II Power Amplifier
Features two VU meters with four-button range control (0, 6, 12, 24 dB); switchable two-speaker operation; relay and speaker protection circuitry; exterior heat sinks. 110 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.03% THD and IM dist.; frequency response 5-100,000 Hz; S/N (IHF A) 110 dB; rack mountable; 5¹/₂" H × 19" W × 12⁷/₈" D $480

ONKYO

M-505 Stereo Power Amplifier
Features two mono amplifiers with own power supply; large heatsinks; dc amplifier circuitry; relay-operated protective circuit; three-step low-cut filter; power, cutoff frequency, and left/right level adjuster controls; "P" input and speaker outputs. 105 W/ch continuous, both channels into 8 ohms over 20-20,000 Hz with 0.05% THD (140 W/ch into 4 ohms); IM dist. 0.05%; damping factor 100 (8 ohms, 1 kHz); frequency response 0-150,000 Hz +0/−1.5 dB; input sensitivity 1.5 V; input impedance 100,000 ohms; load impedance 4-16 ohms; S/N 110 dB (IHF A); embossed vinyl over metal cabinet. 6¹/₂" H × 17¾" W × 12¹¹/₁₆" D $580

OPTONICA

SX-9305 Power Amplifier
Features three-color-LED power output bar graph display; graphic spectrum analyzer; two LEDs for protection circuitry; two-speaker switching; detented volume control. 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD; ebony faceplate $850

PHASE LINEAR

D-500 Series Two Power Amplifier
505 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.09% THD, 800 W continuous into 4 ohms at 1000 Hz; IM dist. 0.09%; damping factor 1000/min; S/N 110 dB (IHF "A"). Features dual LED peak-responding meters; two input sensitivity controls; high/low impedance operating modes; high frequency limiters; automatic speaker safeguard system. 7" H × 19" W × 15" D $1500

700 Series Two Stereo Power Amplifier
360 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.09% THD and IM dist.; frequency response 0-40,000 Hz (1 W, direct-coupled inputs); sensitivity 1.2 V; hum and noise −110 dB; load impedance 4-16 ohms. Features peak-responding LED meters, dual channel controls for input sensitivity; light brushed gold, anodized panel; 7" H × 19" W × 10" D $950
Walnut side panels $50

400 Series Two Stereo Power Amplifier
210 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.09% THD and IM dist.; frequency response 12-40,000 Hz (1 W); S/N 110 dB (IHF "A"); load impedance 4-16 ohms; sensitivity 1.0 V. Features peak-responding LED meters; individual channel controls for input sensitivity; light brushed gold anodized panel. 7" H × 19" W × 10" D ... $650
Walnut side panels $50

300 Series Two Power Amplifier
Features direct-coupled mirror-image drive circuitry and fully complementary output stage; dc speaker protection and output relay; power semiconductor. 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.009% THD and 0.005% IM dist.; frequency response 11-190,000 Hz +0/−1 dB; S/N 110 dB (IHF A weighted); damping factor 330; slew rate 110 V/μsec; rise time 1.0 μsec (small signal); input sensitivity/impedance 0.88 V rms/49k ohms; 3¹/₂" H × 19" W × 11¼" D $450

PHILIPS

AH 578 Stereo Power Amplifier
Features switchable subsonic filter; function display; step detent level controls; memory lock; two output meters; thermal and speaker protection. 210 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.06% THD; IM dist. 0.04% at rated power; frequency response 10-30,000 Hz ±0.15 dB; separation 60 dB (1 kHz); damping factor 100 (8 ohms); S/N 100 dB; input sensitivity 1 V; input impedance 50,000 ohms; silver chassis; 8" H × 18" W × 15" D $680

AH5781. Black chassis $700

PIONEER

SPEC-2 Stereo Power Amplifier
250 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD; frequency response 1-80,000 Hz +0/−1 dB; damping factor 70; hum and noise −110 dB (IHF A); impedance selector for 4 or 8 ohms; input sensitivity control; two peak power level meters; built-in surge current control and protection circuits; 6⁷/₈" H × 18¹⁵/₁₆" W × 13³/₁₆" D $995

SPEC-4 Stereo Power Amplifier
150 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.01% THD (180 W/ch into 4 ohms with 0.03% THD); IM dist. 0.01% at rated output; frequency response 5-100,000 Hz +0/−1 dB; input sensitivity/impedance 1 V/50,000 ohms; load impedance 4-16 ohms; damping factor 100 (8 ohms); hum and noise −115 dB (IHF A). 7³/₈" H × 18²⁹/₃₂" W × 17¹⁷/₃₂" D $795

PS AUDIO

PS Model One Power Amplifier
Class AB power amplifier with front-panel power switch and LED; 80 W continuous into 8 ohms; slew rate 75 V/μsec $380

QSC

A 41 Power Amplifier
Features ac-coupled circuitry providing dc and subaudio protection; dual power supplies; mono-bridging switch; continuous-flow cooling system; high-turbulence-configurated heat sink; horizontal stepped input/output rear section with balanced XLR-type and balanced/unbalanced ¼-in phone jacks and three-pin inputs; gain controls for both channels. Output 200 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.1% THD; IM dist. 0.05% (SMPTE); frequency response 20-25,000 Hz ±1 dB; S/N 95 dB (A weighted); damping factor 200 from 20-20,000 Hz; IHF slew factor 2; dynamic headroom 1.5 dB at 8 ohms; clipping headroom 0.35 dB; 5¹/₄" H × 19" W × 10¹/₄" D $824

A 42. Same as A41 except has LED power output

bar level display, LED TDI indicator, and power limit control with LED $948

A 31. Similar to A41 except 125 W/ch under same conditions $674

A 32. Same as A31 except has additional features of A42 ..... $798

A 21. Similar to A41 except 80 W/ch under same conditions $574

A 22. Same as A21 except has additional features of A42 ..... $698

A 5.1 Power Amplifier
Features ac-coupled circuitry providing dc and subaudio protection; dual power supplies; balanced and unbalanced phono jack inputs; two calibrated gain controls. 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.1% THD; IM dist. 0.05% (SMPTE); frequency response

20-20,000 Hz +0/−1 dB; S/N 95 dB (A weighted); IHF slew factor 1.5; dynamic headroom 1.5 dB; clipping headroom 0.35 dB; damping factor 200 from 20-20,000 Hz; input impedance 50k ohms balanced, 25k ohms unbalanced; 5¼" H × 9" W × 5⁴⁄₃₂" D $428

A 4.2. Similar to A 5.1 except 40 W/ch continuous under same conditions $358

A 3.7. Similar to A 4.2 except mono power operation; 90 W/ch continuous under same conditions $328

ROTEL

RB-5000 Stereo Power Amplifier

Features two average power meters with three-position sensitivity switch (0, −10, and −20 dB) plus 16-LED peak indicators; standby and overload protection, and three speaker select LED indicators; three-position filter (lab test, normal, and low). 500 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.009% THD and IM dist.; frequency response 0-200,000 Hz ±3 dB (1 W/ch into 8 ohms); hum and noise −120 dB (IHF A, closed circuit); damping factor 180 from 20-20,000 Hz, 8 ohms; input 1 V; 9⁷⁄₁₆" H × 19" W × 16¹³⁄₁₆" D $2700

RB-2000 Stereo Power Amplifier

Features complementary push-pull dc OCL output circuitry; separate power supplies for dual FET, differential and pre-driver stages and power output stage; dual peak level power meters; connection for two pairs of speakers; protection indicator; gold-plated input jacks. 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD and IM dist.; frequency response 0-200,000 Hz ±3 dB; S/N 110 dB (IHF "A"); damping factor 60 from 20-20,000 Hz, 8 ohms; input sensitivity 1.5 V/50,000 ohms. 5⅜" H × 19" W × 16¹³⁄₁₆" D $610

RB-1000 Power Amplifier

Features dc circuitry; toroidal transformer; left/right input level controls; two-speaker switching; LED protection indicator. 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; frequency response 5-100,000 Hz; S/N 90 dB; residual noise 0.2 mV; input sensitivity/impedance 1 V/20k ohms; 3²⁷⁄₃₂" H × 16¹³⁄₁₆" W × 11¹³⁄₃₂" D $320

SAE

2600 Stereo Power Amplifier

400 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.05% THD and IM dist. (600 W/ch continuous into 4 ohms with 0.1% THD); frequency response 20-20,000 Hz ±0.25 dB; S/N 100 dB; input sensitivity 2.12 V; relay protection for speakers; fully complementary plus parallel output stage; 7" H × 19" W × 14" D. $1350

2400L Stereo Power Amplifier

200 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 20-20,000 Hz ±0.25 dB; S/N 100 dB; input sensitivity 1.5 V; relay protection for speakers; volt/amp limiter; complementary double differential inputs and complementary series-connected output stages; LED display; feedback level control; 7" H × 19" W × 12½" D ... $850

WMC-2. Unassembled walnut cabinet $50

2300 Stereo Power Amplifier

150 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 20-20,000 Hz ±0.25 dB; S/N 100 dB; input sensitivity 1.5 V. Features fully complementary circuits, toroidal power supply, full protection, and LED display for output monitoring. 5¼" H × 19" W × 12½" D $700

SR-5. Unassembled roll-around rack walnut cabinet for 2300 ..... $40

2200 Stereo Power Amplifier

100 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 20-20,000 Hz ±0.25 dB; S/N 100 dB; sensitivity 1.5 V rms for rated output, 100,000 ohms; LED display; 5.25" H × 19" W × 8.5" D $500

WMC-3. Unassembled walnut cabinet $45

3100 Stereo Power Amplifier

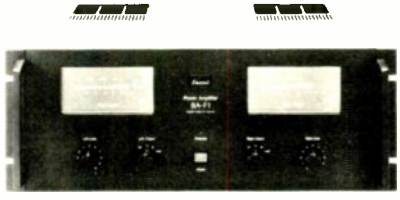
50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 20-20,000 Hz ±0.25 dB; S/N 100 dB; input sensitivity 1.0 V. Features fully complementary circuits, toroidal power supply, thermal, signal relay, and electronic protection, and LED display for output monitoring. 5¼" H × 19" W × 8½" D $300

WMC-3. Unassembled walnut cabinet $45

SANSUI

BA-F1 DD/DC Power Amplifier

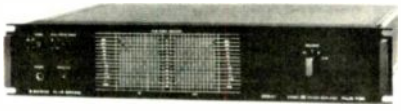
Features "Diamond Differential dc circuitry"; dual peak power meters calibrated in dB and W; left/right input level controls; speaker switching for two systems. Output 110 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.008% THD; frequency response 0-600,000 Hz +0/−3 dB; slew rate 200 V/μsec; rise time 0.5 μsec; S/N 125 dB; matte black finish with detachable rack-mount handles $665



SANYO

PLUS P55 Power Amplifier

Features dc-coupled FET circuitry and MOS FET output stage; fluid convection radiator dissipates heat to liquid; three-way output protection and turn-on delay relay with LED; dual 12-LED graphic peak power display with X0.1 and X1 display range selector; two-way speaker switching; channel strapping for single-channel operation. Output 100 W/ch continuous, both channels driven into 4 or 8 ohms from 20-20,000 Hz with 0.009% THD and IM dist., 200 W mono; frequency response 7-100,000 Hz +0/−1 dB; S/N 110 dB (IHF A); damping factor 60; input sensitivity/impedance 1 V/47k ohms; slew rate 150 V/μsec; includes rack-mount handles; fits optional EIA-standard rack; 3½" H × 17⅜" W × 10⅝" D $350



H.H. SCOTT

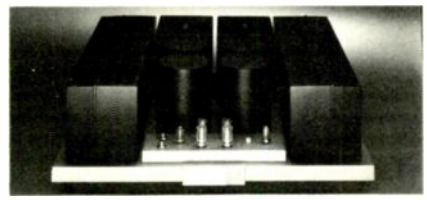
Alpha 6 Power Amplifier

Features dc circuitry; dual computer-grade 10,000-μF electrolytic capacitors; bimodal electrosensor relay protection; two logarithmic power meters; two-way speaker switching; separate channel level controls. 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist.; S/N 100 dB (A weighted); frequency response 10-50,000 Hz; damping factor 50 at 1000 Hz; slew rate 12 V/μsec; input sensitivity/impedance 1 V/25k ohms; includes EIA rack-mount handles; 5¼" H × 19" W × 12½" D $400

SERIES 20

M-25 Stereo Power Amplifier

Class AB stereo power amplifier with current mirror-loaded three-stage Darlington push-pull complementary OCL circuitry; 120 W/ch continuous, both channels driven into 8 ohms from 5-30,000 Hz with 0.01% THD and 0.006% IM dist.; frequency response 5-20,000 Hz +0/−1 dB; damping factor 60 from 5-30,000 Hz at 8 ohms; hum and noise −120 dB (IHF A); input sensitivity/impedance 1 V/50k ohms; speaker output 4-16 ohms; 6¹⁄₁₆" H × 16⁹⁄₁₆" W × 14⁹⁄₁₆" D $1200



M-22 Stereo Power Amplifier

Class A stereo power amplifier with two-stage Darlington push pull OCL dc circuitry; 30 W/ch continuous, both channels driven into 8 ohms from 10-30,000 Hz with 0.01% THD and 0.005% IM dist.; frequency response 2-150,000 Hz +0/−1 dB; damping factor 60 from 20-20,000 Hz, 8 ohms; S/N 106 dB (IHF A); input sensitivity/impedance 1 V/50k ohms; 6¹⁄₃₂" H × 16¹⁷⁄₃₂" W × 14⁹⁄₁₆" D $790

SONY

TA-N88B Stereo Power Amplifier

Stereo power amplifier with pulse-width modulation circuitry and complementary push-pull vertical FET output circuitry; features pulse-locked power supply system and three stages of amplifier/speaker protection circuitry; 160 W/ch continuous into 8 ohms from 20-20,000 Hz with max. 0.5% THD; IM dist. 0.1%; S/N 110 dB (closed circuit, "A"); frequency response 5-40,000 Hz +0.5/−1.0 dB; damping factor 20 at 1000 Hz; input sensitivity/impedance 1.4 V/50,000 ohms; speaker impedance 8 ohms; suitable for 19-in rack mount; 3¹⁄₈" H × 18⅞" W × 14¹⁄₈" D $1050

TA-N7B Stereo Power Amplifier

Stereo power amplifier with dual-FET input and vertical FET output circuitry; all-stage direct-coupled dc design; features four separate power transformers; no signal capacitors or switching devices in signal path; muting and complete protection circuitry; two pairs of rear-panel inputs for dc or capacitor-coupled operation. 100 W/ch continuous into 8 ohms from 20-20,000 Hz with max. 0.01% THD and IM dist.; frequency response 0-100,000 Hz +0/−1 dB (dc coupled); S/N 120 dB ("A"); damping factor 100 at 1000 Hz; input sensitivity/impedance 1.3 V/50,000 ohms; brushed aluminum finish; 6¾" H × 17" W × 13¼" D $920

TA-N86B Power Amplifier

Features all-stage direct-coupled design circuitry; three-mode amplification (Class B, Class A, mono); pulse-locked power supply; two sets of inputs for direct- or capacitor-coupled operation. 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.007% (stereo) and 0.015% (mono) THD (Class B), 18 W/ch under same conditions (Class A), 200 W (mono) $600

SOUNDCRAFTSMEN

"New Class H" Stereo Power Amplifiers

250 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD; IM dist. 0.05%; S/N better than 105 dB; slew rate 50 V/μsec; damping factor greater than 100; input sensitivity/impedance 1.3 V/15-50,000 ohms; "Vari-Portional" system meters output power requirements for optimum efficiency; class AB amplifier; solid-state crowbar fail-

2 POWER AMPLIFIERS

safe overload protection circuitry with automatic reset; nonlimiting output circuitry; black anodized front panel with silver trim and walnut side panels; 7" H × 19" W × 15" D.

MA5002. Features red LED clipping indicators and green LEDs for Vari-Portional system usage; dual power cords for remote ac on/off; VU meters with 10- and 100-times increased sensitivity meter range selection; two speaker switching; power switch; separate gain controls $799

PA5001. Without VU meters, with range, Vari-Portional and clipping LEDs, speaker switching, and gain controls $649

EA5003. Includes 10-band octave equalizer, ±12 dB/octave with 18-dB range for zero-gain controls/channel; no VU meters $949

SPECTRO ACOUSTICS

500SR Stereo Power Amplifier

250 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.15% THD and IM dist.; dynamic headroom 1.4 dB at 8 ohms, 340 W/ch; slew rate 24 V/μsec; input sensitivity 1.5 V rms for rated output; noise 107 dB below rated output; LED power level indicators; readout attenuation; gain attenuators; rack-mount 19-in faceplate $750

500R. Same as 500SR but without LED power level indicators, gain attenuators, and readout attenuators $650

200SR Power Amplifier

Features 40-LED power output bar graph display; 110 W/ch continuous with 0.08% THD and IM dist.; dynamic range 3 dB at 200 W/ch; damping factor 150; slew rate 20 V/μsec; frequency response 20-20,000 Hz ±0.1 dB; S/N 100 dB below full output (unweighted); input sensitivity 1 V; oak or walnut side panels; 7" H × 19" W × 12" D . $400

200R. Same as 200SR without power ouput display $375

STAX

DA-80 Stereo Power Amplifier

45 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.005% THD and 0.01% IM dist.; residual hum and noise −100 dB; input sensitivity 0.89 V; protective circuits for shorts, speakers, and thermal overload, class A amplifier; dc coupling $1300

DA-80M Mono Power Amplifier

95 W continuous into 8 ohms over 20-20,000 Hz with 0.007% THD and 0.01% IM dist.; residual hum and noise −100 dB; input sensitivity 1.26 V; protective circuits for shorts, speakers, and thermal overload; class A amplifier; dc coupling $1225

STUDER/REVOX

A740 Stereo Power Amplifier

100 W/ch into 8 ohms over 45-15,000 Hz with 0.1% dist.; frequency response 20-20,000 Hz ±0.5 dB; sensitivity 1 V for rated output; features peak-indicating power output meters; 3-dB stepped input level controls; front-panel headphone jacks; carrying handles; dual phono and XLR input connections; switchable high-pass filter at input; 6" H × 17" W × 14" D $1499

TECHNICS

SE-9060 Power Amplifier

Stereo dc power amplifier with six power supplies and mono bridging. 70 W/ch sine wave continuous into 8 ohms over 20-20,000 Hz with 0.02% THD and IM dist., 180 W mono; frequency response 20-20,000 Hz +0/−0.1 dB; S/N (IHF A) 115 dB; damping factor 70; load impedance 4-16 ohms

(main or remote), 8-16 ohms (main plus remote); 120-V ac, 60 Hz, 240 W; 3³¹/₃₂" H × 19" W × 14¹³/₁₆" D $460

THRESHOLD

STASIS I Power Amplifier

Mono power amplifier features constant current/constant voltage operating system designed to eliminate semiconductor distortion; 72 ultra-high-speed output transistors; adjustable peak and average meter output display with sensitivity readings of peak/average 0 dB at 15 W, 8 ohms and peak/average 0 dB at 150 W, 8 ohms; LED amp on, error waveform, over temperature, and standby indicators $3000

4000 Stereo Power Amplifier

Power amplifier with stereo amplifier/bridged mono amplifier modes; front-to-back/cascode class A circuitry incorporated into 4 MHz channel output stages with 6 kW dissipation reserve; 1-kW power transformer and dual feeding independent power supplies; includes peak and average output level indicators (+2 to −20 dB range) for each channel. 200 W/ch continuous from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 1.5-150,000 Hz; damping factor constant from 20-20,000 Hz; slew rate 50 V/μsec; S/N 106 dB unweighted; 6.94" H × 19" W × 17.25" D .. $2160

400A Stereo Power Amplifier

Cascode/class A circuitry power amplifier features thirty-two output transistors with 4.8 kW dissipation reserve; current limiting, thermal, fuse, and circuit breaker protected; 40-dB-range peak vs average output level indicators for each channel; grained and black anodized face plate with smooth black anodized chassis, heat sinks, and handles; 100 W/ch into 8 ohms over 20-20,000 Hz with 0.05% THD and IM dist.; slew rate 40 V/μsec (max); frequency response 1.5-150,000 Hz; damping factor 200; slew rate 50 V/μsec; S/N 103 dB (unweighted); 6¹⁵/₁₆" H × 19" W × 11" D..... $1395

CAS-2 Power Amplifier

Features cascode design and bridged mono capability; 24 output devices with 3.6 kW dissipation reserve; dual power supplies and active current sourcing; 43-dB-range peak-reading LED indicators/ch. 100 W/ch continuous from 20-20,000 Hz with 0.05% THD and IM dist.; frequency response 1.5-100,000 Hz; damping factor 150 from 20-20,000 Hz; slew rate 40 V/μsec; S/N 103 dB unweighted..... $895

TOSHIBA

SC-665 Power Amplifier

Features OCL-dc circuitry; toroidal power transformer and two shunted V-type metallized film ca-

pacitors; dual peak power meters; two-speaker switching; switchable dc/5-Hz subsonic operation; −20-dB muting switch. 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; IHF power bandwidth 5-70,000 Hz; frequency response 0-80,000 Hz ±1 dB; damping factor 60; S/N 117 dB (IHF A); input level/impedance 1 V/47k ohms; 3.8" H × 16.5" W × 13.9" D..... $350

M-15 Micro Power Amplifier

Features OCL-dc circuitry; toroidal power transformer and two filter capacitors; LED-indicated two-speaker and BTL switches. 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist., 90 W into 8 ohms at 20-20,000 Hz with 0.05% THD (balanced transformer less); frequency response 0-70,000 Hz +0/−1 dB; damping factor 60 at 8 ohms; S/N 115 dB (IHF A); input sensitivity/impedance 1 V/56k ohms; one-piece aluminum diecast body; 4.2" H × 10.1" W × 8.3" D..... $340

M15B. Black finish..... $350

SC-335 Stereo Power Amplifier

Features audio muting switch (−20 dB); left/right power meters with power range selector switch; double-pair speaker drive selection; stereo headphone jack; heat radiator. 40 W/ch continuous into 8 ohms from 20-20,000 Hz at 0.1% THD and IM dist.; damping factor 25; frequency response 5-80,000 Hz ±1 dB; power bandwidth 5-50,000 Hz, both channels driven, at 0.1% THD; S/N (IHF "A") 95 dB (main in); 3⁴/₈" H × 16¹/₂" W × 9¹/₂" D..... $180

YAMAHA

M-2 Power Amplifier

DC power amplifier features dual FET with cascode bootstrap circuit in input stage and three-stage emitter-follower complementary triple push-pull dc circuitry with linear-transfer bias circuit in output stage; high-capacity toroidal power transformer and two high-capacity electrolytic capacitors; power transistor, dc detection, and muting protection circuits; dual-LED peak level bar graph display; LED overload indicator; illuminated two-speaker switching; separate left and right input level controls and dc/ac input switch on rear panel. 240 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.005% THD; power bandwidth 10-100,000 Hz at half rated power; frequency response 10 (0 dB)-100,000 (−0.7 ±0.5 dB) Hz (dc mode, 120 W, 8 ohms), 10 (−1.5 ±0.5 dB)-100,000 (−0.7 ±0.5 dB) Hz (ac mode, 120 W, 8 ohms); THD 0.003% from 10-20,000 Hz, 120 W into 8 ohms; IM dist. 0.002% at 60:7000 Hz ratio, 120 W into 8 ohms; damping factor 200 at 8 ohms, 20,000 Hz; input sensitivity/impedance 1 V/25k ohms; S/N 123 dB (IHF A); 7³/₁₆" H × 17⅛" W × 14¼" D $1200

M-4. Similar to M-2 without linear-transfer bias circuit and muting protection circuit; 120 W/ch under same conditions; THD 0.005% from 10-20,000 Hz, 60 W into 8 ohms; S/N 118 dB (IHF A); 5³/₄" H × 17⅛" W × 14³/₄" D..... $650

ABOUT PRICES. . . .

With repeal of Fair Trade Laws, manufacturers are now providing "Suggested Retail" or "Fair Retail Value" figures for the guidance of their dealers and customers. Prices in this Directory are those provided by the manufacturers under these conditions.

2 INTEGRATED AMPLIFIERS

ACCUPHASE

E202 Integrated Stereo Amplifier

100 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.1% THD (140 W/ch into 4 ohms, 50 W/ch into 16 ohms); hum and noise −94 dB (main amp), −80 dB (high level), −74 dB (low level); phono sensitivity variable over 2.5-5 mV; phono impedance 30,000, 47,000, 100,000 ohms (switchable); 6" H × 18" W × 14" D..... $800

AWC-2. Walnut case..... $50

AIKO by TZL INTERNATIONAL

AU-80 Stereo Integrated Amplifier

Power amp: features dual power output meters; two-speaker switching; 40 W/ch continuous into 4 ohms with 0.2% HD at 1000 Hz. Preamp features bass and treble controls; low and high filters; loudness, mode, and tape/source monitor switches. 5¼" H × 17" W × 8¼" D..... $260

AIWA

AA-8700 Stereo Integrated Amplifier

Power amp: features dc circuitry; logarithmic compression peak power meters; two-speaker switching; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; frequency response 5-100,000 Hz +0/−3 dB; damping factor 60 at 8 ohms from 20-20,000 Hz. Preamp: features built-in moving-coil head amplifier; bass and treble controls with turnover frequency switches and six-LED turnover frequency/filter setting displays; low and high filters; loudness and muting switches; balance control; two-way tape dubbing and monitoring with separate tape 3 play/record control; mode switch; input selector with LEDs and phono capacitance selector; input sensitivity/impedance 200 μV/10 ohms (phono MC), 150 mV/47k ohms (tuner, aux., tape, DIN); phono overload 280 mV (MM); RIAA deviation ±0.2 dB from 30-15,000 Hz; S/N (IHF A) 83 dB (MM), 70 dB (MC), 100 dB (tuner, aux., tape); 6³/₁₆" H × 18⁹/₁₆" W × 14¹³/₁₆" D..... $550

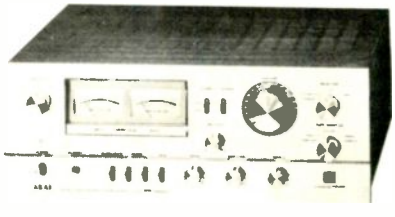
AA-8300U Stereo Integrated Amplifier

Power amp: features dual peak power meters; two-speaker switching; 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.1% THD and IM dist.; damping factor 45 at 8 ohms from 20-20,000 Hz. Preamp: features bass and treble controls; low and high filters; loudness and −15-dB muting; two-way tape dubbing and monitoring; balance/volume control; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms (aux., tape, and DIN); phono overload 130 mV; frequency response ±0.3 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz ±0.2 dB (aux. and tape); S/N (IHF A) 80 dB (phono), 90 dB (aux. and tape); 5¹³/₁₆" H × 16⁹/₁₆" W × 13" D..... $300

AKAI

AM-2850 Stereo Integrated Amplifier

Features dc circuitry; illuminated power meters; switching for three systems; audio mute; tone control defeat; separate bass, midrange, and treble controls; tape 1 and 2/dub 1-to-2 and 2-to-1/source tape monitor selector; phono 1/phono 2/tuner/aux. input selector; balance control; loudness switch; stereo/mono switch. 85 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.08% THD; silver panel with wood-grain vinyl cover; 6.7" H × 17.3" W × 16.9" D..... $475



separate low- and high-frequency filters; speaker

AM-2650 Stereo Integrated Amplifier

Features illuminated power meters; high- and low-frequency filter switches; separate bass and treble controls; tape 1 and 2/dub 1-to-2 and 2-to-1/source tape monitor selector; phono 1/phono 2/tuner/aux. input selector; speaker switching for two systems; balance control; tone, audio mute, stereo/mono, and loudness switches; direct-coupled complementary OCL circuitry. Power amp: 65 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.08% THD; THD 0.02%; power bandwidth 6-60,000 Hz at 8 ohms (IHF); S/N (IHF) 75 dB (phono), 95 dB (aux.); damping factor 30 at 1000 Hz, 8 ohms. Preamp: input sensitivity/impedance 1.3 mV/33k, 47k, 100k ohms (phono 1), 3 mV/47k ohms (phono 2), 150 mV/100k ohms (aux. and tuner); frequency response 30-15,000 Hz ±1 dB (phono RIAA), 10-60,000 Hz ±1 dB (tuner, aux., tape monitor); tone control ±9 dB at 100 Hz (bass), ±9 dB at 10,000 Hz (treble). 5.7" H × 17.3" W × 13.6" D..... $300

AM-2450. Similar to AM-2650 without audio mute, high- and low-frequency filter selectors, and tone switch; has phono/tuner/aux. input selector. Power amp: 45 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.1% THD..... $225

AM-2250 Stereo Integrated Amplifier

Features aux./tuner/phono input selector; two-speaker switching; separate bass and treble controls; loudness switch; stereo/mono mode selector; balance switch; dub 1-to-2 tape monitor switch; complementary OCL circuitry. Power amp: 25 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.2% THD; THD 0.03%; power bandwidth 10-40,000 Hz at 8 ohms (IHF); S/N (IHF) 75 dB (phono), 95 dB (aux.); damping factor 50 at 1000 Hz, 8 ohms. Preamp input sensitivity/impedance 3 mV/47k ohms (phono), 150 mV/100k ohms (aux. and tuner); frequency response 30-15,000 Hz ±1 dB (phono RIAA), 10-40,000 Hz +0/−1 dB (tuner, aux., tape monitor); tone control ±8 dB at 100 Hz (bass), ±6 dB at 10,000 Hz (treble). 5.1" H × 15" W × 8.7" D..... $150

DENON

PMA-850 Integrated Amplifier

All-stage, complementary-pushpull, dc-circuit integrated amplifier. Power amplifier: 110 W/ch continuous into 4 ohms at 1000 Hz with 0.05% THD, 85 W/ch continuous into 8 ohms from 20-20,000 Hz at 0.001% THD; IM dist. 0.02% max.; power bandwidth 5-100,000 Hz into 8 ohms; frequency response at 0.5 W output from 5-100,000 Hz +0/−1 dB; input sensitivity/impedance 1 V rms/50k ohms ±10% from 20-20,000 Hz; output impedance 0.16 ohm max.; S/N 122 dB (IHF "A"). Preamplifier: input sensitivity/impedance 2.5 mV rms/50k ohms; rated output/impedance 1 V rms/50k ohms; RIAA deviation ±0.2 dB from 20-20,000 Hz; max. phono input 200 mV rms at 1000 Hz; bass frequency response 100 Hz ±8 dB, treble 10,000 Hz ±8 dB. Features direct-coupled switch and toroidal core power transformer with separate left/right channel coils. 164 mm H × 434 mm W × 400 mm D..... $800

PMA-630 Stereo Integrated Amplifier

Power amp: features purely complementary push-pull dc circuitry; heavy-duty power transformer with two block capacitors; two-speaker switching; 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.008% THD; IM dist. 0.005%; frequency response 0-100,000 Hz +0/−1 dB; S/N 112 dB (IHF A); input sensitivity/impedance 320 mV/100k ohms. Preamp: features detented volume control; balance control; switcha-

2 INTEGRATED AMPLIFIERS

ble 20- and 40-Hz subsonic filter; loudness switch; two-way tape dubbing and monitoring; rec out selector; input selector; input sensitivity/impedance

2.5 mV/50k ohms (phono 1 and 2), 320 mV/30k ohms (tuner, aux., tape); phono overload 200 mV at 1000 Hz; gain 89 dB; RIAA phono deviation ±0.2 dB; THD 0.003% at 10 V out; rated output 2.5 V; S/N 86 dB (phono), 112 dB (tuner and aux.); complements TU-630 tuner; brushed aluminum front panel; 145 mm H × 434 mm W × 390 mm D..... ..... $460

PMA-501 Integrated Amplifier
Three-stage, direct-coupled equalizer amplifier. Power amplifier: 65 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.005% THD, 50 W/ch continuous into 8 ohms; IM dist. and HD at rated output max. 0.05%; power bandwidth 5-50,000 Hz both channels driven into 8 ohms; frequency response from 5-100,000 Hz −1 dB at 0.5 W output; input sensitivity/impedance 1 V rms/50k ohms ±10%; 0.16-ohm output impedance; S/N 116 dB (IHF "A"). Preamplifier: input sensitivity/impedance 2.5 mV rms/50k ohms (phono), 150 mV rms/85k ohms (tuner, aux, tape 1 & 2); RIAA deviation ±0.2 dB; max input 230 mV rms (phono); max. output/impedance 10 V rms/50k ohms; THD at rated output 0.008% max. at 1000 Hz; S/N 76 dB min. Tone control: frequency response 50 Hz ±10 dB (bass), 20,000 Hz ±10 dB (treble); low filter rolloff 6 dB/octave at 20 Hz; stereo separation 75 dB from 20-1000 Hz (phono/speaker out), 60 dB at 20,000 Hz (phono/speaker out). Features PCC (phono crosstalk canceller) device, separate recording switch, three power transformers, and OCL and pure complementary circuitry; 5¾" H × 16¹⁵⁄₁₆" W × 12³⁄₁₆" D $410

FISHER

CA2420 Integrated Amplifier/Equalizer
Power amp section: features dc circuitry, dual power meters, and two-speaker switching; 80 W/ch

continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; damping factor 50. Preamp/equalizer: features subsonic filter; EQ defeat switch; mode and loudness switches; two-way tape dubbing and monitoring; balance control; input selector; phono capacitance selector; input sensitivity/impedance 2.5 mV/50k ohms (MM), 60 μV/22 ohms (MC), 150 mV/100k ohms (tuner, aux., tape); phono overload 230 mV (MM), 6 mV (MC); frequency response ±0.5 dB (phono RIAA), 20-20,000 Hz ±0.5 dB (high level); S/N (IHF A) 80 dB (MM), 65 dB (MC), 100 dB (tuner, aux., tape); five-band graphic equalizer with center frequencies set at 50, 250, 1000, 4500, and 15,000 Hz, ±10 dB boost or cut; subsonic filter 6 dB/octave at 10 Hz. 5¼" H × 17⅓" W × 13" D $550

CA2320 Stereo Integrated Amplifier
Power amp: features dc circuitry and two-speaker switching; 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist; damping factor 50. Preamp: features bass and treble controls with tone defeat; switchable 5/20 Hz subsonic filter; two-way tape monitoring and dubbing; balance control; loudness switch; mode selector; input selector; input sensitivity/impedance 2.5 mV/50k ohms (MM), 60 μV/22 ohms (MC), 150 mV/50k ohms (tuner, aux., tape); phono overload 230 mV (MM), 6 mV (MC); frequency response ±0.5 dB (phono RIAA), 20-20,000 Hz ±0.5 dB (aux.); S/N (IHF A) 80 dB (MM), 65 dB (MC), 100 dB (tuner, aux., and tape); 3⅓" H × 17⅓" W × 12¼" D..... $400

CA2220 Integrated Amplifier/Equalizer
Power amp: features dc circuitry, dual power meters, and two-speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist; damping factor 50. Preamp/equalizer: features subsonic filter; EQ defeat; mode and loudness switches; two-way tape dubbing and monitoring; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono), 150 mV/100k ohms (tuner, aux., tape); phono overload 230 mV; frequency response ±0.5 dB (phono RIAA), 20-20,000 Hz ±0.5 dB (aux.); S/N (IHF A) 80 dB (phono), 90 dB (tuner, aux., and tape); five-band graphic equalizer with center frequencies set at 50, 250, 1000, 4500, and 15,000 Hz, ±10 dB boost or cut; 5¼" H × 17⅓" W × 13" D..... $400
CA2120. Similar to CA2220 minus subsonic filter; 35 W/ch continuous under same conditions... $330

HARMAN/KARDON

hk505 Integrated Amplifier
Power amplifier: dc-coupled with dual power supplies; 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.03% THD; THD 0.01% (1000 Hz at rated output); IM dist. 0.05% at rated output; frequency response 2-150,000 Hz ±0.5 dB; damping factor more than 50 at 8 ohms; hum and noise −100 dB. Preamplifier: four-stage, low-noise preamplifier features separate 21-step bass and treble controls (±10 dB) with bass hinge set at 150 or 500 Hz and treble hinge set at 2500 or 6000 Hz; tone defeat switch; subsonic and high-cut filters; electronic circuit protection; two-position bass turnover and treble rolloff; two-way tape duplication with LED tape monitor indicators; two auxiliary inputs; phono capacitance switch; speaker selector switch; sensitivity 2.0 mV (phono), 120 mV (high level); phono overload greater than 150 mV; phono equalization ±0.5 dB; S/N ("A") 85 dB (phono), 90 dB (high level).. $399
hk503. Similar to hk505 except 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD; frequency response 3-100,000 Hz ±0.5 dB; damping factor greater than 30 at 8 ohms; hum and noise −95 dB. Features similar, but single power supply, center detent bass and treble controls (±10 dB), no electronic circuit protection, no phono capacitance switch, and three-position tape monitor with simultaneous two tape deck recording and tape copying functions $279

HITACHI

HA-7700 Stereo Integrated Amplifier
Power amp section: features MOS FETs and dc circuitry; dual power supplies; two-speaker switching; 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; IM dist. 0.008%; frequency response 0-100,000 Hz +0/−1 dB (dc); input sensitivity/impedance 1 V/47k ohms; S/N 115 dB (IHF A); damping factor 60 at 1000 Hz, 8 ohms. Preamp section: features bass and treble controls with tone defeat; two-way tape monitoring and dubbing; −16-dB muting switch; low filter; balance control; input selector with separate cartridge load impedance selector; mode switch; input sensitivity/impedance 2.5 mV/100, 22,000, 47,000, and 100,000 ohms (phono MM), 250 μV/100 ohms (MC), 150 mV/47k ohms (tuner, aux., tape); phono overload 300 mV (MM), 30 mV (MC); frequency response 20-20,000 Hz ±0.2 dB (phono RIAA), 10-100,000 Hz +0/−2.5 dB (tuner and aux.); S/N (IHF A) 86 dB (phono MM), 68 dB (MC), 100 dB (tuner, aux., tape); HD 0.002% (MM), 0.01% (MC), 0.005% (tuner, aux., tape); speaker, tone, mode, and phono impedance controls on front panel hidden behind hinged door; 6½" H × 17⅛" W × 15" D..... $600

HA-5700 Stereo Integrated Amplifier
Power amp: features MOS FETs; two-transformer power supply circuitry; dual LED power logarithmic meter display with ×0.1 and ×1 range selector; two-speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; IM dist. 0.008%; power bandwidth 5-60,000 Hz; damping factor 50 at 1000 Hz, 8 ohms. Preamp: features built-in moving-coil head amp; bass and treble controls with tone defeat; subsonic filter; loudness and mode switches; balance control; two-way tape dubbing and monitoring; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (MM), 0.25 mV/10 ohms (MC), 150 mV/47k ohms (tuner, aux., tape); phono overload 200 mV (MM), 20 mV (MC); frequency response 20-20,000 Hz +0.5/−4.5 dB (phono), 10-100,000 Hz +0.5/−4.5 dB (tuner and aux.); S/N (IHF A) 82 dB (MM), 62 dB (MC), 100 dB (tuner and aux.); HD 0.005% (MM), 0.02% (MC, tuner, aux., tape); 4¼" H × 17⅛" W × 15" D. $430

HA-4500 Stereo Integrated Amplifier
Power amp: features pure complementary OCL output circuitry; dual LED power logarithmic meter display; two-speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD; power bandwidth 10-50,000 Hz; damping factor 35. Preamp: features bass and treble controls; balance control; subsonic filter; loudness and mode selectors; two-way tape dubbing and monitoring; input selector with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/33k ohms (tuner and tape); phono overload 250 mV; S/N (IHF A) 75 dB (phono), 90 dB (tuner and tape); frequency response ±0.3 dB (phono RIAA), 10-40,000 Hz +0/−1 dB (tuner and tape); 4⅜" H × 17" W × 10⅞" D $250
HA-3500. Similar to HA-4500 minus tape dubbing facility, aux. input, and logarithmic meters; has two-deck monitoring capability and dual power meters; 30 W/ch continuous under same conditions; damping factor 30; phono overload 200 mV; tuner and tape frequency response 10-40,000 Hz +0.5/−1.5 dB $200

HA 330 Integrated Amplifier
OCL integrated amplifier. 40 W/ch, both channels driven into 8 ohms from 20-20,000 Hz at 0.3% THD and IM dist.; IHF power bandwidth 10-50,000 Hz; frequency response 20-20,000 Hz ±1 dB (tape, aux.); bass and treble tone controls ±8 dB range. Features twin power level meters; low (12 dB/octave) filter; two-tape deck capability through switch control; 41-click-stop volume control.. $220

JVC

A-M1 Micro Integrated Amplifier
Power amp: features ICL dc circuitry; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; frequency response 0-70,000 Hz +0/−1 dB; damping factor 30. Preamp: features input selector buttons with LEDs; volume control in four steps; source and tape monitor buttons with LEDs. Input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms

(tuner, aux., tape); RIAA phono equalization ±0.3 dB from 20-20,000 Hz; phono overload 200 mV rms; S/N (IHF A) 82 dB (phono), 105 dB (tuner, aux., tape); 3 11/16" H × 9 1/16" W × 10 3/16" D.... $600

JA-S77 Stereo Integrated Amplifier
All-stage dc power amp, phono equalizer, and tone control circuits. Power amplifier: 65 W/ch continu-

ous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD, 90 W/ch continuous into 4 ohms at 1000 Hz, 0.02% THD; THD 0.005% at 1000 Hz, 65 W output; IM dist. 0.01% at 65 W out; damping factor 50 from 20-20,000 Hz into 8 ohms; load impedance 4-16 ohms (Sys. 1 or 2), 8-16 ohms (Sys. 1 +2). Preamplifier: input sensitivity/impedance 2.5 mV/33k, 47k, 100k ohms (phono 1, 2), 200 mV/50k ohms (tuner, aux., tape 1, 2); max. input 280 mV rms (phono); S/N (IHF "A") 81 dB (phono), 105 dB (tuner, aux, tape); RIAA phono equalization ±0.2 dB; frequency response 3-100,000 Hz +0/−1 dB; subsonic filter rolloff −6 dB/octave at 18 Hz; −20 dB muting level. Features two gold-plated phono terminal pairs, pre-out/main-in switch, and twin power meters; 6 1/4" H × 17 3/4" W × 13 1/2" D..... $430

JA-S55 Stereo Integrated Amplifier
All-stage, dc power amplifier, phono equalizer, and tone control circuits. Power amplifier: 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD, 70 W/ch continuous into 4 ohms at 1000 Hz, 0.05% THD; THD 0.005% at 60 W output; IM dist. 0.01% at 60 W output; damping factor 50 from 20-20,000 Hz into 8 ohms; load impedance 4-16 ohms (Sys. 1 or 2), 8-16 ohms (Sys. 1 +2). Preamplifier: input sensitivity/impedance 2.5 mV/47k ohms (phono), 200 mV/50k ohms (tuner, aux., tape 1, 2); max. input 230 mV rms (phono); S/N (IHF "A") 81 dB (phono), 105 dB (tuner, aux, and tape); RIAA phono equalization ±0.3 dB; frequency response 5-100,000 Hz +0/−1 dB; subsonic filter rolloff −6 dB/octave at 18 Hz; muting −20 dB. Features separate power supplies, dB-calibrated attenuator volume control, and twin power meters; 6" H × 16 3/4" W × 13 3/8" D. $340

JA-S44 Stereo Integrated Amplifier
DC power amplifier with SEA stereo graphic equalizer. Power amplifier: 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD, 70 W continuous into 4 ohms at 1000 Hz with 0.05% THD; THD 0.005% at 45 W output; IM dist. 0.01% at 45 W output; damping factor 30 from 20-20,000 Hz; load impedance 4-16 ohms (Sys. 1 or 2), 8-16 ohms (Sys. 1 +2). Preamplifier: input sensitivity/impedance 2.5 mV/47k ohms (phono), 160 mV/50k ohms (tuner, aux., tape 1, 2); max. input 200 mV rms; S/N (IHF "A") 80 dB (phono), 100 dB (tuner, aux, tape); RIAA phono equalization ±0.3 dB; frequency response 5-100,000 Hz +0/−2 dB; subsonic filter rolloff −6 dB/octave at 18 Hz. Features SEA REC switch and twin power meters. 6" H × 16 3/4" W × 12 3/8" D. $340

JA-S22 Stereo Integrated Amplifier
DC power amplifier. Power amplifier: 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD, 50 W/ch continuous into 4 ohms at 1000 Hz, 0.05% THD; THD and IM dist. 0.01% at 40 W output; damping factor 30 from 20-20,000 Hz into 8 ohms; load impedance 4-16 ohms (Sys. 1 or 2), 8-16 ohms (Sys 1 +2). Preamplifier: input sensitivity/impedance 2.5 mV/47k ohms (phono), 160 mV/50k ohms (tuner, aux, tape 1, 2); max. input 200 mV rms (phono); S/N (IHF "A") 80 dB (phono), 100 dB (tuner, aux, tape); RIAA phono equalization ±0.3 dB; frequency response 5-100,000 Hz +0/−2 dB; subsonic filter rolloff −6 dB/octave at 18 Hz. Features twin power meters, class-A phono equalizer, and front-panel Tape-2 terminals. 6" H × 16 3/4" W × 13 3/8" D. $240

A-S5 Stereo Integrated Amplifier
Power amp section: features complementary OCL circuitry; two-speaker switching; 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.06% THD and IM dist.; damping factor 50 from 20-20,000 Hz, 8 ohms. Preamp: features bass and treble controls; two-deck dubbing; input selector; loudness switch; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/40k ohms (tuner, aux., and tape); phono overload 150 mV rms; frequency response ±0.5 dB (phono RIAA), 20-40,000 Hz ±1 dB; S/N (IHF A) 75 dB (phono), 95 dB (tuner, aux., tape) 5 7/8" H × 16 1/2" W × 10 7/16" D..... $180
A-S3. Similar to A-S5 except 20 W/ch with 0.08% THD and IM dist.; input sensitivity/impedance 150 mV/45k ohms (tuner), 150 mV/50k ohms (tape); phono overload 120 mV; aux. frequency response 20-40,000 Hz +1/−2 dB; 3 1/2" H × 16 9/16" W × 11 1/32" D $150

JA-S11G Stereo Integrated Amplifier
30 W/ch continuous both channels driven into 8 ohms over 20-20,000 Hz with 0.1% THD and IM dist.; damping factor 30 (8 ohms, 1 kHz); S/N 75 dB (phono); phono overload 150 mV (1 kHz); phono RIAA equalization ±0.5 dB; frequency response 25-40,000 Hz +0/−1 dB; sensitivity 2.5 mV (phono); bass and treble tone controls; two tape monitoring circuits with tape-to-tape dubbing; protection for speakers and power transistors; three-position speaker selector; front panel headphone jack; 5 3/32" H × 15 11/32" W × 13" D $150

KENWOOD

KA-907 DC Integrated Amplifier
Power amp: features dc circuitry, dc coupled selector with LED, full complementary circuit design,

and dual power supplies; LED power safety indicator; output 150 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD; IM dist. 0.0045%; damping factor 100 from 0-20,000 Hz; slew rate ±230 V/μsec; rise time 0.8 μsec; frequency response 0-400,000 Hz +0/−3 dB (dc coupled on), 1-400,000 Hz +0/−3 dB (dc coupled off). Preamp: features built-in low-noise moving-coil head amp and super-low-noise moving-magnet phono equalizer amp; bass and treble tone controls with 150/400 and 3000/6000 Hz turnover frequency selectors with tone defeat; −20 dB attenuator; 18-Hz subsonic and 8000-Hz high filters; two-way speaker switching; two-deck tape dubbing and monitoring; loudness level and 30- and 100-Hz frequency controls; input selector with separate phono selections; mode selector; phono frequency response ±0.2 dB from 20-20,000 Hz (RIAA); input sensitivity/impedance 2.5 mV/33k, 47k, and 100k ohms (phono 1 MM), 2.5 mV/47k ohms (phono 2 MM), 0.1 mV/100 ohms (phono 1 MC), 150 mV/50k ohms (tuner, aux., tape A and B); S/N (IHF A) 90 dB (phono 1 and 2 MM), 70 dB (phono 1 MC), 105 dB (tuner, aux., tape); max. input level 230 mV rms (phono 1 and 2 MM), 9 mV rms (phono 1 MC). Power amp and preamp separable; 6 11/32" H × 18 1/8" W × 18 7/32" D..... $1000

KA-801 DC Integrated Amplifier
Power amp: features dc circuitry with dc coupled switch, dual peak power meters, and dual power supplies; 110 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.015% THD; IM dist. 0.003%; damping factor 100 from 0-20,000 Hz; slew rate ±150 V/μsec; rise time 0.8 μsec; frequency response 0-400,000 Hz −3 dB (dc coupled on), 18-400,000 Hz −3 dB (dc coupled off). Preamp: features low-noise phono equalizer amp; bass and treble controls with tone defeat; two-way speaker switching; balance control; −20 dB attenuator; loudness switch; input selector; subsonic filter (functions as dc coupled switch) two-way tape dubbing and tape B and source monitoring; phono frequency response ±0.2 dB from 20-20,000 Hz (RIAA); input sensitivity/impedance 2.5 mV/50k ohms (phono), 200 mV/50k ohms (tuner, aux., and tape A and B); S/N (IHF A) 90 dB (phono), 105 dB (tuner, tape, and aux.); max. phono input 230 mV rms; 6 9/32" H × 17 19/32" W × 16 9/32" D $699
KA-701. Similar to KA-801 without peak power meters; has turnover frequency controls for bass and treble with defeat and 8000-Hz high filter switch; power output 80 W/ch continuous with 0.02% THD; slew rate ±120 V/μsec; rise time 0.9 μsec; S/N 89 dB (phono), 110 dB (tuner, tape, aux.); max. phono input 220 mV rms..... $499
KA-601. Similar to KA-701 minus turnover frequency selectors and high filter switch; power output 60 W/ch continuous; IM dist. 0.004%; slew rate ±110 V/μsec; S/N 87 dB (phono), 105 dB (tuner, aux., tape); phono RIAA frequency response ±0.3 dB from 20-20,000 Hz..... $399

KA-305 Stereo Integrated Amplifier
Power amplifier: 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD; IM dist. 0.004%; damping factor 40; frequency response 3-100,000 Hz −3 dB. Preamp: features bass and treble controls with bypass tone control, loudness and balance, mic mixing with mic level control, and input selector; phono frequency response ±0.4 dB from 30-15,000 Hz (RIAA); input sensitivity/impedance 2.5 mV/50k ohms (phono and mic), 150 mV/30k ohms (tuner, aux., and tape); S/N (IHF A) 77 dB (phono), 105 dB (tuner, aux., tape), 73 dB (mic); max. phono input 260 mV rms; 5 13/32" H × 15 3/4" W × 11 25/32" D. $199
KA-405. Similar to KA-305 except dc amplifier with peak power meters, two-way tape dubbing with source monitor switch, and LED input selector display; 55 W/ch with 0.05% THD; IM dist. 0.009%; frequency response 2-250,000 Hz +0/−3 dB; phono S/N 83 dB; phono overload 210 mV.... $299

KA-3700 Integrated Amplifier
Power amplifier: 20 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD; IM dist. 0.04%; frequency response 20-20,000 Hz ±1 dB. Preamp: has one-way tape dubbing; sensitivity 2.5 mV (phono), 150 mV (high level); S/N (A weighted) 72 dB (phono), 100 dB (aux.); frequency response 15-20,000 Hz ±0.4 dB (phono RIAA); phono overload 150 mV; 5 1/2" H × 15" W × 11 1/2" D..... $159

Audio Purist Group

600 Stereo Integrated Amplifier
Power amp: 130 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.08% THD; dual power supplies; ASO protection circuit. All-FET direct coupled preamp; max. input 220 mV; dual-level attenuation before and after control preamp section; negative feedback tone controls; selectable turnover points (150, 400, 3000, and 6000 Hz); two-position presence control; defeat switch; four-position loudness control; high/low steep-slope filters; dual tape provision with "tape-through" circuit; selectable cartridge impedance; provision for two phono, two aux., tuner, and three speaker systems; 6" H × 17 1/4" W × 15 1/4" D..... $550

NEED MORE INFORMATION?

Write directly to the manufacturer or distributor. A list of names and addresses starts on page 9.

2 INTEGRATED AMPLIFIERS

LUX

L-11 Integrated Amplifier
Features moving-coil position and input transformer socket; linear equalizer; two-position subsonic filter; headphone jack; two tape deck capability with separate selectors; tape monitor circuit; speaker protection circuit; ac power outlet. Power amplifier: 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD and IM dist.; frequency response 2500-100,000 Hz +0/−1 dB; input sensitivity 1.6 V; damping factor 80. Preamplifier: input sensitivity 2.5 mV (phono 1 and 2), 150 mV (aux., tuner); S/N (IHF "A") better than 92 dB (phono); frequency response 20-20,000 Hz ±0.2 dB (phono), 2500-100,000 Hz +0/−1 dB (tuner, aux., monitor 1 and 2) $945

L-10 Integrated Amplifier
Features variable tonal range of +2/−2.5 dB; speaker protection circuit; subsonic filter; tape 1 and 2 recording selectors; tape monitor switch; headphone jack; extra ac outlets (switched and unswitched). Power amplifier: 55 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.015% THD and IM dist.; frequency response 0-100,000 Hz ±1 dB; input sensitivity 300 mV; hum and noise −100 dB (IHF "A"); damping factor 80. Preamplifier: output 300 mV; input sensitivity 3 mV (phono), 300 mV (tuner, aux.); S/N (IHF "A") 90 dB (phono), 100 dB (tuner, aux.); frequency response 20-20,000 Hz ±1 dB (phono), 0-100,000 Hz −1 dB (tuner, aux.). 3 9/64" H × 17 1/4" W × 14 19/64" D $795

L-5 Integrated Amplifier
Features bass and treble controls (±12-dB range); headphone jack; tape dubbing circuit; tape monitor circuit; high- and low-cut filters; subsonic filter; speaker protection circuit; ac power outlet. Power amplifier: 60 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.03% THD and IM dist.; frequency response 5-100,000 Hz +0/−1 dB; input sensitivity 1.3 V; damping factor 80. Preamplifier: input sensitivity 2.5 mV (phono 1 and 2), 150 mV (aux., tuner, and monitor 1 and 2); S/N (IHF "A") 92 dB (phono); frequency response 20-20,000 Hz ±0.5 dB (phono), 10-100,000 Hz +0/−1 dB (tuner, aux., monitor 1 and 2) $595

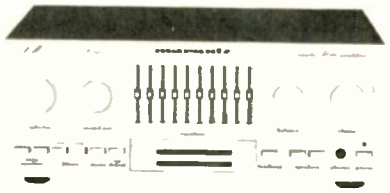
L-3 Integrated Amplifier
Features bass and treble tone controls (±11-dB range); headphone jack; tape dubbing circuit; tape monitor circuit; ac power outlet. Power amplifier: 35 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.05% THD; IM dist. 0.08%; frequency response 15-60,000 Hz −1 dB; damping factor 60. Preamplifier: input sensitivity 2.5 mV (phono), 150 mV (aux., tuner, monitor 1 and 2); S/N (IHF "A") 87 dBf (phono); frequency response 30-18,000 Hz ±0.5 dB (phono), 15-60,000 Hz −1 dB (tuner, aux., monitor 1 and 2) $395

Laboratory Reference Series

Luxman 5L15 Integrated Amplifier
Stereo integrated amplifier with direct-coupled dc preamps and power amps and class AB output stages; connections for tuner, two tapes, two auxiliary sources, and phono. Features phono subsonic filter, two-level muting switch, and illuminated power meters. Power amplifier: 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; frequency response 0-100,000 Hz ±1.0 dB; S/N greater than 100 dB (IHF "A"); damping factor 80. Preamplifier: input sensitivity 3 mV (phono), 300 mV (aux., tape 1/2). Other features include dc offset warning light, electrostatic speaker switch, outputs for LED peak indicator, and speaker-amplifier protection dc sensors. Metal enclosure; 16" H × 17 7/16" W × 5 5/8" D $995

MARANTZ

PM700 Stereo Integrated Amplifier
Power amp: features dc circuitry; dual LED power output logarithmic displays; two-speaker switching;



70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.025% THD and IM dist.; damping factor 60 at 20 Hz. Preamp: features built-in moving-coil cartridge head amplifier; built-in five-band stereo graphic equalizer with center frequencies set at 50, 200, 800, 3200, 12,800 Hz, ±12 dB boost or cut and EQ defeat; 6 dB/octave low (20 Hz) and high (9000 Hz) filters; mono switch; loudness switch; balance control; record mode selector with two-way tape dubbing and two-deck tape monitoring; input selector; input sensitivity/impedance 2.8 mV/47k ohms (phono MM), 0.2 mV/40 ohms (phono MC), 150 mV/30k ohms (high level); phono overload 220 mV (MM), 16 mV (MC); S/N (A weighted) 92 dB (phono MM), 98 dB (high level); frequency response ±0.2 dB from 20-20,000 Hz (phono), 10-70,000 Hz ±1 dB (high level); dynamic range 123 dB (phono MM), 112 dB (MC); 5 3/4" H × 16 3/8" W × 13" D $420
PM500. Similar to PM700 minus built-in moving-coil head amp, record out selector, and high filter; has single five-band graphic equalizer with same center frequencies; 50 W/ch continuous, under same conditions; phono RIAA deviation ±0.3 dB; phono S/N 90 dB (A weighted); phono dynamic range 117 dB $330
PM300. Similar to PM500 minus mono switch, EQ defeat, and two-way tape dubbing and monitoring; has tape/source monitor switch, power level meters, and bass, midrange, and treble slide controls; 30 W/ch continuous with 0.04% THD and IM dist.; phono overload 130 mV; phono RIAA deviation ±0.5 dB; phono S/N 87 dB (A weighted); phono dynamic range 109 dB; high level frequency response 15-50,000 Hz ±1 dB; 5 3/4" H × 16 3/8" W × 9 9/16" D $225

NAD (USA)

3080 Stereo Integrated Amplifier
Power amp: features eight high-current output transistors; separate filtered and regulated power sup-

plies; 2-ohm load impedances; dual power output meter with 8/80 W meter switch; main/remote speaker switching; 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; slew rate 40 V/μsec; damping factor 120 at 8 ohms, 50 Hz; S/N 104 dB (A weighted); frequency response 5-50,000 Hz +0/−3 dB; input sensitivity/impedance 1.2 V/10k ohms. Preamp: features bass and treble controls with switchable turnover frequency selectors and tone defeat; infrasonic and high filters; two-way tape dubbing and monitoring; loudness, mono, and muting switches; mic level control with jack; input selector; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/50k ohms (high level); phono overload 200 mV; frequency response ±0.3 dB (phono RIAA), 20-20,000 Hz ±0.5 dB (high level); THD 0.01%; S/N (A weighted) 82 dB at 10 mV (phono), 95 dB (mute off, high level). 5.5" H × 19.3" W × 14.2" D $485
3060. Similar to 3080 without meter switching and mic level control; 60 W/ch continuous under same conditions; slew rate 30 V/μsec; damping factor 100; main amp input sensitivity/impedance 1.0 V/33k ohms; main amp S/N (A weighted) 103 dB; high-level input impedance 18k ohms; 5.5" H × 17.7" W × 14.2" D $410
3045. Similar to 3060 minus bass and treble turnover frequency selectors and tone defeat; 45 W/ch continuous with 0.05% THD and IM dist.; slew rate 20 V/μsec; damping factor 75; main amp input sensitivity 0.85 V; S/N (A weighted) 101 dB (main amp), 92 dB (high level) $315
3030. Similar to 3045 without two-way tape dubbing; 30 W/ch with 0.09% THD; slew rate 15 V/μsec; damping factor 50; phono overload 190 mV; THD 0.02%; S/N 80 dB at 10 mV (phono); high-level input impedance 50k ohms; 5.5" H × 15.4" W × 10.6" D $230

3020 Stereo Integrated Amplifier
Power amp: features five-LED peak-reading display; 20 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; slew rate 15 V/μsec; damping factor 50 at 8 ohms. Preamp: features bass, treble, and balance controls; audio muting and loudness switches; input selectors; input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/20k ohms (high level); phono overload 270 mV at 1000 Hz; frequency response ±0.3 dB (phono RIAA), 20-20,000 Hz ±0.5 dB; S/N (A weighted) 81 dB at 10 mV (phono), 96 dB (high level); 3.8" H × 16.5" W × 9.5" D $175

NAIM by AUDIOPHILE SYSTEMS

NAP 110 Power/NAC 42 Pre- Amplifiers
Separate units sold as pair. Power amp: 40 W continuous into 8 ohms from 20-20,000 Hz with

0.02% THD and IM dist; frequency response 5-40,000 Hz ±3 dB; transient capability 150 VA; 5" H × 8" W × 11" D. Preamp: features phono, tape, and tuner inputs, normal/mute/monitor switch, and balance control; input sensitivity 2.0 mV (phono), 75 mV (high level); frequency response 20-20,000 Hz ±0.5 dB; THD and IM dist. 0.02%; phono overload 200 mV; 3" H × 8" W × 11" D $1090

NIKKO

NA-890 Stereo Integrated Amplifier
Power amp: features fully complementary OCL circuitry; dual power meters with 5 W and 100 W meter range control; two-way speaker switching; 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; damping factor 60 at 8 ohms, 1000 Hz. Preamp: features discrete transistors in phono section; bass and treble controls with tone defeat; −20-dB audio muting and loudness switches; subsonic and high filter switches; two-way tape monitoring and dubbing; input selector; input sensitivity/impedance 2.3 mV/47k ohms (phono), 150 mV/50k ohms (aux., tuner, tape); frequency response ±0.2 dB from 30-15,000 Hz (phono RIAA), 20-20,000 Hz

±0.2 dB (aux. and tape); S/N (IHF A) 85 dB (phono), 100 dB (aux., tuner, tape); 5⅓" H × 16½" W × 13¹⁵/₁₆" D $350

NA-690. Similar to NA-890 without meter range selector, audio muting, and tone defeat switches; 45 W/ch under same conditions $250

NA-590. Similar to NA-690 without dual power meters, speaker switching, two-way tape dubbing, and high filter switch; 35 W/ch continuous with 0.05% THD and IM dist; frequency response ±1 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz ±0.5 dB; S/N 80 dB (phono), 90 dB (aux., tuner, and tape); 3⅜" H × 17½" W × 14⅛" D $210

NA-790 Stereo Integrated Amplifier

Power amp: features low-distortion, low-noise circuitry; speaker protection system; 53 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist.; damping factor 60 into 8 ohms. Preamp: features built-in moving-coil head amp; subsonic filter; bass and treble controls; phono input sensitivity 2.3 mV/50k ohms; frequency response ±0.5 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz ±0.5 dB (high level); phono S/N 82 dB; phono overload 200 mV at 1000 Hz; rack-mountable; 3⅜" H × 16½" W × 12¾" D $280

ONKYO

A-7090 Stereo Integrated Amplifier

Power amp: features servo-controlled circuitry (servo loop functions as phase inversion and bass

amplification as well as negative feedback circuitry); all-stage direct-coupled OCL discrete circuitry; dual power supplies; electronic amp and speaker protection relays; dual eight-LED peak power bar display with center power LED and X0.01, X0.1, and X1 pushbutton range selector; 110 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.018% THD and IM dist.; frequency response 5-80,000 Hz ±1 dB; S/N 110 dB (IHF A); damping factor 50 into 8 ohms. Preamp: features built-in moving-coil head amp; bass and treble controls with separate turnover frequency controls and tone defeat; loudness and −20-dB muting; two-way speaker switching with A, B, and C speaker terminals; two-way tape dubbing and monitoring; low and high filter switch; mode selector; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 250 μV/40 ohms (phono MC), 150 mV/50k ohms (tuner, aux., tape); THD and IM dist. 0.01%; frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 10-50,000 Hz +0/−1 dB (aux.); S/N (IHF A) 78 dB (phono MM), 68 dB (phono MC), 90 dB (aux.); phono overload 250 mV rms at 1000 Hz. Power and preamp separable through EPS front-panel switch; 6⅛" H × 16½" W × 16¹³/₁₆" D $700

A-7070 Stereo Integrated Amplifier

Power amp: features servo-controlled circuitry; all-stage direct-coupled OCL circuitry; dual power supplies; electronic amp and speaker protector relays; dual eight-LED peak power bar display with center power LED and X0.1, X1 range selector; 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; frequency response 15-50,000 Hz ±1 dB; damping factor 50 into 8 ohms. Preamp: features bass and treble controls with separate tone defeat switches; low and high filters; mode, loudness, and −20-dB muting; two-way speaker switching; two-way tape monitoring and dubbing; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 150 mV/50k ohms (tuner, aux., tape); frequency response 20-20,000 Hz ±0.3 dB (RIAA phono); S/N (IHF A) 80 dB (phono), 90 dB (aux.); phono overload 200 mV rms at 1000 Hz. 4¹³/₁₆" H × 16½" W × 15⅜" D $430

A-7040 Stereo Integrated Amplifier

Power amp: features servo-controlled circuitry; all-stage direct-coupled OCL circuitry; dual power supplies; speaker protection; dual five-LED peak power bar display with center power LED and X0.1, X1 range selector; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.026% THD and IM dist.; frequency response 15-50,000 Hz ±1 dB; damping factor 45 into 8 ohms. Preamp: features bass and treble controls; balance control; high cut filter; mode and loudness switches; two-way speaker switching; two tape monitor switches with one-way dubbing; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 150 mV/50k ohms (tuner and tape); phono frequency response ±0.5 dB from 20-20,000 Hz (RIAA); S/N (IHF A) 80 dB (phono), 90 dB (tuner); phono overload 170 mV rms at 1000 Hz; 4¹³/₁₆" H × 16½" W × 15⅜" D $300

OPTONICA

SM-7305 Stereo Integrated Amplifier

Power amp: features dual-LED power output bar graph display; two-speaker switching; two-color LED protection indicator; 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD. Preamp: features bass and treble controls with variable tone defeat; balance control; 15 and 30 Hz subsonic and 8000 and 15,000 Hz high filter buttons; mono mode; two-way tape dubbing and monitoring; loudness and 20-dB muting; input selector with LEDs. S/N 80 dB (phono, low), 90 dB (phono, high), 100 dB (aux.); RIAA deviation ±0.3 dB from 20-20,000 Hz; phono overload 300 mV; ebony faceplate; 2.9" H × 16.9" W × 15" D.. ..... $460

SM-4305 Stereo Integrated Amplifier

Power amp: has two-way speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD. Preamp: features bass and treble controls; subsonic and high filter buttons; two-way tape dubbing and monitoring; mono mode switch; loudness and 20-dB muting; balance control; input selector with LEDs; S/N 75 dB (phono, low), 85 dB (phono, high), 90 dB (aux.); phono RIAA deviation ±0.4 dB from 20-20,000 Hz; phono overload 250 mV; ebony faceplate; 2.9" H × 16.9" W × 15" D $300

SM-3201 Integrated Amplifier

40 W/ch continuous into 8 ohms over 20-20,000 Hz with 0.19% THD; two output meters; two-way tape dubbing; mode selector switch; tone controls; negative feedback tone control amp; −20 dB audio muting; loudness contour; high and low filters; 41-position detent volume control; speaker selector A and A+B; headphone jack $260

SM-3205. Same as SM-3201, except in ebony finish $260

JC PENNEY

3865 Integrated Amplifier

Features separate left/right power meters; two deck provisions for tape dubbing; tape monitor switch; mode selector with speaker reverse; volume, balance, tone defeat, and loudness controls; switchable speaker selector; headphone jack; dual power supplies. 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD; IM dist. 0.02%; RIAA phono deviation ±0.5 dB from 20-20,000 Hz; S/N 86 dB; phono overload 360 mV; bass and treble control range ±9 dB. $400

3845 Integrated Amplifier

Features separate left/right power meters; two deck provisions for tape dubbing; tape monitor switch; switchable speaker selector; volume, balance, and loudness controls; mode selector; headphone jack. 45 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD and IM dist.; S/N 75 dB; phono overload 170 mV; RIAA deviation ±0.3 dB from 20-20,000 Hz; bass and treble control range ±9 dB $240

3835 Integrated Amplifier

Features separate left/right power meters; two deck provisions for tape dubbing; tape monitor switch; volume, balance, and loudness controls; headphone jack. 35 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD and IM dist.; S/N 75 dB; phono overload 170 mV; bass and treble tone control range ±8 dB; RIAA deviation ±0.5 dB from 20-20,000 Hz $200

PHILIPS

AH388 Integrated Amplifier

Power amplifier: 80 W continuous into 8 ohms from 20-20,000 Hz with 0.05% THD; IM dist. 0.05% at

40 W. Preamplifier: input sensitivity 2.5 mV (phono 1, 2), 200 mV (aux., tuner, tape), 2.0 mV (mic); S/N 70 dB (phono 1, 2), 65 dB (mic), 85 dB (aux. and tuner); dist. 0.02% (equalizer). Features step detented volume control; center detented balance control; separate bass (±10 dB) and treble (±12 dB) controls; high and low filters (−6 dB/octave); tuner, phono 1 and 2, and aux. inputs; tape monitor; switchable six-speaker capability; headphone jack, mic jack and mixing; audio muting; illuminated power output meters; two ac receptacles. 5½" H × 19" W × 14" D $470

AH3881. Black chassis $490

AH386. Similar to AH 388 except 60 W continuous; S/N 65 dB (phono 1, 2, and mic); bass and treble controls ±10 dB; switchable four-speaker capability $360

AH3861. Black chassis $380

AH384. Similar to AH386 except 40 W continuous; bass (±10 dB) and treble (±12 dB) controls; tape monitoring and dubbing; no mic jack and mixing $330

AH3841. Black chassis $350

PIONEER

SA-9800 Stereo Integrated Amplifier

Power amp section: features dual-LED peak power bar graph display with dim/bright meter switch; two-

speaker switching; 100 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.005% THD. Preamp: features built-in moving-coil head amp; bass and treble controls with turnover frequencies and tone defeat; subsonic and high filters; balance control; loudness and audio muting switches; mode selector; two-way tape dubbing and monitoring; input selector with two cartridge capacitance load selectors. 6¹/₈" H × 17¹¹/₁₆" W × 16³/₄" D $750

2 INTEGRATED AMPLIFIERS

SA-8800 Stereo Integrated Amplifier
Power amp: features dc circuitry in hybrid Class A/B configuration; non-switching output; dual power supplies; four ring emitter transistors/ch; dual-LED peak power bar graph display; two-speaker switching; 80 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.005% THD and 0.002% IM dist.; frequency response 5-200,000 Hz +0/−2 dB; damping factor 55 from 20-20,000 Hz, 8 ohms; hum and noise −118 dB (short-circuited A); input sensitivity/impedance 1 V/50k ohms. Preamp: features dc flat amp and low-noise phono equalizer; bass and treble controls with tone defeat; subsonic and high filters; balance and mode switches; loudness and −20-dB muting; two-way tape dubbing and monitoring; input selector with two cartridge load capacitance selectors; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 150 mV/50k ohms (tuner, aux., tape); phono overload 250 mV; THD 0.006% from 10-50,000 Hz; frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 5-100,000 Hz +0/−1 dB (tuner, aux., tape); S/N (A, short-circuited) 90 dB (phono), 110 dB (tuner, aux., tape). Walnut-grain vinyl cabinet; 6 1/8" H × 17 11/16" W × 16 3/4" D..... $550
SA-7800. Similar to SA-8800 minus high filter and phono 2 input with cartridge capacitance selectors; 65 W/ch continuous with 0.009% THD and 0.003% IM dist.; phono overload 200 mV; phono S/N 87 dB (short-circuited, A); 6 1/8" H × 11 7/16" W × 14 13/16" D..... $450
SA-6800. Similar to SA-7800 minus non-switching output, muting, and mode switches; one-way tape dubbing; 45 W/ch continuous with 0.03% THD and IM dist.; damping factor 30 from 20-20,000 Hz; phono overload 180 mV; frequency response ±0.3 dB from 30-15,000 Hz (phono RIAA), 10-50,000 Hz +0/−1.5 dB (tuner, aux., tape); S/N 78 dB (phono), 100 dB (tuner, aux., tape); 5 15/16" H × 17 3/4" W × 10 11/16" D..... $300
SA-5800. Similar to SA-6800 minus dc power circuitry and tone defeat; 25 W/ch under same conditions; phono input sensitivity/impedance 2.5 mV/47k ohms; phono overload 140 mV; frequency response ±0.5 dB from 30-15,000 Hz (phono RIAA), 20-40,000 Hz ±2 dB (tuner, aux., tape); S/N 76 dB (phono), 98 dB (tuner, aux., tape)..... $200

ROGERS by REFERENCE

A75 Series 2 Stereo Integrated Amplifier
Power amp: features dc coupled circuitry; 45 W/ch continuous sine wave into 8 ohms from 30-30,000 Hz; THD 0.08% at 1000 Hz up to 40 W, 8-ohm load; damping factor 30 at 50 Hz, 10 W into 8 ohms. Preamp: features bass and treble controls; high- and low-pass filters; two-way tape dubbing and monitoring; input selector with LEDs; input sensitivity/impedance 2.7, 4, 63, 90 mV/47k ohms (phono), 180 mV/100k ohms (tuner, tape, aux.); frequency response ±1 dB (phono RIAA), 25-20,000 Hz ±1 dB (tuner, tape, aux.); S/N 70 dB (phono), 80 dB (high level). 4 1/2" H × 14 1/4" W × 11 1/4" D..... $530

ROTEL

RA-2040 Stereo Integrated Amplifier
Power amplifier: dc OTL complementary push-pull power circuitry; 120 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD and IM dist., 140 W/ch continuous into 4 ohms at 1000 Hz; frequency response 0-200,000 Hz ±3 dB. Preamplifier: dc FET phono equalizer and RIAA equalization; S/N (IHF "A") 80 dB (phono), 100 dB (tuner and tape); input sensitivity/impedance 2 mV/50,000 ohms (phono 1 and 2), 0.1 mV/33 ohms (moving-coil phono), 150 mV/50,000 ohms (tuner, aux., tape), 980 mV/33,000 ohms (main in); 12 dB/octave subsonic filter at 15 Hz, 12 dB/octave supersonic filter at 24,000 Hz; phono overload 450 mV. Features stepped bass and treble controls with turnover switches; full tape dubbing; loudness switch; audio muting switch; peak LED bar-chart power indicators; additional capacitance and load impedance controls; two speaker pair connections; headphone jack. 5 3/8" H × 19" W × 16 1/16" D..... $880
RA-2030. Similar to RA-2040 except 80 W/ch continuous into 8 ohms, 110 W/ch continuous into 4 ohms; frequency response 0-125,000 Hz; phono overload 300 mV. Features similar except includes moving-coil head amplifier..... $680
RA-2020. Similar to RA-2030 except 60 W/ch continuous, both channels driven into 8 ohms, 85 W/ch into 4 ohms; THD and IM dist. 0.02%; frequency response 0-100,000 Hz ±3 dB; S/N 75 dB (phono), 95 dB (tuner and tape); phono overload 200 mV. Features similar to RA-2030 less recording selector and capacitance and load impedance switches; 12 7/8" D..... $485

RA-1000 Stereo Integrated Amplifier
Power amp: features dc circuitry; two-speaker switching; 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; frequency response 5-70,000 Hz +0/−1 dB. Preamp: features two-way tape dubbing and monitoring; phono selector for MM cartridges; subsonic filter; mode and loudness controls; −15-dB audio muting; input sensitivity/impedance 2.5 mV/50k ohms (phono), 150 mV/50k ohms (tuner and aux.); S/N 75 dB (phono), 85 dB (aux. and tuner). Equalizer: eight bands using OP amplifier; center frequencies set at 40, 100, 200, 400, 1000, 2500, 5000, and 10,000 Hz, ±12 dB boost or cut; 3 27/32" H × 16 15/16" W × 11 13/32" D..... $360

SAE

2922 Integrated Amplifier
Combines SAE 2200 power amplifier and 2900 preamplifier with parametric equalizer; features tape/line filters and two-stage phono circuit... $850

3022 Integrated Amplifier
Combines SAE 2200 power amplifier and 3000 preamplifier; features separate bass, midrange. and treble controls for each channel, tape/line filters, and two-stage phono circuit..... $700

A14 Stereo Integrated Amplifier
Features LED power and tape output bar graph display; parametric equalization with tape EQ; moving-coil phono input; subsonic filter. 140 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD..... $650

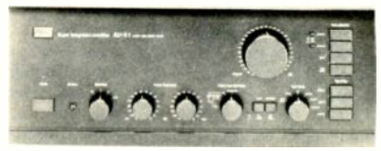
3031 Integrated Amplifier
Combines SAE 3100 power amp and 3000 preamp. Features three-band tone controls/ch, tape/line filters, and two-stage phono circuit..... $550

A7 Stereo Integrated Amplifier
Features LED power output bar graph display; bass, midrange, and treble controls; external processor input; two-way tape dubbing and monitoring; subsonic filter. 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD..... $400

C3A Integrated Amplifier
50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.05% THD; features full complementary circuitry, full tape copy capabilities, stepped volume, bass, and treble controls, dual power level indicators, subsonic filter, and muting switch..... $325

SANSUI

AU-X1 DD/DC Integrated Amplifier
Features "Diamond Differential dc circuitry" in phono equalizer and driver stage in power amp section; separate left/right power amp level controls; power amp operation control with ac/dc 1/dc 2/integrated settings; jump switch (bypasses 14-dB gain of preamp output section); switchable (−3 dB at 16 Hz) subsonic filter; input selector for phono 1 and 2 with moving magnet and moving-coil provision, tuner, and aux/tuner; two-way tape dubbing and monitoring; A and B speaker switching. Power amp: output 160 W/ch continuous, both channels driven into 8 ohms from 5-20,000 Hz with 0.008% THD; frequency response 0-500,000 Hz; slew rate 260 V/μsec; rise time 0.5 μsec. Phono preamp: frequency response ±0.2 dB from 20-20,000 Hz (RIAA); S/N 91 dB (moving-magnet), 76 dB (moving-coil), 100 dB (aux.); phono overload 330 mV; matte black finish with rack-mounting..... $1450



AU-919 DD/DC Integrated Amplifier
Features "Diamond Differential dc circuitry"; bass control with 150 and 300 Hz turnover frequency selectors, treble control with 3000 and 6000 Hz turnover frequency selectors; tone defeat; switchable subsonic filter; −20-dB muting; jump switch (bypasses 14-dB gain of preamp output); left/right balance control; A and B speaker switching; two-way tape dubbing and monitoring; input selector with LEDs for moving-magnet phono 2, moving-coil and moving-magnet phono 1 (switchable to built-in ICL dc pre-preamp), tuner, and aux. Power amp: 110 W/ch continuous, both channels driven into 8 ohms from 5-20,000 Hz with 0.008% THD; frequency response 0-500,000 Hz +0/−3 dB; slew rate 200 V/μsec; rise time 0.5 μsec. Phono preamp: frequency response 20-20,000 Hz ±0.2 dB (RIAA); overload 320 mV; S/N 90 dB (moving-magnet), −154 dB (moving-coil); matte black finish; detachable rack-mount adaptors..... $800
AU-819. Similar to AU-919 without muting switch; has loudness compensation switch; power output 90 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.008% THD; phono overload 350 mV..... $700
AU-719. Similar to AU-819 minus phono 1 moving-coil input and jump switch; has −20-dB muting switch; power output 90 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.015% THD; power amp frequency response 0-400,000 Hz +0/−3 dB; slew rate 170 V/μsec; phono overload 230 mV; S/N 88 dB (phono), 100 dB (aux.)..... $575
AU-519. Similar to AU-719 minus muting switch and bass and treble turnover frequency selectors; built-in subsonic filter and loudness compensation have switch-selectable options; power output 70 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.009% THD; slew rate 160 V/μsec; phono overload 300 mV..... $500

AU-717 DC Integrated Amplifier
Power amp: features dc circuitry; left and right power supplies; dc voltage detection and overload current detection circuitry; A and B speaker switching; one-touch speaker terminal pushbutton; three ac outlets; output 85 W/ch continuous, both channels driven into 8 ohms from 10-20,000 Hz with 0.025% THD; IM dist. 0.01%; damping factor 60 into 8 ohms at 1000 Hz; slew rate 60 V/μsec; rise time 1.4 μsec; frequency response 0-200,000 Hz +0/−3 dB. Preamp: features 16- and 10,000-Hz subsonic and high filters on 6/dB octave slope; attenuated volume control; −20-dB audio muting; two-deck tape facilities; speaker switching for two systems; loudness control; LED input selector for phono 1 and 2, tuner, and aux.; tone defeat switch; bass control with 200 and 400 Hz turnover frequency selector and treble control with 3000 and

6000 Hz turnover frequency selectors; frequency response 20-20,000 Hz ±0.2 dB (phono RIAA); hum and noise −80 dB (phono 1 and 2), −100 dB (aux., tuner, tape); input sensitivity/impedance 2.5 mV/47k ohms (phono 1 and 2), 150 mV/47k ohms (aux., tuner, and tape); phono overload 350 mV rms (phono 1 and 2). Rear-panel switch for preamp/power amp separation; matte black finish; EIA rack-mount brackets; 6⅜" H × 18¹⁹/₁₆" W × 16½" D (with rack mount) $550

AU-417. Similar to AU-517 except power output 65 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD; phono overload 300 mV $395

AU-317. Similar to AU-417 except power output 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; power amp frequency response 0-200,000 Hz +0/−2.5 dB; slew rate 40 V/μsec; phono S/N 77 dB; phono overload 200 mV $350

AU-217II Integrated Amplifier

Features bass, treble, and balance controls; high filter, loudness, and source/tape monitor switches; input selector for switchable subsonic filter, phono, tuner, and tape/aux. Power output: 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.06% THD. Preamp: frequency response ±0.5 dB from 30-15,000 Hz (RIAA); phono sensitivity 2.5 mV; S/N 76 dB (phono), 94 dB (aux.); phono overload 180 mV; matte black finish; rack mountable $230

AU-117II. Similar to AU-217II without phono subsonic filter; power output 25 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.17% THD; phono overload 150 mV $190

SANYO

PLUS A35 Integrated Amplifier

Power amp: features dc-coupled and two cascaded differential amplifier circuitry; dual 12-LED peak

power bar graph display with X0.1 and X1 display range selector; four-way output protection; two-way speaker switching; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.02% THD and IM dist.; frequency response 7-100,000 Hz +0/−1 dB; S/N 110 dB (IHF A); damping factor 50; slew rate 90 V/μsec. Preamp: features Class A phono preamp circuitry with moving-coil cartridge capability; subsonic and high filters; bass and treble controls; loudness switch; two-way tape dubbing and monitoring; input selector buttons with LEDs; input sensitivity/impedance 2.5 mV/47k ohms (phono MM), 250 μV/100 ohms (phono MC), 150 mV/47k ohms (aux. and tape); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 20-20,000 Hz ±0.5 dB (aux. and tape); S/N (IHF A) 85 dB (phono MM), 70 dB aux., tape, phono (MC); max. phono input 250 mV rms (MM), 25 mV rms (MC); includes rack-mount handles; 3½" H × 19" W (with handles) × 10⅜" D $300

DCA611 Integrated Amplifier

60 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.08% THD; IM dist. 0.05%; frequency response 20-20,000 Hz +0/−1 dB (aux. and tape), RIAA phono deviation ±0.5 dB from 30-15,000 Hz; phono sensitivity/overload 2.5/150 mV; aux. and tape sensitivity/impedance 150 mV/50,000 ohms; low (12 dB/octave at 30 Hz) and high (6 dB/octave at 7000 Hz) filters; tone control ±10 dB at 100 and 10,000 Hz. Features separate midrange control ±10 dB at 1000 Hz; two-deck tape monitoring and dubbing; front-panel record jack; two peak power meters; 41-step attenuator volume control; switchable (A, B or A+B) speaker selector switch. 5⅞" H × 16½" W × 13¾" D $270

DCA411. Similar to DCA611 except 45 W/ch; no midrange and low filter controls $200

DCA311. Similar to DCA411 except 30 W/ch and less tape monitoring/dubbing facilities $180

H.H. SCOTT

480A Stereo Integrated Amplifier

85 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM

dist; input sensitivity 2.5 mV (phono), switchable 2.5/5.0 mV (phono 2), 150 mV (high level); S/N (weighted, input shorted) 90 dB (phono), 95 dB (high level); RIAA equalization ±0.5 dB from 20-20,000 Hz, high level at 1 W; phono overload switchable 180 and 360 mV; separate bass (±10 dB at 100 Hz), midrange (±6 dB at 1000 Hz), and treble (±10 dB at 10,000 Hz) tone controls; high (12 dB/octave at 8000 Hz) and subsonic (12 dB/octave at 18 Hz) filters; channel separation 65 dB at 1000 Hz (phono), 75 dB at 1000 Hz (high level); crosstalk 80 dB at 1000 Hz; damping factor 100 at 1000 Hz into 8 ohms. Features two independent phono preamps, bimodal electro-sensor relay protection and delay circuit; linear to logarithmic op amp meter drive converters; 32-detent logarithmic dB-calibrated volume attenuator; variable impedance and capacitance selection; five-position mode switch; separate record and input selectors; accessory input switch; phono sensitivity switch; center detent balance control; dual range output power level meters calibrated in watts and dBW; two tape monitors with full tape copy; switchable speaker selector; 5¼" H × 17" W × 14¼" D $500

460A. Similar to 480A except 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.04% THD and IM dist. Features similar but no variable impedance/capacitance selection and no accessory input switch $430

440A. Similar to 460A except 55 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.05% THD and IM dist.; S/N (weighted, input shorted) 85 dB (phono), 90 dB (high level); phono overload 180 mV; channel separation 60 dB (phono), 70 dB (high level); no subsonic filter. Features similar except two-position mode selector and no record and input selectors; 5¼" H × 17" W × 11¾" D $350

420A. Similar to 440A except 40 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.08% THD and IM dist.; S/N (weighted, input shorted) 80 dB (phono), 85 dB (high level); high-level frequency response 20-20,000 Hz ±1 dB; channel separation at 1000 Hz 55 dB (phono), 60 dB (high level); damping factor 60 at 1000 Hz into 8 ohms. Features similar but no midrange control and no high and subsonic filters $250

SERIES 20

A-27 Stereo Integrated Amplifier

Power amp: features class AB circuitry; two-speaker switching; 120 W/ch continuous, both channels driven into 8 ohms from 5-30,000 Hz with 0.015% THD and 0.006% IM dist.; frequency response 5-200,000 Hz +0/−1 dB; damping factor 60 from 5-30,000 Hz, 8 ohms; hum and noise −120 dB (IHF A); input sensitivity/impedance 1 V/50k ohms. Preamp: features built-in moving-coil head amp; separate 50 and 100 Hz bass and 10,000 and 20,000 Hz treble controls with tone defeat; low filter; two-way tape dubbing and monitoring; phono capacitance/resistance selectors; −20-dB audio muting; input selector with LEDs and separate MM/MC phono selector; input sensitivity/impedance 2.5 mV/100, 10k, 25k, 50k, and 100k ohms switchable (phono MM), 250 μV/100 ohms (MC), 150 mV/50k ohms (tuner, aux., tape); phono overload 300 mV (MM), 30 mV (MC); frequency response ±0.2 dB from 20-20,000 Hz (phono RIAA), 8-100,000 Hz +0/−1 dB (tuner, aux., tape); S/N (IHF A) 90 dB (phono MM), 78 dB (MC), 100 dB (tuner, aux., tape); 6⅜" H × 17⅞" W × 18⅞" D $1300

SHARP

SM-1122 Integrated Amplifier

OTL dc stereo integrated amplifier. 15 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.8% THD; IM dist. 0.3% at rated power; damping factor 40 at 8 ohms, 1000 Hz; input sensitivity/impedance 3.0 mV/40,000 ohms (phono), 150 mV/40,000 ohms (tuner and aux.), 290 mV/40,000 ohms (tape), 2.5 mV/600 ohms (mic); output level 150 mV (tape), 95 mV (mic out); frequency response 15-70,000 Hz ±3 dB (tape, tuner, aux.), RIAA phono deviation +0.5/−0.5 dB from 20-20,000 Hz. Features 41-step calibrated volume control, LED indicators for all functions, switchable loudness control, front-panel stereo headphone input, front-panel mic input with mic mixing level control, A, B/ A+B speaker selector switch, pushbutton function switches, and fader control. 5⅜" H × 15⅜" W × 10⅛" D $270

SM-1144. Similar to SM-1122 except 22 W/ch continuous with 0.4% THD; has two tape monitor switches with one-way dubbing and rumble filter; RIAA phono deviation ±1.0 dB; phono overload 200 mV $350

MCR-1800. Audio component rack in wood vinyl finish; 39⅜" H × 17" W × 15" D $70

SHERWOOD

S-702 CP Stereo Integrated Amplifier

Power amp: features three separate circuits for protection of speakers and amplifier; two-speaker switching; 60 W/ch continuous, both channels dri-

2 INTEGRATED AMPLIFIERS

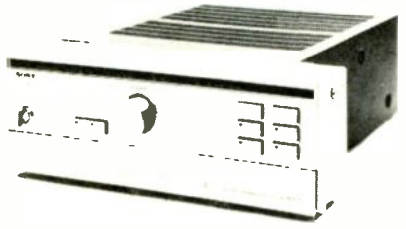
ven into 8 ohms from 20-20,000 Hz with 0.2% THD and IM dist.; frequency response 5-110,000 Hz ±1 dB; S/N 105 dB (IHF A weighted); damping factor 30:1 at 8 ohms; input sensitivity/impedance 1.0 V/50k ohms. Preamp: features bass and treble controls with tone defeat; subsonic and high filters; loudness and mode switches; two-way tape dubbing and monitoring; mic mixing; input selector; input sensitivity/impedance 2.5 mV/47k ohms (phono), 160 mV/50k ohms (aux. and tape); phono overload 200 mV at 1000 Hz; S/N (IHF A) 80 dB (phono), 95 dB (aux.), 80 dB (mic); frequency response ±0.5 dB (phono RIAA), 20-20,000 Hz ±0.5 dB. 5¹/₂" H × 17¹/₄" W × 12³/₄" D..... $350

S-402 CP. Similar to S-702 CP minus subsonic filter and tone defeat; 35 W/ch continuous under same conditions; S/N (IHF A) 100 dB (main amp), 90 dB (aux.) $250

SONY

TA-F70 Stereo Integrated Amplifier

Power amp section: features direct-coupled dc circuitry; pulse power supply; Thermo-Dynamic cool-



ing system; 20-LED peak power bar display (from 0.01-130 W); connections for two pairs of speaker systems; 90 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.007% THD and IM dist.; frequency response 0-100,000 Hz +0/−1 dB; damping factor 100 at 8 ohms, 1000 Hz. Preamp: features low-noise transistor that provides for phono moving-coil cartridge; bass and treble controls with electronic tone defeat; switchable subsonic filter; two tape monitors with two-way tape dubbing; signal processing bypass selector; LED input and tape monitor selectors; input sensitivity/impedance 2.5 mV/50k ohms (phono MM), 0.125 mV/33 or 100 ohms (phono MC), 150 mV/50k ohms (tuner, aux., tape); max. phono input 300 mV (MM), 15 mV (MC); phono RIAA ±0.2 dB; S/N (IHF A) 88 dB (MM), 78 dB (MC), 105 dB (tuner, aux., tape); 6³/₁₆" H × 17" W × 16¹³/₁₆" D..... $725

TA-F6B Stereo Integrated Amplifier

Power amp: features direct-coupled dc circuitry; pulse locked power supply; dual power output meters; two-way speaker switching; 100 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD and IM dist.; frequency response 0-100,000 Hz +0/−1 dB; damping factor 50 at 8 ohms; S/N 115 dB (A weighted). Preamp: features direct-coupled phono EQ amplifier and moving-coil preamp; bass and treble controls with tone defeat; low and high filter switches; −20 dB muting; two-way tape dubbing and monitoring; mode switch; input sensitivity/impedance 2.5 mV/50k ohms (phono 1 and 2), 0.08 mV/100 ohms (head amp), 150 mV/150k ohms (tuner, aux., tape); max. input 250 mV (phono 1 and 2), 8 mV (head amp); frequency response ±0.2 dB (phono RIAA), 2-150,000 Hz +0/−1 dB (tuner, aux., tape); THD and IM dist. 0.003%; S/N (A weighted) 85 dB (phono 1, 2), 70 dB (head amp), 105 dB (tuner, aux., tape); 6¹¹/₁₆" H × 16¹⁵/₁₆" W × 15⁵/₈" D $610

TA-F60 Stereo Integrated Amplifier

Power amp: features pulse power supply; Thermo-Dynamic cooling system; dual 13-LED peak power level display; two-way speaker switching; 75 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD and IM dist.; frequency response 3-70,000 Hz +0/−1 dB; damping factor 40 at 8 ohms, 1000 Hz. Preamp: features low-noise transistor for moving-coil cartridge, bass and treble controls with tone defeat; switchable subsonic filter; two-way tape dubbing with monitor switch; input selectors with LED indicators; input sensitivity/impedance 2.5 mV/50k ohms (MM), 0.25 mV/100 ohms (MC), 150 mV/50k ohms (tuner, aux., tape); max. phono input 250 mV (MM), 25 mV (MC); phono RIAA equalization ±0.2 dB; S/N (IHF A) 88 dB (MM), 75 dB (MC), 100 dB (tuner, aux., tape); 6³/₁₆" H × 17" W × 13⁷/₁₆" D $450

TA-F40. Similar to TA-F60 minus subsonic filter, two-way tape dubbing, and mono/stereo mode switch; has dual six-LED peak power level indicators and tape monitor switch; 50 W/ch under same conditions; power amp frequency response 5-70,000 Hz +0/−1 dB; damping factor 50; 3¹/₄" H × 17" W × 13¹/₄" D $350

TA-F30 Integrated Amplifier

Features electronic tone defeat and LED power output indicators; 30 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.03% THD; S/N 86 dB (phono); frequency response 5-60,000 Hz +0/−2 dB; 3¹/₄" H × 17" W × 13¹/₄" D..... $260

Precise Series

TA-P7F Mini Stereo Integrated Amplifier

Power amp: features pulse power supply; Thermo-Dynamic cooling system; LED peak power indicators; 50 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz with 0.01% THD and IM dist.; frequency response 5-60,000 Hz +0/−1 dB; damping factor 35 at 8 ohms, 1000 Hz. Preamp: features built-in moving coil capability through low-noise transistor; bass and treble controls with electronic tone defeat, acoustic compensator with two-position bass boost and loudness, balance, switchable subsonic filter, and MM/MC cartridge selector located behind removable front panel; input selectors with LEDs; input sensitivity/impedance 2.5 mV/50k ohms (phono MM), 0.25 mV/100 (phono MC), 150 mV/50k ohms (tuner, aux., tape); max. input 120 mV (MM), 12 mV (MC); phono RIAA ±0.2 dB; S/N (IHF A) 88 dB (MM), 75 dB (MC), 100 dB (tuner, aux., tape); complements miniature Precise Series ST-P7J tuner and PS-P7X turntable; 3¹/₄" H × 8¹/₂" W × 13" D..... $500

STUDER/REVOX

B750 Integrated Amplifier

Fully complementary integrated stereo amplifier with equalizer connections and tape copy circuitry.

Amplifier: 80 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz ±0.5 dB with 0.2% THD; damping factor better than 75 dB at 8 ohms; input sensitivity/impedance 1 V/10,000 ohms; phono overload 400 mV, 9 V (tuner, aux., tape 1 and 2). Preamplifier: input sensitivity/impedance 200 mV/100,000 ohms (tuner, aux., tape 1 and 2), 5 mV/25,000, 50,000, 100,000 ohms (phono 1), 5 mV/50,000 ohms (phono 2); output/load impedance 6.5 mV/10,000 ohms (tape 2 out), 15.5 V/4 ohms (speaker A and B), 200 mV/50,000 ohms (tape 1 and 2), 1 V/10,000 ohms (pre out), 15.5 V/100 ohms (phone 1 and 2); S/N 90 dB unweighted (tuner, aux., tape 1 and 2), 70 dB unweighted (phono 1 and 2); channel separation at 1000 Hz better than 60 dB; RIAA phono equalization ±0.5 dB from 20-20,000 Hz. Features separate bass, treble, and presence controls (±8 dB in 2-dB steps) with tone defeat switch; 20-dB front-panel level pad; high (12 dB/octave at 8000 Hz) and low (12 dB/octave at 50 Hz) filters; calibrated balance control; two-deck capability with tape copy function; switchable A/B and A+B speaker selector; preamp out and power amp in accessible for outboard equalizer or other accessory; two headphone jacks. 6" H × 17⁴/₈" W × 13³/₄" D..... $999

TECHNICS

SU-8099 Stereo Integrated Amplifier

Power amp: features dc circuitry; fluorescent peak-reading power display with range selector and LED dimmer; 115 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.007% THD. Preamp: features built-in moving-coil head amp; tape/source monitor switch with two-way tape dubbing; bass and treble controls with turnover frequencies; subsonic filter; S/N 102 dB at 10 mV in (phono)..... $1000

SU-8088 Stereo Integrated Amplifier

Power amp section: features dc circuitry and fluorescent peak-reading power meter display with range selector and dimmer control; 80 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.01% THD. Preamp: features built-in moving-coil head amp; bass and treble controls with turnover frequency selectors; subsonic filter; tape/source monitor switch with two-way tape dubbing; S/N 102 dB at 10 mV in (phono)..... $600

SU-8077 Stereo Integrated Amplifier

Power amp: features dc circuitry and fluorescent peak-reading power meter display with range selector and LED dimmer; 60 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.02% THD. Preamp: features built-in moving coil head amp; tape/source monitor switch with two-way tape dubbing; subsonic filter; S/N 100 dB at 10 mV (phono) $450

SU-8055 Stereo Integrated Amplifier

Power amp: features dc circuitry and fluorescent peak-reading power meter display with range selector and LED dimmer; 47 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.02% THD. Preamp: features three-stage dc phono equalizer; tape/source monitor switch with two-way tape dubbing; subsonic filter; accommodates moving-coil cartridges; S/N 98 dB at 10 mV in (phono) $300

SU-8044 Stereo Integrated Amplifier

Power amp: features dc circuitry and fluorescent peak-reading power meter display with range selector; 38 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.02% THD. Preamp: features three-stage dc phono equalizer; tape/source monitor switch with two-way tape dubbing; S/N 94 dB at 10 mV in (phono) $260

SU-8011 Stereo Integrated Amplifier

Power amp: features dc circuitry; power supply with floating-coil transformer; LED peak-power meter indicators with range selector; main/remote speaker switches; 25 W/ch continuous into 8 ohms from 20-20,000 Hz with 0.08% THD. Preamp: features three-stage direct-coupled phono equalizer; bass and treble controls; source/tape monitor switch; loudness switch; input selector; S/N 80 dB at 2.5 mV in (phono); pearl-gray metal cabinet..... $175

TOSHIBA

SB-420 Integrated Amplifier

42 W/ch continuous, both channels driven into 8 ohms over 20-20,000 Hz with 0.3% THD; IM dist. 0.3%; damping factor 25; frequency response 10-80,000 Hz +0/−1 dB; power bandwidth 5-40,000 Hz, both channels driven, at 0.3% THD. Preamp: input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/47k ohms (aux., tape, tuner), 4 mV/20k ohms (mic), 1 V/47k ohms (main in); output 150 mV (tape), 1.0 V (preamp out); S/N (IHF "A") 80 dB (phono at 10 mV), 90 dB (aux.);

frequency response 30-15,000 ±0.3 dB (phono), 10-50,000 Hz +0/−1 dB (aux., tape); phono overload 350 mV. Features all stage direct-coupled OCL circuitry and push-pull type symmetrical complementary circuitry; attenuator type volume control; two-step audio muting; two tape monitors; two phono inputs; two-step turnover switches with tone defeat; mike mixing with independent volume control; 5⁴⁄₅" H × 17¹¹⁄₁₆" W × 14⁴⁄₅" D..... $230

YAMAHA

CA-2010 Integrated Amplifier

Amplifier section switchable between classes A and B; 120 W/ch continuous (class B), 30 W/ch continuous (class A) into 8 ohms with 0.03% THD; preamp section incorporates equalizer amp with 96 dB S/N (IHF A); moving-coil amp has 71 dB S/N (IHF A) and 50 μV input sensitivity; tone control amp has tone, filter, and buffer amps; two-ganged volume controls for each channel (one each on input/output); peak level output meters have −50 to +5 dB range and may be switched to read rec. out terminal output; selectable phono impedance (47,000, 68,000, and 100,000 ohms); switching for independent use of preamp and power sections; audio muting switch..... $800

CA-1010 Integrated Amplifier

Fully complementary OCL power amp section switchable between classes A and B; 90 W/ch (class B), 18 W/ch (class A). Preamp section has 96 dB S/N (IHF A) and input sensitivity of 10 mV; dist. 0.003% (phono to rec. out); 310 mV dynamic margin for phono input; moving-coil head amp has 68 dB S/N (IHF A) and 50 μV input sensitivity; tone control amp has tone, filter, and buffer amp; two-ganged volume control for each channel; peak level meters have a range of −50 to +5 dB and may be switched to read rec. out terminal output; three input impedances for MM cartridges (47,000, 68,000, and 100,000 ohms); switching for independent use of preamp and power amp sections; audio muting switch $670

A-1 Integrated Amplifier

DC integrated amplifier with built-in head amplifier for moving coil cartridges. Power amplifier: 70 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.02% THD; THD 0.005% max.; IM dist. 0.003% max.; power bandwidth 10-50,000 Hz; frequency response 20-20,000 Hz +0/−0.2 dB; damping factor over 100 at 8 ohms, 1000 Hz. Preamplifier: input sensitivity/impedance 2.5 mV/47k ohms/200 pF (phono moving magnet), 60 μV/10 ohms (phono moving cartridge), 200 mV/47k ohms (tuner, aux., tape); max. input level 230 mV rms (moving magnet), 6 mV rms (moving coil); S/N at 10 mV ref. level better than 97 dB (phono moving magnet), better than 82 dB (phono moving coil), 112 dB min. (tuner, aux., tape); output sensitivity/impedance 200 mV/600 ohms (record playback), 2 V/600 ohms (preamp out); RIAA deviation 0/±0.2 dB, 20-20,000 Hz +0/−0.2 dB (tuner, aux.); channel separation at 1000 Hz 70 dB min. at 5.1-ohm input (tuner), 75 dB min. at 5100-ohm input (phono moving magnet), 75 dB min. (phono moving coil, input shorted); headphone output 39 mV (8 ohms, rated output). Features FET input circuitry employed in power amplifier, tone control and equalizer; dual power meters; separate rec. out and input selectors; variable loudness controls; and high filter and power amp direct switches. 4⁵⁄₈" H × 17¹⁄₈" W × 15" D..... $630

CA-810 Integrated Amplifier

65 W/ch continuous over 20-20,000 Hz with 0.05% dist.; preamp dist. 0.005%; S/N 83 dB (IHF A); input sensitivity 2.5 mV; moving-coil head amp has 73 dB S/N and 60 μV input sensitivity; has negative feedback tone controls with individual defeat controls for bass and treble; power output meters cover 0.5 mW to 158 W; phono impedance selectable (47,000, 68,000, 100,000 ohms); rec. out selector switch..... $430

CA-610II Stereo Integrated Amplifier

Power amplifier: 45 W/ch continuous into 8 ohms from 20-20,000 Hz at 0.05% THD, 50 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.1% THD; THD and IM dist. 0.02% with 8-ohm load; damping factor 50 into 8 ohms at 1000 Hz. Preamplifier: input sensitivity/impedance 2.5 mV/47k ohms (phono), 150 mV/ 47k ohms (tuner, aux., tape PB); max. input level 150 mV at 1000 Hz (phono); S/N 97 dB for 10 mV, shorted (phono), 100 dB (tuner, aux., tape PB); output sensitivity/impedance 150 mV/600 ohms (rec. out); RIAA deviation +0.3/−0.3 dB from 30-15,000 Hz, 10-100,000 Hz +2/−2 dB (tuner, aux., tape PB); high filter rolloff −6 dB/octave at 10,000 Hz. Features main direct switch to bypass tone-control amp; dual power meters; input and rec. out selectors; variable loudness contour; master volume control; two front-panel speaker connectors; stereo headphone jack; and three rear ac outlets. 6¹¹⁄₁₆" H × 17¹⁄₈" W × 13³⁄₁₆" D..... $300

CA-410 II Integrated Amplifier

35 W/ch continuous, both channels driven into 8 ohms from 20-20,000 Hz at 0.05% THD, 40 W continuous, both channels driven into 4 ohms from 20-20,000 Hz at 0.1% THD; input sensitivity/impedance 3.0 mV/47k ohms (phono), 150 mV/ 47k ohms (tuner, aux., tape playback); max. input level 135 mV at 1000 Hz, 0.05% THD (phono); RIAA deviation +0.3/−0.3 dB from 30-15,000 Hz, +0.5/−0.5 dB (tuner, aux., tape); S/N (IHF "A") 95.4 dB shorted (phono), 100 dB (tuner, aux., tape playback), dist. 0.1% from 20-20,000 Hz at 1 V out (phono), 0.02% into 8 ohms at 17.5 W (tuner, aux., tape playback); subsonic filter rolloff −12 dB/octave at 12 Hz, high filter rolloff −6 dB/octave at 8000 Hz. Features power output meters, separate input and record out selectors, variable loudness controls, and speaker selector buttons; 5¹⁄₂" H × 17¹⁄₈" W × 13¹⁄₁₀" D..... $250

3 TUNERS

ACCUPHASE

T-100 AM-FM Stereo Tuner
FM sensitivity 11.2 dBf (2.0 μV); capture ratio 1.5 dB; S/N 75 dB/; THD 0.1% at 1000 Hz; stereo separation 45 dB at 1000 Hz; response 20-15,000 Hz +0/−1 dB. 6″ H × 17½″ W × 14″ D $750

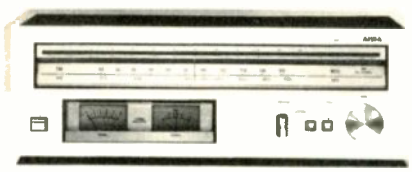
AIKO by TZL INTERNATIONAL

TU-81 AM-FM Stereo Tuner
Features signal-strength and tuning meters; high blend and muting switches. FM usable sensitivity 1.9 μV (mono); S/N 60 dB; HD 0.2%; AM S/N 45 dB; 5¼″ H × 17″ W × 8¼″ D $220

AIWA

AT-9700 FM Stereo Tuner
Features MOS FET front end; quartz PLL multiplex circuitry; quartz-controlled servo-lock tuning with LED digital frequency readout display; ten-LED signal-strength and three-LED tuning indicator displays; LED indicator selector; automatic sharp/normal selectivity selector with LEDs; output level control; mode selector with LEDs. IHF usable sensitivity 10.3 dBf (normal), 12.8 dBf (sharp); 50-dB quieting, mono 15.3 dBf (normal and sharp), stereo 35.3 dBf (normal and sharp); S/N 80 dB (mono), 78 dB (stereo); dist. mono 0.03% (normal), 0.2% (sharp), stereo 0.05% (normal), 0.5% (sharp); capture ratio 1.0 dB (normal), 2.0 dB (sharp); alternate channel selectivity ±400 kHz 50 dB (normal), 80 dB (sharp); image and spurious rejection 110 dB; stereo separation at 1000 Hz 50 dB (normal), 30 dB (sharp); 6³/₁₆″ H × 18⁹/₁₆″ W × 14¹³/₁₆″ D .. $520

AT-9300U AM-FM Stereo Tuner
Features PLL multiplex circuitry; hi blend and muting switches; signal-strength and tuning meters. FM



section: IHF usable sensitivity 1.9 μV (mono); 50-dB quieting 4.5 μV (mono), 44 μV (stereo); IHF S/N 73 dB (mono), 68 dB (stereo); frequency response 30-15,000 Hz +0.3/−2.5 dB; dist. 0.2% (mono), 0.3% (stereo) at 1000 Hz; capture ratio 1.5 dB; IHF alternate channel selectivity 72 dB ±400 kHz; image rejection 48 dB; i-f rejection 75 dB; spurious rejection 70 dB; stereo separation 42 dB at 1000 Hz. AM section: sensitivity 240 μV/m (IHF, ferrite antenna), 25 μV (IHF, external antenna); S/N 50 dB. 5¹⁵/₁₆″ H × 16⁹/₁₆″ W × 13²⁵/₃₂″ D $210

SI-R22U Mini Stereo AM-FM Tuner
Features dual-gate MOS FET front end; PLL IC multiplex demodulator; quartz digital frequency tuning with LED digital frequency readout display; five-LED signal-strength indicator display; hi blend, afc/muting, and band switches. FM section: usable sensitivity 1.9 μV (mono); S/N 73 dB (mono), 70 dB (stereo); frequency response 50-10,000 Hz ±0.5 dB; dist. 0.15% (mono), 0.25% (stereo); capture ratio 1.5 dB; alternate channel selectivity 70 dB ±400 kHz; i-f rejection 80 dB; stereo separation 45 dB at 1000 Hz. AM IHF sensitivity 20 μV (external antenna), 250 μV/m (bar antenna); S/N 50 dB. 2¹³/₁₆″ H × 8⁹/₁₆″ W × 6⅞″ D $200

AKAI

AT-2650 AM-Stereo FM Tuner
Features three dual gate MOS FETs and five-gang frequency rectilinear variable capacitor in front end; signal strength and FM tuning meters; AM/auto FM/mono FM input selector; output level control; noise canceller switch; FM mute switch with level adjuster; LED power and FM stereo indicators. FM section: IHF sensitivity 1.6 μV; capture ratio 1.2 dB; IHF selectivity 80 dB; image, i-f, and spurious rejection 110 dB at 98 MHz; S/N 75 dB; frequency response 20-15,000 Hz +1/−3 dB; HD 0.1% (mono), 0.15% (stereo); stereo separation 45 dB at 1000 Hz. AM section: IHF sensitivity 80 μV/m (bar antenna), 13 μV (external antenna); IHF selectivity 30 dB; S/N 50 dB. Complements AM-2650 stereo integrated amplifier; silver panel with wood-grain vinyl cover; 5.7″ H × 17.3″ W × 14.5″ D $300

AT-2450 AM-Stereo FM Tuner
Features dual gate MOS FETs and four-gang frequency rectilinear variable capacitor in front end; signal strength and FM center tuning meters; AM/auto FM/mono FM input selector; output control; FM mute switch with level adjuster; LED power and stereo FM indicators. FM section: IHF sensitivity 1.7 μV; capture ratio 1.2 dB; IHF selectivity 80 dB; image rejection 90 dB at 98 MHz; i-f and spurious rejection 100 dB at 98 MHz; S/N 75 dB; frequency response 20-15,000 Hz +1/−3 dB; HD 0.1% (mono), 0.2% (stereo); stereo separation 45 dB at 1000 Hz. AM section: IHF sensitivity 100 μV/m (bar antenna), 15 μV (external antenna); IHF selectivity 30 dB; S/N 55 dB. Complements AM-2450 stereo integrated amplifier; 5.7″ H × 17.3″ W × 14.5″ D $225

AT-2250 AM-Stereo FM Tuner
Features PLL multiplex IC circuitry; signal strength and FM center tuning meters; auto FM/FM mute switch; AM/FM input selector; LED stereo FM indicator. FM section: IHF sensitivity 1.9 μV; capture ratio 1.3 dB; IHF selectivity 65 dB; image rejection 60 dB at 98 MHz; i-f rejection 85 dB at 98 MHz; S/N 70 dB; HD 0.1% (mono), 0.2% (stereo); stereo separation 42 dB at 1000 Hz. AM section: IHF sensitivity 100 μV/m; IHF selectivity 30 dB; S/N 55 dB. Complements AM-2250 stereo integrated amplifier; 5.1″ H × 15″ W × 8.7″ D $150

CROWN

FM-1 FM Tuner
Features quartz-crystal IC frequency synthesizer tuning with auto forward/reverse continuous scan and auto search-and-stop operations; five-station memory preset; LED digital frequency readout display; 20-LED analog tuning indicator dial; LED signal-strength and multipath meter displays; 25- or 75-μsec de-emphasis; carrier band filter and muting selectors. IHF usable sensitivity 10.8 dBf (mono); 50-dB quieting 2.75 μV (mono), 35 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); THD 0.1% (mono), 0.09% (stereo); frequency response 30-15,000 Hz ±0.5 dB; capture ratio 2.0 dB; alternate channel selectivity 75 dB; image and spurious rejection 114 dB; stereo separation 45 dB at 1000 Hz; 5¼″ H × 19″ W × 15″ D $995

DENON

TU-850 FM Tuner
Features five-gang capacitor using MOS FET, two-system i-f section, PLL/IC stereo demodulation circuitry, recording level check, high-precision tuning, and two multi-functioning level meters to measure amplifier output. IHF sensitivity 9.8 dBf (1.7 μV); capture ratio 0.8 dB; image response −120 dB; i-f response −110 dB; AM suppression 65 dB; S/N 84 dB; THD 0.08% (stereo), 0.05% (mono). 164 mm H × 434 mm W × 40 mm D $480

TU-500 FM Tuner
Features separate left/right VU meters, multipath terminal, five-gang variable capacitor, dual gate MOS FET and oscillator circuit, two separate i-f sections, PLL decoder, "Stereo Only" switch, and headphone jack. IHF sensitivity 9.8 dBf (1.7 μV); capture ratio 1.0 dB; image response −80 dB; i-f response −110 dB; AM suppression 60 dB; S/N 75 dB; THD 0.2% at 1000 Hz (mono and stereo), 0.3% from 50-5000 Hz (stereo), 0.3% from 50-10,000 Hz (mono); stereo separation 45 dB at 1000 Hz, 40 dB from 100-10,000 Hz. 140 mm H × 430 mm W × 350 mm D $415

TU-630 FM Tuner
Features dual-gate MOS FETs and five-ganged vari-

able capacitor in front end; wide/narrow i-f bandwidth selector; FM detector circuitry; multiplex IC circuit with pilot canceller; servo-lock tuning with LED; built-in low-distortion 3-W/ch power amp with headphone jack; FM muting; auto/hi blend/mono/rec level selector; multipath detector; built-in oscillator; five-LED signal-strength and three-LED tuning meter indicators. Usable sensitivity 1.7 μV; 50-dB quieting 3.3 μV (mono), 30 μV (stereo); S/N 82 dB (mono), 79 dB (stereo); frequency response 20-15,000 Hz +0.2/−1.5 dB; THD at 1000 Hz, mono 0.03% (wide), 0.1% (narrow), stereo 0.06% (wide), 0.12% (narrow); capture ratio 1.0 dB (wide), 1.5 dB (narrow); selectivity 35 dB at 400

kHz (wide), 80 dB at 300 kHz (narrow); image rejection 110 dB; i-f rejection 105 dB; spurious rejection 110 dB; stereo separation at 1000 Hz 55 dB (wide), 50 dB (narrow); matches PMA-630 integrated amplifier; brushed aluminum front panel; 98.5 mm H × 434 mm W × 364 mm D..... $340

TU-501 AM-FM Stereo Tuner
FM section: IHF sensitivity 10.3 dBf (1.8 μV); capture ratio 1.2 dB; image response −90 dB; i-f response −90 dB; AM suppression 60 dB; S/N 75 dB; THD 0.15% (stereo), 0.1% (mono). Features four-gang capacitor, low-noise FET, and separate left/right meters with meter selector switch. AM section: sensitivity 300 μV/m; S/N 55 dB. Features IC and high-selectivity ceramic filters. 5¾" H × 16¹⁵/₁₆" W × 11¹⁵/₁₆" D..... $340

DRACO LABS

Micro/CPU FM Tuner
Features six-section varactor front end; PLL multiplex decoder; PLL frequency-synthesis microcomputer-locked tuning with auto up/down scan tuning and LED four-digit frequency readout display; user-programmable station call letter display with store switch and manual tuning knob; four-station memory preset with LED station display; normal-wide i-f bandwidth selector; toroidal and active low-pass filters; linear phase ceramic i-f filter; variable analog switch muting; signal-strength and tuning meters. IHF usable sensitivity 1.6 μV mono; 50-dB quieting mono 2.1 μV (normal), 3.0 μV (wide); S/N 82 dB (mono), 75 dB (stereo); frequency response 20-15,000 Hz ±0.5 dB; THD at 1000 Hz, mono 0.1% (normal), 0.07% (wide), stereo 0.2% (normal), 0.07% (wide); capture ratio 1.0 dB (normal), 0.5 dB (wide); selectivity 85 dB (normal), 18 dB (wide); image rejection 130 dB; i-f rejection 120 dB; spurious rejection 130 dB; stereo separation at 1000 Hz 50 dB (normal), 55 dB (wide); 6³/₈" H × 20" W × 14¹⁵/₁₆" D..... $1000

EUMIG

T-1000 FM Tuner
Features digitally-synthesized PLL FM tuning with LED frequency readout; ten-station memory preset with LED display, stored through CMOS IC or built-in automatic rechargeable NiCd battery; up/down manual scanning; five-LED signal-strength display; wide/narrow i-f bandwidth; mode and muting buttons. Usable sensitivity 1.6 μV (mono); 50-dB quieting 12 dBf (mono), 36.1 dBf (stereo); stereo separation 50 dB at 1000 Hz; matte black or chrome finish; 19-in rack mount face plate.... $795

FISHER

FM2421 AM-FM Stereo Tuner
Features digital frequency-synthesized tuning with auto/manual search and scan; LED digital frequency readout display; five-station memory preset for AM or FM with LEDs; wide/narrow i-f bandwidth selector; multiplex filter; FM muting; five-LED signal-strength indicators. FM section: usable sensitivity 1.7 μV (mono), 4.3 μV (stereo); 50-dB quieting 2.5 μV (mono), 34 μV (stereo); S/N 75 dB (mono), 70 dB (stereo); THD at 1000 Hz 0.05% (mono), 0.1% (stereo); frequency response 20-15,000 Hz ±1 dB; capture ratio 0.8 dB; alternate channel selectivity 75 dB ±400 kHz; image rejection 80 dB; i-f and spurious rejection 100 dB; stereo separation 46 dB at 1000 Hz. AM section: usable sensitivity 280 μV/m; selectivity 45 dB; S/N 55 dB. 3½" H × 17⅛" W × 13" D..... $450

FM2121 AM-FM Stereo Tuner
Features signal-strength and center tuning meters; Fm muting and high blend switches; function selector. FM section: usable sensitivity 1.9 μV (mono), 4.6 μV (stereo); 50-dB quieting 2.8 μV (mono), 38 μV (stereo); S/N 72 dB (mono), 68 dB (stereo); THD at 1000 Hz 0.12% (mono), 0.2% (stereo); frequency response 20-15,000 Hz ±1 dB; capture ratio 1.0 dB; alternate channel selectivity 70 dB ±400 kHz; image rejection 60 dB; i-f rejection 75 dB; spurious rejection 85 dB; stereo separation 40 dB at 1000 Hz. AM section: usable sensitivity 300 μV/m; selectivity 42 dB; S/N 55 dB. 3½" H × 17⅛" W × 13" D..... $230

HARMAN/KARDON

Citation 18 FM Tuner
Features FM quieting meter for tuning; two-stage muting system (wide and narrow); pushbutton for external processor use; 25 μsec de-emphasis; noise filter; headphone monitoring; output level adjustment. Usable mono sensitivity 11.2 dBf (2.0 μV); 50-dB quieting mono sensitivity 15.1 dBf (3.2 μV); capture ratio 1.5 dB; S/N 64 dB; image response −100 dB; i-f response − 100 dB; frequency response 10-50,000 Hz ±0.5 dB. 4¾" H × 16" W × 13½" D $499
Citation RPM. Rack panel for Citation 18 ..... $188
Citation CRM. Floor-standing rack mount for Citation 18..... $285

hk500 AM-FM Stereo Tuner
Features signal-strength tuning meter; LED in-tune and stereo indicators; switchable 75/25 μsec de-emphasis; switchable interchannel noise suppression; output level control; parallax-free tuning dial. FM section: usable sensitivity 1.9 μV; 50-dB quieting 3.0 μV (mono), 40 μV (stereo); capture ratio 1.5 dB; alternate channel selectivity 65 dB; image response −50 dB; i-f response −50 dB; AM rejection 55 dB; stereo separation 45 dB; S/N 75 dB; HD 0.2% at 65 dBf (mono)..... $279

HEATH

AJ-1600 AM-FM Stereo Tuner
Features digitally-synthesized tuning with LED digital frequency readout display; wide/narrow i-f bandwidth selector; r-f attenuator and muting switches; Dolby noise-reduction system; hi blend, mono/stereo, and AM switch; signal-strength/multipath meter with switch; tuning meter. FM section: usable sensitivity 1.8 μV (mono), 3.5 μV (stereo); S/N 83 dB (mono), 75 dB (stereo); frequency response 20-15,000 Hz ±0.5 dB; alternate channel selectivity 40 dB (wide), 80 dB (narrow); 5¾" H × 19" W × 14" D. Kit..... $380

HITACHI

FT-8000 FM Stereo Tuner
Features quartz crystal digitally-synthesized PLL tuning system with auto scan/manual tuning; four gang variable capacitance diode and dual-gate MOS FETs in electronic front end; multiplex demodulator circuitry; six-station memory preset with LED memory write and erase indicators; LED digital frequency/clock readout display; five-LED signal-strength indicators; multipath switch; mono/mute, hi-blend, and 440-Hz record level switches. Usable sensitivity 11.2 dBf (new IHF), 1.0 μV (75 ohms, IHF); 50-dB quieting 3.3 μV (mono), 40 μV (stereo); S/N 72 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +0.5/−1.2 dB; HD at 1000 Hz 0.12% (mono), 0.15% (stereo); capture ratio 1.2 dB; alternate channel selectivity 80 dB (IHF); image rejection 70 dB; i-f rejection 85 dB; spurious rejection 100 dB; stereo separation 50 dB at 1000 Hz; 3¹/₁₆" H × 17⅛" W × 15³/₃₂" D $460

FT-5000 AM-FM Stereo Tuner
Features dual-gate MOS-FETs and four-gang variable capacitance diode in electronic front end; multiplex demodulator circuit; quartz crystal digitally-synthesized PLL tuning system with automatic scan/manual tuning; seven-station memory preset for AM or FM stations with LEDs; LED frequency readout display; five-LED signal-strength display; FM muting, mode, and function selectors. FM section: IHF usable sensitivity 1.9 μV (mono); 50-dB quieting 16.2 dBf (mono), 38/2 dBf (stereo); S/N 65 dB (mono), 62 dB (stereo); HD at 1000 Hz 0.1% (mono), 0.2% (stereo); frequency response 20-15,000 Hz +1/−1.5 dB; capture ratio 1.0 dB; alternate channel selectivity 75 dB (IHF); image and i-f rejection 70 dB; stereo separation 45 dB at 1000 Hz. AM section: sensitivity 500 μV/m for 20-dB S/N; selectivity 32 dB; S/N 45 dB; HD 0.7%. 4¹/₁₆" H × 17⅛" W × 10³/₄" D..... $330

FT-440B AM-FM Stereo Tuner
Features FET and four-stage linear frequency variable capacitor in front end; PLL IC in multiplex demodulator circuit; signal-strength and tuning meters; FM mute and hi-blend selectors; 440-Hz recording level check oscillator; output level control. FM section: usable sensitivity 1.7 μV (mono), 5.0 μV (stereo); 50-dB quieting 3.5 μV (mono), 39 μV (stereo); S/N 76 dB (mono), 70 dB (stereo); HD at 1000 Hz 0.1% (mono), 0.25% (stereo); frequency response 30-15,000 Hz ±1 dB; capture ratio 1.0 dB; alternate channel selectivity 80 dB (IHF); image rejection 75 dB; i-f and spurious rejection 100 dB; stereo separation 50 dB at 1000 Hz. AM section: sensitivity 250 μV/m (IHF, ferrite antenna), 12 μV (IHF); selectivity 34 dB ±10,000 Hz; S/N 45 dB; HD 0.3%. Matte black finish; 6½" H × 17⅛" W × 14⅞" D..... $300
FT-440B. Same as FT-440B except has brushed aluminum front panel..... $280

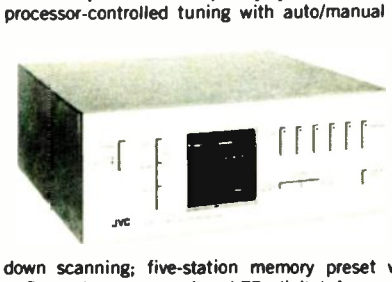
FT 340 AM-FM Tuner
Dual-gate MOS FET and three-stage variable capacitors with i-f filter, four-stage differential integrated circuitry and PLL multiplex demodulator. FM section: usable sensitivity (IHF) mono 10.8 dBf (1.9 μv), stereo 37 dBf (6.3 μV); 50-dB quieting sensitivity mono 17 dBf (3.9 μV), stereo 37 dBf (39 μV); capture ratio 1.5 dB; S/N 75 dB; image response −50 dB; i-f response −90 dB; alternate channel selectivity 65 dB; frequency response 30-15,000 Hz +0.2/−2.0 dB; dist. 0.15% (mono), 0.4% (stereo). Has MPX noise filter switch, center-tuning and signal-strength meters, and high-inertia flywheel $200

FT-4000 AM-FM Stereo Tuner
Features MOS FET and three-gang variable tuning capacitor in front end; FM multiplex noise filter switch; FM auto/mono selector; signal-strength and tuning meters. FM section: usable sensitivity 1.8 μV (mono); 50-dB quieting (IHF) 4 μV (mono), 39.8 μV (stereo); S/N 75 dB (mono), 68 dB (stereo); HD at 1000 Hz 0.1% (mono), 0.25% (stereo); frequency response 30-12,000 Hz +0.5/−1.5 dB; capture ratio 1.2 dB; selectivity 75 dB (IHF); image rejection 50 dB; i-f and spurious rejection 80 dB; stereo separation 46 dB at 1000 Hz. AM sensitivity 12 μV (IHF), 300 μV/m (IHF, ferrite antenna); S/N 53 dB. 4¼" H × 17" W × 10³/₄" D... ..... $180

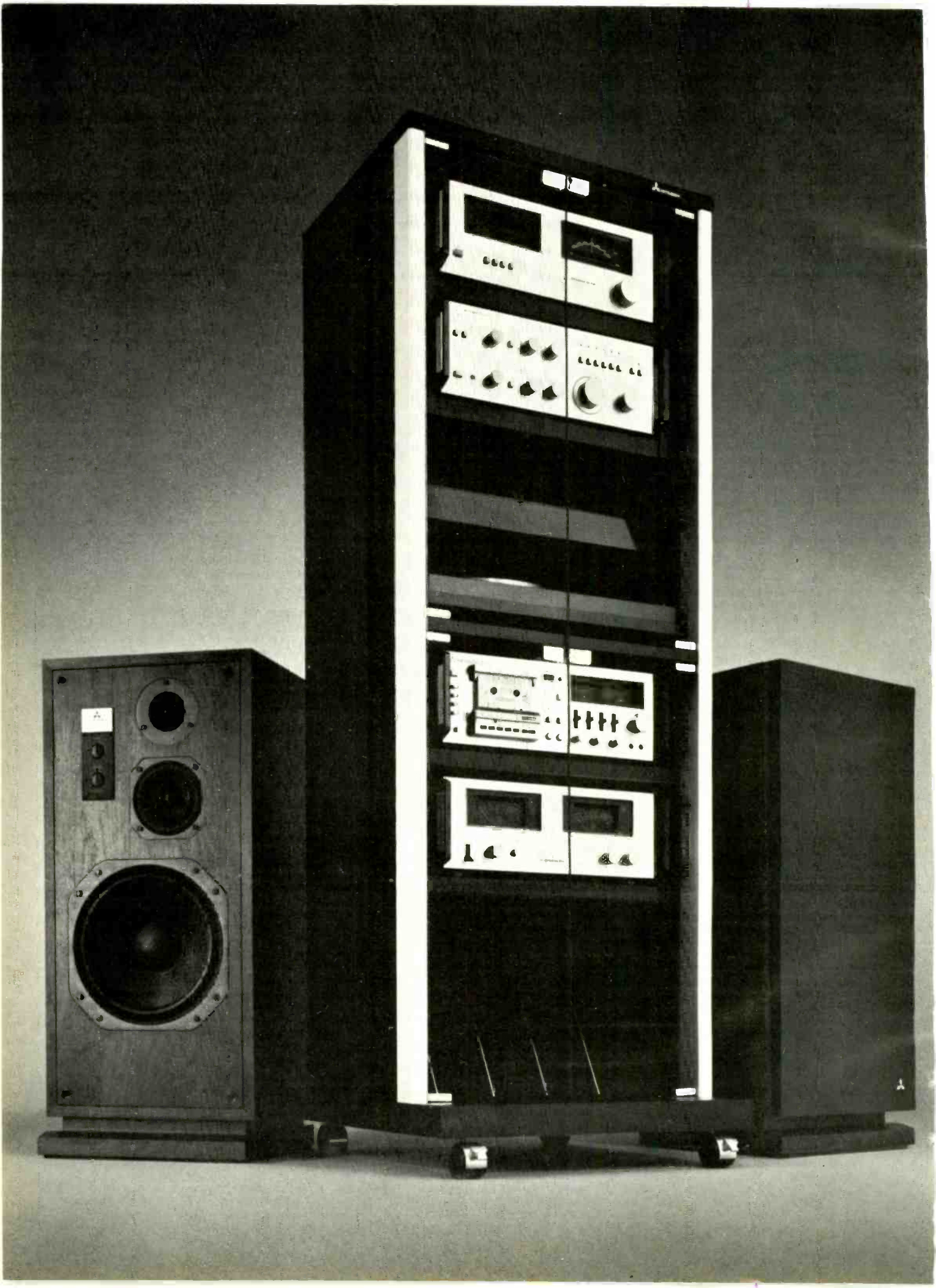
JVC

T-3030 FM Stereo Tuner
Digital frequency synthesizer FM tuner; sensitivity 1 μV; image response −110 dB; i-f response −110 dB; capture ratio 1 dB; AM suppression 65 dB; S/N 72 dB; 25, 50, and 75 μsec de-emphasis; variable output level; seven pre-selected station memory; LED digital frequency display; five-LED signal strength indicator; automatic scanning; anti-birdie filter (switchable); 2⁹/₁₆" H × 16⁹/₁₆" W × 13¹¹/₁₆" D. $650

T-M11 Micro FM Tuner
Features quartz PLL frequency-synthesizer microprocessor-controlled tuning with auto/manual up/



down scanning; five-station memory preset with LEDs and memory write; LED digital frequency/clock readout display; five-LED signal-strength indicator display. Usable sensitivity 0.9 μV; 50-dB



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CIRCLE NO. 4 ON READER SERVICE CARD

3 TUNERS

quieting 2.0 μV; S/N (IHF A) 75 dB (mono), 72 dB (stereo); THD 0.08% (mono), 0.12% (stereo) at 1000 Hz; frequency response 30-15,000 Hz +0.3/−1 dB; capture ratio 1.0 dB; alternate channel selectivity 75 dB; image rejection 75 dB; i-f and spurious rejection 90 dB; stereo separation 50 dB at 1000 Hz; 3 11/16" H × 9 1/16" W × 10 9/16" D..... $500

T-40P AM-FM Stereo Tuner
Features four-gang electronic varicap in FM front end; quartz PLL frequency synthesizer tuning with auto up/down scanning; eight-station AM/FM memory preset with LEDs and memo bar; LED digital frequency readout display; PLL multiplex with automatic pilot canceller; mode, muting, and AM/FM switches; LED signal-strength bar indicators. FM section: usable sensitivity 1.6 μV (mono); 50-dB quieting 3.0 μV (mono), 25 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); frequency response 20–15,000 Hz +0.5/−3.0 dB; dist. at 1000 Hz 0.15% (mono), 0.3% (stereo); capture ratio 1.5 dB; alternate channel selectivity 65 dB; image rejection 70 dB; i-f rejection 80 dB; spurious rejection 75 dB; stereo separation 45 dB at 1000 Hz. AM section: usable sensitivity 150 μV/m (bar antenna); 4 9/16" H × 16 9/16" W × 11 5/8" D..... $370

JT-V77 AM-FM Stereo Tuner
Features PLL multiplex demodulator with recording level calibrator and automatic pilot signal canceller; four-gang tuning capacitor; automatic tuning hold circuit; single-clip four- and one-resonator ceramic filters; VU record level meters. FM section: sensitivity 10.3 dBf (1.8 μV); frequency response 20-15,000 Hz +0.5/ −0.8 dB; 50-dB quieting sensitivity 36.8 dBf (38 μV) stereo, 16.8 dBf (3.8 μV) mono; S/N 72 dB (stereo), 78 dB (mono); capture ratio 1.0 dB; alternate channel selectivity 75 dB; image response −90 dB (98 MHz); i-f response −95 dB; AM suppression 60 dB; stereo separation 45 dB at 100 Hz, 50 dB at 1000 Hz, and 40 dB at 10,000 Hz; antenna input impedance 75 ohms (unbalanced), 300 ohms (balanced). AM section: sensitivity 300 μV (bar antenna), 50 μV (external antenna); image response −45 dB; i-f response −45 dB; S/N 50 dB. 6 1/4" H × 17 3/4" W × 13 1/2" D. $320

JT-V22 AM-FM Stereo Tuner
Features IC PLL FM multiplex demodulator; FET radio-frequency amplifier and frequency-linear three-gang tuning capacitor; FM/AM signal strength and FM center-of-channel tuning meters; muting switch; FM-linear tuning dial; and AM bar antenna. FM section: sensitivity 11.2 dBf (2.0 μV); 50-dB quieting sensitivity 38.3 dBf (45 μV) stereo, 17.2 dBf (4.0 μV) mono; S/N 65 dB (stereo), 73 dB (mono); capture ratio 1.5 dB; alternate channel selectivity 70 dB; image response −58 dB (98 MHz); i-f response −90 dB; AM suppression 45 dB; stereo separation 30 dB at 100 Hz, 40 dB at 1000 Hz, and 30 dB at 10,000 Hz; 75 and 300 ohm antenna input impedance. AM section: sensitivity 300 μV/m (bar antenna), 50 μV (external antenna); image response −45 dB; i-f response −40 dB; S/N 50 dB. 5 7/8" H × 16 1/2" W × 11 5/8" D..... $190

T-V5 AM-FM Stereo Tuner
Features FET r-f amp and three-gang tuning capacitor in front end; PLL multiplex IC demodulator; LED signal-strength and FM tuning bar indicators; selector, mode, and muting switches. FM section: usable sensitivity 0.9 μV (mono); 50-dB quieting 14.8 dBf (mono), 38.3 dBf (stereo); S/N 82 dB (mono), 70 dB (stereo); frequency response 50–15,000 Hz +0.5/−1 dB; dist. at 1000 Hz 0.15% (mono), 0.3% (stereo); capture ratio 1.0 dB; alternate channel selectivity 65 dB; image rejection 60 dB; i-f rejection 90 dB, spurious rejection 75 dB; stereo separation 45 dB at 1000 Hz. AM usable sensitivity 300 μV/m (bar antenna), 30 μV (external antenna). 4 1/4" H × 16 1/2" W × 12 3/8" D..... $180

T-V3. Similar to T-V5 but has analog AM signal-strength/FM tuning meter; FM sensitivity 1.2 μV; 50-dB quieting 17.2 dBf (mono); S/N 70 dB (mono), 65 dB (stereo); dist. at 1000 Hz 0.25% (mono), 0.45% (stereo); capture ratio 1.5 dB; selectivity and image rejection 55 dB; i-f rejection 75 dB; spurious rejection 60 dB; stereo separation 40 dB at 1000 Hz; 3 1/2" H × 16 9/16" W × 12 1/16" D..... ..... $140

KENWOOD

KT-917 FM Stereo Tuner
Features nine-ganged tuning capacitor and double-tuned antenna input stage with double-diffused

MOS FET in i-f front end; pulse-count FM detector and LED distortion detection loop circuitry; narrow/wide/normal i-f bandwidths with control and LED display; signal-strength, tuning, and deviation/multipath meters with deviation/multipath switch; quieting and 20- and 40-dBf muting controls with LEDs; FM Dolby de-emphasis switch; antenna switching; output control. Usable sensitivity 1.9 μV; 50-dB quieting 3.4 μV (mono), 40 μV (stereo); S/N 90 dB (mono), 84 dB (stereo); THD at 1000 Hz, mono 0.03% (wide), 0.06% (normal), 0.15% (narrow), at 1000 Hz, stereo 0.04% (wide), 0.09% (normal), 0.12% (narrow); capture ratio 0.8 dB (wide), 1.4 dB (normal), 1.7 dB (narrow); alternate channel selectivity 35 dB (wide), 60 dB (narrow and normal); stereo separation at 1000 Hz 60 dB (wide), 55 dB (normal), 50 dB (narrow); frequency response 10-16,000 Hz +0.2/−0.5 dB; spurious, image, and i-f rejection 125 dB; 6 11/32" H × 18 1/8" W × 18 7/32" D..... $1000

KT-815 AM-FM Stereo Tuner
Features five-gang FM tuning capacitor with dual-gate MOS FETs in front end; pulse-count FM detector circuitry; wide and narrow i-f bandwidths with selector; multiplex PLL IC with pilot canceller circuit; servo-lock tuning with LED; muting control; mode switch; output level control; signal strength and tuning meters. FM section: usable sensitivity 1.8 μV; 50-dB quieting sensitivity 3.4 μV (mono), 40 μV (stereo); S/N 84 dB (mono), 80 dB (stereo); THD at 1000 Hz, mono 0.04% (wide), 0.16% (narrow), at 1000 Hz, stereo 0.05% (wide), 0.15% (narrow); capture ratio 1.0 dB (wide), 2.0 dB (narrow); alternate channel selectivity 45 dB (wide), 60 dB at 300 kHz (narrow); stereo separation at 1000 Hz 55 dB (wide), 49 dB (narrow); frequency response 30-15,000 Hz +0.3/−0.5 dB; spurious rejection 120 dB; image rejection 110 dB; i-f rejection 105 dB. AM section: usable sensitivity 9 μV; S/N 55 dB. 6 9/32" H × 17 19/32" W × 15 27/32" D.... $440
KT-615. Similar to KT-815 minus servo lock tuning with LED; has four-gang tuning capacitor in front end; FM S/N 81 dB (mono), and 78 dB (stereo), THD at 1000 Hz mono 0.05% (wide) and 0.17% (narrow), at 1000 Hz stereo 0.06% (wide) and 0.25% (stereo); alternate channel selectivity on narrow bandwidth 54 dB, stereo separation at 1000 Hz narrow 48 dB, frequency response 30-15,000 Hz +0.2/−1.5 dB, spurious rejection 105 dB, image rejection 85 dB, i-f rejection 100 dB; AM usable sensitivity 13 μV and S/N 50 dB $299

KT-413 AM-FM Stereo Tuner
Features frequency-linear five-ganged tuning capacitor and FET in front-end; one-touch left/right automatic sequential tuning with LED servo lock indicator; dial scanning and five-station AM and FM preselected scanning with LED; LED signal-strength bar display; FM mode selector; high/low stop level selector for strong/weak broadcast signals. FM section usable sensitivity 1.9 μV; 50-dB quieting 4.0 μV (mono), 40 μV (stereo); S/N 77 dB (mono), 72 dB (stereo); THD 0.1% (mono), 0.15% (stereo) at 1000 Hz; frequency response 30-15,000 Hz +0.2/−2 dB; capture ratio 1.0 dB; alternate channel selectivity 60 dB; spurious rejection 85 dB; image rejection 55 dB; i-f rejection 80 dB; stereo separation 50 dB at 1000 Hz. AM section: sensitivity 16 μV; S/N 48 dB. 5 15/32" H × 15 3/4" W × 11" D.. $250
KT-313. Similar to KT-413 without automatic sequential tuning with LED servo lock and auto and preset scanning; THD 0.3% at 50 and 10,000 Hz; 11 29/31" D $179

KT-5500 AM-FM Stereo Tuner
Three-gang variable tuning capacitor with FET input. FM section: usable sensitivity 1.9 μV; 50-dB quieting sensitivity mono 17.2 dBf, stereo 38.3 dBf; THD 0.15% at 1000 Hz mono, 0.2% at 1000 Hz stereo; frequency response 30-15,000 Hz +0.2/−2.0 dB; capture ratio 1.0 dB; stereo separation 45 dB at 1000 Hz; spurious rejection 80 dB; i-f response −90 dB; selectivity 60 dB. AM section: usable sensitivity 20 μV; S/N 50 dB. Includes signal-strength and center-channel tuning meters and automatic and fixed muting switch. 5 1/2" H × 14 31/32" W × 11 7/16" D..... $175

Audio Purist Group

L-07TII FM Tuner
Features seven-section frequency-linear tuning capacitor and double-diffused dual-gate MOS FETs in front end; switchable i-f bandwidth; pulse-count detector circuitry; multiplex filter switch with LED; muting switch; signal-strength and tuning meters. Usable sensitivity 1.7 μV; 50-dB quieting 3.0 μV (mono), 40 μV (stereo); S/N 84 dB (mono), 80 dB (stereo); THD at 1000 Hz, mono 0.035% (wide), 0.14% (narrow), at 1000 Hz, stereo 0.065% (wide), 0.2% (narrow); capture ratio 0.7 dB (wide), 1.3 dB (narrow); alternate channel selectivity 30 dB (wide), 100 dB at 400 kHz (narrow); stereo separation at 1000 Hz 52 dB (wide), 50 dB (narrow); frequency response 20-15,000 Hz +0.2/−1 dB; spurious and image rejection 120 dB; i-f rejection 110 dB; 3 15/16" H × 18 29/32" W × 13 15/32" D.... $625

LUX

T-12 FM Tuner
Quartz-locked FM tuner includes two-step i-f bandwidth selector (wide and narrow) and FM 5-gang variable capacitor and features "Accutouch" system for accurate center tuning. IHF usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity mono 16.0 dBf (3.3 μV), stereo 14.2 dBf (2.8 μV); capture ratio 0.8 dB (wide), 2 dB (narrow); S/N 80 dB; i-f response −100 dB; image response −100 dB; AM suppression 62 dB; alternate channel selectivity 60 dB (narrow), 30 dB (wide); stereo separation 50 dB (wide), 30 dB (narrow); frequency response 20-17,000 Hz −0.5 dB. Also features multipath check switch, recording test tone circuit, center tuning indicator, signal strength indicator, FM muting switch, FM muting level control, time delay muting circuit, and output level control. 3 1/16" H × 17 1/4" W × 12 11/16" D..... $695

T-4 AM-FM Stereo Tuner
Features center tuning meter, signal strength meter, FM muting level control, and FM muting switch. IHF usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 14.7 dBf (3.0 μV); capture ratio 2 dB; S/N 75 dB; i-f response −80 dB; image response−55 dB; AM suppression 60 dB; alternate channel selectivity 85 dB (narrow), 40 dB (wide); stereo separation 45 dB (wide), 80 dB (narrow); frequency response 20-15,000 Hz; THD mono 0.8% (wide), 0.2% (narrow). AM section: IHF usable sensitivity 200 μV; i-f response −40 dB; image response −50 dB; S/N 50 dB; dist. 0.6% $495
T-2. Similar to T-4 except capture ratio 1.5 dB; AM suppression 58 dB; selectivity 60 dB; stereo separation 45 dB at 1000 Hz; THD 0.3%..... $495

Laboratory Reference Series

Luxman 5T50 FM Stereo Tuner
Features full digital frequency synthesis; LED digital frequency readout; pushbutton tuning with scanning and predetermined channel (seven) modes.

full Dolby system; 400-Hz test tone; FM muting. Sensitivity 4.5 μV (IHF); S/N 70 dB; capture ratio 1.1 dB; i-f response −100 dB; image response −100 dB; AM suppression 55 dB; stereo separation 40 dB (1000 Hz); output voltage 1 V (fixed) and 0-1 V (variable); 4" H × 17.7" W × 16" D..... $1595

Luxman 5T10 FM Stereo Tuner
Features tuning lock system, i-f bandwidth selector, multipath check switch, recording test-tone circuit, center-tuning and signal-strength meters, FM muting switch, FM muting level control, and output level control. Usable mono sensitivity 10.3 dBf (1.8 μV); 50-dB quieting mono sensitivity 15.6 dBf (3.3 μV); THD 0.05% wide (1000 Hz), 0.06% narrow (1000 Hz); capture ratio 0.8 dB (wide), 2 dB (narrow); alternate channel selectivity 90 dB (narrow ±400 kHz); S/N 80 dB; spurious response ratio 100 dB; i-f response −100 dB; image response −100 dB; AM suppression 62 dB; stereo separation 50 dB wide, 30 dB narrow; output voltage 1 V (fixed), 0-1 V (variable); output impedance 100 ohms (fixed), 100-1250 ohms (variable). $795

MARANTZ

2130 AM-FM Stereo Tuner
Features three-in oscilloscope display; quartz-lock FM tuning; dual-surface, acoustical-wave (SAW) filters; PLL FM multiplex demodulator; plug-in FM Dolby capability; selectable FM i-f bandwidth; record level tone switch; IHF sensitivity 9.3 dBf (1.6 μV), 28 μV for 50-dB quieting (stereo); 5¾" H × 16⅜" W × 9⁷/₁₆" D..... $600

2110 AM-FM Stereo Tuner
Features three-in oscilloscope display; PLL FM multiplex demodulator; 25-μsec Dolby de-emphasis network; IHF sensitivity 10.3 dBf (1.8 μV), 40 μV for 50-dB quieting (stereo); 5¾" H × 16⅜" W × 9⁷/₁₆" D..... $380

ST400 AM-FM Stereo Tuner
Features dual-gate MOS FET r-f front end; electronic Gyro-Touch™ tuning with servo lock and FM digital frequency readout display; FM muting/mode and servo lock buttons; signal-strength and FM tuning meters. FM section: IHF usable sensitivity 1.8 μV (mono); 50-dB quieting 2.5 μV (mono); S/N 78 dB (mono), 70 dB (stereo); dist. at 1000 Hz 0.15% (mono), 0.25% (stereo); frequency response 30-15,000 Hz +0.2/−1 dB; capture ratio 1.0 dB. AM usable sensitivity 20 μV (IHF); 5¾" H × 16⅜" W × 9⁹/₁₆" D..... $280
ST300. Similar to ST400 minus LED digital frequency readout display and servo lock tuning; FM 50-dB quieting 2.8 μV (mono); FM S/N 75 dB (mono), 68 dB (stereo)..... $225

McKAY DYMEK

AM7 International AM Tuner
AM-only (150-300 kHz and 540-1600 kHz) solid-state tuner. Sensitivity: 3 μV medium-wave, 6 μV long-wave at 10 dB S/N; −6 dB r-f bandwidth ±4 kHz (narrow), ±7.5 kHz (wide); −50 dB r-f bandwidth ±10 kHz (narrow), ±14 kHz (wide); THD (30% mod, 1 kHz) 0.5%, (80% mod, 1 kHz) 1.5%; audio output 1 V rms, 5000 ohms, +2 dBm, 600 ohm optional; tuning meter; 110/220 V, 60 Hz. 3.5" H × 17.5" W × 10" D..... $365

AM5 AM Tuner
AM-only solid-state tuner. Sensitivity 3 μV for 10 dB S/N; bandwidth −6 dB r-f; narrow mode ±4 kHz, wide mode ±10 kHz; modulation response −3 dB at 15 Hz and 9 kHz; THD (30% mod, 1 kHz) 0.5%; 80% modulation 1.5%; front-mounted slide volume control; 3.5" H × 17.5" W × 10" D (option 19-in rack-mount hardware); designed to be used with active directional antenna (Dymek DA5). $340

MERIDIAN by ANGLO-AMERICAN

104 FM Tuner
Features dual-gate MOS FETs with double-balanced mixer in front end; six-station preset and one standby position; tune switch (disables afc). Usable sensitivity 1 μV; 50-dB quieting 2.5 μV (mono); frequency response 15-15,000 Hz ±0.5 dB; dist. 0.1% (mono); S/N 67 dB (CCIR); separation 50 dB; 2" H × 5.5" W × 12" D..... $555

METRON

DFM-1 AM-FM Stereo Tuner
Features dual MOS FETs and five-gang varactor tuning in front end; digitally-synthesized quartz-lock tuning with auto/manual up/down scan tuning and LED digital frequency readout display; 12-station memory preset in AM and FM modes; adjustable muting; wide/narrow i-f bandwidth selector; five-LED signal-strength indicator display; output level control. FM 50-dB quieting 39 μV (stereo); S/N 70 dB (stereo); dist. 0.07% (stereo); capture ratio 1.2 dB; alternate channel selectivity 87 dB $700

MITSUBISHI

DA-C20 Tuner-Preamplifier
AM/FM stereo combination has individual-channel preamplifiers and moving-coil head amplifier. Also features locked tuning, detent volume control and independent output level controls. FM section: sensitivity 11.2 dBf (2.0 μV) mono, 22.7 dBf (7.5 μV) stereo; 50-dB quieting sensitivity 19.2 dBf (5.0 μV) mono, 39.2 dBf (50 μV) stereo; S/N 75 dB (stereo); frequency response 30-15,000 Hz ±1 dB; THD (1000 Hz, 65 dBf) 0.08% stereo (wide), 0.5% (narrow); selectivity 45 dB (wide), 75 dB (narrow); capture ratio 0.8 dB (wide), 1.5 dB (narrow); stereo separation at 1000 Hz 45 dB (wide), 40 dB (narrow). AM section: sensitivity 45 dB (bar antenna); selectivity 30 dB; THD 0.8%. Preamplifier section: input sensitivity/impedance 0.1 mV/10 ohms (phono MC), 2.3 mV/50,000 ohms (phono MM, 100 pF), 150 mV/50,000 ohms (tuner, aux., play); output level max. 18 V; S/N (IHF "A") 77 dB (phono MC), 84 dB (phono MM), 110 dB (tuner, aux., play); THD 0.005% max.; channel separation at 20,000 Hz 80 dB (phono MC, MM), 100 dB (tuner, play). Other features include subsonic filter; separate tape monitoring and duplication; A/B or A+B speaker pushbutton selection; FM muting; separate tone controls with defeat switches; signal strength and tuning meters; front-panel headphone jack. 6¾" H × 16¾" W × 11½" D..... $510

DA-F20 FM Stereo Tuner
Features both conventional tuning and digital frequency readout with a quartz PLL synthesizer; switchable selectivity; inter-station muting; signal-strength and center-tuning LEDs; tape record level check signal; variable and fixed output level. Specifications: sensitivity mono 11.2 dBf (2.0 μV), stereo 22.7 dBf (7.5 μV); 50-dB quieting sensitivity 19 dBf (5.0 μV) mono, 39.2 dBf (50 μV) stereo; S/N stereo 75 dB (wide), 70 dB (narrow); alternate channel selectivity 45 dB (wide), 75 dB (narrow); stereo separation 50 dB at 1000 Hz (narrow); THD at 1000 Hz and 65 dBf 0.08% (wide), 0.25% (narrow); capture ratio 0.8 dB (wide), 1.3 dB (narrow). 6¾" H × 16¾" W × 10¾" D $430

DA-C7 AM-FM Tuner-Preamp
Tuner-preamp docks physically and electrically with any of company's power amplifiers to provide receiver services. Tuner: features locked tuning system with LED lock; signal-strength and tuning meters; wide/narrow FM i-f bandwidth selector; muting/mode and bandwidth selectors; pilot canceller circuit; FM sensitivity 2.0 μV (mono), 7.8 μV (stereo); 50-dB quieting 5.5 μV (mono), 55 μV (stereo); S/N 73 dB stereo; frequency response 30–16,000 Hz +0.5/−1 dB; THD at 1000 Hz stereo 0.1% (wide), 0.5% (narrow); capture ratio 1.0 dB (wide), 2.0 dB (narrow); stereo separation at 1000 Hz 45 dB (wide), 35 dB (narrow); AM sensitivity 200 μV/m (bar antenna) and selectivity 25 dB. Preamp: features separate bass and treble controls with tone defeat for left and right channels; subsonic filter; balance control; two-speaker switching; two-way tape monitoring and dubbing; mode switch; input selector; input sensitivity/impedance 2.5 mV/50k ohms (phono), 150 mV/50k ohms (aux., tape); S/N (IHF A) 75 dB (phono), 99 dB (aux. and tape); THD 0.003%; 6¾" H × 16¾" W × 11½" D $360

M-F01 FM Tuner
Miniature FM tuner with quartz-PLL synthesizer tuning; five-gang tuning condenser with dual-gate MOS-FETs and four-pole linear-phase LC filters; recording level check signal. Specifications: sensitivity 11.2 dBf (2.0 μV) mono, 22.7 dBf (7.5 μV) stereo; 50-dB quieting sensitivity 19.2 dBf (5.0 μV) mono, 39.2 dBf (50 μV) stereo; S/N 77 dB (stereo); capture ratio 1.0 dB; alternate channel selectivity 70 dB; image response −100 dB; i-f response −100 dB; AM suppression 65 dB; stereo separation 50 dB at 1000 Hz, 40 dB at 10,000 Hz; frequency response 30-16,000 Hz +1 dB; THD at 1000 Hz 0.08% (mono), 0.1% (stereo). 2¾" H × 10⅜" W × 9¾" D..... $340

DA-F10 AM-FM Stereo Tuner
AM-FM stereo tuner features switchable selectivity (wide and narrow). FM section: (stereo mode) usable sensitivity 7.8 μV; S/N 70 dB; dist. at 65 dBf 0.1% (wide), 0.5% (narrow); alternate channel selectivity 45 dB (wide), 75 dB (narrow); stereo separation 45 dB at 1 kHz and 40 dB at 10 kHz (wide), 35 dB at 1 kHz and 30 dB at 10 kHz (narrow). AM section: usable sensitivity 45 dB/m; hum and noise −50 dB; 6¾" H × 16¾" W × 10⅜" D $300

NAD (USA)

4080 AM-FM Stereo Tuner
Features dual-gate MOS FET front end; PLL IC multiplex demodulator; switchable signal-strength/multipath meter and tuning meter; 19-kHz pilot canceller; Dolby FM, muting, and multiplex filter switches; calibration tone selection; output level control. FM section: IHF usable sensitivity 1.8 μV (mono); 50-dB quieting 3.0 μV (mono), 35 μV (stereo); S/N (A weighted) 74 dB (mono), 70 dB (stereo); frequency response 30-15,000 Hz ±0.5 dB; THD at 1000 Hz 0.2% (mono), 0.3% (stereo); capture ratio 1.0 dB; selectivity 70 dB ±400 kHz; image rejection 70 dB; i-f rejection 80 dB; stereo separation 40 dB at 1000 Hz. AM sensitivity 300 μV; 5.5" H × 17.7" W × 14.2" D $285
4030. Similar to 4080 minus signal-strength/multipath meter, output level control, Dolby FM, multiplex filter, and calibration tone switches; FM IHF usable sensitivity 1.9 μV (mono); 50-dB quieting 3.5 μV (mono), 45 μV (stereo); S/N (A weighted), 72 dB (mono), 68 dB (stereo); capture ratio 1.5 dB; alternate channel selectivity 62 dB ±400 kHz; image rejection 50 dB; i-f rejection 60 dB; 5.5" H × 15.4" W × 10.6" D..... $220
4020. Similar to 4030 except FM tuner only; 3.8" H × 16.5" W × 9.5" D..... $175

NAKAMICHI

630 FM Tuner/Preamplifier
Features switchable phono input sensitivity (1, 2, or 5 mV); stepped tone and variable contour controls; independent tape copying; MOS FET front end; switchable i-f section selectivity (normal and narrow); PLL MPX demodulator; Dolby FM reception. Preamp section: frequency response 20-50,000 Hz +0/−1.5 dB (aux., tape); RIAA equalization ±0.3 dB; S/N (IHF A) 102 dB (aux., tape), 80 dB (phono, 1 mV); phono overload 250 mV (1 kHz, 5 mV sensitivity). Tuner section: sensitivity 19 dBf (mono), 39

3 TUNERS

dBf (stereo); S/N 73 dB (Dolby off); separation 50 dB (1 kHz). 6 11/16" H × 16" W × 9 5/16" D..... $730

430 FM Tuner
Features MOS FET front end; SAW i-f filtering; switchable i-f bandwidth (normal and narrow); PLL MPX demodulator; self-lock tuning; optional Dolby FM circuit board. Specifications: sensitivity for 50-dB quieting 17.3 dBf (mono); THD 0.09% at 1000 Hz; S/N better than 70 dB at 65 dBf (mono); separation better than 50 dB at 1000 Hz. 3 3/32" H × 16" W × 8 7/8" D..... $440
DB-100. Dolby FM circuit board for 430..... $44

NIKKO

Gamma V Digital FM Stereo Tuner
Two-stage PLL-synthesized digital FM stereo tuner features five-gang linear variable tuning capacitor and dual-gate MOS FET front end; LED digital station frequency readout; automatic or manual tuning; tuner lock; muting threshold control; stereo/mono switch; five-LED signal strength; hi-blend switch; i-f band switch; six-station memory with auto scan and hold. Sensitivity 1.8 μV; S/N at 65 dBf 81 dB (mono), 75 dB (stereo); capture ratio 1.0 dB (wide), 1.5 dB (narrow); image response −120 dB; i-f response −120 dB; stereo separation at 1000 Hz 55 dB (wide), 45 dB (narrow); THD in mono 0.04% (wide), 0.08% (narrow), in stereo 0.07% (wide) and 0.2% (narrow). Rear-panel features include de-emphasis selector (25 μsec, 75 μsec), output level control, multipath check points, and Dolby adaptor provision. 2 1/2" H × 19" W × 11 5/8" D..... $700

Gamma I FM Stereo Tuner
Dual-gate MOS-FETs with wide and narrow i-f stage and PLL multiplex circuitry. Features signal-strength and center tuning meters; power on/off; stereo muting on/mono; output level control. Sensitivity 1.8 μV; selectivity 35 dB (wide), 85 dB (narrow); S/N 78 dB (mono), 75 dB (stereo); capture ratio 1.0 dB; stereo separation 50 dB (wide), 40 dB (narrow); spurious rejection 110 dB; THD 0.05% (wide), 0.08% (narrow); rack mountable. 2 1/2" H × 19" W × 9" D..... $400

NT-890 AM-FM Stereo Tuner
Features dual-gate FM MOS FET front end; quadrature detector; signal-strength and tuning meters; multiplex canceller; multipath distortion switch; AM/auto FM/mute/hi-blend/FM mono selector. FM section: usable sensitivity 1.9 μV; 50-dB quieting 14.2 dBf (mono), 30 dBf (stereo); S/N 72 dB (mono), 68 dB (stereo); THD 0.1% (mono), 0.2% (stereo); selectivity 65 dB; capture ratio 1.0 dB; spurious rejection 80 dB; image rejection 55 dB; i-f rejection 90 dB; stereo separation 50 dB at 1000 Hz; frequency response 20-20,000 Hz −1 dB; 5 1/2" H × 16 1/2" W × 14 1/8" D..... $220

NT-790 AM-FM Stereo Tuner
Features low-noise FET front end; LED signal-strength and tuning indicators; high blend filter and FM muting circuit switches. FM section: usable sensitivity 2.0 μV; 50-dB quieting 20 dBf (mono), 35 dBf (stereo); S/N 72 dB (mono), 60 dB (stereo); THD 0.2% (mono), 0.5% (stereo); capture ratio 1.5 dB; alternate channel selectivity 55 dB; spurious rejection 70 dB; image rejection 55 dB; i-f rejection 80 dB; stereo separation 40 dB at 1000 Hz; frequency response 30-15,000 Hz ±2 dB; 3 3/8" H × 16 1/2" W × 14 1/8" D..... $180

ONKYO

T-909 FM Tuner
Digitally-synthesized FM tuner features dual-gate MOS FET in front-end and mixer circuit and tuned buffer circuit in oscillator; quartz-controlled tuning with up/down scanning and LED digital frequency

display; seven-station preset automatic tuning; signal-strength meter; LED tuned and stereo indicators; multiplex i-c and pilot canceller circuits. Usable sensitivity (IHF) 1.7 μV (mono), 4 μV (stereo), 50-dB quieting 3 μV (mono), 35 μV (stereo); S/N 80 dB (mono), 74 dB (stereo); capture ratio 1.5 dB; image rejection 85 dB; i-f rejection 100 dB; spurious rejection 105 dB; alternate channel selectivity 80 dB (IHF); stereo separation 45 dB at 1000 Hz; frequency response 30-16,000 Hz +0.5/−2 dB; 3 1/4" H × 17 3/4" W × 13 15/16" D..... $950

T-4090 AM-FM Stereo Tuner
Features four-ganged variable tuning capacitor and dual-gate MOS FETs in front end; quartz-locked tuning circuitry with touch sensor tuning control; LED locked, tuned, flashing direction arrow, and stereo indicators; LED signal strength bar display; PLL multiplex IC circuit; recording level check switch; stereo noise filter, mute/lock, and 25-μsec FM de-emphasis switches; output level control. FM section: usable sensitivity 1.7 μV (mono), 4 μV (stereo); 50-dB quieting 3 μV (mono), 35 μV (stereo); S/N 76 dB (mono), 68 dB (stereo); capture ratio 1.3 dB; image rejection 90 dB; i-f rejection 100 dB; spurious rejection 95 dB; alternate channel selectivity 70 dB; stereo separation 40 dB at 1000 Hz; frequency response 30-15,000 Hz +0.5/−1.5 dB. AM section: usable sensitivity 25 μV; S/N 45 dB. 4 15/16" H × 16 1/2" W × 15 3/4" D..... $340

T-4040 AM-FM Stereo Tuner
Features four-ganged variable tuning capacitor in FET front end; automatic servo-locked tuning with touch sensor tuning knob; LED locked, tuned, flashing direction arrow, and stereo indicators; LED signal-strength bar display; stereo noise filter and mute/lock switches; output level control; PLL IC multiplex; rear-panel three-position tuning sensor switch. FM section: usable sensitivity 1.9 μV (mono), 4.5 μV (stereo); 50-dB quieting 3.5 μV (mono), 35 μV (stereo); S/N 73 dB (mono), 66 dB (stereo); capture ratio 1.5 dB; image rejection 60 dB; i-f rejection 90 dB; spurious rejection 85 dB; alternate channel selectivity 60 dB (IHF); stereo separation 40 dB at 1000 Hz; frequency response 30-15,000 Hz +0.5/−1.5 dB. AM section: usable sensitivity 25 μV; S/N 45 dB. 4 15/16" H × 16 1/2" W × 15 3/4" D..... $230

OPTONICA

ST-9405 AM-FM Stereo Tuner
Features digitally-synthesized tuning with auto search/scan tuning; LED digital frequency readout display; ten-station memory preset with LED indicators; wide/narrow i-f bandwidth selector with LED; threshold local/distant switch; air-check calibrator; 12-LED signal-strength bar graph display; three-LED tuning meter; hi-blend switch; FM muting; mode switch; multipath monitor switch; variable output terminal; pilot canceller. FM section: IHF usable sensitivity 1.7 μV (mono); S/N 75 dB (mono), 70 dB (stereo); frequency response 30-15,000 Hz ±1.5 dB; THD mono 0.1% (wide), 0.2% (narrow), stereo 0.2% (wide), 0.3% (narrow); IHF selectivity 35 dB (narrow), 80 dB (wide); stereo separation 50 dB (wide), and 45 dB (narrow) at 1000 Hz; ebony faceplate..... $1000

ST-7405 AM-FM Stereo Tuner
Features Opto-Lock tuning system with LED indicator; LED digital frequency readout display; seven-LED signal-strength and center tuning meter displays; narrow/wide i-f bandwidth selector with LED; multipath monitor switch; air-check calibrator; pilot canceller; hi blend switch; FM muting switch; mode switch; variable output terminal. FM section: IHF usable sensitivity 1.7 μV; S/N 75 dB (mono), 70 dB (stereo); frequency response 30-15,000 Hz ±1.5 dB; THD mono 0.1% (wide), 0.2% (narrow), stereo 0.2% (wide), 0.3% (narrow); IHF selectivity 35 dB (narrow), 80 dB (wide); stereo separation 50 dB (wide) and 45 dB (narrow) at 1000 Hz; ebony faceplate; 2.9" H × 19.9" W × 15.5" D..... $400

ST-4405 AM-FM Stereo Tuner
Features five-LED signal-strength and three-LED tuning meter displays; air-check calibrator; high blend, FM muting and mode switches; pilot canceller; variable output terminal. FM section: IHF usable sensitivity 1.7 μV; S/N 75 dB (mono), 70 dB (stereo); frequency response 30-15,000 Hz ±1.5 dB; THD 0.2% (mono), 0.3% (stereo); IHF selectivity 65 dB; stereo separation 45 dB at 1000 Hz; ebony faceplate; 2.9" H × 16.9" W × 15.5" D. $250

ST-4201 AM-FM Stereo Tuner
Features dual gate MOS FET front end and PLL multiplex circuitry; i-f detector; FM air-check calibrator; dual tuning meters; muting; hi-blend switch. FM section: sensitivity 1.7 μV (IHF); frequency response 30-15,000 Hz ±1.5 dB; S/N 72 dB .. $200
ST-4205. Same as ST-4201, except in ebony finish $200

JC PENNEY

3710 FM Stereo Tuner
Features PLL multiplex circuitry; signal-strength and center-tuning meters; FM muting switch; multiplex filter; flywheel tuning knob; record level check; FM dipole antenna; quadrature detector for FM. IHF usable sensitivity 1.9 μV; quieting sensitivity 3.0 μV; mono and stereo THD 0.2%; S/N 72 dB mono; capture ratio 0.6 dB; alternate channel selectivity 70 dB; image rejection 85 dB; stereo separation 45 dB; frequency response 9-16,000 Hz $230

3701 AM-FM Stereo Tuner
Features PLL multiplex circuitry; signal-strength and center-tuning meters; FM mute switch; flywheel tuning; FM dipole antenna. FM section: IHF sensitivity 1.9 μV; quieting sensitivity 3.0 μV; THD 0.2% (mono and stereo); S/N 75 dB mono; capture ratio 0.9 dB; alternate channel selectivity 55 dB; image rejection 50 dB; stereo separation 48 dB; frequency response 10-16,000 Hz. AM section: sensitivity 300 μV; S/N 50 dB..... $160

PHASE LINEAR

5000 Series Two Stereo FM Tuner
Features dynamic range expander; multipath dist. indicator; PLL multiplex decoder; variable muting; variable outputs; 25 and 75 μsec de-emphasis; tuning and signal strength meters; IHF sensitivity 10.8 dBf (1.9 μV) mono, 20.8 dBf (6.0 μV) stereo; 50-dB quieting sensitivity 14.8 dBf (3.0 μV) mono, 34.8 dBf (30.0 μV) stereo; S/N 74 dB mono, 72 dB with expander; frequency response 20-15,000 Hz ±0.5 dB; capture ratio 1.2 dB (narrow); alternate channel selectivity 75 dB (narrow); stereo separation 42 dB (1 kHz); optional walnut cabinet available; 7" H × 19" W × 10" D..... $580

5100 Series Two AM-FM Stereo Tuner
Features digitally-synthesized tuning with manual/auto up/down scan tuning and AM or FM six-station memory preset with LED indicators; LED digital frequency readout display; FM muting and record level check switches; five-LED signal-strength indicator display; PLL multiplex demodulator with auto pilot signal cancelling circuit; 25/75 μsec de-emphasis switch. FM section: usable sensitivity 1.9 μV (mono); 50-dB quieting 3.2 μV (mono), 41.1 μV (stereo); S/N 80 dB (mono), 75 dB (stereo); frequency response 20-15,000 Hz +0.2/−0.5 dB; dist. at 1000 Hz 0.05% (mono), 0.08% (stereo); capture ratio 1.0 dB; alternate channel selectivity 60 dB; image rejection 80 dB; i-f rejection 100 dB; spurious rejection 80 dB; stereo separation 55 dB at 1000 Hz. AM usable sensitivity 300 μV/m (IHF, ferrite antenna) and S/N 50 dB. 3 1/2" H × 19" W × 12" D..... $450

PHILIPS

AH673 AM-FM Stereo Tuner

Has signal strength/multipath and center tuning meters; function display lights; AM and FM output

level controls; FM muting; LED touch switches. FM section: sensitivity 3 μV stereo; 50-dB quieting sensitivity 2.2 μV mono, 30 μV stereo; capture ratio 1 dB; AM response −50 dB; i-f response −110 dB; image response −110 dB; stereo separation 50 dB (1 kHz); hum and noise −72 dB. AM section: sensitivity 150 μV/m (rod antenna); image response −68 dB; i-f response −52 dB; hum and noise −60 dB. 5⅓" H × 18" W × 13½" D $530
AH6731. Black chassis..... $550

AH185 AM-FM Stereo Tuner

Features illuminated FM tuning and signal-strength meters; flywheel tuning; stereo indicator light; AM antenna; output level control; mono mode; multiplex filter; and afc. FM section: usable sensitivity 1.7 μV mono; 50-dB quieting sensitivity 3.5 μV; capture ratio 1.2 dB; AM rejection 60 dB; i-f rejection 90 dB; image rejection 80 dB; stereo separation 50 dB at 1000 Hz. AM section: sensitivity 180 μV/m; alternate channel selectivity 35 dB; image rejection 70 dB at 1400 Hz; i-f rejection 60 dB at 600,000 Hz. 5⅓" H × 14" W × 14" D. $330
AH1851. Black chassis..... $350

PIONEER

TX-9800 AM-FM Stereo Tuner

Features quartz-locked tuning system with LED; signal-strength and center tuning meters; wide/narrow AM-FM i-f bandwidth selector; multiplex noise filter; FM muting/mode and function switches with LEDs; output level control. FM section: usable sensitivity 1.5 μV (mono); S/N 83 dB (mono), 80 dB (stereo); capture ratio 0.8 dB (wide), 2.0 dB (narrow); alternate channel selectivity 30 dB (wide), 85 dB (narrow); stereo separation 55 dB at 1000 Hz (wide); 6⅛" H × 17 11/16" W × 15⅜" D..... $450

TX-7800 AM-FM Stereo Tuner

Features dual-gate MOS FET and frequency-linear four-gang variable capacitor in front end; servo-lock/touch sensor tuning with servo re-lock (when system's power is turned on again); PLL IC multiplex demodulator; quadrature discriminator; LED signal-strength and tuning indicator display; function switch with LEDs; wide/narrow AM i-f bandwidth selector; multiplex noise filter; FM muting/mode switch; output level control. FM section: usable sensitivity 1.6 μV (mono); 50-dB quieting 3.3 μV (mono), 39.2 μV (stereo); S/N 83 dB (mono), 79 dB (stereo); frequency response 20–15,000 Hz +0.2/−0.5 dB; dist. at 1000 Hz 0.05% (mono), 0.08% (stereo); capture ratio 1.0 dB; alternate channel selectivity 75 dB; image rejection 85 dB; i-f rejection 100 dB; spurious rejection 95 dB; stereo separation 50 dB at 1000 Hz. AM section: sensitivity 300 μV/m (IHF, ferrite antenna), 15 μV (IHF, external antenna); S/N 50 dB. 6⅛" H × 17 11/16" W × 15⅜" D $350

TVX-9500 VHF/UHF TV Audio Tuner

Converts all VHF/UHF television audio signals to FM. Features VHF electronic tuning with LED channel indicators and front-panel touch buttons for channels 2-13; UHF rotary detent selector for channels 14-83 and fine tune control; i-f amplifier circuitry; one-stage differential amp and two-stage dc output amplifier circuitry; automatic frequency control. Specifications: 50-dB quieting sensitivity 32 dBf (22 μV) at 25,000 Hz DEV.; S/N 65 dB; dist. at 65 dBf, 25,000 Hz DEV. 0.07% at 100 Hz, 0.07% at 1000 Hz, 0.2% at 6000 Hz; frequency response 50-10,000 Hz +0.5 dB/−1.0 dB; capture ratio 1.0 dB; alternate channel selectivity 25 dB; image response −50 dB (VHF), −40 dB (UHF); i-f response −50 dB (VHF), −55 dB (UHF); AM suppression ratio 50 dB; antenna input 300 ohms and 75 ohms (VHF), 300 ohms (UHF); output level/impedance 400 mV/4700 ohms. 3⅞" H × 16 9/16" W × 13¾" D $250

TX-6800 AM-FM Stereo Tuner

Features FET and three-gang variable capacitor in front end; PLL multiplex; quadrature discriminator; built-in pilot canceller circuit; LED signal-strength and tuning indicator display; function switch with LEDs; FM muting. FM section: usable sensitivity 1.9 μV (mono); 50-dB quieting 3.1 μV (mono), 44 μV (stereo); S/N 80 dB (mono), 74 dB (stereo); frequency response 20-15,000 Hz +0.5/−1.0 dB; dist. at 1000 Hz 0.1% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 60 dB; image rejection 60 dB; i-f rejection 80 dB; spurious rejection 70 dB; stereo separation 40 dB at 1000 Hz. AM section: sensitivity 300 μV/m (IHF, ferrite antenna), 15 μV (IHF, external antenna); S/N 50 dB. 5 13/16" H × 17¾" W × 11 3/16" D... $200

ROTEL

RT-2100 FM Stereo Tuner

Quartz PLL FM tuner with built-in Dolby noise-reduction circuit. Features quartz PLL tuning and multiplex section with dual wide/narrow band selection; LED signal-strength and center-tuning configuration readout, digital station readout; FM muting switch; multipath switch; flywheel tuning. IHF sensitivity 1.6 μV mono, 29 dBf stereo; mono S/N 80 dB (IHF); stereo HD 0.07% (wide), 0.2% (narrow); capture ratio 1.0 dB; IHF alternate channel selectivity 35 dB (wide), 80 dB (narrow); stereo separation 50 dB (wide) at 1000 Hz; image and i-f rejection 115 dB; AM suppression 55 dB; frequency response 30-15,000 Hz ±0.5 dB. 5⅜" H × 19" W × 12⅞" D $600
RT-2000. Similar to RT-2100 but AM section included; IHF sensitivity 9.3 dBf (1.6μV) mono, 30 dBf stereo; stereo HD 0.1%; capture ratio 1.0 dB; alternate channel selectivity 75 dB (IHF); frequency response 30-15,000 Hz +0.5/−1 dB; stereo separation 45 dB at 1000 Hz. AM section: IHF sensitivity 12.5 μV; S/N 50 dB; image rejection 60 dB; selectivity 40 dB. Features similar less LED meter displays and Dolby noise-reduction circuit; has signal-strength and tuning meters. $430

RT-1000 AM-FM Stereo Tuner

Features FET front end; PLL multiplex section; LED signal-strength and tuning indicators; hi-blend and muting switch, FM section: usable sensitivity 1.9 μV (mono); 50-dB quieting sensitivity 3.8 μV (mono); S/N 70 dB (mono); 65 dB (stereo); dist. 0.3% at 1000 Hz (stereo); capture ratio 1.5 dB; i-f rejection 60 dB; stereo separation 40 dB at 1000 Hz, AM usable sensitivity 200 μV/m (IHF, ferrite antenna); selectivity 30 dB; 3 27/32" H × 16 13/16" W × 11 13/32" D $250

SAE

8000 FM Digital Tuner

Features LED digital frequency display; five-gang, dual-gate FET front end; log meters for center-channel tuning and signal strength. Sensitivity 8.5 dBf (1.6 μV); linear-phase monolithic i-f filters with PLL MPX circuitry; 0.2% THD; capture ratio 1.5 dB; AM suppression 100 dB; image rejection 100 dB; selectivity 120 dB; stereo separation 30 dB (over 50-15,000 Hz); 5.25" H × 19" W × 11" D.... $700

T14 AM-FM Stereo Tuner

Features varactor front end; LED digital frequency readout; quartz-lock and synthesized touch tuning; five-station memory preset for AM and FM; LED signal-strength/multipath and output level bar graph displays; variable i-f bandwidth selector; linear phase filters; PLL multiplex filter. 50-dB quieting 34.8 dBf (stereo); S/N 76 dB; THD 0.15% (stereo) $550

3200 FM Digital Tuner

Features digital frequency readout; front-end and linear-phase filters; signal-strength and center tuning LED displays; 75- and 300-ohm antenna inputs; tape out jack. IHF usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 37.2 dBf (40 μV); dist. less than 0.2% stereo, 0.15% mono; stereo separation 35 dB from 50-10,000 Hz.. $400

T7 AM-FM Stereo Tuner

Features digital frequency readout; quartz-lock tuning; LED signal-strength/multipath and output level bar grapn displays. 50-dB quieting 34.8 dBf (stereo); S/N 67 dB; THD 0.22% (stereo), 0.11% (mono) $375

T3U AM-FM Stereo Tuner

Features linear AM-FM dial; signal-strength and FM center-channel tuning meters; PLL multiplex; illuminated pushbutton modes. IHF usable sensitivity 10.3 dBf (1.8 μV); capture ratio 1.5 dB; THD 0.15% mono, 0.25% stereo $275

SANSUI

TU-X1 AM-FM Stereo Tuner

Features separate AM and FM tuning systems with signal-strength (combined signal-strength/multi-

path in FM) and tuning meters, switchable output level control, switchable muting, and wide/narrow i-f bandwidth controls in each section; seven-gang tuning capacitor; dc composite and dc audio output amplifier circuitry; 200-V μsec multiplex driver in FM section and synchronized PLL product detector circuitry in AM section; LED AM and FM wide and narrow and FM stereo indicators; calibration tone switch control; noise filter; upper/lower beat canceller. FM IHF sensitivity 1.49 μV; 50-dB quieting sensitivity 34.0 dBf (stereo); dist. 0.03% (stereo); selectivity 80 dB (narrow band), 55 dB (wide band); S/N 80 dB (stereo); matte black finish..... $980

TU-919 AM-FM Stereo Tuner

Digitally-controlled quartz-locked AM-FM stereo tuner features four-digit frequency readout; signal-strength and tuning meters; calibration tone selector; FM muting switch; two i-f wide/narrow bandwidth selectors for AM and FM; auto noise filter; input selector for auto/mono FM and AM; output level control; LED FM stereo and quartz lock indicators. FM section: IHF sensitivity 1.54 μV; 50-dB quieting 34.0 dBf; dist. 0.06% (stereo); S/N 82 dB; capture ratio 0.9 dB; matte black finish with detachable rack-mount handles..... $585

TU-717 AM-FM Stereo Tuner

Features dual-gate MOS FETs and four-gang tuning capacitor in front end; wide/narrow i-f bandwidth selector; signal-strength and tuning meters; calibration level control; muting and noise canceller controls; output level control; input selector for mono and auto FM and AM with LEDs. FM section: IHF sensitivity 4.9 μV (stereo), 1.7 μV (mono); 50-dB quieting sensitivity 27.5 μV (stereo), 2.24 μV (mono); S/N 81 dB (mono), 78 dB (stereo); frequency response 30-15,000 Hz +0.2/−2 dB; THD 0.07% (stereo, wide), 0.2% (stereo, narrow); capture ratio 1.0 dB (wide), 1.5 dB (narrow); matte black finish with EIA rack mount handles and feet; 6⅜" H × 18 13/16" W × 16½" D..... $370

TU-417 AM-FM Stereo Tuner

Features FET r-f stage, i-f section with three differential amplifier limiter stages, and four-element lin-

3 TUNERS

ear phase ceramic filter; PLL stereo demodulator; signal-strength and tuning meters; switchable muting and noise canceller selectors; output level control; input selector for auto/mono FM and AM with FM stereo LED. FM section: IHF sensitivity 10.1 dBf (mono); frequency response 20-15,000 Hz +0.5/−1 dB; dist. 0.07% (mono), 0.09% (stereo); satin-black front panel with detachable rack-mount handles $275

TU-317. Similar to TU-417 except IHF FM sensitivity 1.8 μV (10.3 dBf); capture ratio 1.0 dB; frequency response 30-15,000 Hz +0.5/−1.0 dB $240

TU-217. Similar to TU-317 without noise-canceller circuitry; combined muting and auto/mono FM mode switch; FM sensitivity 1.85 μV (IHF); dist. 0.12% (mono), 0.13% (stereo) $190

SANYO

PLUS T55 AM-FM Stereo Tuner

Features four varactor tuning diodes in FM front end; quartz-lock frequency synthesizer digital tuning with LED analog and frequency digital readout display; 12-station memory tuning with LEDs; fluorescent signal-strength and FM tuning display; variable FM muting threshold; wide-narrow i-f bandwidth selector; passive four-pole LC multiplex filter; input selector and output level control. FM section: usable sensitivity 1.8 μV (mono); 50-dB quieting 3.0 μV (mono), 36 μV (stereo); THD at 1000 Hz, mono 0.15% (narrow), 0.09% (wide), stereo 0.2% (narrow), 0.1% (wide); frequency response 20-15,000 Hz +1/−2 dB; alternate channel selectivity 80 dB (narrow), 55 dB (wide), ±400 kHz; capture ratio 1.8 dB (narrow), 1.2 dB (wide); stereo separation 42 dB (narrow), and 48 dB (wide) at 1000 Hz; spurious rejection 80 dB; image rejection 70 dB; i-f rejection 90 dB. AM section; usable sensitivity 300 V/m (ferrite, external antenna); S/N 45 dB. Includes rack-mount handles; 1 3/4" H × 17 1/4" W (19" with handles) × 10 9/16" D $350

PLUS T35. Similar to PLUS T55 without 12-station memory preset; features "sampling quartz locked" tuning system with illuminated analog tuning dial, digital frequency readout, and on/off locked switch; record level calibration oscillator $300

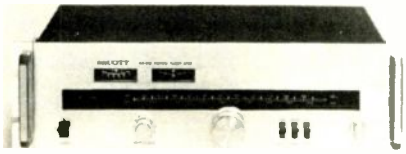
FMT 611K AM-FM Stereo Tuner

MOS-FET FM front end with ceramic i-f filters and PLL multiplex decoder. Features FM muting switch; signal-strength and center-channel tuning meters; multiplex noise switch; FM stereo indicator; flywheel tuning. FM section: IHF usable sensitivity 10.8 dBf (1.9 μV); S/N 75 dB mono, 65 dB stereo; dist. at 1000 Hz 0.08% mono, 0.02% stereo; capture ratio 1.0 dB; alternate channel selectivity 70 dB; image and i-f rejection 55 dB; AM rejection 50 dB; stereo separation 45 dB at 1000 Hz; 300- and 75-ohm antenna inputs. AM section: IHF sensitivity 300 μV/m; selectivity 43 dB; S/N 65 dB; image rejection 50 dB; i-f rejection 48 dB; built-in antenna. 5 7/8" H × 16 1/2" W × 13 3/4" D $160

H.H. SCOTT

570T AM-FM Stereo Tuner

Features four-gang FM tuning capacitor and dual-gate MOS FET in front end; PLL multiplex demodulator; signal-strength and tuning meters; multiplex filter, mode and muting switches; output level control; rear-panel 25/50/75 μsec de-emphasis switch. FM section: IHF sensitivity 1.8 μV; 50-dB quieting sensitivity 3.5 μV (mono), 33 μV (stereo); S/N 75 dB (mono), 70 dB (stereo); frequency response 25-15,000 Hz ±2 dB; dist. 0.1% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 70 dB; image rejection 80 dB; i-f and spurious response rejection 90 dB; stereo separation 50 dB at 1000 Hz. AM usable sensitivity 250 μV/m (bar antenna) and S/N 50 dB. 5 1/4" H × 17" W × 11 3/4" D $250



530T AM-FM Stereo Tuner

Features four-gang FM tuning capacitor and dual-gate MOS FETs in front end; combined signal-strength/center tuning meter; muting and mode switches; rear-panel 25/50/75 μsec de-emphasis switch. FM section: IHF sensitivity 1.9 μV; 50-dB quieting sensitivity 3.8 μV (mono), 35 μV (stereo); S/N 72 dB (mono), 67 dB (stereo); frequency response 25-15,000 Hz ±2 dB; dist. 0.15% (mono), 0.3% (stereo); capture ratio 1.5 dB; alternate channel selectivity 60 dB; image rejection 65 dB; i-f rejection 85 dB; spurious rejection 80 dB; stereo separation 45 dB at 1000 Hz. AM usable sensitivity 250 μV/m (bar antenna) and 45 dB S/N. 5 1/4" H × 17" W × 11 3/4" D $200

SERIES 20

F-26 FM Tuner

Features quartz-locked sampling tuning; three-LED tuning indicators; wide/narrow i-f bandwidth selector with LED; FM muting. IHF usable sensitivity 1.9 μV (mono); 50-dB quieting 2.5 μV (mono), 33.5 μV (stereo); S/N 87 dB (mono), 84 dB (stereo); dist. at 1000 Hz 0.03% (mono), 0.05% (stereo); frequency response 20-15,000 Hz +0.1/−0.3 dB; capture ratio 2.0 dB (narrow); alternate channel selectivity 80 dB ±400 kHz (narrow); image, i-f, and spurious rejection 120 dB; stereo separation 55 dB at 1000 Hz. 3 3/16" H × 16 9/16" W × 14" D $1000

F-28 FM Tuner

Features quartz synthesizer tuning; signal-strength meter; record level and multiplex filter switches; wide/narrow i-f bandwidth selector; muting and mode switches; output level control. Usable sensitivity 1.8 μV (mono); 50-dB quieting 2.8 μV (mono), 35 μV (stereo); S/N 84 dB (mono), 81 dB (stereo); dist. at 1000 Hz, mono 0.04% (wide), 0.08% (narrow), stereo 0.05% (wide), 0.15% (narrow); frequency response 20-15,000 Hz +0.1/−0.3 dB; capture ratio 0.8 dB (wide), 1.5 dB (narrow); alternate channel selectivity 35 dB (wide), 70 dB (narrow); spurious, image, and i-f rejection 120 dB; stereo separation 55 dB at 1000 Hz (wide). 6 1/8" H × 16 9/16" W × 14 13/16" D $690

SHARP

ST-1122 AM-FM Broadcast Tuner

FET front-end AM-FM stereo tuner features "air check," 400-Hz tone generator for recording FM broadcasts, frequency linear slide-rule tuning, center-channel FM tuning and signal-strength meters, AM/FM/mono/FM muting pushbutton selector switches, and LED stereo and power on indicators. FM section: IHF sensitivity 2.0 μV; capture ratio 1 dB; S/N 70 dB; IHF selectivity 60 dB; image rejection 50 dB; i-f rejection 90 dB; AM suppression 50 dB; dist. 0.3% at 400 Hz (mono and stereo); stereo separation 45 dB at 1000 Hz, 35 dB from 50-10,000 Hz; frequency response 30-15,000 Hz ±1.5 dB. AM section: quieting sensitivity 300 μV/m; selectivity 25 dB; S/N 42 dB; image rejection 50 dB; i-f rejection 30 dB. 5 3/8" H × 15 3/8" W × 10 1/8" D $270

ST-1144. Similar to ST-1122 except FM sensitivity 1.9 μV $350

SHERWOOD

S-32 CP AM-FM Stereo Tuner

Features cross-coupled PLL stereo multiplex demodulator; high inertia flywheel tuning; signal-strength and tuning meters; multiplex noise filter; FM muting; output level control; selector switch with LEDs. FM section: IHF usable sensitivity 1.7 μV (mono); 50-dB quieting 2.8 μV (mono); IHF S/N 74 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +1/−2 dB; THD at 1000 Hz 0.1% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 70 dB; image rejection 60 dB; i-f rejection 75 dB; spurious rejection 85 dB; stereo separation 45 dB at 1000 Hz. AM sensitivity 15 μV. 5 1/4" H × 17" W × 12 3/4" D $290

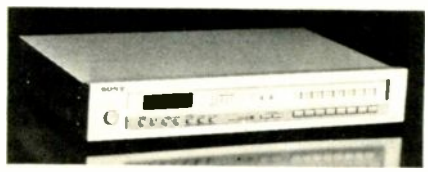
SONY

ST-A7B FM Stereo Tuner

Quartz-crystal frequency synthesis FM tuner with "X-tal Lock" tuning system which eliminates need for center-tuning and AFC circuit. Features digital frequency display; linear tuing dial with LED; i-f bandwidth selector; signal-strength tuning meter with switchable multipath; connections for FM Dolby adaptor and 25 μsec de-emphasis; adjustable interstation-noise muting threshold; adjustable output level for program-source level matching; hi-blend switch. Usable sensitivity 8.8 dBf (1.5 μV); 50-dB quieting sensitivity 14.2 dBf (2.8 μV) mono, 34.6 dBf (30 μV) stereo; S/N 80 dB mono, 75 dB stereo; capture ratio 0.8 dB (normal), 1.8 dB (narrow); alternate channel selectivity 50 dB at 400,000 Hz (normal) 120 dB at 400,000 Hz (narrow); image rejection 90 dB; AM suppression 60 dB; THD and IM dist. mono 0.04% at 1000 Hz (normal), 0.2% (narrow), stereo 0.08% (normal) 0.3% (narrow); frequency response 20-15,000 Hz +0.2/−0.5 dB; stereo separation 55 dB at 1000 Hz (normal), 45 dB at 1000 Hz (narrow); output 750 mV fixed, 1.5 V variable. Brushed aluminum finish. 6 3/4" H × 18 1/8" W × 16 5/8" D $900

ST-J60 FM Stereo Tuner

Features varactor diode and MOS FET amplification in front end; quartz lock frequency synthesis tuning



with LED digital frequency readout; eight-station memory preset with LEDs; manual or autoscan tuning; LED multipath/signal strength meter display with selector; defeatable muting and built-in 400-Hz calibration test tone controls; front-panel insert cards to indicate preset stations. 50-dB quieting sensitivity 3.5 μV (mono), 40 μV (stereo); S/N 77 dB (mono), 72 dB (stereo); frequency response 30-15,000 Hz +0.2/−0.5 dB; THD and IM dist. at 1000 Hz 0.06% (mono), 0.08% (stereo); capture ratio 1.0 dB; alternative channel selectivity 85 dB at 400 Hz; image rejection 85 dB; i-f rejection 95 dB; spurious response −100 dB; stereo separation 50 dB at 1000 Hz; AM suppression 60 dB; 3 1/4" H × 17" W × 12 1/4" D $400

ST-A6B FM Stereo Tuner

Features seven-gang tuning capacitor and dual-gate MOS FET r-f front end; PLL IC stereo multiplex stage; i-f bandwidth selector; signal-strength/multipath and center tuning meters with selector; 400-Hz test-tone calibrator; interstation-noise muting switch; adjustable output level control; hi-blend switch. Usable sensitivity 1.7 μV; 50-dB quieting 3.4 μV (mono), 39 μV (stereo); S/N 79 dB (mono), 74 dB (stereo); capture ratio 1.0 dB (normal), 1.2 dB (narrow); frequency response 30-15,000 Hz +0.2.−1.5 dB; THD and IM dist. at 1000 Hz, mono 0.08% (normal), 0.2% (narrow), stereo 0.15% (normal), 0.4% (narrow); alternative channel selectivity 55 dB (normal), 85 dB (narrow); image rejection 120 dB; stereo separation at 1000 Hz 45 dB (normal), 40 dB (narrow); 6 5/8" H × 16 15/16" W × 12 5/8" D $310

ST-A30 AM-FM Stereo Tuner

Features MOS-FET front end; PLL IC multiplex sys-

tem; "Acute Servo Lock" indicator; LED signal-strength indicators; hi-blend switch; 50-dB quieting 16.1 dBf (mono), 37.3 dBf (stereo); S/N 70 dB (mono), 60 dB (stereo); selectivity 75 dB at 400 Hz; 3¼" H × 17" W × 12¼" D $220

Precise Series

ST-P7J Mini FM Stereo Tuner
Features varactor diodes and MOS FET front end; quartz lock frequency synthesis tuning with LED digital frequency display; eight-station memory preset; manual or autoscanning tuning; LED signal-strength meter display; defeatable muting; front-panel inset cards indicate preset stations; feather-touch function controls with LEDs. 50-dB quieting sensitivity 3.5 μV (mono), 40 μV (stereo); S/N 77 dB (mono), 72 dB (stereo); frequency response 30-15,000 Hz +0.2/−0.5 dB; THD and IM dist. at 1000 Hz 0.06% (mono), 0.08% (stereo); capture ratio 1.0 dB; selectivity 85 dB at 400 Hz; image rejection 85 dB; i-f rejecion 95 dB; spurious rejection 100 dB; stereo separation 50 dB at 1000 Hz; AM suppression 60 dB; complements Precise Series TA-P7F integrated amplifier and PS-P7X turntable; 3¼" H × 8½" W × 13" D $500

SPECTRO ACOUSTICS

220R FM Tuner
Features digitally-synthesized tuning with built-in LED frequency/clock readout display. IHF usable sensitivity 0.9 μV (mono), 1.8 μV (stereo); 50-dB quieting 3 μV (mono), 28 μV (stereo); S/N 70 dB (mono), 65 dB (stereo); frequency response 30-16,000 Hz ±1 dB; dist. 0.15% (stereo); capture ratio 1.5 dB; alternate channel selectivity 75 dB; image rejection 100 dB; stereo separation 42 dB at 1000 Hz; 3½" H × 19" W × 9" D $500

STUDER/REVOX

B760 FM Digital Tuner
Digital frequency synthesizer FM tuner with manual or memory tuning capacity of up to 15 pre-tuned

channels through pushbutton operation; five-digit LED front-panel display of station frequencies; variable muting and separation; Dolby-B card option available; logarithmic signal-strength and center-tuning meters; multipath scope output; 50-dB quieting sensitivity 2.5 μ V; capture ratio 0.9 dB; spurious, image, and i-f rejection 106 dB or better; mid-band separation 42 dB; AM suppression 75 dB; THD less than 0.15% (stereo and mono); S/N 75 dB; 6" H × 17¾" W × 13¾" D..... $1649

TECHNICS

ST-9038 FM Stereo Tuner
Quartz-synthesizer FM stereo tuner. Features quartz-oscillated digital program readout; three-position muting switch; mode switch for pink noise, auto, and mono; auto hi-blend on/off; power on/off; auto tune down/up dial and main auto tuning dial. IHF sensitivity 12.8 dBf (1.2 μV) at 75 ohms; 50-dB quieting sensitivity at 75 ohms 18.1 dBf (2.2 μV) mono, 38.1 dBf (22 μV) stereo; THD 0.1% (mono), 0.15% (stereo); S/N 75 dB (mono); frequency response 20-18,000 Hz +0.1/−0.5 dB; capture ratio 1.0 dB; alternate channel selectivity 75 dB; image response −105 dB; i-f response −105 dB; spurious response −105 dB; AM suppression 55 dB; stereo separation 45 dB at 1000 Hz; output level 0-1.5 V. 1²⁵/₃₂" H × 18³/₈" W × 11¹/₃₂" D $600
SH-9038. 32-step microprocessor-controlled programming unit (see Section 14, Accessories, under "Technics by Panasonic" $600

ST-9030 FM Stereo Tuner
Professional Series component; has automatic narrow and wide i-f bandwidth selection; PLL MPX IC circuitry; pilot and subcarrier cancelling circuits; servo tuning circuit; eight-ganged variable tuning capacitor; signal meter (linear to 81 dBf); sensitivity 1.2 μV; 50-dB quieting sensitivity at 75 ohms 18.1 dBf (2.2 μV) mono, 38.1 dBf (22 μV) stereo; THD at 1000 Hz 0.08% (mono and stereo wide), 0.15% (mono narrow), 0.3% (stereo narrow); S/N 80 dB mono; frequency response 20-18,000 Hz +0.1/−0.5 dB variable; capture ratio 0.8 dB (wide), 90 dB (narrow); alternate channel selectivity 25 dB (wide), 90 dB (narrow); image response −135 dB; i-f response −135 dB; AM suppression 58 dB (wide); stereo separation 50 dB (1 kHz, wide) $460

ST-8077 AM-FM Stereo Tuner
Features active servo-lock fine tuning circuit with active sensor LED tuning indicator; SAW i-f filter; 19-kHz pilot-signal canceller circuit; built-in signal generator; three-step muting adjust with LED; pearl-grey metal cabinet $300

ST-8044 AM-FM Stereo Tuner
Features MOS FET front end; PLL multiplex IC demodulator; quadrature FM detector; active servo lock fine tuning; five-LED signal strength display; LED center-tuning indicator; FM muting; pearl grey metal cabinet $200

ST-8011 AM-FM Stereo Tuner
Features MOS FET front end; PLL multiplex IC demodulator; active servo lock tuning; two-color LED dial pointer that indicates signal-strength and station tuned; center tuning LED; AM and FM interstation muting/mode switch; pearl grey metal cabinet. $170

TOSHIBA

F15 Micro FM Stereo Tuner
Features PLL quartz crystal digital synthesizer tuning with up/down scan tuning and LED digital frequency/memory channel readout; ten-station memory preset; mono and rec calibration switches; manual/auto mode. Usable sensitivity 0 95 μV; S/N 72 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +0.2/−0.8 dB; dist. at 1000 Hz 0.15 % (mono), 0.25% (stereo); capture ratio 1.0 dB; alternate channel selectivity 75 dB; image rejection 50 dB; i-f rejection 80 dB; spurious rejection 100 dB; stereo separation 45 dB at 1000 Hz; silver finish; 2.1" H × 10.1" W × 7.7" D..... $360
F15B. Black finish $370

ST-665 AM-FM Stereo Tuner
Features PLL quartz crystal digital synthesizer tuning with up/down scan tuning and LED digital fre-

quency readout display; six-station memory preset for AM and FM; five-LED signal-strength bar display; function, mode, and record calibration controls. FM section: usable sensitivity 1.8 μV (mono); S/N 72 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz +0.5/−1.5 dB; dist. 0.15% (mono), 0.2% (stereo); capture ratio 1.0 dB; alternate channel selectivity 80 dB; image rejection 60 dB; spurious rejection 75 dB; stereo separation 45 dB at 1000 Hz. AM usable sensitivity 300 μV/m and S/N 50 dB; 2.3" H × 16.5" W × 11.5" D. $300

ST-420 AM-FM Stereo Tuner
Incorporates FET and frequency linear four-gang variable capacitor in front end; PLL IC MPX circuitry; built-in calibrator for air check level; variable output; FM vertical and horizontal multipath outputs; signal and tuning meters. FM IHF usable sensitivity 1.9 μV (mono); S/N 72 dB (mono), 68 dB (stereo); frequency response 20-15,000 Hz ±1 dB; THD 0.2% (mono), 0.3% (stereo); capture ratio 1.0 dB; alternate channel selectivity 70 dB; image rejection 85 dB; i-f rejection 90 dB; spurious rejection 100 dB; stereo separation 45 dB at 1000 Hz; AM sensitivity 300 μV/m; 5.8" H × 17.7" W × 14.8" D $230

ST-335 AM-FM Stereo Tuner
Features FET front end with ceramic filters; PLL IC MPX circuitry; twin tuning meters; linear tuning scale; tuning knob; built-in FM broadcast reference signal; FM muting/mode switch; LED stereo indicator. FM section: sensitivity (IHF) 11.2 dBf (2.0 μV); S/N 73 dB (mono), 65 dB (stereo); capture ratio 1.0 dB; alternate channel selectivity 60 dB; stereo separation 40 dB at 1000 Hz; frequency response 30-15,000 Hz ±1 dB. AM section: sensitivity 300 μV/m; S/N 45 dB; selectivity 25 dB. 3⅝" H × 16½" W × 10¹/₁₆" D $160

YAMAHA

T-2 FM Stereo Tuner
Features digital frequency display; r-f mode selector; i-f mode selector; automatic DX; digital readout; slide-rule dial; 330-Hz record calibration; signal Q meter. FM usable sensitivity 8.8 dBf (1.5 μV); 50-dB quieting sensitivity 13.2 dBf (2.5 μV) mono, 34.2 dBf (28 μV) stereo; THD 0.05% (mono and stereo); S/N 88 dB (mono); frequency response 10-18,000 Hz +0.3/−3 dB; capture ratio 1 dB; alternate channel selectivity 100 dB; image response −120 dBf; i-f response −120 dBf; AM suppression 60 dB; stereo separation 55 dB at 1000 Hz; output 0.5 V fixed, 1 V variable. 2¾" H × 17⅛" W × 13¾" D $750

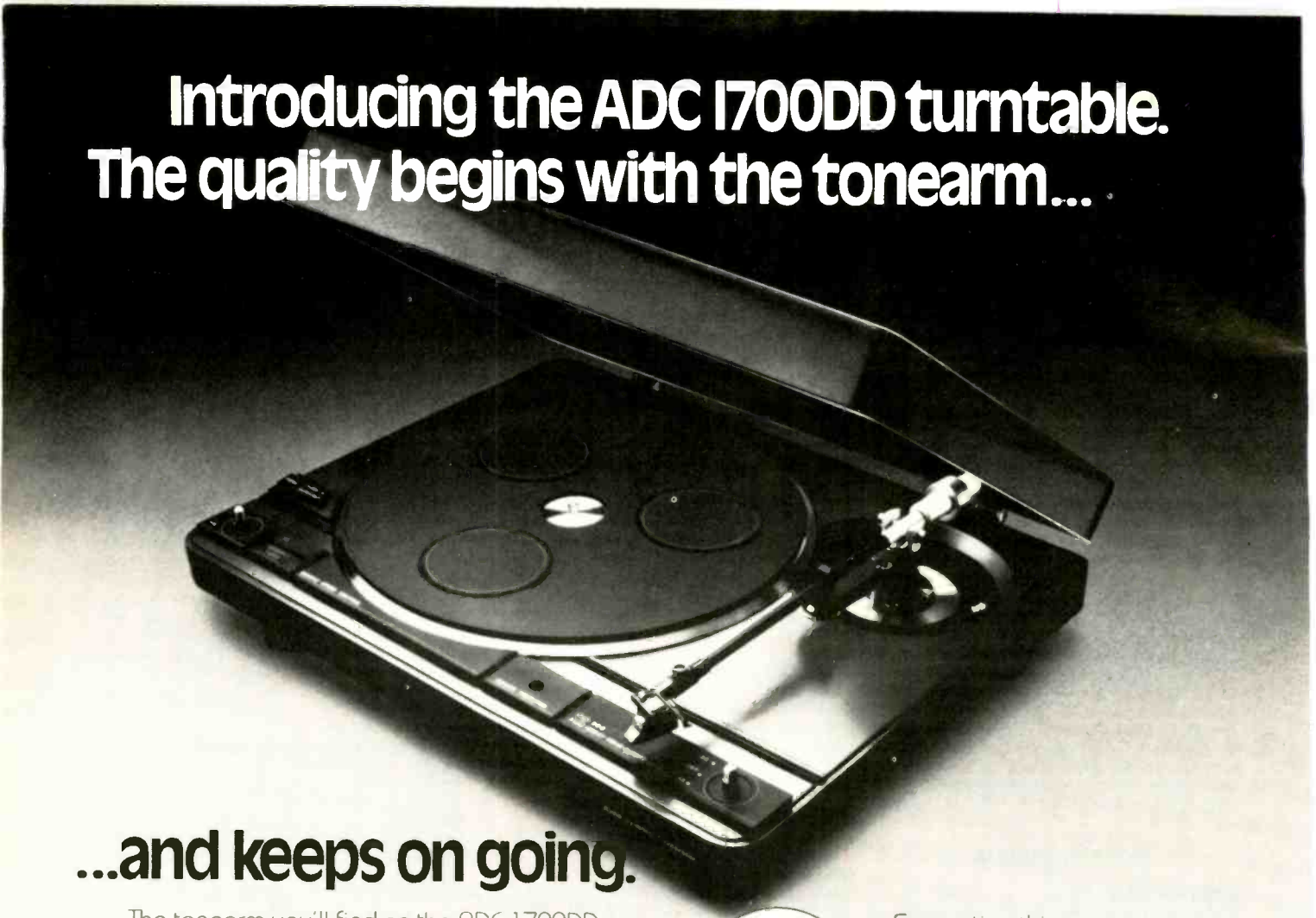
CT-1010 AM-FM Stereo Tuner
Has PLL multiplex decoder; wide-gap five-gang variable capacitor; image response −110 dB; sensitivity 1.9 μV; 19-kHz pilot carrier cancellation; manual tuning with automatic disengagement of afc; muting circuit; signal strength/quality and center-zero metering; 333-Hz recording signal calibration generator $385
CT-810. Similar to CT-1010 but has −90 dB image response and 1.8 μV sensitivity $285

T-1 AM-FM Stereo Tuner
Features DX selection circuitry for automatic selection of i f bandwidth; signal quality meter; record calibration system; direct-current amplifiers. FM section: usable sensitivity 9.8 dBf (1.7 μV); 50-dB quieting sensitivity 14.8 dBf (3 μV) mono, 36 dBf (35 μV) stereo; THD 0.05% (mono and stereo); S/N 80 dB (mono); frequency response 30-15,000 Hz ±0.5 dB; capture ratio 1.0 dB; alternate channel selectivity 92 dB; image response −90 dB; i-f response −100 dB; AM suppression 65 dB; stereo separation 55 dB at 1000 Hz; output 0.5 V fixed. AM section: sensitivity 15 μV (IHF); selectivity 30 dB; S/N 50 dB. 3⅞" H × 17⅛" W × 14⅞" D. $365

CT-610II AM-FM Stereo Tuner
Has selectable long-distance mode, NFB-PLL FM multiplex demodulator, and built-in recording calibrator. FM section: usable sensitivity 9.3 dBf (1.6 μV) mono; capture ratio 1.0 dB; alternate channel selectivity 85 dB (DX mode), 55 dB (normal mode); S/N (at 65 dBf) 75 dB stereo; IM dist. 0.2%; stereo separation 45 dB at 1000 Hz, 40 dB at 50 and 10,000 Hz; frequency response 50-10,000 Hz ±0.5 dB. AM section: sensitivity 18 μV; selectivity 25 dB at 1000 Hz; S/N 50 dB; THD 0.4%. Other features include signal-strength and tuning meters, FM blend and muting selection, and front-panel output level control. 6¼" H × 17⅛" W × 13³/₁₆" D. $225

CT-410II AM-FM Stereo Tuner
FM section: usable sensitivity 10.3 dBf (1.8 μV); 50-dB quieting sensitivity 14.8 dBf (3 μV) mono, 37.2 dBf (40 μV) stereo; THD 0.1% (mono), 0.15% (stereo); S/N 74 dB (mono); frequency response 30-15,000 Hz +0.5/−1.5 dB; capture ratio 1 dB; alternate channel selectivity 82 dB; image response −45 dB; i-f response −80 dB; AM suppression 60 dB; stereo separation 40 dB; output 0.5 V. AM section: usable sensitivity 18 μV; selectivity 25 dB at 1000 Hz; image response −40 dB at 1000 Hz; THD 0.4% $185

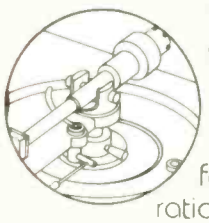
Introducing the ADC 1700DD turntable. The quality begins with the tonearm...



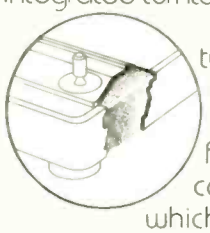
...and keeps on going.

The tonearm you'll find on the ADC 1700DD reduces mass and resonance to new lows. So the music you hear comes out pure and clean.

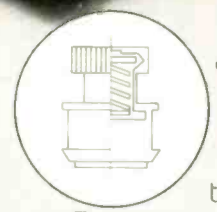
Our engineers have combined the latest advancements of audio technology to create the amazing 1700DD, the first low mass, low resonance turntable.



The famous UMF carbon fibre tonearm was the model for the sleek black anodized aluminum tonearm found on the ADC 1700DD. The headshell is molded carbon fibre, long known for its low mass to high tensile strength ratio. The viscous cueing is a gentle 4mm/sec., and the tempered spring anti-skate adjustment is infinitely variable to 3.5 grams. The pivot system uses stainless steel instrument bearings, which are hand-picked and perfectly matched to both the outer and inner races for virtually frictionless movement. All this makes it the best tonearm found on an integrated turntable.

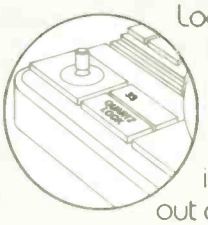


The base on the ADC 1700DD turntable is constructed of a highly dense structural foam which absorbs and neutralizes resonance and feedback. The speed selection control is an electronic microswitch which will respond to your lightest touch.



Supporting this resonance-cancelling base are energy absorbing, resonance-tuned rubber suspension feet. These suspension feet help to stabilize the base while controlling resonance.

The motor in the ADC 1700DD is also present standard of excellence: Direct Drive Quartz Phase-Locked Loop. A quartz crystal is used in the reference oscillator of the motor. An electronic phase comparator constantly monitors any variance in the speed, making instantaneous corrections. Even when out of the Quartz-Locked mode, the optical scanning system keeps drift at below 0.2%. Wow and flutter are less than .03%. Rumble is an incredible -70dB Din B.



The result of all these breakthroughs is pure, uninterrupted enjoyment.

We invite you to a demonstration of this and the other remarkable ADC turntables at your nearest franchised dealer.

Or write for further information to: ADC Professional Products, a division of BSR Consumer Products Group, Route 303, Blauvelt, N.Y. 10913. Distributed in Canada by BSR (Canada) Ltd., Ontario.

A D C
A BSR Company

ADC. We build breakthroughs.

CIRCLE NO. 47 ON READER SERVICE CARD

4 TURNTABLES

ADC

3001-DD Turntable
Two speed (33⅓ and 45 rpm) direct-drive turntable without tonearm; dc brushless motor; strobe with ±5% speed adjustment; wow and flutter 0.035% (DIN 45-507); rumble −70 dB (DIN B); 3" H × 18³⁄₁₆" W × 14¹⁄₄" D..... $250

ADC PROFESSIONAL PRODUCTS

1700DD Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct-drive quartz PLL turntable with auto return arm; electronic

phase comparator monitors speed change; low-mass black anodized aluminum tubular straight tonearm; molded carbon fiber headshell; viscous damped cueing; spring anti-skate adjustment; micro-switch electronic controls; electronic speed and pitch controls; digital speed display; aluminum platter; resonance-tuned suspension feet; includes removable hinged dustcover..... $280

1600DD. Similar to 1700DD except has illuminated stroboscope for speed monitoring and anti-static mat on platter; minus quartz PLL motor and digital speed display..... $230

1510FG. Similar to 1600DD except belt-drive system with S-shaped arm; FG servo-controlled dc motor..... $190

AIWA

LP-3000U Automatic Single-Play
Two-speed (33⅓ and 45 rpm) linear-track pro-

grammable quartz-lock direct-drive turntable with automatic tonearm; pulse-synthesizer quartz PLL servomotor; 7²⁵⁄₁₆-in linear-track and statically-balanced zinc diecast straight tonearm with removable 16.5-g aluminum diecast headshell and independent coreless motor drive; 31-cm zinc diecast platter. Features microprocessor-controlled automatic 15-selection programming with auto repeat (includes repeat of selection segment), cue and review, forward and back skipping, and pause; infrared LED disc sensor with disc size selector for 17-, 25-, and 30-in discs; quartz-locked speed control with LED readout; pitch control (±6%) with LED; feather-touch electronic controls. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-15 g (with accessory headshell). Resonance-absorbing height-adjustable insulator feet; dustcover does not cover operations controls; 5¹⁵⁄₁₆" H × 18¹⁵⁄₁₆" W × 17¹⁵⁄₁₆" D..... $1200

AP-2600 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with auto lift/stop tonearm; quartz PLL servomotor 9³⁄₈-in statically-balanced zinc-diecast S-shaped tonearm with viscous-damped cueing and adjustable anti-skating; 13⁵⁄₁₆-in aluminum alloy diecast platter. Features digital speed readout display; pitch control (±6% in 0.1% steps) with LED digita readout; speed adjust; rec-sync mechanism, built-in muting; solenoid feather-touch controls. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); tracking force range 0-3 g; cartridge weight range 3-14 g; resin cabinet with height-adjustable insulators; removable hinged dustcover; 6" H × 18¹⁵⁄₁₆" W × 15¹⁵⁄₁₆" D..... $400

AP-2200 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic lift/return tonearm; 8-pole linear torque dc servomotor; front-panel controls; one-row stroboscope with pilot lamp; variable pitch control ±3%; S-shaped arm (effective length 215 mm); anti-skating; viscous-damped cueing; rubber headshell liner; moving-magnet cartridge; stylus pressure gauge; adjustable insulators; wow and flutter 0.035% wrms, 0.065% (DIN); rumble −60 dB (IEC "B"), −70 dB (DIN "B"); tracking force 0-3 g; 4⅞" H × 18³⁄₄" W × 14³⁄₁₆" D..... $190

AKAI

AP-307 Automatic Single Play
Two-speed (33⅓ and 45 rpm) direct-drive quartz PLL turntable with automatic tonearm; discolith-coil dc servomotor and geared motor for tonearm drive; 220-mm static balanced S-shaped tonearm with anti-skate and stylus overhang adjusters; 314-mm aluminum alloy diecast platter Features quartz lock switch; built-in strobe light; ±2.5% variable pitch control; electronic speed switch (1000 Hz ±0.08% accuracy); auto repeat; manual operation control; oil-damped cueing. Wow and flutter 0.035% (DIN), 0.025% (JIS); rumble −49 dB (DIN A), −70 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-12 g. Silver panel with removable hinged smoked acrylic dustcover; rubber insulation feet; includes low capacitance cord; 6⁷⁄₃₂" H × 17⁹⁄₁₁" W × 13³⁄₄" D..... $280

AP-306. Similar to AP-307 except semi-automatic with auto-return tonearm and eight-pole dc servomotor; no auto repeat..... $240

AP-207 Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; discolith-coil dc servomotor and geared motor for tonearm drive; 220-mm static-balanced S-shaped tonearm with anti-skate and stylus overhang adjusters; 314-mm aluminum alloy diecast platter. Features electronic speed selector (1000 Hz ±0.15% accuracy); ±2.5% variable pitch control; built-in strobe light; manual operation control; auto repeat; oil damped cueing. Wow and flutter 0.035% (DIN), 0.025% (JIS); rumble −49 dB (DIN A), −70 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-12 g; silver panel and particle board cabinet with removable hinged smoked acrylic dustcover and rubber insulation feet; includes low capacitance cord; 6⁷⁄₃₂" H × 17⁵⁄₁₆" W × 13³⁄₄" D..... $200

AP-206. Similar to AP-207 except semi-automatic with auto-return tonearm and discolith coil dc servomotor; no auto repeat..... $160

AP-100 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto-return tonearm; four-pole synchronous motor; 220-mm static-balanced S-shaped tonearm with anti-skating and stylus overhang adjusters; oil-damped cueing; 330-mm aluminum diecast platter. Wow and flutter 0.05% wrms (JIS); S/N 53 dB (JIS), 43 dB (DIN A), 64 dB (DIN B); tracking force range 0-4 g; cartridge weight range 5-8.5 g; silver panel with removable hinged smoked acrylic dustcover and rubber insulation feet; 5¹¹⁄₁₆" H × 17⁵⁄₁₆" W × 14" D..... $120

AP-B10C Manual Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with manual arm and magnetic cartridge; four-pole synchronous motor; low-mass straight arm with anti-skating and stylus over-hang adjusters; damped cueing. Wow and flutter 0.5%; rumble −65 dB (DIN B); 5.3" H × 17.3" W × 14" D..... $100

ARISTON by OSAWA

RD11S Manual Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with manual tonearm (not included); 24-pole synchronous brushless dc servomotor; multiple-cast aluminum-zinc alloy platter; speed adjustment ±4%; wow and flutter 0.05%; rumble −80 dB, weighted; tonearm board and turntable suspended from top plate to minimize feedback; recommended tonearm Osawa's Ultracraft AC-300 MKII; teak base with precision shock-absorbent feet; leveling bubble..... $600

BANG & OLUFSEN

Beogram 4004 Automatic Single-Play
Two-speed (33⅓ and 45 rpm) computer-controlled

4 TURNTABLES

belt-drive turntable with automatic tangential-tracking tonearm; tachometer-controlled dc motor and separate dc motor for arm drive; short low-mass electronic-circuited straight tonearm with MMC 20EN pickup cartridge with elliptical naked diamond stylus. Features one-touch automatic operation with power-assisted manual operation; optical scan detector arm sensor; anti-skating adjust; leaf spring/pendulum suspension system. Wow and flutter ±0.025%; rumble −65 dB (DIN A); tracking error 0.04 degree max.; rosewood-veneer base; 4" H × 19" W × 14¾" D..... $850

Beogram 3400 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) electronically-controlled belt-drive turntable with automatic tonearm; servo-controlled dc motor; low-mass tonearm with MMC 20EN pickup cartridge with elliptical nude diamond stylus. Features illuminated one-touch automatic start, pause and stop controls; fine speed adjustment; left-side manual controls; auto anti-skating adjust; three-point pendulum suspension system. Wow and flutter 0.03%; rumble −65 dB; tracking error 0.126 degree/cm; includes dustcover that does not cover controls; rosewood-veneer base; 3½" H × 17¼" W × 14½" D..... $425

Beogram 2402 Automatic Single-Play

Two-speed (33 and 45 rpm) belt-drive turntable with automatic lift/shutoff tonearm; single master control for all operations; tachometer-controlled, dc motor. Speed adjustment ±3%; speed deviation 0.1%; wow and flutter less than ±0.06%; rumble (DIN weighted) −62 dB; tracking error 0.126°/cm (0.32°/in); comes equipped with magnesium alloy tonearm and MMC 20E stereo cartridge, hinged dustcover (records can be played with cover closed), rosewood veneer base (oak, teak or white lacquer finishes available on special order); 3½" H × 17¼" W × 13" D..... $350

B·I·C

SP85 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) microprocessor-controlled quartz crystal isolated belt-drive turntable

with automatic/manual tonearm, 24-pole 300-rpm motor, and 9-in dynamically-balanced straight tonearm with plug-in arm tube. Features digital pitch computer with four-character actual speed/electronic stopwatch readout; microprocessor operations controls; continuous repeat (up to six times) with auto shutoff; oil-damped cue rate control and three-scale anti-skating; isomer shock-mount feet; black cabinet with friction-hinged removable dustcover..... $240

80Z. Same as SP85 except six-record automatic changer with single-play spindle $240

SP65 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) isolated belt-drive turntable with automatic/manual tonearm, 24-pole, 300-rpm motor, and 9-in dynamically-balanced straight tonearm. Features repeat capability (up to six times) with auto shutoff; variable pitch with illuminated strobe; oil-damped cueing with cue rate control and three-scale anti-skating adjustment; isomer shock-mount feet; black cabinet with removable friction-hinged dustcover $180

60Z. Same as SP65 except six-record automatic changer with single-play spindle $180

40Z Automatic Changer Turntable

Two-speed (33⅓ and 45 rpm) six-record automatic changer/single-play turntable with 9-in statically balanced straight tonearm with jewel vertical bearings and stylus overhang and 24-pole 300-rpm motor. Features continuous repeat (up to six times); oil-damped cueing with cue rate control; three-scale anti-skating; isomer shock-mount feet; black cabinet with removable friction-hinged dustcover . $150

20Z. Similar to 40Z except has counterbalanced low-mass straight tonearm; minus isomer shock-mount feet..... $100

BSR

Accuglide XR-50 Automatic Multi-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with separate infrared remote control unit with all

arm functions and volume control; computerized memory bank programs up to 27 commands in specified order; 300-rpm ac synchronous 24-pole motor; tubular J-shaped tonearm. Wow and flutter 0.04% wrms; rumble −66 dB (DIN B); includes ADC QLM-32 magnetic cartridge, low-resonance base, dustcover, and remote transmitter $230

Quanta 550 SX Automatic Multiple-Play

Two-speed (33 and 45 rpm), automatic multiple-play turntable; belt-driven by 24-pole, 300-rpm synchronous ac motor with electronic speed changing; speed adjustment ±3%; illuminated stroboscope; dynamically balanced, aluminum, channeled tonearm with slide-in headshell, calibrated 1-4 g tracking force adjustment; viscous-damped cueing tonearm automatically locks on arm rest after play; "Autoglide" umbrella spindle interchangeable with single-play stub spindle; includes ADC QLM-34 Mk III magnetic cartridge, base and dustcover; wow and flutter 0.08% wrms; rumble −65 dB (DIN "B" weighting)..... $130

Quanta 550SLC. Same as Quanta 550 SX minus cartridge $110

Quanta 450SX. Similar to 550 SX, but with mechanical speed change, no speed adjustment or stroboscope; tonearm counterweight preset at factory, tracking-force adjustment by calibrated scale-beam weight; includes ADC QLM-32 Mk III magnetic cartridge; wow and flutter 0.08% wrms; rumble −62 dB (DIN "B")..... $100

Quanta 400 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto return tonearm; S-shaped counterbalanced arm with plug-in headshell; electronic micro switches; viscous damped cueing; aluminum platter with anti-static mat; removable hinged dustcover... ..... $100

400X. Similar to 400 except with ADC QLM-32 magnetic cartridge $120

BSR McDonald Series

255 SX Single-/Multi- Play

Three-speed (33⅓, 45, and 78 rpm) belt-drive record changer with multi-play record umbrella and single-play spindle; four-pole high-torque induction motor; spring-balanced S-shaped tonearm with automatic lock, anti-skating, and stylus force adjustment; cue/pause control; includes factory-set ADC QLM-30 Mk III magnetic cartridge, base and hinged dustcover..... $80

205 SX Automatic Single-Play

Three-speed (33⅓, 45, and 78 rpm) belt-drive turntable with automatic tonearm; gimbal-suspension counterbalanced arm with bi-directional viscous-damped cueing; includes ADC QLM-30 Mk III magnetic cartridge, 45-rpm single-play adaptor, base, and dustcover..... $80

CALIBRE

360 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto lift/shutoff tonearm; dc servomotor; 11-in S-shaped arm with adjustable anti-skating and damped cueing; strobe with pitch control; wow and flutter 0.035% (DIN 45 507); rumble −70 dB (DIN 45 539 B); tracking force range 0-3 g; 7" H × 17¼" W × 13½" D..... $195

330 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto lift/shutoff arm; hysteresis synchronous motor; 11-in S-shaped arm with damped cueing and adjustable anti-skating; wow and flutter 0.1% (DIN 45 507); rumble −62 dB (DIN 45 539 B); tracking force range 0-4 g; 5¼" H × 17⅜" W × 13¾" D..... $145

CONCEPT

2QD Semi-Automatic Single-Play

Two speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with auto lift tonearm; dc servomotor; 11-in straight arm with damped cueing and adjustable anti-skating; LED strobe with ±6% speed adjust; wow and flutter 0.025% (DIN 45 507); rumble −70 dB (DIN 45 539 B); tracking force range 0-3 g; 5⅞" H × 17¾" W × 14½" D..... $295

CONNOISSEUR by HERVIC

BD103 Transcription Unit

Three-speed (33, 45, and 78 rpm), belt-drive turntable; low-voltage dc electronically-controlled servomotor with external power supply to eliminate hum fields; replaceable tonearm mounting discs; electronic speed adjustment; 12-in platter; illuminated stroboscope; comes with base and dustcover; 5¾" H × 18" W × 15" D..... $248

BD103/A. Same as BD103 except with Connoisseur tonearm; magnetically damped unipivot/double-knife-edged tonearm with magnetic anti-skate and adjustable effective mass; rumble −77 dB; hum −100 dB; wow and flutter 0.05%; plug-in headshell..... $370

BD2A Single-Play/Automatic Cue Up

Integrated turntable with SAU2 arm and pickup assembly; has push-button speed control; hydraulic lift and lowering of tonearm plus automatic lift at end of record; anti-vibration springs; lightweight cartridge shell with self-cleaning contacts. Two-speed (33 and 45 rpm) belt-drive; 60-Hz synchronous constant speed 450 rpm; rumble −65 dB (DIN); hum −80 dB; wow and flutter 0.065%; 10¼-in aluminum platter; comes with arm, walnut vinyl base, dustcover but without cartridge. 5½" H × 18" W × 15" D..... $200

Walnut veneer base..... $220

BD101 Transcription Turntable

Two-speed (33⅓ and 45 rpm) belt-drive turntable

without tonearm; 16-pole synchronous ac motor; 12-in platter; wow and flutter 0.06% wrms; rumble −70 dB (DIN B); includes walnut vinyl base and plastic dustcover; 6½" H × 18" W × 15" D.... $160

BD1. Similar to BD101 except wow and flutter 0.065% wrms; rumble −65 dB (DIN B)..... $135

DENON

DP-6700 Quartz-Controlled Single-Play

Two-speed (33 and 45 rpm) direct-drive turntable with quartz-crystal phase-locked speed control; ac motor regulated by pulse-width modulation; stroboscope illumination derived from quartz oscillator; supplied with stabilizer weight to prevent acoustic feedback pickup from record; Denon DA-307 tonearm with one-point suspension; dynamic damping of arm/cartridge resonance; magnetic anti-skating; magnesium headshell; vernier tracking-force adjustment; oil-damped cueing; speed electronically adjustable (±6%); wow and flutter less than 0.015% wrms; rumble better than −77 dB; starting time to full speed less than 1.2 sec; tonearm effective length 9⅜-in; tracking error 2.5° max.; 7⅜" H × 20⁹⁄₁₆" W × 16⁹⁄₁₆" D..... $1060

DP-6000. Above DP-6700 table only, less Denon DA-307 dynamically damped tonearm with magnetic anti-skating, base, and cover $595

DP-50F Automatic Single-Play

Two-speed (33⅓ and 45 rpm) PLL quartz direct-drive turntable with automatic servo-controlled tonearm; ac servomotor; 244-mm statically-balanced S-shaped tonearm with separate angular control motor and impact-molded light metal headshell; 300-mm diecast aluminum platter. Features 7-in and 12-in disc size selector buttons; illuminated strobe; standby mode for end of cue; repeat playback from any groove; front-panel anti-skating dial; wood veneer base with two-toned polished metal trim. Wow and flutter 0.015% wrms; rumble −75 dB (DIN B); starting time 1.5 sec at 33⅓ rpm; tracking force range 0-2.5 g; cartridge weight range 5-11 g; 146 mm H × 485 mm W × 437 mm D $690

DP-40F. Similar to DP-50F minus disc size selector, illuminated strobe, and standby mode; simulated mohogany finish base with brushed chrome trim $495

DP-2500 Quartz-Controlled Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm and quartz-crystal phase-locked speed control; ac servomotor regulated by magnetic pulse detection; electrical dc brake for stop mode; illuminated stroboscope; dynamically damped and statically balanced tonearm; anti-skating and cueing device; aluminum alloy head shell; slide-switch speed selection; wow and flutter 0.015% max. wrms; rumble better than −75 dB; starting time less than 1.5 sec (33⅓ rpm); effective tonearm length 9⅜-in; vinyl plywood cabinet with acryl resin cover; 9⅜" H × 19¹⁄₁₀" W × 16" D. $525

DP-2800. Similar to 2500 but with marble base $675

DP-2550. Similar to 2500 minus arm $475

DA-309. Dynamically damped tonearm; 9⅜-in $220

DP-1200 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto lift/shutoff tonearm; ac servomotor; Denon DA-307 dynamically damped and statically balanced tonearm with oil-damped cueing and adjustable height; servo speed control; record-end sensor; standby end-of-cue switch. Wow and flutter 0.018% wrms; rumble −75 (DIN B); starting time 1.5 sec; marble base and laminated plywood cabinet; 6⅜" H × 19¹⁄₁₀" W × 15⅜" D..... $375

DK-200. Base with hinged dustcover..... $260

DA-307. Dynamically damped tonearm; effective length 9⅜-in..... $255

DP-30L Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto lift/shutoff tonearm, ac servomotor; 220 mm statically-balanced S-shaped tonearm with touch-control cueing and separate motor. Wow and flutter 0.018% wrms; high-density resin-compound base with anti-vibration feet $295

DUAL

All Dual turntables feature ultra-low-mass straight-line tubular tonearms mounted in true four-point gimbal suspensions; total effective tonearm and cartridge mass 8 g; dynamically balanced tonearm requires no critical leveling of chassis; precision-machined platters; tracking to ¼ g; vernier-adjust damped counterbalance; direct-dial setting of stylus force; stylus force applied around vertical pivot; anti-skating calibrated for conical and elliptical styli; adjustable pitch control for 33⅓ and 45 rpm; illuminated strobe; cueing system damped in both directions; stylus overhang adjustment; dustcover included; base 3½" H × 16½" W × 14½" D.

Single-Play Turntable

CS731Q. Fully automatic, single play turntable with ULM tonearm. Features anti-resonance filter user-

tunable to specific mass and compliance of high-performance cartridge; quartz reference oscillator (11% pitch) with LEDs and illuminated strobe, and

4 TURNTABLES

phase-locked-loop monitoring circuit; front-panel solenoid-operated controls; variable cueing descent speed; rumble −78 dB; wow and flutter 0.015% wrms..... $600
714Q. Similar to CS731Q but semi-automatic tonearm with automatic return and shut-off; switchable lead-in groove sensor indicates when tonearm is precisely over 7-in and 12-in lead-in grooves.. $480
650RC. Fully automatic direct-drive turntable with ULM tonearm; front-panel solenoid operations controls; tunable anti-resonance filter; ±10% pitch control; CMOS regulator circuit and integral frequency generator in motor; optional wireless remote control available $400
RE152/RE120. Wireless remote control transmitter/receiver system for 650RC; start, stop and cue operations from up to 40 ft away; transmitter/receiver priced separately..... $80/$40
622. Similar to 650RC without remote control; controls on chassis..... $320
606. Similar to 622 except semi-automatic with auto return/shut off arm; mechanical lead-in groove sensor indicates when stylus is over 12- and 7-in lead-in grooves $279
522. Similar to 622 except vario belt-drive turntable; has ±6% pitch control, illuminated strobe, and continuous repeat; wow and flutter ±0.04% wrms; rumble −70 dB $225
506. Similar to 522 except semi-automatic with auto shut-off tonearm..... $180

Automatic Multiple-Play Changers

Additional features of Dual fully automatic multiplay turntables include vario-belt drive system; automatic and manual operation in both single- and multiple-play modes; interchangeable rotating single-play spindle; 6% pitch control; elevator-action multiple-play spindle holds up to six records; records may be removed from platter without removing spindle.
1264. ULM tonearm; 12-in platter; illuminated strobe; tunable anti-resonance filter; continuous repeat switch; rumble −70 dB; wow and flutter ±0.04% wrms; 5⅘" H × 16½" W × 14⅘" D. $275
1257. Compact version of 1264 without illuminated strobe, continuous repeat, and filter; 10⅜-in platter $180

FISHER

MT 6250 Automatic/Manual Single-Play

Two-speed (33⅓ and 45 rpm) linear motor, direct-drive turntable with automatic tonearm and option of manual start/stop; quartz PLL speed control, ±6% range unlocked; S-shaped balanced tonearm; viscous damped cueing and variable anti-skate; strobe light and pitch control; adjustable legs, integrated level and stylus overhang gauge; wow and flutter 0.03% wrms; rumble −70 dB (DIN "B"); tracking force range 0.6-3.5 g; tracking error ±1.5 degrees; 12 15/16-in platter; effective arm length 222 mm; cartridge mounting hardware; walnut base; 6½" H × 17¾" W × 14¼" D..... $300
MT 6250C. With stereo magnetic cartridge $325

MT 6225A Automatic Single-Play

Two-speed (33 and 45 rpm) turntable with direct-drive linear motor (no windings or electrical connections in turntable platter); manual start and stop, auto stop and reject; strobe light, ±3% speed adjust; S-shaped, balanced arm with removable cartridge shell; viscous-damped cueing; wow and flutter 0.03% wrms; speed variation within ±0.5%; rumble −70 dB; tonearm effective length 222 mm; max. tracking error ±1.5°; with base and dustcover; 6" H × 17¾" W × 14¼" D $250
MT 6225AC. With stereo magnetic cartridge .. $270
MT 6224. Same as MT 6225A except wow and flutter 0.04% wrms and rumble −68 dB $200
MT 6224C. With stereo magnetic cartridge $220

MT6335 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with auto return/shutoff tonearm; 120-pole linear quartz PLL motor; 222-mm S-shaped tonearm with counterweight; 12 15/16-in aluminum diecast platter with stroboscope. Features quartz-locked speed control (0% variation); viscous-damped cueing; variable calibrated anti-skating and stylus pressure adjustment. Wow and flutter 0.035% wrms; rumble −70 dB (DIN 45539B); tracking force range 0.6-3.5 g; 6" H × 17⅓" W × 14½" D $250
MT6330. Similar to MT6335 without quartz-locked servo system $190

MT 6211 Automatic/Manual Single-Play

Two-speed (33⅓ and 45 rpm) dc servo, belt-drive turntable with automatic tonearm and option of manual start/stop; speed control (±3% range); pitch control; strobe light; stereo magnetic cartridge; S-shaped balanced tonearm; viscous damped cueing; anti-skate control; wow and flutter 0.05% wrms; rumble −60 dB (DIN "B"); tracking force range 0.6-3.5 g; tracking error ±2.0 degrees; 12⅛-in platter; effective arm length 222 mm; gray base; 5⅛" H × 17¾" W × 14¼" D..... $150

MT 6115 Automatic/Manual Single-Play

Two-speed (33⅓ and 45 rpm) four-pole ac synchronous, belt-drive turntable with automatic tonearm and option of manual start/stop; pitch control; stereo magnetic cartridge, S-shaped balanced tonearm; viscous damped cueing; anti-skate control; wow and flutter 0.08% wrms; rumble −55 dB (DIN "B"); tracking force range 0.7-3.5 g; tracking error ±3 degrees; 11-in platter; effective arm length 193 mm; gray walnut base; 5⅛" H × 17¾" W × 13¾" D $120

MT6310 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto return/shutoff tonearm; dc servomotor; 222-mm S-shaped tonearm with viscous-damped cueing, adjustable anti-skating, and counterweight; 12⅛-in, 2-lb aluminum platter with built-in strobe light. Wow and flutter 0.04% wrms; rumble −68 dB (DIN 45539B); tracking force range 0.6-3.5 g; supplied with magnetic stereo cartridge; 6" H × 17⅓" W × 14½" D..... $120

GARRARD

GT350 Automatic Multi-/Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive multi-/single-play turntable with manual single-play or, automatic single- or multi-play tonearm; 1000 rpm dc servomotor; low-mass J-shaped tonearm with low-mass carbon fiber headshell (total weight 12 g); dynamically-balanced aluminum alloy diecast platter with LED stroboscope and electronic variable speed control; 7- and 10-in disc size selector. Wow and flutter 0.06% wrms; rumble −68 dB (DIN B); includes base and dustcover; 7½" H × 17¾" W × 14⅜" D $230
GT250. Similar to GT350 minus variable speed control and LED strobe; synchro-lab motor; wow and flutter 0.08% wrms; rumble −65 dB (DIN B). $200

DD132 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with Delglide automatic tonearm; brushless, coreless, slotless Hall-effect motor; low-mass J-shaped tonearm integrated with headshell; strobe and electronic variable speed control. Wow and flutter 0.06% wrms; rumble −70 dB; includes base and dustcover $220
DD131. Same as DD132 except semi-automatic with auto return/shutoff arm $200

GT350AP Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic tonearm; dc servomotor; low-mass tonearm with low-mass carbon-fiber headshell (12 g total weight); dynamically-balanced aluminum alloy diecast platter with LED stroboscope and electronic variable speed control; speed/record size selector; wow and flutter 0.06% wrms; rumble −68 dB (DIN B); includes base and dustcover; 5⅛" H × 17¾" W × 14⅜" D $210
GT250AP. Similar to GT350AP minus strobe and speed control; has synchro-lab motor; wow and flutter 0.08% wrms; rumble −65 dB (DIN B) $180

GT35AP-1 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with Delglide automatic tonearm; dc servomotor; aluminum alloy diecast platter with LED strobe and electronic variable speed control; low-mass jewel-bearing J-shaped tonearm with integrated headshell; wow and flutter 0.06% wrms; rumble −68 dB (DIN B); includes base and dustcover..... $200
GT25AP-1. Similar to GT35AP-1 minus strobe and variable speed control; has synchro-lab motor; wow and flutter 0.08% wrms; rumble −65 dB (DIN B) $170

GT-35 Automatic Single-/Multiple-Play

Two-speed (33 and 45 rpm) belt-drive automatic turntable; manual/automatic single-play or automatic multiple-/repeat-play; dc servomotor with electronic speed regulation and pitch control, stroboscope; independent pitch control for each speed; ultra-low-mass "S"-type tonearm with detachable headshell; cueing; anti-skating; repeat play if desired; wow and flutter 0.06%; rumble −68 dB (DIN "B"); with base and cover $220
GT-25. Similar to GT-35 but with Garrard Synchro-Lab motor, no pitch control or stroboscope; wow and flutter 0.08%; rumble −65 dB (DIN "B"); with base and cover..... $190

GT-15 Automatic Multiple-Play

Belt-driven by Synchro-Lab motor; cue control; anti-skating; manual/automatic single-play or automatic multiple-/repeat-play; arm mass 10 g; supplied with Shure M93E cartridge; wow and flutter 0.12%; rumble −60 dB (DIN "B"); with base and cover $180

DD130 Manual Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive brushless dc servo-controlled turntable with manual tonearm; 12-g tubular aluminum arm with headshell; calibrated anti-skating; servo electronic-controlled automatic speed; variable pitch control; LED stroboscope; 12-in aluminum platter; shock absorbent feet; includes dustcover and base..... $180

GT12 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic lift/return/shut-off arm; four-pole induction motor; 7-g S-shaped gimbal-support arm with cartridge; anti-skating and damped cueing controls; includes base and dustcover; wow and flutter 0.15%; rumble −55 dB (DIN "B")..... $120

HARMAN/KARDON

ST-8 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm, adjustable ±5.5%) belt-drive turntable with automatic lift tonearm; brushless dc motor; automatic speed control; illuminated strobe; touch control operation; straight tubular tonearm; damped cueing; adjustable feet. Wow and flutter 0.04% (NAB); rumble −68 dB (DIN "B"); tracking error 0; includes dustcover; 6¾" H × 16½" W × 16¼" D..... ..... $399

HITACHI

HT-860 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; brushless, slotless, coreless dc servo Unitorque motor; 230-mm statically-balanced S-shaped tubular tonearm with built-in anti-skating and low-mass resonance-damped magnesium plug-in headshell; die-cast aluminum platter. Features IC logic-controlled soft-touch operations buttons operable with cover down; touch-button arm operation in forward and reverse, continuous movement, and height adjustment, enabling no physical contact between user and arm; variable pitch control (±9.9% in 0.1% steps); automatic record size electric-eye sensor; electronic memory repeat (up to nine times on one

side); digital display for speed, pitch, size, and number of repeat entered; full speed reached within 1/3 rotation at 33 1/3 rpm. Wow and flutter 0.025% wrms; rumble −78 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; includes detachable acrylic resin dustcover; aluminum diecast base and insulated feet; 6" H × 19" W × 16 1/4" D... ..... $800

HT-660 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; brushless, slotless, coreless dc servo Unitorque motor; statically-balanced S-shaped pipe tonearm with built-in anti-skating and European-standard plug-in headshell; 13-in aluminum alloy diecast platter with single-platter stroboscope. Features electronic braking system and optical arm return sensing system. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; includes hinged detachable plastic dustcover that does not cover operations controls; aluminum diecast base and air-suspension insulator feet; 5 1/2" H × 17 7/8" W × 15 3/8" D..... $400

HT-550 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz-lock direct-drive turntable with auto return/cut tonearm; brushless, slotless dc servo Unitorque motor; 230-mm statically-balanced S-shaped tubular tonearm with built-in anti-skating, tracking force counterweight, and coil-pressed aluminum alloy plug-in headshell; 330-mm aluminum diecast platter with single-pattern stroboscope. Wow and flutter 0.025% wrms; rumble −74 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-14 g; includes detachable plastic dustcover; high-density BMC base and air-suspension insulator feet; 5 1/2" H × 18 7/8" W × 15" D..... $300

HT-463 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz-locked PLL direct-drive turntable with automatic tonearm; brushless, slotless, coreless dc servo Unitorque motor; 220-mm statically-balanced pipe arm with direct-readout tracking force counterweight, anti-skating, and plug-in universal aluminum headshell; viscous-damped cueing; 12 3/4-in aluminum alloy diecast platter with single-pattern strobe. Wow and flutter 0.03% wrms; rumble −73 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; includes detachable plastic dustcover; air-suspension insulator feet with coil spring and plastic base; 5 21/32" H × 17 7/8" W × 15 11/32" D..... $240

HT-356 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz-lock direct-drive turntable with auto return/cut tonearm; brushless servo Unitorque motor; 220-mm statically-balanced S-shaped tonearm with direct-readout anti-skating, viscous-damped cueing, and plug-in European-standard headshell; 310-mm aluminum alloy diecast platter with single-pattern stroboscope. Wow and flutter 0.03% wrms; rumble −75 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; includes removable hinged dustcover; anti-feedback insulator feet; 5 1/32" H × 17 1/8" W × 14 3/4" D $200
HT-354. Similar to HT-356 minus quartz-lock servo system; has pitch control (±3 at 33 1/3 rpm, ±5% at 45 rpm)..... $160

HT-324 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) belt-drive turntable with auto return/cut tonearm; four-pole synchronous motor; 220-mm statically-balanced S-shaped tubular tonearm with tracking-force adjustment, viscous-damped cueing, anti-skating, and universal plug-in headshell; 310-mm aluminum alloy diecast platter. Wow and flutter 0.06% wrms; rumble −65 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; 5" H × 17 1/8" W × 14 3/8" D.... ..... $120

JVC

QL-10 Quartz-Locked Single-Play
Two-speed (33 and 45 rpm) direct-drive turntable with manual tonearm. Speed controlled by quartz-locked, dual servo system; servocontrol system operates for both speed increase and decrease; digital speed indicator; pitch adjustable ±6 Hz from 440-Hz standard "A," in 1-Hz increments; powered by coreless dc servomotor; electronic brake; touch-control buttons; run/hold control for counter; includes UA-7045, gimbal-support arm; statically balanced arm; oil-damped cueing; CL-P1 turntable base with "resonance-free" seven-layer cabinet with interchangeable tonearm boards, heavy acrylic dustcover; wow and flutter less than 0.02% wrms, less than 0.04% DIN; S/N 75 dB (DIN "B"); start up time less than 0.6 sec, 60° of rotation; speed overshoot less than 2%; speed deviation less than 0.002%; drift 0.00004%/hr; stopping time less than 1 sec; tonearm effective length 9 5/8-in; tracking error 1°48' max; tracking force range 0-3 g in 0.1-g steps; arm height adjustable 40-60 mm; 7 41/64" H × 20 3/64" W × 16 9/64" D..... $1250
QL-7. Similar to QL-10 but manual arm; single quartz-lock servo system; no pitch control; 6 3/8" H × 18 3/4" W × 15 3/4" D..... $300
QL-5. Similar to QL-7 except electrical-switch speed change and no stroboscope; 6 1/2" H × 18 15/16" W × 15 7/8" D $270
QL-50. Similar to QL-5 less tonearm..... $250
QL-F4. Similar to QL-50 except fully automatic tonearm, coreless direct drive servomotor; S/N 72 dB (DIN "B"); effective arm length 220 mm; tracking error +3°35', −0°43'; 5 3/4" H × 18 1/8" W × 14 3/8" D..... $230
QL-A2. Similar to QL-F4 except semi-automatic tonearm and four-pole synchronous motor $190

QL-F6 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) double servo quartz direct-drive turntable with automatic tonearm; coreless dc servomotor; 327-mm aluminum diecast platter; 233-mm statically-balanced gimbal-support S-shaped tonearm with one-piece non-resonant headshell; pitch control meter (±6%) with memory. Wow and flutter 0.025% wrms; rumble −78 dB (DIN B); tracking force range 0-3 G; cartridge weight range 13-20 g (includes headshell); aluminum diecast cabinet; 5 19/32" H × 17 41/64" W × 15 3/4" D..... ..... $400

L-A55 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) direct-drive turntable with auto-return/shutoff tonearm; coreless dc servomotor; 220-mm statically-balanced aluminum-alloy S-shaped tonearm with dual-contact bearing; 308-mm platter with strobe. Wow and flutter 0.03% wrms; rumble −75 dB (DIN B); tracking force range 0-3 g; cartridge weight range 12.5-18.5 g (includes headshell); 5 1/8" H × 17 1/4" W × 14 15/16" D..... $160

L-A11 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) belt-drive tonearm with auto return/shutoff tonearm; four-pole synchronous motor; 220-mm statically-balanced aluminum-alloy S-shaped tonearm with dual-contact bearing; 300-mm aluminum alloy diecast platter. Wow and flutter 0.06% wrms; rumble −63 dB (DIN B); tracking force range 0-3 g; cartridge weight range 14.5-18.5 g; 5 3/8" H × 17 1/4" W × 14 15/16" D. $110

KENWOOD

KD-750 Manual Single-Play
Two-speed (33 1/3 and 45 rpm) quartz PLL direct-drive turntable with manual tonearm; 20-pole 30-slot brushless dc servomotor; 9 5/8-in statically-balanced S-shaped pipe tonearm with weight decoupling system and Collet chuck-type arm base; T-shaped magnesium alloy diecast headshell with stand; 13-in 5.7-lb aluminum alloy diecast platter. Features adjustable tonearm height and anti-skating; viscous-damped cueing lever; speed and start/stop microswitch controls; LED quartz lock, power, and speed indicators; electronic braking; stylus pressure direct readout counter. Wow and flutter 0.022% wrms; rumble −74 dB (DIN weighted), −55 dB (DIN unweighted); tracking force range 0-3 g in 0.1-g steps; cartridge weight range 4-14 g; includes low-capacitance phono cables with gold-plated terminals and EP adaptor with overhang gauge; piano-finish walnut veneer particleboard and anti-resonant compression base cabinet with free-stop acrylic dustcover; 6 1/2" H × 19 5/16" W × 16 5/8" D..... $520

KD-650 Manual Single-Play
Two-speed (33 1/3 and 45 rpm) quartz PLL direct-drive turntable with manual tonearm; 20-pole 30-slot brushless dc servomotor; 9 5/8-in statically-balanced S-shaped pipe tonearm with oil-damped cueing, static-type anti-skating control, gold-plated contact points, and lightweight diecast aluminum headshell with stand; 13-in 5.7-lb aluminum alloy diecast platter. Features digital touch-sensing start/stop and speed selectors with LEDs; all-electronic braking system; anti-vibration rubber platter sheet; LED quartz-lock and power indicators. Wow and flutter 0.025% wrms; rumble −75 dB (DIN weighted), −55 dB (DIN unweighted); tracking force range 0-3 g; cartridge weight range 2-12 g; includes low-resistance phono cables with gold-plated terminals and EP adaptor with overhang gauge; anti-resonant compression base limestone-particle cabinet with ribbed non-resonant acrylic dustcover; 6 1/2" H × 19 5/16" W × 18 1/8" D $400
KD-600. Same as KD-650 without tonearm; has two tonearm bases for Ortofon AS-212MKII and Infinity Black Widow or SME-3009I, 3009II, 3009III series laboratory reference tonearms..... $350

KD-550 Manual Single-Play
Two-speed (33 1/3 and 45 rpm) direct-drive turntable with manual arm; brushless dc servomotor; wow and flutter 0.03% wrms; rumble −70 dB (DIN); tracking force 0-4 g; resonant-concrete base; 6 3/8" H × 19 3/4" W × 15" D..... $300
KD-500. Same as KD-550 without arm $250

KD-5070 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) direct-drive turntable with 8 7/8-in statically-balanced S-shaped automatic tonearm; aluminum alloy headshell with stand; 20-pole 30-slot brushless dc servomotor and 12-pole synchronous gear motor for automatic arm; 12 1/2-in 3.3-lb aluminum alloy diecast platter. Features illuminated stroboscope; auto lead-in/return/cut/repeat with manual operations function; anti-skating and viscous-damped cueing; fine speed adjustment, stylus pressure direct readout counter; disc size selector. Wow and flutter 0.025% wrms; rumble −73 dB (DIN weighted), −53 dB (DIN unweighted); tracking force range 0-3 g; cartridge weight range 3-10 g; includes low-capcitance phono cables and EP adaptor; anti-resonant compression base limestone-particle cabinet with acrylic styrene dustcover; 6 1/8" H × 18 7/8" W × 14 7/16" D $285

KD-3100 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) direct-drive turntable with auto-return/cut tonearm; coreless and slotless dc servomotor and 12-pole ac geared motor for automatic arm function; 12 3/16-in aluminum alloy diecast platter; 8 7/8-in statically balanced S-shaped tubular tonearm. Features illuminated stroboscope; anti-skating and oil-damped cueing; speed adjustment control; speed selector with LED; stylus pressure direct readout counter. Wow and flutter 0.03% wrms; rumble −71 dB (DIN weighted); tracking force range 0-3 g; cartridge weight 3-9 g; includes low-capacitance phono cables, headshell, and 45-rpm adaptor stand; ABS copolymer resin base; 5 1/2" H × 17 5/16" W × 14 3/4" D..... $200

KD-2000 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) belt-drive turntable with auto-return/cut tonearm; four-pole synchronous motor; 8 7/8-in statically-balanced S-shaped pipe tonearm with plug-in headshell; 12-in zinc alloy diecast platter. Features anti-skating and viscous-damped cueing; stylus pressure direct readout counter. Wow and flutter 0.055% wrms; rumble −65 dB (DIN weighted); tracking force range 0-3 g; cartridge weight range 4-10 g; includes EP adaptor; ABS copolymer resin base; 5 15/16" H × 18 7/16" W × 14 3/8" D $158

4 TURNTABLES

KD-1500. Similar to KD-2000 except has auto up/cut tonearm; 12-in aluminum alloy diecast platter; wow and flutter 0.05% wrms; limestone injected cabinet; 5½" H × 18⁷/₁₆" W × 14⁹/₁₆" D $119

LAFAYETTE

T-5000 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; dc servo motor; calibrated balance and stylus force adjustment; front-mounted capacitance controls; S-shaped tonearm; bi-directional viscous damped cueing; resonance-absorbing feet; wow and flutter 0.03%; rumble −65 dB; includes base and dustcover; UL approved $200

T-4000 Semi-Automatic Single-Play

Two-speed (33 and 45 rpm) with auto return/shutoff tonearm; dc servomotor; wow and flutter 0.08%; rumble −45 dB; speed adjust. ±2.5%; calibrated balance stylus force adjustment; anti-skating adjustment; stylus force range 1.5-3 g; auto return and shutoff; detachable shell; illuminated strobe; low-capacitance cables; semi-automatic cueing; comes with base and dustcover; UL approved; 6¼" H × 18½" W × 14¼" D $130

T-2000. Similar to T-4000 except wow and flutter 0.1%; rumble −40 dB (DIN B); hysteresis synchronous motor; speed adjustable ±1.3%; UL approved; 6" H × 17¼" W × 13⅜" D $110

LINN SONDEK by AUDIOPHILE SYSTEMS

LP12 Manual Single-Play

One-speed (33⅓ rpm) belt-drive turntable with manual tonearm, 24-pole synchronous motor, 12-in zinc aluminum alloy diecast platter (9 lbs) with felt mat, and single-point oil-bath bearing, hardened tool steel spindle; adjustable three-point spring-suspension subchassis; heavy gauge stainless-steel base plate and solid kiln-dried hardwood base. Wow and flutter 0.04% wrms; rumble −60 dB unweighted; speed accuracy +0.04%; optional 45-rpm adaptor available; 5½" H × 17½" W × 14" D $650

LUX

PD444 Quartz-Lock Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive quartz-PLL turntable without tonearm; provision for any two tonearms with detachable, sliding arm base and tonearm selector switch; quartz-controlled, load-free spindle, brushless dc servomotor; two-step brake insulator; wow and flutter no more than 0.025% wrms; rumble −75 dB; includes detachable acrylic resin dustcover; 6⁸/₁₆" H × 26¼" W × 15⁷/₁₆" D $845

PD441. Similar to PD 444 except one-tonearm provision without tonearm selector switch; 6⁸/₁₆" H × 18¹¹/₁₆" W × 15⁷/₁₆" D $675

PD277 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; brushless and slotless dc servomotor and separate motor for tonearm; statically-balanced low-mass straight tonearm with electronic operations controls; mirror-reflex strobe with ±4% pitch control. Wow and flutter 0.03%; rumble −60 dB; 6" H × 18½" W × 13¾" D $395

PD272. Similar to PD277 except has manual tonearm with oil-damped cueing $345

PD270. Same as PD277 without tonearm $285

MARANTZ

6370Q Automatic/Manual Single-Play

Two-speed (33⅓ and 45 rpm), direct-drive, quartz-locked turntable with auto return/shutoff arm; dc servomotor; rpm speed/deviation digital readout; lateral balanced tonearm; oil-damped cueing; shock absorbent feet; anti-skating; wow and flutter 0.02% (NAB weighted); rumble −70 dB (NAB RRLL); includes dustcover and walnut-finish base; 5¾" H × 18¼" W × 14½" D $470

TT4000 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic return/shutoff tonearm; brushless slotless high-torque dc motor; 8.5-in straight tonearm with removable headshell, acoustically decoupled counterweight, and verticle viscous-damped cueing; 12.6-in dynamically-balanced platter. Wow and flutter 0.025% wrms; rumble −72 dB (DIM B); tracking force range 0-4 g; damped shock-absorbent feet; removable damped-hinged dustcover (does not cover controls); 5½" H × 17⅜" W × 15" D $250

TT2000. Similar to TT4000 without quartz lock; has coreless 8-pole, 2-phase dc servomotor and strobe light and ±4% pitch control; wow and flutter 0.03% wrms $200

6025 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic return/shutoff arm; four-pole ac-synchronous motor; reject button; damped cueing; anti-skating; shock absorbent feet; wow and flutter 0.07% (NAB weighted); rumble −65 dB (NAB RRLL); includes dustcover and base; 5½" H × 17⅞" W × 13¹⁵/₁₆" D $130

MICRO SEIKI

DQX-1000 Single-Play Automatic

Direct-drive, quartz PLL servo-controlled motor; will accept three tonearms because of special casting containing three separate modular pods; separate layers of cork and rubber for turntable mat; two-layer absorber system consisting of cushion rubber and insulator balls with built-in springs; turntable controls and power supply in separate unit for speed select, stop, power, and fine-speed adjustment; without tonearm or cartridge $750

MA-505. Dynamically balanced manual arm for DQX-1000 ..... $175

DQL-120 Single-Play Armless

Two-speed (33⅓ and 45 rpm) direct-drive quartz-locked PLL dc servo-controlled turntable; 350-mm zinc platter; separate power transformer integrated with control section; stand-by lamp until rated speed is reached; electronic brake; brass tonearm mount with sub tonearm mount; 1-mm lead plate inserted into rosewood base to reduce vibration; adjustable air-suspension absorbers; wow and flutter less than 0.02% wrms; rumble −75 dB (DIN "B"); main unit 174 mm H × 520 mm W × 420 mm D; control box 60 mm H × 96 mm W × 192 mm D $750

DQX-500. Similar to DQL-120 except features MA-707 dynamically-balanced, variable mass tonearm with mechanically-controlled viscous damped cueing; effective length 9⅜-in; tracking force 0-3 g; phonomotor and tonearm integrated with metal base; 13¾-in aluminum platter; 5½" H × 16⅛" W × 13¾" D $550

DQ-50. Similar to DQL-120 except has MA-505 dynamically balanced tonearm with manual operation; effective length 9⅜-in anti-skating control; adjustable arm height; mechanically-controlled viscous damped cueing; no power transformer; 6⅞" H × 19¾" W × 16⅛" D $550

DQ-43 Single-Play Semi-Automatic

Two-speed (33⅓ and 45 rpm) direct-drive quartz-locked PLL dc servo-controlled turntable with electronically-controlled auto lift/shut off tonearm; MA-707 dynamically-balanced variable mass tonearm (effective length 9⅜-in) with solenoid-activated viscous damped cueing; 13-in aluminum platter; wow and flutter less than 0.025% wrms; rumble −63 dB (JIS), −75 dB (DIN "B"); max. tracking error less than 1.5 degrees; tracking force 0-3 g; rosewood base; 6⅛" H × 18⅜" W × 14¾" D $500

DD-33. Similar to DQ-43 but less quartz PLL system; speed adjustment range ±6%; 12¼-in aluminum platter; wow and flutter less than 0.03% wrms $400

DD-24 Single-Play Manual

Two-speed (33⅓ and 45 rpm) direct-drive dc servo-controlled turntable with electronically-controlled tonearm return/shutoff with manual operation; DD-24 statically-balanced S-shaped arm; viscous damped cueing; inside force canceller; on/off and rotational speed pushbutton controls; speed adjustment ±5% range; automatic quick start when arm moves toward record; 12¼-in aluminum platter; anti-howl rubber feet; wow and flutter less than 0.03%; rumble −73 dB (DIN "B"); max. tracking error less than 1.5 degrees; tracking force adjustment 0.3 g; 4⅞" H × 17⅜" W × 13¾" D $200

MB-14. Similar to DD-24 except belt-drive, four-pole synchronous system; tubular S-shaped arm with detachable headshell; oil-damped cueing; anti-skating control; 11⅞-in aluminum platter; wow and flutter less than 0.55%; rumble −65 dB (DIN "B"); 5⅜" H × 17⅜" W × 13¾" D $140

MITSUBISHI

DP-EC20 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; 12-pole dc

servomotor; 9-in statically-balanced stainless-steel J-shaped pipe arm with diecast magnesium alloy headshell and offset counterweight; 13⅛-in diecast aluminum platter with LED stroboscope. Features logic operations controls; photo-optical disc size/speed electronic sensor, also controls vertical and horizontal drive motors for arm cueing and positioning in either direction with manual override. Wow and flutter 0.025% (DIN 45507); rumble −80 (DIN 45539-B); possible cartridge weight range 11-16.5 g; includes detachable hinged dustcover (does not cover controls) and acoustic insulator feet; 5⅞" H × 18½" W × 15½" D $520

DP-EC10. Similar to DP-EC20 except driven by FG dc servomotor; minus motor-driven horizontal arm positioning except in auto start/stop; wow and flutter 0.03% wrms; rumble −75 dB (DIN B); 5⅜" H × 18½" W × 15½" D $400

DP-EC7. Similar to DP-EC10 except LSI logic controls of all automatic functions and vertical and horizontal motor driver; 20-pole 30-slot dc FG servomotor; rumble −73 dB (DIN B); includes 6.6-g GFRP headshell; 5¾" H × 17⅞" W × 15" D .. $300

NAD (USA)

5080 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto return/shut off tonearm; electronically-controlled brushless dc motor; low-mass straight arm with plug-in carbon-fiber headshell, gimbal suspension, ball race lateral bearings, anti-skating, and viscous cueing; 11.89-in dynamically balanced diecast aluminum platter with illuminated strobe and variable pitch control. Wow and flutter 0.03% wrms; rumble −70 dB (DIN B); tracking force range 0-3.5 g; start-up time ⅓ revolution to full speed; ABS base; 6" H × 18.5" W × 15" D $250

5040. Similar to 5080 except belt-drive with FG dc servomotor and open-cradle suspension tonearm

with plug-in magnesium headshell; wow and flutter 0.05% wrms; rumble -67 dB (DIN B) $212

5020. Similar to 5040 minus strobe and pitch control; has 4-pole synchronous motor; arm same as 5080; wow and flutter 0.06% wrms; rumble 65 dB (DIN B) $177

ONKYO

CP-1030F Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; brushless,

coreless, slotless quartz dc motor and motor for arm function; low-mass statically-balanced straight tubular arm with detachable non-resonant carbon fiber headshell and direct-reading tracking force counterbalance; 1.4-kg aluminum diecast platter with bevel edges. Features continuous repeat; two-tier strobe with front-panel LED strobe window; adjustable anti-skating dial; oil-damped cueing by automatic and manual function; opto-electric shut off; double-insulated rubber feet. Wow and flutter 0.03% wrms; S/N 75 dB (DIN B); cartridge weight range 5-8.5 g; includes hinged dustcover (does not cover front-panel controls). $315

CP-1020F Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; brushless, coreless, slotless FG servo dc motor and dc motor for tonearm; 224 mm statically-balanced straight pipe tonearm with detachable headshell with ADC type connector and direct-readout tracking force counterbalance; 31-cm bevel-rimmed aluminum diecast platter. Features continuous repeat; separate speed adjust controls (±2% accuracy); two-tiered strobe; anti-skating with dial adjustment; oil-damped cueing by automatic and manual operation; double-insulated rubber feet. Wow and flutter 0.035% wrms; S/N 72 dB (DIN B); cartridge weight range 5-8.5 g; includes removable hinged dustcover (does not cover front panel controls) and 45-rpm adaptor; 5¼" H × 17⅜" W × 14½" D. $220

CP-1010A Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto return/auto cut tonearm; 24-pole FG servo dc motor; 213-mm statically-balanced straight pipe arm with detachable headshell with ADC-type connector and direct-readout tracking force counterbalance; 31 cm bevel rimmed aluminum diecast platter. Features separate speed controls (±2% accuracy); anti-skating with adjustable dial; oil damped manual cueing; two-tier illuminated strobe; double insulated spring-loaded rubber feet. Wow and flutter 0.05% wrms; S/N 67 dB (DIN B); cartridge weight range 5-8.5 g; includes hinged removable acrylic dustcover (does not cover front-panel controls) and 45-rpm record adaptor; 5¼" H × 17⅜" W × 14½" D. $145

OPTONICA

RP-9705 Automatic Single-Play

Two speed (33⅓ and 45 rpm) programmable microprocessor-controlled quartz-locked direct-drive turntable with automatic tonearm and separate remote control unit; statically-balanced and sensor tonearms with direct-readout stylus force, anti-skating; viscous-damped cueing; and overhang mark. Features automatic programmable music selector (progams up to ten different selections or one selection repeatedly ten times), programmer also plays portions of selections; infrared remote control with complete programming functions; LED pre-program and play-program digital readout; solenoid operations controls. Wow and flutter 0.028% wrms; rumble 70 dB (DIN B); nylon turntable base . . . $1200

RP-7705 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-lock direct-drive turntable with automatic tonearm; coreless quartz-locked dc motor; 8.3-in statically-balanced J-shaped toneatm and separate sensor tonearm. Features nine-position auto program locate device; strobe with ±4% pitch control; anti-skating and viscous-damped cueing; overhang mark; direct-read out stylus force; solenoid-operations controls with LEDs. Wow and flutter 0.03% wrms; rumble 70 dB (DIN B); min. tracking force 1 g; nylon base; 4.3" H × 18.9" W × 15.1" D. $400

RP-4705 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; coreless FG dc servomotor; platter with strobe and ±4% pitch contol; 8.3-in statically-balanced J-shaped tonearm with direct-readout stylus force, anti-skating, viscous-damped cueing, and overhang mark; solenoid operations controls with LEDs. Wow and flutter 0.035% wrms; rumble 68 dB (DIN B); min traking force 1.0 g; nylon base; 4.3" H × 18.9" W × 15 5" D. $280

RP-7505 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; coreless dc motor; frequency generator servo system; push button controls; metal-filled resin base; 8.3-in static-balanced "S"-type tonearm with plug-in headshell; oil damped cueing, anti-skate dial; 12-in platter; counterweight calibration; controls include automatic play, reject, auto-repeat; illuminated stroboscope. Pitch tonearm ±4%; wow and flutter 0.03% wrms; rumble 70 dB (DIN "B" weighting); tonearm effective length 8.3-in; tracking force 1.0 g; includes detachable acrylic dustcover; 5.6" H × 17.5" W × 14" D. $280

RP-7205 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive system with automatic arm; dc servo motor; 8.3 in static balanced "S"-shaped tonearm; oil-damped cueing; micrometer-style stylus pressure calibration; "Soft-Touch" solenoid controls; end of disc return, auto play and reject. Wow and flutter 0.06% wrms; rumble (DIN B) 60 dB; 12-in platter; tonearm length 8.3-in, resonance 8 Hz; min. tracking 1.0 g; wood-composition base; detachable plastic dustcover; 5.6" H × 17.5" W × 14.0" D. $200

PANASONIC

SL-H401 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; FG servomotor; 12-in aluminum diecast platter with illuminated stroboscope and variable pitch control (±10%); statically-balanced aluminum S-shaped tonearm with moving magnet cartridge and anti-skating/viscous-damped cueing; electronic speed switching; heavy-duty base material with separate isolators; detachable hinged dustcover . . . . . $170-$190

SL-H301 Semi-Automatic Single/Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic return tonearm; dc servomotor; 12 in aluminum diecast platter; statically-balanced S-shaped tonearm with moving-magnet cartridge, viscous-damped cueing, and anti-skating; electronic speed switching; built-in audio insulators; detachable tilt-back dustcover. . . . $140-$160

SL-H201 Automatic Changer

Two-speed (33⅓ and 45 rpm) belt-drive record changer with automatic tonearm; synchronous 24-pole motor; 11-in aluminum platter; low-mass aluminum tubular S-shaped tonearm with Shure moving-magnet cartridge, bi-directional viscous damped cueing, tracking force adjustment, and anti skating, features memo-gram; simulated wood base. . . . . $110-$130

JC PENNEY

MCS 6800 Semi-Auto Single-Multi Play

Two-speed (33⅓ and 45 rpm) programmable belt-drive turntable with auto return/shutoff tonearm; 24-pole ac synchronous motor; 11⅞-in recessed platter; straight tonearm with decoupled counter weight, preset anti-skating, and electro-optical sensing magnetic cartridge. Features remote control unit for programming within 50-ft radius; six-record multi-play capability; can program up to 27 selections from six records or 13 selections from one record; electronically-controlled cue, pause, and muting; auto speed record size/speed selection. Wow and flutter 0.05% wrms; rumble -65 dB (DIN B); includes removable hinged dustcover (all controls outside cover), 45-rpm adaptor, 9-V battery for remote unit, and rotating manual and multi-play spindles; anti-resonant plastic black-finish cabinet; 7" H × 17¾" W × 17½" D. $300

6700 Automatic Single-Multi Play

Two-speed (33⅓ and 45 rpm) direct-drive dc servo-controlled single-/multi-play turntable with automatic arm operation; speed deviation 0.06%; fine speed control; strobe; S-shaped tubular tonearm with cue/pause and anti-skating; arm length 9.06-in; wow and flutter 0.03% wrms (JIS); rumble 73 dB (IEC A weighted); tracking error 3.5 degrees; includes universal cartridge head, 45-rpm adaptor, and dustcover; 6¹⁵⁄₁₆" H × 17¾" W × 14½" D. $230

6601. Similar to 6700 except single-play with automatic return/stop tonearm; wow and flutter 0.03%. $180

MCS 6710 Semi-Auto Single-Multi Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto return/shut-off tonearm; dc servomotor; 12-in aluminum diecast recessed platter with strobe and ±6% pitch control; S-shaped tubular arm with damped cue/pause. Features single-/multi-play capability (up to six records); manual size selector for 7- and 12-in discs; six-program selector; repeat; electronic speed change; Wow and flutter 0.05% wrms (JIS); rumble 65 dB (IEC A weighted); tracking force range 0-3 g; includes manual and umbrella spindles, 45-rpm adaptor, and removable tinted plastic dustcover; 6½" H × 16¹⁵⁄₁₆" W × 14" D. $160

6503 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive dc servo-controlled turntable with auto return stop tonearm; speed deviation 0.16%; fine speed control; strobe; S-shaped tubular arm (length 8.65-in) with anti skating and cue/pause controls; wow and flutter 0.05% wrms (JIS); rumble 65 dB (DIN "B"); tracking error 3.5 degrees; includes dustcover black wood cabinet; 5⁵⁄₁₆" H × 16¾" W × 13¼" D. . $130

6502. Same as 6503 except has woodgrain vinyl cabinet $130

MCS 6200 Single-/Multiple-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with manual/automatic tonearm; 24-pole synchronous motor; 11-in diecast turntable; 7.55-in S-shaped aluminum tubular arm with Shure magnetic cartridge. Features programmable repeat (up to six times on one record or six records once); damped cue/pause control; manual disc size selector; Rumble -60 dB (DIN B); tracking force range 0-4 g; includes manual and automatic spindles and hinged dustcover; black plastic woodgrain-trim cabinet; 6½" H × 17¼" W × 13⅞" D. $100

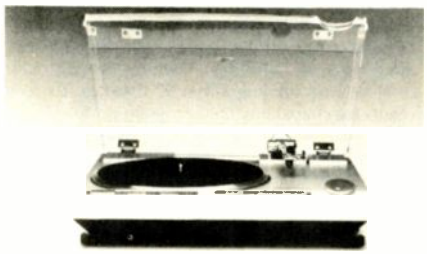
PHASE LINEAR

8000 Series Two Auto Single-Play

Two-speed (33⅓ and 45 rpm) PLL quartz locked direct-drive turntable with manual/automatic tonearm; PLL Hall-effect motor; 12.2-in. aluminum diecast platter; 7.5-in. linear-motor tangential-tracking statically-balanced straight tonearm; three-diameter disc size selector; automatic repeat. Wow

4 TURNTABLES

and flutter 0 013% wrms; rumble 78 dB (DIN B);



cartridge weight range 4 14.5 g; 6" H · 19.4" W · 17.5" D $750

PHILIPS

AF977 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) digital quartz PLL belt drive turntable with automatic tonearm; Direct

Control tacho-generator motor; has tubular straight arm. Features LED digital speed readout; pitch control (±0.002%); adjustable anti-skating and stylus force readout (0.5-3 g range); wow and flutter 0.02% wrms $400

AF829 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with autnmatic tonearm; Direct Control tacho-generator motor; has straight tubular tonearm Features LED digital speed readout; nine-LED pitch control display in 0.5% steps with separate controls for both speeds; adjustable anti-skating, cueing, and stylus force readout (0.5-3 g); wow and flutter 0.03% wrms; dustcover does not cover touch controls $300

AF877 Semi-Automatic Single-Play

Two speed (33⅓ and 45 rpm) belt-drive electronically-controlled dc turntable with photo electronic stop/auto return and reject tonearm; electronic touch controls with electronic speed adjustment (±3%); direct-reading stylus force gauge; straight tubular arm (effective length 8.46-in); anti skating adjustment; viscous damped cueing; pitch controls with nine-element LED bar; wow and flutter 0 03% wrms; rumble 70 dB (DIN "B"); tracking error 0-degree, 9-ft/cm; tracking force range 0 3 g; includes detachable headshell and hinged dustcover; 5½" H · 16½" W · 13¾" D. $260

AF867. Similar to AF877 except manual tonearm with photo-electronic stop; three-element LED bar; wow and flutter 0.05% wrms; rumble 65 dB (DIN "B") $230

AF777. Similar to AF867 except automatic tonearm; no electronic touch controls; tracking force 0-4 g $200

GA406 Auto/Manual Multi-Play

Two-speed (33 and 45 rpm) multiple play turntable with automatic tonearm; holds up to five records, automatically selects record diameter and speed for each; both speeds independently adjustable ±3%; belt-driven by dc servomotor, speeds changed and regulated electronically; independent dc servomotor controls changing mechanism and arm movements; viscous-damped cue control; anti-skating; counter balanced arm adjustable for 0-4 g stylus force; wow and flutter less than 0.1% (DIN); rumble below 60 dB (DIN "B" weighting); speed drift less than 0.2%; tracking error less than 0°23'/in; comes with dustcover and base; 5¾" H × 16⅜" W × 13½" D. $170

AF685 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive with auto return/shut off tonearm; electronically controlled dc motor; viscous-damped cueing; anti-skating; pitch control; wow and flutter 0.09% wrms; rumble 60 dB (DIN B) $140

PIONEER

PL-630 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-PLL direct-drive turntable with automatic lead-in/play/return/shut-off tonearm (can be set for manual operation). Features quartz-PLL Hall and dc motors with three ICs for electronic control; front-panel touch-sensitive buttons and LEDs; pitch control (range ±6%) and meter display; optical electronic end-of play detection; electronic cueing device and quick-stop; anti-skating; S-curved gimbal-supported tonearm (effective length 237 mm); magnesium headshell; coaxial suspension system Wow and flutter 0.025% wrms max.; rumble 65 dB (JIS), 75 dB (DIN "B"). Includes removable hinged acrylic cover. 5¹³/₁₆" H · 18½" W × 16⁷/₁₆" D. . . . $449

PL-610. Similar to PL 630 except automatic-return tonearm $399

PL-560. Similar to PL-630 minus full electron.c operation and coaxial suspension system; has Warren motor for automatic functions, one-row strobe, repeat button, electronic quick-stop, and oil-damped cueing; rumble -63 dB (JIS), 73 dB (DIN "B"); effective arm length 221 mm. 5¹¹/₁₆" H × 7⁵/₁₆" W · 14⅜" D $329

PL-540. Similar to PL-560 except auto return/shut off tonearm; minus electronic operation and meter display for pitch control; rumble 60 dB (JIS) $249

PL-518 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto return/shut-off tonearm; dc servo motor; right-hand controls including cue lever, speed select button, fine pitch control (±2% range), and built-in strobe; S-shaped balanced pipe arm (effective length 221 mm); anti-skating and lateral balancer devices; oil-damped cueing mechanism; 45-rpm adaptor; wow and flutter 0.03% wrms; rumble 73 dB (DIN "B"); 5⅜" H · 17⅜" W · 14⅜" D. $199

PL-516. Similar to PL-518 except belt drive system with FG servo dc motor; anti skating with dial control; wow and flutter 0.045% wrms; rumble 68 dB (DIN "B"); 5½" H · 17⅜" W × 14⅜" D. . . $159

PL-514. Similar to PL-516 minus fine pitch control and strobe; four-pole synchronous motor; wow and flutter 0 055% wrms; rumble 65 dB . . $139

PL-512. Similar to PL 514 except manual operation; minus anti-skating device; includes removable hinged, acrylic dustcover; 5³/₁₆" H × 17⅜" W × 14⅜" D $100

REALISTIC

LAB-500 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) electronic quartz locked direct-drive turntable with automatic tonearm; brushless dc servomotor; statically balanced S-shaped tonearm with integrated headshell and cartridge and biradial elliptical stylus; electronic oil-damped cue/pause; calibrated anti skate; record size and speed selectors; single-play/repeat knob; includes hinged dustcover; wow and flutter 0.04% wrms; tracking force less than 1 g; walnut vinyl base; 6⅛" H × 18⅜" W · 15⅜" D. . . . $260

LAB-400 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; brushless dc servomotor and tonearm motor; neon strobe; damped cue/pause; calibrated anti-skating; 8¹¹/₁₆-in S-shaped tonearm tracks down to 0.5 g; low-capacitance pick-up leads; supplied with magnetic cartridge with elliptical stylus and hinged dustcover; wow and flutter 0.03% wrms; rumble 63 dB (DIN B); walnut veneer base; 5⅜" H × 17¹¹/₁₆" W × 13³¹/₃₂" D. $200

LAB 260 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic tonearm; 4-pole synchronous motor; removable headshell; cueing; wow and flutter 0 09%; includes base, dustcover, and cartridge; 6" H · 17⅜" W · 14⅛" D. $140

LAB-250 Manual Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive manual player with automatic return/shutoff tonearm; four-pole synchronous motor; wow and flutter 0.09%; rumble 60 dB (DIN B); 11¾-in cast platter; S-shaped tonearm; viscous damped cue/pause lever; adjustable anti-skating; cartridge has elliptical stylus; tracking force adjustable over 0-4 g; walnut grained vinyl veneer base; 6" H × 17⅜" W × 14⅛" D. $130

LAB-110 Automatic Single-Play

Three-speed (33⅓, 45, and 78 rpm) turntable with automatic/manual tonearm; damped cue/pause; four-pole induction motor; adjustable tracking; supplied with magnetic cartridge with diamond stylus and dustcover; simulated walnut base; 5¾" H × 15⅜" W · 14⅜" D $80

REFERENCE by QUADRAFLEX

620T Semi-Automatic Single-Play

Two speed (33⅓ and 45 rpm) direct-drive turntable with auto lift/shutoff tonearm; 20 pole, 30 pole dc servomotor; 11½-in straight tonearm with adjustable anti-skating and damped cueing; strobe with pitch control; wow and flutter 0.03% (DIN 45 507); rumble 70 dB (DIN 45 539 B); tracking force range 0-3 g; 6.1" H × 18" W · 13.2" D . . . $250

510T Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto/shutoff tonearm; ac synchonous motor; 11⅝-in S-shaped tonearm with adjustable anti skating and damped cueing; wow and flutter 0.1% (DIN 45 507); rumble 60 dB (DIN 45 539 B); tracking force range 0-4 g; 5¹³/₁₆" H × 17¼" W · 14¾" D $140

ROTEL

RP-9400 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-lock PLL direct-drive turntable with automatic tonearm, dc servomotor, and statically-balanced straight arm with glass fiber headshell. Features stroboscope with speed controls (±4% accuracy); anti-skating and cue; spring loaded insulator feet Wow and flutter 0.025% wrms; rumble 63 dB (IEC B); tracking force range 0 75 3 g; includes detachable dust cover; 6" H × 17²³/₃₂" W · 14" D $375

RP-6400 Semi-Automatic Single-Play

Two speed (33⅓ and 45 rpm) direct-drive turntable with auto return/lead-in/shutoff arm, dc servomotor, and statically-balanced straight arm with glass-fiber headshell. Features stroboscope with speed controls (±4% accuracy); anti-skating and cue; spring loaded insulator feet. Wow and flutter 0.03% wrms; rumble 60 dB (IEC B); tracking force range 0.75 3 g; includes detachable dustcover; 5¹¹/₁₆" H · 17⅜" W · 14⅜" D $235

RP-4400 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt drive turntable with auto return/shutoff tonearm, FG dc servomotor, and statically balanced straight arm with glass fiber headshell. Features stroboscope with speed controls (±3% accuracy); anti skating and cue Wow and flutter 0.04% wrms; rumble 58 dB (IEC B);

tracking force range 1 3 g; includes detachable dustcover; 5 1/8" H · 17 23/32" W · 13 25/32" D . $200

RP-2400 Semi-Automatic Single-Play
Two speed (33 1/3 and 45 rpm) belt-drive turntable with auto return/shutoff tonearm, four pole hysteresis synchronous motor, and statically-balanced straight tonearm with glass-fiber headshell; anti skating; cue stick; double floating insulation system. Wow and flutter 0.06% wrms; rumble 55 dB (IEC B); tracking force range 1 3 g; includes detachable dustcover; 5 1/8" H · 17 23/32" W · 13 25/32" D $160

SANSUI

SR-929 Manual Single-Play
Two-speed (33 1/3 and 45 rpm), quartz servo direct drive turntable with manual tonearm; 20-pole, 30-slot dc brushless motor; quartz crystal controlled direct spindle drive; 9 1/2 in statically-balanced S-shaped tonearm with height-adjustable needle point and knife edge support and vertical stylus alignment; 11 15/16-in aluminum die-cast platter; concrete resin base Features oscillator driven stroboscope; speed indicators; anti-skating; universal headshell. Wow and flutter 0 028%; rumble 74 dB (DIN B); speed deviation 0 002%; fine speed adjustment · 3.5% (quartz-servo off); min tracking force setting 0 5 g; acceptable cartridge weight 2 11 g; lacquered black polyester resin particleboard with acrylic dustcover with free stop hinges; 6 7/8" H · 19 5/16" W · 15" D $530

XR-Q9 Automatic Single-Play
Two speed (33 1/3 and 45 rpm) direct-drive computerized quartz-PLL turntable with automatic "Dyna

Optimum Balanced" straight tonearm and servomotor. Features electronic speed selector (· 0.002% accuracy) with LED digital display; electronic cue, pause, arm return, up/down, repeat, and start/stop controls. Anti-feedback construction with tonearm and motor sub chassis separated from fiberglass and bulk molding compound base board; includes hinged dustcover that does not cover controls $500

SR-838 Manual Single-Play
Two speed (33 1/3 and 45 rpm) PLL quartz servo direct-drive turntable with manual tonearm; 20-pole 30-slot brushless motor with built in frequency generator; 12 9/16-in aluminum diecast platter; 9 1/16 in statically balanced S shaped tonearm with height adjustable two-point pivot support and vertical stylus alignment. Features quartz crystal oscillator speed control (0.002% accuracy); ±2.5% pitch control; quartz-locked strobe; electronic brake; direct readout tracking force dial; up-front controls; lever/weight anti-skating; oil-damped cueing. Wow and flutter 0.025% wrms; rumble 72 dB (DIN B); min tracking force 0 5 g; cartridge weight range 4-11 g, 11 20.5 g with sub counterweight; includes overhang gauge, sub weight, hexagon wrench keys, 45 rpm record spindle adaptor, and hinged dust cover; 6 5/16" H · 19 5/16" W · 15 3/8" D . . . $440

FR-Q5 Automatic Single-Play
Two speed (33 1/3 and 45 rpm) computer controlled quartz PLL direct drive turntable with automatic "Dyna Optimum Balanced" S shaped tonearm; brushless direct-drive servomotor and separate motor for arm lift, cue, and return; die-cast a uminum alloy platter. Features built-in computer with programmable repeat (repeats record once or indefinitely) and memory that stores beginning and end of record selection; up-front controls; electronic speed selector (0 002% accuracy); 45-rpm record spindle adaptor; cartridge mounting gauge; electronical/mechanical damping Wow and flutter 0.025% wrms; S/N 75 dB; min. tracking force 0 5 g; includes dustcover with automatic hinges. . . $340

FR-D4 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) computer-controlled direct drive turntable with automatic "Dyna-Optimum Balanced" S-shaped tonearm; brushless dc servomotor and motor for arm lift, cue, and return; aluminum alloy diecast platter Features built-in computer that stores beginning and end of record and with programmable repeat; up-front controls including pitch control; electronic/mechanical damping; 45-rpm record spindle adaptor; cartridge mounting gauge. Wow and flutter 0 028% wrms; rumble 72 dB; min tracking force 0 5 g; includes removable dustcover with automatic hinges (does not cover controls) $240

FR-D3 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) electronically-controlled direct drive turntable with auto return/shutoff tonearm; 20 pole 30 slot brushless motor; aluminum alloy diecast platter; 8" 1/16-in statically balanced S-shaped tonearm Features wide-band strobe control; · 3% pitch control; up-front controls (outside dustcover). Wow and flutter 0.028% wrms; S/N 72 dB (DIN B); min tracking force 1 g; includes removable hinged dustcover . . $190

SR-B200S Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) belt-drive turntable with auto return tonearm; synchronous four pole motor; 8 1/4-in statically-balanced S-shaped arm. Wow and flutter 0.07% wrms; rumble 65 dB (DIN B); min. tracking force 1 5 g; cartridge weight range 4 8 g; includes hinged removable dustcover . $135

SANYO

PLUS Q60 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) PLL quartz-locked direct drive turntable with automatic tonearm; 20-pole 30-slot brushless dc servomotor and separate dc motor for arm; 9 33-in straight carbon fiber tonearm with carbon fiber headshell and calibrated counterweight; 3 3-lb aluminum diecast platter Features quartz locked double servo speed control; touch pushbutton controls with LEDs; stylus timer clock display/reset with memory; LED digital stylus tracking force display; LED speed and pitch read out; suspension/isolation system; four rubber/air damped suspension feet; calibrated anti-skating; disc size selector for 7, 10, and 12 in discs Wow and flutter 0 025% wrms; rumble 73 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4-10 g; includes 45-rpm adaptor and hinged dustcover (does not cover controls); 6" H · 17 3/8" W · 14 3/8" D. $550
PLUS Q50. Similar to PLUS Q60 without LED read outs $300

PLUS Q40 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz-locked direct-drive turntable with automatic arm; 20-pcle 30-slot brushless dc servomotor; 8.66-in straight aluminum tubular arm with ABS headshell and calibrated counterweight; 2.2 lb aluminum diecast platter. Features front-panel control switches; disc size selector for 7, 10, and 12 in discs; automatically adjustable strobe frequency; suspension/isolation design; four rubber damped feet; adjustable anti skating. Wow and flutter 0 03% wrms; rumble 70 dB (DIN B); tracking force range 0-3 g; cartridge weight range 4 10 g; includes 45 rpm adaptor and hinged dustcover (does not cover controls); 6" H · 17 3/8" W · 14 3/8" D $200
Q25. Similar to Q40 except semi automatic with auto return/shutoff arm; no disc size selector; 5 1/2" H · 17 3/8" W · 15" D $180

TP1030 Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) two-motor servo controlled brushless dc direct-drive turntable with auto tonearm. Features electronic speed change (· 3% speed adjustment); illuminated stroboscope; S shaped counterbalanced tone arm with plug-in headshell; anti skating; cueing control; automatic continuous repeat; reject button; auto shutoff Wow and flutter 0 03% wrms; rumble 70 dB; tracking force range 0-3 g; tracking error · 1.5 degrees; 6" 1/16" H · 18 3/4" W · 15" D $170

TP1012A Semi-Automatic Single-Play
Two speed (33 1/3 and 45 rpm) dc servo-controlled direct-drive turntable with end-of-record automatic return/shutoff tonearm Features speed adjustment · 3%; illuminated stroboscope; S-shaped counterbalanced arm; anti-skating; cueing control; reject control. Wow and flutter 0 04% wrms; rumble 70 dB tracking error · 1 5 degrees; tracking force range 0 3 g; 5" 1/16" H · 17 3/8" W · 14 3/8" D $140
TP1010. Similar to TP1012 except PLL dc servo-controlled belt drive turntable with auto return shutoff laterally-balanced tonearm; wow and flutter 0.05% $120
TP1010C. TP1010 with unmounted Pickering magnetic stereo cartridge $130

TP1005 Semi-Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) belt-drive turntable with auro return tonearm; 68 pole tacho generator PLL servomotor; 220-mm S-shaped tonearm with plug-in headshell and calibrated counterweight; 1 1/4-lb diecast aluminum platter. Features adjustable anti-skating; viscous-damped cueing; electronic speed control Wow and flutter 0.05% wrms; rumble 60 dB; tracking force range 0-3 g; hinged dustcover; 5 1/2" H · 17 3/4" W · 14 3/8" D . . . $90
TP1005C. TP1005 with unmounted magnetic stereo cartridge . $100

H.H. SCOTT

PS97XV Automatic Single-Play
Two-speed (33 1/3 and 45 rpm) quartz PLL direct drive turntable with automatic tonearm with single

play or repeat functions; high torque motor with electronic switching commutation; servo applied speed lock; pushbutton speed change; 12-in aluminum platter with strobe; strobe light with adjustable speed controls; S shaped unipoint-suspension statically-balanced tonearm; viscous damped cueing; direct readout anti-skating; stylus pressure control; record size selector Wow and flutter 0 03% wrms; rumble 50 dB; tracking force range 1-3 g; includes spare headshell holder and hinged dustcover; 5 1/2" H · 17 3/4" W · 13 3/4" D . $260
PS77XV. Similar to PS97XV except semi-automatic with automatic reject/return/shutoff tonearm; no record selector; 7" H · 17 3/4" W · 13 3/4" D . $235

PS87A Automatic Single-Play
Two speed (33 1/3 and 45 rpm) direct-drive turntable with automatic tonearm with single play or repeat functions; 72 pole FG ac servomotor; pushbutton speed change; 12-in aluminum platter with strobe; strobe light with adjustable speed controls; S shaped unipoint suspension statically-balanced tonearm; viscous damped cueing; direct-readout

4 TURNTABLES

stylus pressure and anti-skating controls; record size selector. Wow and flutter 0.03% wrms; rumble −60 dB; tracking force range 1-3 g; includes spare headshell holder and hinged dustcover; 5¼" H × 17¼" W × 13⅜" D..... $210

PS67A. Similar to PS87A except semi-automatic with automatic reject/return/shutoff tonearm; no record size selector; 7" H × 17¼" W × 13⅜" D..... $200

PS47A. Similar to PS67A except FG dc servo-controlled belt-drive turntable; gimbal supported statically balanced arm; no spare headshell holder; wow and flutter 0.05% wrms; rumble −55 dB; tracking force range 1-4 g; 5½" H × 17¼" W × 13⅜" D..... $150

PS17A. Similar to PS47A except semi-automatic with automatic return/shutoff arm; four-pole ac synchronous motor; no stroboscope with adjustable speed control; wow and flutter 0.07% wrms; rumble −52 dB; tracking force range 1.5-4 g..... $130

SERIES 20

PLC-590 Single-Play

Two-speed (33⅓ and 45 rpm) quartz PLL direct-drive turntable without tonearm; quartz PLL Hall motor; 12¹⁹/₃₂-in aluminum alloy diecast platter with pitch indicator; electronic quick stop. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); start-up time ½ rotation. Includes height-adjustable insulators and free-hinge acrylic dustcover; 7⁹/₃₂" H × 19⁹/₃₂" W × 15³¹/₃₂" D..... $550

SONY

PS-B80 Electronic Single-Play

Two-speed (33⅓ and 45 rpm) microprocessor-controlled turntable with electronic-controlled Velocity

Feedback automatic tonearm; brushless slotless BSL motor; 9¼-in statically-balanced J-shaped tonearm driven by two linear motors for horizontal and vertical motion; one-piece diecast aluminum headshell with four-clamp connector; 12⅝-in single diecast aluminum platter (4 lb, 14 oz with mat). Features Magnedisc monitoring head and quartz-crystal lock speed reference (accuracy ±0.002%); electronic stylus force with LED digital readout; auto electronic anti-skating; auto tonearm balancing; electronic damping; auto record-size sensing; auto shutoff; front-panel cueing and arm indexing with memory control; built-in stylus cleaner; fluid-filled feet. Wow and flutter 0.02% wrms; rumble −78 dB (DIN B); startup time ¼ rotation at 33⅓ rpm; tracking force range 0.5-3 g; includes hinged dustcover with controls outside; 7¹⁵/₁₆" H × 19¹⁵/₁₆" W × 16¹⁵/₁₆" D..... $1800

PS-X70 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; brushless, slotless BSL motor and FG servo arm motor; 9¼-in J-shaped carbon fiber tonearm with arm height adjustment; one-piece aluminum alloy headshell with four-clamp headshell connector; 12⅝-in diecast aluminum platter (4 lb, 14 oz). Features Magnedisc servo control and quartz-drive strobe light (accuracy ±0.002% fixed, ±10% variable); feathertouch operation controls with LEDs; luminous sensor for arm return; audio muting circuit; viscous damped cueing; direct-read anti-skating and counterweight; viscous-filled height-adjustable feet. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); startup time ¼ rotation at 33⅓ rpm; tracking force range 0-2.5 g; includes spare headshell holder and removable spring-loaded cover; 6⅛" H × 18¹³/₁₆" W × 16⁹/₁₆" D..... $500

PS-X60. Similar to PS-X70 minus fine speed adjust, separate motor for arm drive, and audio muting; has aluminum tonearm; speed accuracy ±0.003%; startup time ½ rotation at 33⅓ rpm..... $400

PS-X50. Similar to PS-X60 except semi-automatic with auto return/shutoff arm; 6½" H..... $330

PS-X40. Similar to PS-X50 has automatic tonearm; minus tonearm height adjustment, four-clamp headshell connector, and luminous sensor for arm return; 12⅜-in platter (3 lb, 8 oz); 8½-in arm; rumble −73 dB (DIN B); tracking force range 0-3 g; 5¾" H × 17½" W × 15¾" D..... $275

PS-X30. Similar to PS-X40 except semi-automatic with auto return/shutoff arm; has rubber-filled feet and 12½-in platter (2 lb, 10 oz); wow and flutter 0.03% wrms; rumble −70 dB (DIN B)..... $245

PS-X20. Similar to PS-X30 except automatic operation; minus quartz-drive strobe light; has LED digital speed display; rumble −73 dB (DIN B)..... $210

PS-T25 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto tonearm; BSL motor; diecast aluminum platter; J-shaped aluminum arm. Features Magnedisc servo control with variable speed control (±4%); motor-driven strobe light; viscous-damped cueing; direct-read antiskating and counterweight; feathertouch controls. Wow and flutter 0.04% wrms; rumble −70 dB (DIN B); includes spare headshell holder and removable spring-loaded cover $170

PS-T1 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto return/shutoff tonearm; BSL motor; 12⅜-in diecast aluminum platter; 8¹⁷/₃₂-in statically-balanced J-shaped aluminum arm. Features multi-gap-head Magnedisc servo and strobe light with five speed adjust; front-panel reject button; universal headshell; direct-reading stylus force gauge; viscous-damped cueing; anti-skating device with direct-reading gauge; cup-shaped rubber feet. Wow and flutter 0.04% wrms; rumble −68 dB (DIN B); start-up time ⅔ rotation at 33⅓ rpm; tracking force range 0-3 g; cartridge weight range 4-10 g; 5½" H × 17½" W × 14¾" D..... $130

Precise Series

PS-P7X Semi-Auto/Manual Single-Play

Two-speed (33⅓ and 45 rpm) quartz-crystal direct-drive turntable with auto return/shutoff or manual tonearm; brushless, slotless BSL motor; 12⅝-in diecast aluminum platter (2 lb, 11 oz); 8½-in statically-balanced aluminum J-shaped tonearm driven by discrete FG servomotor; one-piece diecast aluminum headshell with four-clamp connector. Features Magnedisc servo control and LED quartz reference speed readout (accuracy ±0.003%); quick stop and electromagnetic braking; luminous sensor for arm return; audio muting circuit; viscous-filled height-adjustable feet. Wow and flutter 0.025% wrms; rumble −75 dB (DIN B); start-up time ½ rotation at 33⅓ rpm; tracking force range 0-3 g; 4⅜" H × 17" W × 13⅜" D..... $450

STANTON

8005 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) slow-speed, synchronous belt-drive turntable supplied with either Stanton 881S or 681 Triple-E phono cartridge and extra cartridge adaptor head; wow and flutter 0.07% max. (DIN weighted); rumble −55 dB (DIN weighted); stylus force range 0-4 g; tracking error ±1.2 degrees max.; anti-skate adjustable with separate scales for any stylus; 6" H × 14¼" W × 16¾" D.

With 881S phono cartridge: tracking force 1¼ g; frequency response 10-25,000 Hz; channel separation 35 dB; output 0.9 mV/cm/sec; stereohedron stylus $500

With 681 Triple-E phono cartridge: tracking force 1 g+½, −¼; frequency response 12-22,000 Hz; channel separation 35 dB; output 0.7 mV/cm/sec; elliptical diamond stylus..... $440

8005M. Same as 8005 except manual operation.

With 881S..... $450

With 681 Triple-E $390

STD by H&H INTERNATIONAL

305 M Automatic Single-Play

Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic arm, 16-pole synchronous motor, and 300-mm platter; wow and flutter 0.06% (DIN PK weighted), 0.03% rms; rumble −70 dB (DIN B weighted); startup time 1.5 sec at 33⅓ rpm.. $625

STUDER/REVOX

B790 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-controlled dc servo direct-drive turntable with servo-electronic

tangential tonearm; speed accuracy ±0.01%; cartridge output electronically muted except when stylus in groove; no tonearm but uses overhead tangential tracking trolley with opto-electronic LED sensing and servo guidance system; auto lift/return/shut-off after play; servo-electronic and dc motor tonearm follow-up; electronically controlled, pneumatically-damped cartridge lowering; front-panel controls operable with dustcover in place; four-digit quartz LED readout; automatically-activated run-out switch; wow and flutter less than 0.05% (DIN weighted), better than 0.1% (DIN unweighted); rumble −68 dB ("A" weighted); includes cartridge; 5⅜" H × 17⁴/₈" W × 15" D $899

TECHNICS

SP-10 MK II Single-Play Manual

Three-speed (33, 45, and 78 rpm) direct-drive turntable with phase-lock quartz-crystal speed control of low-speed, dc brushless motor; build-up time to precise speed within 25 degree rotation (0.25 sec) at 33⅓ rpm; stop time (magnetic brake) within 30 degree rotation (0.3 sec); long-term speed stability ±0.002% (within ±36 ms over 30-min period, less than ¾ sec in 10 hr); wow and flutter 0.025% wrms (JIS); rumble −70 dB; solenoid controls (including remote); 4¹/₆₄" H× 14.5" W × 14.5" D..... $900

SP-15 Single-Play

Three-speed (33⅓, 45, and 78 rpm) quartz-synthesizer direct-drive turntable without tonearm; het-

ero pole brushless dc motor; integrated rotor-platter

Why we created our own total system.

We simply had to. Because no chain is stronger than its weakest link. And no music system is better than the distortion or noise coming from any of its components.

We wanted to make sure that when you choose one Revox you get all that it has to offer.

The total Revox system delivers virtually distortion-free music from every source and in any mode — music reproduction so true that it is unmatched by any other system available today.

Revox
Audio-Rack

All the components in the Revox system are designed to meet the professional quality standards that have been set by the Revox B77 open reel recorder with its ingenious logic control system. The B750 integrated amplifier, for example, is renowned for its fast transient response to all musical signals and for its low TIM. It is paired with the incredible B760 digital synthesizer FM tuner with the unusual capability of programming 15 stations which you can recall at the push of a button. The B790 direct drive, quartz controlled turntable reduces tracking distortion to an absolute minimum using a revolutionary new system called Linatrack.

For an unmatched musical experience, listen to our matched components at your franchised Revox dealer. Or write to us for details.

REVOX

Studer Revox America, Inc , 1819 Broadway, Nashville, TN 37203 615 329-9576 / In Canada: Studer Revox Canada, Ltd.

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4 TURNTABLES

motor; quartz-synthesizer pitch control in 0.1% increments (±9.9%) with LED digital display; start-up and stop time 0.4 sec; wow and flutter 0.025% wrms; rumble −56 dB (DIN A), −78 dB (DIN B); diecast aluminum base $600
SP-25. Similar to SP-15 except two-speed (33⅓ and 45 rpm) with high-torque dc motor; minus LED digital pitch readout; ±6% pitch control; rumble −50 dB (DIN A); start-up time 0.7 sec $400

SL-1300Mk2 Automatic Quartz-Locked

Two-speed (33 and 45 rpm) single-play automatic turntable with quartz-lock speed control active on normal-speed and pitch-control modes; touch-control buttons adjust speed ±9.9% in 0.1% increments, monitored by digital readout; IC logic and noncontact optical sensor system control automatic start, lead-in, stop and auto-return; record may be repeated from two to six times or continuously; output muting linked to cueing lever; all controls accessible with cover closed; arm height adjustable; low-capacitance cables; speed accurate within 0.002%; full speed attained in 0.7 sec (¼ turn); electronic braking; wow and flutter 0.025% wrms (JIS); rumble −73 dB or less (DIN "B") $530
SL-1400Mk2. Similar to SL-1300Mk2, but with manual start, manual and automatic shutoff and arm return at end of record; single play $480
SL-1500Mk2. Similar to SL-1300Mk2, but with completely manual control of arm $430

SL-1600MK2 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with automatic tonearm; gimbal-suspension S-shaped tonearm with variable height adjustment and double cueing; four-line strobe calibration; ±5% pitch control with front-panel graphic display; front-panel micro-computer operations controls; infrared auto record size selector sensor; stylus illuminator; electronic braking; aluminum base wih double-isolation suspension system. Wow and flutter 0.025% wrms; rumble −78 dB (DIN B) $400
SL-1700MK2. Similar to SL-1600MK2 except semi-automatic with auto return arm $350
SL-1800MK2. Similar to SL-1700MK2 except has manual tonearm $300

SL-1301 Single-Play Automatic

Two-speed (33⅓ and 45 rpm) quartz-phase-locked, direct-drive turntable with automatic arm; brushless dc motor; logic-detected end-of-play; start/stop lever; 13-in aluminum diecast platter; S-shaped gimbal-suspension arm (effective length 9 1/16-in); anti-skating control; oil-damped cueing in both directions; can be operated manually. Speed drift within ±0.002%; wow and flutter 0.025% wrms (JIS), ±0.035% peak (IEC); rumble −50 dB (DIN "A"), −73 dB (DIN "B"); tracking error +1 degree (inner groove), +3 degrees (outer groove); adjustable tracking force 0-3 g; 4 15/16" H × 17¾" W × 14 9/16" D $360
SL-1401. Similar to SL-1301 except auto lead-in/auto-return tonearm $320

SL-1200MK2 Manual Single-Play

Two-speed (33⅓ and 45 rpm) quartz-locked direct-drive turntable with manual tonearm; brushless dc motor, gimbal-suspension S-shaped tonearm with variable helicoid height adjustment; damped platter with LED strobe illuminator; quartz-locked slide pitch control (±8%); fully electronic braking system; wow and flutter 0.025% wrms; rumble −56 dB (DIN A), −78 dB (DIN B); aluminum diecast cabinet and visco-elastic base material for acoustic isolation $350

SL-3350 Automatic Multiple-Play

Two-speed (33⅓ and 45 rpm) direct-drive changer with automatic set-down/lift-off/return/record change tonearm; FG servo-controlled and dc brushless motor; memogram accommodates max. six records and programs sequential play/repeat, six repeated record-play or continuous play in single-play mode; front-panel controls for all functions; individual pitch controls; stroboscope; S-shaped gimbal-suspension tonearm; viscous damped cueing; anti-skating control; wow and flutter 0.03% wrms; rumble −73 dB (DIN "B"); includes detachable tonearm headshell and removable dustcover $240
SL-3300. Similar to SL-3350 except automatic tonearm with additional auto stop function $180
SL-3200. Similar to SL-3350 except auto return/shut-off tonearm; front-panel controls for stop, cueing and speed adjustment $150

SL-Q2 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) quartz-phase-locked direct-drive turntable with automatic return tonearm; FG servomotor; low-mass gimbal-suspension S-shaped tonearm with anti-skating and bidirectional viscous-damped cueing; strobe with prism stylus illuminator; pitch control (±6%); aluminum diecast base with acoustic-feedback insulators; wow and flutter 0.025% wrms; rumble −78 dB (DIN B) $200
SL-Q3. Similar to SL-Q2 except has automatic tonearm with memo repeat (up to six times or continuously) $240

SL-D3 Automatic Single-Play

Two-speed (33⅓ and 45 rpm) IC-controlled direct-drive turntable with automatic tonearm; back-electromotive-force FG dc servomotor; 12-in aluminum diecast platter with 10% variable pitch control and illuminated strobe; low-mass gimbal-suspension S-shaped tonearm with viscous-damped cueing and anti-skating; wow and flutter 0.03% wrms (JIS); rumble −75 dB (DIN B) $170
SL-D2. Similar to SL-D3 except semi-automatic with auto return/shut off arm $150
SL-D1. Similar to SL-D2 except has manual tonearm $125

SL-235 Automatic Changer

Two-speed (33⅓ and 45 rpm) belt-drive automatic changer/turntable with automatic tonearm; FG servo-controlled dc motor; electronic speed switching; front-panel control for all functions; memogram repeat programs six records played sequentially with last record repeated, last record continuous repeat, or in single-play one record played indefinitely; two pitch controls within 6% range; illuminated stroboscope; S-shaped balanced tubular tonearm (effective length 9 1/16-in); anti-skating; viscous damped cueing; 12-in aluminum diecast platter. Wow and flutter 0.045% wrms (JIS), ±0.06% peak (IEC "A"); rumble −70 dB (DIN "B"); tracking error +0 degree, 32 ft (inner groove), +2 degrees, 32 ft (outer groove); tracking force 0-3 g; includes detachable hinged dustcover; 6 23/64" H × 16 59/64" W × 14 49/64" D $180
SL-230. Similar to SL-235 but single-play $165
SL-220. Similar to SL-230 except auto return/shut-off tonearm and no memogram repeat; 4 31/32" H × 16 59/64" W × 14 49/64" D $135
SL-210. Similar to SL-220 except manual arm operation $110

THORENS

All Thorens turntables are belt-driven, single-play units powered by dc servomotors with tachogenerator for precise speed control; straight tubular tonearms have interchangeable shafts instead of headshells for lower effective mass; gimbal suspension, anti-skating; 9-in tonearm effective length; tracking error less than 0.18°/cm (0.46°/in).

TD-126C MKIII Semi-Auto Single-Play

Three-speed (33, 45 and 78 rpm) turntable with auto arm lift and motor shutoff; with electronic speed selection and pitch control (±6%), stroboscope, electronic velocity sensor actuates arm lift and return; wow and flutter less than 0.04%; rumble −72 dB weighted, −51 dB unweighted; frictionless, magnetic anti-skating; with base and dust-cover; 6 11/16" H × 19⅞" W × 15½" D $825
TD-126BC MKIII. Same as TD-126C MKIII, but without arm $675

TD-115C Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) dual servo system with commutator-type pulse-modulated dc motor and automatic end-of record/shut-off tonearm; 72-pole tachogenerator for electronic speed selection; pitch control; fast start; current feedback provides automatic pitch control to correct load variations; jeweled pivot bearings in arm; magnetic anti-skating device; wow and flutter 0.05%; rumble −48 dB unweighted, −68 dB weighted; 11 13/16-in platter; arm length 8¾-in; tonearm mass 7.5 g; 5⅛" H × 17½" W × 14 11/64" D $450
TD-110C. Same as TH-115C except no auto cue and shut-off $360

TD105 Semi-Automatic Single-Play

Two-speed (33⅓ and 45 rpm) servo-controlled electronic belt-drive turntable with auto return tone-

arm; dc motor with 72-pole tachogenerator; 8¾-in straight tonearm; 12-in dynamically-balanced zinc alloy platter with LED stroboscope and electronic pitch control (±6%); friction-free velocity-sensing electronic shutoff; feather-touch operations controls; frictionless magnetic anti-skating. Wow and flutter 0.05% (DIN 45507); rumble −72 dB (weighted); 5" H × 17⅛" W × 15½" D $350
TD-104. Same as TD105 except has manual tonearm $285

TD160 II B Transcription Turntable

Two-speed (33⅓ and 45 rpm) belt-drive turntable without tonearm; 16-pole two-phase synchonous motor; 12-in dynamically-balanced non-ferrous diecast platter. Wow and flutter 0.06% (DIN 45507); rumble −65 dB (unweighted); 6" H × 17" W × 14 3/16" D $295

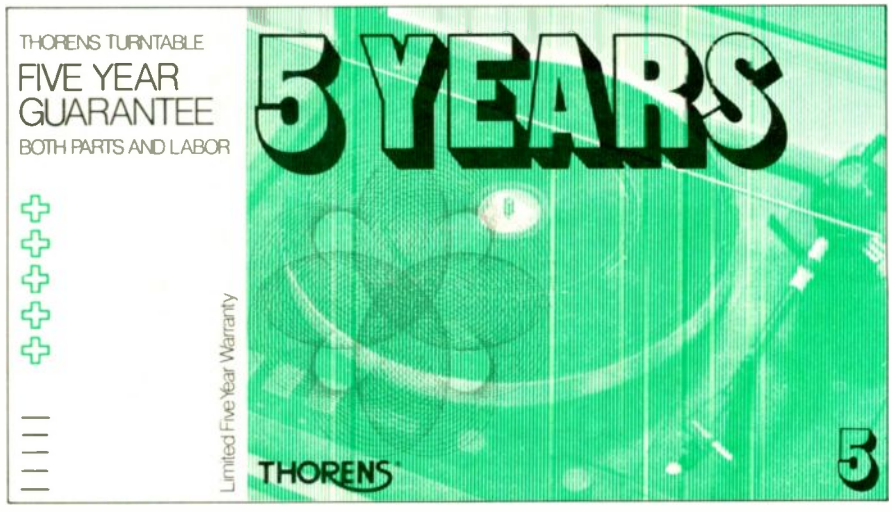
TOSHIBA

SR-FX70 Automatic Single-Play

Two-speed (33⅓ and 45 rpm)PLL quartz crystal digitally-synthesized direct-drive turntable with au-

tomatic tonearm; slotless, coreless 8-pole FG servomotor; 330-mm aluminum diecast platter; 224-mm statically-balanced S-shaped tonearm with removable magnesium headshell. Features four-digit LED speed display; speed/disc size selector; auto (one selection up to six times) or continuous repeat; calibrated tracking force and anti-skating adjustments; oil-damped elevation/cueing control. Wow and flutter 0.022% wrms; rumble −75 dB; cartridge weight range 4.5-10.5 g; dense particleboard cabinet with acoustic insulator feet;

HOW COME THORENS TURNTABLES ARE THE ONLY ONES GUARANTEED FOR FIVE YEARS?



It is very easy for a turntable maker to claim high quality, precision workmanship and durability. So turntable advertising and sales literature – including ours – is not at all bashful about talking "quality".

It is not so easy, however, to put your money where your mouth is. You have to have far, far better than average construction if you are going to extend the usual one-year guarantee to two years. Or three years. Or even to four years.

Thorens turntables are so well built we are able to give you a five-year guarantee – 500% longer than most guarantees!

All Thorens turntables now offered are guaranteed for five full years from the date of purchase. The Isotrack tonearms are included in the guarantee.

Every model covered

All Thorens turntables now offered carry our five-year guarantee – irrespective of the price you pay. (The guarantee covers both parts and labor). Naturally, the higher priced models offer more features, but there is never any compromise with Thorens quality. Dollar for dollar you can't get better sound.

Before you make that all important decision on a turntable, don't you think it would be a good idea to take a good hard look at a Thorens? If you don't know the location of the nearest authorized Thorens dealer, we will be glad to send you his name, address, and a copy of our guarantee. Elpa Marketing Industries, Inc., One Thorens Ave., New Hyde Park, N.Y. 11040. U.S. distributor for Thorens turntables.

TD-105C
- Extremely low price for Thorens quality and performance.
- Servo-controlled electronic belt-drive.
- Low effective mass, low resonance TP22 Isotrack tonearm for maximum tracking ability with minimum record wear.
- Friction-free velocity-sensing auto shut-off/return.

Suggested retail $300.00

TD-104C
- Identical to TD-105 less auto shut-off/return.

Suggested retail $250.00

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includes removable acrylic cover and spare headshell stand; 6" H × 17.6" W × 13.9" D $300

SR-F770 Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct-drive turntable with automatic tonearm; 20-pole 30-slot brushless dc servomotor; 224-mm statically balanced S shaped pipe arm with removable aluminum head shell; 330-mm aluminum diecast platter with two-tier strobe and ±3% pitch control; speed/disc size selector; auto repeat (one selection up to six times) or continuous repeat; calibrated tracking force and anti-skating; oil-damped cueing. Wow and flutter 0.026% wrms; rumble 70 dB (DIN B); cartridge weight range 4.5 10.5 g; dense particleboard cabinet with acoustic feedback feet; includes removable acrylic dustcover and spare headshell stand; 5 9" H × 17 6" W × 13.9" D..... $200

SR-F452 Automatic Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with automatic tonearm; PLL FG servomotor; 310-mm aluminum diecast platter with four-tier strobe and ±3% pitch control; 215 mm statically balanced S-shaped tonearm with removable aluminum headshell and moving-magnet cartridge with 0.6-mm diamond-tipped stylus; front-lever controls; speed and disc size selectors; continuous repeat Wow and flutter 0.05% wrms; rumble 65 dB (DIN B); cartridge weight range 5-16 g; metallic gray cabinet with acoustic insulator feet; includes removable acrylic dustcover and spare headshell stand; 5.5" H × 16.6" W × 14.1" D. $180

SR-F451. Similar to SR-F452 minus magnetic cartridge with diamond tipped stylus $150

SR-F450. Same as SR F451 except in metallic silver finish. $150

SR-A272 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto cut/return tonearm; 4 pole synchronous ac motor; 316-mm aluminum diecast platter; 220-mm statically balanced S shaped pipe arm with removable aluminum headshell and magnetic cartridge with 0.6-mm diamond tipped stylus; calibrated tracking force and anti-skating; cueing. Wow and flutter 0.06% wrms; rumble 65 dB (DIN B); cartridge weight range 5 5-10 g; particleboard cabinet with acoustic insulator feet; heavy acrylic dustcover; 5.7" H × 17 6" W × 14.1" D. . . . $145

SR-A270. Same as SR-A272 without magnetic cartridge with diamond tipped stylus $115

VISONIK

VT9300 Automatic Single-Play
Two-speed (33⅓ and 45 rpm) quartz locked FG direct drive turntable with automatic tonearm; 220-mm low-mass straight aluminum tonearm with low mass integrated arm/headshell, viscous damped cueing, and anti skating; 320-mm diecast aluminum platter with mirror-type stroboscope. Wow and flutter 0.02% wrms; rumble 75 dB (DIN B, weighted); 385 mm H × 450 mm W × 138 mm D. $400

VT8300. Similar to VT9300 except semi automatic with auto return/shutoff arm; has brushless dc motor and ±4% pitch control; no quartz lock; wow and flutter 0 03% wrms; rumble 70 dB (DIN B, weighted) $300

VT7300. Similar to VT8300 except belt-drive system; wow and flutter 0 04% wrms; rumble 68 dB (DIN B, unweighted) $250

VT5300. Similar to VT7300 except has 310 mm platter with illuminated stroboscope; wow and flutter 0 06% wrms; rumble 67 dB (DIN B weighted); 450 mm H × 365 mm W × 135 mm D $215

VT3300. Similar to VT5300 minus frequency generator motor control and strobe with pitch control; wow and flutter 0 07% wrms; rumble 65 dB (DIN B weighted) $165

YAMAHA

YP-D10 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm), direct-drive turntable with automatic lift/stop tonearm. Features

double FG/quartz PLL servo system with high torque 12-pole, 24-slot dc servomotor; S-shaped arm on gimbal support; oil damped cueing lever; direct-reading anti-skate device; acoustic insulator feet; stroboscopic speed indication on turntable rim with speed adjustment range ±3%. Specifications: wow and flutter less than 0.03% wrms; rumble 60 dB (IEC "B"), 70 dB (DIN "B"); effective arm length 8¾-in; tracking force range 0 3 g; includes dustcover. 6⅛" H × 18½" W × 14 ⅜" D $670

YP-D8 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm), direct-drive turntable with automatic lift/stop tonearm. Features FG servo system with 12-pole, 24-slot dc servomotor; S-shaped arm; anti-skate device; oil damped cueing; speed adjustment range ±3% with strobe and pitch control. Specifications: wow and flutter less than 0.03% wrms; rumble better than 70 dB (DIN "B"); effective arm length 9⅛-in; includes dustcover. 18" H × 14⅞" W × 6⅞" D . . . $440

YP-D71 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) quartz-locked PLL direct drive turntable with auto return/cut tonearm; coreless and slotless quartz locked dc Hall motor; 242 mm statically-balanced gimbal supported S-shaped aluminum tonearm with aluminum EIA standard plug-in headshell, height adjuster, and anti-skating counterbalance; 31-cm aluminum diecast platter. Features no-contact opto electronic auto stop and play/cut lever Wow and flutter 0.025% wrms; rumble 77 dB (IEC 98A weighted); cartridge weight range 3-12 g. Includes heavy acrylic dustcover; simulated ebony grain cabinet with butyl rubber feet; 155 mm H × 470 mm W × 383 mm D $330

YP-D4 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct drive turntable with auto return tonearm; coreless and slotless dc Hall motor; 8½-in statically-balanced S shaped tubular tonearm with aluminum headshell, counterweight/ring tracking force dial, anti-skating, and cue; 12-in diecast aluminum platter with single tier stroboscope; pitch control (±4%) Wow and flutter ±0.055% peak (IEC 98A weighted); rumble 77 dB (IEC 98A weighted); tracking force range 0-3 g; cartridge weight range 4-10 g; includes 3 mm thick acrylic dustcover; low-resonance particleboard cabinet with double folded rubber insulators; 5½" H × 17⅜" W × 14 ⅜" D. $230

YP-B4 Automatic Single-Play
Two-speed (33 and 45 rpm), belt-drive turntable with automatic lead in, stop and shutoff, and return tonearm, automatic repeat if desired; 4-pole high-torque synchronous motor; S-shaped tonearm; adjustable anti-skating; direct-reading tracking force adjust; cueing control; braced wood cabinet with acoustic damper feet and detachable hinged dust cover; wow and flutter less than 0 07%; rumble below 62 dB (DIN B); 5⅛" H × 17½" W × 14¼" D. $180

YP-B2 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) belt-drive turntable with auto return/cut tonearm; four-pole synchronous motor; 8½-in statically-balanced S-shaped tonearm with universal plug-in aluminum headshell, oil-damped cueing, and direct-readout tracking-force and anti-skating dials (phono cartridge not included); 12-in diecast aluminum platter. Wow and flutter 0.08% wrms; rumble 52 dB; cartridge weight range 4-10 g: includes clear polystyrene free-stop dustcover; simulated walnut finish cabinet; 5⅞" H × 17⅛" W × 14 ⅜" D. $140

ZENITH

MC9050 Semi-Automatic Single-Play
Two-speed (33⅓ and 45 rpm) direct-drive turntable with auto return/shutoff tonearm; dc servomotor; counterbalanced S-shaped arm with Shure M75EJ

magnetic cartridge with diamond stylus; lathed aluminum platter. Features built in strobe and pitch control; adjustable stylus pressure; two-way viscous-damped cueing; adjustable anti skating; includes acrylic hinged dustcover; metallic gold-finish base $250

MC9030 Automatic Single/Multiple-Play
Two-speed (33⅓ and 45 rpm) belt drive turntable with automatic tonearm; four-pole high torque induction motor; 11¼-in aluminum platter; aluminum S-shaped balanced tubular tonearm with Shure M75ECS magnetic cartridge with elliptical diamond stylus. Features four-position mode selector for single-record play, multiple record play, continuous repeat, and auto shutoff; viscous-damped cueing; adjustable anti skating Wow and flutter 0.2% wrms; rumble 50 dB (DIN B); includes 45-rpm single-play adaptor, single-play 33⅓-rpm record spindle, and spring-loaded hinged acrylic dustcover; 7¾" H × 16 ⅜" W × 14¼" D . . . $150

MC9035 Automatic Single/Multiple-Play
Two-speed (33⅓ and 45 rpm) belt drive turntable with automatic tonearm; 24 pole synchronous motor; aluminum tubular S shaped arm with counter balance weight assembly and Shure magnetic cartridge with diamond stylus; 11-in raised metal platter Features three-position mode selector for single-record play with auto shutoff, auto six record play with auto shutoff, and six-time one record continuous repeat; bi-directional viscous damped cueing; adjustable auto-skating and stylus force controls Wow and flutter 0.08% wrms; rumble 60 dB (DIN B); includes 45 rpm adaptor, multi play and single-play 33⅓ rpm spindle and acrylic dustcover; 6.62" H × 16.18" W × 15 18" D $140

MC9025 Automatic Single/Multiple-Play
Two-speed (33⅓ and 45 rpm) belt drive turntable with automatic tonearm; 24-pole synchronous motor; aluminum tubular S shaped arm with counter balance weight assembly and Shure M74CSZ magnetic cartridge with diamond stylus; 11-in metal platter. Features programmable auto multi record play, manual single-record play, and continuous repeat; bi-directional viscous-damped cueing; adjustable anti-skating and stylus force controls. Wow and flutter 0.08% wrms; rumble 60 dB (DIN B); includes 45-rpm adaptor, multi play and single-play 33⅓-rpm spindle, and acrylic dustcover; 6 62" H × 16.18" W × 15.18" D $110

If you don't clean and preserve your records with Sound Guard™, you're only scratching the surface.

Have you ever considered what it would cost to replace your record collection at today's prices? With that kind of investment at stake, it's no wonder that many music lovers have become more aware of record care. Regular cleaning of your records is important and necessary, but cleaning alone won't prevent them from wearing out. To protect your investment you need more than cleaning. You need both Sound Guard Cleaner and Sound Guard Preservative.

Sound Guard Record Preservative is a revolutionary dry lubricant which virtually eliminates record wear without affecting the fidelity of the record. And when you drag the hardest substance found in nature—diamond—through the soft, intricate vinyl canyons of a phonograph record at phenomenal rates of acceleration, it doesn't matter how light you're tracking. Something's got to give, and that's the vinyl. But with a Sound Guard-treated record, even after 100 plays, there is no audible degradation of performance.*

Before and after you preserve your records, be sure to use our superior cleaner to remove the dust and oily films that can further mar performance. (The cleaner will not remove the preservative's protective coating.)

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Sound Guard. Everything else is a lot of noise.

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Sound Guard preservative- Sound Guard™ cleaner.
Sound Guard™ Total Record Care System.
Sound Guard is Ball Corporation's registered trademark.

*We have the test results to prove it—write us and we'll send them to you.

Professional Sound Systems Start With The Stanton 881S

Stanton Magnetics presents the new 881S Professional Calibration Standard Cartridge. It's the cartridge preferred by recording engineers worldwide and it assures a new standard for home audiophiles desiring the very best in recorded sound.
Its patented, low mass Stereohedron™ stylus tip makes possible the flawless reproduction of high velocity modulations present on today's finest recordings.
The Stanton 881S...where great sound begins.
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THE CHOICE OF THE PROFESSIONALS™

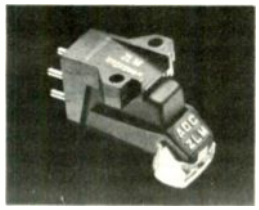
CIRCLE NO. 74 ON READER SERVICE CARD

5 PHONO CARTRIDGES (includes Tonearms)

ADC

ZLM Phono Cartridge

Induced-magnet omni-pivotal phono cartridge; output 1 mV at 1 cm/sec; frequency response



10-20,000 Hz ±1 dB; channel separation 30 dB (1 kHz); tracking force 0.5-1.25 g; 0.0002 × 0.0015-in nude Aliptic tapered cantilever stylus assembly; supplied with stylus brush, screwdriver, signed frequency response curve, and all mounting hardware..... $135

XLM Mk III Phono Cartridge

Induced-magnet omni-pivotal phono cartridge; output 1 mV at 1 cm/sec; frequency response 10-20,000 Hz ±1 dB; channel separation 28 dB (1 kHz); tracking force 0.3-1.2 g; nude 0.2 × 0.7 mil elliptical tapered cantilever stylus assembly; supplied with stylus brush, screwdriver, signed specifications card, and all mounting hardware..... $110

QLM 36 Mk III Phono Cartridge

Induced-magnet omni-pivotal phono cartridge; output 1.1 mV at 1 cm/sec; frequency response 15-20,000 Hz ±2 dB; channel separation 26 dB (1 kHz); tracking force 0.3- 1.2 g; Diasa (nude) 0.3 × 0.7 mil straight cantilever stylus assembly; supplied with screwdriver and all mounting hardware..... $80

QLM 34 Mk III Phono Cartridge

Induced-magnet phono cartridge; output 1.6 mV at 1 cm/sec; frequency response 20-20,000 Hz ±2 dB; channel separation 24 dB (1 kHz); tracking force 1.5-3 g; bushed 0.3 × 0.7 mil elliptical straight cantilever stylus assembly; supplied with all mounting hardware..... $65

QLM 32 Mk III Phono Cartridge

Induced-magnet phono cartridge; output 1.5 mV at 1 cm/sec; frequency response 20-18,000 Hz ±2 dB; channel separation 20 dB (1 kHz); tracking force 2-4 g; bushed 0.4 × 0.7 mil elliptical straight cantilever stylus assembly; supplied with all mounting hardware..... $50

QLM 30 Mk III Phono Cartridge

Induced-magnet phono cartridge; output 1.5 mV at 1 cm/sec; frequency response 20-18,000 Hz ± 3 dB; channel separation 20 dB (1 kHz); tracking force 3-5 g; bushed 0.7 mil spherical straight cantilever stylus assembly; supplied with all mounting hardware..... $35

XLM Mk II Phono Cartridge

Induced-magnet omni-pivotal phono cartridge; output 1.1 mV at 1 cm/sec; frequency response 15-24,000 Hz ±2 dB; separation 26 dB at 1000 Hz; tracking force range 0.3-1.2 g; 0.3 × 0.7-mil Diasa elliptical diamond tip stylus..... $100

QLM 33 Mk III Phono Cartridge

Induced-magnet phono cartridge; output 1.2 mV at 1 cm/sec; frequency response 20-20,000 Hz ±2 dB; separation 24 dB at 1000 Hz; tracking force range 1-2 g; 0.7-mil spherical diamond-tip stylus..... $55

ALT-1 Tonearm

12-in S. S. ball-bearing straight tonearm with removable carbon-fiber headshell and slide base; max. tracking force 1.25 degrees at 2.38, 3.69, 5.75 in; tracking force 0-4 g; total cable capacitance 220 pF; cartridge weight range 4-11 g; damped cueing and adjustable anti-skating... $150

LMF-1 Tonearm

12.33-in S. S. ball-bearing straight carbon fiber tonearm with headshell; max. tracking force 1.25 degrees at 2.38, 3.69, and 5.75 in; tracking force range 0-2 g; total cable capacitance 220 pF; cartridge weight range 4-11 g; damped cueing and adjustable anti-skating..... $205

LMF-2. Similar to LMF-1 except has removable headshell; cartridge weight range 3-11 g..... $215

ADCOM

Adcom Crosscoil Phono Cartridge

Moving-coil cartridge with output 2.5 mV at 5 cm/sec; frequency response 20-20,000 Hz ±1½ dB; channel balance/separation 1 dB/28 dB at 1000 Hz; tracking force 1.8 g; nude-mounted grain oriented diamond stylus with a choice of Shibata, hyperelliptical, or elliptical (biradial) tip, effective tip mass 0.35 mg; thin beryllium cantilever; weight 5.5 g..... $159 to $249

AKG

P8ES Phono Cartridge

Output voltage (5 mV/cm/sec) 3.75; frequency response 10-28,000 Hz; channel balance/separation ±1 dB/30 dB at 1 kHz; optimum load impedance 47,000 ohms; optimum load capacitance 470 pF; tracking force 0.75-1.25 g; 0.2 × 0.7 mil elliptical diamond stylus; supplied with frequency response/crosstalk curve and screwdriver; weight 5.86 g..... $165

P8E Phono Cartridge

Output voltage (5 mV/cm/sec) 4; frequency response 10-23,000 Hz; channel balance/separation ±1 dB/30 dB at 1 kHz; optimum load impedance 47,000 ohms; optimum load capacitance 470 pF; tracking force 0.75-1.25 g; 0.2 × 0.7 mil elliptical diamond stylus; includes frequency response/crosstalk curve and screwdriver; weight 5.86 g..... $115

P7E Phono Cartridge

Output voltage (5 mV/cm/sec) 4.5; frequency response 10-21,500 Hz; channel balance/separation ±2 dB/25 dB at 1 kHz; optimum load impedance 47,000 ohms; optimum load capacitance 470 pF; tracking force 1.25-2.5 g; 0.3 × 0.7 mil elliptical diamond stylus; weight 5.86 g..... $80

P6E Phono Cartridge

Output voltage (5 mV/cm/sec) 6.25; frequency response 20-20,000 Hz; channel balance/separation ±2 dB/20 dB at 1 kHz; optimum load impedance 47,000 ohms; optimum load capacitance 470 pF; tracking force 1.5-3 g; 0.4 × 0.8 mil elliptical diamond stylus; weight 5.86 g..... $60

P6R Phono Cartridge

Output voltage (5 mV/cm/sec) 6.25; frequency response 20-20,000 Hz; channel balance/separation ±2 dB/15 dB at 1 kHz; optimum load impedance 47,000 ohms; optimum load capacitance 470 pF; tracking force 2-4 g; 0.7 mil spherical diamond stylus; weight 5.86 g..... $50

ALL-TEST

ATD-25 Phono Preamp

Amplifies magnetic phono cartridge signals to level which will drive high-level inputs of any stereo amp, integrated amp, or receiver; IM dist. 0.01%, 0.005% typical; noise 80 dB below 10 mV input, 20-20,000 Hz (input shorted); negative feedback 70 dB at 1 kHz; gain 36 dB at 1 kHz; input impedance 47,000 ohms ±5%; frequency response 20-20,000 Hz ±0.5 dB of RIAA curve; channel separation 80 dB at 10,000 Hz; max. output 8 V rms into 47,000 ohms or higher, 7 V rms into 10,000 ohms; channel balance within ±0.1 dB..... $170

AUDIO RESEARCH

MCP-22 Moving-Coil Preamplifier

Vacuum-tube moving-coil preamp features input and output controls and five-position gain and impedance controls; front-panel preamp and outlets on switches with LEDs, ±output and mute switches. Frequency response ±0.25 dB from 30-40,000 Hz (phono RIAA); HD 0.01% at 2 V rms out; IM dist. 0.005% at 2 V rms out (SMPTE); gain range 30-54 dB in 6-dB steps; max. input 500 mV at 1000 Hz; input impedance 10, 30, 100, 300, and 820 ohms; rated output 2 V rms from 20-20,000 Hz; output impedance 500 ohms; noise −1 μV; includes rack-mount handles; 5¼" H × 19" W × 10¼" D..... $1195

MCP-2 Pre-Preamplifier

Frequency response 20-20,000 Hz ±0.25 dB; HD and IM dist. less than 0.005% at rated output (IHF); max. input 50 mV rms; max. output 0.25 V rms; output impedance 50 ohms. Features front-panel switch selectable gain +6 dB from 10-34 dB; front-panel switch selectable input impedance at 10, 30, 100, 300, and special (from 3-1000 ohms); front-panel mute/operate switch; front-panel input/output selection switches; three switched and one unswitched power receptacles..... $495

WC-2. Walnut-finished wood cabinet for MCP-2..... $90

5 PHONO CARTRIDGES

MCP-1 "Pre"-Preamplifier
Frequency response 5-100,000 Hz +0/−3 dB; 1 V rated output; S/N 80 dB (phono, 10 mV input); sensitivity 100 mV (phono); phono overload 100 mV; serves as moving coil pre-preamp for SP-4 and SP-5 ..... $250

AUDIO-TECHNICA

AT32 Phono Cartridge
Dual moving micro-coil phono cartridge; output 0.4 mV at 5 cm/sec; frequency response 10-24,000 Hz; channel balance/separation ±0.75 dB/30 dB at 1000 Hz; tracking force 1-2 g; beryllium cantilever and 0.2 × 0.7-mil nude-mounted elliptical stylus on 0.12-mm square shank nude diamond. $300

AT20SS Phono Cartridge
Frequency response 5-50,000 Hz; output 2.7 mV at 5 cm/sec; channel balance/separation ±0.75 dB/35 dB at 1000 Hz; tracking force 0.75-1.75 g; nude-mounted square-shank Shibata stylus; beryllium cantilever; supplied with individual frequency response curves for both channels; replacement stylus ATN20SS ($125) $250

AT15SS Phono Cartridge
Frequency response 5-45,000 Hz; output 2.7 mV at 5 cm/sec; channel balance/separation +0.75 dB/33 dB at 1000 Hz; tracking force 0.75-1.75 g; nude-mounted square-shank Shibata sylus; beryllium cantilever; supplied with individual frequency response curves for both channels; replacement stylus ATN15SS ($100) $200

AT15XE Phono Cartridge
Output 2.7 mV at 5 cm/sec; frequency response 5-30,000 Hz; channel balance/separation ±0.75 dB/28 dB at 1 kHz; tracking force 0.75-1.75 g; square-shank nude-mounted 0.2 × 0.7 mil elliptical stylus, supplied with individual stereo response curves; replacement stylus ATN15XE ($85)... $175

AT14Sa Phono Cartridge
Output 2.7 mV at 5 cm/sec; frequency response 5-45,000 Hz; channel balance/separation ±1 dB/27 dB at 1 kHz; tracking force 0.75-1.75 g; square-shank nude-mounted Shibata stylus; replacement stylus ATN14 ($75) $150

AT30E Phono Cartridge
Moving-coil type; output 0.28 mV at 5 cm/sec; frequency response 15-25,000 Hz; channel balance/separation ±0.75 dB/25 dB at 1000 Hz; tracking force range 1.4-2 g; 0.3 × 0.7-mil nude-mounted elliptical stylus; replacement stylus ATN30E ($65) $125

AT12Sa Phono Cartridge
Output 2.7 mV at 5 cm/sec; frequency response 15-45,000 Hz; channel balance/separation ±1 dB/26 dB at 1 kHz; tracking force 0.75-1.75 g; Shibata stylus; replacement stylus ATN12S ($60) $120

AT13Ea Phono Cartridge
Output 4.2 mV at 5 cm/sec; frequency response 10-30,000 Hz; channel balance/separation ±1 dB/25 dB at 1 kHz; tracking force 0.75-1.75 g; 0.2 × 0.7 mil square-shank diamond stylus; replacement stylus ATN13 ($50) $100

AT12XE Phono Cartridge
Output 4.2 mV at 5 cm/sec; frequency response 15-28,000 Hz; channel balance/separation ±1.5 dB/23 dB at 1 kHz; tracking force 1-2 g; 0.4 × 0.7 mil bonded diamond mounted to thin-wall stylus tube; replacement stylus ATS12 ($45) $85

AT12E Phono Cartridge
Output 4.2 mV at 5 cm/sec; frequency response 15-26,000 Hz; channel balance/separation ±1.5 dB/23 dB at 1000 Hz; tracking force 1-2 g; bonded 0.4 × 0.7 mil elliptical tip and thin-wall stylus tube; replacement stylus ATS12 ($40) $70

AT11E Phono Cartridge
Output 4.8 mV at 5 cm/sec; frequency response 15-25,000 Hz; channel balance/separation ±1.5 dB/21 dB at 1 kHz; tracking force 1.5-2.5 g; bonded 0.4 × 0.7 mil elliptical tip and thin-wall stylus tube; replacement stylus ATS11E ($35). $60

AT11 Phono Cartridge
Output 4.8 mV at 5 cm/sec; frequency response 15-22,000 Hz; channel balance/separation ±1.5 dB/21 dB at 1 kHz; tracking force 1.5-2.5 g; spherical bonded tip; replacement stylus ATS11 ($30)... ..... $50

AT10 Phono Cartridge
Output 4.8 mV at 5 cm/sec; frequency response 20-20,000 Hz; channel balance/separation ±2 dB/20 dB at 1 kHz; tracking force 2-3 g; spherical bonded tip; replacement stylus ATS10 ($25)... $40

"Omnitech" Series

AT24 Phono Cartridge
Moving-magnet phono cartridge with toroidal coils; output 2.2 mV at 5 cm/sec; frequency response

15-25,000 Hz; channel balance/separation ±0.5 dB/35 dB at 1000 Hz; tracking force 0.8-1.6 g; nude-mounted square shank 0.2 × 0.7-mil elliptical stylus; beryllium cantilever; replacement stylus ATN2 ($150) $250
AT25. Same as AT24 except integral type with own headshell from direct plug-in; replacement stylus ATN25 ($150) $275

AT22 Phono Cartridge
Moving-magnet phono cartridge with toroidal coils; output 2.2 mV at 5 cm/sec; frequency response 15-23,000 Hz; channel balance/separation ±0.75 dB/30 dB at 1000 Hz; tracking force 0.9-1.7 g; nude-mounted square shank 0.2 × 0.7-mil elliptical stylus; beryllium cantilever; replacement stylus ATN23a ($100) $200
AT23a. Same as AT22 except integral type with own headshell from direct plug-in; replacement stylus ATN23a ($100) $225

"The Professionals" Series

ATP-3 Phono Cartridge
For stereo operation: output 5.3 mV at 5 cm/sec; frequency response 15-25,000 Hz; channel balance/separation ±1.5 dB/23 dB at 1 kHz; load impedance 47,000 ohms; tracking force 2-3 g; 0.3 × 0.7 mil nude elliptical diamond stylus; replacement stylus ATP-N3; weight 7.2 g $80

ATP-2 Phono Cartridge
For stereo operation; output 5.3 mV at 5 cm/sec; frequency response 15-22,000 Hz; channel balance/separation ±1.5 dB/23 dB at 1 kHz; load impedance 47,000 ohms; tracking force 3-5 g; 0.4 × 0.7 mil elliptical diamond stylus; replacement stylus ATP-N2; weight 7.2 g $60
ATP-2XN. Same as ATP-2 with extra stylus..... $90

ATP-1 Phono Cartridge
For stereo operation; output 5.3 mV at 5 cm/sec; frequency response 20-20,000 Hz; channel balance/separation ±1.5 dB/21 dB at 1 kHz; load impedance 47,000 ohms; tracking force 3-5 g; 0.6 mil spherical diamond stylus; replacement stylus ATP-N1; weight 7.2 g..... $45

AT1010 Tonearm
Features low-frequency resonance damping; silver wire used for all arm leads including AT-MS headshell; gold-plated contacts; lateral balance adjustment for tracking warped records; stylus pressure 0-2.5 g $350

AT-1009 Tonearm
Includes all basic elements of the AT-1005 II plus exclusive pneumatic arm lift with convenient lever control; special low-mass plug-in shell; sliding counterweight with set screw for setting static balance; separate micro-adjust for precise balance; precision lever and dial scale for anti-skating adjust; arm height ±2½ mm adjustment with separate micro-adjust lever; stylus force gauge with sliding ring-weight calibrated to 0.1 g..... $175
AT-D. Plug-in shell $12

AT-1005 II Tonearm
Features calibrated adjustments to permit exact selection of desired tracking force, anti-skating, with stylus overhang; perforated plug-in shell and sliding cartridge mounting, attaches by means of knurled locking ring and spring-loaded contacts; sliding main counterweight; tracking force selected by sliding ring weight along length of arm (calibrations permit adjustment to 0.5 g); one-hole installation of arm. Stylus force 0-3 g, calibrated to 0.5 g; cartridge weight 5-24 g; effective mass 20 g (set for AT14S cartridge) $85
ART-S. Plug-in shell $8
AT-L2. Optional hydraulic arm lift $17

AT650 Moving-Coil Transformer
Passive transformer, no batteries or power supply required; variable impedance 3, 20, 40 ohms and pass; frequency response 10-100,000 Hz; THD 0.05% at 1 mV; output impedance 47,000 ohms $250

AT630 Moving-Coil Transformer
Frequency response 15-100,000 Hz; input impedance 20 ohms; output impedance 47,000 ohms; channel balance 0.5 dB; THD 0.01% at 0.5 mV input..... $95

AUDIO TECHNOLOGY

440 Head Amplifier/Phono Preamplifier
RIAA equalizer (IHF) with built-in head amp; frequency response 20-20,000 Hz ±0.25 dB over 0-200,000 Hz bandwidth; THD and IM dist. 0.001%; S/N 90 dB ("A" weighted); slew rate 15 V/μsec; drives 600 ohm load to 5 V rms; will accommodate moving magnet and moving coil cartridges; resistive and capacitive loading for over 120 cartridge combinations; programmable gain 40-70 dB; 1¾" H × 7½" W × 5½" D $210

BANG & OLUFSEN

MMC Series Phono Cartridges
Low-inductance low-mass (4-g) phono cartridges with "Moving Micro Cross" armature.
MMC 20CL. Features single-crystal sapphire cantilever with nude multi-radial contact line diamond stylus; effective tip mass 0.3 mg; output 2.12 mV/47k ohms at 5 cm lateral rms; frequency response 20-20,000 Hz ±1 dB; channel separation 30 dB at 1000 Hz; dynamic compliance 30 μm/mN; sensitivity 0.6 mV/47k ohms; tracking force 10 mN/1 g. $200
MMC 20EN. Aluminum cantilever with 5 × 17 μm elliptical diamond stylus; effective tip mass 0.4 mg; output 2.12 mV/47k ohms at 5 cm lateral rms; frequency response 20-20,000 Hz ±2 dB; channel separation 25 dB at 1000 Hz; dynamic compliance 25 μ/mN; sensitivity 0.6 mV/47k ohms; tracking force 12 mN/1.2 g.. ..... $125
MMC 20E. Aluminum cantilever with 5 × 17 μm elliptical diamond stylus (0.5 mg effective tip mass); output 2.12 mV/47k ohms; frequency response 20-20,000 Hz ±2.5 dB; channel separation 20 dB at 1000 Hz; dynamic compliance 20 μm/mN; sensitivity 0.6 mV/47k ohms; tracking force 15 mN/1.5 g..... $70
MMC 10E. Similar to MMC 20E except frequency response 20-20,000 Hz ±3 dB $60

SP-12 Phono Cartridge
Moving-iron type; output 1 mV/cm/sec; frequency response 15-25,000 Hz ±3 dB; has 0.2 × 0.7-mil elliptical stylus; tracking force 1 to 1½ g; 15-degree tracking angle; channel separation 25 dB at 1000 Hz; compliance 25 × 10^{-6} cm/dyne; replacement stylus 5430 ..... $85

CONNOISSEUR by HERVIC

SAU4 Tonearm
Viscous-damped unipivot tonearm with antiskating graduated weights and bi-directional damped cueing; 8⁷/₁₆ in from pivot to stylus; tracking force range 0-4 g; effective mass 4-6 g $135

SAU2 Tonearm
Double-gimbal-suspension ball-bearing tonearm with removable headshell; bi-directional damped cueing; 10-in from pivot to stylus; tracking force range 0.25-6 g; effective mass 4-6 g..... $80

DECCA

MK VI Elliptical Cartridge
Stereo cartridge with elliptical stylii; tracking force 1½ g; 5 mV output at 5 cm/sec; recommended load resistance 50,000 ohms; channel separation 20 dB at 1000 Hz; recommended cable load 250-300 pF; cartridge weight 4 g; factory-replaceable stylus..... ..... $200
Replacement stylus (gold) $80

MK VI Spherical Cartridge
Stereo cartridge with spherical styli; tracking force 2 g; 7½ mV output at 5 cm/sec; otherwise similar to elliptical model..... $150
Replacement stylus (plum)..... $70

London International Tonearm
Separate tonearm features frictionless jeweled unipivot magnetic floating assembly, magnetic antiskating, optional vertical and lateral fluid damping, micrometer-type tracking-force adjustment, spirit level in head shell, adjustable stylus overhang provisions; effective arm mass 9 g; effective arm friction better than 0.02 g lateral and vertical; tracking force ¼-3 g; cable capacitance 120 μF/ch; cartridge weight range, 5-12 g; pivot-to-stylus distance 9½-in; height adj. 2¼-in max., 1¼-in min.... $150

DENON

DL-103D Moving-Coil Cartridge
Output 0.25 mV at 50 mm/sec; frequency response 20-65,000 Hz; channel separation 28 dB at 1000 Hz; channel balance 1 dB max. at 1000 Hz; 100-ohm load impedance; compliance 12 × 10^{-6} cm/dyne; tracking force 1.5 −0.2 g; elliptical diamond stylus; weight 7.5 g $267

DL-103/T Moving-Coil Cartridge
Includes cartridge transformer. Cartridge: output 0.3 mV at 50 mm/sec; frequency response 20-45,000 Hz; channel separation over 25 dB at 1000 Hz; channel balance 1 dB max. at 1000 Hz; 100-ohm load impedance; compliance 5 × 10^{-6} cm/dyne; tracking force 2.5 ±0.3 g; round stylus; weight 8.5 g. Transformer: 1:10 step-up ratio; 40-ohm primary impedance, 4000-ohm secondary impedance; frequency response 20-40,000 Hz ±1 dB; 50 k ohm load impedance; 38 mm H × 51 mm W × 115 mm D $200
DL-103. Same as DL-103/T minus cartridge transformer $140

DL-103S Moving-Coil Cartridge
Output 0.3 mV at 50 mm/sec; frequency response 20-60,000 Hz; channel separation over 25 dB at 1000 Hz; channel balance 1 dB max. at 1000 Hz; 100-ohm load impedance; compliance 8 × 10^{-6} cm/dyne; tracking force 1.8 ±0.3 g; weight 7.8 g.. ..... $186

AU-320 Cartridge Transformer
For moving-coil type. 1:10 step-up ratio; 3-40-ohm

5 PHONO CARTRIDGES

primary impedance, 4000-ohm secondary impedance; frequency response 10-100,000 Hz ±1 dB; 65 mm H × 97 mm W × 155 mm D $153
AU310. Similar to AU-320 except with 20-40,000 Hz ±1 dB frequency response; 53 mm H × 51 mm W × 181 mm D $95

HA-1000 Cartridge Head Amplifier
MC-type cartridge head amplifier; frequency response 8-600,000 Hz +0/−1 dB; input noise level −157 dB/V rms; input impedance 200 ohms; IM dist. and HD 0.008%; crosstalk −70 dB; 68 mm H × 125 mm W × 292 mm D (power supply 68 mm H × 107 mm W × 141 mm D) $290

DYNAVECTOR

20B Moving-Coil Cartridge
Output 2 mV (1 kHz, 5 cm/sec); channel balance ±1.5 dB; crosstalk −20 dB (1 kHz); frequency response 20-30,000 Hz ±2 dB; beryllium cantilever; 6μ Shibata stylus; 85-ohm dc resistance; tracking force 1.5 ±0.3 g; weight 9.5 g; ½" mounting centers $250
20A. Similar to 20B but with aluminum cantilever; frequency response 10-30,000 Hz ±2 dB..... $190

10A Moving-Coil Cartridge
Output 2 mV (3.45 cm/sec); channel balance ±0.65 dB; channel separation 20 dB at 1000 Hz; 85-ohm dc coil resistance; 0.6-mil non-replaceable spherical stylus on alumnum cantilever; tracking force 2.5 g; weight 9.5 g; ½-in mounting center $160
10X. Similar to 10A..... $120

DV-505 Tonearm
Bi-axis inertia-controlled dynamic balance-type tonearm; arm has two pivots; dynamic damping system to eliminate arm resonance; electro-magnetic damping system; free-standing type mounting; overall length 335 mm, effective length 241 mm; height 72-94 mm; offset angle 21.5°; lateral tracking error 0-2.2°; overhang 15 mm; height adjustable over 38-70 mm; suitable cartridge weights 9-35 g; supplied with 1.2 m cable $600

ELECTRO-RESEARCH

EK1 Kinetic Preamp Pick-Up System
Preamp pickup system includes phono cartridge and preamp. Cartridge; frequency response 20-20,000 Hz ±1 dB; channel separation 42 dB at 1000 Hz; recommended tracking force 2 g. Preamp: frequency response 7 MHz capability; output voltage 54.6 V peak-to-peak, 19.5 V rms; output impedance 25 ohms; rise and fall time 60 nano sec; circuit slew rate 740 V/μ sec; S/N 98 dB (high level), 84 dB (EK1 mode, unweighted), 93 dB (EK1 mode, weighted); input impedance 25k ohms $2295

EMPIRE

2000Z Phono Cartridge
For matrix four-channel and stereo operation; output 3 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±1 dB; channel balance/separation ±0.75 dB (1 kHz)/30 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 300 pF/ch; compliance 30 × 10^6 cm/dyne; tracking force 0.75-1.25 g; 0.2 × 0.7 mil elliptical stylus... $150

2000T Phono Cartridge
Incorporates laminated pole structure; output 3 mV at 3.54 cm/sec; frequency response 20-20,000 Hz ±1.5 dB; channel balance/separation ±1 dB (1 kHz)/27 dB (500-15,000 Hz); recommended load 47,000 ohms; total capacitance 300 pF; compliance 30 × 10^{-6} cm/dyne lateral and vertical; tracking force 0.75-1.25 g; 0.2 × 0.7 mil diamond stylus..... $100

2000E/III Phono Cartridge
For matrix four-channel and stereo operation; output 4.5 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±2 dB; channel balance/separation ±1 dB (1 kHz)/28 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 400-500 pF/ch; compliance 20 × 10^{-6} cm/dyne; tracking force 0.75-1.5 g; 0.2 × 0.7 mil elliptical stylus $85

2000E/II Phono Cartridge
For matrix four-channel and stereo operation; output 4.5 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±2 dB; channel balance/separation ±1.25 dB (1 kHz)/25 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 400-500 pF/ch; compliance 18 × 10^6 cm/dyne; tracking force 0.75-1.5 g; 0.2 × 0.7 mil elliptical stylus $70

2000E/I Phono Cartridge
For matrix four-channel and stereo operation; output 7 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±3 dB; channel balance/separation ±1.5 dB (1 kHz)/23 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 400-500 pF/ch; compliance 17 × 10^6 cm/dyne; tracking force 1-2 g; 0.2 × 0.7 mil elliptical stylus..... $60

2000E Phono Cartridge
For matrix four-channel and stereo operation; output 7 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±3 dB; channel balance/separation ±1.5 dB (1 kHz)/23 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 400-500 pF/ch; compliance 16 × 10^6 cm/dyne; tracking force 1.25-2.5 g; 0.3 × 0.7 mil elliptical stylus $50

2000 Phono Cartridge
For matrix four-channel and stereo operation; output 7 mV/ch at 3.54 cm/sec; frequency response 20-20,000 Hz ±3 dB; channel balance/separation ±1.5 dB (1 kHz)/21 dB (500-15,000 Hz); input load 47,000 ohms/ch; total capacitance 400-500 pF/ch; compliance 14 × 10^6 cm/dyne; tracking force 1.5-3 g; 0.7 mil spherical stylus..... $35

4-Channel

4000D/III Phono Cartridge
For discrete and matrix four-channel as well as stereo operation; output 3 mV/ch at 3.54 cm/sec; frequency response 10-50,000 Hz ±3 dB; channel balance/separation ±1 dB (1 kHz)/28 dB (15-1000 Hz); input load 100 ohms/ch; total capacitance under 100 pF/ch; compliance 30 × 10^6 cm/dyne; tracking force 0.75-1.25 g; 0.2 mil LAC stylus..... ..... $175

4000D/I Phono Cartridge
For discrete and matrix four-channel as well as stereo operation; output 3 mV/ch at 3.54 cm/sec; frequency response 15-45,000 Hz ±3 dB; channel balance/separation ±1.5 dB (1 kHz)/24 dB (15-1000 Hz); input load 100,000 ohms/ch; total capacitance under 100 pF/ch; compliance 30 × 10^6 cm/dyne; tracking force 1-1.75 g; 0.2 mil LAC stylus $100

Empire also manufactures the 2000X phono cartridge at $125 and EDR.9 at $200 which will be available at press time.

FULTON

Fulton Blue Phono Cartridge
Moving-coil phono cartridge; output 0.33 mV at 1000 Hz; frequency response 10-60,000 Hz −0.5 dB; channel separation 34 dB at 1000 Hz; load capacitance 30 pF; head amp load 125 ohms recommended; dynamic compliance 12 × 10^6 cm; tracking force 1.5-1.75 g; 0.65-mil polished conical stylus; weight 5 g..... $350

GOLDRING by HERVIC

G-900SE2 Phono Cartridge
Moving-coil phono cartridge; output 4.5 mV at 5 cm/sec, 1000 Hz; response 20-20,090 Hz ±2 dB; channel separation 25 dB; tracking force 0.75-1.5 g; 0.7 × 0.2-mil elliptical stylus..... $180

G-900E Phono Cartridge
Low-mass phono cartridge; output 6.5 mV at 5 cm/sec; frequency response 20-20,000 Hz ±3 dB; channel separation 20 dB at 1000 Hz; tracking force 1-3 g; 0.7 × 0.3-mil elliptical stylus $110

INFINITY

Black Widow Tone Arm
Utilizes jointed-pipe damped-knife-edge-fulcrum system; accommodates cartridges weighing 4-8.5 g; adjustable cartridge mounting bar; graphite-fiber arm tube; stylus force adjustment ±2 g per revolution of single-weight vernier; anti-skating fine spring adjustment, calibrated for coordination with stylus pressure; bearing sensitivity at stylus point 0.005 g (vertical, knife-edge bearing), 0.01 g (lateral, fine miniature ball bearing); sliding base adjustment ±10 mm (slideset and lock type); output cord capacitance 50 pF per 1.5 meter; effective arm mass 3 g; oil-damped cueing device $245

JVC

MC-1 Phono Cartridge
Micro moving-coil cartridge with direct-coupled transducer and beryllium cantilever; 0.1-mm square diamond-tip Shibata MK II stylus; output 0.2 mV at 5 cm/sec; channel balance/separation 1 dB/27 dB; impedance 30 ohms; dynamic compliance 8 × 10^6 cm/dyne at 100 Hz; optimum tracking force 1.5 ±0.15 g; frequency response 10-50,000 Hz; weight 8.7 g..... $300
MC-2E. Similar to MC-1 except with duralumin cantilever and 0.07 × 0.14-mm diamond tip elliptical stylus; channel separation 25 dB; frequency response 10-25,000 Hz..... $200

LENTEK

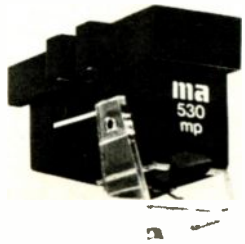
Moving-Coil Preamplifier
Complementary push-pull dc moving-coil preamplifier; voltage gain 28 dB; frequency response 20-20,000 Hz +0/−1 dB; dist. less than 0.05%; max. output 300 mV rms; input impedance 100 ohms; output impedance 4700 ohms; battery test LED indicator; gold plated phono input sockets, phono output connectors, and switch contacts; 9-V Mallory battery; 1 5/32" H × 2 1/2" W × 6" D $160

LUX

CX-1 DC Head Amplifier
Offers switchable gain (20 or 30 dB) for moving-coil cartridges of either middle- or low-output type; moving-magnet cartridge has "bypass" position. Equivalent input noise −150 dB V (RIAA, IHF "A"); THD no more than 0.003%; frequency response 5-500,000 Hz −1 dB; input and output impedances 100 ohms; 3 1/32" H × 5 7/16" W × 12" D. $295

MICRO-ACOUSTICS

530-mp Stereo Cartridge
Micro-Point diamond stylus, beryllium cantilever;



frequency response 5-20,000 Hz ±1.25 dB; channel separation 30 dB at 1000 Hz, 15 dB at 10,000 Hz; output voltage 3.5 mV/ch at 5 cm/sec peak recorded velocity; load requirements 10,000-100,000 ohms; cable capacity 100-1500 pF; tracking force range 0.7-1.4 g; cartridge weight 4 g, 3.2 g without stylus hood $200

2002-e Stereo Cartridge

Frequency response 5-20,000 Hz ±1.5 dB; tracking force range 0.7-1.4 g; channel separation 30 dB at 1000 Hz, 15 dB at 10,000 Hz; output voltage 3.5 mV/ch at 5 cm/sec peak recorded velocity; load 10,000-100,000 ohms; 0.0002 × 0.0007 elliptical diamond; cable capacitance 100-1500 pF; cartridge weight 4 g, 3.2 g without stylus hood ... $125

282-e Stereo Cartridge

0.0002 × 0.0007 elliptical diamond stylus; frequency response 5-20,000 Hz ±2 dB; channel separation 25 dB at 1000 Hz, 15 dB at 10,000 Hz; output voltage 3.5 mV/ch at 5 cm/sec peak recorded velocity; load requirements 10,000-100,000 ohms; cable capacity 100-1500 pF; tracking force range 0.75-1.5 g; cartridge weight 5.2 g..... $95

NAGATRON

HV9100 Ribbon Stereo Phono Cartridge

Fine wire-ribbon magnetic cartridge converts mechanical signal from record into electrical signal by reacting to stylus tip motion over record grooves; constant dc magnetic flux; no internal coil; uses one-point support for straight-line titanium stylus cantilever; acrylic resin headshell; frequency response 20-30,000 Hz; output 0.04 mV at 5 cm/sec (1000 Hz); channel balance/separation 1.0/25 dB at 1000 Hz; output impedance 3 ohms at 1000 Hz; nominal dynamic compliance 7 × 10 ^{6}cm/dyne; 0.4 × 0.8 mil elliptical nude solid diamond stylus $275

HA-9000. Head amplifier designed for use with Nagatron HV9100 and moving-coil cartridges; frequency response 10-200,000 Hz ±1 dB; 40-dB gain; THD 0.01% at 1000 Hz; noise level at input −155 dB/V (RIAA and IHF "A"); max. input 8.4 mV; output to magnetic phono in 50,000 ohms; input impedance 20 ohms; battery-powered with individual power supplies/channel $330

9600 Super IM Phono Cartridge

Two-channel induced-magnet aluminum magnesium alloy phono cartridge with tapered, tubular boron cantilever and Samarium cobalt magnet; frequency response 20-30,000 Hz; output 2 mV at 50 mm/sec, 1000 Hz; channel balance/separation 1 dB/27 dB at 1000 Hz; recommended load 47,000 ohms; dynamic compliance 15 × 10 ^{6} cm/dyne at 100 Hz; tracking force range 0.9-1.3 g; triangle-tip elliptical semi-line-contact stylus; effective mass 0.031 mg; JIS and EIA standard mount; weight 7.6 g..... $225

300 Series

Features critically aligned two-channel Samarium-cobalt alloy induced magnet structure; universal mount; frequency response 10-25,000 Hz; channel balance/separation 1.0/25 dB at 1000 Hz; output 4.0 mV at 50 mm/sec (1000 Hz); recommended load 30,000-100,000 ohms, 50,000 ohms nominal; dynamic compliance 9 × 10 ^{6} cm/dyne; static compliance 20 × 10 ^{6} cm/dyne.

360CEX. Hand-selected 0.3 × 0.7 mil shaped elliptical nude diamond stylus with tapered carbon-fiber cantilever; effective mass 0.60 mg; $165

360CE. 0.3 × 0.7 mil shaped elliptical nude diamond stylus; effective mass 0.6 mg..... $135

350E. 0.3 × 0.7 mil elliptical nude diamond stylus with aluminum UT-58 cantilever; effective mass 0.65 mg $95

344DE. 0.3 × 0.7-mil bonded elliptical diamond stylus with aluminum cantilever and permalloy micro tubular armature; super permalloy magnet structure; frequency response 20-25,000 Hz; dynamic compliance 8 × 10 ^{6} cm/dyne/100 Hz; weight 6 g $70

340S. 0.5 mil spherical diamond stylus; aluminum UT-58 cantilever; effective mass 0.85 mg..... $55

200 Series

Two-channel cobalt-alloy magnet structure; universal mount; frequency response 10-25,000 Hz; channel balance/separation 1.0/25 dB at 1000 Hz; output voltage 4.0 mV at 50 mm/sec (1000 Hz); recommended load 30,000-100,000 ohms, 50,000 ohms nominal; dynamic compliance 8 × 10 ^{6} cm/dyne at 1000 Hz; static compliance 20 × 10 ^{6} cm/dyne.

220CE. 0.3 × 0.7 mil shaped elliptical nude diamond stylus with tapered carbon-fiber cantilever; effective mass 0.60 mg $120

210E. 0.3 × 0.7 mil elliptical nude diamond stylus with aluminum UT-58 cantilever; effective mass, 0.65 mg $84

200S. 0.5 mil spherical diamond stylus with aluminum UT-58 cantilever; mass 0.85 mg $45

100 Series

Two-channel induced magnet with super-permalloy shield; frequency response 20-20,000 Hz; effective mass 0.85 mg; channel balance/separation 1.5/24 dB at 1000 Hz; output 4.0 mV at 50 mm/sec (1000 Hz); recommended load 30,000-100,000 ohms, 50,000 ohms nominal; dynamic compliance more than 8 × 10 ^{6} cm/dyne at 1000 Hz; static compliance 20 × 10 ^{6} cm/dyne; aluminum cantilever.

195IE. 0.3 × 0.7 mil elliptical diamond stylus; integral head shell $55

185E. 0.3 × 0.7 mil elliptical diamond stylus; universal mount $45

175IS. 0.5 mil spherical diamond stylus; integral headshell $43

165S. 0.5 mil spherical diamond stylus; universal mount $35

NAKAMICHI

MC-1000 Reference Pickup

Moving-coil pickup with low-mass single-crystal beryllium cantilever assembly, direct-coupled one-point supported coil assembly, and Crystal Permalloy laminated core; output 0.2 mV (1 kHz, 5 cm/sec); frequency response 15-65,000 Hz; channel separation 27 dB at 1 kHz; impedance 3.5 ohms; compliance 16 × 10 ^{6} cm/dyne; tracking force 1.5-2.1 g; features Shibata stylus; supplied with SME-type shell and individual test data $305

MC-500. Similar to MC-1000 but with duralumin cantilever and no tonearm shell; output 0.9 mV (1 kHz, 5 cm/sec); response 20-35,000 Hz; channel separation 25 dB at 1 kHz; impedance 20 ohms; compliance 7 × 10 ^{6} cm/dyne; tracking force 1.9-2.5 g; elliptical stylus..... $135

MCB-100. Moving-coil pickup booster with double-shielded, specially wound transformer; frequency response 10-65,000 Hz; load impedance 50,000 ohms; input impedance 2-20 ohms $120

MB-150 Moving-Coil Booster Amplifier

Switchable gain 22 or 38 dB; equivalent input noise −158 dB (IHF "A" weighted); THD less than 0.005%, 20-20,000 Hz; frequency response 10-100,000 Hz +0/−0.5 dB, 22-dB gain setting; requires PS-100 Power Supply; 2¹⁄₁₆" H × 7¹⁄₂" W × 4" D $110

ONKYO

MC-100 Stereo Phono Cartridge

Moving-coil magnesium-alloy phono cartridge with cantilever constructed of two duralumin layers and carbon-fiber middle layer; permalloy coil-bobbin construction and Alnico V magnet; output 0.4 mV at 1000 Hz, 5.5 cm/sec; frequency response 20-50,000 Hz; channel separation 28 dB at 1000 Hz; dynamic compliance 8.5 × 10 ^{6} cm/dyne; load impedance 24 ohms ±20%; tracking force 1.8 g ±0.2 g; weight 8.5 g..... $170

MT-2. Transformer for MC-100..... $98

ORTOFON

MC30 Phono Cartridge

Moving-coil pickup cartridge; output 0.8 mV at 5 cm/sec at 1000 Hz; frequency response 20-20,000 Hz ±1 dB; channel separation 25 dB at 1000 Hz; compliance 13μm/mN lateral, 13μm/mN horizontal; load impedance 47,000 ohms; tracking force 1.5 g; fine line stylus; wide range damping system $600

MC20 Phono Cartridge

Moving-coil pickup cartridge; output 0.07 mV at 5 cm/sec (1 kHz); frequency response 20-20,000 Hz ±1 dB; channel separation 25 dB at 1000 Hz; load impedance 47,000 ohms; tracking force 1.5-2 g; beryllium-filled stepped cantilever; three-part damping system; square-pole piece; requires transformer or pre-preamplifier; weight 7 g $205

Concorde 30 Phono Cartridge

Variable magnetic shunt moving-magnet cartridge; output 3 mV at 5 cm/sec at 1000 Hz; frequency response 20-25,000 Hz; channel separation 25 dB at 1000 Hz; compliance 25 × 10 ^{6} cm/dyne lateral, 28 × 10 ^{6} cm/dyne vertical; load impedance 47,000 ohms; tracking force 1.2-1.8 g; fine line stylus; cartridge/headshell combo, 6.5 g..... $165

Concorde 20. Similar to Concorde 30 except output 3.5 mV at 5 cm/sec at 1000 Hz; frequency response 20-20,000 Hz; compliance 22 × 10 ^{6} cm/dyne vertical, 15 × 10 ^{6} cm/dyne lateral; tracking force 1.5-2.1 g..... $125

LM20. Similar to Concorde 20 except weight 2.6 g $115

LM20H Phono Cartridge

Variable magnetic shunt moving-magnet cartridge; output 3 mV at 5 cm/sec at 1000 Hz; channel separation 25 dB at 1000 Hz; compliance 35 × 10 ^{6} cm/dyne lateral, 40 × 10 ^{6} cm/dyne vertical; load impedance 47,000 ohms; tracking force 0.8-1.2 g; fine line stylus; ultra-high compliance for use with low-mass tonearms only; 2.6 g.... $145

LM30H. Similar to LM20H with frequency response 20-25,000 Hz..... $150

LM30 Phono Cartridge

Variable magnetic shunt moving-magnetic cartridge; output 3 mV at 5 cm/sec at 1000 Hz; frequency response 20-25,000 Hz; channel separation 25 dB at 1000 Hz; compliance 25 × 10 ^{6} cm/dyne lateral, 28 × 10 ^{6} cm/dyne vertical; load impedance 47,000 ohms; tracking force 1.2-1.8 g; fine line stylus; weight 2.6 g $150

MC10 Phono Cartridge

Moving-coil pickup cartridge; output 0.1 mV at 5 cm/sec (1 kHz); frequency response 10-20,000 Hz ±1 dB; channel separation 22 dB at 1000 Hz; load impedance 47,000 ohms; tracking force 1.7-2.3 g.; 0.3 × 0.7 mil elliptical stylus $145

VMS20E MkII Cartridge

Variable magnetic shunt moving-magnet type; output 5 mV at 5 cm/sec (1 kHz); frequency response 20-20,000 Hz ± 1 dB; channel separation 25 dB at 1000 Hz; load impedance 47,000 ohms; tracking force 0.75-1.5 g.; 0.3 × 0.7 mil elliptical stylus; removable capacitance matching device.... $90

FF15E MK II Phono Cartridge

Variable magnetic shunt moving-magnet cartridge; output 5 mV at 5 cm/sec at 1000 Hz; frequency response 20-20,000 Hz ±1 dB; compliance 20 × 10 ^{6} cm/dyne lateral, 20 × 10 ^{6} cm/dyne vertical; channel separation 20 dB at 1000 Hz; load impedance 47,000 ohms; tracking force 1-3 g; 0.3 × 0.7 mil elliptical stylus $65

FF15XE MK II. Similar to FF15E Mk II except tracking force 1.5-3 g $45

OSAWA

MP-20 Phono Cartridge

Moving permalloy-induced samarium cobalt magnet

5 PHONO CARTRIDGES

in fiberglass-reinforced plastic body; butyl rubber cantilever damper; triagonal diamond stylus; boron stylus cantilever; gold-plated cartridge pins; frequency response 20-23,000 Hz; dynamic compliance 9 × 10 ^{6} cm/dyne $175
Pre-mounted in Osawa High Performance headshell $200

MP-15 Phono Cartridge
Moving permalloy-induced samarium cobalt magnet in fiberglass-reinforced body; aluminum alloy cantilever; 0.3 × 0.7-mil precision-bonded elliptical diamond stylus; frequency response 20-20,000 Hz; channel separation 24 dB at 1000 Hz; dynamic compliance 8 × 10 ^{6} $150
Pre-mounted in Osawa High Performance headshell $175

300MP Phono Cartridge
Permalloy-induced magnet design for S/N; carbon fiber cantilever; cobalt magnet; butyl cantilever damper; 0.3 × 0.7 mil elliptical nude diamond stylus; frequency response 20-22,000 Hz; separation 25 dB at 1000 Hz; dynamic compliance 9 × 10^{-6} cm/dyne; weight 5.5 g $110

200MP Phono Cartridge
Permalloy-induced magnet design; cobalt magnet, butyl cantilever damper; 0.3 × 0.7 mil elliptical nude diamond stylus; frequency response 20-20,000 Hz; separation 25 dB at 1000 Hz; dynamic compliance 9 × 10^{-6} cm/dyne; weight 5.5 g $75

110MP Phono Cartridge
Permalloy-induced iron/nickel magnet; synthetic butyl rubber cantilever damper; 0.3 × 0.7-mil elliptical bonded diamond stylus; frequency response 20-20,000 Hz; separation 25 dB at 1000 Hz; dynamic compliance 8 × 10^{-6} cm/dyne; weight 5.5 g $55

100MP Phono Cartridge
Permalloy-induced magnet design; cobalt magnet; butyl cantilever damper; 0.6 mil conical bonded diamond stylus; frequency response 20-20,000 Hz; separation 25 dB at 1000 Hz; dynamic compliance 8 × 10^{-6} cm/dyne; weight 5.5 g $45

Ultracraft AC-300MKII Tonearm
Single needle-point support with adjustable oil damping; accepts interchangeable straight or S-shape metal and carbon fiber arm stems; with straight tubular stem $385
Other stems $60
AC-3000MKII. Same as Ultracraft AC-300MKII except has black anodized brass arm $500

PICKERING

XSV/3000 Phono Cartridge
Output 5 mV at 5.5 cm/sec; frequency response 10-30,000 Hz; Stereohedron stylus tip; tracking force 0.75-1.5 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D3000 ..... $100

XV-15/1200E Phono Cartridge
Output 4.4 mV at 5.5 cm/sec; frequency response 10-30,000 Hz; 0.2 × 0.7 mil elliptical stylus; tracking force 0.5-1.25 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D1200 ..... $80

XV-15/750E Phono Cartridge
Output 4.4 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.3 × 0.7 mil elliptical stylus; tracking force 0.5-1.5 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D750 ..... $65

XV-15/625DJ Phono Cartridge
Designed for disco use; output 0.8 mV/cm/sec; channel separation 30 dB; tracking force 1-4 g; 0.3 × 0.7-mil elliptical stylus $60

XV-15/625E Phono Cartridge
Output 4.4 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.3 × 0.7 mil elliptical diamond stylus; tracking force 0.75-1.5 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D625 ..... $60

XV-15/400E Phono Cartridge
Output 5.5 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.4 × 0.7 mil elliptical stylus; tracking force 1-1.5 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D4000 ..... $55

XV-15/200E Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.4 × 0.7 mil elliptical stylus; tracking force 2-4 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D200 ..... $50

XV-15/350 Phono Cartridge
Output 6 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.7 mil spherical stylus; tracking force 1-3 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D350.... $40

XV-15/140E Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 10-20,000 Hz; 0.5 × 0.7 mil elliptical stylus; tracking force 3-5 g; channel separation 35 dB; has Dustamatic brush; replacement stylus D140.... $35

XV-15/150 Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 10-25,000 Hz; 0.7 mil spherical stylus; tracking force 2-4 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D150.... $35

XV-15/100 Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 10-20,000 Hz; 0.7 mil spherical stylus; tracking force 3-7 g; channel separation 35 dB; features Dustamatic brush; replacement stylus D100.... $30

V-15 Micro IV AME Phono Cartridge
Output 5.5 mV at 5.5 cm/sec; frequency response 20-20,000 Hz; 0.4 × 0.7 mil elliptical stylus; tracking force 1-2 g; channel separation 30 dB; features Dustamatic brush; replacement stylus DIV-AME $50

V-15 Micro IV ATE Phono Cartridge
Output 6.5 mV at 5.5 cm/sec; frequency response 20-18,000 Hz; 0.4 × 0.7 mil elliptical stylus; tracking force 2-4 g; channel separation 28 dB; features Dustamatic brush; replacement stylus DIV-ATE $40

V-15 Micro IV AM Phono Cartridge
Output 6 mV at 5.5 cm/sec.; frequency response 20-20,000 Hz; 0.7 mil spherical stylus; tracking force 1-3 g; channel separation 30 dB; features Dustamatic brush; replacement stylus DIV-AM . $35

V-15 Micro IV ACE Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 20-17,000 Hz; 0.5 × 0.7 mil elliptical stylus; tracking force 3-5 g; channel separation 26 dB; features Dustamatic brush; replacement stylus DIV-ACE $30

V-15 Micro IV AT Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 20-18,000 Hz; 0.7 mil spherical stylus; tracking force 2-4 g; channel separation 28 dB; features Dustamatic brush; replacement stylus DIV-AT .. $30

V-15 Micro IV AC Phono Cartridge
Output 8 mV at 5.5 cm/sec; frequency response 20-17,000 Hz; 0.7 mil spherical stylus; tracking force 3-7 g; channel separation 26 dB; features Dustamatic brush; replacement stylus DIV-AC.. $25

4-Channel

XUV/4500-Q Phono Cartridge
For stereo, four-channel matrix (SQ and QS), and discrete four-channel playback; output 3.4 mV at 5.5 cm/sec; frequency response 10-50,000 Hz; Quadrahedral stylus with Quadrahedron tip; tracking force 0.5-1.5 g; channel separation 35 dB at 1 kHz, 25 dB at 30 kHz; channel balance 1.5 dB; features Dustamatic brush..... $140

UV-15/2400-Q Phono Cartridge
For discrete four-channel playback; output 3.3 mV; frequency response 10-50,000 Hz (100,000-ohm 100-pF load); Quadrahedral diamond stylus; tracking force 1.5-2.5 g; channel separation 35 dB; features Dustamatic brush..... $125
UV-15/2000-Q. Similar to UV-15/2400-Q but frequency response 20-45,000 Hz; channel separation 30 dB $70

PP-1 Stereo Preamplifier
Stereo preamplifier with rumble filter; input impedance 47,000 ohms; gain at 1 kHz 38 dB; frequency response (RIAA) 30-15,000 Hz ±2 dB; S/N 60 dB $30

PRECEDENT.

Z-Mod Phono Cartridge
Moving-magnet phono cartridge for use with medium- and high-mass tonearms; 0.6 × 0.3 mil elliptical stylus; tracking force range 1-1.5 g; output 3 mV at 3.54 cm/sec, 1000 Hz; frequency response 10-60,000 Hz ±0.5 dB; separation 25 dB from 10-30,000 Hz..... $175

SATIN

M-18BX Phono Cartridge
Moving-coil phono cartridge with fixed-pivot beryllium cantilever and magnetic fluid damping; for stereo and four-channel operation; output 2.5 mV; frequency response 10-40,000 Hz; compliance 20 × 10^{-6} cm/dyne; tracking force 0.5-1.5 g; 0.1 × 2.5 mil Shibata diamond stylus; any phono input impedance over 30 ohms may be used; user-replaceable stylus mounts in magnetic mounting; needs no transformer or head amp; special formula damping lubricant $300

M-18X Phono Cartridge
Moving-coil phono cartridge with fixed-point pivot for the stylus cantilever mechanism; for stereo and four-channel operation; output 2.5 mV; frequency response 10-35,000 Hz; compliance 15 × 10 ^{6} cm/dyne; tracking force 0.5-1.5 g; 0.1 × 2.5 mil Shibata diamond stylus; user-replaceable stylus mounts in magnetic mounting; needs no transformer or head amp..... $275

M-18E Phono Cartridge
Moving-coil phono cartridge with fixed-point pivot for the stylus cantilever mechanism; output 2.5 mV; frequency response 10-30,000 Hz; compliance 15 × 10^{-6} cm/dyne; tracking force 0.5-1.5 g; 0.2 × 0.8 mil elliptical diamond stylus; user-replaceable stylus mounts in magnetic mounting; needs no transformer or head amp $250

FROM PICKERING

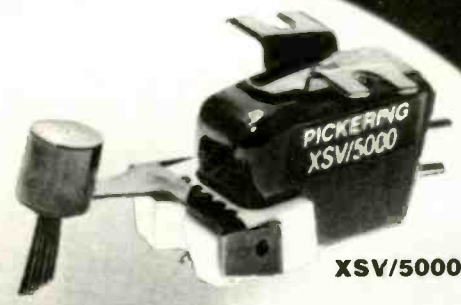
The New Shape of Sound

THE STEREOHEDRON® SERIES

From one of the oldest names in sound development comes the latest sound innovation... the Stereohedron Stylus Tip...with expanded contact area for truest fidelity. And now it's available from Pickering in three great cartridges. The critically acclaimed XSV/3000, the new XSV/4000 with expanded frequency response range, and the ultimate in high compliance, the XSV/5000 with the most faithful low frequency trackability for rich bass response *plus traceability* to capture all the high frequency information contained in today's finest recordings...creating a whole new experience in recorded sound.

XSV/3000

XSV/4000



XSV/5000

PICKERING *"for those who can hear the difference"*

101 Sunnyside Blvd., Plainview, N.Y. 11803

CIRCLE NO. 73 ON READER SERVICE CARD

5 PHONO CARTRIDGES

M-117G Phono Cartridge
Moving-coil phono cartridge with fixed-point pivot; output 3 mV; frequency response 20-25,000 Hz; compliance 12 × 10^{-6} cm/dyne; tracking force 0.5-1.5 g; 0.2 × 0.8 mil elliptical diamond stylus; user-replaceable stylus mounts in magnetic mounting; needs no transformer or head amp $175
117Z. Similar to M-117G except has conical diamond stylus $125

SHURE

V15 Type IV Phono Cartridge
Moving-magnet type; output 4 mV at 5 cm/sec peak velocity (1000 Hz); frequency response 10-25,000 Hz; channel separation 25 dB at 1000 Hz; tracking force 0.75-1.25 g; 0.2 × 0.7 mil biradial hyperelliptical stylus; features viscous damped dynamic stabilizer; replacement stylus VN45HE..... $165

V-15 Type III Phono Cartridge
Moving-magnet type; output 3.5 mV at 5 cm/sec peak velocity (1 kHz); frequency response 10-25,000 Hz; channel separation 25 dB at 1 kHz; tracking force 0.75-1.25 g; 0.2 × 0.7 mil biradial (elliptical) stylus; replacement stylus VN35E . $103

SC39ED Phono Cartridge
Professional moving-magnet type; output 4 mV at 5 cm/sec peak velocity (1 kHz); frequency response

20-20,000 Hz; channel separation 25 dB at 1000 Hz; tracking force 0.75-1.5 g; 0.2 × 0.7-mil biradial (elliptical) stylus; features MASAR™ tip and SIDE-GUARD stylus deflector; replacement stylus SS39ED $100
SC39EJ. Same as SC39ED except tracking force 1.5-3 g; channel separation 20 dB at 1000 Hz; replacement stylus SS39EJ $70
SC39B. Same as SC39EJ except with 0.7-mil spherical tip stylus; replacement stylus SS39B. $60

M95HE Phono Cartridge
Output 4.7 mV/ch at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; channel balance/separation ±2 dB/25 dB (1 kHz); tracking force 0.75-1.5 g; hyperelliptical stylus with nude diamond tip; replacement stylus N95HE..... $98
M95ED. Same as M95HE except with nude biradial (elliptical) tip; replacement stylus N95ED..... $85
M95EJ. Same as M95ED except tracking force 1.5-3 g; replacement stylus N95EJ $68

M75ED Type 2 Phono Cartridge
Output 5 mV/ch at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; tracking force 0.75-1.5 g; 0.2 × 0.7 mil biradial (elliptical) stylus; replacement stylus N75ED Type II..... $73
M75G Type 2. Same as M75ED Type 2 but with 0.6 mil spherical stylus; replacement stylus N75G Type II..... $55

M91ED Phono Cartridge
Moving-magnet type; output 5 mV at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; channel separation 25 dB (1 kHz); tracking force 0.75-1.5 g; 0.2 × 0.7 mil biradial (elliptical) stylus; replacement stylus N91ED..... $73
M91GD. Same as M91E but with 0.6 mil spherical stylus; replacement stylus N91GD..... $62

M93E Phono Cartridge
Moving-magnet type; output 6.2 mV at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; channel separation 25 dB (1 kHz); tracking force 1.5-3 g; 0.4 × 0.7 mil biradial (elliptical) stylus; replacement stylus N93E $56

M70EJ Phono Cartridge
Output 6.2 mV/ch at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; tracking force 1.5-3 g; 0.4 × 0.7 mil biradial elliptical stylus..... $49
M70B. Same as M70EJ but with 0.6 mil spherical stylus; replacement stylus N70B..... $44

M75B Type 2 Phono Cartridge
Output 5 mV/ch at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; tracking force 1.5-3 g; 0.6 mil spherical stylus; replacement stylus N75B $49
M75EJ Type 2. Same as M75B Type 2 but with 0.02 × 0.7 mil biradial (elliptical) stylus; replacement stylus N75EJ $62

M55E Phono Cartridge
Moving-magnet type; output 6.2 mV at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; tracking force 0.75-2 g; channel separation 22 dB (1 kHz); 0.2 × 0.7 mil biradial (elliptical) stylus; replacement stylus N55E... . $46

M44E Phono Cartridge
Moving-magnet type; output 9.5 mV at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; tracking force 1.75-4 g; channel separation 20 dB (1 kHz); 0.4 × 0.7 mil biradial (elliptical) stylus; replacement stylus N44E... . $40

SC35C Phono Cartridge
Professional moving-magnet type; output 5 mV at 5 cm/sec peak velocity (1 kHz); frequency response 20-20,000 Hz; channel separation 20 dB at 1000 Hz; tracking force 4-5 g; 0.6-mil spherical stylus; features band alignment point; replacement stylus SS35C $30

M3D Phono Cartridge
Moving-magnet type; output 5 mV at 5 cm/sec; frequency response 20-15,000 Hz; tracking force 3-6 g; 0.7 mil spherical stylus; replacement stylus N3D $26

4-Channel

M24H Four-Channel Cartridge
For discrete and matrix four-channel and stereo operation; output 3 mV/ch at 5 cm/sec peak velocity (1 kHz); frequency response 20-50,000 Hz; channel balance/separation 2 dB/25 dB (1 kHz); tracking force 1-1.5 g; hyperbolic tip linked to high-energy magnet via low-mass stylus assembly $97

M64 Preamplifier
Fixed-gain stereo preamplifier with switch-selected phono and tape equalization; for use with unequalized amplifier inputs and microphones and as buffer amplifier in "flat" position; on-off ac/dc switch; two phono jack inputs; 120 V ac ±10%, 50/60 Hz, 5 W $81

SME3009 Series III Tonearm
Integral carrying arm interchangeable for multi-cartridge use; low-friction pivots; high-precision, protected ball races on vertical axis, knife edges on horizontal axis; precise tracking force gauge (up to 2.5 g can be applied without gauge); balance system accommodates max. 12-g cartridges; antiskating force; fine adjustment 0-2.5 g; fluid-damped cueing control; gold-plated electrical contacts; adjustable fluid damper $294
SME3009 Series IIIs. Performance same as Series III without adjustable fluid damper (optional F.D. III-S $44.50); simplified arm adjustments.... $240

SME3009 Series II Tonearm
Incorporates non-detachable shell for reduced weight; low-friction pivots for vertical axis and knife-edges for horizontal axis; bed slides on bedplate for tracking adjustment with protractor; arm mass divided by elastic coupling; lever-operated hydraulically damped cueing control; tracking force 1-1.5 g; cartridge weight range 4-9 g..... $177
SME3009/S2. Same as SME3009 Series II but with detachable headshell $190

SIGNET

MK111E Moving-Coil Cartridge
Dual moving micro-coil cartridge; samarium cobalt magnet; frequency response 5-50,000 Hz; output 0.4 mV at 5 cm/sec; channel balance/separation 0.5 dB/30 dB min. at 1000 Hz; tracking force 1-2 g; 0.2 X 0.7 mil nude mounted elliptical diamond stylus; beryllium cantilever; weight 4.8 g $300
MK112E. Same as MK111E except cartridge is integrated into own headshell with molded finger lift and adjustment for overhang dimension..... $325
MK10T. Transformer matches MK111E and 112E to conventional magnetic phone inputs..... $95
MK12T. Moving-coil transformer with selector for 3, 20, 40 ohms or passive impedance..... $300

TK9E Phono Cartridge
Frequency response 10-25,000 Hz; output 2.2 mV at 5 cm/sec; tracking force 0.8-1.6 g; channel balance/separation 0.5 dB/35 dB at 1000 Hz; 0.2 X 0.7 mil elliptical square-shank nude diamond stylus; 0.3-mil beryllium cantilever; replacement stylus TKN 29 ($175)..... $275

TK7SU Phono Cartridge
Frequency response 5-45,000 Hz; output 2.7 mV at 5 cm/sec; channel balance/separation 0.75 dB/30 dB at 1000 Hz; tracking force ¾-1¾ g; nude square-shank miniature Shibata stylus; micromass tapered tube cantilever; replacement stylus TKN3 ($100) $185

TK7E Phono Cartridge
Frequency response 5-30,000 Hz; output 2.7 mV at 5 cm/sec; channel balance/separation 0.75 dB/30 dB at 1000 Hz; tracking force ¾-1¾ g; 0.2 × 0.7-mil nude square-shank miniature elliptical stylus; micro-mass tapered tube cantilever; replacement stylus TKN2 ($75) $160

TK5E Phono Cartridge
Frequency response 10-30,000 Hz; output 4.2 mV at 5 cm/sec; channel balance/separation 1.0/25 dB at 1000 Hz; tracking force ¾-1¾ g; 0.2 × 0.7-mil nude square-shank elliptical stylus; tapered cantilever; replacement stylus TKN1 ($50). $90

TK3E Phono Cartridge
Frequency response 15-28,000 Hz; output 4.2 mV at 5 cm/sec; channel balance/separation 1.0 dB/28 dB at 1000 Hz; tracking force 1-1¾ g; 0.3 X 0.7 mil elliptical nude diamond stylus; thin-walled tube cantilever; replacement TKN6 ($30)..... $55

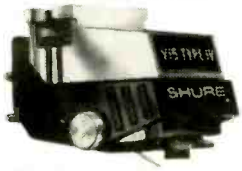
TK1E Phono Cartridge
Frequency response 15-25,000 Hz; output 4.8 mV at 5 cm/sec; channel balance/separation 1.5 dB/26 dB at 1000 Hz; tracking force 1½-2½ g; 0.4 X 0.7 mil elliptical diamond stylus; thin-walled tubed cantilever; replacement stylus TKN 22 ($25)... $40

XK50 Tonearm
Integral tonearm to eliminate headshell connecting ring resonance and weight; has Signetrace™ damped planar tracking; designed to accommodate cartridges weighing 4-11 g; provides anti-skating adjust for elliptical conical line type styli; tracking force adjust 1/10 g; increments 0-1.6 g; overhang adjust 5 mm; tracking error ±1½° max.; total arm and cable capacitance 80 pF; weight 9.5 g.... $400
SKST1. Extra integral tonearm tube to XK50 .... $60
The company offers at extra cost a choice of carbon fiber, beryllium, titanium or boron cantilever material to go with spherical, elliptical, and Shibata styli.

SONUS

Dimension 5 Phono Cartridge
Magnetic phono cartridge with polished square

fact: there's a Shure cartridge that's correct for your system —and your checkbook:



V15 Type IV—The perfectionist's pickup--overcomes such ever-present problems as warp, static electricity, and dust. Ultra-flat response. Reduced distortion. Unprecedented trackability. ¾ to 1¼ grams tracking. Premium-priced.

V15 Type III—Second only to the Type IV. Ultra-flat, wide range response. Super trackability. ¾ to 1¼ grams tracking. Best-buy pricing.

M95HE—New mid-priced cartridge with distortion-reducing Hyperelliptical stylus. Flat response. ¾ to 1½ grams tracking.

M95EJ—Superb performance for heavier tracking (1½ to 3 grams) systems. Biradial (Elliptical) stylus. Moderately priced.

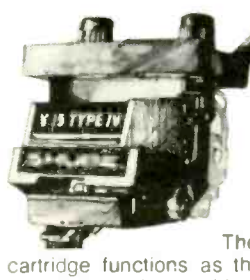
M70 Series—Modestly priced cartridges with truly noteworthy performance. 1½ to 3 grams tracking. Biradial or Spherical styli.

M3D—The low-cost cartridge that began it all nearly two decades ago! 3 to 6 grams tracking. Replacement styli still available, as they are for virtually all Shure stereo cartridges ever made.

® SHURE ®

Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

fact: the phono cartridge is the heart of hi-fi...



The hi-fi phono cartridge functions as the *source of sound* (the point at which the recording is linked with the balance of the hi-fi system)—therefore, its role in high fidelity is absolutely critical. Just as the camera can be no better than its lens, not even the finest hi-fi system in the world can transcend the limitations of an inferior cartridge. The cartridge represents a relatively modest investment which can audibly upgrade the sound of your entire record playback system.

Consult with your nearby Shure dealer who will help you select the Shure phono cartridge that is correct for your system and your checkbook. We especially recommend that you audition the Shure V15 Type IV. Discriminating critics throughout the world praise this cartridge as the new standard for faithful sound re-creation. It overcomes such ever-present problems as dust, static electricity, "hot" signals, and record warp that cause "clicks" or "pops," and distorted record reproduction. May we send you our brochure?

Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204
In Canada: A.C. Simmonds & Sons Limited

® SHURE ®

CIRCLE NO. 11 ON READER SERVICE CARD

5 PHONO CARTRIDGES

nude shank Lambda diamond stylus and integrated tapered aluminum cantilever; micro-machined armature; designed to reproduce direct-to-disc and PCM recordings; frequency response 10-20,000 Hz ±1 dB, 20-40,000 Hz +2/−5 dB; compliance 50 cms/ dyne × 10^{-6}; channel balance/separation ±1 dB/30 dB at 1000 Hz; tracking force range 0.75-1.25 g; weight 5.5 g..... $250

Sonus Series II

Gold Phono Cartridges

Electromagnetically balanced cartridges with interchangeable styli among Gold models; output 0.8 mV ±2 dB; compliance 50 cms/dyne × 10^{6}; channel balance ±2 dB; channel separation 30 dB at 1000 Hz, 20 dB from 20-20,000 Hz; load impedance 47,000 ohms/ch; tracking force range ¾-1¼ g; weight 5.5 g.

Blue Label. Modified-line contact-form ground stylus designed for extended high-frequency response quadraphonic recordings; frequency response 10-16,000 Hz ±1 dB; (replacement stylus $68). $154

Red Label. Ground elliptical stylus; response 10-10,000 Hz ±1 dB; (replacement stylus $45). $138

Green Label. Precision spherical stylus; response 10-10,000 Hz ±1 dB; (replacement stylus $27)... ..... $121

Silver Phono Cartridges

Similar in principal characteristics to Gold series; output 1.0 mV ±2 dB; compliance 40 cms/dyne × 10^{6}; nominal balance ±2 dB; channel separation 30 dB at 1000 Hz, 20 dB from 20-20,000 Hz; load impedance 47,000 ohms; tracking force range 1-1½ g; weight 5.5 g.

Silver "P". Modified-line contact stylus suitable for quadraphonic recordings; frequency response 10-15,000 Hz ±1 dB; (replacement stylus $40)...$99

Silver "E". Elliptical stylus (replacement stylus $30); response 10-15,000 Hz ± 1 dB $88

Black Phono Cartridges

Output 1.0 mV ±2 dB, 5 mV at 5 cms/sec; frequency response 10-10,000 Hz ±1 dB, 10-20,000 Hz +2/−1 dB; channel balance/separation ±2 dB/25 dB at 1000 Hz; load impedance/ch 47,000 ohms; weight 5.5 g.

Black "A". Precision-ground and polished bi-radial elliptical stylus; compliance 30 cms/dyne × 10^{-6}; tracking force range 1.25-1.75 g $77

Black "C". Precision spherical stylus; compliance 25 cms/dyne × 10^{-6}; tracking force 1.5-2 g ...$66

SONY

XL-55Pro Phono Cartridge

Figure-8 design moving-coil phono cartridge with integrated magnesium headshell and aluminum, beryllium, and carbon fiber composite cantilever; output 0.2 mV at 5 cm/sec, 1000 Hz, 45 degrees; frequency response 10-50,000 Hz; channel separation 30 dB; channel balance 1 dB at 1000 Hz; compliance 15 × 10^{-6} cm/dyne; recommended tracking force 2.0 g; 0.3 × 0.8 mil elliptical stylus; includes stylus brush and stylus guard; 22 g .. $300

STANTON

881S Phono Cartridge

Output 0.9 mV/cm/sec; frequency response 10-25,000 Hz; channel balance/separation (1 kHz) ±1 dB/35 dB; load impedance 47,000 ohms; load capacitance 275 pF (including arm leads, cables, and amp); tracking force 0.75-1.25 g; nude Stereohedron stylus; weight 5.7 g with self-supporting (1 g) brush; replacement stylus D81, D810 for mono LP's, D827 for 78's $150

681 Triple-E S Type

Output 0.7 mV/cm/sec ±2 dB; frequency response 10-12,000 Hz ±0.5 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 0.75-1.5 g; 3 × 2.8 mil Stereohedron stylus; weight 6.3 g with self-supporting (1 g) brush; replacement stylus 6800EEE-S, D6810 for LP's, D6827 for 78's..... $115

680EL Disco Cartridge

Output 0.82 mV/cm/sec ±2 dB; frequency response 20-18,000 Hz; channel balance/separation ±2 dB/30 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 2-5 g; 0.4 × 0.7 mil elliptical diamond stylus; weight 5.5 g; replacement stylus D6800EL $90

681 Triple-E Phono Cartridge

Output 0.7 mV/cm/sec ±2 dB; frequency response 10-12,000 Hz ±1.5 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 0.75-1.5 g; 0.2 × 0.7 mil elliptical diamond stylus; weight 5.5 g with self-supporting (1 g) brush; replacement stylus D6800EEE, D6810 for LP's, D6827 for 78's $90

680SL Disco Cartridge

Output 1.1 mV/cm/sec ±2 dB; frequency response 20-20,000 Hz; channel balance/separation 2 dB/

30 dB; load resistance 47,000 ohms; load capacitance 275 pF; nude stereohedron stylus tip; tracking force range 3-6 g with brush; weight 5.5 g..... $88

681A Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 10-10,000 Hz ±0.5 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 1.5-3 g; 0.7 mil spherical stylus; weight 5.5 g with self-supporting (1 g) brush; replacement stylus D6807A, D6810 for LP's, D6827 for 78's $72

681EE Phono Cartridge

Output 0.82 mV/cm/sec ±2 dB; frequency response 10-10,000 Hz ±2 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 0.75-1.5 g; 0.2 × 0.7 mil elliptical diamond stylus; weight 5.5 g with self-supporting (1 g) brush; replacement stylus D6800EE, D6810 for LP's, D6827 for 78's $72

681SE Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 10-10,000 Hz ±0.5 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 2-4 g; 0.4 × 0.7 mil elliptical stylus; weight 5.5 g with self-supporting (1 g) brush; replacement stylus D6800SE, D6810 for LP's, D6827 for 78's $72

680EE Phono Cartridge

Output 0.82 mV/cm/sec ±2 dB; frequency response 20-20,000 Hz; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 0.75-1.5 g; 0.3 × 0.7 mil elliptical diamond stylus; weight 5.5 g with self-supporting (1 g) brush; replacement stylus D680 ..... $63

600EE Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 20-20,000 Hz ±2.5 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 1-2 g; 0.3 × 0.7 mil elliptical diamond stylus; weight 5 g; replacement stylus D6003EE, D6010 for LP's, D6027 for 78's..... $55

600E. Similar to 600EE but frequency response 20-20,000 Hz ±2 dB; 0.4 × 0.7 mil elliptical diamond stylus; tracking force 1.5-3 g; replacement stylus D6004E $50

600A. Similar to 600E but with 0.7 mil stylus; tracking force 2-4 g; replacement stylus D6071A... ..... $45

500EE Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 20-10,000 Hz ±1 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 1-2 g; 0.3 × 0.7 mil elliptical diamond stylus; weight 5 g; replacement stylus D5100EE, D5110 for LP's, D5127 for 78's..... $40

500AA Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 20-10,000 Hz ±1 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 1-2.5 g; 0.5 mil spherical diamond stylus; weight 5 g; replacement stylus D5105AA, D5110 for LP's, D5127 for 78's..... $35

500E Phono Cartridge

Output 1 mV/cm/sec ±2 dB; frequency response 20-10,000 Hz ±1 dB; channel balance/separation ±2 dB/35 dB (1 kHz); load impedance 47,000 ohms; load capacitance 275 pF; tracking force 2-5 g; 0.4 × 0.7 mil elliptical diamond stylus; weight 5 g; replacement stylus D5100E, D5110 for LP's, D5127 for 78's..... $35

500A. Similar to 500E except has 0.7 mil spherical diamond stylus; replacement stylus D5107A for LP's, D5127 for 78's $30

4-Channel

780/4DQ Four-Channel Cartridge

Designed to play discrete four-channel records as well as standard stereo discs or four-channel matrix-derived compatible records; response 10-50,000 Hz (when terminated in recommended load of 100 k ohms and 100 pF); tracking force 1-3 g; channel separation 35 dB; output 0.7 mV/cm/sec ±2 dB; inductance and resistance (each channel) 350 mH, 750 ohms; features "Quadrahedral" stylus.... $125

780/Q. Same as 780/4DQ except frequency response is 10-45,000 Hz $75

THORENS

TMC 70 Phono Cartridge

Moving-coil pick-up cartridges; designed for Thorens TD-110 and TD-115 turntable arms; output 0.15 mV at 1 cm/sec; frequency response 20-20,000 Hz ±2 dB; channel separation 25 dB at 1000 Hz; dynamic compliance 12 × 10^{-6} cm/dyne; tracking force range 2-3 g; 8-μm fine-line diamond stylus; may be used directly with low-impedance (22-ohm) phono pre-preamp $550

TMC-63. Same as TMC 70 except designed for Thorens Isotrack TP 11 Mk II and TP 16 Mk II turntable arms $550

YAMAHA

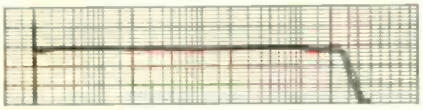
MC-1X Phono Cartridge

Integrated moving-coil phono cartridge with tapered tubular beryllium cantilever and twin dual coreless ic coils in aluminum diecast housing; output 0.2 mV at 5 cm/sec, 1000 Hz; channel separation 28 dB at 1000 Hz; frequency response 10-20,000 Hz; recommended stylus pressure 1.8 g ±0.2 g; 0.1-mm square pure diamond stylus with special-contour 8 × 40-micron ellipse tip; replacement stylus by factory; weight 18.5 g ±0.1 g $250

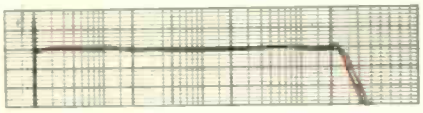
MC-1S. Same as MC-1X except has universal unmounted headshell; weight 7.8 g ±0.1 g $200

We can. Thanks to the revolutionary Omni-Pivot System™ in our new ADC Improved Series cartridges. We can also honestly say ADC has never sounded better. Definition and stereo separation are incredible. Even the most complex musical passages are reproduced in full detail with absolute neutrality.

The new Omni-Pivot System™ is a major advance in micro-technology. There are no restrictive armature governors, wires or adhesives. Instead, each armature is micro-machined to perfectly lock into a newly formulated S-9 high definition suspension block. We think it's a real breakthrough. But we'd like you to be the judge.



Above is the frequency response of a new ADC ZLM Improved cartridge. The wider and flatter the response, the better it is. Do we have to state the obvious? We didn't think so.



Now look at the same cartridge after 1000 playing hours. See any difference? You won't hear any difference either. The ADC ZLM Improved cartridge showed less than a 1dB change in response after 1000 hours!

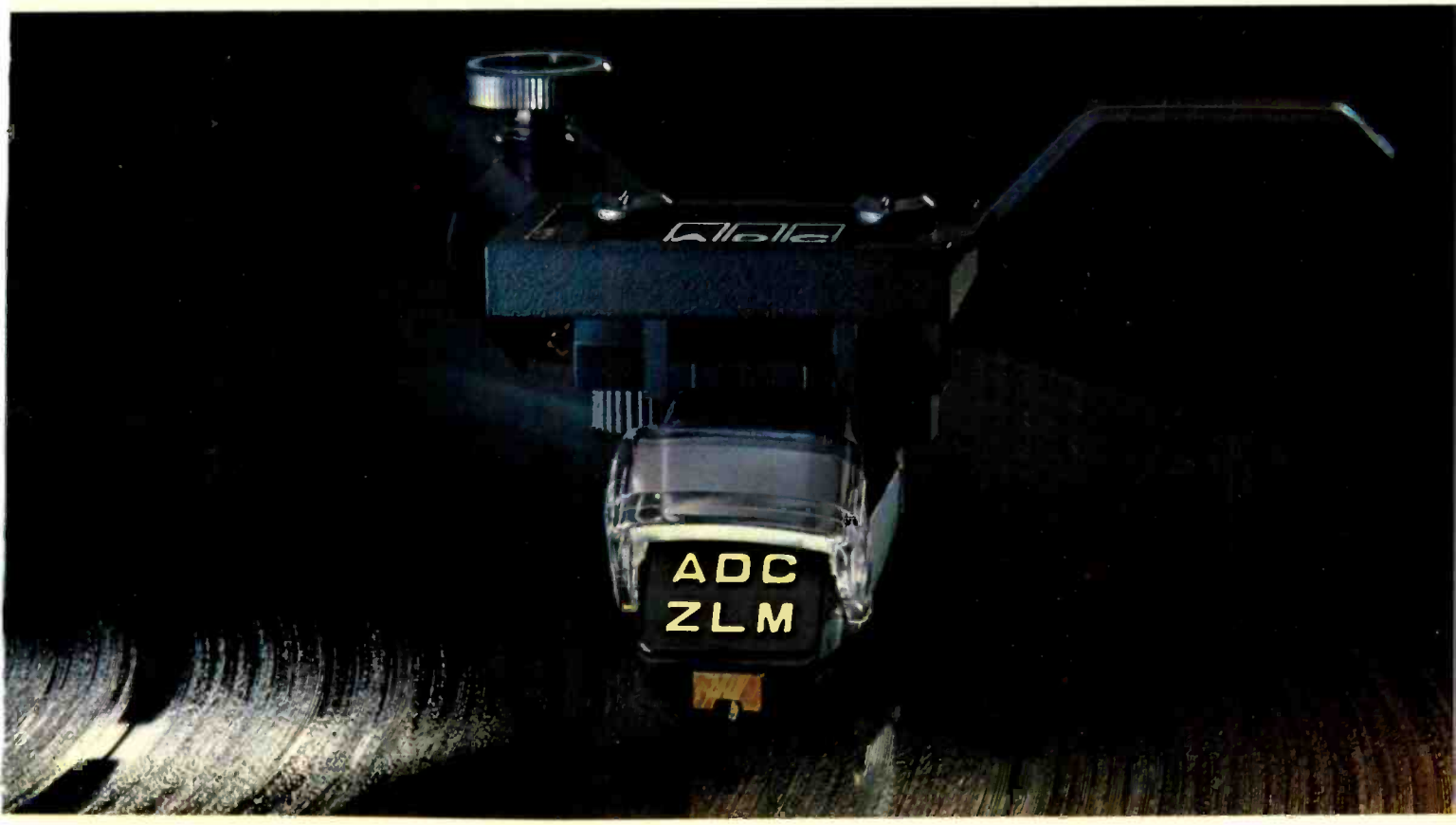
Now the good news gets even better. The Omni-Pivot System™ comes in a wide range of new ADC Improved Series cartridges. The ZLM, XLM MKIII and MKII, and QLM-36 MKIII. All featuring new snap-down stylus protectors.

If you already own a fine ADC cartridge, the Omni-Pivot System™ is yours for just the price of a replacement stylus.

Listen to any new ADC Improved cartridge. After you've heard us, we'd like to hear from you. Write Audio Dynamics Corp., Pickett District Rd., New Milford, Ct. 06776, or call our toll-free number (800) 243-9544.

CIRCLE NO. 28 ON READER SERVICE CARD

CAN YOU HONESTLY SAY YOUR CARTRIDGE WILL STILL SOUND NEW 1000 PLAYING HOURS AFTER YOU BOUGHT IT?



ADC
A BSR COMPANY

At 1⅞, it outperforms other cassette decks. At 3¾, it's in the open-reel class. B·I·C introduces the T-4M. With full metal tape capability, and performance so unprecedented it puts cassette technology on a new plane. Thanks to B·I·C's exclusive Broadband Electronics, at 1⅞ ips the T-4M ranks with the world's finest cassette decks. At 3¾, it challenges even expensive open-reel machines. The numbers speak for themselves: guaranteed frequency response of 20 Hz to 23 kHz ±3dB at 3¾ on 70 μSec tape (20 Hz to 21 kHz at 1⅞!). For complete literature write B·I·C|AVNET, Dept. T, Westbury, N.Y. 11590. **The new T-4M Two-Speed Cassette Deck.**

B I C ™

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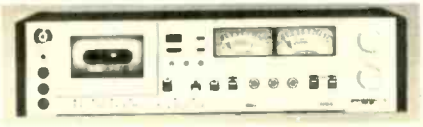
CIRCLE NO. 38 ON READER SERVICE CARD

6 CASSETTE TAPE MACHINES

AIWA

AD-6900 Mk II U Cassette Deck

Front-loading wireless-remote-controlled metal-compatible stereo cassette deck with Dolby noise-



reduction system, 38-pulse FG servomotor in dual-capstan drive system, and three-head combination V-cut Ferrite Guard record/playback and erase heads. Features separate three-position bias and equalization for LH, FeCr, and metal tapes with automatic CrO_2 tape switching; ±20% bias fine adjust controls for LH, FeCr, and CrO_2 tapes and "Flat Response Tuning System;" two dual-scale peak/VU meters with peak hold, peak, and VU LED controls; separate mic and line recording level controls; output level slide control; tape/source monitor switch; feather-touch logic-controlled tape function controls on deck with LEDs and on hand-held remote control unit; three-digit tape counter with reset and memory stop/replay; external record/play/repeat timer provision; includes wireless infrared remote control unit. Wow and flutter 0.04% wrms; frequency response +2/−3 dB at 0 VU 25-9000 Hz (CrO_2), to 12,500 Hz (metal), at −20 VU, +2/−3 dB 25-14,000 Hz (LH), to 17,000 Hz (CrO_2), to 18,000 Hz (metal); S/N 68 dB with FeCr tape, Dolby on; input sensitivity/impedance 0.25 mV/200-10,000 ohms (mic), 75 mV/50,000 ohms (line); output level/impedance 0.41 V/50,000 ohms (line), 2 mW/8 ohms (headphone); 4¾" H × 17¾" W × 12¹⁵/₁₆" D..... $1000

AD-6700 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, 38-pulse FG servo and electronically-controlled dc servomotors, and sendust guard record/ playback and double-gap ferrite erase heads. Features solenoid tape function controls on machine and on separate wireless remote control unit; four-position bias and equalization for LH, CrO_2, FeCr, and metal tapes with bias fine adjust for LH, FeCr, and CrO_2 tapes; multiplex filter; dual switchable VU/tape time meters with nine-LED peak level readout display and peak hold; line/mic input selector; record level and output level controls; continuous auto repeat; three-digit tape counter with reset and memory rewind; rec mute/mute time control; cue and review; timer play with optional external timer; fast-forward/rewind time 65 sec (C-60). Wow and flutter 0.04% wrms; frequency response +2/−3 dB 25-15,000 Hz (LH), to 17,000 Hz (CrO_2, FeCr, and metal); S/N 67 dB with Dolby, metal tape; input sensitivity/impedance 0.25 mV/3k ohms (mic), 50 mV/50k ohms (line); 4¾" H × 18⅜" W × 12¹⁵/₁₆" D ... $750

AD-6800 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, two heads plus special bias-test head, and servo capstan motor plus dc reel motor. Features dual-needle meters showing VU (average) and peak level for each channel; selectable peak hold; front-panel bias adjust for three tape types, plus bias-calibration oscillator; memory rewind; limiter; separate bias and equalization selectors; oil-damped cassette ejection; front-panel (DIN) record/play jack; separate record and output level controls; timer record provision. Wow and flutter 0.05% wrms; S/N 65 dB (Dolby on, FeCr tape); frequency response 20-19,000 Hz ±3 dB (FeCr tape), 20-16,000 Hz ±3 dB (LH tape); fast-winding time 90 sec (C-60); 6⅜" H × 17¾" W × 13³/₁₆" D..... $550

AD-L40U Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, dc servomotor, and Sendust Guard head. Features three-position bias and equalization for LH, FeCr, and metal tapes with auto CrO_2 switching; LH bias fine adjust; 20-point LED optical peak/VU meter display with −20 to +10 dB range; record level control with line and mic/DIN input selector; headphone output level control; rec mute; pause with timer start provision; piano-key tape function controls. Wow and flutter 0.04% wrms; frequency response at −20 VU, +2/−3 dB 30-13,000 Hz (LH), to 15,000 Hz (CrO_2), to 16,000 Hz (FeCr), to 17,000 Hz (metal); S/N 65 dB with FeCr tape, Dolby on; input sensitivity/impedance 0.3 mV/3000 ohms (mic), 50 mV/50,000 ohms (line); output level/impedance 0.41 V/50,000 ohms (line), 2 mW/8 ohms (headphone); 5⅞" H × 17¾" W × 11⁷/₁₆" D..... $490

AD-6600 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, 38-pulse FG servomotor, and ferrite guard head. Features three-position bias and equalization for LH, FeCr, and CrO_2 tapes with bias fine adjust; dual switchable VU/ tape time meters with nine-LED peak level readout display; line/mic input selector; three-digit tape counter with reset and memory rewind; rec/mute time counter; player sync; cue and review; timer start with external timer; record and output level controls; piano-key tape function controls; fast-forward/rewind time 90 sec (C-60). Wow and flutter 0.04% wrms; frequency response ±3 dB 30-13,000 Hz (LH), to 15,000 Hz (CrO_2 and FeCr tapes); S/N 65 dB with Dolby, FeCr tape; input sensitivity/impedance 0.3 mV/200-10,000 ohms (mic), 50 mV/50k ohms (line); 5¹⁵/₁₆" H × 17¾" W × 13" D..... $490

AD-6550 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and remaining tape time meter, 38-pulse FG servomotor, and Ferrite Guard head. Features bias fine adjustor and separate bias and equalization selectors; oil-damped cassette ejection; memory rewind; two VU meters and two-step peak indicator lamps. Wow and flutter 0.05% wrms; S/N 65 dB (Dolby on, FeCr tape); frequency response 30-15,000 Hz ±3 dB (FeCr and CrO_2 tape), 30-13,000 Hz ± 3 dB (LH tape); fast-winding time 90 sec (C-60); 5¹⁵/₁₆" H × 16⁹/₁₆" W × 13" D..... $450

AD-6450 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, 38-pulse FG servomotor, and Ferrite Guard tape head. Features three-step tape selector switches; bias and equalizer selectors; LH bias fine tuning; two-step peak-level indicator lamps; front-panel VU meters; oil-damped cassette ejection; front-panel (DIN) record/play jack; separate record and output level controls; timer record provision. Wow and flutter 0.05% wrms; S/N 65 dB (Dolby on, FeCr tape); frequency response 20-17,000 Hz (FeCr tape), 20-17,000 Hz (CrO_2 tape), 20-15,000 Hz (LH tape); fast-winding time 90 sec (C-60); 5¹⁵/₁₆" H × 16⁹/₁₆" W × 13" D.. $380

AD-6350U Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and permalloy head. Features three-position tape selector; bias fine adjust; rec mute; LED VU and peak-level indicators; built-in timer standby; full auto stop; cue and review; mechanical pause; line/mic input selector; record indicator lamp; oil-damped eject. Wow and flutter 0.08% wrms; S/N 65 dB (FeCr tape with Dolby); fast-winding time 85 sec (C-60); 5¹⁵/₁₆" H × 16⁹/₁₆" W × 13" D..... $320

AD-M200U Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and ultra-hard permalloy head. Features separate bias and equalization for LH, FeCr, and CrO_2 tapes; LH fine bias adjust; dual VU meters with +3 and +7 dB peak-reading LEDs; record level control with line/mic input selector; output level control; full auto stop; cue and review; piano-key tape function controls. Wow and flutter 0.06% wrms; frequency response ±3 dB at −20 VU 30-12,500 Hz (LH), to 14,000 Hz (CrO_2 and FeCr); S/N 62 dB with FeCr tape, Dolby on; input sensitivity/impedance 0.3 mV/3000 ohms (mic), 75 mV/50,000 ohms (line); output level/impedance 0.41 V/50,000 ohms (line), 0.8 mW/8 ohms (phones); 5⅞" H × 16½" W × 10⅜" D. $260

AD-M100U. Similar to AD-M200U without peak-reading LEDs, LH bias fine adjust, and output level control; has auto CrO_2 tape selector and separate left/right record level controls with line/mic input selector; wow and flutter 0.07% wrms; S/N 60 dB with CrO_2 tape, Dolby on $210

SD-L22U Mini Cassette Deck

Front-loading mini stereo cassette deck with Dolby noise-reduction system. Features five-point LED peak level meter display; LH/CrO_2 tape selector; record level control with mic/line input selector; LED tape running indicator; three-digit tape counter with reset; piano-key tape function controls with lighted arrows. Wow and flutter 0.09% wrms; frequency response 25-14,000 Hz (LH), to 16,000 Hz (CrO_2); S/N 60 dB with Dolby; 2⅞" H × 8⁵/₁₆" W × 7⅞" D.. ..... $260

AKAI

GXC-570DII Cassette Deck

Vertical-style front-loading stereo cassette deck with dual-process Dolby noise-reduction system, separate crystal-ferrite and glass GX recording, playback, and erase heads, FG dc servo capstan motor and two dc reel motors, and closed-loop double-

6 CASSETTE TAPE MACHINES

capstan drive system. Features Sensi-Touch logic circuit function controls with individually colored function indication lamps; detented left/right mic and line recording level controls; tape/source monitor switch; output level control; three-digit tape counter with continuous playback and memory rewind; pitch control for playback (±6%); four-position bias and equalization for low noise, low noise/high output, CrO_2, and FeCr tapes; phone level adjustment during playback/monitor; 400-Hz calibration tone switch; left/right recording calibration adjustment; multiplex filter; limiter switch; switchable VU/peak-reading meters with LEDs; Dolby LED; auto door opener; left/right mic and headphone jacks; remote control provision for optional RC-17 or RC-18 remote control unit; fast forward/rewind time 50 sec (C-60). Wow and flutter 0.06% wrms, 0.17% (DIN 45500); frequency response ±3 dB 35-15,000 Hz (LN), to 16,000 Hz (LH), to 17,000 Hz (CrO_2), to 19,000 Hz (FeCr); dist. at 1000 Hz, 0 VU 1.0% (LN and LH tapes), 1.5% (CrO_2 and FeCr); S/N without Dolby 51 dB (LN and LH), 52 dB (CrO_2 and FeCr); 10" H × 17.3" W × 8.9" D $900

RC-18. Remote control for GXC-570DII $58

RC-70. Full-function wireless remote control for GXC-570DII; operates with all Akai solenoid machines $150

GXC-750D Cassette Deck

Front-loading stereo cassette deck with dual-Dolby noise reduction system, GX record and playback heads plus erase head, and closed-loop double-capstan drive with three motors. Features ADR system; memory rewind; mic/line mixing; switchable peak level/VU meters; multiplex filter; bias and equalization for LN, LH, CrO_2, and FeCr tapes; remote control jack for optional RC-17, RC-18, or RC-70 remote control units; pause with lock; full-logic solenoid function controls. Wow and flutter 0.06% wrms; frequency response 35-18,000 Hz ±3 dB with FeCr tape; dist. 1.0% at LH position; S/N 56 dB weighted (CrO_2) without Dolby; 6.2" H × 17.3" W × 12.5" D $725

GX-F90 Cassette Deck

Front-loading metal-compatible stereo cassette deck with dual-Dolby circuitry, GX record/playback and high-current erase heads, and direct-drive dc servomotor and dc motor for tape handling. Features IPLS (Instant Program Location System); two-color LED bar-graph peak/VU meters; three-digit tape counter with reset, auto repeat, and memory rewind; record/play timer start; mic/line mixing; tape/source monitor switch; output level control; calibration tone oscillator; four-position tape selector with lighted tape selector indicator; illuminated feathertouch logic solenoid tape function controls. Wow and flutter 0.03% wrms; frequency response 25-21,000 Hz ±3 dB with metal tape; dist. 0.6% at 1000 Hz, 0 VU with metal tape; S/N 62 dB without Dolby, improved 10 dB above 5000 Hz using metal tape with Dolby; 4.1" H × 17.3" W × 14.6" D $595

GX-F80. Similar to GX-F90 without IPLS and calibration tone oscillator; electronically-controlled dc servo capstan and dc tape handling motors; wow and flutter 0.035% wrms; 5.3" H × 17.3" W × 13.4" D $495

GXC-735D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, crystal ferrite and glass GX recording/playback and two erase heads, and electronically-controlled dc capstan and dc reel motors. Features illuminated feather-touch logic function controls; three-position auto reverse (allows one-way record/playback, two-way record/playback, or continuous playback/two-way recording); three-digit tape counter with memory search and LED; dual VU meters with LED +3/+7 dB peak level indicators; line/mic mixing; output level control; four-position bias and equalization for low noise, low noise/high output, CrO_2, and FeCr tapes; rec mute; timer start; LED Dolby; damped tape eject; two mic jacks; headphone jack; fast forward/rewind time 60 sec (C-60). Wow and flutter 0.045% wrms; frequency response ±3 dB 35-14,000 Hz (LH and LN), to 15,000 Hz (CrO_2), to 16,000 Hz (FeCr); dist. 1.0% (LN and LH), 1.5% (CrO_2 and FeCr); S/N without Dolby 55 dB (LN and LH), 56 dB (CrO_2 and FeCr); input sensitivity/impedance 0.25 mV/5k ohms (mic), 70 mV/100k ohms (line), 0.25 mV/2.2k ohms (DIN); output 410 mV (line and DIN), 100 mV into 8 ohms (headphone); 5.9" H × 17.3" W × 11.4" D $500

GX-M50 Cassette Deck

Front-loading metal-compatible stereo cassette deck with dual-Dolby circuitry and GX record/playback and high-current erase heads. Features IPLS (Instant Program Location System); mic/line mixing; tape/source monitoring; output level control; two-color fluorescent bar graph peak/VU meters; four-position illuminated tape selector for LN, LH, CrO_2, and metal tapes; bias fine adjust; master recording level control for fade-in/fade-out; FM copy; three-digit tape counter with reset and memory rewind; piano-key tape funtion controls. Wow and flutter 0.04% wrms; frequency response 25-21,000 Hz ±3 dB with metal tape; dist. 0.6% at 1000 Hz, 0 VU with metal tape; S/N 62 dB without Dolby, improved by 10 dB above 5000 Hz using metal tape with Dolby; 6.2" H × 17.3" W × 10.9" D $375

GX-M30. Similar to GX-M50 without tape/source monitor switch and master recording level control for fade-in/fade-out; frequency response 30-19,000 Hz ±3 dB with metal tape; S/N 61 dB without Dolby $300

CS-732D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, permalloy record/playback and two erase heads, and electronically-controlled dc motor. Features three-position auto reverse (allows continuous repeat or two-way recording); tape direction switch; four-position bias and equalization for low noise, low noise/high output, CrO_2, and FeCr tapes; recording level control; one-touch mic/line input selector; output level control; three-digit tape counter with reset; damped tape eject; two VU meters; LED record, +7 dB peak level, and Dolby indicators; piano-key function controls; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.06% wrms; frequency response ±3 dB 35-13,000 Hz (LN and LH), to 14,000 Hz (CrO_2), to 15,000 Hz (FeCr); dist. 1.3% (LN and LH), 1.5% (CrO_2 and FeCr); S/N without Dolby 54 dB (LN and LH), 56 dB (CrO_2 and FeCr); input sensitivity/impedance 0.25 mV/5k ohms (mic), 70 mV/100k ohms (line), 2.0 mV/10k ohms (DIN); output level 410 mV (line and DIN), 100 mV into 8 ohms (headphone); 6.3" H × 17.3" W × 11.4" D $350

GXC-706D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, crystal ferrite and glass GX recording/playback and erase heads, and electronically-controlled dc motor. Features four-position bias and equalization for low noise, low noise/high output, CrO_2, and FeCr tapes; dual VU meters with +7 dB LED peak level indicator; mic/line mixing; output level control; LED recording and Dolby indicators; three-digit tape counter with reset; auto stop; headphone jack; two mic jacks; removable receptacle lid; piano-key function controls; fast forward/rewind time 120 sec (C-60). Wow and flutter 0.055% wrms; frequency response ±3 dB 35-13,000 Hz (LN), to 14,000 Hz (LH), to 15,000 Hz (CrO_2 and FeCr); dist. 1.3% (LN and LH), 1.5% (CrO_2 and FeCr); S/N without Dolby 54 dB (LN and LH), 56 dB (CrO_2 and FeCr); input sensitivity/impedance 0.25 mV/5k ohms (mic and DIN), 70 mV/100k ohms (line); output level 410 mV (line and DIN), 100 mV into 8 ohms (headphone); 5.9" H × 17.3" W × 11.4" D $250

CS-703D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, vertical headblock assembly, and electronically-controlled dc motor. Features bias and equalization for CrO_2 and LN tapes; left/right recording level controls; auto stop; two VU meters; LED record and Dolby indicators; two mic jacks; headphone jack; piano-key function controls; three-digit tape counter with reset. Wow and flutter 0.06% wrms; frequency response 40-15,000 Hz ±3 dB (CrO_2); dist. 1.3% with LN tape; S/N 56 dB with CrO_2, Dolby off; 5.9" H × 15" W × 10.5" D $200

BANG & OLUFSEN

Beocord 5000 Cassette Deck

Top-loading stereo cassette deck with automatic Dolby noise-reduction system, dual capstan and two servomotors, and Sendust record/playback tape head. Features automatic bias selection; automatic tape head demagnetization; stainless-steel touch plate control panel with on/off, Dolby out, fade in/out, record, eject, rewind, fast forward, and stop controls; left and right slide-lever volume controls; illuminated cassette tray; illuminated peak program meters (−25 to +3 dB); slide-rule type peak-reading all-electronic "meters." Wow and flutter (DIN) ±0.1%; S/N (DIN) 57 dB (CrO_2 tape, Dolby off), 65 dB (CrO_2 tape, Dolby on); frequency range (DIN) 30-15,000 Hz; fast forward/rewind time 60 sec; speed deviation ±0.5%; sleek wood grain and stainless-steel cabinet design; 3⅛" H × 18½" W × 11" D $695

B•I•C

T-4M Cassette Deck

Front-loading microprocessor-controlled metal-compatible two-speed (1⅞ and 3¾ ips) stereo cas-

sette deck with four Dolby circuits for encode/decode and FM copy, tachometer feedback dc servo capstan and dc spooling motors in dual-capstan transport, and wide-gap record, narrow-gap playback, and erase heads. Features LED peak-reading (−36 to +9 dB) bar graph display with peak hold; three-digit electronic tape counter readout with microprocessor-controlled counter reset, memory inhibit, memory 1, memory 2, auto rewind, and auto play buttons; solenoid tape function controls with pause, record, and play LEDs; separate mic and line record and headphone and output level controls; tape/source monitor; record calibration; separate three-position bias and equalization for hi, normal, and lo tapes; adjustable Dolby calibration; multiplex filter; pitch control (±5%); record safety/mute switch; fast forward/rewind time 48 sec (C-60). Wow and flutter 0.05% wrms (1⅞ ips) and 0.035% wrms (3¾ ips); frequency response 20-20,000 Hz (1⅞ ips), to 22,000 Hz (3¾ ips); THD 1.7% at 1⅞ ips, 1.4% at 3¾ ips; S/N with Dolby at 1⅞ ips 64 dB (70 μsec tape), 68 dB (metal), at 3¾ ips with Dolby 68 dB (70-μsec tape), 72 dB (metal), all "A" weighted, ref. 3.0% THD; erasure 75 dB (70-μsec), 80 dB (metal); input impedance 50k ohms (line), 600 ohms (mic); output level/impedance 2 V rms/3k ohms (line), 0.7 V rms/150 ohms (headphones); 6 7/16" H × 17 5/16" W × 10 1/8" D $850

T-3 Cassette Deck

Front-loading two-speed (1⅞ and 3¾ ips) stereo cassette deck with four Dolby circuits for encode/decode and Dolby FM, tachometer feedback dc servomotor in dual-capstan transport, and wide-gap record, narrow-gap playback, and erase heads. Features dual 45-dB peak-reading meters with chameleon LED record/THD overload indicators; three-digit tape counter with memory and reset; 70- and 120-μsec equalization; hi/normal/lo bias; multiplex filter; record ready with LED; tape/source, record calibration, and mic/line buttons; separate

ing indicator; three-digit tape counter with reset; fast-forward/rewind time 75 sec (C-60). Wow and flutter 0.05% wrms; frequency response ±3 dB 30-16,000 Hz (CrO_2, FeCr, and special), to 14,500 Hz (Fe and normal); THD 1.0% at +3 dB, 0.3% typically; S/N 62 dB with Dolby; input sensitivity/impedance 60 mV/47k ohms (line), 0.27 mV/600 tors, and Sendust record/playback and double-gap ferrite erase heads. Features continuously variable bias adjust; three-position tape selector for LH, Fe-Cr, and cobalt tapes; muted recording/pause button; timer recording/playback provision; automatic repeat; auto rewind and memory stop; logic-controlled tape function buttons with LEDs; three-digit quency response ±3 dB 20-17,000 Hz with Fe tape and to 18,000 Hz with CrO_2 ..... $500

C820 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, high-torque dc servomotor with i-f generator, twin-belt

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drive system, direct load and lock system, and Sendust record/playback head. Features equalized LED peak-level indicators; two-way memory stop; switchable multiplex filter; switchable limiter; logic-controlled intermode switching; six-position bias and equalization; separate line and mic input level controls; auto shutoff; fast forward/rewind time 65 sec (C-60). Wow and flutter 0.04% wrms; frequency response 20-16,000 Hz (Fe), to 17,000 Hz (CrO_2), to 18,000 Hz (FeCr), to 19,000 Hz (metal); HD 0.5%; S/N with Dolby 64 dB (Fe and CrO_2), 67 dB (FeCr and metal); 5¾" H × 17 3/16" W × 13⅜" D $420

C810. Similar to C820 without two-way memory stop and switchable limiter; not metal compatible; has three-way bias/equalization and hard permalloy record/playback head; wow and flutter 0.045% wrms; frequency response ±3 dB 20-16,500 Hz (CrO_2) and to 17,000 Hz (FeCr); S/N with Dolby 63 dB (Fe and CrO_2), 66 dB (FeCr) $330

EUMIG USA, INC.

FL-1000 Cassette Deck
Front-loading microprocessor-controlled metal-compatible stereo cassette deck with Dolby noise-

reduction system, three separate heads, and opto-electronic servo capstan motor. Features logic-controlled solenoid tape function controls; 14-segment/channel fluorescent level display with switchable VU, peak-reading, and peak-hold functions; separate 400- and 16,000-Hz oscillators; bias controls for metal, high bias, and normal bias tapes; master fader for mic/line and line/line mixing; variable output control; LED digital counter display with microprocessor-controlled indexing; speed accuracy 15,000 times/sec. Wow and flutter 0.035% wrms; frequency response 20-20,000 Hz ±3 dB (metal and CrO_2), 30-18,000 Hz ±3 dB (ferric); S/N 72 dB (metal), 68 dB (CrO_2), and 66 dB (ferric); rack-mountable $1550

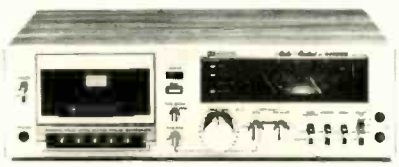
CCD Metropolitan Cassette Deck
Top-loading stereo cassette deck with Dolby noise-reduction system, opto-electronic servo-controlled capstan motor, dc-controlled mixing circuits, and three heads. Features C/MOS logic tape function controls with LEDs; LED display record-level indicators; built-in tone generator; three-digit tape counter with reset and memory rewind; full-function remote control; automatic or manual record level setting; separate headphone volume control. Wow and flutter 0.05% wrms; frequency response 20-20,000 Hz ±3 dB (FeCr and CrO_2), 30-16,000 Hz (ferric); S/N with Dolby 72 dB (FeCr), 68 dB (CrO_2), and 66 dB (ferric); 5.4" H × 17.1" W × 11.8" D $1300

FISHER

CR5150 Cassette Deck
Front-loading solenoid-operated cassette deck with dual Dolby noise-reduction system, dc servo and dc governor motors with capstan drive, and three ferrite heads. Features full-function wireless remote control, electronic digital tape counter display with built-in timer, two illuminated VU meters, tape selector switch for normal, CrO_2, and FeCr tapes, and defeatable FM subcarrier filter. Wow and flutter 0.04% wrms; frequency response ±3 dB 30-15,000 Hz (normal), 30-18,000 Hz (CrO_2); THD 1.4%; S/N 55 dB (Dolby off), 64 dB (Dolby on); channel separation 40 dB; signal crosstalk −70 dB; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mike), 100 mV/100,000 ohms (aux., FM Dolby); output 1 V/5000 ohms at 0 VU (line); walnut-grain vinyl veneer finish; 5⅓" H × 17⅓" W × 11⅞" D $700

CR5125. Similar to CR5150 without electronic digital tape counter/timer display; has dual capstan drive and wireless remote control editing; black finish; 4¾" H × 17⅓" W × 12¼" D $500

CR4029 Cassette Deck
Front-loading two-speed (1⅞ and 3¾ ips) metal-compatible cassette deck with dual Dolby noise-re-



duction system, dc servo motor, capstan drive, and three VHT/Sendust heads. Features four position bias and equalization selectors for metal particle, normal, FeCr, and CrO_2 tapes with bias fine adjust; tape source monitor switch; two illuminated VU meters; LED tape, source, Dolby, and record indicators; piano-key function buttons; and mic/line input selector. Wow and flutter 0.06% wrms (1⅞ ips), 0.05% wrms (3¾ ips); frequency response ±3 dB at 1⅞: 30-14,000 Hz (normal), to 16,000 Hz (CrO_2 and FeCr), to 18,000 Hz (metal), ±3 dB at 3¾: 30-20,000 Hz (normal), 30-22,000 Hz (CrO_2 and FeCr), 30-25,000 Hz (metal); THD 1.5% at 0 VU (1⅞), 1.2% at 0 VU (3¾); S/N 52 dB (Dolby off), 62 dB (Dolby on); channel separation 45 dB; signal crosstalk −70 dB; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mike), 100 mV/100,000 ohms (line); output 1 V/5000 ohms (line); walnut-grain vinyl veneer finish; 4¾" H × 17⅓" W × 12¼" D $500

CR4031 Cassette Deck
Front-loading two-speed metal-compatible cassette deck with Dolby noise-reduction system, dc governor motor, capstan drive, and two Sendust/ferrite heads. Features Auto Search Function (automatically locates the next gap in tape selection) with search cue button, two illuminated VU meters, metal and standard tape bias and equalization, tape selector switch for normal, CrO_2, FeCr, and metal tapes, and piano-key function buttons. Wow and flutter 0.07% wrms (1⅞), 0.06% wrms (3¾); frequency response ±3 dB at 1⅞: 30-14,000 Hz (normal), to 15,000 Hz (CrO_2 and FeCr), to 16,000 Hz (metal), at 3¾: 30-20,000 Hz (normal), to 22,000 Hz (CrO_2 and FeCr), to 23,000 Hz (metal); THD 1.8% (1⅞), 1.6% (3¾); S/N 52 dB (Dolby off), 62 dB (Dolby on); channel separation 42 dB; signal crosstalk −70 dB; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mike), 100 mV/100,000 ohms (line); output 1 V/5000 ohms (line); walnut-grain vinyl veneer finish; mounting hardware included; 4¾" H × 17⅓" W × 12¼" D $350

CR4028. Same as CR4031 without mounting hardware $350

CR4027. Similar to CR4031 without metal tape capability; has two super permalloy/ferrite heads; wow and flutter 0.08% wrms (1⅞), 0.07% wrms (3¾); THD 2% at 0 VU (1⅞), 1.8% at 0 VU (3¾); channel separation 40 dB $300

CR5120 Cassette Deck
Front-loading stereo cassette deck with dual Dolby circuitry, dc Hall Element servomotor and dc governor motor, and three ferrite heads. Wow and flutter 0.04% wrms; S/N 64 dB (Dolby on); channel separation 40 dB; signal crosstalk −70 dB; frequency response 30-15,000 Hz ±3 dB (normal tape), 30-18,000 Hz ±3 dB (CrO_2 tape); THD at 0 VU 1.4%; tape speed variation ±0.8%; fast-winding time 84 sec. Features two VU meters and LED peak-indicators; input/impedance 0.2 mV/600 ohms (mike), 100 mV/100,000 ohms (aux., FM Dolby); output/impedance 1 V/5000 ohms (line), headphone jack; tape select switch for normal, CrO_2 and FeCr tape; memory rewind; walnut-grain vinyl veneer finish; 6⅝" H × 17⅛" W × 12½" D $350

CR5115 Cassette Deck
Front-loading stereo cassette deck with dual Dolby circuitry, dc servomotor, and three ferrite heads. Wow and flutter 0.07% wrms; S/N 60 dB (Dolby on); channel separation 38 dB; signal crosstalk −70 dB; frequency response 30-14,000 Hz ±3 dB (normal tape), 30-17,000 Hz ±3 dB (CrO_2 tape); THD at 0 VU 1.5%; tape speed variation ±1%; fast-winding time 90 sec; two VU meters; input/impedance 0.2 mV/600 ohms (mike), 100 mV/100,000 ohms (aux., FM Dolby); output/impedance 1 V/5000 ohms (line), headphone jack; tape select switch for normal, CrO_2, and FeCr tape; walnut-grain vinyl veneer finish; 6⅝" H × 16⅜" W × 11¾" D $280

ER8155/8150 Cassette/8-Track Decks
See Section 8, 8-Track Tape Machines, under Fisher ..... $370/$330

CR4016 Cassette Deck
Front-loading two-speed cassette deck with Dolby noise-reduction system, dc servo motor, capstan drive, and two super permalloy/ferrite heads. Features electronic tape speed change, CrO_2/normal bias and high/low equalization switches, two illuminated VU meters, tape selector switch. Wow and flutter 0.1% wrms (1⅞), 0.09% wrms (3¾); frequency response ±3 dB at 1⅞: 40-13,000 Hz (normal), to 14,000 Hz (CrO_2), ±3 dB at 3¾: 40-18,000 Hz (normal), to 19,000 Hz (CrO_2); S/N 50 dB (Dolby off), 60 dB (Dolby on); THD 2.2% (1⅞), 1.9% (3¾); channel separation 40 dB; signal crosstalk −70 dB; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mike), 100 mV/100,000 ohms (line); walnut-grain vinyl veneer finish; 5¼" H × 17⅓" W × 9½" D $250

CR4025 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc-governor motor in capstan drive system, and ferrite and Mu-Metal heads. Features tape selector switch for normal and CrO_2 tape; wireless remote control with pause function; two input level controls; twin VU meters; three-digit tape counter. Wow and flutter 0.09% wrms; S/N 50 dB (Dolby off), 56 dB (Dolby on); frequency response 40-12,000 Hz ±3 dB (normal tape), 40-14,000 Hz ±3 dB (CrO_2 tape); THD 1.8% at 0 VU; fast-forward and rewind time 100 sec; 6" H × 15⅛" W × 11⅞" D $200

CD4015 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc-governor motor in capstan drive, and ferrite and Mu-Metal heads; has tape selector switch for normal and CrO_2 tape; two record level/VU meters; one dual input level control; wow and flutter 0.09% wrms; S/N 50 dB (Dolby off), 56 dB (Dolby on); frequency response 40-11,000 Hz ±3 dB (normal tape), 40-13,000 Hz ±3 dB (CrO_2 tape); THD 1.8% at 0 VU; 5¾" H × 15" W × 8⅛" D $150

CR4013. Similar to CD4015 except has two LED VU meters $170

HARMAN/KARDON

hk 3500 Cassette Deck
Three-head, dual-motor, front-loading stereo cassette deck with Dolby noise-reduction system; dual permalloy record/play head for tape monitoring; capstan drive and fast forward/reverse motors; phase compensation in record mode. Features twin lighted peak-reading record/play VU meters calibrated from −40 to +6 dB with two LED tape overload indicators and flashing LED record indicator; separate Dolby record and playback electronics; three-position bias and equalization controls for low-noise, FeCr, and CrO_2 tapes; colinear variable bias trim control; test signal generator for Dolby (400 Hz) and bias (8000 Hz) calibration; separate level controls for microphone input, line input, and playback; tape counter with memory control; tape motion indicator; headphone monitor amplifier; spring-loaded record mute switch; headphone and

two mic jacks; variable speed control for playback; fast-winding time 60 sec (C-60). Wow and flutter 0.05% wrms; frequency response 20-17,500 Hz (low-noise, FeCr, CrO_2); THD 1.2% at 3 dB below Dolby level; S/N 65 dB; microphone sensitivity 0.5 mV; low-level line sensitivity 50 mV; high-level line sensitivity 200 mV; channel separation 37 dB; channel crosstalk 65 dB; input impedance 600 ohms (microphone), 30k ohms (aux., low level), 50k ohms (aux., high level); headphone impedance 8 ohms $549

hk 2500 Cassette Deck

Stereo cassette deck with Dolby noise-reduction system, dc servo-controlled motor, and permalloy record/play head. Features twin peak-reading record/play VU meters, expanded range meters calibrated from −20 to +5 dB; separate record and playback level controls; three-position bias and equalization controls; bias trim control for tape calibration; two LED tape overload indicators and flashing record "pause" indicator; tape counter with memory control; tape motion indicator; headphone monitor amplifier; spring-loaded record mute switch; subsonic filter; Dolby FM filter "off" position for mic/phono recording; fast-winding time 75 sec (C-60). Wow and flutter 0.06% wrms; frequency response 20-16,000 Hz ±3.0 dB (low noise, FeCr, CrO_2); THD 1.5% (3 dB below Dolby level); S/N 63 dB; sensitivity (microphone) 0.5 mV, (line) 50 mV; channel separation 35 dB; channel crosstalk 62 dB; microphone input impedance 1000 ohms; headphone impedance 8 ohms .. $319

hk 1500 Cassette Deck

Stereo cassette deck with Dolby noise-reduction system, dc servo-controlled motor, and permalloy record/play head. Features twin peak-reading record/play VU meters, expanded range meters calibrated from −20 to +5 dB; LED tape overload indicator; separate record and playback level controls; two-position bias and equalization controls for low-noise and CrO_2 tapes; three-digit tape counter; tape motion indicator; headphone monitor amplifier; Dolby-on LED; record-on LED; two microphone inputs; fast-winding time 75 sec (C-60). Wow and flutter 0.06% wrms; THD 1.5%; frequency response 30-15,000 Hz ±3.0 dB (low noise, CrO_2); S/N 63 dB; sensitivity (microphone) 0.5 mV, (line) 50 mV; channel separation 35 dB; channel crosstalk 60 dB; microphone input impedance 1000 ohms; headphone impedance 8 ohms $249

HITACHI

D-5500 Cassette Deck

Front-loading microcomputer-controlled stereo cassette deck with Dolby noise-reduction system, Uni-

torque direct-drive capstan and dc servo reel motors, dual-capstan transport, and closed-gap ferrite record/playback and erase heads. Features microcomputerized automatic bias and equalization calibration with pushbutton test, three memory, tape formulation (CrO_2, normal, and FeCr), and manual controls with bias and equalization level meters; infra-red wireless remote control with tape function controls and LEDs (operates within 32-ft radius or can be inserted in front panel when not in use); two VU meters with three LED peak indicators at +7, +5, and +3 dB; auto rewind play/stop; rec mute; separate line and mic/DIN record level controls; output level control; tape/source monitor switch; three-digit tape counter with reset; air-damped cassette eject; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.028% wrms; frequency response ±3 dB in manual position using Hitachi tape 30-18,000 Hz (normal and FeCr), to 19,000 Hz (CrO_2), in test position of Automatic Tape Response System using other tapes 30-18,000 Hz (normal and FeCr), to 20,000 Hz (CrO_2); dist. 1.2% at 0 VU, 1000 Hz; S/N (A weighted, 3.0% THD) 68 dB with Dolby, 60 dB without Dolby; input sensitivity/impedance 60 mV/100k ohms (line), 0.35 mV/300-5000 ohms (mic); output level 550 mV; 7⅜" H × 17⅛" W × 12⅝" D $1200

D-7500 Cassette Deck

Front-loading stereo cassette deck with dual-Dolby noise-reduction system, dc servomotor, and Hall element record/playback and erase heads. Features IC logic tape function controls; three-position bias and equalization for normal, CrO_2, and FeCr tapes; tape/source monitor selector with LED display; built-in Dolby noise-reduction calibration control system; rec mute; switchable VU/peak meters; three-digit tape counter with memory and reset; line and mic/DIN record level controls; output level control. Wow and flutter 0.05% wrms; frequency response ±3 dB 30-15,000 Hz (normal and FeCr), to 18,000 Hz (CrO_2); S/N (IHF) 68 dB (A weighted, Dolby on); input sensitivity/impedance 60 mV/100k ohms (line), 0.3 mV/3.3k ohms (DIN), 0.3 mV/300 ohms-5k ohms (mic); dist. 1.5%; fast-forward/rewind time 120 sec (C-60); 7⅛" H × 17⅛" W × 10" D $695

D-980 Cassette Deck

Front-loading stereo cassette deck with dual-Dolby noise-reduction system and built-in Dolby Calibration Control System for specific tape fine tuning, Unitorque direct-drive capstan and dc servo reel motors, closed-gap ferrite record/playback and erase heads, and dual capstan, closed-loop transport. Features separate bias and equalization switches for normal, CrO_2, and FeCr tapes with bias adjust; graphic operations mode indicator; TTL IC logic tape function controls; edit button; auto rewind play/stop; tape/source monitor; separate line and mic/DIN record level controls; output level control; dual VU meters with 0, +3, and +7 LED peak indicators; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.03% wrms; frequency response ±3 dB 30-17,000 Hz (normal and FeCr), to 18,000 Hz (CrO_2); dist. 1.3% at 0 VU, 1000 Hz; S/N (A weighted, 3.0% THD) 67 dB with Dolby; input sensitivity/impedance 60 mV/100k ohms (line), 0.35 mV/300-5000 ohms (mic); output level 550 mV; 6½" H × 17⅛" W × 10" D $550

D-900 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system; three-head system for tape monitoring; ferrite heads; full logic controls permit pushbutton shifting to any tape function instantly and smoothly without damaging tape; three-position bias and equalization; dual capstan motors, dc servo controlled; front-panel peak-reading VU meters; tape counter; input, source, output, record, and play indicator lamps; Dolby on/off switch; memory counter with on/off and reset controls; frequency response 20-15,000 Hz ±3 dB (normal tape), 30-18,000 Hz ±3 dB (CrO_2), 20-15,000 Hz ±3 dB (FeCr); S/N 63 dB (Dolby on), 55 dB (Dolby off); wow and flutter 0.05% wrms; 2% dist.; fast-forward/rewind time 100 sec (C-60); input sensitivity/impedance (mic) 0.25 mV, 300-5k ohms, (line) 50 mV, 100k ohms, (DIN) 0.25 mV, 12k ohms; 7⅛" H × 17⅛" W × 10" D $530

D-777 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and super hard permalloy SL record/playback and erase heads. Features auto reverse/auto repeat playback with LEDs; manual tape direction switch with LED arrows; bias and equalization for normal, FeCr, and CrO_2 tapes with bias adjust control and meter; dual VU meters; line and mic record level controls; rec mute. Wow and flutter 0.06% wrms; frequency response ±3 dB 30-14,000 Hz (normal and FeCr), to 15,000 Hz (CrO_2); S/N (IHF) 62 dB with Dolby; input sensitivity/impedance 80 mV/70k ohms (line), 0.3 mV/300-5000 ohms (mic); dist. 1.5%; fast forward/rewind time 100 sec (C-60); 6½" H × 17⅛" W × 10" D $450

D-850 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, three-head system for tape monitoring encompassing ferrite tape heads, and dual-capstan servo motors. Features power-assisted controls; three-position bias and equalization; front-panel peak-reading VU meters; Dolby calibration control; Dolby FM broadcast decoder; tape counter; Dolby-on and record indicator lamps. Frequency response 30-15,000 Hz ±3 dB (normal tape), 30-16,000 Hz (CrO_2), 30-15,000 Hz (FeCr); S/N 63 dB (Dolby on), 55 dB (Dolby off); wow and flutter 0.05% wrms; less than 2% dist.; fast-forward/rewind time 100 sec (C-60); input sensitivity/impedance (mic) 0.25 mV, 300-5k ohms, (line) 50 mV, 100k ohms, (DIN) 0.25 mV, 12k ohms; 5¾" H × 17⅛" W × 10" D $400

D-75S Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc capstan and dc reel motors, and Sendust record/playback and double-gap ferrite erase heads. Features fluorescent bar graph VU/peak-reading meter display; four-position tape selector for normal, FeCr, CrO_2, and metal tapes; record level control with line/mic input selector; output level control; feather-touch logic tape function controls; auto rewind and auto play switch; rec mute; three-digit tape counter with reset; fast forward and rewind time 90 sec (C-60). Wow and flutter 0.04% wrms; frequency response ±3 dB 30-15,000 Hz (normal and FeCr), to 16,000 Hz (CrO_2), to 17,000 Hz (metal); dist. 1.2% at 0 VU, 1000 Hz; S/N (A weighted, 3.0% THD) 66 dB with Dolby; input sensitivity/impedance 60 mV/47,000 ohms (line), 0.38 mV/300-5000 ohms (mic); output level 500 mV; 4⅜" H × 17⅛" W × 10½" D $380

D-40S. Similar to D-75S but has SL permalloy record/playback and erase heads, "Power-Assisted" piano-key tape function controls, two VU meters with five-LED peak-reading indicators, and three-position tape select buttons for normal, CrO_2, and FeCr tapes; no output level control or metal compatibility $230

D-580 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servo capstan and dc reel motors, and SL permalloy record/playback and erase heads. Features IC logic tape function controls; auto play and auto rewind switch; rec mute and pause; three-position bias and equalization selectors for normal, FeCr, and CrO_2 tapes; dual VU meters with +3 and +7 LED peak indicators; separate line and mic record level controls with built-in mic amplifier; output level control; three-digit tape counter with reset; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.04% wrms; frequency response ±3 dB 20-15,000 Hz (normal), to 16,000 Hz (FeCr), and to 18,000 Hz (CrO_2); dist. 1.5% at 0 VU, 1000 Hz; S/N (A weighted, 3.0% THD) 66 dB with Dolby; input sensitivity/impedance 80 mV/47,000 ohms (line), 0.38 mV/3300 ohms (DIN and mic); output level 500 mV; 5⅜" H × 17⅛" W × 10" D $380

D-560 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and super hard permalloy record/playback and erase heads. Features dual fluorescent peak level bar display; bias and equalization for normal, FeCr, and CrO_2 tapes with bias adjust; mic/line mixing with separate controls; rec mute; power-assisted tape function controls. Wow and flutter 0.05% wrms; frequency response ±3 dB from 30-13,500 Hz (normal), to 14,000 Hz (FeCr), to 15,000 Hz (CrO_2); S/N (A weighted) 66 dB with Dolby; input sensitivity/impedance 60 mV/47k ohms (line), 0.25 mV/300-5000 ohms (mic); fast-forward and rewind time 100 sec (C-60); 5¾" H × 17¼" W × 10" D $300

D-550R Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system; record/playback head is super life permalloy, erase head is ferrite; dc servomotor; power-assisted controls; full automatic stop on all functions; three-position bias and equalization con-

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trols; damped vertical transport; tape rewind counter; calibrated VU meters; record and Dolby-on indicator lamps; frequency response 30-14,000 Hz ±3 dB (normal tape), 30-15,000 Hz ±3 dB (CrO_2), 30-15,000 Hz ±3 dB (FeCr); S/N 58 dB (Dolby on), 53 dB (Dolby off); wow and flutter 0.08% wrms; 1.8% dist.; fast-forward/rewind time 100 sec (C-60); input sensitivity/impedance (mic) 0.26 mV, 300-5k ohms, (line) 60 mV, 100k ohms, (DIN) 0.25 mV, 2k ohms; 5⅝" H × 11½" W × 10" D $240

D230 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor drive, and two hard permalloy SL heads. Frequency response 30-12,500 Hz ±3 dB (normal tape), 30-14,000 Hz ±3 dB (CrO_2 and FeCr); S/N 58 dB (Dolby on), 53 dB (Dolby off); wow and flutter 0.09% wrms; 10" H × 15⅜" W × 5⅝" D $180

JVC

KD-A8 Cassette Deck

Front-loading computerized metal-compatible stereo cassette deck with Super ANRS (automatic

noise reduction system), X-cut SA (Sen-Alloy) record/playback and two-gap SA erase heads, and FG dc servo capstan and dc reel motors in ID (independent drive) tape transport. Features computer-controlled B.E.S.T. (bias, equalization, and sensitivity of tape) Tuning System which automatically detects SF/normal, FeCr, SA/CrO_2, or metal tape, super ANRS/ANRS, non record, S&L (search and lock), or record mute modes, bias adjustment, high frequency equalization (flat response at 10,000 Hz ±1.0 dB accuracy), ±0.5 dB tape sensitivity adjustment, and error detection and correction with LED peak indicators at −10, −5, 0, +3, and +6 dB; solenoid controlled tape function controls; timer standby with music wake-up; three-digit tape counter with memory stop and play; real-time pause; provision for optional remote control; two-stepped gear/oil-damped cassette lid; fast forward/rewind time 85 sec (C-60). Wow and flutter 0.035% wrms; frequency response at 20 VU ±1 dB with computer 40-12,500 Hz (metal, SA/chrome, and normal), at ±3 dB 25-17,000 Hz (metal and SA/chrome), to 16,000 Hz (normal), at 0 VU 25-12,000 Hz ±3 dB (metal), to 8000 Hz (SA/chrome); THD 1.0% at 0 VU, 1000 Hz (metal); S/N 60 dB without ANRS, improved 5 dB at 1000 Hz and 10 dB above 5000 Hz with ANRS; crosstalk −65 dB at 1000 Hz; channel separation 35 dB at 1000 Hz; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mic), 80 mV/70k ohms (line); output level/impedance 0-300 mV/3-8k ohms (line), 0-0.5 mW/8-1k ohms (headphone); 4⅞" H × 17¹¹⁄₁₆" W × 15⅜" D $750

KD-A77. Similar to KD-A8 without computerized B.E.S.T. tuning system; has recording equalizer switch and combination three-head record/playback and two-gap SA erase heads; wow and flutter 0.04% wrms; frequency response at 20 VU ±3 dB 25-18,000 Hz (metal and SA/chrome); 4¾" H × 17¾" W × 15" D $570

KD-A7. Similar to KD-A77 without multi-LED peak level indicators and three-head monitor switch; has fluorescent 12-level spectro peak indicators set at 60, 150, 400, 1000, 2400, 6000, and 15,000 Hz, X-cut SA record/playback and two-gap SA erase heads, and recording equalizer circuit; frequency response at 20 VU with metal and SA/chrome tapes 25-17,000 Hz ±3 dB; 12⅞" D $500

KD-A6. Similar to KD-A7 without fluorescent spectro peak indicator; has ±10% pitch control; 12⁷⁄₁₆" D $480

KD-3030 Cassette Deck

Front-loading stereo cassette deck with super ANRS noise-reduction system and recording equalizer circuit, servo capstan and dc reel motors, and Sen-Alloy record/playback head and double-gap ferrite erase head. Features electronic solenoid operation; independent mic and line volume controls for mic/line mixing; twin VU level meters; five peak-reading LED indicators; three-position bias and equalization selection; automatic stop at end of tape in all modes; memory rewind; three-digit tape counter; built-in 400 Hz signal oscillator. Frequency response 30-16,000 Hz ±3 dB (normal and chrome tape); S/N 56 dB, 66 dB (above 5 kHz with ANRS); wow and flutter 0.05% wrms; THD 0.4%; 8⅝" H × 18¹⁵⁄₁₆" W × 13³⁄₁₆" D $550

KD-85 Cassette Deck

Front-loading stereo cassette deck with super ANRS noise-reduction system and recording equalizer circuit; has FG servo capstan and dc reel motors, and Sen-Alloy record/playback and double-gap ferrite erase heads. Features pushbutton full-logic solenoid operation; independent mic and line inputs; three-position bias and equalization selection; spectro-peak level indicator with 25 LEDs indicates the levels (−10, −5, 0, +3, +6, dB) of five frequency ranges (100, 300, 1000, 3000, 10,000 Hz); twin vertically-designed VU level meters; automatic stop; memory rewind; three-digit tape counter. Frequency response 30-16,000 Hz ±3 dB (normal) and to 17,000 Hz (SA/chrome); S/N 57 dB; wow and flutter 0.04% wrms; THD 0.4%. 6¼" H × 17¾" W × 12⅞" D $530

KD-65 Cassette Deck

Front-loading stereo cassette deck with super ANRS noise-reduction system and recording equalization, FG dc servomotor, and Sen-Alloy record/playback and double-gap erase heads. Features independent mic and line inputs; three position bias and equalization selection; spectro-peak level indicator with 25 LEDs indicates the levels (−10, −5, 0, +3, +6 dB) of five frequency ranges (100, 300, 1000, 3000, 10,000 Hz); twin vertically-designed VU level meters; output level control; automatic tape-end stop; memory rewind; three-digit tape counter. Frequency response 30-17,000 Hz ±3 dB (chrome tape); S/N 57 dB, 66 dB (above 5 kHz with ANRS); wow and flutter 0.05% wrms; THD 0.5%; 6¼" H × 17¾" W × 12⅞" D $430

KD-1636II Portable Cassette Deck

Top-loading portable stereo cassette deck with super ANRS noise-reduction system, electronic governor coreless dc motor, and Sen-Alloy record/playback and double-gap ferrite erase heads. Features tri-color LED peak-level indicator; built-in monitor speaker with volume control; master record volume control for easier fade-in, fade-out; headphone amp with separate volume control; electronic automatic stop; twin wide-range VU meters and battery condition checker; bias and equalization selector switches; input selection for mic/DIN and line; −20 dB mic attenuator; stereo/mono mode switch; three-digit tape counter. Frequency response 30-16,000 Hz ±3 dB (chrome tape); S/N 57 dB, 67 dB (above 5 kHz with ANRS); wow and flutter 0.08% wrms; THD 0.5%; three-way power flexibility: ac, 8-16 V dc, or batteries; 4" H × 14⅝" W × 9¹¹⁄₁₆" D $400

KD-S201 Cassette Deck

Front-loading stereo cassette deck with super ANRS noise-reduction system, FG dc servomotor, and Sen-Alloy record/playback and double-gap ferrite erase heads. Features pushbutton and slider controls; multi-point peak indicator system with five LEDs; two VU meters; separate mic and line inputs; photocell all-mode automatic stop; input selector; three-digit tape counter. Frequency response 30-16,000 Hz ±3 dB (chrome tape); S/N 56 dB, 66 dB (above 5 kHz with ANRS); wow and flutter 0.06% wrms; THD 0.5%; 6⁹⁄₁₆" H × 19¹¹⁄₁₆" W × 14¹⁄₁₆" D $390

KD-1770II Cassette Deck

Top-loading stereo cassette deck with super ANRS noise-reduction system, FG dc servomotor, and Sen-Alloy record/playback and double-gap ferrite erase heads. Features independent drive system for both capstan and reels; twin five-LED peak indicators for left and right channels; three-position (six pushbuttons) bias and equalization selection; mic/line mixing; memory rewind; mirrored VU meters; photocell automatic tape-end stop. Frequency response 30-16,000 Hz ±3 dB (chrome tape); S/N 56 dB, 66 dB (above 5 kHz with ANRS); wow and flutter 0.05% wrms; THD 0.5%; 4¹⁵⁄₁₆" H × 16¾" W × 10⅞" D $380

KD-A5 Cassette Deck

Front-loading metal-compatible stereo cassette deck with super ANRS, electronic governor dc motor in two-motor transport system, and SA record/playback and two-gap SA erase heads. Features solenoid-controlled tape function controls; record mute; two VU meters with five-LED peak level indicators; record/play timer standby; tape select switch for high bias, FeCr, SF/normal, SA/CrO_2, and metal tapes; three-digit tape counter with reset; remote control provision; two-stepped gear/oil-damped cassette lid; fast-forward/rewind time 85 sec (C-60). Wow and flutter 0.04% wrms; frequency response at 20 VU, ±3 dB 30-16,000 Hz (metal and SA/chrome), to 15,000 Hz (normal), at 0 VU ±3 dB 30-12,500 Hz (metal), to 8000 Hz (SA/chrome); THD 1.0% at 0 VU, 1000 Hz (metal); S/N 60 dB with metal, improved 5 dB at 1000 Hz and 10 dB above 5000 Hz with ANRS; crosstalk −65 dB at 1000 Hz; channel separation 35 dB at 1000 Hz; input sensitivity/impedance 0.2 mV/600-10,000 ohms (mic), 78 mV/100k ohms (line); output level/impedance 0-300 mV/3-6k ohms (line), 0-0.3 mW/8-1k ohms (headphones); 4¾" H × 16⁹⁄₁₆" W × 11⅞" D $360

KD-A3. Similar to KD-A5 except has piano-key tape function controls; no provision for remote control; fast forward/rewind 80 sec (C-60); wow and flutter 0.055% wrms; DIN input sensitivity/impedance 0.1 mV/1k or 10k ohms switchable; DIN output level/impedance 0-300 mV/5k ohms; 5⅞" H × 16⁹⁄₁₆" W × 10⁵⁄₁₆" D $300

KD-2 Portable Cassette Deck

Top-loading portable stereo cassette deck with super ANRS, electronic governor coreless dc motor, and SA record/playback and two-gap ferrite erase heads. Features three-way power source (ac, 6 V dc, or four "D" batteries); left/right master recording/volume control; three-position input switch; two round VU meters; separate headphone amp with level control; piano-key tape function controls; dual-ball cassette hold system; fast-forward/rewind time 90 sec (C-60). Wow and flutter 0.09% wrms; frequency response ±3 dB 30-16,000 Hz (SA/chrome), to 15,000 Hz (normal); THD 1.2% at 0 VU, 1000 Hz; S/N 57 dB, improved 5 dB at 1000 Hz and 10 dB above 5000 Hz with ANRS; weighs 8.8 lbs with batteries; 3¾" H × 10⅞" W × 11⅞" D $350

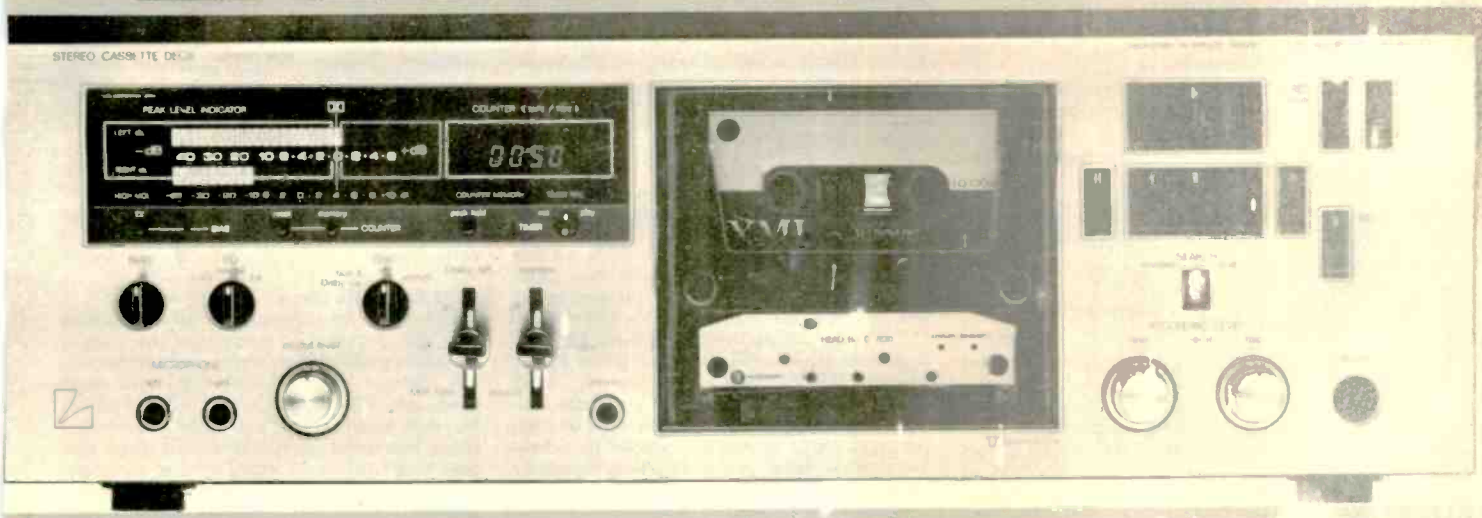
KD-25 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, FG dc servomotor, and Sen-Alloy record/playback and double-gap ferrite erase heads. Features three-position bias and equalization selection; five LEDs for multi-point (−10, −5, 0, +3, +6 dB) peak level indication; automatic input selector for mic and line inputs; dual rotary controls for left and right channel recording levels; automatic tape-end stop; two VU level meters; three-digit tape counter. Frequency response 40-15,000 Hz ±3 dB (chrome tape); S/N 56 dB, 66 dB (above 5 kHz with Dolby); wow and flutter 0.06%; THD 0.5%; 5⅞" H × 16⁹⁄₁₆" W × 10⁷⁄₁₆" D $270

KD-10. Similar to KD-25 except has Cronios record/playback and two-gap ferrite erase heads and tape amount scale; channel separation 30 dB at 1000 Hz $210

KD-A1. Similar to KD-10 without five-LED peak

LUX 5K50



LUX 5K50 STEREO CASSETTE DECK

REDEFINING THE ART OF CASSETTE PERFORMANCE

For over half a century, the name Lux has meant advanced technology and sophisticated designs—qualities sought by dedicated music lovers around the world. And now, Lux's audiophile/engineers have focused their attention on the cassette format.

Some of the special features of the new 5K50: Real-time process DC amplifiers for both record and playback; a unique modular tape-transport system featuring three motors and separate three-head configuration; Lux's dual Plasma record level meter, and most significant, Lux's recently developed BRBS Variable Bias Control System.

Real-time processing DC circuits bring Lux quality amplification to the cassette format for extended bandwidth, low distortion and exceptional signal-to-noise ratios.

The highly sophisticated tape transport extracts the best possible performance from any cassette ... and there's further improvement when Lux cassettes are used. Each of the three heads is precisely designed for its special task, as are the three motors that provide the separate drives for the dual capstans and reel hubs. The capstan drive motor is a quartz-referenced phase-locked loop direct-drive unit, while coreless motors for the reels provide total stability with the precise torque and tension required for an effective dual-capstan transport system.

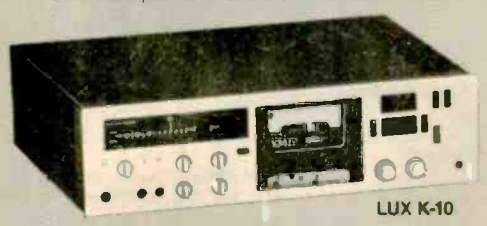
When a Lux cassette tape is loaded, an electronic digital counter provides the exact minute and second of tape use. The electronic counter functions normally for standard cassettes. A plasma fluorescent display indicates peak levels from -40 to +6 dB per channel with a special +10 dB scale for metal-particle tapes.

To eliminate the distortion inherent in conventional tape-bias circuitry, Lux developed the Bridge Recording Bias System. These special circuits enable the user to adjust the recorder for best possible response with any tape, while eliminating those components and circuits which in conventional decks cause transient distortion and phase shift.

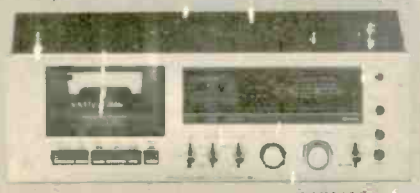
And there is so much more. Electronic IC logic control with feather-touch pushbuttons replaces mechanical operation and its attendant noise and wear problems. Human engineered control clusters; record-head azimuth adjustment with built-in indicators for optimum setting for any tape; signal-to-noise ratios up to 69 dB and frequency response from 30 to 20,000 Hz, depending of course, on the tape used.

The expense of the Lux 5K50 cassette deck is fully justified, not only by what Lux puts into it, but the performance the user can get out of it. Also look into the other Lux cassette decks, Models K-12, K-10 and K-5, ranging in price from $495 to $2,000 ... each an embodyment of Lux quality.

To experience the Lux lineup of high-performance cassette decks, see your local Lux dealer or write to Mr. Robert Bowman, Vice President of Sales at Lux Audio of America Ltd.



LUX K-10



LUX K-5

LUX K-12

LUX AUDIO OF AMERICA, LTD.
160 Dupont Street, Plainview, NY 11803
In Canada: Lux Audio of Canada, Ltd., Ontario

CIRCLE NO. 22 ON READER SERVICE CARD

level indicators; has direct-access cassette well and single record level control; wow and flutter 0.08% wrms; THD 1.4% at 0 VU, 1000 Hz; S/N 57 dB, 67 dB with Dolby; 5⅞" H × 15⅜" W × 10⅜" D.. $180

KENWOOD

KX-1030 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, ac bias system (bias frequency 85 kHz), and three ferrite heads for record, rewind, and erase. Features three-position bias selector (normal, chrome, reserve); three-position equalization selector (normal, chrome, reserve); fine bias adjustment controls with oscillator; full auto shut-off in all modes; mic/line mixing; memory rewind; LED recording indicator; tape monitor; three-digit tape counter; two large illuminated VU meters with LED peak indicator. Wow and flutter 0.06% wrms; S/N 65 dB (Dolby on, normal tape), 67 dB (Dolby on, CrO_2 tape); frequency response 35-15,000 Hz ±3 dB (normal tape), 35-18,000 Hz ±3 dB (CrO_2 tape), 35-17,000 Hz ±3 dB (Ferri-CrO_2 tape); HD 1.3% at 1 kHz, 0 VU with normal tape; fast-winding time 80 sec (C-60); line 1 input 77.5 mV at 56k ohms, line 2 input 0.1 mV at 1k ohm; line output 775 mV; headphone impedance 8-16 ohms; 6⁹/₁₆" H × 16¹⁵/₁₆" W × 13¹/₁₆" D..... $450

KX-760 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, ac bias (85-kHz frequency), and hard permalloy record/playback and ferrite erase heads. Features three-position bias and equalization selectors for normal, chrome, and reserve tapes; multiplex filter; separate line and mic input volume controls; audio timer; memory index; LED record/Dolby/memory index indicators; full auto shutoff; independent record/playback level controls; illuminated cassette compartment; three-digit tape counter; headphone jack; two mic jacks with left-channel doubling as mono mic jack; two illuminated VU meters. Wow and flutter 0.05% wrms, ±0.18% (DIN); frequency response 30-13,000 Hz (normal) and to 16,000 Hz (CrO_2 and ferri-chrome), all ±3 dB; S/N (DIN weighted) 62 dB (normal with Dolby), 64 dB (CrO_2 with Dolby); HD 1.0% at 1000 Hz, 0 VU with normal tape; input sensitivity/impedance 77.5 mV/50k ohms (line 1 and 2), 10.9 mV/1.5k ohms (DIN), 0.2 mV/10k ohms (mic 1 and 2); output level/load impedance 775 mV at 0 VU/100k ohms (lines 1 and 2 and DIN) and 50 mV/8-16 ohms (headphone); fast-winding time 85 sec (C-60)..... $350

KX-830 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, ac bias system (bias frequency 85 kHz), and hard permalloy recording/playback head and ferrite erase head. Features three-position bias selector (normal, chrome, reserve); three-position equalization selector (normal, chrome, reserve); three-position input selector (mic/DIN-line-att mic/DIN); full auto stop in all modes; memory rewind; LED recording indicator; two-way tape loading system; three-digit-tape counter; two large illuminated VU meters with LED peak indicator. Wow and flutter 0.06% wrms, ±0.18% DIN; S/N 62 dB (Dolby on, normal tape), 64 dB (Dolby on, CrO_2 tape); frequency response 35-13,000 Hz ±3 dB (normal tape), 35-16,000 Hz ±3 dB (CrO_2 tape), 35-15,000 Hz ±3 dB (Ferri-CrO_2 tape); HD 1.3% at 1 kHz, 0 VU with normal tape; fast-winding time 80 sec (C-60); line input 77.5 mV at 100k ohms; line output 775 mV; headphone impedance 8-16 ohms; 6⁹/₁₆" H × 16¹⁵/₁₆" W × 13¹/₁₆" D..... $325

KX-650 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, ac bias system (85 kHz frequency), and hard permalloy record/play and ferrite erase heads. Features full auto stop; three-position equalization selector for normal, chrome, and reserve tapes; two-position bias for normal and chrome; LED Dolby and recording indicators; mic/DIN-line-att mic/DIN input selector; illuminated VU meters; three-digit tape counter; two mic jacks and headphone jack. Wow and flutter 0.05% wrms; frequency response 40-13,000 Hz (normal), to 15,000 Hz (CrO_2 and ferri-chrome), all ±3 dB; S/N 62 dB (normal with Dolby), 64 dB (CrO_2 and ferri-chrome with Dolby); HD less than 1.5% at 1000 Hz, 0 VU with normal tape; input sensitivity/impedance 77.5 mV/80k ohms (line 1 and 2), 16.0 mV/3.3k ohms (DIN), −12 dB (att mic/DIN), 0.19 mV/10k ohms (mic 1 and 2); output level/load impedance 775 mV at 0 VU/100k ohms (lines 1 and 2 and DIN), 48.9 mV/8-16 ohms (headphone); fast-winding time 85 sec (C-60); 6³/₈" H × 17⁹/₁₆W × 13¹⁵/₁₆" D..... $299

KX-550. Similar to KX-650 minus LED Dolby indicator and mic/DIN-line-att mic/DIN input selector; has two-position equalization selector for normal and chrome tapes; input sensitivity/impedance 77.5 mV/100k ohms (lines 1 and 2), 16.0 mV/2k ohms (DIN), 0.15 mV/10k ohms (mic 1 and 2); output level/load impedance 489 mV at 0 VU/100k ohms (lines 1 and 2 and DIN), 48.9 mV/8-16 ohms (headphone); 6¼" H × 15¾" W × 11 ¹/₁₆" D... $235

LAFAYETTE

RKD-600 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and three-head design with separate recording and playback heads in single housing and true monitoring off playback head. Features air-damped cassette eject; "feather-touch" control keys; full auto stop; two VU meters with dual peak LEDs; mic/line mixing; memory rewind; independent bias and equalization; monitor switch; MPX filter; output control. Frequency response 40-16,000 Hz (CrO_2 tape); wow and flutter 0.06%; S/N −63 dB (Dolby on); 2% dist.; 5¼" H × 16¼" W × 11¾" D... $300

RKD-225 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and permalloy head. Features oil-damped cassette eject; "feather-touch" control keys; built-in Dolby circuitry allows any receiver to decode Dolbyized broadcasts through tape monitor; left/right channel record and output controls; dual VU meters with peak LED; auto shut-off; independent bias and equalization; memory rewind. Frequency response 30-13,000 Hz (FeO_3 tape); wow and flutter 0.09%; S/N 60 dB (Dolby on); 6⅞" H × 17⁹/₁₆" W × 12" D..... $200

RKD-150 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and electronically-controlled dc motor. Features auto shut-off; independent bias and equalization; record level controls; dual mic inputs; dual VU meters with peak LED. Frequency response 40-12,000 Hz; wow and flutter 0.15%; S/N 65 dB (Dolby on over 5 kHz); dist. 1.5%; 5½" H × 16½" W × 11¾" D..... $150

LUX

Luxman Laboratory Reference Series

5K50 Cassette Deck

Front-loading metal-compatible stereo cassette deck with processed dc record/playback amp circuitry, quartz-locked direct-drive dual capstan motor and two coreless reel motors, ferrite record and erase and Sendust playback heads, and Dolby noise-reduction system. Features four-digit, seven-segment LED electronic tape counter display (also reads record/playback time in min and sec) with memory and reset; fluorescent green 24-dot/ch plasma level meter with upper 12 dots for peak hold; variable bias with "Bridge Recording by Bias Current and Signal Current"; azimuth adjustment with two lamps; search cue/review; IC logic-controlled operations; equalization for normal, CrO_2, and EX (metal) tapes; tape/source monitor switch; separate mic/line record level controls; rec mute; headphone jack; two mic jacks; 400 and 6000 Hz oscillator; provision for optional remote control. Wow and flutter 0.03% wrms; S/N with Dolby 66 dB (CrO_2), 65 dB (LH); frequency response 30-18,000 Hz (CrO_2), to 16,000 Hz (LH), both ±3 dB; dist. 1.2% with LH tape at 1000 Hz, 0 dB; separation 35 dB at 1000 Hz, 0 dB; crosstalk −60 dB at 1000 Hz, 0 dB; input sensitivity 100 mV (line), 0.25 mV (mic), 2 mV/1k ohms (DIN); output level 580 mV; headphone output 1 mW into 8 ohms; 5³/₁₆" H × 17¹³/₃₂" W × 14¼" D..... $1995

K-12 Cassette Deck

Front-loading metal-compatible stereo cassette deck with processed dc recording/playback amps, FG servo capstan and electronic governor reel motors, Sendust record/playback and ferrite erase heads, and Dolby noise-reduction system. Features four-digit, seven-segment LED digital tape counter/timer; fluorescent green plasma level meter with peak hold function; IC logic-controlled operations controls; record mute; mic mixing; memory rewind; separate line/mic recording level controls; bias/equalization selector for normal, CrO_2, and EX (metal) tapes; provision for optional remote control; headphone jack. Wow and flutter 0.04% wrms; S/N with Dolby 69 dB (metal), 65 dB (CrO_2), 63 dB (LH); frequency response ±3 dB from 30-20,000 Hz (metal), to 18,000 Hz (CrO_2), and to 16,000 Hz (LH); dist. 1.2% with LH tape at 1000 Hz, 0 dB; input sensitivity/impedance 100 mV/50k ohms (line), 0.25 mV/50k ohms (mic), 30 mV/1k ohms (DIN); output level/impedance 580 mV/220 ohms (line in), 1 mW into 8 ohms (headphone); 4³¹/₃₂" H × 17¼" W × 14⁹/₁₆" D..... $995

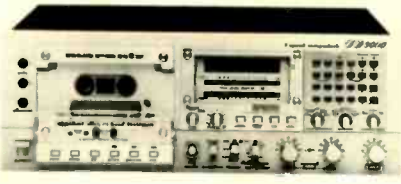
K-10. Similar to K-12 except has digital tape counter, electronic LED peak level meter, and auto rewind/playback; input sensitivity 0.45 mV (mic), 2 mV/1k ohms (DIN); output level 430 mV; headphone output 1.5 mW into 8 ohms; 5" H $745

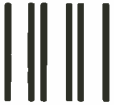
K-5A. Similar to K-10 except with bridge reel/capstan motor and two VU meters with LED peak indicator; no auto rewind/play, timer switch, rec mute, or mic recording level control; wow and flutter 0.06%; S/N with Dolby 65 dB (metal), 63 dB (CrO_2), 60 dB (LH); dist. 1.5% with LH tape at 1000 Hz, 0 dB; output level 580 mV; 5²⁹/₃₂" H × 17¼" W × 10⅜" D..... $495

MARANTZ

SD 9000 Cassette Compudeck

Two-speed (1⅞ and 3¾ ips) microprocessor-controlled metal-compatible front-loading stereo cassette deck with dual Dolby circuitry, Sendust alloy three-head system, and two servo-controlled motors. Compudeck microprocessor programming and selection circuitry features random access memory and sequential access memory playback programming keyboard of up to 19 music selections; keyboard tape counter start/stop and memory call with counter memory mode selector; timer on/off with clock functions; timer/counter/clock selector switch; program start/skip/pause with program





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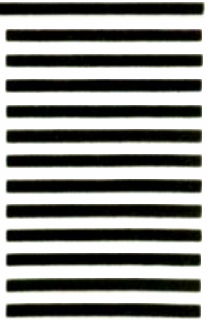


Stereo Review

P.O. Box 2771
Boulder, Colorado 80321

mode selector. Additional features include four-digit LED counter/timer/program indicator display; LED peak level bar graph display; pushbutton normal, special/CrO_2, FeCr, and metal tape selectors with bias fine adjust (±15%); speed selector; separate mic and line record level controls; tape/source monitor switch; output level control; rec mute; electronic feather-touch tape function controls with LED play, pause, and record indicators; built-in record/playback timer; sensor total system shutoff; front-panel access for head adjustment. Wow and flutter 0.03% wrms (3¾ ips), 0.05% wrms (1⅞ ips); frequency response ±3 dB at high speed 25-23,000 Hz (metal), to 22,000 Hz (FeCr and CrO_2), to 20,000 Hz (normal), at standard speed ±3 dB 25-20,000 Hz (metal), to 18,000 Hz (FeCr), to 17,000 Hz (CrO_2), to 16,000 Hz (normal); S/N with Dolby over 5000 Hz 72 dB (high speed), 69 dB (standard speed); 5¾" H × 16⅜" W × 11⅜" D $775

SD 8000. Similar to SD 9000 without tape/source monitor switch; has single-Dolby circuitry $650

SD 6000 Cassette Deck

Two-speed (1⅞ and 3¾ ips) metal-compatible front-loading cassette deck with Dolby noise-reduction system, Sendust alloy record/playback and erase heads, and two servo-controlled motors. Features LED bar graph peak-level meters; three-digit tape counter with reset and memory rewind/replay; pushbutton tape selector for normal, special/CrO_2, FeCr, and metal tapes with bias fine adjust (±15%); speed selector switch; record/playback timer; rec mute; separate mic and line record level controls; output level control; auto slack tape take-up; electronic feather-touch tape function controls with LED play, pause, and record indicators; total system sensor shut-off. Wow and flutter 0.03% wrms (3¾ ips), 0.05% wrms (1⅞ ips); frequency response ±3 dB at 3¾ ips 30-22,000 Hz (metal), to 21,000 Hz (FeCr and CrO_2), to 18,000 Hz (normal), at 1⅞ ips 30-19,000 Hz (metal), to 17,000 Hz (FeCr and CrO_2), to 15,000 Hz (normal); S/N with Dolby over 5000 Hz 71 dB (3¾ ips), 68 dB (1⅞ ips); 5¾" H × 16⅜" W × 11⅜" D $520

SD 4000. Similar to SD 6000 without memory rewind/replay, bias fine adjust, auto slack take-up, output level control, and record/playback timer; has CompuSkip automatic sequential program selection in rewind or fast forward, dual-Dolby circuitry, tape/source monitor switch, cue and review, piano-key tape function controls, and LED record indicator; wow and flutter 0.04% wrms (3¾ ips), 0.06% (1⅞ ips); FeCr and CrO_2 tape frequency response at 3¾ ips 30-20,000 Hz ±3 dB; S/N with Dolby over 5000 Hz 70 dB (3¾ ips), 67 dB (1⅞ ips); 5¾" H × 16⅜" W × 9⁹⁄₁₆" D $435

SD 3000. Similar to SD 4000 without tape/source monitor switch and metal compatibility; has separate bias and equalization for normal and special tapes, separate left/right record level controls, single Dolby circuitry, and super hard permalloy heads; wow and flutter 0.05% wrms (3¾ ips), 0.07% wrms (1⅞ ips); frequency response ±3 dB at 3¾ ips 30-19,000 Hz (FeCr and CrO_2), to 17,000 Hz (normal), at 1⅞ ips 30-16,000 Hz (FeCr), to 15,000 Hz (CrO_2), to 14,000 Hz (normal); S/N with Dolby over 5000 Hz 67 dB (3¾ ips), 64 dB (1⅞ ips) $295

SD 1000. Similar to SD 3000 without multiplex filter in Dolby system, rec mute, cue and review, CompuSkip, and LED bar graph peak-reading meters; has two VU meters; wow and flutter 0.06% wrms (3¾ ips), 0.08% wrms (1⅞ ips); frequency response ±3 dB at 3¾ ips 35-19,000 Hz (FeCr), to 18,000 Hz (CrO_2), to 17,000 Hz (normal), at 1⅞ ips 35-16,000 Hz (FeCr), to 15,000 (CrO_2), to 14,000 Hz (normal); S/N with Dolby over 5000 Hz 66 dB (3¾ ips), 63 dB (1⅞ ips) $235

SD 800 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and super hard record/playback permalloy head. Features separate bias and equalization for normal, special/CrO_2, and FeCr tapes; separate left and right record level controls; two VU meters; three-digit tape counter with reset; total system shut-off. Wow and flutter 0.08% wrms; frequency response ±3 dB 35-15,000 Hz (FeCr), to 14,000 Hz (CrO_2), to 13,000 Hz (normal); S/N 63 dB with Dolby over 5000 Hz; 5¾" H × 16⅜" W × 9⁹⁄₁₆" D $200

MITSUBISHI

DT-30 Cassette Deck

Direct front-loading stereo cassette deck with Dolby

noise-reduction system, closed-loop dual capstan drive dc servomotor, separate ferrite recording and erase heads and sendust playback head, and twin power lines for recording equalizer amp. Features solenoid-operated microswitch controls; automatic spacing-pause button; dual peak-reading meters with three-sec peak-hold for readings above 0 dB; separate mic and line input recording level controls plus master recording volume control with presetter; three-position bias and equalization for normal, special, and FeCr tapes and 440- and 8000-Hz internal oscillators for bias adjustment; FM multiplex filter; memory play and rewind; auto repeat and auto rewind; mic and tape output mixing in playback mode; output level control; two mic jacks with left-channel doubling as mono mic jack; headphone jack; three-digit tape counter; fast forward/rewind time 80 sec (C-60). Wow and flutter 0.05% wrms (playback); S/N weighted at 400 Hz 58 dB (without Dolby), 66 dB (with Dolby); frequency response 40-15,000 Hz (normal), to 18,000 Hz (special), and to 20,000 Hz (FeCr), all ±3 dB; dist. 1.0%; erasure ratio 70 dB at 1000 Hz; crosstalk 35 dB between channels (500-6300 Hz), 65 dB between tracks (1000 Hz); input sensitivity 0.3 mV (mic), 100 mV (line); bias frequency 85 kHz; 6¾" H × 16¾" W × 14⅞" D $650

M-T01 Cassette Deck

Compact direct front-loading stereo cassette deck with Dolby noise-reduction system, closed-loop dual-capstan drive dc servomotor, and sendust recording/playback head. Features solenoid-operated microswitch controls; automatic spacing-pause button; twin peak-reading VU meters; three-position bias and equalization for normal, special, and FeCr tapes; multiplex filter; timer control with external timer unit; memory-stop and memory-play; microphone and line input level controls; output level control; headphone jack; two mic jacks with left channel doubling as mono mic jack; three-digit tape counter; fast forward/rewind time 80 sec (C-60). Wow and flutter 0.05% wrms; S/N (weighted at +3 dB) 56 dB without Dolby, 64 dB with Dolby; frequency response 40-13,000 Hz (normal), to 15,000 Hz (special and FeCr), all ±3 dB; erasure ratio 70 dB at 1000 Hz; crosstalk 35 dB between channels, 65 dB between tracks; harmonic dist. 1.0% at 400 Hz; input sensitivity 0.3 mV (mic), 100 mV (line); bias frequency 85 kHz; 5½" H × 10⅜" W × 9⅜" D $560

DT-10 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and capstan drive dc servomotor. Features residual tape meter; separate mic and line input level controls plus master recording level control; two VU meters with LED peak-level indicator; memory rewind; output level control; two-position bias and equalization for normal and special tapes; oil-damped eject; headphone jack; two mic jacks with left channel doubling as mono mic jack; fast forward/rewind time 80 sec (C-60). Wow and flutter 0.06% wrms; frequency response 40-12,000 Hz (normal) and to 15,000 Hz (special), at ±3 dB; dist. 1.0% at 400 Hz; S/N 56 dB without Dolby, 64 dB with Dolby; erasure ratio 70 dB at 1000 Hz; crosstalk 35 dB between channels, 65 dB between tracks; input sensitivity 0.24 mV (mic), 80 mV (line); bias frequency 85 kHz; 6¾" H × 16¾" W × 14⅞" D $370

NAD (USA)

6100 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc capstan servomotor, and Sendust record/play and ferrite erase heads. Features dual-LED peak level bar graph display; three-position bias and equalization for normal, FeCr, and CrO_2 tapes; record and playback level controls; ic feather-touch solenoid tape function controls; three-digit tape counter with reset and memory rewind. Wow and flutter 0.045% wrms; S/N 62 dB with Dolby, normal tape (A weighted); frequency response 35-16,000 Hz ±3 dB (normal), 35-17,000 Hz ±3 dB (CrO_2 and FeCr); HD 1.5% at 0 dB; input sensitivity/impedance 0.5 mV/10k ohms (mic), 35 mV/50k ohms (line), 6 mV/25k ohms (DIN); fast winding time 70 sec (C-60); 9.8" H × 17.7" W × 6.0" D $425

NAKAMICHI

1000 II Cassette Deck

Three-head stereo record/play deck with Dolby noise-reduction system and DNL, Crystal Permalloy playback head and record head azimuth alignment beacon, and dual capstan, closed-loop transport with dc servomotor drive. Features full IC logic transport controls; auto shut-off; spill-proof system; memory and auto rewind; playback pitch control; two 50-dB range peak-reading meters; separate bias and equalization switches; left, right, and blend wide dynamic range mike inputs; phase-corrected low-noise electronics. Wow and flutter 0.05% wrms, 0.1% weighted peak; S/N 65 dB (400 Hz, 3% THD, with Dolby and SX tape); THD less than 1 5% (400 Hz, 0 dB); frequency response 35-22,000 Hz ±3 dB (with Dolby); inputs 0.2 mV at 10,000 ohms (mike), 50 mV at 50,000 ohms (line); outputs 1 V max. (line, variable), 300 mV/channel max. into 8 ohms (headphone); 11¹¹⁄₁₆" H × 20¹¹⁄₁₆" W × 8⁹⁄₁₆" D $1650

700 II. Similar to 1000 II but without auto rewind or DNL; 10¹¹⁄₁₆" H × 20½" W × 5⅛" D $1140

RM-10. Remote control duplicates control systems of 1000 II and 700 II; controls all tape motion including record; can also be used with 580 Series; 15-ft cable $60

HC-1000. Extra heavy duty carrying cabinet covered in leatherette; double-protected edges and corners; side-mounted folding metal carrying handles; front and rear covers for complete protection; accommodates one 1000 II $365

HC-700. Similar to HC-1000 but for 700 II; rear cover attached; metal hinged door for connection access $325

DS-200. Digital timer turns system on at present time; sleep timer function plays for 59 min before shutdown; allows unattended recording of broadcasts with company's 1000, 700, 600, and 580 Series cassette decks; self-repeating 24-hr basis; 2" H × 12¹⁄₄" W × 4½" D $180

680 Cassette Deck

Front-loading two-speed (1⅞ and ¹⁵⁄₁₆ ips) metal-compatible stereo cassette deck with Dolby noise-

reduction system, PLL dc servo main, dc reel, and dc cam motors, and Crystalloy record/playback and E-8L direct-flux erase heads in discrete three-head configuration. Features double NF dc record and phase-corrected double NF playback amplifiers; RAM program search system with LED program indicator; manual high-speed cueing; fluorescent VU/peak-reading meter display with meter calibration/peak hold/VU meter switch; three-position tape selector for EX, SX, and ZX (metal) tapes with separate EQ switch; tape/source monitor switch; timer start; playback pitch control; three-digit tape counter with memory reset; solenoidless tape function controls. Wow and flutter 0.04% wrms (1⅞ ips), 0.08% wrms (¹⁵⁄₁₆ ips); frequency response ±3 dB, at 1⅞

6 CASSETTE TAPE MACHINES

ips 20-20,000 Hz, at 15/16 ips 20-15,000 Hz; THD with metal tape 0.8% at 1 7/8 ips, 1.5% at 15/16 ips; S/N with Dolby at 400 Hz, 3% THD 66 dB at 1 7/8 ips, 60 dB at 15/16 ips; 4 7/8" H × 19" W × 12 3/4" D $1350

582 Discrete Cassette Deck

Metalloy-compatible discrete record/play cassette deck with Dolby noise-reduction system, "Second-Generation" Direct-Flux erase head, Crystalloy record SuperHead, and Crystalloy playback Super-Head with discrete configuration for independently-adjustable record and play azimuths, and PLL dc servomotor and two dc motors in closed-loop, double-capstan system. Features three-position tape selector for EX, SX, and ZX tapes; equalization selector; defeatable multiplex filter; tape-start memory and timer self-start in record/play; built-in 400-Hz (0 dB) and 15-kHz (20 dB) test oscillators; three-position record calibration and bias adjust controls; source/tape monitoring; 47-dB peak-reading meters; double-negative-feedback record and play amplifiers; MOS logic-controlled anti-spill and tape-end shutoff; high-output 8-ohm headphone amplifier. Frequency response 20-20,000 Hz ±3 dB; wow and flutter 0.05% wrms max., 0.1% weighted peak; S/N 66 dB at 400 Hz, 3.0% THD, A-weighted (with ZX metalloy tape and Dolby); THD 0.8% at 400 Hz, 0 dB (with ZX tape); erasure 60 dB with ZX tape; input 50k ohms at 50 mV; output 2.2k ohms at 1 V; headphone output 45 mW; 5 1/8" H × 19 11/16" W × 13 25/32" D $890

581. Same as 582 without source/tape monitoring $770

580 Cassette Deck

Metal-compatible stereo record/play cassette deck with Dolby noise-reduction system, Crystalloy record/playback SuperHead and Direct-Flux erase head, and PLL dc servomotor and two dc motors in closed-loop double-capstan system. Features two-speed cueing during fast-wind; double-negative-feedback record and play amplifiers; timer self-start in record/play; separate bias and equalization for EX and SX tapes; defeatable multiplex filter; tape-start memory; built-in 400-Hz test oscillator; record calibration and bias adjust controls; 47-dB peak-reading meters; MOS logic-controlled anti-spill and tape-end shutoff; high-output 8-ohm headphone amplifier. Frequency response 20-20,000 Hz ±3 dB; wow and flutter 0.05% wrms max., 0.1% weighted peak; S/N 63 dB at 400 Hz, 3.0% THD, A weighted (with SX tape and Dolby); THD under 1.5% at 400 Hz, 0 dB; input 50k ohms at 50 mV; output 3.3k ohms at 1 V; headphone output 45 mW; 5 1/8" H × 19 11/16" W × 13 25/32" D $650

RM-580. Wireless remote control for 580 and 680 Series decks; receptor unit connects to deck via one-meter cable; hand-held transmitter battery-operated; seven-bit pulse code modulation on infrared carrier; all transport functions duplicated; ten-meter range; direct line-of-sight required $155

500 Cassette Deck

Two-head stereo record/play cassette deck with Crystal Permalloy record/play head, Dolby noise reduction system, and dc servomotor drive. Features full-range 45-dB peak-reading meters; automatic shut-off and memory rewind; three-point sound pickup for live recording; peak limiter; three-position tape selector; variable output level control. Frequency response 40-17,000 Hz ±3 dB; wow and flutter 0.08% wrms, 0.13% weighted peak; S/N 63 dB (400 Hz, 3% THD, with Dolby and SX tape); THD 1.5% at 1 kHz, 0 dB; inputs: mike and blend mike 600 ohms, 0.2 mV, line 150,000 ohms, 70 mV; outputs: line 1 V max. variable, headphones 8 ohms, 1 mW, 0 dB; 4 1/2" H × 15" W × 10" D.. $480

550. Similar to 500 but S/N 65 dB (SX tape with Dolby); outputs: line 580 mV; headphones 300 mW (1 kHz, 0 dB); three-way power supply (117 V ac, 12 V battery, car jack); tape-end alarm with preset timer; 3 1/2" H × 12 1/4" W × 13 3/4" D; 11.15 lb (without battery) $630

HC-550. Hard carrying case for 550 ..... $60

350 Cassette Deck

Stereo record/play deck with Dolby noise reduction system and dc servomotor. Features tape selector; full automatic shut-off; three low-impedance microphone inputs with mixing. Frequency response 40-15,000 Hz ±3 dB; wow and flutter 0.08% wrms; S/N 58 dB (with Dolby); operates from ac power pack (included), 12-V dc source, or from battery supply in optional carrying case; 3 1/2" H × 7 1/2" W × 9 1/2" D $440

HC-350. Carrying case with built-in 12-V lead-acid battery and recharging circuit; 12-hr charge for 2-hr continuous recording with 350; 10 1/2" H × 9 1/2" W × 3 3/4" D; 4.5 lb $125

NEAL by KMAL

302 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and three motors. Features tape selector for normal and special tapes; bias and tone calibration selectors; mic, DIN, and line input selectors; record level, balance, and output level controls; solenoid tape function controls with LEDs; dual peak level meters. Wow and flutter 0.09% rms (DIN weighted); S/N with Dolby 64 dB (special ferric and chrome), 72 dB (normal ferric); frequency response 35-12,000 Hz +1/ 3 dB (normal ferric), 35-15,000 Hz +1/− 3 dB (special ferric and chromium dioxide); fast winding time 50 sec (C-60); 446 mm H × 226 mm W × 115 mm D $995

PEARLCORDER by OLYMPUS

D130 Microcassette Recorder/Player

Two-hour two-speed modular pocket microcassette recorder/player with capstan drive, coreless motor (can drive 8-ohm 10-in woofer), and ferrite recording head. LED display functions as tape counter, quartz clock, quartz timer and quartz stop watch; side-mounted deactivator switch for quartz system. Includes built-in electret condenser microphone; 45 mm dynamic speaker; auto shut-off; LED record/battery check indicator; front-panel function selector, reset and start/stop buttons, and tape speed switch; side-mounted cassette eject button, record, play and stop pushbutton controls; top-mounted four-way switch features review, rewind, cue and fast forward functions; earplug/monitor, mic, remote control, and power jacks. Tape speeds: 2.4 cm/sec and 1.2 cm/sec; ac bias; max. output 150 mW at 2.4 cm/sec and 75 mW at 1.2 cm/sec; frequency response 300-7000 Hz (2.4 cm/sec) and 300-7000 Hz (1.2 cm/sec); 3 V dc; complete set includes three MC-60 microcassettes, cassette head cleaner, earphone, ac adaptor, carrying case, wrist strap, two 1.5-V AA Penlight batteries, two silver oxide batteries; optional detachable AM and FM radio and other accessories available; 5 1/2" H × 2 5/8" W × 15/16" D $350

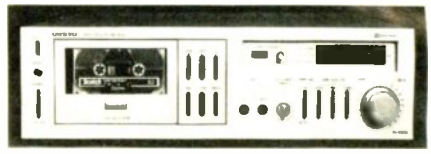
ONKYO

TA-2080 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system and two-channel Dolby recording calibrations, PLL dc servo drive and dc reel motors in two-capstan drive system, and Sendust alloy record and playback and laminated core erase heads. Features automatic "Accu-Bias" control with built-in 400- and 10,000-Hz oscillators (compatible with all tape formulations); separate bias and equalization for metal, high, and normal tapes; electronic logic-controlled feathertouch tape function controls; VU meters with left/right 10-step LED peak indicators; fade out control; mic mixing; three-digit tape counter with reset and memory rewind; built-in timer function operable with optional audio timer; multiplex filter; auto stop; record mute; lighted auto Accu, Dolby, record, play, and pause indicators; line and mic input level controls; left/right channel mic jacks with auto stereo/mono switchover; phone jack (8-200 ohm headphones); soft eject; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.045% wrms; frequency response 20-16,000 Hz (normal), to 18,000 Hz (high), to 20,000 Hz (metal); S/N 62 dB with metal tape, Dolby out; input level/impedance 0.3 mV/5k ohms (mic), 50 mV/100k ohms (line); output level 775 mV at 0 VU (line out); 6 5/16" H × 17 1/4" W × 14 3/8" D $800

TA-2040 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, frequency



generator dc servomotor, and Sendust alloy record/playback and ferrite erase heads. Features "Accu-Bias" adjust with separate selectors for metal, high, and normal tape; fluorescent VU level meters; electronic pushbutton tape function controls; auto stop; input selector; three-digit tape counter with reset. Wow and flutter 0.055% wrms; frequency response 20-19,000 Hz (metal); S/N 60 dB without Dolby 4 3/4" H × 16 7/16" W × 13" D $370

RC-5. Remote control unit for TA-2040 ..... $50

TA-630DS Cassette Deck

Front-loading stereo cassette deck with dual-Dolby circuitry, PLL dc servomotor in two-belt drive transport, and hyperbolic S&S Sendust head. Features "Accubias" with built-in 400- and 10,000-Hz oscillators with Accu bias adjust; three-position bias and equalization for CrO_2, FeCr, and normal tapes; three-digit tape counter with reset and memory rewind; piano-key tape function controls; dual VU meters with two peak indicators; auto stop; timer start/pause provision; rec mute; Dolby FM/line/mic-DIN input selector; input and output level controls; high/low impedance headphone jack. Wow and flutter 0.055% wrms; frequency response 20-15,000 Hz (normal), to 18,000 Hz (FeCr and CrO_2); S/N 68 dB with Dolby (FeCr above 5000 Hz); input level/impedance 0.3 mV/50k ohms (mic), 50 mV/50k ohms (line), 0.1 mV/5k ohms (DIN); output level/load impedance 0.775 V/50k ohms (line and DIN); headphone impedance 8-200 ohms; 6 1/4" H × 16 1/2" W × 12" D $350

TA-2010 Cassette Deck

Front-loading stereo cassette deck with dual-Dolby circuitry, dc servomotor, and hard permalloy Widex record/playback and ferrite erase heads. Features "Accu-Bias" adjust; three-position bias and equalization for high, FeCr, and normal tapes; piano-key tape function controls; three-digit tape counter with reset; input level control; two VU meters with ±3 dB Dolby level indication; auto stop; pause control; two mic jacks; high-impedance phone jack; fast forward/rewind 90 sec (C-60). Wow and flutter 0.08% wrms; frequency response 20-14,000 Hz (normal), to 16,000 Hz (FeCr and CrO_2); S/N 54 dB with FeCr tape, Dolby out; input level/impedance 0.3 mV/5k ohms (mic), 50 mV/50k ohms (line); output level/load impedance 480 mV/50k ohms (line); headphone load impedance 8-200 ohms; 5 15/16" H × 16 7/16" W × 10 1/2" D $260

OPTONICA

RT-6502 Cassette Deck

Front-loading microprocessor-controlled metal-compatible stereo cassette deck with Dolby noise-reduction system, frequency-generated servomotor, and superhard permalloy head. Features Auto Program Locate Device (APLD) with five memory functions (locates beginning of selection, automatically plays any segment of tape in forward or reverse, auto on/off, repeatedly plays certain segment of tape, and has rewind and tape counter memory); quartz digital clock and LCD display; LCD electronic tape and elapsed time displays; Opto peak level display with peak hold function; record and Dolby LED indicators; separate mic and line input level controls; four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; full auto stop; illu-

minated tape compartment. Wow and flutter 0.045% wrms; frequency response 20-17,000 Hz (normal), to 18,000 Hz (CrO_2), to 20,000 Hz (metal); S/N 68 dB with Dolby $540
RT-6506. RT-6502 with ebony finish $540

RT-6202 Cassette Deck
Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system. Features nine-position Auto Program Locate Device (APLD) that locates any selection in forward or reverse; logic solenoid-controlled transport; Opto peak level display with peak hold; mic/line mixing; output volume control; four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; timer/start mechanism. Wow and flutter 0.04% wrms; frequency response 25-15,000 Hz (normal), to 17,000 Hz (CrO_2), to 18,000 Hz (metal); S/N 67 dB with Dolby $470
RT-6206. RT-6202 with ebony finish $470

RT-6501 Cassette Deck
Front-loading microprocessor-controlled cassette deck with Dolby noise-reduction system, frequency generator servomotor, and permalloy head. Features Automatic Program Locate Device (APLD) with five separate memory functions (can be directed to find start and automatically play any segment of tape by going either forward or in reverse; can be programmed to turn itself on and off, and repeatedly play a certain segment of a tape; has rewind and tape counter memory); Quartz digital clock and complete LCD display; LCD electronic tape and elapsed time displays; two VU meters; LED peak level, record and Dolby indicators; individual input level controls for mic and line; separate bias and equalization settings; Hall effect IC full automatic stop; illuminated tape compartment; tear-drop shaped control knobs. Wow and flutter 0.058% wrms; frequency response 30-16,000 Hz ±3 dB (FeCr); S/N 64 dB $420
RT-6505. RT-6501 with ebony finish $420

RT-6201 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, two electronic governor dc motors for capstan and reel drives, and Sendust alloy record/playback head. Features Auto Program Search System (APSS); solenoid-controlled transport; multiplex filter; two VU meters with three peak LEDs; output volume control. Wow and flutter 0.05% wrms; frequency response 30-14,000 Hz (normal), to 16,000 Hz (CrO_2), to 17,000 Hz (FeCr), all ±3 dB; S/N 67 dB with Dolby $370
RT-6205. RT-6201 with ebony finish $370

RT-6101 Cassette Deck
Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system. Features nine-position Auto Program Locate Device (APLD) that scans and stops at desired selection; four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; Opto peak level display with peak hold; electronic auto stop; output volume control; mic/line mixing. Wow and flutter 0.055% wrms; frequency response 25-15,000 Hz (normal), to 16,000 Hz (CrO_2), to 18,000 Hz (metal); S/N 67 dB with Dolby $350
RT-6105. RT-6101 with ebony finish $350

RT-6001 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system. Features Auto Program Search System (APSS); three-position bias and equalization for normal, CrO_2, and FeCr tapes; electronic auto stop; output volume control; Opto peak level display. Wow and flutter 0.06% wrms; frequency response 25-15,000 Hz (normal), to 16,000 Hz (CrO_2); S/N 67 dB with Dolby $270
RT-6005. RT-6001 with ebony finish $270

RT-1515 Cassette Deck
Front-loading stereo cassette deck incorporates Dolby noise-reduction system, dc electronic governor motor, and single Micro Crystal Ferrite head. Features dual adjustable bias and equalization controls; input level controls; electronic auto stop. Frequency response 30-12,500 Hz ±3 dB (normal tape), 30-14,000 Hz ±3 dB (CrO_2 tape), 30-15,000 Hz ±3 dB (FeCr tape); S/N 62 dB with Dolby; input sensitivity/impedance 0.2 mV/6.8k ohms (mike), 50 mV/50k ohms (aux.); output level/impedance 500 mV/50k ohms (line), 0.5 mW/8 ohms (headphone); wow and flutter 0.085% wrms; fast-winding time 100 sec (C-60); 6.3" H × 16.3" W × 9.6" D $250
RT-1515B. RT-1515 with ebony finish $250

PANASONIC

RN-006 Microcassette Recorder
Two-hr two-speed microcassette recorder with electronic governor motor and capstan drive. Features built-in condenser mic; full auto-stop; LED record/battery indicators; edit function; tape speed selector; one-touch record/cue/review controls; locking pause control; five-hr rechargeable system; comes with ac adaptor, five-hr recharging pack, telephone pick up, two blank cassettes, earphones, carrying case and strap; champagne gold finish; 5¹/₂" H × 2⁷/₈" W × ⁵/₈" D $300

RS-612US Cassette Deck
Front-loading cassette deck with Dolby noise-reduction system, LH tape head and ferrite erase head, and electronic speed-control dc motor. Features separate bias and equalization selectors; twin VU meters and recording level controls; glide-open door switch; lockable pause control; record indicator lamp; digital tape counter; auto-stop. Wow and flutter 0.12% wrms; S/N 65 dB (Dolby on), 55 dB (Dolby off); frequency response 30-15,000 Hz (CrO_2 tape), 30-13,000 Hz (normal tape); input sensitivity/impedance 0.25 mV/400 ohms (mic), 60 mV/90k ohms (line); output/impedance 420 mV/22k ohms (line), 65 mV/8 ohms (headphone); fast-winding time 90 sec (C-60). 5³/₈" H × 16¹/₈" W × 9³/₈" D ..... $160-$180

RS-600US Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, super-alloy head for rec/playback and ferrite head for erase, and dc motor. Features three-position tape selector for bias and equalization; twin level meters; record/playback level controls with preset markers; limiter switch; noise filter switch; digital tape counter; auto-stop/lockable pause control. Wow and flutter 0.15% wrms; S/N 45 dB; frequency response 40-13,000 Hz (CrO_2 and FeCr tapes), 40-11,000 Hz (normal tape); input sensitivity/impedance 0.25mV/600 ohms (mike), 64 mV/390k ohms (line); output/impedance 0.7 V/50k ohms (line), 0.45 mW/8 ohms (headphone); fast-winding time 120 sec (C-60). 3⁷/₈" H × 14¹/₄" W × 9¹/₄" D ..... $130-$150

JC PENNEY

3563 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system; permalloy record/play and ferrite erase heads; dc motor; FM multiplex filter; memory reset; bias control for normal, FeCr and CrO_2 tapes; mic/line source selectors; timer standby, record mute; tape run, peak, record, memory, and Dolby LEDs; low, mid and high tone controls; power on/off; tape counter with reset; all playback/record function modes; record level meters and controls; left/right mic jacks; headphone jack; wow and flutter 0.07% wrms; frequency response 20-12,500 Hz ± 3 dB (normal tape), 20-15,000 Hz ±3 dB (CrO_2 and FeCr tapes); S/N 64 dB (CrO_2 with Dolby), 63 dB (normal tape with Dolby); THD 1.4% ..$270
3564. Similar to 3563 minus source selectors, timer standby, record mute, and memory LED; wow and flutter 0.06% wrms; frequency response 20-14,000 Hz ±3 dB (CrO_2 and FeCr tapes); S/N 61 dB (normal tape with Dolby) $220

MCS 3570 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system. Features LED ten-program memory preset; bias and equalization for normal, FeCr, and CrO_2 tapes; mic/mute/line input selector; record and output level controls; two VU meters with LED peak indicator, three-digit tape counter with reset; auto shut-off. Wow and flutter 0.09% wrms; frequency response 30-14,000 Hz (CrO_2 and normal); S/N with Dolby 64 dB (CrO_2), 63 dB (normal); wood grain vinyl cabinet with brushed aluminum faceplate; 5⁷/₁₆" H × 15³/₄" W × 10⁷/₁₆" D $250

MCS 3552 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system. Features separate bias and equalization for normal, FeCr, and special/CrO_2 tapes; separate left and right record level controls; dual VU meters; three-digit tape counter with reset; auto shut-off. Wow and flutter 0.14% wrms; frequency response 40-12,500 Hz −3 dB; S/N with Dolby 56 dB (CrO_2) and 54 dB (normal and FeCr); 6¹/₄" H × 16⁹/₁₆" W × 10¹/₁₆" D $180
MCS 3536. Similar to MCS 3552 minus FeCr tape selection; wow and flutter 0.15% wrms; response 40-15,000 Hz −3 dB (CrO_2), to 14,000 Hz (ferric oxide); 5⁷/₈" H × 14¹/₂" W × 10¹/₄" D $150

PHASE LINEAR

7000 Series Two Cassette Deck
Hidden-loaded (behind front panel) microprocessor-controlled metal-compatible stereo cassette deck with dual Dolby noise-reduction system, quartz PLL direct-drive capstan and coreless dc reel motors, and uni-crystal ferrite record/playback and separate erase heads. Features MicroScan system that automatically adjusts and optimizes bias, level, and equalization with all tape types including metal; nine memory locations with LED digital readout for storage of bias/level/equalization settings for playback accuracy; dual LED VU bar graph display with peak/peak hold/average and dimmer selectors; tape selector for standard, FeCr, CrO_2, and metal tapes with bias fine adjust; four-digit tape counter with LED digital readout; mic/line input controls; output level control, pitch control; record/playback timer capability with external timer. Wow and flutter 0.03% wrms; frequency response ±3 dB 25-16,000 Hz (standard), to 18,000 Hz (FeCr and CrO_2), to 19,000 Hz (metal); S/N 70 dB with Dolby; THD 1.0%; input sensitivity/impedance 0.3 mV/10k ohms (min), 60 mV/100k ohms (line); fast winding time 75 sec (C-60). All controls, except tape transport and LED readout and VU meter displays, behind front panel; 12¹/₂" H × 20³/₄" W × 19¹/₄" D $1350

PHILIPS

N2535 Cassette Deck
Stereo cassette deck with Dolby noise-reduction system. Features bias/equalization switches for chromium dioxide, ferro-chrome, and ferrous oxide tapes; three-digit tape counter; auto stop; multiplex filter; adjustable output level controls; illuminated recording level meters; record/overload indicator; selector switching that enables speed and direction change without going through stop. Wow and flutter 0.01%; frecuency range 30-16,000 Hz ±3 dB (ferro-chrome and chromium), 40-13,000 Hz ±3 dB (ferro); S/N 56 dB (with Dolby); fast-winding time 90 sec (C-60); mike input sensitivity 1 mV/1k ohm; 18" × 5⁷/₈" × 10¹/₄" $210
N2535BK. Black finish $230

PIONEER

CT-F1250 Cassette Deck
Microprocessor-controlled front-loading metal-compatible stereo cassette deck with Dolby noise-reduc-

tion system, closed-loop dual-capstan transport

6 CASSETTE TAPE MACHINES

with quartz-locked direct-drive capstan motor and dc fast-winding motor, and "Single-Crystal Ferrite Solid" record/playback and Alfex erase heads. Features four memory functions; monitoring-while-recording capability; two 24-segment Fluroscan average/peak/peak-hold meters; automatic bias and equalization controls; multiplex filter; mic/line mixing and recording; auto stop; quartz-locked pitch control; fast forward/rewind time 65 sec (C-60). Wow and flutter 0.03% wrms; frequency response 20-16,000 Hz ±3 dB (standard), to 17,500 Hz with CrO_2 and FeCr tapes, to 18,500 Hz (metal); S/N 69 dB with Dolby (chrome); two mic, two line, and DIN inputs; two line, DIN, and headphone outputs; 7 3/8" H × 16 9/16" W × 14 9/16" D $695

CT-F950 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, electronically controlled dc servomotor with built-in generator for capstan drive in closed-loop dual-capstan transport, and crystalline ferrite record/playback and Alfex erase heads in three-head configuration. Features digital readout tape counter; memory/repeat functions; electronic microprocessor for record/play level display (20 segments in each channel, covering a range from −20 dB to 7 dB, can also show VU's and peak level); electronic tape transport with soft-touch controls; bias adjust facility; automatic chrome tape selection; add-on recording; timer start; fast-winding time 85 sec (C-60). Wow and flutter 0.04% wrms; frequency response 25-15,000 Hz ±3 dB (standard LH tape), 25-17,000 Hz ±3 dB (chromium dioxide and FeCr tapes), 25-18,000 Hz ±3 dB (metal); S/N 59 dB (Dolby off), 69 dB (Dolby on); HD 1.3% at 0 dB; mike input sensitivity 0.3 mV-100 mV/30k ohms; 7 3/8" H × 16 9/16" W × 14 1/2" D $595

CT-F850 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc servomotor with built-in generator for capstan drive and dc high-torque fast-winding motor in closed-loop dual-capstan transport, and Sendust record and playback and Alfex erase heads. Features Fluroscan level indicators with average and peak functions. Wow and flutter 0.04% wrms; frequency response 20-17,000 Hz (standard LH tape), to 18,000 Hz (CrO_2 and FeCr tapes), to 19,000 Hz (metal tape); S/N with Dolby 69 dB; HD 1.2%; mic input sensitivity/impedance 0.3 mV-100 mV/10k ohms; 5 7/8" H × 16 9/16" W × 14 13/16" D $495

CT-F750 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, high-torque dc servomotor, and stationary four-track record/playback and two ferrite erase heads. Features auto reverse; line/mic-DIN input selector; soft-touch buttons; vertical-hold tape mounting; LED Dolby; bias and equalization for standard, FeCr, CrO_2, and metal tapes; illuminated cassette compartment; fast forward/rewind time 85 sec (C-60). Wow and flutter 0.05% wrms; frequency response 20-15,000 Hz (standard), to 17,000 Hz (FeCr and CrO_2), to 18,000 Hz (metal), all ±3 dB; S/N 69 dB with Dolby; HD 1.2% at 0 dB; mic input sensitivity/impedance 0.3 mV-100 mV/10k ohms; 5 7/8" H × 16 9/16" W × 13 1/4" D $395

CT-F650 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc servomotor, and hard permalloy record/playback and ferrite erase heads. Features automatic music selection that locates gaps between musical selections; vertical cassette holding mechanism; LED Dolby; tape selector switch; tape compartment illumination; complete complement of inputs and outputs; fast forward/rewind time 85 sec (C-60). Wow and flutter 0.05% wrms; frequency response 20-15,000 Hz (standard), to 17,000 Hz (chrome and ferrichrome), to 18,000 Hz (metal); S/N 69 dB with Dolby; HD 1.2%; 5 7/8" H × 16 9/16" W × 13 1/4" D $295

CT-F500 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and hard permalloy recording/playback and ferrite erase heads. Features flywheel capstan drive; automatic shut-off in all modes; soft-damping cassette holder; three-mode tape bias/equalization switching; left/right mic jacks; two large VU meters; three-digit tape counter; record and Dolby on indicators; fast-winding time 90 sec (C-60). Wow and flutter 0.05% wrms; frequency response 40-13,000 Hz ±3 dB (STD tape), 40-15,000 Hz ±3 dB (CrO_2 and FeCr tape); S/N 54 dB (Dolby off), 64 dB (Dolby on); HD 1.5%; mike input sensitivity 0.3 mV-110 mV/10k ohms; 5 1/2" H × 14 15/16" W × 10 1/4" D $195

REALISTIC

SCT-3000 Cassette Deck

Stereo cassette deck with dual-Dolby noise-reduction system, three heads, and dual capstan drive. Features fine bias adjust with tone; seven solenoid control logic function keys; auto rewind; and dual VU meters with LED peak indicators. Wow and flutter 0.05% wrms; frequency response ±3 dB 30-10,000 Hz (R/P Supertape Gold), 30-20,000 Hz (Supertape Gold); THD 0.9%; S/N 61 dB weighted with Supertape Gold Dolby CCIR $580

SCT-30 Cassette Deck

Front-loading stereo cassette deck with double Dolby noise-reduction system, three permalloy heads permit monitoring with or without Dolby while recording, and dual capstan drive servomotor. Features three-position bias and equalization; full auto-stop; power assist controls; record and output level controls; dual VU meters; headphone and left and right microphone jacks; push levers for fast forward, rewind, pause, stop, and eject. Frequency response 30-16,000 Hz (CrO_2 tape); wow and flutter 0.06% wrms; S/N 61 dB; 5 5/8" × 17 7/8" × 10" $400

SCT-16 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and permalloy record/play head. Features three-position bias and equalization; dual VU meters; full auto-stop; power assist controls; headphone and left/right microphone jacks; push levers for fast forward, rewind, pause, stop, and eject; tape counter. Frequency response 30-15,000 Hz; wow and flutter 0.07% wrms; S/N 60 dB; 5 1/2" × 15 1/2" × 11" $300

SCT-19 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system. Features dual VU meters; full auto-stop; bias and equalization controls; record and output level controls; headphone and left/right microphone jacks; push lever stop/eject, rewind, fast forward, and pause. Frequency response 30-14,000 Hz (CrO_2 tape); wow and flutter 0.12% wrms; S/N 59 dB; 5 1/2" × 15" × 11" $200

SCT-20 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system. Features dual VU meters; auto-stop; bias and equalization switch; tape counter; headphone and left/right microphone jacks; push-lever rewind, fast forward, and pause. Frequency response 40-13,000 Hz (CrO_2 tape); wow and flutter 0.19% wrms; S/N 53 dB; THD 2% at 1 kHz (0 VU); 3 3/4" × 11 3/4" × 9" $150

REFERENCE by QUADRAFLEX

412D Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system and two heads. Features dual VU meters with peak-reading LED; metal, special, and normal tape selector buttons; separate left/right input selectors; three-digit tape counter with reset; piano-key tape function controls include one for door. Wow and flutter 0.06% wrms; frequency response 30-18,000 Hz ±3 dB (metal); S/N 62 dB with Dolby; 6 1/4" H × 15 3/4" W × 10" D $250

ROTEL

RD-1000 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, FG servo capstan and dc servo reel motors, and hard permalloy record/playback and ferrite erase heads. Features feathertouch solenoid tape function controls with LEDs; auto stop, auto repeat, and auto rewind; three-digit tape counter with memory rewind/play; two VU meters with LED peak indicator; normal, FeCr, and CrO_2; tape selectors; record/play timer buttons with optional external timer unit; direct-function change without going through stop; fast-winding time 90 sec (C-60). Wow and flutter 0.045% wrms; 3 27/32" H × 16 15/16" W × 11 13/32" D $440

RD-2200 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronic governor dc motor, and Sendust recording/playback and ferrite erase heads. Features three-position bias and equalization controls for normal, CrO_2, and FeCr tapes with adjustable bias control; input selector for line, mic, and record mute; multiplex filter; 13-element LED bar chart peak level indicator; three-digit tape counter; pushbutton controls for reset and memory rewind; operation controls for eject, record, rewind/review, play, fast forward/cue, and pause; headphone amplifier with control; headphone and two mic jacks. Wow and flutter 0.05%; frequency response 30-17,000 Hz +3 dB (normal) and 30-19,000 Hz +3 dB (CrO_2 and FeCr tapes); S/N 64 dB with CrO_2, Dolby in; rack mountable $430

RD-2200M. Same as RD-2200 except metal-compatible deck with normal, chrome and metal tape selections; 5 7/8" H × 19" W × 10 7/32" D $450

RD-2000 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronic governor dc motor, and Sendust recording/playback head. Features three-position bias and equalization with adjustable bias control; five LED peak indicators; two VU meters; input selector for line and mic/DIN; multiplex filter; headphone and two mic jacks; damped ejection; tape counter. Wow and flutter 0.05%; frequency response 30-14,000 Hz +3 dB (normal), 30-15,000 Hz +3 dB (CrO_2), 30-16,000 Hz (FeCr); S/N 63 dB with Dolby; rack mountable; 5 5/8" H × 19" W × 10 5/8" D $370

RD-25F Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronic governor dc motor, and super hard permalloy recording/playback head. Features three-position bias and equalization with bias adjust; two VU meters; LED peak indicator; input selector for line and mic/DIN; multiplex filter; headphone jack and two mic jacks; automatic stop; output and record level controls; tape counter; wood cabinet. Wow and flutter 0.06%; frequency response 30-14,000 Hz +3 dB (normal and LH tapes), 30-16,000 Hz +3 dB (FeCr and CrO_2 tapes); S/N 63 dB with CrO_2, Dolby in; 5 5/8" H × 16 15/16" W × 10 5/8" D $340

RD-18F Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronic governor dc motor, and hard permalloy record/playback and ferrite core erase heads. Features bias and equalization for normal, FeCr, and CrO_2 tapes with bias fine adjust; auto stop; dual VU meters with peak LED; record level control; piano-key tape function controls. Wow and flutter 0.08% wrms; frequency response ±3 dB 30-13,000 Hz (normal), to 15,000 Hz (CrO_2 and FeCr); S/N 63 dB with CrO_2, Dolby in; 5 25/32" H × 16 15/16" W × 10 23/32" D $250

RD-15F Cassette Deck

Front-loading stereo cassette deck with Dolby noise-

reduction system, electronic governor dc motor, and super hard permalloy record/playback head. Features LED peak level indicator; three-position tape bias/equalization selectors; input level controls; two VU meters; cue and review; auto shutoff; tape counter; wood cabinet. Wow and flutter 0.08%; frequency response 20-13,000 Hz ±3 dB (normal and LH tapes), 20-15,000 Hz ±3 dB (FeCr and CrO_2); S/N 60 dB with CrO_2, Dolby in $250

SAE

SAE Two Line

C4 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and FG servo motor. Features logic solenoid tape function controls; three-positions bias and equalization for normal, FeCr, and high output (includes metal) tapes with variable bias; auto stop; LED peak level bar graph display; mic, line, and record mute switch; tape counter with reset; timer switch; optional remote control. Wow and flutter 0.06%; frequency response 30-18,000 Hz ±2.5 dB $500

Remote One. Remote control unit for C4 and C3D.... ..... $45

C3D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, FG servomotor, and two heads. Features solenoid logic tape function controls; auto stop; memory rewind; bias and equalization for low noise, FeCr, and CrO_2 tapes; two lighted VU meters; mic/line input selector; rec mute; record level and record balance controls; timer switch for optional external ac timer; provision for optional remote control. Wow and flutter 0.06%; frequency response 30-18,000 Hz ±3 dB; S/N 64 dB with Dolby; 5.3" H × 17.4" W × 14" D..... $400

SANKYO

STD-3000 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, frequency generator servo capstan and mechanical governor dc reel motors, and ferrite core combination record/playback and erase heads. Features dual-color fluorescent bar-graph peak level meter; provision for optional auto record/playback memory timer; auto rewind/playback; separate three-position bias and equalization for normal, FeCr, and CrO_2 tapes; recording sensitivity calibration control; 19-kHz multiplex filter; separate mic and line record level controls; output level control; logic-controlled tape function controls; three-digit tape counter with reset; fast-forward/rewind time 80 sec (C-60). Wow and flutter 0.04% wrms; frequency response 20-16,000 Hz (normal), to 18,000 Hz (CrO_2); dist. 1.2%; S/N 58 dB (CrO_2, Dolby off), improved 5 dB at 1000 Hz and 10 dB at 5000 Hz with Dolby; input sensitivity/impedance 100 mV/50k ohms (line), 0.35 mV/5k ohms (mic), 0.1 mV/1k ohm (DIN); output level 580 mV (line and DIN), 2 mW into 8 ohms (headphone); 4¹/₄" H × 17⁵/₈" W × 11⁷/₁₆" D..... $550

STD-2500 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, frequency generator servomotor, and super hard Sankyo Dynalloy head. Features built-in digital clock/timer display with pushbutton reset, memory, tape, and time controls and slow/fast setting, seconds, and sleep function buttons; dual-color fluorescent bar-graph peak meters; auto shutoff; three-position bias and equalization for normal, FeCr, and CrO_2 tapes; mic/DIN, line, and rec mute input selector switch; record level control; output level control; piano-key tape function controls; auto tape loading; fast forward/rewind time 80 sec (C-60). Wow and flutter 0.065% wrms; frequency response 30-15,000 Hz (normal), to 17,000 Hz (CrO_2); dist. 1.5%; S/N 56 dB (CrO_2, Dolby off), improved 5 dB at 1000 Hz and 10 dB at 5000 Hz with Dolby; input sensitivity/impedance 50 mV/50k ohms (line), 0.5 mV/6.8k ohms (mic); output level 580 mV (line), 2 mW (headphone); 5²⁹/₃₂" H × 17⁵/₈" W × 11⁷/₁₆" D..... $450

STD-2000 Cassette Deck

Automatic front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and super hard permalloy record/play and erase heads. Features auto shut-off; separate three-position bias and equalization switches; three-digit memory counter; LED peak indicator; twin illuminated VU meters; LED record, Dolby, and tape running indicators; line/mic/DIN input switch; piano-key tape function controls; mechanical pause; fast-winding time 90 sec (C-60). Wow and flutter 0.058% wrms; frequency response 30-14,000 Hz (normal tape), 30-18,000 Hz (CrO_2 and FeCr tapes); THD less than 1.0%; S/N 56 dB (CrO_2 tape, with filter, Dolby off) improved by 5 dB at 5 kHz and 10 dB at 5 kHz cycle or more with Dolby; crosstalk 35 dB at channel, 55 dB at track; input sensitivity (DIN/mic) 0.5 mV, (line-in) 50 mV; input impedance (DIN/mic) 5k ohms, (line-in) 50k ohms; chrome-finished panel and wood cabinet or black finish; 5¹/₂" H × 17" W × 11³/₄" D..... $310

STD-2200 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and super hard permalloy record/playback head. Features fluorescent bar-graph peak level meter; three pushbutton tape selectors for normal, FeCr, and CrO_2 tapes; pushbutton input select; record level control; output level control; LED record indicator; piano-key function controls; three-digit tape counter with reset; fast-forward/rewind time 80 sec (C-60). Wow and flutter 0.07% wrms; frequency response 30-14,000 Hz (normal), to 16,000 Hz (CrO_2); dist. 1.8%; S/N 55 dB (CrO_2, Dolby off), improved 5 dB at 1000 Hz and 10 dB at 5000 Hz with Dolby; input sensitivity/impedance 50 mV/50k ohms (line), 0.7 mV/10k ohms (mic), 0.1 mV/1k ohms (DIN); output level 580 mV (line and DIN), 2 mW into 8 ohms (headphone); 5²⁹/₃₂" H × 17⁵/₈" W × 11⁷/₁₆" D. $280

STD-1870 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and super hard permalloy record/playback and ferrite core erase heads. Features automatic shut-off; record level controls; three-position tape selector switch (CrO_2, FeCr, normal); three-digit tape counter; memory switch; record/mute switch; input select switch; output level control; piano-key tape function controls; twin illuminated VU meters with LED peak indicator; fast-winding time 90 sec (C-60). Wow and flutter 0.06% wrms; frequency response 30-14,000 Hz (normal tape), 30-17,000 Hz (CrO_2 and FeCr tapes); THD 1.1% with normal tape; S/N 55 dB (CrO_2 with filter, Dolby off) improved by 5 dB at 1 kHz and 10 dB at 5 kHz with Dolby on; input sensitivity (DIN/mic) 0.7 mV at 400 Hz, (line) 50 mV at 400 Hz; input impedance (DIN/mic) 10k ohms, (line-in) 50k ohms; crosstalk 50 dB at 1 kHz; separation 30 dB at 1 kHz; 5¹⁵/₁₆" H × 17⁵/₈" W × 9⁷/₈" D..... $250

STD-1850 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and super hard permalloy record/play and ferrite core erase heads. Features three-position tape selector switch (CrO_2, FeCr, normal); record level controls; twin illuminated VU meters; three-digit tape counter; total automatic shut-off; dual microphone jacks; headphone jack; line in/out jacks; output level control; input selector switch; fast-winding time 90 sec (C-60). Wow and flutter 0.07% wrms; frequency response 30-14,000 Hz (normal tape), 30-16,000 Hz (CrO_2 and FeCr tapes); THD 2.0% with normal tape; S/N 55 dB (CrO_2 with filter, Dolby off) improved by 5 dB at 1 kHz and 10 dB at 5 kHz with Dolby on; separation 30 dB at 1 kHz; crosstalk 50 dB at 1 kHz; input sensitivity (DIN/mic) 0.7 mV at 400 Hz, (line) 50 mV at 400 Hz; input impedance (DIN/mic) 10k ohms, (line-in) 50k ohms; available in chrome-finished panel and wood cabinet or black finish; 5¹⁵/₁₆" H × 15³/₄" W × 9⁷/₈" D..... $230

STD-1750 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, mechanical governor dc motor, and super hard permalloy record/playback and ferrite core erase heads. Features record level controls; three-digit tape counter; total automatic shut-off; two-position tape selector switch (Normal/CrO_2); dual microphone jacks; headphone jack; record indicator; fast-winding time 90 sec (C-60). Wow and flutter 0.14% wrms; frequency response 30-14,000 Hz (normal tape), 30-16,000 Hz (CrO_2 tape); THD 2.0% with normal tape; S/N 55 dB (CrO_2 tape with filter, Dolby off) improved by 5 dB at 1 kHz and 10 dB at 5 kHz with Dolby on; separation 30 dB at 1 kHz; crosstalk 50 dB at 1 kHz; input sensitivity (mic) 0.7 mV at 400 Hz, (line-in) 50 mV at 400 Hz; input impedance (mic) 10k ohms, (line-in) 50k ohms; 5¹⁵/₁₆" H × 14¹/₄" W × 9⁷/₈" D... $180

STD-1650 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, mechanical governor dc motor, and super hard permalloy record/playback and ferrite core erase heads. Features dual record level controls; automatic shut-off; two-position tape selector switch; fast-winding time 90 sec (C-60). Wow and flutter 0.16% wrms; frequency response 40-13,000 Hz (normal tape), 40-15,000 Hz (CrO_2 tape); THD 2.2% with normal tape; S/N 53 dB (CrO_2 with filter, Dolby off) improved 5 dB at 1 kHz and 10 dB at 5 kHz with Dolby on; input sensitivity (mic) 0.5 mV at 400 Hz, (line-in) 50 mV at 400 Hz; input impedance (mic) 5k ohms, (line-in) 50k ohms; 5⅜" H × 14¹/₄" W × 7⅞" D..... $140

SANSUI

SC-5330 Cassette Deck

"Direct-O-Matic" front-loading metal-compatible stereo cassette deck with dual-Dolby circuitry, FG

servo capstan and reel motors with holdback tension mechanism, special record/playback and ferrite erase heads and dc amplifier circuitry. Features three-position bias and equalization selectors for metal, CrO_2, and normal tapes; two VU meters with five-LED peak-reading indicators; memory rewind, replay, and repeat buttons; rec mute; mic/line mixing with switchable limiter; output level control; logic-controlled feather-touch tape function controls include tape lead-in; LED record, play, and pause indicators; three-digit tape counter with reset; provision for optional external play/record timer. Wow and flutter 0.038% wrms; frequency response ±3 dB 20-20,000 Hz (metal), to 17,000 Hz (CrO_2); S/N 69 dB with Dolby; black matte finish with detachable rack-mounting handles; 7¹/₁₆" H × 19" W (handles on) × 12" D $520

SC-3300 Cassette Deck

"Direct-O-Matic" front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system FG servo capstan and reel motors with holdback tension mechanism, and special record/playback and ferrite erase heads. Features separate bias and equalization for metal, CrO_2, and normal tapes; 16-segment LED peak-reading indicators; memory rewind; auto replay and repeat functions; record mute; logic-controlled feather-touch tape function controls include tape lead-in; LED record, pause, and play indicators; mic/line mixing; provision for external record/play timer. Wow and flutter 0.04%; frequency response 20-16,000 Hz ±3 dB (metal and CrO_2); S/N 69 dB with Dolby; simulated rosewood-grain finish; 6⁹/₁₆" H × 16¹⁵/₁₆" W × 12" D..... ..... $420

SC-3330. Same as SC-3300 except has black matte finish with detachable rack-mounting handles; 6⁹/₁₆" H × 19" W (handles on) " 12" D $420

SC-1300 Cassette Deck

"Direct-O-Matic" front-loading metal-compatible

6 CASSETTE TAPE MACHINES

stereo cassette deck with Dolby noise-reduction system, dc drive motor and constant-tension holdback mechanism, and special record/playback and ferrite erase heads. Features 16-segment LED peak-reading indicators; three-position bias and equalization for metal, CrO_2, and normal tapes; record mute; tape lead-in; separate input/output level controls; provision for external timer activation. Wow and flutter 0.05%; frequency response 20-16,000 Hz ±3 dB (metal and CrO_2); S/N 69 dB with Dolby; simulated rosewood finish; 6⁵/₁₆" H × 16¹⁵/₁₆" W × 12⅜" D $320

SC-1330. Same as SC-1300 except has black matte finish with detachable rack-mounting handles; 6⁵/₁₆" H × 19" W (with handles) × 12⅜" D $320

D-90 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and super hard permalloy record/playback and ferrite erase heads. Features separate bias and equalization for normal, FeCr, and CrO_2 tapes; dual VU meters; record level control; piano-key tape function controls; provision for external timer with auto shut-off. Wow and flutter 0.055%; frequency response ±3 dB 35-15,000 Hz (CrO_2), to 14,000 Hz (normal); S/N 65 dB with Dolby; metal cabinet; 5¾" H × 16¹⁵/₁₆" W × 9½" D $200

SANYO

RD5350 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, PLL dc servomotor with 34 stator and 34 rotor poles, and permalloy recording head. Features LED peak indicators; separate calibrated input and output level controls; two lighted VU meters; record mute; standby timer; full automatic stop; locking pause; separate bias and equalization switching (CrO_2 and normal); separate left and right microphone jacks; headphone jack; digital tape counter; Dolby on/off switch; line-in, mic/DIN input button. Frequency response up to 17,000 Hz with CrO_2 and FeCr tape; S/N 64 dB (Dolby on); simulated walnut covered metal cabinet $240

RD5340 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and hard permalloy record/play and ferrite erase heads. Features dual fluorescent peak-hold bar graph display; bias and equalization buttons for normal, FeCr, and CrO_2 tapes; timer standby with optional external timer; mic mixing; output level control; rec mute; piano-key tape function controls; LED Dolby and record indicators. Wow and flutter 0.05% wrms; frequency response 30-17,000 Hz ±3 dB (CrO_2); S/N 64 dB with CrO_2, Dolby on; 5½" H × 16½" W × 10½" D $230

RD8400A Cassette/8-Track Deck

Front-loading unit combines cassette record/play deck with 8-track cartridge record/play deck; permits recording either on cassette or 8-track and transferring from one to the other. Cassette section: frequency response 60-12,000 Hz; S/N 45 dB; wow and flutter 0.25% rms; speed accuracy ±2.5%; CrO_2/standard tape selector; tape counter; pause control. 8-track section: frequency response 30-12,000 Hz; S/N 42 dB; wow and flutter 0.25% rms; lighted program indicators; LED record and end-of-tape indicators; locking pause; two lighted VU meters; separate record-level controls $200

RD5035 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, Sendust Alloy record/playback head and ferrite erase head, and dc high torque motor. Features equalization and bias switches for metal, CrO_2, FeCr, and normal tapes with LEDs; two input level controls for both channels; multiplex filter; dual VU meters; digital tape counter with reset; auto stop; air damped cassette door; headphone jack; two mic jacks with left doubling as mono mic. Wow and flutter 0.08%; frequency response 30-19,000 Hz $190

RD5250 Cassette Deck

Stereo record/playback cassette deck with Dolby noise-reduction system; tape selector; permalloy recording head; calibrated input/output level controls; separate LED record-on and Dolby-on indicators; two large VU meters; locking pause control; bias/equalization switching; full automatic stop; viscous damped cassette door $170

RD5030 Cassette Deck

Front-loading stereo record/playback deck with Dolby noise-reduction system; tape select switch for normal, CrO_2, and FeCr tape; pause control; calibrated level controls; separate bias/equalization switching; full automatic stop; left and right mike inputs; frequency 30-16,000 Hz; wow and flutter 0.08%; S/N 62 dB (Dolby on) $160

RD5008 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, high torque dc motor, and two heads. Features auto stop; CrO_2 and normal tape selector; dual five-LED VU bar graph indicators; input level controls; piano-key tape function controls. Wow and flutter 0.1% wrms; frequency response 30-14,000 Hz ±3 dB (CrO_2); S/N 60 dB (CrO_2 with Dolby); 5" H × 14" W × 8" D. $130

PLUS Series

RD5372 Cassette Deck

Front-loading microprocessor-controlled metal-

compatible stereo cassette deck with dual-Dolby noise-reduction system, dc servo capstan and dc governor reel motors, and separate but integrated Sendust Alloy record and play heads and ferrite erase head; solenoid transport control. Features digital tape counter readout display with reset and memory rewind; auto rewind and repeat; PLL speed control; timer standby for record/playback with provision for external timer/programmer; tape/source monitor switch; defeatable FM multiplex filter; defeatable peak limiter; normal, FeCr, CrO_2, and metal tape selection; lighted front-panel function and tape selection indicators; LED record, pause, and play indicators; two VU meters with peak LEDs; removable damped door. Wow and flutter 0.04% wrms; frequency response ±3 dB 30-19,000 Hz (metal), to 18,000 Hz (CrO_2 and FeCr), to 15,000 Hz (normal); S/N with Dolby 70 dB (metal), 69 dB (FeCr), 67 dB (CrO_2), and 66 dB (normal); THD 0.8% (metal), 1.5% (CrO_2); input sensitivity/impedance 0.26 mV/600 ohms (mic), 100 mV/100 ohms (line); line output level/load impedance 1 V/7k ohms; channel separation 42 dB; crosstalk −70 dB; 6¼" H × 17⅜" W × 12⅜" D $500

RD5370. Similar to RD5372 without digital tape counter readout display, LED record, play, and pause indicators, auto rewind and repeat, and PLL-synthesized speed control; CrO_2 and FeCr frequency response 30-17,000 Hz, normal 30-13,000 Hz; THD 1.7% (metal), 2.0% (CrO_2) $400

D65 Cassette Deck

Front-loading metal-compatible auto-reverse cassette deck with Dolby noise-reduction system, Sendust Alloy record/playback and ferrite erase heads, and dc servo capstan and dc governor reel motors. Features separate bias and equalization for metal, CrO_2, FeCr, and normal tapes; defeatable FM multiplex filter; auto stop; edit record mute control; digital tape counter with reset; timer standby function with provision for optional external timer/programmer; output level control; two lighted VU meters; feather-touch solenoid transport controls and mode selectors; lighted tape direction arrows; damped door; headphone jack; two mic jacks with left jack doubling as mono mic jack. Wow and flutter 0.04% wrms; frequency response ±3 dB 20-18,000 Hz (metal), to 16,000 Hz (CrO_2 and FeCr), to 13,000 Hz (normal); S/N with Dolby 70 dB (metal), 69 dB (FeCr), 67 (CrO_2), and 66 dB (normal); THD 0.8% (metal), 1.5% (CrO_2); input sensitivity/impedance 0.3 mV/400-10,000 ohms (mic), 50 mV/50 ohms (line); line output level/load 0.53 V/7k ohms; channel separation 42 dB; crosstalk −70 dB; 5¼" H × 16½" W × 10⅜" D $400

D62 Cassette Deck

Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system, Sendust Alloy record/playback and ferrite erase heads, and dc servomotor. Features automatic music select system (automatically locates gap between musical selections on cassette) with flashing tape direction arrows; two-color fluorescent peak-hold level bar graph bias and equalization for metal, CrO_2, FeCr, and normal tapes; displays with high-speed peak/standard VU selection switch; mic/line mixing; output level control; defeatable FM multiplex filter; auto stop; piano-key transport controls include record mute; digital tape counter with memory rewind; timer standby with provision for external tuner and programmable timer; removable damped door; black metal finish. Wow and flutter 0.04%; frequency response ±3 dB 20-20,000 Hz (metal), to 17,000 Hz (CrO_2 and FeCr), to 13,000 Hz (normal); S/N with Dolby 70 dB (metal), 67 dB (CrO_2), 69 dB (FeCr), and 66 dB (normal); THD 0.8% (metal), 1.5% (CrO_2); input sensitivity/impedance 0.3 mV/400-10,000 ohms (mic), 50 mV/50k ohms (line); output level/load 530 mV/7k ohms (line), 50 mV/8 ohms (phone); channel separation 42 dB; crosstalk −70 dB; 5¼" H × 17⅝" W × 11⅜" D $330

D60. D62 with silver-faceplate $330

D55. Similar to D62 without automatic music select system $290

D45. Similar to D55 without dual-mode bar graph display and memory rewind; has one-color peak-hold bar graph display; wow and flutter 0.05% wrms; frequency response ±3 dB 30-19,000 Hz (metal), to 17,000 Hz (CrO_2 and FeCr), to 13,000 Hz (normal); S/N with Dolby 67 dB (metal), 66 dB (FeCr), 64 dB (CrO_2), 63 dB (normal); headphone output/load 32 mV/8 ohms; channel separation 38 dB; 5⅜" H × 16½" W × 11½" D $260

H.H. SCOTT

670D Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc mo-

tor, and super hard permalloy heads. Features three-position bias and equalization for normal, CrO_2, and FeCr tapes; soft eject mechanism; illuminated cassette compartment; split channel record level control; variable output control; automatic stop; tape memory rewind; LED record, Dolby, and peak level indicators; dual VU meters; three-digit tape counter; line/mic input selector; headphone and two mic jacks. Wow and flutter 0.07% wrms; frequency response 25-14,000 Hz (normal), 25-16,000 Hz (CrO_2 and FeCr tapes); S/N ("A" weighted) 64 dB with Dolby, 56 dB normal; fast forward and rewind time 90 sec; erasure 70 dB; 5¼" H × 17" W × 11¾" D $250

SHARP

RT-4488 Cassette Deck

Microprocessor-controlled metal-compatible front-loading stereo cassette deck with Dolby noise-re-

duction system, frequency-generated servomotor, and superhard permalloy head. Features auto program locate device (APLD) with five separate memory functions (locates beginning of selection, automatically plays any segment of tape in forward or reverse modes, automatic on/off, repeatedly plays certain segment of tape, and has rewind and tape counter memory); quartz digital clock and LCD display; LCD electronic tape and elapsed time displays; Opto peak level display with peak hold function; LED record and Dolby indicators; separate mic and line input level controls; four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; auto stop; illuminated tape compartment. Wow and flutter 0.048% wrms; frequency response 20-16,000 Hz (normal), to 17,000 Hz (CrO_2), to 20,000 Hz (metal); S/N 68 dB with Dolby $500

RT-2266 Cassette Deck
Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system and solenoid-controlled transport operations. Features nine-position auto program locate device (APLD) (locates any selection in forward or reverse); Opto peak level display with peak hold; mic/line mixing; output volume control; four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; timer/start mechanism. Wow and flutter 0.045% wrms; frequency response 25-15,000 Hz (normal), to 16,000 Hz (CrO_2), to 18,000 Hz (metal); S/N 67dB with Dolby $450

RT-3388A Cassette Deck
Microprocessor-controlled front-loading stereo cassette deck with Automatic Program Locate Device (APLD), Dolby noise-reduction system, servo-controlled dc motor, and hard permalloy record/playback head and ferrite erase head. Features five forms of memory (can be programmed to find the start and automatically play any segment of cassette tape by going either forward or in reverse, can turn itself on and off, has both rewind and tape counter memory, and can be programmed to repeatedly play a certain segment of tape); Quartz digital clock and complete LCD display; LCD electronic tape and elapsed time displays; two VU meters; LED peak level, record and Dolby indicators; individual input level controls for mic and line; separate bias and equalization settings; Hall effect IC full auto stop; illuminated tape compartment. Wow and flutter 0.55% wrms; frequency response 30-16,000 Hz (FeCr tape); S/N 64 dB (Dolby on) $410

RT-2251 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, two dc motors, and permalloy record/playback head. Features Automatic Program Search System that scans in forward and reverse modes and stops at desired selection; soft-touch solenoid tape function controls; LED control display; three-digit tape counter with reset; two VU meters with LED peak indicator; high/low bias and equalization buttons; mic/line input selector; left and right record level controls; output level control. Wow and flutter 0.055% wrms; frequency response 25-17,000 Hz (FeCr); S/N 66 dB with Dolby . $360

RT-1199 Cassette Deck
Front-loading metal-compatible stereo cassette deck with Dolby noise-reduction system. Features nine-position auto program locate device (scans tape and stops at desired selection); four-position bias and equalization for normal, CrO_2, FeCr, and metal particle tapes; Opto peak level display with peak hold function; electronic auto stop; output volume control; mic/line mixing. Wow and flutter 0.058% wrms; frequency response 30-15,000 Hz (normal), to 16,000 Hz (CrO_2), to 18,000 Hz (metal); S/N 67 dB with Dolby..... $330

RT-1177 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system. Features three-position bias and equalization for normal, CrO_2, and FeCr tapes; electronic auto stop; output volume control; Opto peak level display; auto program search system. Wow and flutter 0.065% wrms; frequency response 30-15,000 Hz (normal), to 16,000 Hz (CrO_2); S/N 67 dB with Dolby $270

RD110AC Micro Cassette Recorder
Three-cubic-centimeter micro cassette recorder features capstan drive system, two-speed control system, built-in electret condenser mic, auto stop, electronic pause, three-digit tape counter, cue/review, LED record/battery indicator, earphone monitoring, and two-way power supply; accepts two AA batteries; includes ac adaptor $250

RT-1165 Mk II Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, Automatic Program Search System (The Sharp Eye), servo-controlled dc motor, and narrow gap permalloy head. Features two VU meters; LED peak level indicator; mic/line mixing with individual level controls; separate bias and equalization switches; automatic end-of-tape shut-off; mechanical pause control; digital tape counter; mic/line selector and editor button. Wow and flutter 0.08% wrms; frequency response 25-16,000 Hz (FeCr); S/N 62 dB $240

RT-1157 Mk II Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, Automatic Program Search System (The Sharp Eye), servo-controlled dc motor, and narrow gap permalloy head. Features two VU meters; LED peak level indicator; individual bias and equalization switches; automatic end-of-tape shut-off; mechanical pause control; line/mic input selector switch; front panel inputs for stereo headphones; digital tape counter. Wow and flutter 0.08% wrms; frequency response 30-16,000 Hz (FeCr); S/N 62 dB $220

RT-1144 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system. Features three-position bias and equalization; input level control; electronic auto stop; auto program search system (APSS). Wow and flutter 0.08% wrms; frequency response 30-14,000 Hz (normal), to 15,000 Hz (CrO_2 and FeCr tapes); S/N 62 dB with Dolby $190

RT-1125 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction, Automatic Program Search System (The Sharp Eye), servo-controlled dc motor, and narrow gap permalloy head. Features two VU meters; LED record indicator; individual bias and equalization switches; automatic end-of-tape shut-off; mechanical pause control front panel inputs for stereo headphones and microphones; digital tape counter. Wow and flutter 0.09% wrms; frequency response 40-13,000 Hz; S/N 56 dB $170

SHERWOOD

CD-200 CP Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, FG servo dc motor, and sendust record/playback and ferrite erase heads. Features three-position bias and equalization for normal, FeCr, and CrO_2 tapes; two record level controls with mic/DIN and line input switch; three-digit tape counter with reset and memory rewind; output level control; two VU meters with peak LED; piano-key tape function controls; auto shut off. Wow and flutter and S/N certified upon purchase; frequency response 30-17,000 Hz +3 dB (CrO_2 and FeCr); HD 1.2% at 1000 Hz, 0 dB; input sensitivity/impedance 0.4 mV/100k ohms (mic), 90 mV/100k ohms (line), 2.0 mV (DIN); fast forward/rewind time 95 sec (C-60); 6" H × 16⅞" W × 12¼" D $330

SONY

TC-D5 Portable Cassette Deck
Portable stereo cassette deck with Dolby noise-reduction system, coreless dc servomotor in capstan drive transport, electronic feedback load stabilizer and dc-dc converter, and hard ferrite-and-ferrite head. Features three-way power supply through ac, battery, or car/boat 12-V adapter operation; two VU meters with peak-level LEDs; LED battery life span; three-position tape switch for normal, ferrichrome, and CrO_2 tapes; high-level limiter; 20-dB microphone attenuator; dual input controls; built-in monitor, speaker, and headphone jack; auto shutoff;

auto stop; piano-key tape function controls. Wow and flutter 0.06% wrms, 0.17% (DIN 45507); frequency response ±3 dB 30-16,000 Hz (FeCr), to 15,000 Hz (EHF and SHF tapes); S/N (IHF A weighted) 59 dB with FeCr tape, Dolby off (improves 5 dB at 1000 Hz and 10 dB at 5000 Hz or above with Dolby); fast-forward/rewind time 150 sec (C-60); weight 3 lb, 4 oz; 1⅞" H × 9⅜" W × 6⅝" D $680

TC-K96R Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, brushless and slotless capstan-drive motor with built-in frequency generator and brushless and slotless reel motor, and ferrite-and-ferrite record/playback and two erase heads. Features record/playback auto reverse with microprocessor-controlled record/playback preselect functions for auto stop at end of side, auto stop after both sides are over, or repeat tape three times; solenoid tape function controls on removable front panels (also functions as remote control unit) with illuminated indicators on transport and remote unit; three-position bias and equalization for normal, FeCr, and CrO_2 tapes; two VU meters with three LED peak indicators; three-digit tape counter with memory reset; line and mic mixing with separate level controls for each channel; headphone/line output level control; timer standby with optional external timer unit. Wow and flutter 0.05% wrms; frequency response ±3 dB 30-16,000 Hz (FeCr), to 15,000 Hz (CrO_2), to 13,000 Hz (normal); THD 1.3%; S/N without Dolby 59 dB (FeCr), 55 dB (CrO_2), 53 dB (normal); fast winding time 85 sec (C 60); includes 16-ft remote control cable; 6⅛" H × 18⅛" W × 12⅞" D $620

TC-K75 Cassette Deck
Front-loading microprocessor-controlled metal-compatible stereo cassette deck with Dolby noise-reduction system, BSL dc servo capstan and servo spooling reel motors, and ferrite-and-ferrite record/playback and erase heads in three-head configuration. Features 16-segment LED peak-reading meter display with auto/manual peak hold reset; separate four-position bias and equalization switches for normal, FeCr, CrO_2, and metal tapes with variable bias adjust; 19-kHz switchable filter; logic-controlled solenoid tape function controls; auto-space record mute; timer-activated record/play; record level control with line/mic input selector; tape/source monitor switch; separate bias/rec level calibration control; headphone/line output level control; auto play with memory; auto stop; three-digit tape counter with reset; provision for optional remote control. Wow and flutter 0.04% wrms; frequency response 30-18,000 Hz ±3 dB $600
TC-K65. Similar to TC-K75 without variable bias adjust, tape/source monitor switch, separate bias/record level calibration control, and headphone/line output level control; has sendust-ferrite record/playback head and Random Music Sensor (RMS) that preprograms up to 16 selections $500

TC-K60 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, brushless and slotless capstan-drive motor, and ferrite-and-ferrite record/playback and erase heads. Features illuminated dual-color liquid-crystal peak program vertical bar meter display with auto/manual peak hold reset buttons; automatic music sensor preselects nine programs with LED digital program readout and clear and program buttons; three-digit tape counter with memory/auto

6 CASSETTE TAPE MACHINES

music sensor button; three-position bias and equalization with normal, FeCr, and CrO_2 tapes; timer standby with optional external timer unit; rec mute; record level control with line and mic input selectors, line/headphone output level control; auto shut-off. Wow and flutter 0.045% wrms; frequency response ±3 dB 30-16,000 Hz (FeCr), to 15,000 Hz (CrO_2), to 13,000 Hz (normal); THD 1.3%; S/N without Dolby 59 dB (FeCr), 55 dB (CrO_2), 53 dB (normal); fast-winding time 90 sec (C-60); 6⅛" H × 18⅛" W × 12⅞" D..... $550

TC-K55 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, BSL dc servo capstan and servo spooling reel motors, and sendust-ferrite record/playback head. Features separate three-position bias and equalization switches for FeCr, CrO_2, and normal tapes; switchable 19-kHz filter; record level control with mic/line input selector; dual VU meters with five-LED peak-reading indicators; logic-controlled solenoid tape function controls; auto-space rec mute; auto stop; three-digit tape counter with reset. Wow and flutter 0.04% wrms; frequency response ±3 dB 30-17,000 Hz (FeCr), to 16,000 Hz (EHF), to 15,000 Hz (SHF); S/N (IHF A weighted) 58 dB with FeCr tape, Dolby off; 5⅛" H × 17" W × 11½" D $400

TC-K45 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, tri-duty dc servomotor, and ferrite-and-ferrite record/playback head. Features three-position bias and equalization switches for normal, FeCr, and CrO_2 tapes; record level control; mic/line input selector; 16-segment LED VU/peak-reading level display; switchable 19-kHz filter; piano-key tape function controls; auto play; rec mute; auto stop; three-digit tape counter with reset and memory. Wow and flutter 0.05% wrms; frequency response 30-15,000 Hz ±3 dB (FeCr); S/N (IHF A weighted) 58 dB with FeCr tape, Dolby off; 5⅛" H × 17" W × 11½" D $320

TC-K35. Similar to TC-K45 without 16-segment LED peak-reading display and memory on/off; has dual VU meters with peak-reading LED $250

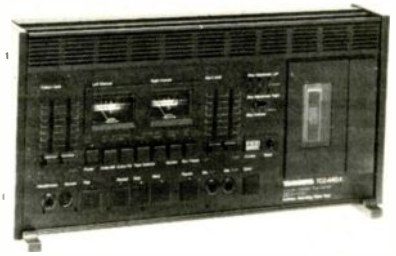
TC-K1A Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and two heads. Features equalization switch for normal, FeCr, and CrO_2 tapes; two VU meters; record level control; three-digit tape counter with reset; piano-key tape function controls. Wow and flutter 0.08% wrms; frequency response ±3 dB 50-13,000 Hz (FeCr and CrO_2), to 11,000 Hz (normal); THD 2.0%; S/N without Dolby 55 dB (FeCr), 53 dB (CrO_2), 51 dB (normal); 5¾" H × 17⅛" W × 10¼" D..... $180

TANDBERG

TCD 440A Cassette Deck

Metal-compatible stereo cassette deck with dual Dolby noise-reduction system, separate record,



playback, and Tandberg erase heads (80 dB erasure at 1000 Hz and 60 dB erasure at 100 Hz), and three motors in dual capstan transport system. Features "DYNEQ™" record equalization circuitry designed to automatically adjust record pre-emphasis of deck to maximize potential treble response while simultaneously minimizing treble distortion; "Actilinear" recording system; dual peak-reading meters with second scale reflecting metal-particle signal levels; 10-kHz test oscillator; bias adjust controls for ferric, CrO_2, and metal tapes with set of left/right LEDs; separate slider input and output level controls; source/tape monitor button; record preset; three-digit tape counter with reset; PROM logic-controlled tape function controls with LEDs; LED Dolbys, tape I and II/metal, source/tape, rec preset on/off, and power on/off indicators; optional PCM infrared wireless remote control available. Frequency response 30-20,000 Hz ±3 dB; S/N 70 dB ("A" weighted); anodized matte black finish. $1600

TCD 340A Cassette Deck

Front-loading stereo cassette deck with four Dolby-B processors, three motors, and separate adjustable azimuth recording and playback heads and dual-gap erase head. Features Actilinear recording system; solenoidless operation; electronic logic tape function controls; equalized peak-reading/VU meters; variable input/output controls; mode indicator lights; tape selector switch; multiplex filter; front-panel electronic editing; pneumatically-damped cassette door; digital tape counter. Wow and flutter 0.12% wrms, 0.08% (JIS); frequency response 30-20,000 Hz; S/N 65 dB (IEC A); horizontal or vertical operation; rack mountable..... $1150

TCD 320 Cassette Deck

Horizontal- or vertical-operating stereo cassette deck with Dolby B noise-reduction system and synchronous record/replay, fast forward, and back wind motors in dual capstan closed-loop transport system. Features self-adjusting input amplifier; equalized peak-reading VU meters; defeatable multiplex filter; headphone output and playback volume controls. Wow and flutter 0.13% wrms (record/playback), 0.09% (JIS); frequency response 30-18,000 Hz; S/N 65 dB min..... $700

TCR-222 Cassette Deck

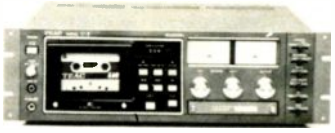
Top-loading cassette deck for mono recording and playback; has three-motor system, one synchronous hysteresis motor for recording and playback and two servo dc motors for fast winding, and dual-capstan closed-loop drive system. Features peak-reading meter; tape counter; output and input level controls; bass and treble controls; large built-in speaker and amplifier with output power of 12 W continuous. Wow and flutter (DIN) 0.2%; frequency response 40-14,000 Hz (DIN); S/N (DIN) 58 dB; max. dist. 3% at 0 dB; mic input suitable for dynamic microphone with impedance less than 700 ohms; mic input sensitivity 0.1 mV to 17 mV at 200 ohms..... $600

TEAC

C-1 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and three-motor and three-head dual-capstan transport system with PLL dc servo capstan and two dc coreless reel motors. Features LSI logic tape function operation controls; pitch control to vary tape speed up to ±4%; double-action input controls; two peak program VU meters; three-position bias and equalization switch; optional interchangeable bias/equalization card, CX-8; three-position monitor switch; switchable Dolby/dbx noise reduction system with optional dbx II Interface; input selector switch for mic/mic-with-attenuation/line; memory function for auto-stop/repeat; timer control switch; provision for optional remote control unit. Wow and flutter 0.04% (NAB weighted); frequency response 31.5-18,000 Hz ±3 dB (CrO_2), 31.5-16,000 Hz ±3 dB (Hi-Fi); S/N 60 dB, improved 5 dB at 1 kHz and 10 dB over 5 kHz with Dolby; fast-winding time 100 sec (C-60); two mic inputs −72 dB (0.25 mV), 600-ohm impedance; two line inputs 60 mV, 50,000-ohm impedance; available in champagne or brown; 6½" H × 19" W × 13⅞" D..... $1350

C-2. Similar to C-1 except has two motors and accepts metal-particle tape; wow and flutter 0.05%; frequency response 20-20,000 Hz (metal or



chrome); S/N 68 dB with Dolby, 90 dB with dbx (optional) $1000

C-3. Similar to C-2 without provision for optional dbx II Interface and plug-in bias/equalization modules; S/N 58 dB, improved 5 dB at 1000 Hz, 10 dB over 5000 Hz with Dolby..... $600

CX-650R Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system. Features solenoid-operated bi-directional record/play; feather-touch micro-switched logic tape function controls; separate three-position bias and equalization; programmable auto reverse/continuous play; programmable timer function; record mute; tape counter with memory rewind; provision for optional remote control unit..... $700

A-601R Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, FG servo-controlled dc motor, and two heads for erase and record/playback. Features newly developed transport for reverse playback; easy change of direction by touching electronic button; record, Dolby, and record/mute indicators; three-position bias and equalization switch; memory function; mic/line mixing; peak-level meters; timer switch for automatic record-start; 1/mono mic input jack; fast-winding time 100 sec (C-60). Wow and flutter 0.08% (NAB, weighted); frequency response 30-16,000 Hz (CrO_2), 30-13,000 Hz (hi-fi); S/N 55 dB, improved 5 dB at 1 kHz and 10 dB over 5 kHz with Dolby; two mic inputs 0.25 mV (−72 dB) at 600-ohm impedance; two line inputs 60 mV at 50,000-ohm impedance; 6¹¹⁄₁₆" H × 17⁵⁄₁₆" W × 13³⁄₁₆" D..... $650

A-550RX Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system and dbx circuitry, dc servomotor, and high-density ferrite erase and record/playback heads. Features feather-touch microprocessor-controlled tape function controls; rec/mute control; programmable record/play timer; three-position bias and equalization; separate left and right record level controls; output level control; mic/line switching; three-digit tape counter with memory rewind. Wow and flutter 0.06% wrms; frequency response 30-16,000 Hz (chrome); S/N 56 dB, 66 dB with Dolby over 10,000 Hz, 90 dB with dbx; 147 mm H × 440 mm W × 345 mm D $550

A-430 Cassette Deck

Front-loading metal-compatible stereo cassette deck with dual Dolby noise-reduction system, three-head reproduction system and dc servomotor. Features automatic bias scanning system with calibrated bias selector and fine bias adjust for normal, CrO_2, and metal tapes; two peak-reading meters; tape/source monitor switch; separate mic and line record level controls; three-digit tape counter with memory rewind; rec mute; piano-key tape function controls. Wow and flutter 0.07% wrms; frequency response 30-17,000 Hz (metal); S/N 55 dB, improved 5 dB at 1000 Hz and 10 dB over 5000 Hz with Dolby; 160 mm H × 410 mm W × 300 mm D. $500

A-510 Cassette Deck

Front-loading stereo cassette deck with Dolby noise-reduction system, high-density ferrite record/playback and erase heads, and FG dc servomotor. Features fluorescent liquid peak-reading bar graph display; feather-touch micro-switched logic tape function controls; differential gear-coupled record level controls; output level control; separate three-position bias and equalization; programmable timer function; three-digit tape counter with memory rewind; rec mute; provision for remote control... $475

A-500. Same as A-510 except has peak program VU meters instead of bar graph..... $425

A-300 Cassette Deck
Front-loading stereo cassette deck with dual-Dolby circuitry, tension servo system with FG dc servomotor, and three-head system. Features mic/line mixing; output level control; separate two-position bias and equalization selectors; tape counter with memory rewind $425

CX-270 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system and servo-controlled transport motors. Features fluorescent bar graph VU meters with selectable peak-hold manual/automatic reset modes; separate bias and equalization for normal and CrO_2 tapes; mic/DIN and line input selector; separate right/left record level controls; LED record and Dolby; piano-key tape function controls. Wow and flutter 0.07% wrms; frequency response 30-16,000 Hz; S/N 65 dB with Dolby; 142 mm H × 410 mm W × 300 mm D $250
CX-210. Same as CX-270 except has standard VU meters instead of bar graph $200

M-124 Syncaset Cassette Deck
Front-loading Simul-Sync stereo cassette deck with Dolby noise-reduction system, FG dc servomotor, and record/playback and erase heads. Features Simul-Sync (for monitoring on one track while simultaneously recording on another through the same head) with cross-feed switch for slight blending of left and right channels; mic blend level control with left/blend and right mic jacks; independent bias and equalization selectors for normal and CrO tapes; separate left and right record level controls; mic/DIN and line input selector; three-digit tape counter with memory rewind; two VU meters; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.07% (NAB weighted); frequency response 30-16,000 Hz (CrO_2); S/N 55 dB, improved 5 dB at 1000 Hz and 10 dB at 5000 Hz with Dolby; input sensitivity/impedance 60 mV/50k ohms (line), 0.25 mV/600 ohms (mic); 6¼" H × 16⅛" W × 11½" D $450

TECHNICS by PANASONIC

RS-M68 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, FG dc servomotor, and four-track Sendust Extra (SX) record/playback head. Features full auto reverse record/playback with three-position mode switch (continuous play/auto stop at end of reverse record or play cycle/auto reverse that disengages after end of side); two-color fluorescent bar graph peak meters with adjustable meter light switch; forward and reverse cue/review; three-digit tape counter; memory auto play, rewind auto play, and memory stop; separate three-position bias and equalization for CrO_2, FeCr, and normal tapes; input level control with line and mic/DIN input selector; output level control; timer standby switch. Wow and flutter 0.06% wrms; frequency response 20-17,000 Hz (CrO_2 and FeCr); S/N 67 dB with Dolby $550

RS-M56 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, FG dc servomotor, and HPF record/playback head. Features Micro-Computer Music Selector that quickly searches and stops at user-specified song (20-selection capacity) with music select and present status tape direction arrows; two-color fluorescent bar graph peak meters; separate three-position bias and equalization for normal, FeCr, and CrO_2 tapes with bias fine adjust; rec mute; cue and review with quick review; separate line and mic input level controls; output level control; three-digit tape counter with memory auto play; timer standby. Wow and flutter 0.045% wrms; frequency response 30-17,000 Hz (CrO_2 and FeCr); S/N 67 dB with Dolby $500

RS-M63 Cassette Deck
Front-loading metal-compatible stereo cassette deck with dual Dolby circuitry, combination wide-gap record/narrow-gap playback heads in single housing and double-gap sendust/ferrite erase head, and high-torque dc motor. Features three-head five-LED function display; two-color fluorescent bar graph peak meters with adjustable meter light control; three-position bias and equalization selector for normal, FeCr, and CrO_2 tapes with bias adjust control and separate metal tape switch; separate line and mic input level controls; tape/source monitor switch; output level control; three-digit tape counter with memory auto play; cue and review with quick review; timer standby. Wow and flutter 0.05% wrms; frequency response 20-20,000 Hz (metal), to 18,000 Hz (CrO_2 and FeCr); S/N 67 dB with Dolby $450

RS-M44 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, FG dc servomotor, and HPF record/playback head. Features two-color fluorescent bar graph peak meters; separate three-position bias and equalization for normal, FeCr, and CrO_2 tapes with bias fine adjust; cue and review with quick review and music selector; three-digit tape counter; memory auto play/memory rewind/rewind auto play; timer standby. Wow and flutter 0.05% wrms; frequency response 30-17,000 Hz (CrO_2 and FeCr); S/N 67 dB with Dolby $400
RS-M33. Similar to RS-M44 except without bias fine adjust and switchable multiplex filter in Dolby system; has auto stop $350

RS-M22 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and LH record/playback head. Features fluorescent bar graph peak meters; separate three-position bias and equalization for normal, FeCr, and CrO tapes; cue and review with quick review; rewind auto play; auto stop. Wow and flutter 0.05% wrms; frequency response 30-16,000 Hz (CrO_2 and FeCr); S/N 67 dB with Dolby $300

Professional Series

RS-9900US Cassette Deck
Incorporates closed-loop, double-capstan, three-motor drive, separate amplifier unit, and Dolby noise-reduction system. Features memory play/rewind; pitch control; remaining tape time meter; calibration controls for Dolby play and record, bias, equalization; tape/source monitoring; mike attenuator; tape selection switch; 400- and 8000 Hz test oscillators; MPX filter. Amp unit: S/N 67 dB with Dolby; 55-dB dynamic range (mike amp recording capacity). Tape transport: wow and flutter 0.04% wrms; frequency response 25-18,000 Hz +3 dB (normal tape), to 20,000 Hz with CrO_2 tape; fast-winding time 70 sec (C-60); two HPF record/play and ferrite erase heads; transport: 7⅜" H × 19" W × 14¾" D; amp: 6⅞" H × 19" W × 14¾" D. $2000

RS-M95 Cassette Deck
Front-loading quartz-locked metal-compatible stereo cassette deck with Dolby noise-reduction system, quartz-locked direct-drive motor, and hot-pressed ferrite record/playback and erase heads in three-head system. Features dual-color fluorescent VU/instant peak/peak hold bar graph display; four-position bias and equalization for normal, FeCr, CrO_2, and metal tapes with bias fine adjust; microprocessor tape counter with memory play/rewind/stop; optional RP-9690-P or RP-070 remote control unit available; black metal cabinet $1300

RS-M85 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system; vertical hold, flat component style; quartz-locked-planer-opposed dc brushless, coreless, slotless direct drive capstan motor with servo-controlled circuit; separate coreless reel motor; full IC logic control; laminated Sendust head; low noise equalizer and high linearity amplifier; MPX filter. Features fluorescent electronic bar graph peak meters; three-position tape selector; fine bias adjustment; electronic full auto-stop; record muting; mic/line mixing; memory rewind; left and right channel microphone jacks; stereo headphone jack; electronic muting circuit. Wow and flutter 0.035% wrms; speed deviations 0.3%; fast-winding time 80 sec (C-60); frequency response 30-16,000 Hz +3 dB (CrO_2 and FeCr tape), 30-14,000 Hz +3 dB (normal tape); S/N 59 dB (Dolby off), 69 dB (above 5 kHz, Dolby on); mic input sensitivity 0.25 mV; mic impedance 400-10,000 ohms; 3⅞" H × 19" W × 15⅞" D $700

RS-M65 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, direct-drive planar-opposed capstan motor with integrated FG servo mechanism and coreless reel motors, and laminated sendust head. Features two-color fluorescent bar graph peak meters with adjustable meter brightness switch; three-position tape selector for normal, FeCr, and CrO_2 tapes with bias adjust; IC logic tape function controls; electronic auto stop; rec mute; timer standby; input level control with mic/line input selector; output level control; low-noise high-linearity amplifier circuitry; three-digit tape counter; memory rewind. Wow and flutter 0.035% wrms; tape speed deviation 0.3% $550

THORENS

PC-650 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, two motors, and three-head as-

sembly. Features bias and equalization for Fe, FeCr, and CrO_2 tapes; separate line and mic/DIN input selectors with mic/DIN switch and mic mixing; input/tape control to phones jack; Dolby test tone and calibration adjustments; limiter and mute controls; three-digit tape counter with memory rewind and reset; timer switch with external timer; dual VU meters. Wow and flutter 0.06% wrms; frequency response 30-15,000 Hz ±3 dB; S/N 56 dB without Dolby, 64 dB with Dolby; 5⅜" H × 17⅛" W × 13⅜" D $1300

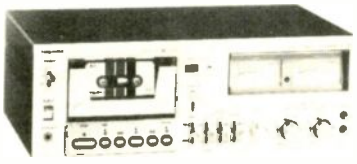
TOSHIBA

D15 Micro Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc servo and dc motors, and sendust record/playback and ferrite erase heads. Features dual LED peak level bar graph display; IC logic tape function controls; FeCr tape selector switch; three-digit tape counter with reset and memory; record level control; record/play timer with external timer; remote control capability with optional unit. Wow and flutter 0.04% wrms; S/N 65 dB with Dolby, chrome; THD 0.7%; input level/impedance 0.25 mV/600 ohms (mic), 70 mV/50k ohms (line); fast forward/rewind time 70 sec (C-60); 4.2" H × 10.1" W × 7" D; black finish $560
Silver finish $550

PC-X40 Cassette Deck
Front-loading programmable metal-compatible stereo cassette deck with Dolby noise-reduction system and All-Sendust record/playback and ferrite erase heads. Features digital ic-controlled programmable multi-music quick sensor system (programs up to six musical selections) with play/skip button; dual LED bar graph peak-level meters with switchable dot/bar level indicator; auto repeat and auto program; tape editor switch; separate bias and equalization for normal, CrO_2, and metal tapes; separate left/right record level controls; output level control; three-digit tape counter with reset and memory rewind; cue and review; soft eject; provision for optional external timer. Wow and flutter 0.05% wrms; frequency response 20-18,000 Hz ±3 dB at 20-dB input; S/N with Dolby 72 dB (metal), 68 dB (CrO_2) $380
PC-X20. Similar to PC-X40 without programmable multi-music quick sensor system, memory rewind, auto program, and tape editor control $300

6 CASSETTE TAPE MACHINES

PC-5460 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, servo dc motor, and all Sendust



record/playback and ferrite erase heads. Features three-level/six-way independent bias/equalization; two triple-function meters (VU, peak-level, and peak-hold); editor volume control; mic and line mixing with separate right and left volume controls; output level control; timer recording; Dolby FM in/out switch; feather-touch controls. Wow and flutter 0.06% wrms; frequency response 20-17,000 Hz ±3 dB (chrome tape); S/N 69 dB (Dolby on, chrome tape); 6" H × 16½" W × 11" D..... $370

PC-4460 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and hard permalloy record/playback and ferrite erase heads. Features three-level/six-way independent bias/equalization selectors; twin VU meters; +6 dB LED peak indicator; left/right record level controls; output level control; switchable MPX filter; timer recording; feather-touch controls. Wow and flutter 0.06% wrms; frequency response 30-16,000 Hz ±3 dB (chrome tape); S/N 69 dB (Dolby on, chrome tape); 6" H × 16½" W × 11" D..... $300

PC-3460 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and hard permalloy record/playback and ferrite erase heads. Features twin VU meters; +6 dB LED peak indicator; three-level/six-way independent bias/equalization selectors; left/right record level controls; output level control; switchable MPX filter; cue and review; feather-touch controls. Wow and flutter 0.06% wrms; frequency response 30-16,000 Hz ±3 dB (chrome tape); S/N 67 dB (Dolby on, chrome); 5¾" H × 16½" W × 11" D..... $230

PC-2460 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, dc servomotor, and permalloy record/playback and ferrite erase heads. Features two wide-range peak-reading level meters; two-level four-way separate bias/equalization controls; left/right record level controls; built-in MPX filter. Wow and flutter 0.1% wrms; frequency response 30-14,000 Hz ±3 dB (chrome tape); S/N 65 dB (Dolby on, chrome tape); 6½" H × 16½" W × 11" D..... $170

UHER by WALTER ODEMER

CG-362 Cassette Deck
Stereo record/play cassette deck with Dolby noise-reduction system and three-motor drive system. Features DNL; switchable MPX filter; automatic bias and equalization switch; three-position tape selector; RCA and DIN input-output connectors; digital IC logic controls; digital tape counter; auto-stop; tape-flow control; input mixing and three-position replay program selector; aux. output (0.5 W at 4 ohms) for driving motional feedback speakers. Wow and flutter 0.15% wrms; S/N 68 dB (Dolby on, chrome tape); frequency response 20-18,000 Hz (MPX filter off)..... $1186

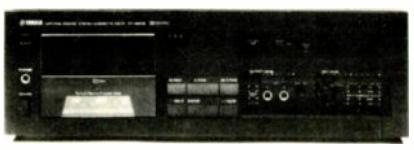
CR-240 Portable Cassette Deck
Compact front-loading portable cassette deck with Dolby noise-reduction system, collectorless, low-wear motor with electronic control, two contrarotating flywheels, and built-in loudspeaker for mono monitoring. Features automatic start after fast-forward or rewind; automatic end-of-tape shut-off; switchable alc; remote control accessory; clock timer operation; separate or tandem (mechanical coupling) record level controls; twin peak-reading level meters for record and playback with meter illumination and three LED function indicators; battery check with quick-action switch; built-in condenser microphone; linear stereo power amplifier; stereo headphone jack socket; joy stick control for selection of three tape transport functions. Wow and flutter 0.2% (DIN); frequency response 30-16,000 Hz; S/N 58 dB (Dolby off, FeCr), 66 dB (Dolby on, CrO_2 and FeCr), 65 dB (Dolby on, Fe_2O_3); crosstalk at 1 kHz, −70 dB (reverse track), −45 dB (stereo); mic input 0.2 mV at 500 ohms source impedance; power: ac mains, dry cells, rechargeable, or car battery; 9¼" × 2⅛" × 7¼"..... $1186
CR-240AV. Audio-visual version of CR-240.. $1257

CG-332 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system and hard permalloy tape head. Features separate left and right channel level controls, plus combined master control; adjustable headphone power stage; three-position tape type selector switch (Fe, CrO_2, FeCr); three-digit memory tape counter; tape run indicator; automatic end-of-tape shut-off; twin moving-coil VU level meters; LED peak indicator. Wow and flutter 0.13%; frequency response 40-14,000 Hz, 40-17,000 Hz (CrO_2 tape), 40-18,000 Hz (FeCr tape); S/N 56 dB (Dolby off), 62 dB (Dolby on); crosstalk 60 dB (reverse track), 25 dB (stereo); mic input sensitivity 0.2 mV/500 ohms; separate sockets for headphones, left and right microphones, DIN input/output, line output, line input; 3.9" H × 15" W × 10.1" D..... $533

YAMAHA

TC-1000 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, PLL servomotor and mechanical governor reel motor, "Pure Plasma Processed" Sendust-Alloy record/playback head and ferrite erase head, and dual FET differential ICL low-noise amplifier. Features mic attenuator switch; auto stop; memory rewind; tape select/bias fine adjust switch for CrO_2, LH, and FeCr tapes; timer recording; headphone amp; mic/line mixing; dual line output (fixed and variable); FM multiplex filter; twin peak-reading meters; LED Dolby and record indicators; electronically-controlled operating switches; three-digit tape counter with reset; headphone and two mic jacks; fast forward/rewind time 70 sec (C-60). Wow and flutter 0.05% wrms (JIS); frequency response 30-16,000 Hz (LH), 30-18,000 Hz (CrO_2), both ±3 dB; THD at 1000 Hz 1.0% (LH), 1.6% (CrO_2); S/N 60 dB without Dolby (JIS weighted), 69 dB at 5000 Hz with Dolby; channel separation 30 dB at 1000 Hz; input sensitivity/impedance 0.25 mV/600 ohms (mic), 50 mV/50k ohms (line); output level 340 mV max. (line), 1 mW into 8 ohms (headphone); 6¹¹⁄₁₆" H × 18⅛" W × 12⅞" D.. $650

TC-920B Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, FG dc servo capstan motor and



two-motor-design bidirectional high-torque dc reel motors, and Pure Plasma Process sendust record/playback head and double-gap ferrite erase head. Features dual-LED peak level bar graph display with fast/slow meter switch; tape selector of LH, FeCr, and CrO tapes with LEDs and bias adjust; multiplex and subsonic filters; sharp/soft sound focus switch; record and output level slide controls; record balance control; line/mic input selector; three-digit tape counter with memory rewind; timer recording switch with external timer; rec mute; IC solenoid logic tape function controls; less-used controls hidden in sub-panel with door. Wow and flutter 0.03% wrms (JIS), 0.1% (DIN 45500); S/N with CrO_2 tape, Dolby off 60 dB (JIS), 52 dB (DIN); frequency response 30-16,000 Hz ±3 dB (LH), 30-18,000 Hz ±3 dB (CrO_2); THD 1.0% (LH), 1.6% (CrO_2); input sensitivity/impedance 0.3 mV/5k ohms (mic), 60 mV/50k ohms (line); fast-forward/rewind time 75 sec (C-60); 5½" H × 17⅛" W × 12" D..... $600

TC-720 Cassette Deck
Front-loading stereo cassette deck with dual Dolby noise-reduction system, FG servo dc motor, and combination ferrite record/playback head and ferrite erase head. Features two-position bias and equalization buttons for LH and CrO_2 tapes with bias adjust; record level adjust controls and record calibration signal generator; tape/source monitor switch; mic/line mixing with separate mic and line record level controls and echo control; dual VU meters; timer start with optional external timer. Wow and flutter 0.06% wrms (JIS), 0.2% (DIN 45500); frequency response ±3 dB from 40-13,000 Hz (LH), to 15,000 Hz (CrO_2); THD at 1000 Hz 1.5% (LH), 2.0% (CrO_2); S/N with CrO_2 tape, Dolby off 57 dB (JIS), 52 dB (DIN); input sensitivity/impedance 0.3 mV/5k ohms (mic), 50 mV/50k ohms (line); fast forward/rewind time 90 sec (C-60). 5¹⁵⁄₁₆" H × 17⅛" W × 11⁵⁄₁₆" D..... $450

TC-520 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, double-belt drive transport, high torque dc motor, and super hard permalloy record/playback and ferrite erase heads. Features three-position bias/equalization for CrO_2, LH, and FeCr tapes with fine bias adjust; two VU meters with two-colored LED peak level indicators; rec mute switch; electronic muting circuit; timer recording; headphone amp circuitry; auto shutoff; line/mic inputs; independent left/right rec level controls; three-digit tape counter with reset; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.07% wrms (JIS); frequency response +3 dB 30-13,000 Hz (LH), to 15,000 Hz (FeCr and CrO_2); THD at 1000 Hz 1.5% (LH), 2.0% (CrO_2); S/N 57 dB (JIS weighted); channel separation 30 dB at 1000 Hz; input sensitivity/impedance 0.3 mV/5000 ohms (mic), 50 mV/100k ohms (line); output level 370 mV (line), 1.6 mW/8 ohms or 5 mW/150 ohms (headphones); 6¼" H × 17⅛" W × 12⅞" D..... $320

TC-320 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, high torque dc motor, and super hard permalloy record/play and ferrite erase heads. Features separate bias and equalization switches for LH and CrO_2 tapes; independent level controls; headphone and two mic jacks; dual VU meters with LED record indicator; tape counter with reset; auto stop; fast forward/rewind time 90 sec (C-60). Wow and flutter 0.07% wrms; frequency response ±3 dB 40-14,000 Hz (LH) and to 15,000 Hz (CrO_2); dist. at 1000 Hz 1.5% (LH), 2.0% (CrO_2); S/N without Dolby 57 dB (LH); channel separation 30 dB at 1000 Hz; input sensitivity/impedance 0.3 mV/2k ohms (mic), 50 mV/90k ohms (line); output level 400 mV (line), 3 mW (headphones); 5½" H × 17⅛" W × 11¼" D..... $240

ZENITH

MC9070 Cassette Deck
Front-loading stereo cassette deck with Dolby noise-reduction system, electronically-controlled dc motor, and recording/playback and erase heads. Features two VU meters with LED peak indicators; bias and equalization for normal, FeCr, and CrO_2 tapes; left/right record level control; piano-key tape function controls; three-digit tape counter. Wow and flutter 0.08% wrms (JIS); frequency response ±3 dB 40-13,000 Hz (normal), to 14,000 Hz (CrO_2), to 15,000 Hz (FeCr); HD 1.5%; S/N with Dolby 62 dB using normal tape over 5000 Hz, 66.5 dB using CrO_2 tape over 5000 Hz; fast-winding time 85 sec (C-60); 5.98" H × 16.77" W × 9.33" D..... $250

7 OPEN-REEL TAPE MACHINES

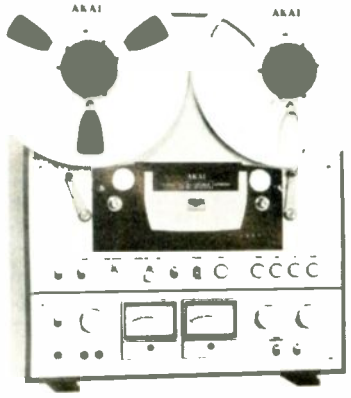
AKAI

PRO-1000 Stereo Tape Deck

Three-speed (15, 7½, and 3¾ ips), ½-track record/play and ¼-track play two-channel stereo system; will handle up to 10½-in reels; double-capstan closed-loop drive system; one ac servomotor for capstan drive and two six-pole eddy current motors for reel drive; three GX heads and one full-track erase head. Features illuminated VU meters with change-over switch for reading peak/VU and bias; built-in mixing of four different inputs with panpots; input selector switch with 30 dB microphone attenuator; full mic/line mixing capability; tape/source monitoring; remote control and timer operation (with optional RC-17 or RC-18); feather-touch full logic solenoid control system; NAB playback standards; recording input level control; independent left and right output volume controls. Wow and flutter 0.025% wrms (15 ips), 0.04% wrms (7½ ips), 0.08% wrms (3¾ ips); frequency response 50-20,000 Hz ±1 dB (15 ips), 40-24,000 Hz ±3 dB (7½ ips), 60-12,000 Hz ±3 dB (3¾ ips); THD 1%, 1 kHz, 0 VU; S/N 60 dB; fast-forward and rewind time within 120 sec (1800-ft tape); 16¼" H × 18" W × 8" D $1995

GX-650D Stereo Tape Deck

Three-speed (15, 7½, and 3¾ ips), ¼-track two-channel stereo/mono system; will handle up to



10½-in reels; closed-loop double capstan mechanism; three motors with ac servo-controlled capstan drive; glass and crystal ferrite heads. Features line/mike mixing; sound-on-sound recording facilities; dual-monitoring system; remote control (with optional RC-17 accessory); automatic stop; pause lever switch; cue switch; individual line-output volume control; tape selector switch (low noise/wide range); four-digit tape index counter; two VU meters; two mike input jacks; stereo headphone jack; RCA-type line input and output jacks; record and pause indicator lamps. Wow and flutter 0.04% rms (15 ips), 0.055% rms (7½ ips), 0.07% rms (3¾ ips); frequency response 30-30,000 Hz ±3 dB at 15 ips, 30-26,000 Hz ±3 dB at 7½ ips (both with LN-150 tape); dist. 0.4% at 15 and 7½ ips (1000 Hz, 0 VU). 20.6" H × 17.4" W × 10" D $1295

GX-635DB Stereo Tape Deck

Two-speed (7½ and 3¾ ips), ¼-track, two-channel record/playback stereo deck with dual-process Dolby noise-reduction system, ac servo direct-drive capstan and two reel motors, and two GX record, two GX playback, and two erase heads; handles up to 10½-in reels. Features automatic reverse in record/playback; ±6% pitch control; full logic solenoid function controls; mic/line mixing; output level control; record mute; real time counter; remote control jack. Wow and flutter 0.03% wrms at 7½ ips; frequency response 30-27,000 Hz ±3 dB with WR tape; dist. 0.5% at 7½ ips (1000 Hz, 0 VU); S/N 62 dB DIN without Dolby, improved 10 dB above 5000 Hz with Dolby; 19" H × 17.4" W × 10.1" D $1095

GX-635D. Similar to GX-635DB without Dolby noise-reduction system $995

GX-267D Stereo Tape Deck

Two-speed (7½ and 3¾ ips), ¼-track, two-channel stereo deck with two GX playback, two GX record, and two erase heads and center pole generator ac servo capstan and two eddy current reel motors; handles up to 7-in reels; direct capstan drive system. Features two brake drums each fitted with Mylar brake belt for supply and take-up reels; three-position record/playback auto reverse for one-way record/playback, one-cycle record/playback, or one-cycle record and continuous playback; feather-touch solenoid operations controls with direct function control; record mute with 1-sec timing indicator; timer start switch with wake-up music function; line/mic input mixing controls; instant pause control; dual VU meters; low noise/wide range tape selector switch; dual monitoring; left/right record mode selector switches; output level control; one-way damped tension arm. Wow and flutter 0.04% wrms (7½ ips), 0.06% wrms (3¾ ips); frequency response ±3 dB 30-25,000 Hz (7½ ips), to 19,000 Hz (3¾ ips), both with Akai LN-150-7 tape; dist. 0.5% at 1000 Hz, 0 VU; S/N 60 dB (JIS); input sensitivity/impedance 0.25 mV/2.4k ohms (mic), 70 mV/100k ohms (line); output level 0.775 V (line), 100 mV into 8 ohms (headphone); 18.5" H × 17.3" W × 9.8" D $850

GX-620 Stereo Tape Deck

Two-speed (7½ and 3¾ ips) ¼-track two-channel stereo/mono tape deck with ac servo direct-drive capstan and two eddy current reel motors and GX record, GX playback, and erase heads; 10½-in reel capacity. Features illuminated logic solenoid tape function controls with standby indicators; mic/line mixing; tape/source monitor switch; output level control; low noise/wide range tape selector; stereo/mono record selector; rec mute; see-through head cover for editing; provision for record/playback timer; two VU meters. Wow and flutter 0.03% rms at 7½ ips; frequency response 30-26,000 Hz ±3 dB at 7½ ips; d st. 0.5% at 1000 Hz, 0 VU (7½ ips); S/N 62 dB DIN; 17.6" H × 17.4" W × 9.5" D $725

GX-255 Stereo Tape Deck

Two-speed (7½ and 3¾ ips), ¼-track two-channel stereo/mono tape deck with ac servo direct drive capstan and two eddy-current reel motors and three GX heads in four-head function; 7-in reel capacity. Features auto/manual reverse playback; tape/source monitor switch; mic/line mixing; output level control; low noise/wide range tape selector; illuminated logic solenoid tape function controls with standby indicators; see-through head cover for editing; stereo/mono record; two VU meters. Wow and flutter 0.04% rms (7½ ips); frequency response 30-24,000 Hz ±3 dB at 7½ ips; dist. 0.5% at 1000 Hz, 0 VU (7½ ips); S/N 61 dB DIN; 16.5" H × 17.3" W × 9.5" D $650

GX-4000DB Stereo Tape Deck

Two-speed (7½ and 3¾ ips), ¼-track, two-channel stereo system with Dolby noise-reduction system, GX recording and playback heads and erase head, and four-pole induction motor; handles up to 7-in reels. Features tape/source monitor and low noise/wide range selector switches; auto stop; mic/DIN/line mixing; output control; pause control; four-digit index counter with reset; LED record indicator. Wow and flutter 0.08% wrms; frequency response ±3 dB 30-24,000 Hz (7½ ips), to 16,000 Hz (3¾ ips); dist. 1.0% at 1000 Hz, 0 VU; S/N 60 dB without Dolby; input sensitivity 0.25 mV (mic), 70 mV (line), 2 mV into 10k ohms (DIN); output level 580 mV (line), 100 mV into 8 ohms (headphone), 0.3 V (DIN); 12.4" H × 17.3" W × 9.1" D $500

GX-4000D. Same as GX-4000DB without Dolby noise-reduction system $400

1722II Stereo Tape Deck

Two-speed (7½ and 3¾ ips), ¼-track, two-channel stereo tape system with record/playback and erase heads and two-speed induction motor; handles up to 7-in reels. Features low noise/wide range tape selector switch; three-way speaker switch for mute/recording monitor, normal, and PA; auto shut-off; rear-panel speaker switch convertible to PA system; pause control; built-in phono equalizer amp directly records from magnetic phono cartridge; built-in 5 × 7-in speakers with speaker jacks; line and DIN in and out connections; two VU meters. Wow and flutter 0.14% rms (7½ ips), 0.18% rms (3¾ ips); frequency response ±3 dB at 7½ ips 30-21,000 Hz (wide-range tape), to 18,000 Hz (low-noise), at 3¾ ips 40-15,000 Hz (wide range), to 13,000 Hz (low-noise); dist. 2.0% at 1000 Hz, 0 VU; S/N 50 dB; output 10 W total music power, 6 W continuous; crosstalk 60 dB (mono), 45 dB (stereo); input sensitivity/impedance 0.5 mV/100k ohms (mic), 150 mV/330k ohms (line); output level 1.23 V (line), 100 mV into 8 ohms (headphone), 5 W into 8 ohms (speaker); 14.1" H × 14" W × 9.8" D $475

4-Channel

GX-630D-SS 4-Channel Tape Deck

Two-speed (7½ and 3¾ ips) four-channel or stereo record/playback tape system with ac servo direct-drive capstan and two eddy current reel motors and four GX glass-and-crystal ferrite heads; 10½-in reel capacity. Features A-B monitoring in either mode; full logic solenoid function controls; four-track "Quadra-Sync" dubbing circuit; mic/line mixing with four separate mic and line controls; left/right track selector; pitch control (±5%); low noise/wide range tape select switch; line output control; auto

7 OPEN-REEL TAPE MACHINES

stop; pause control with lock; four VU meters. Wow and flutter 0.06% rms at 7½ ips; frequency response 30-21,000 Hz ±3 dB (7½ ips); dist.0.5% at 7½ ips, 1000 Hz, 0 VU; S/N 58 dB weighted (wide-range position); 20.7" H × 17.3" W × 9.4" D $1250

GX-270D-SS 4-Channel Tape Deck

Two-speed (7½ and 3¾ ips) ¼-track, four and two channel record/play deck with ac servo direct-drive capstan motor plus two eddy current motors for fast-forward and rewind and four GX heads in three-head function; 7-in reel capacity. Features full logic solenoid function controls; automatic stereo reverse playback; tape/source monitoring; "Quadra-Sync" recording; pitch control for record/playback (±5%); line output control; mic/line mixing; low noise/wide range tape selector; auto stop; four VU meters. Wow and flutter 0.07% rms (7½ ips); S/N 54 dB (measured via tape with peak recording level of +6 VU); frequency response 30-21,000 Hz ±3 dB (7½ ips); distortion 1% (1000 Hz, 0 VU); 18.3" H × 17.3" W × 7.5" D..... $1075

OTARI

MX-5050-B Tape Recorder

Two-channel ½-track (¼-track reproduce) three-speed (internally switchable pairs of 15 and 7½ ips

or 7½ and 3¾ ips) compact professional tape recorder with variable three-speed (±7%) dc servo capstan and two induction torque reel motors and four plug-in rugged Permalloy head stacks (½ track erase, record and reproduce and ¼-track reproduce); handles 10½-in EIA or NAB reels and 5- or 7-in plastic reels; ¼-in tape. Features dual VU meters with +9-dB peak-reading LEDs; adjustable bias; record equalization for high and low speeds for each channel; two-speed operation button in speed pairs; four-digit tape counter with reset and selection locator memory that recues machine to zero setting; cue control; edit control; selective reproduce; TTL-IC logic noise-free punch-in/punch-out record; motion-sensing play mode directly from fast forward or rewind; fixed output level control; two line/mic input level controls; LED flashing record; built-in 1000-Hz test oscillator; rewind time 90 sec for 2500-ft reel. Wow and flutter (NAB weighted) 0.05% (15 ips), 0.06% (7½ ips), 0.10% (3¾ ips); frequency response ±2 dB 30-22,000 Hz (15 ips at 0 VU), 25-20,000 Hz (7½ ips at −10 VU), 30-12,000 Hz (3¾ ips at −10 VU); dist. 1.0% at 1000 Hz, 250 nWb/m; S/N (weighted) 65 dB (15 and 7½ ips), 64 dB (3¾ ips); crosstalk 55 dB at 1000 Hz on adjacent tracks; **line inputs 15 dBm, 50k ohms unbalanced and 600 ohms balanced;** mic input −70 dBm, 50k ohms unbalanced; line output 4 dBm/−10 dBm (fixed level, switch selectable), max. output +28 dBm, headroom +24 dBm before clipping, **load impedance 600 ohms balanced, output impedance 50 ohms balanced;** headphone jack −24 dBm, 8-ohm impedance; **standard 3-pin XLR connector.** Includes 10½-in NAB reel, precision hold down knob, and NAB reel shims; vinyl wooden cabinet; vertical or horizontal operating position; 21⅞" H × 21½" W × 8⅛" D..... $1945

4/8-Channel

Mark II Four-Channel Recorder

Incorporates features of MX-5050 plus separately packaged transport and electronics, dc capstan servo with pitch control, plug-in electronics, complete accessibility to electronics adjustments, and interface jack for adding dbx or Dolby noise-reduction system; tape speeds 15 and 7½ ips; three four-track heads in line stacks for erase, record, reproduce; wow and flutter 0.05% at 15 ips, 0.06% at 7½ ips; frequency response 50-20,000 Hz ±2 dB, 35-25,000 Hz ±3 dB (15 ips at 0 VU), 50-18,000 Hz ±2 dB, 40-20,000 Hz ±3 dB (7½ ips at −10 dB); **600-ohm balanced output;** 10½ in NAB reels; ½-in tape, 0.075-in track width; 25¼" × 19" standard rack mount..... $3595

Two-Channel. Same as Mark II but uses ¼-in tape; will handle 5- and 7-in plastic reels or 10½-in EIA or NAB; 21¼" × 19" standard rack mount... $2445

MX-5050-QXHD Four-Channel Recorder

Four-channel, two-speed (15 and 7½ ips), ¼-track, ¼-in tape recorder/reproducer with dc capstan servo system and two induction torque reel motors; reel size 5, 7, and 10½ inch EIA or NAB; four head stacks, erase (tracks 1 and 3), erase (tracks 2 and 4), record (four track), and reproduce (four track); rewind time less than 90 sec (2500-ft reel). Wow and flutter 0.05% at 15 ips, 0.06% at 7½ ips; connectors: **line in/out standard three-pin XLR, mike standard ¼-in phone jack; inputs: 15 dBm unbalanced 50k ohms, 600 ohms balanced with optional transformer, mike 70 dBm unbalanced nominal 50k ohms;** outputs: variable or fixed level, headroom 19 dBm before clipping; headphone jack −24 dBm nominal 8 ohms unbalanced; NAB standard equalization; S/N 63 dB weighted at 15 ips, 62 dB weighted, at 7½ ips; frequency response 50-20,000 Hz ±2 dB, 35-25,000 Hz ±3 dB (both at 15 ips), 50-18,000 Hz ±2 dB, 40-20,000 Hz ±3 dB (both at 7½ ips); distortion 1% at 1000 Hz at 185 nWb/m; vertical or horizontal operation; vinyl-covered wood case; rack mounting kit and floor console optional; transport 16¹¹⁄₁₆" H × 18⅛" W × 9½" D; electronics 11³⁄₁₆" H × 18⅛" W × 9½" D..... $2845

MX-5050-8D. Similar to MX-5050-QXHD except eight-channel ½-in recorder/reproducer $4895

PHILIPS

N4506 Tape Recorder

Three-motor, three-head, preamplified tape recorder features dynamic noise limiter; A-B monitor

switch; two peak-reading meters; direct switchable tape direction; input selection and level adjustment of phono, tuner, aux., and line; three speeds (7½, 3¾, 1⅞ ips); max. reel diameter 7-in. Frequency response 35-11,500 Hz (1⅞ ips), to 20,000 Hz (3¾ ips), to 26,000 Hz (7½ ips); S/N (without DNL) 60 dB (7½ and 3¾ ips), 58 dB (1⅞ ips); wow and flutter 0.05% (7½ ips), 0.07% (3¾ ips), 0.2% (1⅞ ips); fast-winding time 180 sec (1800 ft); channel separation 30 dB; track separation 60 dB; full complement of inputs/outputs; 17" H × 21¾" W × 8¼" D..... $690

N4504 Tape Recorder

Three-motor, three-head tape recorder features two peak-reading meters; direct switchable tape direction; A-B monitor switch; dynamic noise limiter; three speeds (7½, 3¾, 1⅞ ips); max. reel diameter 7-in. Frequency response 35-11,500 Hz (1⅞ ips), to 20,000 Hz (3¾ ips), to 26,000 Hz (7½ ips); S/N (without DNL) 60 dB (7½ and 3¾ ips), 58 dB (1⅞ ips); wow and flutter (wrms) 0.05% (7½ ips), 0.07% (3¾ ips), 0.2% (1⅞ ips); fast-winding time 180 sec (1800 ft); channel separation 25 dB; track separation 60 dB; full complement of inputs/outputs; 16¾" H × 16⅜" W × 7¼" D $480

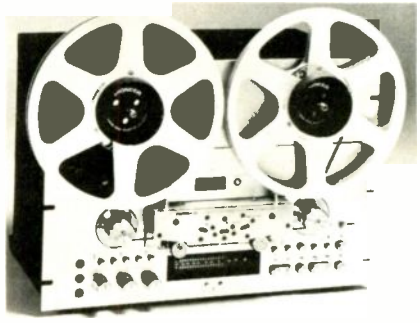
PIONEER

RT-2022 Stereo Tape Deck

Two-speed (7½ and 15 ips), ½-track, three-motor, three-head stereo deck; will handle up to 10½-in reels; ⁴⁄₈ pole hysteresis synchronous motor and two six-pole inner-rotor induction motors for reel drive. Features solenoid-operated direct-change function buttons; separate transport and amplifier units; plug-in head assembly; scrape filter; continuously variable tape bias, two-step tape equalizer and tape selector with time-constant switch mechanism for use with all types of tape; wide-dynamic-range playback amplifier; independent recording amplifier for line and mike input/output; "synchromonitor" mechanism for sound-on-sound and sound-with-sound. Wow and flutter 0.04% wrms at 15 ips, 0.08% wrms at 7½ ips; S/N 55 dB; THD 0.8% max. at 15 ips, 1.0% max. at 7½ ips; response 30-28,000 Hz ±3 dB at 15 ips, 40-20,000 Hz ±3 dB at 7½ ips; full complement of inputs and outputs; 21¾" H × 18⅛" W × 10¹³⁄₁₆" D $1590

RT-909 Stereo Tape Deck

Two-speed (3¾ and 7½ ips), ¼-track, three-motor, four-head stereo tape deck; FG dc servo dual-cap-



stan motor and two six-pole inner rotor reel motors; accepts both 10½- and 7-in reels. Features two-step bias and equalization selector with variable bias; Fluroscan level indicators with peak and average functions; four-digit electronic counter; reel and speed selector; pitch control; repeat switch; timer start with external timer; auto reverse; tape/monitor switch; separate mic/line and left/right input level controls; output level control. Wow and flutter 0.04% at 7½ ips, 0.08% at 3¾ ips; frequency response 20-28,000 Hz ±3 dB (7½ ips), 20-18,000 Hz ±3 dB (3¾ ips); S/N 60 dB (7½ ips), 55 dB (3¾ ips); 13⅜" H × 18⅞" W × 12½" D $895

RT-901. Similar to RT-909 except has three heads. $795

RT-707 Stereo Tape Deck

Auto-reverse playback stereo reel to reel tape deck; two speed (3¾ and 7½ ips); speed accuracy ±0.5%; three-motor, four-head, ¼-track, two-channel design; handles 7-in reels; FG servo ac direct drive motor for capstan drive and two six-pole inner-rotor induction motors for reel drive. Features solenoid operated, direct switchable function buttons and preset function buttons for timer record and play; auto and manual reverse play; auto repeat

play; independent L/R recording mode selectors; two bias and two equalization tape selection; full complement of inputs/outputs. Wow and flutter 0.05% wrms (7½ ips), 0.08% wrms (3¾ ips); S/N 58 dB; dist. 1% max. (7½ ips); fast rewind 100 sec (7-in reel); frequency response 30-24,000 Hz ±3 dB (7½ ips), 30-16,000 Hz ±3 dB (3¾ ips); crosstalk −50 dB; channel separation 50 dB; pitch control ±6% (playback only); 9⁷/₁₆" H × 18²⁹/₃₂" W × 14¹/₃₂" D $695

RT-701 Stereo Tape Deck

Two speed (3¾ and 7½ ips) design; speed accuracy ±0.5%; three-motor, three-head design; FG servo ac direct drive motor for capstan drive and two six-pole inner-rotor induction motors for reel drive; handles 7-in reels. Features solenoid-operated direct switchable function buttons and preset function buttons for timer record and play; permalloy heads; line/mike mixing; two bias and two equalization tape selectors; full complement of inputs/outputs; fast rewind 100 sec. Wow and flutter 0.05% wrms (7½ ips), 0.08% wrms (3¾ ips); S/N 58 dB; dist. 1% (7½ ips); frequency response 30-24,000 Hz ±3 dB (7½ ips), 30-16,000 Hz ±3 dB (3¾ ips); crosstalk −50 dB; channel separation 50 dB; pitch control ±6% (playback only); 9⁷/₁₆" H × 18²⁹/₃₂" W × 14¹/₃₂" D $595

4-Channel

RT-2044 4-Channel Tape Deck

Same as RT-2022 stereo deck except with two TAU-11 amplifier units; 37¹⁵/₁₆" H × 18⁷/₈" W × 10³/₁₆" D $2010

STUDER/REVOX

A700 Stereo Tape Recorder

Three-speed (choice of 15, 7½, and 3¾ ips, ¹⁵/₁₆, 1⅞, and 3¾ ips, or 1⅞, 3¾, 7½ ips) stereo tape

recorder with plug-in head assembly (¼- or ½-track available), three heads (fourth head optional), and frequency and phase servo capstan motor and two servo reel motors. Features microprocessor-controlled digital logic function controls; quartz-crystal speed control; logic-controlled tape tension; electronic tape-motion sensor; digital tape counter readout in min and sec; auto stop logic; electronic pause control; instant repeat play control; continuous record or play function; solid-state switching of audio circuits; built-in four-input mixer; switched selection of 12 input sources including four balanced hi/lo mike inputs; built-in magnetic phono preamp; master record level slide fader; stereo echo; five stereo outputs; zero-level line outputs and level and tone-controlled outputs; VU meter with overmodulation indicators; input or off-tape metering; variable speed (±7 halftones) with optional remote control available, variable speed (2.5 to 21.5 ips with external oscillator. Wow and flutter (DIN 45507/IEEE 193-1971) 0.06% (15 ips), 0.08% (7½ ips), 0.10% (3¾ ips); frequency response +2/−3 dB 30-22,000 Hz (15 ips), to 20,000 Hz (7½ ips), to 16,000 Hz (3¾ ips); S/N on ¼-track 63 dB (15 and 7½ ips), 60 dB (3¾ ips); on ½-track machines 67 dB (15 and 7½ ips), 64 dB (3¾ ips); 18.2" H × 19" W × 6.9" D..... $2999

A77 Mk IV Tape Deck

Two-speed (3¾ and 7½ ips or 7½ and 15 ips), ½- or ¼-track stereo tape recorder with servo-controlled capstan and two reel motors and three heads; reel capacity 10½ in. Features dual VU meters with LED peak level indicators; auto shut off; relay/solenoid operations controls; off-tape or input monitoring; two record level controls; provision for remote control; optional plug-in 8-W power amp boards; metal cage for rack or custom mounting, and suitcase version with built-in speakers available. Wow and flutter (DIN 45507/IEEE 193-1971) 0.06% (15 ips), 0.08% (7½ ips), 0.1% (3¾ ips); frequency response +2/−3 dB 30-22,000 Hz (15 ips), to 20,000 Hz (7½ ips), to 16,000 Hz (3¾ ips); S/N on ¼-track 62 dB (7½), 59 dB (3¾), on ½-track 66 dB (15 and 7½ ips), 63 dB (3¾ ips); 16⅜" H × 14³/₁₆" W × 7⅛" D . $1499

A77 Mk IV Professional. Same as A77 Mk IV but only in 7½ and 15 ips speed; **balanced and floating inputs and outputs;** no input selector and level controls accessible from outside of machine; **inputs and outputs via Cannon connectors**..... $1950

B77 Stereo Tape Recorder

Two-speed (choice of 3¾ and 7½ ips, 7½ and 15 ips, ¹⁵/₁₆ and 1⅞ ips, or 1⅞ and 3¾ ips) stereo tape recorder with three motors; reel capacity 10½ in. Features integrated drive logic computer-type push-point function keys; built-in tape cutter close to headblock; dual VU meters with peak level indicators; separate left/right record and input level controls; tape monitor switch; provision for remote control of all functions and electric timer operation; connectors for remote control of tape transport functions, remote control of variable tape speed, and slide projector or crossfade unit. Wow and flutter (DIN 45507/IEEE 193-1971) 0.6% (15 ips), 0.08% (7½ ips), 0.1% (3¾ ips); frequency response +2/−3 dB 30-22,000 Hz (15 ips), to 20,000 Hz (7½ ips), to 16,000 Hz (3¾ ips); S/N on ¼-track 63 dB (15 ips and 7½ ips), 60 dB (3¾ ips), on ½-track 67 dB (15 and 7½ ips), 64 dB (3¾ ips); mic input level/impedance 0.15 mV/2.2k ohms (lo position, 50- to 600-ohm mics), 2.8 mV/110k ohms (hi, 20k-ohm mics); 16.3" H × 17.8" W × 8.14" D $1499

B77 Self Sync. Same as B77; available in 3¾ and 7½ ips or 7½ and 15 ips speeds with playback possibility from record head $1599

B77 Dolby B. Same as B77 except 3¾ and 7½ ips speed only with Dolby B noise-reduction system; separate compressors and expanders for each channel; S/N on ½-track 67 dB (3¾ ips), 71 dB (7½ ips)..... $1799

B77 Autostart. Same as B77 except with VOX control $1749

B77 Slide Sync. Same as B77 except with additional head for slide projector control $1599

TANDBERG

TD 20A "Baron" Open-Reel Deck

Features actilinear recording system; active transconductance circuit for lower intermodulation;

built-in Sel Sync; four-motor solenoidless operation; phase linearity network; pushbutton operation with LED indicators, including "Free" position for easy tape editing and threading; stand-by position with LED when one or both record buttons are engaged; electronically-governed speed; optional infrared (wireless) remote control or conventional cord remote control; four line inputs and master control for fading in/out; two-step front panel switch for mic attenuation (25 dB); very wide scale, peak-reading VU meters; front panel accessible bias adjustment; available in three versions:

7½ and 3¾ ips; ¼-track..... $1500
15 and 7½ ips; ¼-track..... $1550
15 and 7½ ips; ½-track..... $1600
Carrying case with/without wheels ..... $300/$245
Wireless remote control $150

Series 15 Open-Reel Recorder

Three-speed (7½, 3¾, 1⅞ ips), mono record/play open-reel recorder; wow and flutter 0.1% at 7½ ips; frequency response 40-18,000 Hz ±2 dB at 7½ ips; S + N/N 55 dB at max. record level; 5 W/channel continuous, both channels driven; preamp output 0.75 V; low-Z mic; high- and low-level inputs; 6¾" H × 13⅜" W × 11⅞" D.

1541F or 1521F. ¼-track or ½-track $700

TASCAM by TEAC

80-8 Recorder/Reproducer

½-in, 8-tracks; will take up to 10½-in reels NAB hub only; 15 ips and 7½ ips tape speed; function select panel; full IC logic tape transport; memory stop function; digital counter; integrated dbx noise reduction; **line input −10 dB (0.3 V), impedance greater than 20,000 ohms, unbalanced; line output −10 dB (0.3 V), load impedance greater than 10,000 ohms, unbalanced;** record level 0 VU referenced to 3 dB above; wow and flutter 0.04% rms (NAB, weighted), 0.06% peak (ANSI, weighted); fast-winding time 120 sec with 240-ft tape; frequency response 40-18,000 Hz ±3 dB; S/N 65 dB weighted, 60 dB unweighted; dist. 1.0% at 400 Hz, 0 VU; overall THD 3.0% at 10 dB above 0 VU; crosstalk greater than 45 dB at 400 Hz; 21" H × 17¼" W × 12" D..... $3990

35-2 Recorder/Reproducer

Two-track stereo/four-track stereo playback (switchable) two-speed (15 and 7½ ips ±0.5%) open-reel recorder/reproducer with dc servo-controlled capstan and two eddy current induction reel motors and high-density Permaflux erase, record, playback and 4-track playback heads; 10½-in reel capacity; separate transport and electronics design. Transport features touch-button logic tape function controls with motion-sensing direct mode changes; pitch control; punch-in recording facility; cueing and edit, four-digit tape counter. Electronics features optional dbx encode/decode; six-step bias selector and variable record EQ control; source/calibration/output monitor switch; separate left and right input and output level controls; two VU meters with LED peak indicators. Wow and flutter (NAB weighted) 0.03% at 15 ips, 0.06% at 7½ ips; frequency response 40-22,000 Hz ±3 dB (15 ips), to 18,000 Hz (7½ ips); HD 0.6%; S/N 100 dB with dbx, 65 dB without dbx at 3.0% THD; stereo channel separation 50 dB at 1000 Hz; **line input sensitivity/impedance 60 mV/50,000 ohms; line output level/load impedance 0.45 V/10,000 ohms;** headphone output/impedance −21 dB/8 ohms; fast forward/rewind time 160 sec for 1800 ft; 16½" H × 18¹³/₁₆" W × 10½" D (transport); 6¹⁵/₁₆" H × 18¹³/₁₆" W × 9⁵/₁₆" D (electronics) $1900

OX-2. Plug-in dbx noise-reduction cards for 35-2 ..... $225

40-4 Recorder/Reproducer

Four-track, ¼-in recorder/reproducer; will take up to 10½-in reels NAB hub only; 15 and 7½ ips tape speeds; includes function select panel; full IC logic tape transport; memory stop function; digital counter; integrated dbx noise-reduction system; **line input −10 dB (0.3 V) impedance greater than 20,000 ohms, unbalanced; line output −10 dB (0.3 V) load impedance greater than 10,000 ohms, unbalanced;** wow and flutter 0.04% wrms NAB at 15 ips; fast-winding time 120 sec for 2500-ft tape; fre-

7 OPEN-REEL TAPE MACHINES

quency response 40-20,000 Hz ±3 dB (15 ips), 40-15,000 Hz ±3 dB (7½ ips); S/N 63 dB weighted, 58 dB unweighted at 15 ips, 65 dB weighted, 60 dB unweighted at 7½ ips; overall dist. 1% at 400 Hz, 0 VU at 9 dB; crosstalk greater than 50 dB at 400 Hz; 21" H × 17¼" W × 12" D. $1700

TEAC

A-6600 Stereo Tape Deck

Two speed (7½ and 3¾ ips), ¼-track, two-channel deck; will handle reels up to 10½-in; four heads (erase, record, play, reverse playback). Features auto-reverse and counter repeat; two capstans, one for each direction; tape guide rollers; cueing facility for both forward and reverse tracks; record mode indicator lights; auto spacer for inserting blank spaces between selections; separate left and right level controls; master gain controls for mic and line inputs; hi and low bias and equalization settings; three-position monitor switch; peak LEDs flash at 10 VU (7½ ips) and 8 VU (3¾ ips); remote control with optional RC-80..... $1575

A-6100 Mark II Stereo Tape Deck

Two speed (15 and 7½ ips), ½-track, two-channel deck; will handle reels up to 10½-in; four heads (erase, record, play, ¼-track playback). Features two peak-reading LED level indicators; timer control; servo-controlled supply reel; manual cue lever which defeats tape lifters during last modes for fast search, cueing, and editing; flip-up hinged head cover; memory stop function..... $1400

A-3300SX-2T Tape Deck

Two-speed (15, 7½ ips), ½-track, two-channel stereo or mono deck; one dual-speed hysteresis synchronous capstan motor; two eddy-current induction reel motors; three heads; will handle 7-in and 10½-in reels. Wow and flutter 0.04% (15 ips), 0.06% (7½ ips) NAB weighted; S/N 60 dB; frequency response 30-26,000 Hz ±3 dB at 15 ips, 30-24,000 Hz ±3 dB at 7½ ips; THD 1% at 1 kHz. Features independent left/right channel source/tape selectors; VU-type level meters; manual cue lever; separate bias and equalization selectors; 17⅝" H × 17⅜" W × 8⅜" D..... $1050

Audio Specialist Series

X-10 Stereo Tape Deck

Two-speed (7½ and 3¾ ips) ¼-track two-channel tape recorder with three dc motors in closed-loop

dual-capstan drive system and erase, record, and playback heads; 10½-in reel capacity. Features pitch control; cue lever; pushbutton tape function controls with rec mute; separate mic and line input level controls; output level control; source/tape monitor switch; separate two-position recording bias and equalization buttons; four-digit tape counter with memory and timer; two VU meters. Wow and flutter (NAB weighted) 0.03% (7½ ips), 0.04% (3¾ ips); frequency response 30-28,000 Hz (7½ ips), to 20,000 Hz (3¾ ips); S/N 63 dB; 17¹³⁄₁₆" H × 17" W × 10⁹⁄₁₆" D..... $1000

X-10R. Same as X-10 except bi-directional record/playback with six heads (two each erase, record, and playback)..... $1150

X-7 Stereo Tape Deck

Two-speed (7½ and 3¾ ips) ¼-track two-channel tape deck with three dc motors in closed-loop dual-capstan drive and erase, record, and playback heads; 7-in reel capacity. Features pitch control; separate mic and line input level controls; tape/source monitor switch; output level control; two-position bias and equalization; two VU meters; pushbutton tape function controls including rec mute; timer standby; four-digit tape counter; provision for optional remote control unit. Wow and flutter (NAB weighted) 0.03% (7½ ips), 0.04% (3¾ ips); frequency response 30-28,000 Hz (7½ ips), to 20,000 Hz (3¾ ips); S/N 63 dB; 14⁹⁄₁₆" H × 17" W × 10⁹⁄₁₆" D..... $700

X-7R. Same as X-7 except has bi-directional record/playback and auto repeat..... $800

4-Channel

A-3440 4-Channel Tape Deck

Two-speed (15 and 7½ ips) ¼-track four-channel Simul-Sync tape deck with erase, record/sync and playback heads and three motors; 10½-in reel capacity. Features four function select buttons with LEDs and source/sync/play output select buttons with tape/source monitoring and standby functions; headphone monitor switch with four-track pushbuttons; independent level control; four separate input and output level controls per channel with mic attenuation/mic/line input selectors; four VU meters; pitch control; four-digit tape counter; micro-switch tape function controls with LED pause and record; manual cueing; four unbalanced high- or low-impedance microphone input jacks; provision for optional dbx interface noise-reduction unit and optional RC-70 remote control. Wow and flutter (NAB weighted) 0.04% (15 ips), 0.06% (7½ ips); frequency response ±3 dB 40-22,000 Hz at 0 VU (15 ips), to 20,000 Hz at −10 VU (7½ ips); S/N 65 dB with 3.0% THD, weighted; **input sensitivity/impedance 60 mV/50,000 ohms (line), 0.25 mV/600 ohms (mic);** 117 V ac, 60 Hz; 20½" H × 17½" W × 9¼" D..... $1600

A-2340SX Tape Deck

Two-speed (7½ and 3¾ ips) ¼-track four-channel Simul-Sync tape recorder with erase, record, and playback heads and three motors; 7-in reel capacity. Features four Sync function select buttons with tape/source output select switches; four mic/line input level controls and output level controls for each channel; four VU meters; micro-controlled tape function controls; four-digit tape counter; four mic jacks and two phone jacks; provision for optional RC-120 remote control unit. Wow and flutter (NAB weighted) 0.08% (7½ ips), 0.10% (3¾ ips); frequency response ±3 dB 40-18,000 Hz (7½ ips), to 10,000 Hz (3¾ ips); S/N 62 dB with 3.0% THD, weighted; **input sensitivity/impedance 0.1 V/100k ohms (line), 0.25 mV/600 ohms (mic);** 17⁹⁄₁₆" H × 13¾" W × 8¾" D..... $1175

TECHNICS

RS-1520US Open-Reel Deck

Compact professional tape deck; ½-track, two-channel recording/playback and ¼-track, two channel playback; four head system; three speeds (15, 7½, 3¾ ips); quartz control phase-locked dc brushless servo direct-drive capstan motor; reel tables; two-tape tension controlled dc brushless direct drive motors; isolated loop direct-drive transport system. Features full IC logic tape transport functions; direct switching from mode-to-mode without tape strain; separate left and right bias and equalization controls; left and right VU meters; built-in stroboscope. Wow and flutter 0.018% wrms (15 ips), 0.3% wrms (7½ ips); fast-winding time 150 sec with 2500-ft tape; frequency response 30-30,000 Hz ±3 dB (15 ips), 30-25,000 Hz ±3 dB (7½ ips); S/N 60 dB; 0.8% dist.; 50 dB channel separation; mic input sensitivity 0.25 mV (−72 dB); microphone impedance 200-10,000 ohms; 17½" H × 18" W × 10⅛" D..... $2000

RS-1506US. Similar to RS-1520US except ¼-track, two-channel recording/playback and ½-track, two-channel playback..... $1500

RS-1700US. Similar to RS-1506US except auto-reverse in both recording and playback modes; ¼-track, two-channel; six-head system $2000

UHER by WALTER ODEMER

SG-631 Logic Open-Reel Deck

Three-speed (7½, 3¾, 1⅞ ips) two- or four-track stereo record/play deck; Omega looping system eliminates pinch roller, drive couplings, springs, and function wheels; four-motor drive system includes two dc hub motors, an electronically regulated capstan drive, and a servomotor to form the Omega loop. Wow and flutter 0.05%; frequency response 20-25,000 Hz (7½ ips), to 16,000 Hz (3¾ ips), to 12,500 Hz (1⅞ ips); S/N 65 dB (two-track at 7½ ips). Features built-in strobe disc; speed control; peak-reading meter; built-in "Dia-Pilot" for recording signal impulses and automatic slide-projector control; switchable peak-level limiter; separate stereo headphone power with volume, bass, and treble controls; A/B monitoring; remote-control facilities; 10½-in reel, max..... $1876

SG 561 Royal Open-Reel Deck

Four speed (7½, 3¾, 1⅞, ¹⁵⁄₁₆ ips) two- or four-track mono/stereo record/play deck with interchangeable two- or four-track tape head mount with Recovac longlife heads and built-in stereo amplifier with mixing facility; 7-in reel capacity. Features "Synchro-Play" sound-with-sound, "Multi-Play" sound-on-sound, reverb effect, and echo; "Dia-Pilot" for record/playback of cueing signals for auto slide projectors, will also synchronize sound and picture in 8- and 16-mm film-making; separate mic/radio and phono input controls; mic in/out switch; dual peak-reading meters; tape/source monitor switch; separate and continuous tandem tone control; four-digit tape counter with zero reset; tape tension comparator; electronic end-of-tape shut-off. Wow and flutter (DIN 45507) 0.05% (7½ ips), 0.1% (3¾ ips), 0.2% (1⅞ ips); frequency response 20-20,000 Hz (7½ ips), to 15,000 Hz (3¾ ips), to 9000 Hz (1⅞ ips); S/N (weighted, DIN 45500) on two-track 67 dB (7½ ips), 66 dB (3¾ ips), 65 dB (1⅞ ips), on four-track 65 dB (7½ ips), 64 dB (3¾ ips), 61 dB (1⅞ ips); crosstalk −60 dB (mono), −45 dB (stereo); 13.9" H × 18" W × 7.5" D..... $1419

4200 Report IC Recorder

Four-speed (7½, 3¾, 1⅞, ¹⁵⁄₁₆ ips) two-track stereo record/play recorder with Recovac tape head. Features three-digit counter; direct tape monitoring with earphones or speaker; electronic start and stop with remote switch, manual, or foot-switch operation; 5-in. max. reel size; ac, single-cell, car, or rechargeable battery operation. Wow and flutter 0.2% (DIN), 0.15% (rms); S/N 62 dB (rms A curve); frequency response 35-20,000 Hz (all at 7½ ips); input 0.12-40 mV at 200 ohms (mic), 2.4-700 mV (radio), 0.045-20 V at 2 megohms (phono)..... $1062

SG-521 Four-Speed Recorder

Four-speed (7½, 3¾, 1⅞, and ¹⁵⁄₁₆ ips) recorder; interchangeable head assemblies for two- or four-track operation; remote capability for start/stop; can be sound-activated; end-of-tape stop; on/off automatic level control switch; bass and treble controls; four-digit index counter. Frequency response 30-20,000 Hz; wow and flutter 0.02% wrms (both at 7½ ips); 6 W/ch continuous into 8 ohms (30-20,000 Hz) at 1% THD; S/N 65 dB (two-track at 7½ ips); can be operated vertically or horizontally $928

BOLDFACE indicates that the machine has professional qualities.

8 8-TRACK TAPE MACHINES

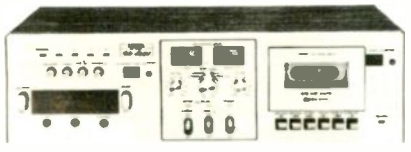
AKAI

CR-83D 8-Track Deck
Recorder/player features illuminated elapsed-time record indicator, locking pause, fast forward, inde

pendent dual record level controls, combination record/play and erase head, auto stop, and continuous playback selector switch; dc motor; illuminated record interlock; automatic ac on when cartridge is inserted; wow and flutter 0.15% rms; S/N 48 dB; frequency response 60 14,000 Hz ±3 dB (low-noise tape); dist. 2% at 3¾ ips; 4.3" H × 16.5" W × 9.6" D..... $225

FISHER

ER8150 8-Track/Cassette Deck
8-track and cassette deck with Dolby noise-reduction system. Wow and flutter 0.15% wrms (8-track),



0.09% wrms (cassette); frequency response 40-12,000 Hz at +3 dB; S/N 52 dB (8-track, Dolby on), 56 dB (cassette, Dolby on)..... $330
ER8155. Similar to ER8150 except has cassette with wireless remote control editing..... $370

ER8125 8-Track Deck
8-track deck has Dolby noise-reduction system and dc servomotor. Wow and flutter 0.15% wrms; frequency response 35-12,000 Hz at +3 dB; S/N 44 dB (Dolby off), 52 dB (Dolby on)..... $200

ER8130 8-Track Deck
Incorporates Dolby noise-reduction system; wow and flutter 0.15% wrms; fast-winding time 3.3 min (45-min cartridge); auto or manual end of tape shutoff; frequency response 35-11,000 Hz; S/N 52 dB with Dolby; crosstalk −55 dB; channel separation 40 dB (1 kHz); 5" H × 14⅜" W × 10" D.. $180

ER8115 8-Track Deck
Features 8-track record/play deck with dc governor motor; features dual VU meters; left/right record level controls; four-program LED indicators; locking pause control; LED tape record and tape stop indicators. Wow and flutter 0.15% wrms; frequency response 35-11,000 Hz ±3 dB; HD 1.5% at 1000 Hz; S/N 44 dB input sensitivity/impedance 0.2 mV/600 ohms (mic), 100 mV/100k ohms (line); fast-wind time 4.5 min (45 min), 8.9 min (90 min); 5" H × 12⅝" W × 10¼" D..... $170

LAFAYETTE

RK-899 8-Track Deck
Stereo 8-track deck features selectable auto stop for play/record modes; dual record level meters; left/right mic input jacks; record level controls; pause control; walnut vinyl covered wood cabinet. Frequency response 50-10,000 Hz; wow and flutter 0.3%; 4¼" H × 16½" W × 18¼" D..... $160

PANASONIC

RS-808 8-Track Deck
Front-loading 8 track record/play deck with slide-in cartridge mechanism; features auto-stop in record/

playback modes with LED indicators; auto/manual program selector with LED indicators; locking pause and fast forward switches; left and right channel level controls; two level meters; tape time counter; jacks for mic and headphones; two built-in connection cords. Wow and flutter 0.15% wrms; S/N 45 dB; frequency response 50-12,000 Hz, simulated wood cabinet; 5⅜" H × 14¼" W × 9⅞" D..... $120-$140

REALISTIC

TR-803 8-Track Deck
Record/play deck features digital timer; pushbutton control of continuous play, program repeat, auto-stop, eject, program change, fast-forward, and pause; response 50 12,000 Hz; wow and flutter 0.2%; front-panel mike input for live recording; walnut wood cabinet; 4¾" × 16½" × 10"..... $200

TRC-883 8-Track Deck
Record/play deck features dual VU meters; level controls; pushbutton fast forward, pause, and record interlock; program select button; auto stop button; stereo headphone jack; left and right microphone jacks; timer; program indicators; frequency response 50-8000 Hz; wow and flutter 0.2%; walnut-finish wood case; 4⅝" × 14" × 8¾". ... $140

TRC-884 8-Track Deck
Record/play deck features dual VU meters; level controls; pushbutton fast forward and record interlock; program select button; stereo headphone jack; left and right microphone jacks; program indicators; frequency response 100-8000 Hz; wow and flutter 0.15%; 13½" × 8½" × 5"... $100

SANYO

RD8400A Cassette/8-Track Deck
See Section 6, Cassette Tape Machines, under "Sanyo" $200

RD8020A 8-Track Deck
8-track record/play deck; frequency response 30-12,000 Hz; S/N 42 dB; wow and flutter 0.3%; features automatic stop at program-start point; two calibrated VU meters; latching fast-forward control; latching pause control; restart button; lighted channel indicators; inputs for right/left mike and aux.; 5" H × 12½" W × 10" D..... $100

TRANSAUDIO

3850 8-Track Deck
Stereo 8-track record/playback deck features push button fast forward, auto stop, restart, record, pause, and repeat; separate left/right record level controls; LED channel indicators; dual VU meters with LED stop and record indicators; two mic jacks; phone jack. Wow and flutter 0.2% wrms; frequency response 40-10,000 Hz +3 dB; S/N 48 dB .. $160

NOTICE TO READERS

Prices of items described are suggested prices only and are subject to change without notice. Actual selling prices are determined by the dealer.

9 VIDEO CASSETTE TAPE RECORDERS

AKAI

VT-300N Nighthawk Portable VCR

Portable ½-in, 30-min black-and-white video cassette recorder designed for low-light applications; modular design with optional detachable three-in black-and-white monitor; includes Nighthawk video camera with C-mount 8:1 zoom lens, detachable 1.5-in VF-300E electronic viewfinder, and built-in omnidirectional electret microphone. Recorder has twin rotating glass and crystal ferrite heads in frequency modulation system; uses USA Standard TV signal; features quick start, piano key function controls, battery meter, and three-digit tape counter with reset; resolution 270 lines; S/N 40 dB (video), 45 dB (audio); input 1 V p-p into 75 ohms (video), −65 dB into 600 ohms (audio); audio frequency response 80-10,000 Hz; accepts Akai VK30 cassette; ac or two 6-V battery operation; 5" H × 9.75" W × 11.5" D. Video camera features 500-line horizontal resolution at 15,750 Hz; vertical frequency 60 Hz; video output 1 V p-p composite; 8" H × 2.6" W × 6.5" D..... $2395

VT-350 Portable VCR

Portable black-and-white video cassette recorder with vertical-interval editing, variable speed frame control, and still frame; ½-in cassette format; 30-min recording time; twin rotating head, frequency modulation recording system; audio dubbing; includes black and white video camera with "C" lens mount, VF-300E electronic viewfinder, and 8:1 (11.5 to 90 mm) zoom lens; battery or ac power; recorder dimensions 5" H × 9.75" W × 11.5" D; camera dimensions 3.6" H × 4.3" W × 7.8" D..... $2195

ActiVideo VCR/Tuner-Timer

Portable VHS two-hour color video cassette recorder with detachable color TV tuner adaptor/timer. Video recorder: has rotary slant azimuth two-head scan system and NTSC color video signal system; features double-speed playback; still and single-frame advance/variable speed playback (still through four times normal speed control); front-panel remote pause control jack; three-digit tape counter with memory; sound dubbing; LED flashing dew warning, battery warning, and tape motion indicators; video horizontal resolution 240 lines; input 0.5-2 V, 75 ohms unbalanced (video), −65 dB, 600 ohms (mic); output 1 V, 75 ohms unbalanced (video), −20 dB, 1000 ohms (audio); S/N 45 dB (video), 40 dB (audio); audio frequency response 50-10,000 Hz. Tuner/timer: features built-in programmable 24-hr LED digital clock/timer display that can be preset for up to seven days with auto on-off function; 12-channel (UHF/VHF) electronic tuning; auto battery recharging; auto shut-off; auto external/internal battery switch; three-hour battery charge time. System operates on ac house current or rechargeable nickel-cadmium batteries; includes antenna switch box, r-f convertor, earphone, wire remote pause control, T-30 video cassette, channel display card for tuner, antenna cable, UHF antenna, 75/300 ohm antenna convertors and 300/75 ohm antenna convertors; 13.3 lbs (VCR), 10.4 lbs (tuner); 4.8" H × 11.5" W × 11.9" D..... $1495

GENERAL ELECTRIC

IVCR0010W Video Cassette Recorder

VHS four-hour computer-programmable color video cassette recorder. Features electronic memory bank with five program select buttons with LED indicators, auto start, stop, and channel change, repeat program button, and four sequence indicator lights; built-in digital clock/timer display with memory recall (displays pre-programmed schedule of shows); 12-channel pushbutton electronic tuning for any combination of VHF/UHF channels; three-digit tape counter with memory and program search; remote pause control for use within 16 ft; audio dubbing; pause control; long/standard play tape speed selector; tracking control; includes 75-ohm coaxial cable, two 300-ohm UHF twin leads, 300/75 ohm transformer, 75/300 ohm transformer, and terminal block; high impact plastic construction with woodgrain finish; 6¼" H × 18¹³/₁₆" W × 14¹/₁₆" D. $1300

IVCR0002W Video Cassette Recorder

VHS four-hour color video cassette recorder. Features built-in 24-hr digital clock/timer display with preselected auto start/stop; long/standard play recording selector; built-in VHF/UHF tuner; tape counter with memory switch and program search; remote pause control for use within 20 ft; tracking control; audio dubbing; dew indicator lamp; 6⅞" H × 19⅛" W × 15½" D..... $995

GTE PHILCO

V1100 Video Cassette Recorder

VHS 2/4-hour color video cassette recorder with separate remote pause control unit. Features built-in 24-hr electronic digital clock/timer with auto shut off at end of program; built-in VHF/UHF tuners and auto fine tuning (enables user to tape program when TV is off or while watching another program); audio dubbing button; LED on and dew indicators; digital tape counter with memory; mic jack; includes power cord, tape, and antenna cables. S/N 43 dB/sec (video), 40 dB/sec (audio); video horizontal resolution 240 lines; audio frequency response 50-10,000 Hz; 120 V ac, 60 Hz, 28 W; 6⅞" H × 19⅛" W × 15½" D..... $1100

SC2113. Color video camera with power zoom lens and electronic viewfinder $1095

GTE SYLVANIA

VC4000 Portable VCR

Portable VHS four-hour video cassette recorder with separate remote control unit. Features separate record and playback sections; built-in 24-hr programmable digital timer; pause button (manual or with remote control); audio dubbing button; built-in electronic VHF/UHF tuner with pushbutton channel selection; battery pack and carrying strap included in record section $1500

VC2500 VHS Video Cassette Recorder

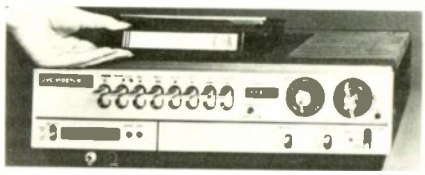
VHS 2/4-hr color video cassette recorder with separate remote pause control unit. Features built-in 24-hr electronic digital clock/timer; built-in VHF/UHF tuners with auto fine tuning (allows user to tape program when TV is off or while watching another program); auto threading; audio dubbing button; LED on and dew indicators; digital tape counter with memory reset; mic jack; includes power cord, tape, and antenna cables. S/N 43 dB/sec (video), 40 dB/sec (audio); video horizontal resolution 240 lines; audio frequency response 50-10,000 Hz; 120 V ac, 60 Hz, 28 W; 6⅞" H × 19¼" W × 15⅜" D..... $1100

SC2112. Color video camera with power zoom lens and electronic viewfinder $1095

JVC

HR-4100 Vidstar Portable VCR

Portable VHS two-hour color video cassette recorder with rotary slant azimuth two-head helical scan re-



cording system and NTSC color signal system. Features piano-key recording/playback controls including audio dub; three-digit tape counter with search button and reset; LED battery and moisture warning indicators; three-way power supply; battery pack compartment; built-in r-f converter for channel 3 or 4; tracking control; drop-out compensator; built-in automatic line/camera input selection; supplied with PBP-1 battery pack, earphone, r-f converter, F connector, two antenna cables, and antenna selector. Video: input 0.5-2.0 V p-p, 75 ohms unbalanced; output 1.0 V p-p, 75 ohms unbalanced; horizontal resolution 240 lines (color); S/N 45 dB (Rhode & Schwarz noise meter). Audio: input −67 d8s, 10k ohms unbalanced (mic), −20 d8s, 50k ohms unbalanced (line); output −6 dBs, 1k ohm unbalanced (line), 0 dBs, 1k ohms unbalanced (earphone); frequency response 70-10,000 Hz; S/N 40 dB; 20.5 lbs with cassette, battery pack, and r-f converter; 5⁷/₁₆" H × 13⅜" W × 13" D.... $1250

HP-4000AU Vidstar Portable VC Player

Portable VHS two-hour color video cassette player with rotary slant azimuth two-head helical scanning system and NTSC color signal system. Playback-only machine features lightweight construction; still playback key that freezes scene for up to four min; built-in r-f converter for channel 3 or 4; piano-key tape function controls; three-digit tape counter with search button and reset; LED power and dew indicators; tracking control; remote control jack; ac power pack compartment; includes ac power pack, earphone, r-f converter, two antenna cables, F connector, and antenna selector. Video: output 1.0 V p-p, 75 ohms unbalanced; horizontal resolution 240 lines (color); S/N 45 dB (Rhode & Schwarz). Audio: output −6 dBs, 1k ohms unbalanced (line), 0 dBs, 1k ohm unbalanced (earphone); frequency response

70-10,000 Hz; S/N 40 dB; 17.8 lbs with ac power pack; 5 7/16" H × 13 3/8" W × 14 3/16" D..... $925

GC-4400 Video Camera

Two-tube system portable video camera; 2/3-in electrostatic focus/electromagnetic deflection saticon tubes; auto-iris control with manual override; 1.5-in b&w viewfinder with exposure and standby mode indicator; 6:1 zoom lens; 12 V dc, 13.5 W .. $2595

MAGNAVOX

8225 Video Cassette Recorder

VHS programmable 2/4-hr "Touch-Tune" video cassette recorder can be preset for up to seven days to record four programs on different channels or same program regularly for as long as tape lasts. Features built-in electronic digital clock/timer that turns unit on and off, changes channels automatically, and displays time of day and pre-selected program schedule; timer light; 14-channel pushbutton electronic channel selection (2-83) with LED channel indicators; automatic fine tuning switch; tracking control; three-digit tape counter with memory; automatic dew moisture control; remote pause jack; remote control unit for tape start/stop at distance; audio dubbing button; microphone jack; includes dustcover $1295

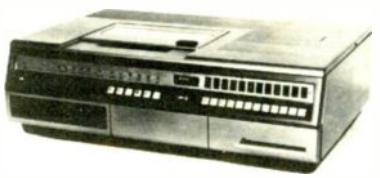
8220. Similar to 8225 except non-programmable video cassette recorder with built-in 24-hr electronic digital clock/timer (allows user to preset beginning and end of unattended recording) and remote-control editing $1025

Deluxe color video camera with zoom lens and electronic viewfinder $1295

MITSUBISHI

HS 200 U Video Cassette Recorder

VHS 2-4-6 hr 1/2-in three-speed color video cassette recorder with five dc servo-controlled motors in di-



rect-drive transport system and two rotary hot press ferrite helical-scan, dual-purpose audio sync-control, dual-purpose full-track audio dubbing/erase, and dual-purpose cue heads. Features seven-day programmable memory that stores up to six programs; electronic digital seven-day timer; program search; electronic 12-channel touch tuning; automatic repeat; three-digit index counter; auto TV/VCR switch; audio dubbing; mic input; video and audio in/out; switchable channel 3 or 4 r-f; microprocessor-controlled tape function controls; includes full-function remote control with provision for optional wireless full-function remote unit. S/N 42 dB; fast forward/rewind time 3 min with T-120 tape; 6.5" H × 19.5" W × 13.5" D $1400

PANASONIC

Omnivision IV Series

PV-2200 Portable VCR

Portable VHS programmable four-hour color video cassette recorder and detachable electronic pushbutton VHF and UHF tuners with automatic fine tuning; can program up to four selections on any channel over seven-day period or can program same selection for seven days a week with timer; operates 30 min outdoors with optional PK-300 color camera. Features electronic digital clock/timer with on/off for preset recording; solenoid tape function pushbutton controls; three-way power supply through house current, car/vehicle battery, or rechargeable battery; built-in r-f modulator for channels 3 or 4; includes shoulder belt and rechargeable Panalloid battery; 5 1/2" H × 12 1/8" W × 14 1/4" D (deck), 5 1/2" H × 7 1/2" W × 14" D (tuner)..... $1525

PV-2100. Similar to PV-2200 except has detachable manual VHF and UHF tuners $1450

PV-1500 Video Cassette Recorder

VHS programmable four-hour color video cassette recorder records up to four programs on any channel over seven-day period. Features digital clock/timer with on-off; built-in VHF and UHF tuners with electronic pushbutton tuning; built-in r-f modulator for channels 3 or 4, piano-key tape function controls; simulated wood-grain cabinet; includes plastic dustcover, cables, connectors, and NV-T60 VHS video cassette; 7" H × 19 1/4" W × 15 1/2" D..... $1295

PV-1100 Video Cassette Recorder

VHS four-hour color video cassette player/recorder; compatible with black-and-white or color television systems; 1/2-in cassette format; direct drive motor and capstan servo system; built-in electronic digital clock with 24-hour timer; automatic stop and shut-off at end of tape; remote pause control; built-in VHF/UHF tuners; auto fine tuning switch; auto stop and memory rewind functions; audio dubbing; LED dew detector; annealed die-cast aluminum chassis; 6 7/8" H × 19 1/8" W × 15 1/2" D..... $1095

Hand-held camera with built-in mic $300

PK-300 Color Video Camera

Color video camera with 17-102 mm 12.0 C-mount 6:1 zoom lens, electronic viewfinder, and built-in omnidirectional electret condenser microphone; light intensity indicator; has pistol grip with remote trigger switch and shoulder support/tripod mounting hole; includes ac adaptor; 11 lbs $1275

PK-200. Color video camera with 25-mm f1.8 C-mount lens, optical viewfinder, and condenser microphone; 8 lbs..... $850

QUASAR

VH5100 Video Cassette Recorder

VHS four-hour programmable color video cassette recorder with remote TV channel change. Features seven-day advanced programming with automatic channel change and built-in digital clock/timer display; forward/reverse program cueing; one-button selection of 14 UHF/VHF stations; audio overdub; switchable channel 3 or 4 r-f modulator; auto switching to TV selection when VTR off. Video: horizontal resolution 270 lines (b&w), 230 lines (color); input 1.0 V p-p, 75 ohms unbalanced; output 1.0 V p-p, 75 ohms unbalanced; S/N 42 dB (b&w, Rhode & Schwarz). Audio: input −20 dB, 100k ohms unbalanced (line), −70 dB, 600 ohms unbalanced (mic); output −6 dB, 600 ohms unbalanced; frequency response 100-8000 Hz −10 dB (short play), 100-6000 Hz −10 dB (long play); S/N 40 dB. Includes 1-2 hr video cassette, remote channel/pause control with 20-ft cable, 5-ft 75-ohm VHF output cable, 5-ft 300-ohm UHF connector cable, 75/300 ohms VHF matching transformer, and 300/75 ohms VHF antenna adaptor; 7" H × 19" W × 14 3/4" D $1350

VH5010. Same as VH5100 without remote channel change and electronic program cue and review; 6 7/8" H × 19 1/8" W × 15 1/2" D..... $1150

VH5200 Portable VCR

VHS 1/2-in four-hour portable color video cassette recorder with two rotary hot press ferrite video heads, one stationary audio control head, and full track and audio dubbing erase heads; azimuth helical scan system. Features three-way power supply (built-in sealed rechargeable battery, 12 V dc, or ac home current); audio dub; logic-controlled tape function controls; three-digit tape counter with memory; standard/long play speed switch; battery check meter. Video: horizontal resolution 280 lines (b&w), 240 lines (color); input 1.0 V p-p, 75 ohms unbalanced; S/N 42 dB (b&w). Audio: input −20 dB, 100k ohms unbalanced (line), −70 dB, 600 ohms unbalanced (mic); frequency response 100-8000 Hz −10 dB (standard play), 100-6000 Hz −10 dB (long play); S/N 40 dB. Includes 1-2 hr video cassette, battery pack, car battery cord, shoulder strap, earphone, 5-ft 75-ohm VHF output cable, and 300/75 ohms VHF antenna adaptor; 19 lbs w/battery; 5 1/2" H × 12 1/2" W × 12 1/2" D. $1150

515. Electronic varactor tuner for VH5200; 14-position electronic tuning system for 14 UHF/VHF channels; remote TV channel changing; permits ac home operation and off-the-air recording; also recharges built-in battery on ac power..... $425

VA505. Power supply for VH5200; recharges batteries and enables standard ac house current operation..... $130

VK720. Color video camera with electronic viewfinder; 6:1 zoom lens, and boom electret microphone..... $960

VH5020 Video Cassette Recorder

VHS 1/2-in six-hour color video cassette recorder with two rotary hot press ferrite video heads, one audio control stationary head, and full-track and audio dubbing erase heads. Features built-in electronic digital clock/timer; 14 UHF/VHF station selection buttons; audio dub; pause control; three-digit tape counter with memory; cue/review; tuner/camera input select switch. Video: horizontal resolution 270 lines (b&w), 230 lines (color); input 1.0 V p-p, 75 ohms unbalanced; S/N 42 dB (b&w, Rhode & Schwarz); output 1.0 V p-p 75 ohms unbalanced Audio: input −20 dB, 100k ohms unbalanced (line), −70 dB, 600 ohms unbalanced (mic); output −6 dB, 600 ohms unbalanced (line); frequency response 100-8000 Hz (standard play), 100-6000 Hz (long play), 100-5000 Hz (SLP), all −10 dB; S/N 40 dB. Includes 1-2-3 hr video cassette, remote pause control with 20-ft cable, 5-ft 75-ohm VHF output cable, 5-ft 300-ohm UHF connector cable, 75/300 ohms VHF matching transformer, and 300/75 ohms VHF antenna adaptor; 6 7/8" H × 19 1/8" W × 15 1/2" D..... $1100

VH5150. Same as VH5020 except has built-in electronic digital clock/timer display that can program up to six hours of recording over seven-day period; 7" H × 19" W × 14 3/4" D $1325

RCA

VCT400 SelectaVision VCR

VHS programmable two-speed direct-drive video cassette recorder with standard play (two hours) or long play (four hours) recording option; rotary two-head helical scan system; NTSC color video signal (EIA). Features built-in electronic seven-day programmer with microprocessor and timer display; user feeds memory circuits day of program, program time, program length, and program channel, and up to four programs on different channels can be preset; 14 programmable electronic touch-button selectors receive 82 VHF/UHF channels with LED channel indicators; electronic program indexing searches beginning of particular program and automatically stops at that point. Additional features include three-digit tape counter with memory; remote pause control with 20-ft cord; tracking control; automatic dew moisture control with LEDs; audio dub; fast forward/rewind time 4 min (VK250 cassette). Input levels 1.0 V p-p, 75 ohms unbalanced (video), −20 dB, 50k ohms unbalanced (audio, line), −70 dB, 600 ohms unbalanced (audio, mic); output levels 1.0 V p-p, 75 ohms unbalanced (video), −6 dB, 600 ohms unbalanced (audio); VHF output signal Ch 3 or 4, 75 ohms unbalanced; 75-ohm external VHF antenna terminals, 300-ohm external UHF antenna terminals; 110-130 V ac, 60 Hz; 7" H × 19" W × 14 1/2" D..... $1300

CC001. Color camera with 25-mm lens, built-in microphone, detachable optical viewfinder, and recording/pause control..... $875

CC002. Color camera with Canon 6:1 zoom lens, built-in microphone, electronic viewfinder, and recording/pause control..... $1300

BW003. Black-and-white camera with 16-mm lens, built-in microphone, flip-up viewfinder, and trigger pause control $330

BW004. Black-and-white camera with Canon 3:1 zoom lens, built-in microphone, and trigger pause control.. ..... $430

VCT201 SelectaVision VCR

VHS two-speed direct-drive video cassette recorder with standard (two hours) and long (four hours) play recording option; rotary two-head helical scan sys-

9 VIDEO CASSETTE TAPE RECORDERS

tem; NTSC color video signal (EIA). Features built-in 24-hr digital clock/timer with auto stop (allows user to preset beginning and end of unattended recording); three-digit tape counter with memory that also serves as program indexer; remote pause control with 20-ft cord; tracking control; automatic dew moisture control with LED; audio dub; fast forward/rewind time 4 min (VK250 cassette). Input levels 1.0 V p-p, 75 ohms, unbalanced (video), −20 dB, 50k ohms, unbalanced (audio, line), −70 dB, 600 ohms, unbalanced (audio, mic); output levels 1.0 V p-p, 75 ohms, unbalanced (video), −6 dB, 600 ohms, unbalanced (audio); VHF output signal Ch 3 or 4, 75 ohms unbalanced; 75-ohm external VHF antenna terminals and 200-ohm external UHF antenna terminals; optional cameras, video cassettes, and microphone same as VCT400; 110-130 V ac, 60 Hz; 7" H × 19⅛" W × 15½" D..... $1100

SANYO

Betacord Video Cassette Recorder

Color video cassette recorder with Beta cassette format for one hour, two hour, or three hour recording/playback; one-touch pushbutton operation; built-in digital clock/timer; memory digital tape counter; instant editing with pause control; built-in all-channel tuner; lighted channel indicators; automatic fine tuning; camera and microphone inputs; video inputs/outputs; automatic shut-off with sleep switch; rotary two-head helical scan recording system; 7.7" H × 19.5" W × 14.6" D..... $995

SHARP

VC-6700 Video Cassette Recorder

VHS microprocessor-controlled programmable six-hour video cassette recorder features memory preset that is programmable over three one-week periods; auto program locate device; four-digit LED counter/time display; timer/sleep switch; tape remaining indicators $1395

XC-35U. Portable color video sound camera with 1.5-in electronic viewfinder/monitor, built-in electret condenser microphone, and C mount f1.8 17.5-105 mm manual 6:1 zoom lens; has 90-degree rotatable eyepiece, Incident Light Level indicator, and on-camera recording/pause control $1395

SONY

SL-3000 Portable VCR

Betamax 1-hr portable color video cassette recorder with rotary two-head helical scanning system and

EIA-standard NTSC color video signal system. Features one-button recording; audio dubbing; cue function; pause control; logic-controlled tape functions; dew sensor; battery indicator; three-way power supply (ac, dc, or battery operation); four-digit tape counter; tape speed control system. Video: S/N 45 dB; input 1.0 V p-p, 75 ohms unbalanced; output 1.0 V p-p, 75 ohms; resolution 240 lines. Audio: S/N 40 dB; frequency response 50-7000 Hz. Includes −26-dB earphone, antenna switch and 2-m cable, and shoulder strap; 8.5 kg with tape and battery; 127 mm H × 296 mm W × 345 mm D..... $1300

HVC-1000. MF Trinicon color video camera for SL-3000; has ⅔-in Trinicon pick-up tube; built-in F1.8 14-42 mm zoom lens, built-in microphone, single reflex optical viewfinder, remote start/stop recorder control functions, and remote control pause; 300-line resolution; S/N 45 dB; video output 1.0 V p-p; 22 kg $1400

TT-3000. Tuner-timer for SL-3000; features built-in electronic digital timer for seven-day programmable recording capability with access to 14 VHF/UHF channels, three-hr recording capacity, express tuning, and auto shut-off and fine tuning; 16 lbs, 9 oz. $500

SL-5400 Video Cassette Recorder

Betamax 4½-hr color video cassette recorder with direct-drive dc head and servo capstan motors in rotary two-head helical scan system and NTSC-color video signal. Features BetaScan system for instant forward/reverse search and scan; built-in three day timer/one-event programmer; fourteen-position pushbutton tuning; auto program selector; still-frame capability; BetaScan Commander remote control with freeze-frame capability up to 15 ft away; audio dubbing; five recording length settings; air-damped cassette lid; remote camera connector; four-digit tape counter. Video: horizontal resolution 280 lines (monochrome), 240 lines (color); S/N 45 dB (monochrome). Audio: S/N 40 dB; frequency response 50-8000 Hz (Beta II), 100-7000 Hz (Beta III). Includes cassette tape, channel indicators, antenna connectors, 75-ohm coaxial cable, and 300-ohm twin-lead cable; 33 lbs; 6½" H × 19¾" W × 15" D..... $1250

Betamax SL-8600 VCR

Color video cassette recorder with Beta cassette format for three-hour recording. Features LED clock timer; record/pause indicator; remote pause with 20-ft cord; tape counter with memory; VHF and UHF channel selectors with numeral read-out; rotary two-head helical scan recording system; optional black-and-white sound camera available; 7¹¹⁄₁₆" H × 18⅜" W × 16⅛" D..... $1150

VP-2011 Video Cassette Player

U-Matic ¾-in one-hour video cassette player with microprocessor-controlled Auto Search Control random access unit with automatic program/segment locate and play function, pause control, and LED digital position/selected position readout display. Features auto stop, rewind, and restart; still adjust control; 8-pin VTR connector; BNC video out and playback on conventional TV receiver with optional r-f adaptor $2000

VO-2610. U-Matic video cassette player/recorder with input review, skew control, and still adjust $2150

VP-2010. U-Matic player with still control ... $1775

Trident VP-2030. U-Matic player/recorder can record on three major world TV systems, NTSC, PAL, and SECAM, when used with PVM-1850PS Trinitron monitors $2350

PVM-1850PS. Trinitron monitor..... $1430

TOSHIBA

V-5425 Portable VCR

Betamax two-speed five-hour programmable portable video cassette recorder. Features comput-r-tune micro-computer 12-station programmable electronic tuning system that presets up to three programs per week; freeze frame, fast forward, and reverse with scanning and monitoring facilities; four-digit tape counter with fast forward/rewind auto find and counter memory rewind; LED digital clock/program frequency display with adjust switch; audio dubbing; remote pause; LED power, record, long play, pause/still, and tape function indicators $1345

V-5420 Video Cassette Recorder

Programmable three-hour Beta-format video cassette recorder records up to three different programs within seven-day period. Features built-in electronic digital clock/timer; memory circuits fed with day of program, program channel, program time, and program length; programmable electronic forward/reverse channel selectors (2-13) with LED channel indicators; tape sentinel; piano-key tape function controls with LED indicators; search tape counter with memory reset; LED power, record, standby, and pause indicators; audio dubbing; remote pause control..... $1295

IK-1610. Portable color video camera with 25-mm F/1.8 lens, built-in condenser mike, hand grip and shoulder rest, univicon sensitivity, remote trigger pause, and ac/dc operation..... $895

IK-1650. Same as IK-1610 but also has 18-105 mm F/1.8 zoom lens and electronic viewfinder with built-in record/playback monitor and sound . $1345

V-5530 Video Cassette Recorder

Portable three-hour Beta-format video cassette recorder. Features audio dubbing; remote pause; cue and review; touch reference controls; optional built-in battery supply; allows one hour fully remote recording..... $1245

V-5535. V-5530 with tuner; does not include ac adaptor..... $1345

TU-530. Timer/tuner for V-5530; LED timer for hands-off recording; includes battery charging function..... $245

V-5310 Video Cassette Recorder

Color video cassette recorder with Beta cassette format for three-hour recording; built-in fully electronic LED timer; remote pause control; audio-voice dubbing control; capstan-servo drive mechanism $1095

LVR Video Tape Recorder

Endless-loop-tape fixed-head fixed-reel one-hour color video tape recorder. System features simpli-

fied internal mechanics, 17-sec fast-access time to any track for visual review/preview, 220-track digital tape indexing, distortion- and vibration-free tape handling, smaller size and weight, and high-speed tape duplication; uses ½-in 100-m-long graphic-lubricated tape. Additional features include random access and function flexibility; red LED track counter display; enter three-digit track number selector; play and record buttons with LED; up/down for preview, scan, or rewind; repeat with LED indicator (repeats selected 17-sec track, locks, cancelled by play or stop); stop; and eject. Video: EIA NTSC-compatible color in and out signals; S/N 42 dB min.; resolution 240 lines (color); track access time 20 msec/track; single track loop time 16.7 sec; audio S/N 40 dB; 5⅜" H × 12⅜" W × 13½" D .....approx. $600

ZENITH

VR9000W Video Director VCR

Betamax-format five-hour color video cassette recorder with rotary two-head helical scan recording system and EIA NTSC color video signal. Features Video Action remote control with speed search and stop; automatic digital timer display with auto shut-off permits user to program over three-day period; electronic 14-pushbutton tuning; audio dubbing; tape counter with reset button; camera jack for use with any Zenith black-and-white or color TV camera. Video input 1.0 V p-p +1/−0.5 V, 75 ohms unbalanced; output 1.0 V p-p ±10%, 75 ohms; horizontal resolution 250 lines ±20 (monochrome); S/N 45 dB (video), 40 dB (audio); audio frequency response 50-10,000 Hz; 6½" H × 19⅛" W × 15" D. $1195

10 BLANK TAPE

AMPEX

Grand Master II Series Cassettes
High bias; 70 μsec equalization.
366 C60 60 min..... $4.19
366-C90. 90 min..... $5 29

Grand Master I Series Cassettes
Normal bias; 120 μsec equalization.
365-C60 60 min..... $3.69
365-C90 90 min..... $4.79

20/20 + Series Cassettes
364-C45. 45 min..... $2.39
364 C60. 60 min..... $2.69
364-C90 90 min..... $3.79
364-C120. 120 min..... $5.29

Plus Series Cassettes
371-C45. 45 min..... $1.39
371 C60. 60 min..... $1.69
371 C90. 90 min..... $2.79
371-C120. 120 min..... $4 19

Low-Noise Series Cassettes
352-C45. 45 min..... $0 99
352 C60. 60 min..... $1.29
352-C90. 90 min..... $1.89
352 C120 120 min..... $3.39

Grand Master Series Cartridges
389-45. 45 min..... $3 29
389 90. 90 min..... $3 99

20/20 + Series Cartridges
388-45. 45 min..... $2.79
388 90. 90 min..... $3.49

Plus Series Cartridges
382 45. 45 min..... $2.29
382-90 90 min..... $2.79

Grand Master Series Open-Reel Tapes
356 1511J1. 1200-ft, 7-in reel, 1.5 mil. $8.69
357 1511J1. 1800 ft, 7 in reel, 1.0 mil. $9 99
356 1731J1 2500-ft, 10½ in NAB reel, 1.5 mil..... $22 99
357-1731J1. 3600-ft, 10½-in NAB reel, 1 0 mil..... $26.49

20/20 + Series Open-Reel Tapes
372-151111 1200 ft, 7-in reel, 1.5 mil. $7.39
373-151111 1800 ft, 7-in reel, 1 0 mil. $8 99

Plus Series Open-Reel Tapes
332-1511J1. 1200-ft, 7 in reel, 1.5 mil. $5 89
342-1511J1. 1800 ft, 7 in reel, 1.0 mil. $7 39

Accessories
E3220BC. Demagnetizer/head cleaner for cassette players/recorders..... $4.69
E3228BC. Demagnetizer/head cleaner for 8 track cartridge players/recorders..... $5.59
ST 1 Cassette storage unit..... $1 49
G-RCK-1 Record care kit..... $7.99
G TRCK 1 Tape recorder care kit..... $7.99

Video Cassette Tape

Beta-Format Videocassettes
101 L 250-1C 30 60 min..... $13.49
101 L 500 1C. 60-120 min..... $16.95

VHS-Format Video Cassettes
102 T60. 60-120 min..... $16.95
102 T120 120 240 min..... $22.95

BASF

Professional I Series Cassettes
Ferric oxide; normal bias/equalization for imported decks.
60 min..... $3.49
90 min..... $4.99

Professional II Series Cassettes
Super chrome; normal bias; 70 μsec equalization
60 min..... $3.69
90 min..... $5.29

Professional III Series Cassettes
Ferrichrome for "third" switch position.
60 min..... $3.69
90 min..... $5 29

Studio I Series Cassettes
Normal bias/equalization.
60 min..... $3.29
90 min..... $4.69

Studio II Series Cassettes
High bias; chrome equalization
60 min..... $3.49
90 min..... $4.99

Performance Series Cassettes
Normal bias/equalization; mirror-polished tape; snap pack or mailer-box enclosure.
45 min..... $2.49
60 min..... $2.69
90 min..... $3.79
120 min..... $4.99

Studio Series 8-Track Cartridges
High output/low noise; mirror polished; boxed or carded enclosure
45 min..... $3.29
90 min..... $3.99

Performance Series 8-Track Cartridges
Low noise; back-lubricated tape.
45 min..... $2.89
90 min..... $3.49

Professional Series Open-Reel Tapes
1800 ft, 7-in reel..... $14.99
3600-ft, 10½ in reel..... $29.99

Studio Series Open-Reel Tapes
1800-ft, 7 in reel..... $9.99
2400-ft, 7 in reel..... $14.99
3600-ft, 10½ in reel..... $19.99

Performance Series Open-Reel Tapes
1800-ft, 7 in reel..... $7.19
2400-ft, 7-in reel..... $9.99
3600-ft, 7 in reel..... $15.99

Music Box
Black plastic storage cabinet holds up to 40 cassettes; can be mounted on wall or set on shelf..... $15.00

Accessories
8-track headcleaner..... $1.99
Cassette headcleaner..... $1.79
7 in plastic storage box..... $2.69
7-in plastic reel..... $1.59

Video Cassette Tape

Betamax Format
Chrome formulation.
L-500. 1-2 hrs..... $16.95
L-750. 1½-3 hrs..... $20 95

VHS Format
Chrome formulation.
T-60. 1 2 hrs..... $17.95
T-120. 2-4 hrs..... $24.95

CAPITOL

"The Music Tape" Cassettes
High-output low-noise with "cushion aire" backing.
C 45. 45 min..... $1.99
C-60. 60 min..... $2.49
C-90 90 min..... $3.69

"The Music Tape" Cartridges
High output low-noise.
8T-45. 45 min..... $2.49
8T-60 60 min..... $2.79
8T-90. 90 min..... $2.99
8T 100 100 min..... $3.19
8T-120. 120 min..... $3.79

CERTRON

High Energy Gamma
Oxide formulation; durable binder system.
C 60 HE. 60 min..... $1.99
C-90 HE. 90 min..... $2.39
C 120 HE. 120 min..... $2.99

Low Noise
C-30 LN. 30 min..... $0.89
C-45 LN. 45 min..... $0.99
C 60 LN. 60 min..... $1.09
C-90 LN. 90 min..... $1.49
C-120 LN 120 min..... $1.79

High Density
C-30 HD. 30 min..... $1.19
C-45 HD. 45 min..... $1.29
C-60 HD. 60 min..... $1.49
C-90 HD. 90 min..... $1.89
C 120 HD. 120 min..... $2.29

Memotape for Minicassette
MT30 30 min..... $3.99

10 BLANK TAPE

MT40. 40 min $4.99

Dictation Cassette
D30. 30 min $1.69
D45. 45 min $1.79
D60. 60 min $1.89
D90. 90 min $2.39

8-Track Cartridges
8T-45. 45 min $1.49
8T-65. 65 min $1.69
8T-90. 90 min $1.99

Tape Accessories
CHC. Cassette head cleaner $0.99
8T-HC. 8-track head cleaner $1.19

DAK INDUSTRIES

ML Cassettes
Normal bias; 120 μsec equalization.
ML46. 46 min $1.49
ML60. 60 min $1.76
ML90. 90 min $2.49

HEC Cassettes
Normal bias and equalization.
HEC 40. 40 min $1.27
HEC 60. 60 min $1.57
HEC 90. 90 min $1.91
HEC 120. 120 min $2.96

EC Special Length Cassettes
Normal bias and equalization.
EC32. 32 min $0.91
EC62. 62 min $1.03
EC92. 92 min $1.23
EC122. 122 min $1.82

LNC Cassettes
Low noise; normal bias and equalization.
LNC30. 30 min $0.77
LNC60. 60 min $0.92
LNC90. 90 min $1.17
LNC120. 120 min $1.89

C Voice Cassettes
Normal bias and equalization.
C30. 30 min $0.69
C60. 60 min $0.81
C90. 90 min $1.04
C120. 120 min $1.74

DENON

DX-5 Series
Double-coated FeCr-type music tape; broad bias curve and +8-dB increase in maximum output level; bias setting of 70 μsec; compatible with variety of cassette decks and program sources; ferri chrome position.
FC-46. 46 min $4.50
FC-60 60 min $5.00
FC-90. 90 min $7.00

DX-3 Series
Double-coated magnetic FeCr-type tape accommodates all types of cassette decks; normal bias setting; normal position.
NC-46. 46 min $3.50
NC-60. 60 min $4.00
NC-90. 90 min $5.60

DUPONT

Video Cassette Tape

Crolyn Video Cassettes
U-matic format; chromium dioxide; S/N 50 dB; audio output uniformity 1 dB; dropouts 20 per min; stop motion capable of exceeding 1 hour; tape life capable of exceeding 2000 passes.
KCS-5. 5 min $18
KCA-10. 10 min $20
KCS-10. 10 min $20
KCA-20. 20 min $25
KCS-20. 20 min $25
KCA-30. 30 min $30
KCS-30. 30 min $35
KCA-40. 40 min $34
KCA-50. 50 min $38
KCA-60. 60 min $40
KCA-75. 75 min $45
KC-90. 90 min $50

Prime Time Video Cassettes
Betamax format; chromium dioxide.
L250. ½ hr $14
L500. 2 hr $17
L750. 3 hr $22

EMI by EMPIRE SCIENTIFIC

Hi Fidelity Cassette Tapes
Ferric-oxide formulation; normal bias; 120-μsec equalization; for mastering.
60 min $4.85
90 min $6.40
120 min $7.85

Super Cassette Tapes
Ferric-oxide formulation; normal bias; 120-μsec equalization; for music/mastering.
60 min $3.50
90 min $5.20
120 min $6.95

Standard Cassette Tapes
Ferric-oxide formulation; normal bias; 120-μsec equalization; for general and music purposes.
60 min $2.35
90 min $3.55
120 min $4.60

Super Open-Reel Tapes
Standard; for mastering purposes.
600-ft, 5-in reel $14.95
1200-ft, 7-in reel $24.95
Long-Play.
900-ft, 5-in reel $16.95
1800-ft, 7-in reel $25.95
3600-ft, 10½-in NAB reel $59 95
Double-Play.
1200-ft, 5-in reel $18 95
2400-ft, 7-in reel $27.95

EMI also manufactures special formulations for professional and semi-professional use in the 7- and 10½-in reel formats.

FUJI

Metal Tape
Very high output, ultra-low noise, 7-12 dB higher MOL than chrome; metal bias; 70 μsec equalization.
C46. 46 min $9.98
C60. 60 min $10.97

FX-I Premium Cassette Series
Pure Ferrix; normal bias; 120 μsec equalization.
C46FX-I. 46 min $4.29
C60FX-I. 60 min $4.89
C90FX-I. 90 min $6.70

FX-II Premium Cassette Series
Beridox; high bias; 70 μsec equalization.
C46FX-II. 46 min $4.40
C60FX-II. 60 min $5.10
C90FX-II. 90 min $6.95

FL Low-Noise Cassettes
C46FL. 46 min $3.00
C60FL. 60 min $3.40
C90FL. 90 min $4.70
C120FL. 120 min $6.50

8-Track Cartridges
8T-45 ..... $4.20
8T-90 ..... $5.60

FB-151 Master Open-Reel Tapes
Ultra-low-noise, high-output, back-coated master recording tape; for use on tape recorders equipped with bias selector.
1200-ft, 7-in reel $12.25
1800-ft, 7-in reel $15.85
3600-ft, 10½ -in metal reel $43.20

Videocassette Tapes
VHS Beridox; high impact ABS housing.
T-120. 2-4 hr $25.50
T-90. 1½ hr $22.95
T-60. 1-2 hr $18.35
T-30. 0.5-1 hr $15.50
Beta videocassettes.
L-500. 1-2 hr $17.50
L-370. 1½ hr $14.90
L-250. 0.5-1 hr $13.25
L-125. 15-30 min. $11.95

HITACHI

UD-ER Cassettes
Epitaxial magnetic substance; high output and energy, low distortion; noral bias; includes replaceable self-index label and leader tape.
60ER. 60 min $4.00
90ER. 90 min $5.50

UD-EX Cassettes
Epitaxial magnetic substance for chrome position.
60EX. 60 min $4.00
90EX. 90 min $5.50

IRISH

Professional-Series Cassettes
In album/mailer.
261-C45. 45 min $1.95
261-C60. 60 min $2.20
261-C90. 90 min $3.00
261-C120. 120 min $5.30
In flip-top plastic box.
2000-C30. 30 min $1.40
2000-C60. 60 min $1.60
2000-C90. 90 min $2.05
In flip-top plastic box and polybag.
2000-C60B. 60 min $1.65
2000-C90B. 90 min $2.10

Low-Noise, Extended-Range Cassettes
Flip-top plastic box.
262-C60. 60 min $2.85
262-C90. 90 min $4.25

Cassettes in Polybag
2000C-60SP. 120 min $3.20
2000C-90SP. 180 min $4.10

8-Track Cartridges
8T45. 45 min. $3.00
8T90. 90 min. $3.80

Two 8-Track Cartridges in Box
2X42. Two 42 min $3.90
2X84. Two 84 min $4.40

270 Series Tape
Low-noise, high-output, back coated.
276-151. 1200-ft, 7-in reel $13.15
277-151. 1800-ft, 7-in reel $17.20

200 Series Professional Tape
Standard, 1½-mil, polyester base, ¼-in.
231-151. 1200-ft., 7-in reel $7.35
Extra-length, 1-mil, polyester base, ¼-in.

can you be bribed?

You get $35.21 in bribes when you try 10 DAK ML90 high energy cassettes risk free for only $2.19 each. Your bribe is bigger than your purchase!

FREE CATALOGUE "HOW TO RECORD" BOOKLET

Hats off to Maxell. Their UDXL cassette established a new standard of sound quality for all cassettes.

The new DAK ML90 starts another new technology. A technology of protection from Hi frequency loss and of extreme reliability.

Later we are going to offer you valuable bribes, just for testing these cassettes. risk free; so read on!

YOUR TIME IS PRECIOUS

Imagine yourself just finishing recording the second side of a 90 minute cassette and horrors, the cassette jams. Tape is wound around the capstan, your recorder may be damaged and you've just wasted 90 minutes of your time and perhaps lost a great recording off FM.

Enter DAK. We manufacture over one million units of cassette tape each month in our factory. Many of our tapes are used for high speed duplication where they are recorded at speeds up to 8 times normal. This is the ultimate stress for cassettes and causes more failures than any other use.

When we first started, 12 years ago, DAK's cassettes failed, just like many others. So we installed over $20,000 worth of high speed duplication equipment at our factory and set out to design the perfect cassette.

MOLYSULFIDE

Failure after failure. For six years we substituted, remade, tested and retested until we positively linked the major cause of cassette failure to the slip sheets, or liners in the cassette. Evidently, 3M and TDK were hot on our heels, because they have now also come out with new liners.

We developed polyester slip sheets with raised spring loaded ridges to guide each layer of tape as it winds. We coat the liners with a unique formulation of graphite and a new chemical, molysulfide.

Molysulfide reduces friction several times better than graphite and allows the tape to move more freely within the cassette. The molysulfide is tougher and makes the liner much more resistant to wear.

Hi frequency protection! Tape is basically plastic, and as it moves within the cassette internal friction causes the build up of static electricity, much as rubbing a balloon against your hair, or scuffing your shoes on a carpet in dry weather.

Static electricity within the cassette was drastically reduced by the low friction of the molysulfide and easily bled off, so that its tendency to erase very high frequencies was drastically reduced. A very important consideration for often played tapes.

MAXELL IS BETTER

Yes, honestly, if you own a $1000 cassette deck like a Nakamici, the frequency responses of Maxell UDXL or TDK SA are superior to DAK and you just might be able to hear the difference.

DAK ML has a frequency response that is flat from 40cps to 14,500 ±3db. Virtually all cassette recorders priced under $600 are flat ±3db from 40cps to about 12,000cps, so we have over 2000cps to spare, and you'll probably never notice the difference.

No apology. We feel that we have equaled or exceeded the mechanical reliability of virtually all cassettes and offer one of the best frequency responses in the industry. Maxell UDXL is truly the Rolls Royce of the industry, and DAK is comparable to the 100% US made Cadillac or Corvette!

Price DAK manufactures the tape we sell. You avoid paying the wholesaler and retailer profits. While Maxell UDXL 90s may sell for $3.50 to $4.50 each at retail, DAK ML90s sell factory direct to you for only $2.19 each complete with deluxe boxes and index insert cards.

YOU WIN

You are paying less for the 10, 90 minute cassettes than you would pay for the comparable bribes we are offering if you went to a Radio Shack store.

Yours Free

CHECK THE VALUE OF THE DAK BRIBES AT RADIO SHACK

The next time your batteries are dead in a calculator, radio, flashlight or battery operated recorder, you'll be glad you have this versatile battery eliminator AC adaptor.

You'll save lots of money on batteries because now you can plug in, instead of using up expensive batteries. 4 voltages: 3, 4.5, 6 and 9 volts plus 4 plugs to fit virtually anything battery powered. Radio Shack sells a similar 4 voltage adaptor for $9.95.

Think of it, 10 of the most commonly used six foot hook up cords with RCA plugs at each end. You can connect friends recorders, extra tuners, or virtually any stereo equipment. You'll certainly appreciate these cords in the years to come. Radio Shack sells their six foot cords for $1.89 each.

You need clean tape heads to make good recordings. The easiest way to clean your heads is with DAK's 12 oz. deluxe spray head cleaner, complete with handy snorkel tube. Radio Shack doesn't sell a single large 12 oz. can, but 12 oz. from them costs $6.36.

The comparable Radio Shack prices are not list prices, but the actual prices you would pay at a store when this ad was written.

Yours Free

WE WIN TOO

Customers like you are very valuable in the form of future business. We anticipate receiving over 6000 orders and 4500 repeat customers from this advertisement to add to our list of over 57,000 "actives." We are betting you will buy our cassettes again, and we are putting our money where our mouth is!

TRY DAK ML90 FREE

We want you to try these high energy cassettes on your own recorder without obligation for 30 days. If you aren't 100% satisfied for any reason, simply return the tapes and bribes to DAK for a full refund.

To order your 10 DAK ML90 minute high energy cassettes and receive your $35.21 bribe with your credit card, simply call toll free 800, 423-2636, (in Calif. call 213-984-1559) or send your check for $21.90 plus $3 for postage and handling for each group of 10 cassettes and bribes to DAK. (Calif. residents add 6% sales tax).

DAK unconditionally guarantees all DAK cassettes for one year against any defects in material or workmanship.

Why not order an extra group of 10 DAK ML90 cassettes for yourself or a friend? We will add one free ML90 cassette to each additional 10 you buy and of course you get all 3 bribes with each group of 10 tapes.

DAK INDUSTRIES INCORPORATED

Call TOLL-FREE . . . . . (800) 423-2636
In California Call . . . . . (213) 984-1559
10845 Vanowen St., North Hollywood, CA 91605

CIRCLE NO. 77 ON READER SERVICE CARD

10 BLANK TAPE

241-151. 1800-ft., 7-in reel $9.25
Double-length, ½-mil, polyester tensilized base.
251-151. 2400-ft., 7-in reel $16.10

Betamax Video Cassettes
551-L250-10X. ½-1 hr $13.95
551-L500-10X. 1-2 hr $16.95

LUX

XM Series
Magnetic tape features skew adjustment facility, stainless-steel metal tape guide, 7-mm wide pad, roll-spring holding mechanism, four-guideroller system, and sensing roller for transport time.
C60 I. 60 min $6.25
C90 I. 90 min $7.75
C60 II. 60 min $6.75
C90 II. 90 min $8.75

MAXELL

UD-XL-I Epitaxial Cassettes
Normal bias; 120 μsec equalization.
C-60. 60 min. $5.25
C-90. 90 min. $7.25

UD-XL-II Epitaxial Cassettes
Chrome type; high-level bias; 70 μsec equalization.
C-60. 60 min. $5.25
C-90. 90 min. $7.25

Ultra-Dynamic Cassettes
Normal bias.
UD-46. 46 min. $3.70
UD-60. 60 min. $4.00
UD-90. 90 min. $5.90
UD-120. 120 min. $7.90

Low-Noise Cassettes
Normal bias.
LN-46. 46 min. $2.45
LN-60. 60 min. $2.70
LN-90. 90 min. $4.10
LN-120. 120 min. $5.30

Ultra-Dynamic 8-Track
Normal bias.
UD8T-46. 46 min. $5.20
UD8T-90. 90 min. $6.50

8-Track Cartridges
Normal bias; low noise.
LN8T-46. 46 min. $3.95
LN8T-60. 60 min. $4.40
LN8T-90. 90 min. $4.95

Low-Noise Open-Reel Tape
1. 5-mil polyester, (normal bias).
LN-50-60. 1200-ft, 7-in reel $8.70
LN-50-120. 2500-ft, 10½-in reel $24.70
1-mil polyester
LN-35-90. 1800-ft, 7-in reel $10.00
LN-38-180. 3600-ft, 10½-in reel $28.00
0.5-mil polyester
LN-25-120. 2400-ft, 7-in reel $14.95
LN-18-180. 3600-ft, 7-in reel $21.25

Ultra-Dynamic Open-Reel Tape
Ultra-dynamic, high-energy type, (normal bias).
1.5-mil polyester
UD50-60. 1200-ft, 7-in reel $9.95
UD50-120. 2500-ft, 10½-in reel $28.30
1-mil polyester
UD35-90. 1800-ft, 7-in reel $11.50
UD35-180. 3600-ft, 10½-in reel $31.90

Professional Epitaxial Open-Reel Tape
Back-coated, ultra-dynamic, high energy, normal bias type.
1.5-mil polyester
UD-XL 50-60B. 1200-ft, 7-in reel $12.45
UD-XL 50-120B. 2500-ft, 10½-in reel .. $33.75
1-mil polyester
UD-XL 35-90B. 1800-ft, 7-in reel $14.00
UD-XL 35-180B. 3600-ft, 10½-in reel .. $38.50

Tape Accessories
7-in plastic reel $4.75
7-in precision metal reel $10.50
10.5-in precision metal reel $16.50
12 cassette plastic storage box $5.95
12 8-track plastic storage box $5.95
Tape recorder care kit $8.95
Care kit replacement fluid and pads $3.49

Video Cassette Tape

VHS Epitaxial Videocassette
Cobalt-ferric oxide formulation; ½ in; mirror-finished tape surface and binder system keep head wear to a minimum.
T-60. 1-2 hrs $19.95
T-120. 2-4 hrs $28.50

U-matic Videocassette
¾ in.
KCA-30. 30 min $28.50
KCA-60. 60 min $41.50

Open Reel Video Tape
½ in EIAS Standard.
VT-5B. 30 min $19.00
VT-7B. 60 min $30.00

MEMOREX

HIGH BIAS Cassettes
Ferrite crystal oxide formulation for high bias (chrome/CrO_2) setting; 70-μsec equalization with 4-5 dB noise reduction at high frequencies; built-in hub lock design accepts cassette from either direction; case has snap-lock hinge and overlapping lid.
HB-60. 60 min. $4.39
HB-90. 90 min. $5 99

MRX$_3$ Cassettes
Ferric oxide formulation; normal bias (120-μsec equalization).
C-30. 30 min. $2.59
C-45. 45 min. $2.79
C-60. 60 min. $2.99
C-90. 90 min. $4.49
C-120. 120 min. $5.99

8-Track Cartridges
45 min. $2.99
60 min. $3.29
90 min. $3.59

Accessories
Tape recorder care kit $8.99
8-track head/capstan cleaner $3.29
Cassette cleaning kit $2.99
8-track head cleaner $1.99
Cassette head cleaner $1.99

Video Cassette Tape

VHS™ Video Cassettes
½ in; low video noise/high r-f output; high Chroma output/low Chroma noise; features dust-proof plastic case with pressure-sensitive labels and removable black sleeve.
T-60. 1-2 hrs $19.99
T-120. 2-4 hrs $27.99

NAKAMICHI

ZX Cassette Tapes
Metalloy (metal-particle) formulation for use with metal-compatible decks only; features ultra-high coercivity and retentivity for improved distortion and MOL; 70 μsec equalization.
C60 ..... $9.75

SX Cassette Tapes
Single-coated; ionized cobalt and ferric oxide formulation; high coercivity permits use of CrO_2 bias and equalization (70 μsec) for 4-5 dB better S/N.
C60 ..... $5.50
C90 ..... $7.20

EX II Cassette Tapes
Single-coated; ferricobalt formulation; same bias and equalization (120 μsec) as EX tape; extra-low noise, high output.
C60 ..... $5.20
C90 ..... $7.00

EX Cassette Tapes
Specially formulated ferrocrystal tape for improved frequency response, S/N ratio, and dynamic range; special binder for even particle distribution and reduced head wear.
C60 ..... $4.50
C90 ..... $5.80

QUASAR

Video Cassette Tape

VX-Format
VC-60. 1 hr. $18.95
VC-120. 2 hr. $26.95

VHS-Format
VC-T60. 1-2-3 hrs $18.95
VC-T120. 2-4-6 hrs $26.95

RKO TAPE

Broadcast I Cassettes
Ferric formulation; normal bias; 120 μsec equalization; housed in five-screw polystyrene shell.
C-60. 60 min $3.79
C-90. 90 min $5.75

Audition XD Cassettes
Ferric bias; for home recording.
C-45. 45 min $2.85
C-60. 60 min $3.15
C-90. 90 min $4.40

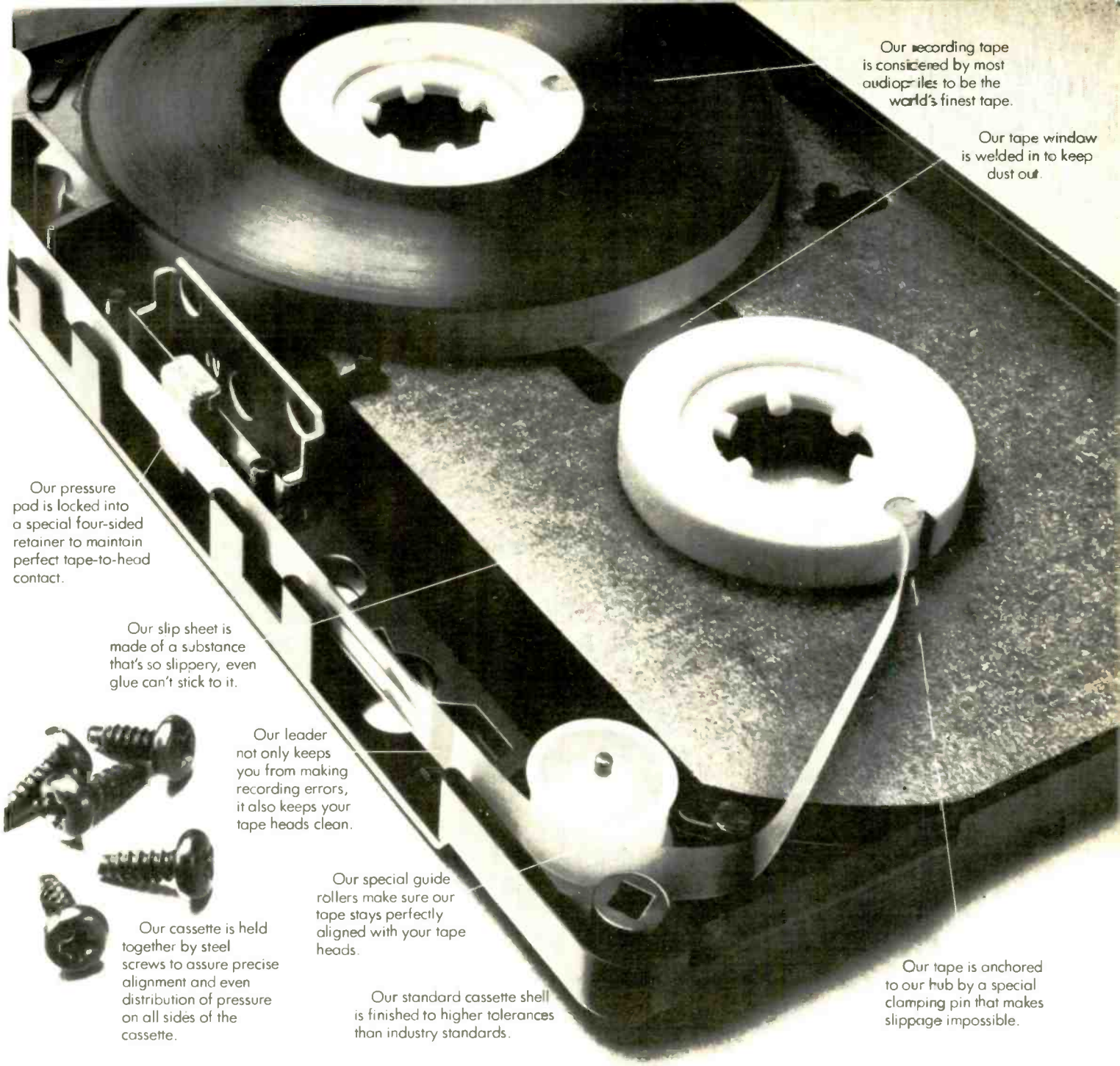
SCOTCH

Metafine Cassettes
Fine metal magnetic particle formulation; delivers max. output up to 10 dB better than typical chrome tapes and up to 7 dB greater than oxide tapes; low distortion, added high frequency response, and improved S/N.
45 min $6.25
60 min $6.95
90 min $8.95

Master I Cassettes
Features premium grade, low-noise ferric oxide; for use with recorders in the normal or 120 μsec equalization position; album or "C-box" (40 cents additional) packaging; improved shell for critical mechanical permanence and three-head recorder equipment.
45 min $3.59
60 min $3.89
90 min $5.09

Master II Cassettes
Features chrome equivalent modified ferric oxide for use with recorders operating in the CrO_2 or 70 μsec equalization position; improved cassette shell for critical mechanical performance and three-head recorder equipment; 3-dB S/N improvement over current CrO_2 cassettes; album or "C-Box" packaging (40 cents additional for "C-box" packaging).
45 min (album only) $4.19
60 min $4.49
90 min $5.69

Master III Cassettes
Features improved FeCr dual-layer construction



There's more to the world's best tape than the world's best tape.

Our reputation for making the world's best tape is due in part to making the world's best cassettes.

In fact, we put more thought and more work into our cassettes than most manufacturers put into their tape.

We do all this, because at Maxell we believe in a simple philosophy.

To get great sound out of a cassette takes a lot more than just putting great tape into it.

maxell

Maxell Corporation of America, 60 Oxford Drive, Moonachie, N.J. 07074.

CIRCLE NO. 46 ON READER SERVICE CARD

features directivity switch and five-position function switch for mic adjustment; internal battery or phantom power; frequency response 30-16,000 Hz ±2.5 dB; 250-ohm output impedance; S/N 70 dB; max. SPL 140 dB; dynamic range 116 dB; high-cut switch; pad switch; FET circuit; windscreen and shock mounting; fixed mike connector; 20 ft cable; comes with carrying case; 3" diameter × 8 11/16" L $505

C-37P. Similar to C-38B without high-cut switch and internal battery power; max. SPL 154 dB; dynamic range 130 dB; 1 7/8" dia. × 7 5/16" L $455

ECM-53FP Cardioid Microphone

Unidirectional cardioid back electret condenser microphone designed for desk or podium use; frequency response 40-15,000 Hz; 250-ohm output impedance; S/N 66 dB; max. SPL 126 dB; dynamic range 98 dB; movable head; battery-powered (optional ac/dc operation available); fixed mic connector; 10-ft cable; XLR-3 mic connector; includes windscreen, carrying case, battery, and stand adaptor; 13/16" diameter × 10 3/4" L $285

F-660 Dynamic Microphone

Unidirectional dynamic microphone for vocal/orchestral recording; frequency response 100-10,000 Hz; 250-ohm output impedance; safety lock; XLR-3 mike connector; includes double windscreens and mic holder; 1 1/2" dia. × 6 1/2" L $250

ECM-56F Electret Condenser Mike

Back electret condenser microphone; unidirectional; frequency response 20-20,000 Hz; 250-ohm output impedance; S/N 66 dB; max. SPL 134 dB; dynamic range 106 dB; low-cut switch; external phantom power system or battery power; battery check lamp; 90 degree adjustable angle; rubber cushion in mounting reduces vibration; fixed mic connector; 20-ft cable; 2" dia. × 8 1/4" L .. $245

ECM-65F Electret Condenser Mike

Hand-held professional back electret condenser microphone for stage, broadcasting, or studio use; unidirectional; frequency response 70-20,000 Hz; 250-ohm output impedance; S/N 66 dB; max. SPL 137 dB; dynamic range 109 dB; double windscreen; phantom power system or battery power; XLR-3 mike connector; 20-ft cable; 1 1/2" diameter × 7" L $235

ECM-64P. Similar to ECM-65F except omnidirectional mike for outdoor use; frequency response 40-20,000 Hz $235

ECM-50PS Electret Condenser Mike

Professional omnidirectional electret condenser microphone with miniature design; frequency response 40-14,000 Hz; 250-ohm output impedance; S/N 66 dB; max. SPL 126 dB; dynamic range 98 dB; phantom power supply or internal battery; non-reflective satin nickel finish; comes with windscreen, carrying case and tie clip; fixed mike connector; 10-ft cable; 7/16" diameter × 13/16" L $225

F-115 Dynamic Microphone

Omnidirectional dynamic microphone for outdoor use in all weather conditions; built-in waterproof screen; also has double-structured accessory windscreen; frequency response 40-12,000 Hz; 600-ohm output impedance; vibration-proof rubber mounting; balanced output with "Cannon" plug; fixed mike connector; 20-ft cable; 1 3/16" diameter × 6 7/8" L $160

ECM-990F Electret Condenser Mike

Single-point stereo back electret condenser microphone for studio-quality performance; unidirectional; frequency response 40-16,000 Hz; 200-ohm output impedance; S/N 64 dB; max. SPL 126 dB; dynamic range 96 dB; back electret/FET impedance translator; axis selector to adjust directional quality; low-cut switch; LED battery power indicator; Sony type mike connector; 10-ft cable; includes windscreen and mic holder; 3 1/2" diameter × 8 1/4" L $150

ECM-30 Condenser Microphone

Professional omnidirectional condenser microphone with ultra-miniature design; frequency response 50-14,000 Hz; 250-ohm output impedance; S/N 60 dB; max. SPL 117 dB; dynamic range 83 dB; battery power; balanced output with "Cannon" XLR; fixed mike connector; 10-ft cable; includes carrying case, windscreen, and tie clip; 11/32" diameter × 19/32" L $105

ECM-23F Electret Condenser Mike

Unidirectional back electret condenser microphone; 20-20,000 Hz frequency response; 250-ohm output impedance; S/N 66 dB; max. SPL 130 dB; dynamic range 102 dB; output for both balanced and unbalanced circuit; FET impedance translator; battery power; low-cut switch; pad switch; comes with windscreen, carrying case, mike cable, and mike holder; XLR-3 mike connector; 20-ft cable; 1 1/16" diameter × 7 1/2" L $100

ECM-33F. Similar to ECM-23F except battery or phantom powered; max. SPL 126 dB; dynamic range 98 dB; 1 1/16" diameter × 6 15/16" L $185

ECM-41 Electret Condenser Microphone

Unidirectional electret condenser microphone designed for studio interviews; telescopic design, frequency response 50-13,000 Hz; 250-ohm output impedance; S/N 63 dB; max. SPL 126 dB; dynamic range 95 dB; satin nickel finish; fixed mic connector; 8-ft cable; XLR-3 connector; battery-powered; includes windscreen and mic holder; 3/4" diameter × 10 3/4-19 9/16" L adjustable $95

F-560 Dynamic Microphone

Unidirectional dynamic microphone designed for vocal, PA, and outdoor use; frequency response 80-13,000 Hz; 200-ohm impedance; low-cut switch; diecast aluminum body; XLR-3 mic connector; 6-ft 5-in cable; includes mic holder; 1 5/8" diameter × 6 7/16" L $90

ECM-170A Electret Condenser Mike

Omnidirectional electret condenser microphone for semi-professional use; good for recording or lecturing outdoors; frequency response 20-16,000 Hz; 200-ohm output impedance; S/N 64 dB; max. SPL 126 dB; dynamic range 96 dB; low-cut switch; output for balanced and unbalanced circuits; detachable windscreen; FET impedance translator; easy-to-hold grip; satin nickel finish; Sony type mike connector; 16-ft cable; includes mic cable, mic holder, and carrying case; 1" dia. × 6 1/16" L $75

ECM-150 Electret Condenser Mike

Omnidirectional electret condenser microphone with miniature design; frequency response 40-13,000 Hz; 250-ohm output impedance; S/N 60 dB; max. SPL 117 dB; dynamic range 83 dB; plug adaptor for mini and phone connections; on/off switch; includes windscreen, case with mike stand, tie clip, and battery; fixed mike connector; 6-ft 5-in cable; 11/32" diameter × 19/32" L $65

ECM-260F Electret Condenser Mike

Unidirectional back electret condenser microphone; frequency response 50-14,000 Hz; 200-ohm output impedance; S/N 66 dB; max. SPL 126 dB; dynamic range 98 dB; battery-powered; 16-ft cable with phone cable plug; includes windscreen, battery, mic holder, stand adaptor, and carrying case; 1 1/2" diameter × 7 1/16" L $63

ECM-99A Electret Condenser Mike

One-point stereo electret condenser microphone for semi-professional and amateur stereo recording; two unidirectional microphone capsules in one housing; frequency response 50-12,000 Hz; 250-ohm output impedance; S/N 60 dB; comes with windscreen, carrying case, mike holder and battery; satin nickel finish; fixed mike connector; 10-ft cable; 2 3/4" diameter × 7 11/16" L $60

ECM-31M Electret Condenser Mike

Unidirectional electret condenser microphone designed for indoor/outdoor interviews; telescopic design; frequency response 50-13,000 Hz; 250-ohm output impedance; battery-operated; 8-ft cable with mini cable plug; includes urethane windscreen and mic holder; 3/4" diameter × adjustable 10 3/4-19 9/16" L $55

F-540 Dynamic Microphone

Unidirectional dynamic microphone for amateur vocal, single instrument or speech recording; frequency response 80-13,000 Hz; 300-ohm output impedance; talk switch; built-in windscreen; easy-to-hold tapered grip; fixed mike connector; 16-ft cable; 1 5/8" diameter × 7" L $45

ECM-16 Electret Condenser Microphone

Omnidirectional electret condenser lavalier microphone designed for interviews or conferences; features FET impedance translator; frequency response 50-13,000 Hz; 250-ohm output impedance; 6-ft cable; battery-operated; includes clip holder; 9/16" diameter × 1 9/16" L $38

ECM-210M Electret Condenser Mike

Unidirectional electret condenser microphone for general-purpose recording; frequency response 50-12,000 Hz; output impedance 200 ohms; S/N 64 dB; battery powered; fixed mike connector; mini plug fits most portable tape recorders; 8-ft cable; 1 1/2" diameter × 7 1/4" L $32

ECM-210S. Similar to ECM-210M except has dual-pin plug for use with tape recorders that offer remote start and stop capability $35

F-99M Stereo Dynamic Microphone

One-point stereo dynamic microphone for hi-fi recording; frequency response 80-12,000 Hz; 200-ohm output impedance; mini-plugs connect to hi-fi system mic inputs; fixed mike connector; 5-ft cable; 1 1/8" diameter × 6 1/4" L $30

F510 Dynamic Microphone

Unidirectional microphone for general amateur application; frequency response 80-12,000 Hz; 320-ohm output impedance; talk switch; built-in windscreen; rugged aluminum alloy construction; fixed mike connector; 10-ft cable; comes with mike stand and plug adaptor; 1 3/4" dia. × 7 3/8" L $28

F-500 Dynamic Microphone

Unidirectional microphone for general use; frequency response 80-12,000 Hz; 320-ohm output impedance; mini-plug connections; fixed mike connector; 8-ft cable; 1 7/8" diameter × 7 1/16" L $22

F-500S. Similar to F-500 except has dual plugs for connection to recorders that feature remote start and stop capability; start/stop switch is on microphone body $24

As of presstime, Sony will introduce the ECM-220FA electret condenser microphone at $50 and two wireless microphone systems. For more information, write directly to Sony.

TEAC

ME-120 Dynamic Microphone

Cardioid or omnidirectional dynamic electret microphone; two-position response switch, 40-18,000 Hz (cardioid), 30-16,000 Hz (omnidirectional); supplied with stand attachment, two wind-screens, and 15-ft cable $120

ME-80. Same as ME-120 except response 50-16,000 Hz $90

ME-50. Same as ME-80 except cardioid; unbalanced or balanced 10,000 or 200-ohms; response 50-14,000 Hz $50

12 CAR STEREO EQUIPMENT

12 CAR TAPE MACHINES

AFCO

IDC-750A AM-FM/Cassette Player
In-dash AM-stereo FM radio and cassette player with auto reverse. Features locking fast forward/rewind; eject; local distant and AM/FM switches; dial light dimmer and antenna switch; fader/balance control. Wow and flutter 0.35% wrms; frequency response range 100 Hz (tone) 1 ± 3 dB to 4000 Hz (high) 1 ± 5 dB, 100 Hz (tone) +9 ± 3 dB to 2000 Hz (low) −16 ± 5 dB; output 6 W; FM separation 35 dB; 1⁹⁄₁₆" H × 7" W × 5¹⁄₄" D . . . $170

AIKO by TZL

ACS-8000L AM-FM/Cassette Player
In-dash AM-stereo FM radio and stereo cassette player with auto eject and locking fast forward and rewind. Radio features LED digital clock and frequency readout; AM/FM LED indicators; local/distant and mono/stereo switches; built-in stereo balance and speaker fader controls; input for auto motorized antenna. Wow and flutter 0.4%; S/N 43 dB; channel separation 30 dB; adjustable shafts; 1³⁄₄" H × 7" W × 5¹⁄₂" D . . . $280

ALPINE

7307 Preamp/Tuner/Cassette Deck
In-dash AM stereo FM tuner/preamplifier/stereo cassette deck. Cassette deck features Dolby noise-reduction system, CrO_2/FeCr selector button, ignition-key off and cassette glide eject, auto replay at end of rewind, auto eject at end of play/fast forward, and music sensor in fast forward and rewind; wow and flutter 0.09%; tape frequency response 40-16,000 Hz; S/N 72 dB (Dolby on). Radio features five-station pushbutton preset, noise eliminator switch, separate bass and treble controls, mute switch, DIN connector, and tone-by-pass switch; FM usable sensitivity 1.4 μV; FM S/N 72 dB (Dolby on); FM capture ratio 1.5 dB . . . $380

7203 AM-Stereo FM/Cassette Deck
In-dash AM-stereo FM radio/stereo cassette deck. Cassette features Dolby noise-reduction system; hard permalloy tape head; cassette and electronic glide eject; CrO_2/FeCr tape selector; auto replay at end of rewind; auto eject at end of play/fast forward; wow and flutter 0.13%; tape frequency response 40-12,000 Hz; S/N 65 dB (Dolby on). Radio features four-way fader balance control; noise eliminator switch; separate bass and treble controls; mute switch; loudness contour; output 20 W/ch continuous; FM usable sensitivity 1.4 μV; FM S/N 72 dB (Dolby on); FM capture ratio 1.5 dB; dist. 0.8% at 8 W continuous $380
7213. Similar to 7203 without permalloy tape head; auto reverse cassette; wow and flutter 0.14%; tape response 40-11,000 Hz . . . $410
7212. Similar to 7213 without CrO_2/FeCr tape selector and noise eliminator switch $360
7202. Similar to 7212 without auto reverse; cassette has auto replay at end of rewind and auto eject at end of play or fast forward; tape response 40-12,000 Hz; wow and flutter 0.13% . $330
7201. Similar to 7202 without Dolby noise-reduction system and four-way fader/balance . . $280

7206 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and cassette player with Dolby noise-reduction system, hard permalloy tape head, and cassette and electronic glide eject; CrO_2/FeCr tape selector; auto replay at end of rewind and auto eject at end of play or fast forward; music sensor in fast forward/rewind; wow and flutter 0.09%; tape frequency response 40-12,000 Hz; tape S/N 65 dB (Dolby on). Radio features five-station preset, four-way fader/balance control; feather-touch controls for mute, loudness contour, and noise eliminator switches; separate bass and treble controls; output 20 W/ch continuous; FM usable sensitivity 1.4 μV; FM S/N 72 dB (Dolby on); FM capture ratio 1.5 dB; dist. 0.8% at 10 W continuous $410
7205. Similar to 7206 without CrO_2/FeCr switch and music sensor $360
7204. Similar to 7205 without four-way fader/balance control $310

7100 AM-Stereo FM Cassette Player
In-dash AM-stereo FM radio and cassette player with cassette glide, locking fast forward and rewind, and auto stop at end of play or fast forward; radio has five-station preset, local/distant switch, and tone control; wow and flutter 0.09%; tape S/N 55 dB; FM sensitivity 1.6 μV; FM selectivity 70 dB; FM S/N 62 dB; auto afc and power antenna lead. $200

ALTUS

CLA-3740 AM-FM/Cassette Player
In-dash AM-stereo FM pushbutton radio with digital readout and clock, and stereo cassette player with auto reverse. Features tape eject, locking fast-forward and rewind, and tape direction indicator. Radio features five preset pushbutton tuning, auto FM muting, hr/min adjustment, local/distant switch, stereo indicator light, and front/rear fader and left/right balance controls. Wow and flutter 0.2%; frequency response 30-12,000 Hz; S/N 45 dB; amp output 15 W/ch continuous; FM THD 1.0% at 1 W; FM sensitivity 4.8 μV 3 dB; FM S/N 60 dB; FM stereo separation 35 dB at 1000 Hz; 12 V negative ground; 2.77" H × 7.1" W × 6" D . . . $411

CTH-2392 AM-FM/Cassette Player
Combines stereo cassette player with AM-stereo FM radio; locking fast forward and rewind; fader, treble, and bass controls; tape indicator light; pushbutton tuning; muting; mono/stereo selector; tape-end eject; power-off eject; 4-8 ohm impedance; audio output 25 W continuous; 14.4 V dc; 2³⁄₄" H × 7" W × 5" D $313

CXR-2376 AM-FM/Cassette Player
In-dash AM-stereo FM radio and side-loading stereo cassette player with auto reverse and electronic motor speed control; adjustable shafts and trimplates and DIN standard nosepiece to fit foreign cars. Features locking fast-forward and rewind, LED tape, stereo and AM/FM indicators, and local distant, eject and AM/FM band selector switches. Wow and flutter 0.25%; frequency response 30-10,000 Hz; S/N 55 dB; amp output 5 W/ch continuous; FM THD 1.5% at 1 W; FM sensitivity 1.5 μV at 3 dB; FM S/N 60 dB; FM stereo separation 30 dB at 1000 Hz; 12 V negative ground; 1.75" H × 7.01" W × 5.15" D $250

ELR-3742 AM-Stereo FM/8-Track Player
In-dash AM-stereo FM pushbutton radio with digital readout/clock display and stereo 8-track player with LED program indicators. Features five preset pushbutton tuning, auto FM muting, hr/min adjustment, local distant switch, AM/FM mode control, stereo indicator light, fader and bass/treble balance controls. Wow and flutter 0.25%; frequency response 30-18,000 Hz; S/N 50 dB; amp output 15 W/ch continuous; FM THD 2.0% at 1 W; FM sensitivity 1.9 μV −3 dB; FM S/N 60 dB; FM stereo separation 35 dB at 1000 Hz; 12 V negative ground; 2.88" H × 7.11" W × 7.91" D $384

PBH-2385 AM-FM/8-Track Player
Combines stereo 8-track player with AM-stereo FM radio. Features locking fast forward; separate bass and treble controls, fader control (four-way speaker balance); left/right balance control; program repeat; tape eject; mono/stereo selector; stereo channel indicator lights; power indicator light; manual channel selector; preset pushbutton tuning; local distant switch; adjustable shafts; 4-8 ohm impedance; audio output 25 W continuous; 14.4 V dc . . . $259

Super Separates Line

CS-052 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM tuner and cassette player with Dolby noise-reduction system. Cassette features auto reverse, loudness contour, tape switch for CrO_2, locking fast-forward and rewind, tape eject, and LED tape direction indicator. Radio features LED AM/FM stereo indicators, local/distant switch, FM muting, and AM/FM stereo band selector. Wow and flutter 0.15% wrms; S/N 60 dB with Dolby; FM sensitivity 2 μV for 30-dB quieting; stereo separation 30 dB at 1000 Hz; 1.74" H × 7.10" W × 5.87" D. $332
CS-101. Preamp/40-W amplifier and five-band graphic equalizer for CS-052 . . . . $135

CS-032 AM-Stereo FM/8-Track Player
In-dash AM-stereo FM tuner and stereo 8-track player features loudness contour, channel selector, LED program indicators, and program repeat switch. Radio features FM muting, LED stereo indicator, local/distant switch and AM/FM mode selector. Wow and flutter ("A" weighted) 1.5%; S/N 50 dB. FM sensitivity 2 μV for 30 dB S/N; stereo separation 30 dB at 1000 Hz; 1.74" H × 7.10" W × 5.31" D $265
CS-101. Preamp/40-W amplifier and five-band graphic equalizer for CS-032 . . . . $135

12 CAR TAPE MACHINES

CS-152 Cassette Deck
Underdash cassette deck with Dolby noise-reduction system. Features auto reverse, locking fast forward and rewind, loudness contour, tape eject, tape switch for CrO_2, and separate bass, treble and balance controls. Wow and flutter 0.15% wrms; S/N 60 dB with Dolby $212
CS-112. Underdash AM-stereo FM tuner for CS-152; features LED stereo indicator, and FM muting, AM/FM, stereo/mono, and local/distant switches; FM sensitivity 4 μV at 1 W; stereo separation 30 dB at 1000 Hz $153
CS-101. Pre-amp/40-W amplifier and five-band graphic equalizer for CS-152 ..... $135

AUDIOVOX

DGC-20 AM-Stereo FM/Cassette Player
In-dash digitally-synthesized AM-stereo FM pushbutton radio with memory, stereo cassette player, and built-in quartz clock. Features include electronically-controlled tuning with green LED digital display; as many as six AM and six FM stations can be preset; auto scan searches and stops at next available station; "display priority" switch for constant frequency or time readout; pushbutton stereo/mono and local/distant switches. Wow and flutter 0.35% wrms; frequency response 50-10,000 Hz; max. output 6.5 W/ch with 10% THD; FM stereo separation 25 dB; 2" H × 7⅛" W × 6" D..... $442

CAS-600A AM-Stereo FM/Cassette
In-dash unit combines AM-stereo FM radio and stereo cassette player with Dolby noise-reduction system; power output 10 W/channel; locking fast-forward/rewind, bass, treble, mono/stereo, local/distant, and power booster on/off controls $300

ID-900/DGC-5 AM-FM/Cassette Player
In-dash AM-stereo FM radio and cassette with quartz clock and digital frequency and time display. Features fast forward and eject and four-way balance controls; radio has local/distant and AM/FM pushbutton controls..... $270

ID-800/DGT-500 AM-FM/8-Track Player
In-dash digital readout AM-stereo FM radio/8-track player/quartz clock features LED program indicators, manually tuned AM-stereo FM with green LED digital readout of station frequency and time, and pushbutton FM local/distant and stereo/mono. Wow and flutter 0.25% wrms; frequency response 50-10,000 Hz; max. output 6 W/ch with 10% THD; 2" H × 7⅛" W × 5½" D..... $270

TPB-4000 AM-Stereo FM/8-Track
Combines AM/stereo FM radio and 8-track player with built-in power booster; four-way stereo balance; power output 20 W/channel $260

ID-675/CAS-350 AM-FM/Cassette
In-dash "Super Power" AM-stereo FM radio and stereo cassette player features four-way stereo balance, side-load cassette mechanism, auto and manual eject, tape play indicator light, and locking fast forward/rewind control. Radio features pushbutton mono/stereo and local/distant controls, slide-bar band selector, and separate bass, treble, and tone controls. Wow and flutter 0.35% wrms; frequency response 50-10,000 Hz; max. output 20 W/ch; FM stereo separation 25 dB; 12 V dc negative ground; 2" H × 7⅛" W × 5½" D..... $258

ID-625/CAS-450 AM-FM/Cassette
In-dash unit combines AM-stereo FM radio and auto reverse stereo cassette player; four-way stereo balance; power output 4 W continuous; mono/stereo, program select, local/distant, eject, and locking fast-forward controls..... $210

ID-725 AM-Stereo FM/Cassette Player
In-dash pushbutton AM-stereo FM radio and stereo cassette player features locking fast forward and pushbutton eject control, dial-in-door, and four-way balance control. Radio has pushbutton local/distant and slide-bar band selection. Wow and flutter 0.3% wrms; frequency response 50-10,000 Hz; max. output 12 W; FM stereo separation 20 dB; 12 V dc negative ground; 2¾" H × 7⅛" W × 6" D..... $210

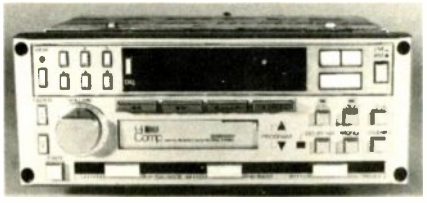
ID-610/CAS-310 AM-FM/Cassette
In-dash unit combines AM/FM radio and stereo cassette player; fast-forward, rewind, local/distant, mono/stereo, and eject controls; power output 5 W/channel; 2¾" H × 7" W × 5½" D..... $164

UC-20 FM Stereo/Cassette Player
Underdash FM stereo radio and cassette player features LED stereo and tape indicators, dial-in-door, pushbutton local/distant and stereo/mono switches, slide control for fast forward, rewind, and automatic eject; other slide controls include volume, balance and tone. Wow and flutter 0.25% wrms; S/N 45 dB (tape), 55 dB (radio); frequency response 50-10,000 Hz; max. output 6 W/ch with 10% THD; 2⅛" H × 6¾" W × 6½" D $150
UT-30. Similar to UC-20 except 8-track player with LED program indicators $136

C-981A Cassette Player
Auto-reverse cassette player; volume, tone, balance, fast-forward, and rewind controls; has tape direction indicators; power output 5 W/channel; accepts 4-8 ohm speakers; mounts under dash; 1¾" H × 5½" W × 6¾" D..... $136

HI-COMP Line

HCM-0010 AM-FM/Cassette Deck
In-dash AM-stereo FM radio with quartz clock and stereo cassette deck. Deck features auto reverse,



Dolby FM circuitry, CrO_2 tape switch, and preamp and RCA output jacks. Radio features 12-station memory preset pushbutton tuning, auto station "seek" control, LED display panel, separate bass and treble controls, four-way balance, electronic motor-driven fader, and muting $650

HCM-005 AM-Stereo FM/Cassette Deck
In-dash AM-stereo FM radio/stereo cassette deck. Cassette deck features Dolby noise-reduction system, CrO_2 and FeO_2 tape selector, and auto reverse. Radio features electronic tuning with up to 12-station memory, LED display panel, regular/biamp capability, electronic motor-driven fader, separate bass and treble controls, and loudness control..... $550

HCC-1030 AM-Stereo FM/Cassette Deck
In-dash AM-stereo FM radio/stereo cassette deck. Deck features Dolby noise-reduction system, auto reverse, tape selector for FeO_2 and CrO_2 tapes, and locking fast forward and rewind. Radio features pushbutton tuning, FM Dolby, separate bass and treble controls, four-way balance, local/distant, and mono-stereo switches; 40 W power booster; output 13 W/ch continuous with 1.0% THD..... $420
HCC-1025. Similar to HCC-1030 without muting... ..... $380

B·I·C

C-1 Cassette Deck
Underdash two-speed (1⅞ and 3¾ ips) metal-compatible car stereo cassette deck with Dolby noise-reduction system. Features speed selector with LED; illuminated peak level meter; equalization selector for all tapes with LED; volume, balance, and treble controls; tape eject; loudness selector with LED; tape end indicator; preamp output; 10 W/ch continuous; supplied with quick-disconnect mounting bracket $230

BLAUPUNKT

Berlin US AM-FM/Cassette Player
Flexible-mount electronic remote control AM-stereo FM/LW/SW eight band radio with fast forward/re-

wind control. Comes with in- or underdash stereo cassette player/recorder; features pushbutton fast forward, rewind, record, playback, mic, radio and pause controls. 5 W/channel..... $1240

Bamberg 'E' US AM-FM/Cassette Player
Unit combines electronic AM-stereo FM/LW/SW eight band radio with pushbutton stereo cassette player with record/playback. Radio features preset electronic station selection. 5 W/ch; DIN Std. nosepiece; 130 mm shaft spacing.. ..... $844
Heidelberg. Similar to Bamberg 'E' US without preset station selection..... ..... $739

CR-2000D AM-FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player. Cassette: features Dolby noise-reduction system with Dolby FM circuitry, auto reverse, power eject, locking fast forward and rewind, and program select switch; fast forward/rewind time 65 sec (C-60); wow and flutter 0.15% wrms (JIS); frequency response 35-14,000 Hz −10 dB; THD 1.0% at 1000 Hz, 10 dB; S/N 53 dB at 1000 Hz, 0 dB; crosstalk −53 dB at 1000 Hz, 0 dB; channel separation 38 dB at 1000 Hz, 10 dB. Radio features variable tone control, stereo balance control, FM muting, mono/stereo switch, manual tuning control, waveband select and local/distant switch; has company's ASU noise suppression circuitry for FM broadcast reception; max. sensitivity 0.8 μV; S/N 68 dB at 1 mV in; i-f rejection 80 dB; image rejection 46 dB; THD 1.5%; frequency response 40-15,000 Hz ±6 dB. Designed to fit most imported cars and has adjustable shafts for domestic cars; 1¾" H × 7⅛" W × 5⅛" D..... $303
CR-2001. Similar to CR-2000D except with five station preset pushbutton tuning $351
CR-2000. Same as CR-2000D without Dolby noise reduction circuitry... ..... $275

Essen AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player. Cassette features power eject, locking fast forward and rewind, and cassette eject; fast forward/rewind time 90 sec (C-60); wow and flutter 0.25%; THD 2.0% at 1 W; crosstalk −33 dB. Radio features variable tone control, balance control, stereo/mono switch, manual tuning controls, station frequency indicators, and ASU noise suppression circuit for FM reception; sensitivity 1 μV for 1 W out; image ratio 50 dB; stereo separation 32 dB; 1¾" H × 7" W × 5¼" D.. ..... $277

CR-8000 AM-Stereo FM/8-Track
In-dash AM-stereo FM radio/8-track tape player. 8-track features tape program selector and tape eject; wow and flutter 0.25% wrms (JIS); frequency response 35-14,000 Hz −10 dB; THD 1.0% at 1000 Hz, 10 dB; S/N 50 dB at 1000 Hz, 0 dB; crosstalk −55 dB at 1000 Hz, 0 dB; channel separation 40 dB. Radio features variable tone control, balance control, waveband select and local/distant switch, and ASU noise suppression circuitry. Unit designed for imported cars and has adjustable shafts for domestic car installation; 1¾" H × 7" W × 5⅜" D..... $192
CR-4095. Similar to CR-8000 except with stereo cassette recorder/playback; microphone provided for monaural dictation; 7 W/ch $294

Frankfurt US AM-Stereo FM Radio
In-dash AM-stereo FM radio with five AM and five

FM pushbutton preset tuning; ASU noise suppression circuitry; 5 W/ch; DIN Std. nosepiece; 130 mm shaft spacing $218
Frankfurt US. Similar to Frankfurt US Stereo except mono radio with five-station preset pushbutton tuning; 5 W $128

CAR TAPES

JS-6200 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player features preset pushbutton tuning for up to five FM and five AM stations; LED frequency/clock readout; local/distant switch; separate bass and treble controls; auto reverse, fast forward, and rewind; output 15 W/ch at 1.0% dist.; FM sensitivity 1.5 μV for 30-dB quieting; 2¹/₄" H × 7" W × 4⁷/₈" D $500
JS-6100. Similar to JS-6200 without preset pushbutton tuning; output 8 W/ch; combined bass/treble control; 1³/₄" H × 7" W × 5" D $400

JS-9600 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player features preset pushbutton tuning for up to five FM and five AM stations; auto reverse, locking fast forward and rewind; local/distant switch; FM muting switch; stereo indicator and direction lights; output 8 W/ch at 1.0% dist.; frequency response 50-12,000 Hz; FM sensitivity 3.0 μV for 30-dB quieting; 2³/₈" H × 7¹/₈" W × 6³/₈" D; adjustable shafts $220
JS-9200. Similar to JS-9600 without preset pushbutton tuning; FM sensitivity 4.5 μV for 30-dB quieting; 2" H × 7" W × 5⁷/₈" D $190

JS-9380 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player with preset pushbutton tuning for up to five AM and five FM stations; fast forward control; local/distant; output 5 W/ch at 1.0% dist.; FM sensitivity 4.0 μV for 30-dB quieting; 2" H × 5³/₈" W × 4⁷/₈" D $200
JS-8580. Same as JS-9380 except has 8-track instead of cassette player $200

CLARION

PE-751B AM-Stereo FM/Cassette Player
In-dash unit combines AM-stereo FM radio with stereo cassette player. Features five pushbutton tuning; Dolby noise-reduction on both cassette and FM; locking fast forward and rewind; separate bass and treble controls; 15 W/ch continuous; front-to-rear fader; left-to-right balance control; FET front end; cassette eject button; stereo indicator light; cassette program change button; Dolby indicator lights; Dolby switch; smaller chassis to fit over 90% of all U.S. and foreign cars $340

PE-684A Stereo FM/Cassette Player
Underdash unit combines stereo FM radio with stereo cassette player. Features power amplifier with 12 W/ch continuous; auto reverse; Dolby on both FM and cassette; locking fast forward and rewind; push to eject button; program change switch; punch sound; FM tuner sensitivity switch; switchable Dolby; Dolby and stereo indicator lights; program indicator lights; separate bass and treble controls; front-to-rear fader; left-to-right balance control; FET front end in FM tuner section ... $250
PE-838A. Similar to PE-684A without FM tuner $220

COBRA

221GTL AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and stereo cassette player features digital frequency readout and digital clock display; cassette has pushbutton eject, fast forward and rewind slide controls, and tape direction indicators; radio has pushbutton tuning, local/distant and mono/stereo buttons, and rotary balance, treble, bass, and fader controls; output 12 W/ch; tape frequency response 100-8000 Hz ±6 dB; FM sensitivity 1.9 mV $330
222GTL. Similar to 221GTL except has 8-track player $300

CRAIG

T686 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio, stereo cassette player, and digital radio frequency/clock display. Cassette features Dolby noise-reduction system; automatic end-of-tape and power-off eject; locking fast forward and rewind; equalization for normal or CrO_2 tapes. Radio features five-station pushbutton preset; automatic select signal stabilizer; separate boost/cut bass and treble controls; balance and fader controls; pushbutton loudness contour control; local/distant pushbutton; preamp output jacks; 12 W/ch; 2³/₄" H × 7¹/₈" W × 5¹/₄" D $420
T684. Similar to T686 without digital clock/radio frequency display, end-of-tape eject, and signal stabilizer; cassette has auto-reverse with equalization selector for 120- or 70-μsec tape; power antenna; 2" H × 7¹/₈" W × 6" D $337
T688. Similar to T684 without five-station pushbutton preset, power antenna, and preamp jack; has end-of-tape and power-off eject $280
T681. Similar to T688 without Dolby noise-reduction, tape equalization, separate bass and treble controls, loudness control, and tape auto reverse function; 2" H × 7¹/₈" W × 5¹/₄" D $220

T636 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player with digital clock/radio frequency display with hr/min time adjust. Cassette features auto end-of-tape and power-off eject; locking fast-forward and rewind. Radio features five-station pushbutton preset; signal stabilizer; separate boost/cut bass and treble controls; separate balance and fader controls; loudness contour pushbutton; local/distant button; preamp output jacks; 2³/₄" H × 7¹/₈" W × 5¹/₄" D $360
T634. Similar to T636 without digital clock/radio frequency display, signal stabilizer, and end-of-tape eject; cassette has auto reverse function; 2" H × 7¹/₈" W × 6" D $280
T638. Similar to T634 without separate bass and treble controls and tape auto reverse; has end-of-tape and power-off auto eject; 2" H × 7¹/₈" W × 5¹/₄" D $220

T635 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player with LED digital clock/radio frequency display. Cassette features power-off and end-of-tape auto eject; locking fast forward and rewind slide bar. Radio features ten-station pushbutton preset with auto scan; PLL circuitry; separate balance and fader controls; power antenna; local/distant and muting controls; 2¹/₂" H × 7¹/₈" W × 4¹/₄" D $360

T615 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player with digital clock/radio frequency readout display with hr/min adjust. Cassette features auto reverse, locking fast forward and rewind, and pushbutton eject; LED tape direction indicator. Radio features pushbutton stereo/mono, local/distant, AM/FM controls; bass/treble control with push program/frequency and pull balance knob; tuning control; fader control; 2" H × 7¹/₈" W × 6" D $290

Underdash Cassette Players
T180. Auto reverse cassette player with separate boost/cut bass and treble controls, locking fast forward/rewind, loudness pushbutton, and tape eject; output 12 W/ch; includes reversible quick-release slide-out bracket; 2³/₈" H × 6¹/₂" W × 6¹/₈" D .. $190
T200. Same as T180 except radio has auto frequency control, local/distant, and stereo-matrix circuitry $155

S686 AM-Stereo FM/8-Track Player
In-dash AM-stereo FM radio/8-track player with digital clock/frequency display. 8-track features LED program indicators. Radio features five-station pushbutton preset; signal stabilizer pushbutton with LED indicator; separate boost/cut bass and treble controls; loudness contour and local/distant pushbuttons; separate balance and fader controls; preamp jacks; power antenna; 2³/₄" H × 7¹/₄" W × 5¹/₄" D $360

EVADIN by TZL

CR-6000 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and cassette player with auto reverse, locking fast forward and rewind, and pushbutton eject. Radio features pushbutton channel controls, stereo indicator light, local/distant switch, and rotary balance/tone control. Max. wow and flutter 0.4% wrms; frequency response 50-12,000 Hz; max. output 16 W continuous power; adjustable shafts and 105-mm nose to fit foreign and domestic cars; 2¹/₂" H × 7" W × 6¹/₄" D $200

FUJITSU TEN

COMPO III EP-820 AM-FM/Cassette
Microprocessor controlled AM-stereo FM radio with preamp and auto reverse cassette player with Dolby noise-reduction system. Unit features built-in five-band graphic equalizer with center frequencies set at 60, 250, 1000, 3500, and 10,000 Hz, ±3 dB; quartz clock and electronic tuning for constant digital frequency readout and pushbutton digital time display; preset channel selector that memorizes up to seven AM and seven FM stations for instant recall with search up/down and scan function. Cassette features Life Time Metal tape head, equalizer switch for chrome and ferri-chrome tape, and locking fast forward and rewind slide control. Radio features FM noise blanker, FM muting, and four-way fader control. Frequency response 40-14,000 Hz $570

EP-750S1 AM-FM/Cassette Player
In-dash AM-stereo FM radio with electronic digital tuner and stereo cassette player with auto reverse, locking fast forward/rewind slide control and program indicator. Unit features digital frequency and time display; quartz clock; preset pushbutton Memory Write tuning up to five AM and five FM channels with instant recall; auto search and lock into next station; pushbutton local/distant and AM/FM selectors; stereo indicator. Wow and flutter 0.15%; frequency response 40-14,000 Hz $500

GP-7881 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and cassette player with Dolby noise-reduction system and auto reverse; features locking fast forward and rewind, five AM or five FM pushbutton tuning, four-way bass fader, and built-in noise blanker; front/rear fader control and balance, bass, treble and volume controls. Wow and flutter 0.15%; frequency response 40-14,000 Hz; output 5 W/ch continuous power, max. output 20 W; tape S/N 48 dB; FM stereo separation 20 dB; FM sensitivity 18 dB $300
DP-7872. Similar to GP-7881 without Dolby system; adjustable shafts designed to fit American cars $200
DP-7871. Similar to DP-7872 except has DIN specs and fixed shafts to fit foreign cars $200
All three radio/cassette players can utilize any one of Fujitsu Ten's plug-in preamp power and control options.

GL-7851 AM-Stereo FM/8-Track Player
In-dash AM-stereo FM radio and 8-track player with dial-in-door; four-way fader mute and treble/bass control; local/distant switch; LED stereo and tape indicators; five pushbutton tuning; wow and flutter 0.25%; frequency response 50-12,000 Hz; S/N 30 dB; FM sensitivity 18 dB; adjustable shafts .. $250
DL-7841. Similar to GL-7851 without four-way fader mute and treble/bass control $130

Component System
AT-7831. AM/FM tuner with auto-search tuning; bass and treble tone controls; local/distant and stereo/mono pushbutton switches $280
AT-372/EX-1. Stereo FM tuner with auto-search tuning $230
SP-711S1. Cassette deck with auto reverse and Dolby noise-reduction system; slide-bar bass and treble tone controls; wow and flutter 0.15%; frequency response 30-14,000 Hz; S/N 50 dB .. $200
CA-2000. Five-band preamp graphic equalizer features Level Attenuator System switch, remote con-

12 CAR TAPE MACHINES

trol for tape program and search tuning, illuminated front graphic panel, fader control, and pushbutton defeat. Center frequencies set at 60, 250, 1000, 3500, and 15,000 Hz, ±10 dB; frequency response 20-40,000 Hz; THD 0.1%; S/N 60 dB. $145

PA-150F. Four-channel power amp with 80-W output $120

CA-100. Control amplifier $90

RV-130-EX-1. Electronic stereo graphic timer delay with LED 500, 1500, 3000 msec; fader/volume, reverb, and pushbutton power controls. $180

Audio Compo Marine System

Five-unit weatherproof and shock-proof component system for boat owners; all units are white.

AT-7831-M. AM-stereo FM tuner with auto search tuning, and separate bass and treble controls. $330

SP-711-M. Cassette deck with auto reverse and Dolby noise-reduction system..... $249

CA-100-M. Remote control amplifier..... $122

CA-200-M. Five-band preamp graphic equalizer with remote control capability $175

PA-130-M. Two-channel power amplifier; output 20 W/ch..... $110

SSB-4838-M. Two-way air-suspension speaker system with 4-in woofer, 8-oz magnet, and 2-in tweeter; input 20 W; impedance 8 ohms.. $180

S-EX-10. Five-unit weatherproof housing for installation $175

S-EX-11. One-unit weatherproof housing for installation $80

GRUNDIG

GCV 2700A/B AM-FM/Cassette Player

AM-stereo FM radio and auto reverse cassette player with locking fast forward/rewind, switch-off eject, electronic signal seeking and search/local system with LEDs, ESA electronic noise blanking on FM; local/distant and stereo/mono switch, and fader control; output 20 W/ch; station memory preset optional; connection for accessories..... $399

WKC 2035US AM-FM/Cassette Player

AM-stereo FM radio and cassette player with local/distant and stereo/mono switch, fast forward and manual eject; built-in fuse holder; DIN snap-in mounting; output 5 W/ch $316

GCM 8200 AM-FM/Cassette Player

In-dash AM-stereo FM radio and stereo auto-reverse two-ch/four-track cassette player with Flat Noze design, Motorglide cassette injection system, and built-in three-band graphic equalizer. Cassette features locking fast forward and rewind, power-off auto eject, and tape direction and function indicators. Radio has auto stereo sensitivity switching, LED tuning dial indicator, FM muting, fader control, local/distant switch, and balance slide control. Wow and flutter 0.08% wrms; frequency response 40-13,000 Hz 6 dB; max. output power 7 W/ch continuous; 4-ohm impedance; equalizer center frequencies set at 100, 1000, and 8000 Hz ±10 dB; dist. 1.5% 10 dB, 1000 Hz; S/N 50 dB (tape), 63 dB (FM); FM quieting sensitivity 2.5 μV for 26 dB S/N; stereo separation 38 dB (1000 Hz); one-piece construction, DIN snap-in mounting, and auxiliary out connections for accessories; 180 mm H × 52 mm W × 135 mm D $279

GCM 8100. Similar to GCM 8200 without graphic equalizer and function indicators; has hi/lo boost; adjustable shaft; 180 mm H × 44 mm W × 130 mm D..... $239

GCM 4700A/B AM-FM/Cassette Player

AM-stereo FM radio and auto reverse cassette player with locking fast forward/rewind, auto-eject on, switching off, local/distant and stereo/mono switch, and program selector button; DIN snap-in mounting; output 7 W/ch or optional 20 W/ch $219

HANDIC

Monte Carlo AM-FM/Cassette Player

In-dash microprocessor-controlled AM-stereo FM radio and stereo cassette player with auto reverse. Radio features computerized storage of up to seven AM and seven FM preset stations, LED station indicators, electronic four-way fader/balance control, LED frequency readout with dimmer switch, and mono/stereo, AM/FM, local/distant, auto/manual controls; feather-touch controls for all radio functions. Cassette features locking fast forward and rewind, pushbutton eject, and program select switch. Wow and flutter 0.15%; frequency response 50-15,000 Hz; output 15 W/ch continuous; FM sensitivity 1.6 μV; impedance 4 ohms; 12 V dc negative ground; 2⅞" H × 7" W × 5¹⁵⁄₁₆" D... $550

Las Vegas AM-FM/Cassette Player

In-dash AM-stereo FM radio and cassette player with auto reverse, auto eject and locking fast forward/rewind. Radio features LED digital display for AM/FM frequency and clock with elapsed timer; local/distant switch; five-pushbutton AM/FM tuning; Noise Killer adaptor; power antenna cord; adjustable shafts. Wow and flutter 0.25%; frequency response 50-12,000 Hz; output 12 W/ch continuous; FM sensitivity 1.6 μV; 12 V dc negative ground; 2¾" H × 7" W × 5¼" D..... $420

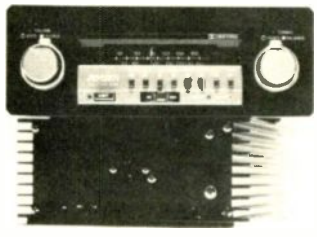
Napoli AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio with electronic tuning and cassette player with auto eject and locking fast forward/rewind; adjustable shafts and DIN standard nosepiece for foreign and domestic cars. Radio features two memory functions for auto or manual tuned stations; 13-LED dial indicator; local/distant/manual tuning switch; built-in Handic Noise Killer designed to cut out ignition noise and FM radio static distortion; power antenna cord. Wow and flutter 0.25%; frequency response 50-12,000 Hz; output 6 W/ch continuous; FM sensitivity 1.8 μV; FM selectivity 35 dB; impedance 4-8 ohms; 12 V dc negative ground; 1¾" H × 6⅜" W × 5½" D.. $380

JENSEN

R430 AM-Stereo FM/Cassette Player

In-dash bi-amplified AM-stereo FM receiver/cassette player with Dolby noise-reduction system and



separate power amplifiers. Features cassette door/tuner dial; pushbutton eject; fast forward/rewind switch; automatic flashing tape alarm reminds you when ignition is turned off to remove cassette; LED cassette and stereo indicators; individual bass/treble and balance/fader; other controls include pushbutton remote power amplifier, bi-amplification, loudness compensation, muting, AM/FM, local/distant, and tuner. Wow and flutter 0.2%; S/N 73 dB (FM Dolby); frequency response 30-18,000 Hz; THD 0.4% at 52 W; output 30 W continuous; FM sensitivity 1.0 μV; FM alternate channel rejection 75 dB; FM stereo separation 35 dB; capture ratio 1.5 dB; bi-amplifier output 25 W (bass), 5 W (treble); bi-amp crossover 1000 Hz $530

R420. Similar to R430 without power amplifier and remote power amplification control; THD 1.0% at 16 W; bi-amplifier output 5 W (bass), 5 W (treble); output 10 W continuous..... $400

R410. Similar to R420 without bi-amplification; output 5 W continuous; THD 1.0% at 8 W.. .. $400

R330 AM-Stereo FM/8-Track Player

In-dash bi-amplified AM-stereo FM receiver/8-track player with Dolby noise-reduction system and separate power amplifiers. Features LED program and stereo indicators; individual bass/treble and fader/balance; volume/push-program and tuning/push-fast forward controls; other controls include push-button remote power amplifier, bi-amplification, loudness compensation, muting, AM/FM, local/distant, and tuner. Wow and flutter 0.2%; S/N 73 dB (FM Dolby); frequency response 30-18,000 Hz; THD 0.4% at 52 W; output 30 W continuous; FM sensitivity 1.0 μV; FM alternate channel rejection 75 dB; FM stereo separation 35 dB; capture ratio 1.5 dB; bi-amplifier output 25 W (bass), 5 W (treble); bi-amp crossover 1000 Hz $530

R320. Similar to R330 without power amplifier and remote power amplification control; THD 1.0% at 16 W; bi-amplifier output 5 W (bass), 5 W (treble); output 10 W continuous... ... . $400

R310. Similar to R320 without bi-amplification; output 5 W continuous; THD 1.0% at 8 W..... $400

J.I.L.

634E AM-Stereo FM/Cassette Player

In-dash computer-programmed AM-stereo FM radio and cassette player with auto reverse. Cassette features auto eject, locking fast forward/rewind, and LED tape direction indicators. Radio features fluorescent digital time and frequency readout; pushbutton tuning for four AM and four FM channels with scan/pause and seek/lock-in functions; auto FM muting; local/distant button; hour/min adjust; treble/bass tone control; power boost "Power Pumper" switch; FET front end and adjustable shafts; max. output 20 W/ch continuous; 2" H × 7" W × 7" D..... $490

633. Similar to 634E without computer programming and digital clock/frequency display; has LED stereo indicator; 2" H × 7¼" W × 6¾" D $325

874E AM-Stereo FM/8-Track Player

In-dash computer-programmed AM-stereo FM radio and 8-track player with dial-in-door. Unit features LED frequency readout and time display; hour/minute adjust; auto FM muting; LED stereo indicator; pushbutton tuning for four AM and four FM channels with scan/pause and seek/lock-in functions; AM/FM selector button; treble/bass tone controls; power boost "Power Pumper" switch; FET front end and adjustable shafts; max. output 20 W/ch continuous; 2" H × 7" W × 7" D... ... $415

873. Similar to 874E without computer programming; has program indicator lights; 1¹³⁄₁₆" H × 7¼" W × 6" D. $270

LAFAYETTE

CP-2300 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/stereo cassette player features locking fast-forward/rewind/eject switch; mono/stereo switch; FM local/distant switch; stereo indicator light; tone, volume, and balance controls; 1⅞" H × 5½" W × 7" D..... $100

RK-300 Cassette Player

Underdash stereo cassette player features automatic reverse; has fast-forward, rewind, and eject controls and slide controls for volume, balance, and tone; 2⅛" H × 7" W × 7" D. $80

LAKE COMMUNICATIONS

990 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/cassette player features digital LED clock/radio frequency readout display. Radio includes multipurpose concentric control for volume/balance (pull and turn) and bass/treble (push and turn); stereo balance/tuning control; toggle switches for time/frequency, AM/FM, and stereo/mono modes; LED FM stereo indicator. Cassette features auto eject and fast forward and rewind. Output 6 W/ch; stereo separation 30 dB; 13.8 V dc negative ground; 44 mm H × 178 mm W × 150 mm D..... $110

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Funny thing this stereo business. The world's full of advanced technology—so how do you make a better unit? More features? More power?

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See your nearest Mitsubishi dealer and point to, poke at and above all, listen to our exciting new line of car audio products.

Shown here are the RX-79 in-dash cassette with AM/FM MPX, the CV-23 control amplifier and equalizer, the CX-20 component cassette deck, the SX-30SA 2-way speaker enclosures and the SB-2SA super tweeters.

MITSUBISHI® CAR AUDIO
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12 CAR TAPE MACHINES

MARANTZ

CAR-427 CompuTuner/Cassette Deck
In-dash unit incorporates stereo CompuTuner/preamplifier/auto reverse cassette deck with digital quartz clock/radio frequency display. Cassette features Dolby noise-reduction system with tape and FM Dolby buttons, Sendust-alloy tape head, tape equalization for special tape (includes metal-particle), memory preset tape eject and power off auto eject, and locking fast forward and rewind. Tuner/preamplifier features front-to-rear preamp fader control; atmospheric interference rejection; quartz-locked synthesized tuning with ten electronic memory preset buttons and electronic station search; center-detented bass, midrange and treble controls; loudness compensation; FM muting; FM impulse-noise blanker. Wow and flutter 0.15% wrms; tape frequency response 40-15,000 Hz at -3 dB; FM sensitivity 1.0 μV, 75 ohms; stereo separation 30 dB at 1000 Hz; 2⁹/₁₆" H × 7¹/₈" W × 5¹/₈" D; nose piece 2" H × 4¹/₈" W..... $625

CAR-400 CompuTuner/Cassette Deck
In-dash unit combines stereo CompuTuner, built-in stereo amplifier, and cassette deck with digital quartz clock/radio frequency display. Cassette features Dolby noise-reduction system, auto eject, and locking fast forward and rewind. Radio features quartz-locked synthesized tuning with 12-station electronic memory preset buttons and electronic station search; atmospheric interference rejection; center detented bass and treble controls; fader control; FM muting. Wow and flutter 0.15% wrms; tape frequency response 40-13,000 Hz at 3 dB; output 2.5 W/ch into 4 ohms from 50-20,000 Hz with 0.9% THD; FM sensitivity 1.8 μV into 75 ohms; stereo separation 30 dB at 1000 Hz; 2⁹/₁₆" H × 7¹/₈" W × 5¹/₈" D; nose piece 2" H × 4¹/₈" W.... $500

CAR-302 Tuner/Cassette Deck
In-dash unit combines AM-FM stereo tuner and stereo cassette deck. Cassette features Dolby noise-reduction system, super hard permalloy tape head, auto eject, and fast forward and rewind. Radio features five-station preset; atmospheric interference rejection; separate bass and treble controls; volume control; LED FM stereo indicator; front-to-rear speaker fader. Wow and flutter 0.15% wrms; tape response 40-13,000 Hz at -3 dB; output 2.5 W/ch into 4 ohms from 50-20,000 Hz with 0.9% THD; FM sensitivity 1.8 μV; 2³/₄" H × 7¹/₈" W × 4³/₄" D; nose piece 1³/₄" H × 4¹/₈" W... $300

CAR-301 Tuner/Preamp/Cassette Deck
In-dash unit combines AM-FM stereo tuner/preamplifier/cassette deck. Cassette deck features Dolby noise-reduction system, super hard permalloy tape head, auto eject, and fast forward and rewind. Radio features five-station pushbutton preset; atmospheric interference rejection; separate bass and treble controls; loudness compensation volume control; LED FM stereo indicator; preamp front-to-rear speaker fader..... $270

420 AM-FM/Cassette Player
In-dash unit combines AM/Stereo FM radio with cassette player; AM/FM stereo Computuner with quartz-controlled synthesized digital tuning and microprocessor which provides electronic search plus instant access to 12 user-programmable stations (six AM and six FM); auto-reverse cassette player with locking fast forward and rewind; wow and flutter 0.15%; tape frequency range 40-13,000 Hz; output 10 W/ch continuous into 4 ohms with 0.9% THD; FM sensitivity 1.1 μV at 75 ohms (12 dBf); capture ratio 1.5 dB; FET r-f amplifier; PLL for stereo separation; fader control; FM muting; local/distant switch; bass and treble controls; loudness control; antenna trimmer; adjustable shaft spacing; quartz clock; 1³/₄" H × 7¹/₈" W × 5⁷/₈" D; nose dimensions 1⁵/₈" H × 4¹/₈" W (DIN standard).... $500

410 AM-FM/Cassette Player
In-dash unit combines AM/FM radio and stereo cassette player; AM/FM stereo Computuner with quartz controlled synthesized digital tuning and microprocessor which provides electronic station search plus instant access to 12 user-programmable stations (six AM and six FM); auto-eject cassette player with locking fast forward and rewind; wow and flutter 0.15%; tape frequency range 40-13,000 Hz; output 4 W/ch continuous into 4 ohms with 0.9% THD; FM sensitivity 1.1 μV at 75 ohms (12 dBf); capture ratio 1.5 dB; FET r-f amplifier; PLL for stereo separation; FM muting; local/distant switch; tone control; antenna trimmer; power antenna wire; adjustable control shaft spacing; quartz clock; 1³/₄" H × 7¹/₁₆" W × 5⁷/₈" D; nose dimensions 1⁵/₈" H × 4¹³/₁₆" W (DIN standard) $390

350 AM-FM/Cassette Player
In-dash AM/Stereo FM receiver and auto-reverse cassette player; locking fast forward and rewind; power-off eject; FET r-f amplifier; PLL for stereo separation; FM muting; local/distant switch; tone control; antenna trimmer; adjustable control shafts; wow and flutter 0.15%; tape frequency range 40-13,000 Hz; output 4 W/ch continuous into 4 ohms with 0.9% THD; capture ratio 2 dB; FM sensitivity 1.5 μV at 75 ohms; 1³/₄" H × 7¹/₈" W × 5³/₈" D; nose dimensions 1⁵/₈" H × 4¹/₈" W (DIN standard) $240

300 AM-FM/Cassette Player
In-dash unit combines five-station presets and auto eject cassette; PLL FM decoder; FM muting; full-time noise blanker; automatic stereo/mono/switching; local/distant switch; super-hard permalloy head; volume, tone and balance controls; FM stereo LED indicator; locking fast-forward and rewind; wow and flutter 0.15% wrms; output 4 W/ch continuous into 4 ohms with 0.9% THD; frequency response 40-13,000 Hz; FM sensitivity 1.8 μV into 75 ohms (16.36 dBf); capture ratio 2.0 dB; FM selectivity 60 dB at ±400,000 Hz; negative ground; anodized brushed-aluminum faceplate in gold; chassis 2³/₈" H × 7¹/₈" W × 5³/₈" D; nose 1³/₄" × 4¹/₈"..... $220

MIDLAND INTERNATIONAL

67-440 AM-Stereo FM/Cassette Player
In-dash unit incorporates "MicroPrecision" electronic memory-controlled AM-stereo FM radio, modular stereo amplifier, auto reverse cassette player with twin capstan drive, and quartz crystal digital clock. Cassette: four-pickup playback head with pause detector; locking fast forward/rewind; eject; LED tape direction indicators; wow and flutter 0.2% (JIS weighted); frequency response 30-15,000 Hz; S/N 48 dB; crosstalk -46 dB. Receiver: scan function with 5-sec hold; hold button locks in with afc; PLL tuning; digital frequency readout; can pushbutton preset up to five AM and five FM stations; FM noise blanker; FM muting; LED FM and stereo FM indicators; front antenna trimmer; local/distant; separate bass, treble, fader, and balance controls; FM IHF usable sensitivity 1 μV at 12 dBf; S/N 60 dB; FM i-f rejection 70 dB; FM capture ratio 1.7 dB; frequency response 40-15,000 Hz; output 15 W/ch continuous with 1.0% THD; load impedance 4 ohms; 2³/₈" H × 7³/₄" W × 6¹/₂" D..... $450
67-550. Same as 67-440 except has 8-track player with auto/manual programming and tape program indicator lights $450

63-445 CB/AM-FM/Cassette Player
In-dash unit incorporates 40-channel CB transceiver, AM-stereo FM radio, and stereo cassette player. Cassette: electronically-controlled capstan drive motor; auto stop; locking fast forward button; pushbutton eject; LED tape mode indicator; wow and flutter 0.35% rms. CB transceiver: dual conversion superheterodyne receiver with switchable ANL; PLL 40-channel tuning; lighted signal power meter (also reads as tuning meter for radio); separate underdash-mounted 500-ohm dynamic microphone with LED channel readout and "on air" indicator with dimmer switch, channel change, and squelch controls; monitor switch; output 4 W; receiver sensitivity 0.5 μV for 10-dB S/N; adjacent channel selectivity 70 dB; squelch range 0.5-1000 μV. Radio features pushbutton AM/FM selectors; FM stereo light; local/distant switch; tone control; fader and balance controls; FM 30-dB quieting sensitivity 5 μV; FM i-f rejection 75 dB; FM image rejection 40 dB; FM stereo separation 28 dB at 1000 Hz; output 6 W/ch continuous; load impedance 4 ohms; 2³/₈" H × 7³/₄" W × 6³/₄" D $400
63-545. Same as 63-445 except has 8-track player with auto/manual program change and LED program lights $400

MITSUBISHI CAR AUDIO

RX-79EM AM-FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player with auto reverse; features locking fast forward and

rewind; four-speaker capability; tuning, balance, and fader controls with five-station pushbutton preset; stereo/mono switch; pushbutton program selector; AM/FM LEDs; 18 W/ch..... $260

RX-7 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player designed for imported cars. Cassette features auto reverse, auto eject, locking fast forward and rewind, and LED tape flow indicator; wow and flutter 0.15% wrms; S/N 50 dB; 40-dB separation. Radio features FM noise killer circuit; one-touch six-station pushbutton preset tuning; program selector switch; frequency response 40-13,000 Hz; dist. 1.0%; capture ratio 4 dB; selectivity 48 dB..... $250
RX-69. Similar to RX-7 except designed for domestic cars; without six-station preset; has five-station pushbutton preset, stereo/mono switch, dual-color-mode dial illumination, bass booster switch, and fader and balance controls for four-speaker 8-ohm system; dist. 0.5%; selectivity 35 dB..... $240
RS-67. Similar to RX-69 except has 8-track player with one-touch program selector; radio has five AM/FM station preset; wow and flutter 0.2% wrms; S/N 50 dB..... $230

RX-73 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player features pushbutton AM/FM; tuning/fader control with five-station pushbutton preset; locking fast forward and eject; left and right balance controls; local/distant switch..... $180

Car Stereo Components
CV-21EM. 20 W/ch power amplifier with balanced transformerless circuit; loudness control; separate bass and treble controls; fader and balance controls; attenuation switch; dimmer control connection..... $140
CJ-20EM. AM-stereo FM tuner with noise-killer circuitry, local/distant switch, muting circuit, and illuminated tuning meter..... $140
CX-20EM. Cassette deck with auto eject, hard permalloy heads, level controls, and dimmer control connections; wow and flutter 0.15%; S/N 55 dB; frequency response 30-14,000 Hz..... $100
CX-21EM. Same as CX-20EM except has noise-reduction switch, locking fast forward/rewind, program selector switch, and auto reverse..... $140

MOTOROLA

830SX AM-FM Radio/Cassette Player
In-dash electronic AM-stereo FM radio and cassette player with Dolby noise-reduction system. Cassette features AutoReverse, locking fast forward and rewind, and equalization switch for ferric oxide or CrO_2 tapes; max. wow and flutter 0.105% wrms at 1.0% THD. Radio has electronic touch-tuning with up to ten-station memory and "search" and "scan" functions; orange LED frequency readout and time

display; fader control; AM/FM muting switch; loudness control; bass, treble, and balance controls; FM sensitivity 65 dB; separation 40 dB; 20 W continuous total output power into 4-ohms at 1.0% THD; frequency response 20-15,000 Hz; 51 mm H × 180 mm W × 150 mm D..... $450

CC975AX AM-FM/Cassette Player/CB
In-dash unit combines AM-stereo FM radio and stereo cassette player with AutoCue; also features CB standby and CB/radio pushbuttons; LED channel display; pushbutton operations; removable microphone..... $430

TC894AX AM-FM/Cassette Player
In-dash unit combines AM-stereo FM radio and stereo cassette player; features Dolby noise-reduction system for tape and FM radio modes; hard permalloy head; tape equalization control for FeCr and CrO_2 tapes; loudness control; pushbutton local/distant, eject, filter, mono/stereo, and FM controls; pushbutton tuning; locking fast forward and rewind; AutoReverse; fader control; separate bass and treble controls; stereo indicator light; 24 W continuous total system power..... $390
TC890AX. Same as TC894AX minus loudness control; 8 W continuous total system power..... $400

TC887AX AM-FM/Cassette Player
In-dash unit features AM-stereo FM radio and front-loading stereo cassette player; 8 W continuous total system power; AutoReverse sensor automatically plays second side of tape; locking fast forward and rewind switch with direction indicator light; FM local/distant switch; stereo indicator lights; left/right balance controls; front-rear fader; mono/stereo switch; hard permalloy head; 2.6" H × 7.1" W × 5.3" D..... $250

TC888AX AM-FM/Cassette Player
In-dash unit combines AM-stereo FM radio and front-loading stereo cassette player; 8 W continuous total system power; AutoCue control electronically positions tape in either forward or reverse mode; pushbutton tuning; separate fader control; locking fast forward and rewind buttons; tape eject; tone, balance, and volume controls; local/distant and mono/stereo switches; stereo indicator light; hard permalloy heads..... $240

TC885AX AM-FM/Cassette Player
In-dash unit designed for compact cars combines AM-stereo FM radio and front-loading stereo cassette player; 8 W continuous total system power; AutoReverse; hard permalloy tape head; manual tuning; controls for tone, balance, and volume; locking fast forward and rewind; tape eject; pushbutton local/distant, mono/stereo, and FM controls; stereo indicator light..... $200

MUNTZ HI Z

350 AM-Stereo FM/Cassette Deck
In-dash AM-stereo FM radio/auto reverse cassette deck with LED clock/station frequency readout and built-in 50-W amp; designed to operate with Model 77 amplifier. Features locking fast forward and rewind; cassette eject button; mono/stereo and AM/FM switches; LED stereo indicator; built-in FM noise suppressor. FM sensitivity 4 μV; FM stereo separation 30 dB..... $320

NAKAMICHI

350 Universal Cassette Deck
See Section 6, Cassette Tape Machines, under "Nakamichi"..... $440

250 Cassette Player
Designed for use with ADS subminiature biamplified speaker systems; Dolby noise reduction circuitry; selectable playback equalization; full auto shutoff; dc servomotor drive; volume, tone, and balance controls; supplied with bracket for underdash mounting and connecting cables; playback frequency response 40-17,000 Hz +3 dB; wow and flutter 0.08% wrms; S/N 62 dB (with Dolby); output 580 mV; 9¹/₂" × 7¹/₃" × 3¹/₂"..... $310
250S. Same as 250 but with ac power supply..... $335

PANASONIC

Cockpit RM-610 Tuner/Cassette Deck
Ceiling-mounted modular control unit incorporates stereo cassette deck, FM stereo tuner, and preamplifier with plug-in power amplifier. Tape deck: has switchable Dolby noise-reduction system; auto reverse; locking fast forward and rewind; auto eject; tape selector for normal and CrO_2 tapes; LED tape direction indicator; volume control; wow and flutter 0.2% wrms; frequency response 30-14,000 Hz; S/N 60 dB with Dolby; crosstalk −57 dB; stereo separation 40 dB at 1000 Hz. FM tuner: automatic multipath noise suppressor, r-f amplifier, and double-balanced mixer circuitry; three preset pushbutton preset or manual electronic FM tuning; auto FM stereo/mono switch; FM stereo indicator; LED dial frequency indicators; muting switch; local/distant switch; noise blanker; usable sensitivity 16 dBf; S/N 65 dB; image rejection 70 dB; i-f rejection 80 dB; frequency response 30-15,000 Hz. Preamp: separate center-detent bass and treble controls; balance and fader controls; 21 click-stop volume control; loudness switch; ten-LED output power indicators. Plug-in power amplifier: hidden mount (behind dash, under seat, or in trunk); 60 W total output into 4 ohms with 0.5% THD from 20-20,000 Hz; frequency response 20-40,000 Hz −3 dB; S/N 82 dB. Optional speakers available with Cockpit system; 1¹/₂" × 27³/₄ × 9¹/₁₆".. $1000
Speaker. Rear-deck surface-mount two-way air-suspension speaker system with urethane-edged 4³/₄-in woofer and 2-in tweeter; max. input 50 W; frequency response 60-20,000 Hz; 4-ohm input impedance; 5⁷/₁₆" × 9¹³/₁₆" × 7⁷/₁₆"..... $210

CQ-8700 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM electronic tuner digital radio, clock, and cassette player with Dolby noise-reduction system and auto reverse. Cassette features locking fast forward/rewind, manual eject, and LED tape direction indicator. Radio features five-memory buttons for five AM and five FM station selections, seek control that stops on strong frequencies, manual frequency scan, quartz-controlled PLL frequency synthesizer, built-in impulse noise quieting circuit, LED frequency and time display on cassette door, LED stereo and flashing signal/strength indicators, and local/distant, Dolby, and bi-amp switches; electric antenna and dimmer leads. Wow and flutter 0.2%; tape frequency response 30-12,500 Hz; S/N 53 dB (Dolby off), 62 dB (Dolby on); FM frequency response 30-15,000 Hz; FM S/N 60 dB; THD 0.2%; adjustable shafts and trimplates..... $700

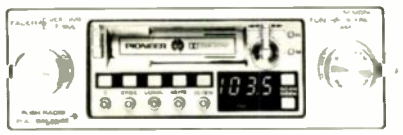
CQ-7600 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and Repeatrack cassette player with Dolby noise-reduction system and built-in five-band graphic equalizer. Features locking fast forward/rewind; eject button; bi-amp, Dolby, and local/distant switches; FM muting; quartz-controlled PLL frequency synthesizer; stereo indicators; built-in INQ circuit; electric antenna and dimmer leads; equalizer center frequencies set at 60, 250, 1000, 3500, 10,000 Hz at ±12 dB. Wow and flutter 0.02% wrms; tape frequency response 30-12,500 Hz at −3 dB; S/N 63 dB (Dolby on); adjustable shafts and trimplates..... $400
CQ-7400. Similar to CQ-7600 except without Dolby noise-reduction, quartz-controlled PLL frequency synthesizer, and bi-amp switch; has equalizer center frequencies set at 80, 250, 1000, 3500, 10,000 Hz at ±12 dB..... $300

CQ-6600 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and cassette player with Repeatrack cassette has adjustable shafts and trimplates to fit American and imported cars. Features locking fast forward/rewind; auto or manual eject; LED stereo/tape mode indicators; switchable INQ circuit designed to suppress impulse noise on FM band; local/distant/super sensitivity control; tuner, balance, fader and tone controls; pushbutton tuning; max. output 7 W/channel..... $260
CQ-4600. Similar to CQ-6600 except 8-track; has manual and auto program change and LED program indicators..... $260

CX-7200 Component Cassette Player
Underdash cassette player with auto reverse. Features two stage preamp and dual channel amp; separate volume, left/right tone, and balance controls; one-lever operation for locking fast forward/rewind/eject; manual program selector; LED program indicators; wow and flutter 0.3% wrms; frequency response 40-12,000 Hz at −3 dB; S/N 50 dB; output 2 W/channel at 400 Hz; THD 5%; impedance 4 ohms..... $140
CX-5200. Similar to CX-7200 without auto reverse; has Repeatrack that switches rewind mode to playback at the beginning of tape; frequency response 40-10,000 Hz −3 dB..... $100
CX-1200. Similar to CX-7200 except 8-track with Panasonic Vertical Head Movement System; wow and flutter 0.13% wrms; S/N 40 dB..... $90
CA-9600. AM-stereo FM tuner..... $100
CJ-3600. Five-band graphic equalizer/amp.... $150
CJ-2600. Dashboard-mount; 10 W/ch power booster..... $60
The 15-W/ch CJ-3000, 20-W/ch CJ-4000, and 50-W/ch CJ-5000 in-dash amplifiers can be used with all Panasonic car cassette players.

PIONEER

KE-5000 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM Supertuner and stereo cassette player with dual-Dolby circuitry; electronic



PLL frequency synthesizer tuning; digital readout for station frequency and time with clock button; random access memory allows pre-setting up to five AM and five FM stations through electronic feather-touch buttons; scan/stop and seek buttons for station selection; built-in PNS noise suppression. Cassette features auto replay, locking fast forward and rewind, and CrO_2 tape selector. Radio features double diffusion MOS FET front end, muting and stereo/mono switches, AM/FM local/distant switch, and built-in fader control. Wow and flutter 0.28%; tape frequency response 30-12,000 Hz; S/N 53 dB (Dolby on), 45 dB (Dolby off); output 8 W continuous; FM usable sensitivity 1.1 μV into 75 ohms (12 dBf); FM 50-dB quieting sensitivity 1.4 μV into 75 ohms (14.3 dBf); selectivity 74 dB; capture ratio 1.7 dB; 3" H × 7¹/₈" W × 5⁷/₈" D..... $420
KE-3000. Similar to KE-5000 without Dolby noise-reduction system; 2" H × 7¹/₈" W × 5⁷/₈" D.... $360
KE-2000. Similar to KE-3000 without PNS noise suppression, electronic PLL synthesizer, digital readout, and scan tuning; LED electronic pointer display; AM local/distant switch..... $320

KPX-9500 AM-Stereo FM/Cassette
In-dash AM-stereo FM Supertuner and electronically governed stereo cassette player with dual-Dolby noise-reduction circuitry; LED stereo and Dolby indicators. Cassette features auto replay and eject, and locking fast-forward and rewind. Radio features five-station preset pushbutton tuning, stereo/mono switch, loudness control, separate bass and treble controls with center detent, and volume and balance controls. Wow and flutter 0.13% wrms; tape frequency response 30-15,000 Hz −3 dB; S/N 60 dB (Dolby on); FM usable sensitivity 1.1 μV into 75 ohms (12 dBf) mono; FM 50-dB quieting sensitivity 1.4 μV into 75 ohms (14.3 dBf); selectivity 74 dB; capture ratio 1.7 dB; 3" H × 4¹/₈" W × 1¹/₈" D..... $330

KPX-9000 AM-Stereo FM/Cassette
In-dash AM-stereo FM Supertuner and electronically governed stereo cassette player; volume and balance control; auto eject; LED tuning scale; rewind/fast-forward lever; separate bass and treble

12 CAR TAPE MACHINES

controls; loudness contour switch; five-station preset pushbutton tuning; LED stereo and tape play indicators; FM muting; FM stereo/mono switch; tuner capture ratio 1.7 dB; FM usable sensitivity 1.1 μV into 75 ohms (12 dBf) mono. Tape player: fast-winding time 120 sec (C-60); wow and flutter 0.13% wrms; frequency response 30-15,000 Hz −3 dB; S/N 52 dB; 2" H × 7 1/8" W × 5 7/8" D; nose 1 3/4" H × 4 1/8" W × 1 1/8" D $300

KP-8500 AM-Stereo FM/Cassette Player
In-dash Supertuner AM-stereo FM radio and cassette player with Dolby noise reduction system. Features auto eject, and locking fast forward and rewind. Radio features five-station preset pushbutton tuning, stereo/mono and local/distant switches, auto FM muting, and volume, tone and balance controls. Wow and flutter 0.28% wrms; tape frequency response 30-12,000 Hz; 10 W max. continuous output power; FM usable sensitivity 1.1 μV into 75 ohms; 50 dB quieting sensitivity 1.4 μV into 75 ohms; alternate channel selectivity 74 dB; 3" H × 7 1/8" W × 5 3/4" D; nose dimensions 1 3/4" H × 4 1/8" W × 1 1/8" D $280

KP-707G Cassette Deck
Underdash cassette deck with Dolby noise-reduction system, electronic governor motor, and ferrite head. Features auto reverse with auto tape slack eliminator; CrO_2 tape selector; audio muting switch; feather-touch direction, fast forward, and rewind tape controls; loudness control; tape direction indicators; separate bass, treble, balance, and volume controls with center detent. Wow and flutter 0.13% wrms; tape frequency response 30-15,000 Hz at ±3 dB; S/N 60 dB (Dolby on), 52 dB (Dolby off); 2" H × 6" W × 6 3/8" D $250

KP-8005 AM-Stereo FM/Cassette
In-dash AM-stereo FM Supertuner and cassette player. Features auto eject and replay, and locking fast forward and rewind; five-station preset tuning; volume/tone/balance controls; muting switch; stereo/mono switch; 8 W max. continuous output power; FM usable sensitivity 1.1 μV at 75 ohms (12 dBf); 50-dB quieting sensitivity 1.4 μV at 75 ohms (14.3 dBf); alternate channel selectivity 74 dB; capture ratio 1.7 dB; FET r-f amplifier; PLL for stereo separation; tape frequency range 30-12,000 Hz; wow and flutter 0.28% wrms; 2" H × 7 1/8" W × 5 3/4" D; nose dimensions 1 3/4" H × 4 1/8" W × 1 1/8" D $250
KP-8000. Same as KP-8005 except designed to DIN standard for European cars; nose 1 3/8" H × 4 1/8" W × 3/4" D; shaft spacing 5 1/8-in $250

KP-3500 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and cassette player designed to fit European cars. Unit features built-in PNS noise suppression system, auto eject and replay, locking fast forward and rewind, stereo/mono and local/distant switches, and volume, tone and balance controls. Wow and flutter 0.28% wrms; tape frequency response 30-12,000 Hz; max. output 8 W continuous; FM usable sensitivity 1.1 μV; FM 50-dB quieting sensitivity 1.4 μV; selectivity 74 dB; capture ratio 1.7 dB; 2" H × 7 1/8" W × 5 3/4" D; nose dimensions 1 3/8" H × 4 1/8" W × 3/4" D $230

KP-500 Stereo FM/Cassette
Underdash FM stereo Supertuner and cassette player. Features automatic eject; fast forward and rewind; PLL multiplex demodulator; automatic stereo/mono switching; local/distant switch; loudness and muting switches; separate bass and treble controls; 8 W max. continuous output power; FM usable sensitivity 1.1 μV; 50-dB quieting sensitivity 1.4 μV; alternate channel selectivity 74 dB; capture ratio 1.7 dB; wow and flutter 0.3%; frequency response 40-10,000 Hz; brushed aluminum panel; 3" H × 7 3/8" W × 7 1/2" D $220
KP-250. Similar to KP-500 except separate balance/tone/volume control; 2" H × 6 1/8" W × 6 3/4" D. $165

KPX-600 Stereo FM/Cassette
Underdash FM stereo Supertuner and stereo cassette player. Features automatic replay and eject; locking fast forward and rewind; tape-play indicator; electronic governor motor; volume, bass, treble, and balance controls; FM muting; loudness contour switch; FM stereo indicator; FM stereo/mono switch. FM tuner: S/N 68 dB; capture ratio 1.7 dB; stereo separation 32 dB (65 dBf, 1 kHz). Tape player: fast-winding time 120 sec (C-60); wow and flutter 0.13% wrms; frequency response 30-15,000 Hz −3 dB; S/N 52 dB; 2 3/8" H × 7 1/8" W × 6 7/8" D $220

KP-77G Cassette Deck
Underdash cassette deck with electronic governor motor features auto reverse with auto tape slack eliminator, locking fast forward and rewind, CrO_2 tape selector, audio muting switch, loudness control, tape direction indicators, and separate bass, treble, balance and volume controls with center detents. Wow and flutter 0.13%; frequency response 30-15,000 Hz at ±3 dB; S/N 52 dB; 2" H × 6" W × 6 3/8" D $180

KP-88G Cassette Player
Underdash stereo cassette player with Dolby noise-reduction system and electronic governor motor. Features automatic replay and eject; loudness contour switch; locking fast forward and rewind; Dolby on/off switch; separate bass and treble controls; balance control; Dolby on and tape play indicators; fast-winding time 120 sec (C-60); wow and flutter 0.13% wrms; frequency response 30-15,000 Hz ±3 dB; S/N 60 dB (Dolby on), 52 dB (Dolby off); 2" H × 6" W × 6 9/16" D $180
KP-66G. Similar to KP-88G except without Dolby; 2" H × 4 7/8" W × 6 1/8" D $150

KP-575 Cassette Player
Underdash cassette player has auto reverse with auto tape slack eliminator, locking fast forward and rewind, tape direction indicators, loudness control, and volume, tone and balance controls. Wow and flutter 0.25% wrms; tape frequency response 30-14,000 Hz; S/N ratio 50 dB; max. output 10 W continuous; 2" H × 6 1/8" W × 4 13/16" D $160
KP-373. Similar to KP-575 except without auto reverse; has auto replay and slide volume control; 2" H × 4 3/4" W × 6 1/8" D. $135

KP-272 Cassette Player
Underdash cassette player with auto eject, fast-forward and rewind, and separate volume, tone, and balance controls. Wow and flutter 0.3% wrms; frequency response 40-10,000 Hz; max. output 8 W continuous; 2" H × 5 7/8" W × 6 1/8" D $110

TP-7007 AM-Stereo FM/8-Track Player
In-dash AM-stereo FM radio and 8-track player with auto and manual program change, five-station preset pushbutton tuning, stereo/mono switch, LED FM and stereo indicators, and volume, balance and tone controls. Wow and flutter 0.3% wrms; tape frequency response 40-10,000 Hz; max. output 8 W continuous; 2" H × 7 1/8" W × 6 1/4" D $180
TP-6006. Similar to TP-7007 without five-station preset tuning; has local/distant switch and LED stereo indicator; 2" H × 7 1/8" W × 6 1/4" D $150

RCA

20C505 AM-Stereo FM/Cassette Player
In-dash unit combines AM-stereo FM radio and stereo cassette player. Features five × five AM/FM slidebar switching; five quick-set pushbutton tuning; local/distant switch; automatic frequency control; stereo balance control; fader control; dial light dimmer control lead; automatic power antenna activator lead. 10 W/ch continuous; frequency response 30-20,000 Hz; 4-8 ohm impedance; adjustable shafts; 2 3/16" H × 7" W × 6" D $225

12R704 AM-Stereo FM/8-Track Player
In-dash unit combines AM-stereo FM radio and stereo 8-track player. Features radio dial in cartridge door; five quick-set tuning pushbuttons; cartridge eject; local/distant switch; stereo fader and balance controls; dial light dimmer control lead; afc; program indicator lights; FM stereo indicator light. 10 W/channel; frequency response 30-20,000 Hz; 3-8 ohm impedance; adjustable shafts; 2 13/16" H × 7" W × 6" D $210

REALISTIC

12-1886 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/cassette player features adjustable shafts, locking fast-forward/rewind, stereo/mono switch, and separate controls for bass, treble, and loudness; 12 W/channel; 12 V dc negative ground $180
12-1887. Same as 12-1886 except has 8-track player $180

12-1809 Cassette Player
Cassette player with auto eject and fast forward/rewind controls; output 24 W $100
12-1810. Similar to 12-1809 except radio/8-track player with headphone jack $100

ROYAL SOUND

RS 2510 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio and auto reverse cassette player with LED tape direction indicator, built-in auto receiver tape change switch, locking fast forward/rewind, and manual stop/eject; radio features FM muting, defeat switch, LED AM/FM, MPX, afc, and mute indicators, loudness contour control, rotary bass/treble and balance/fader controls; auto antenna connector and RCA output jack. Wow and flutter 0.3% wrms; frequency response 30-13,000 Hz ±3 dB; S/N 55 dB; max. output power 10 W/ch into 8 ohms; stereo separation 35 dB at 1000 Hz; 4-8 ohm impedance; adjustable shaft; 1 3/4" H × 7" W × 5 23/32" D $400

SANKYO SEIKI

SCS-202 AM-Stereo FM/Cassette Player
In-dash AM-stereo FM radio/stereo cassette player; designed to fit most American and foreign cars; features four-way front-to-back and side-to-side fader; volume/tone control; pushbutton locking fast forward; red LED stereo FM and green LED tape indicators; local/distant switch; adjustable shafts; output 10 W; wow and flutter 0.3% wrms; S/N 48 dB; frequency response 40-12,000 Hz; FM sensitivity 2.8 mV at 9 dB; 4-8 ohm impedance; 1 3/4" H × 7 1/8" W × 4 3/4" D $140

SANYO

FT2200 AM-Stereo FM/Cassette Deck
In-dash unit combines AM-stereo FM radio and metal-compatible cassette deck with Dolby noise-reduction system and built-in digital quartz clock; designed for small foreign and American sub-compact cars. Cassette features Sendust Alloy record/playback head, bias head switch for normal, CrO_2, FeCr and metal tapes, and automatic/manual reverse, locking fast forward and rewind; wow and flutter 0.07% wrms; frequency response 40-19,000 Hz; S/N 62 dB. Electronic-varactor tuner features ten-station touchbutton memory tuning, LED frequency and time display, and manual FM stereo/mono and local/distant switches; frequency response 30-15,000 Hz at ±3 dB; stereo separation 32 dB at 1000 Hz. Preamplifier features output jacks, bass and treble controls, loudness switch, rotary on/off/master volume control and balance control; frequency response 30-25,000 Hz at ±3 dB; 2" H × 6 1/4" W × 5" D $330
FT1498. Similar to FT2200 except biamplified with 14 W/ch woofer and 2.7 W/ch tweeter amps at 5% THD; 33 W continuous output power; 4-8 ohm impedance; wow and flutter 0.08% wrms; FM frequency response 60-14,000 Hz at ±3 dB; 3" H ×

7" W × 6" D $350
FT1490-2. Similar to FT1498 without digital frequency/time display $240

FT1670 AM-Stereo FM/Cassette Player

In-dash unit combines AM-FM stereo radio, cassette player, digital clock, and elapsed timer; has auto eject transport; biamp with 12 W/ch woofer amps and 2 W/ch tweeter amps; LED display for elapsed time and station frequency; auto up/down for electric antennas; separate woofer and tweeter controls; remote scanning with hold button; locking fast-forward/rewind. Receiver: 28 W continuous output power; FM usable sensitivity 1.0 μV into 75 ohms; frequency response 30-16,000 Hz; selectivity 55 dB; capture ratio 1.5 dB; stereo separation 30 dB; speaker impedance 4 or 8 ohms; operating voltage 12 V dc neg. ground, 13.8 V dc nominal. Cassette: wow and flutter 0.2% wrms; S/N 45 dB. 3" H × 7" W × 6" D $300
FT690. Similar to FT1670 without elapsed timer and biamp with woofer/tweeter amps; 8 W continuous; response 50-12,000 Hz $250
FT1495. Similar to FT1670 without digital clock; features Dolby noise-reduction system and Dolby-encoded FM broadcasting; full auto reverse with auto repeat; five-station preset pushbutton tuning; wow and flutter 0.08% wrms; 33 W continuous output power; S/N with Dolby 62 dB $240

FT489 AM-Stereo FM/Cassette Player

In-dash AM-FM pushbutton stereo radio with cassette player; features auto-reverse; dual-gate MOS FET front end; locking fast-forward and rewind; local/DX switch; auto up/down control for electric antennas; EZ install system. Receiver: 9 W continuous output power; FM sensitivity 11.2 dBf (1.0 μV); frequency response 50-12,000 Hz; selectivity 55 dB; capture ratio 1.5 dB; FM stereo separation 35 dB; speaker impedance 4 or 8 ohms. Cassette: wow and flutter 0.08% wrms; S/N 45 dB. 12 V dc neg. ground; 2" H × 7" W × 6" D $190

FT1405 FM Stereo/Biamp/Cassette Play

Under-dash FM stereo receiver with biamp and cassette player with auto reverse features slide in/out bracket; biamp with 14 W/ch woofer and 2.7 W/ch tweeter amps at 5% THD; separate woofer and tweeter controls; loudness switch; locking fast-forward and rewind; dual gate MOS FET front end. Receiver: 33 W continuous total output power; FM usable sensitivity 1.5 μV into 75 ohms; frequency response 30-16,000 Hz; selectivity 50 dB; capture ratio 1.5 dB; FM stereo separation 30 dB; speaker impedance 4 or 8 ohms. Cassette: wow and flutter 0.08% wrms; S/N 46 dB. Operating voltage 12 V dc neg. ground, 13.8 V dc nominal; 2 1/4" H × 6 3/4" W × 7" D $160
FT1400. Similar to FT1405 without FM radio; 2 1/2" H × 7" W × 7" D $140

FT1877 AM-FM Stereo Biamp/8-Track

In-dash AM-FM biamplified stereo receiver and 8-track player with Dolby noise-reduction system and five pushbutton preset stations; biamp with 14 W/ch woofer amp and 2.7 W/ch tweeter amp; separate woofer and tweeter controls; locking fast-forward; dual gate MOS FET front end; PLL multiplex decoder; automatic up/down for electric antennas. Receiver: 33 W continuous total output power; FM usable sensitivity 2.0 μV into 75 ohms; frequency response 30-16,000 Hz; selectivity 55 dB; capture ratio 1.5 dB; FM stereo separation 30 dB; speaker impedance 4 or 8 ohms. Cassette: wow and flutter 0.15% wrms; S/N 55 dB with Dolby. Operating voltage 12 V dc neg. ground, 13.8 V dc nominal; 3" H × 7" W × 6" D $200
FT1004. Similar to FT1877 but under-dash unit without Dolby noise-reduction system and locking fast-forward; has rotary balance and tone controls; FM radio; FM sensitivity 1.5 μV into 75 ohms; S/N 46 dB; 2 1/4" H × 6 3/4" W × 6 7/8" D $130

SHARP

RG-5252 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/stereo cassette player designed for foreign-made cars. Features Automatic Program Search System (The Sharp Eye); tape end LED indicator; automatic end-of-tape shut-off; simplified slot loading; illuminated slide-rule tuning dial; band switch for AM/FM/Stereo FM; balance control; fast-forward and reverse lever; variable tone control; solid state stereo amplifier; PLL/FM stereo circuitry; agc and afc; stereo indicator lamp... $170
RG-3550. Similar to RG-5252 except designed for domestic cars $170

SPARKOMATIC

SR-3400 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/stereo cassette player with digital clock. Features auto stop; pushbutton eject; electronic loudness, muting, high filter, and AM/FM controls; local/distant control; elapsed timer and reset controls; locking fast forward and rewind; bass, treble, balance, and fader controls; LED stereo indicator. Wow and flutter 0.3% rms; S/N 40 dB; channel separation 45 dB; audio output 40 W continuous at 1.0% THD; frequency response 20-20,000 Hz; 1 3/4" H × 7" W × 5 1/2" D $300
SR-2400. Same as SR-3400 except has 8-track player with program selector and LEDs instead of cassette; no fast forward and rewind; wow and flutter 0.25% rms; 5 1/8" D $270
SR-3300. Similar to SR-3400 except auto-reverse cassette player with tape direction control and LED indicator; no digital clock with elapsed time and reset controls $260
SR-3100. Similar to SR-3300 minus auto reverse with tape direction control and LED $230
SR-2100. Same as SR-3100 except has 8-track player with program selector and indicator lights instead of cassette; wow and flutter 0.25% rms; 5 1/8" D $220

SR-340 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/stereo cassette player with digital clock. Features elapsed timer and reset controls; electronic loudness, muting, high filter, and AM/FM controls; local/distant control; automatic end-of-tape and pushbutton eject; locking fast-forward and rewind; bass, treble, balance, and fader controls; LED stereo indicator. Wow and flutter 0.3% rms; S/N 40 dB; channel separation 45 dB; audio output 10 W at 1.0% THD; frequency response 40-15,000 Hz; 1 3/4" H × 7" W × 5 1/2" D $260
SR-240. Same as SR-340 except has 8-track player with program selector and LED indicators instead of cassette; wow and flutter 0.25% rms; 5 1/8" D. $240
SR-330. Similar to SR-340 except auto reverse player with tape direction control and indicator; no digital clock $230

SR-301 AM-Stereo FM/Cassette Player

In-dash AM-stereo FM radio/stereo cassette player with AM/FM, muting, local/distant, and mono/stereo switches; auto shutoff; pushbutton eject and fast forward and rewind; separate balance and fader controls; tone control. Wow and flutter 0.3% rms; S/N 38 dB; channel separation 42 dB; audio output 8 W at 1.0% THD; frequency response 60-12,000 Hz; 1 3/4" H × 6 11/16" W × 4 13/16" D $120
SR-201. Same as SR-301 except has 8-track player with program selector and LEDs instead of cassette. $120

TENNA

C-3010DMX AM-FM/Cassette Player

In-dash AM-stereo FM radio and cassette player features digital readout and time display; separate fader and balance controls; locking fast-forward and rewind and end-of-tape-eject; mono/stereo and local/distant switches; stereo indicator light; dial dimmer lead; wow and flutter 0.20% wrms; S/N 50 dB; 8 W continuous output power at 5% THD; FM sensitivity 4 μV; adjustable shafts with universal nose and chassis size for installation in most cars... ..... $280
T-3009DMX. Similar to C-3010DMX except with 8-track player; wow and flutter 0.15% rms $270

12 CAR SPEAKERS

ACUTEX

MTS-I Miniature Speaker System

Two-way miniature speaker system with 4-in Perfect Piston woofer with 1-in voice coil and 22-oz magnet structure, and semi-horn dome tweeter; frequency response 100-20,000 Hz; crossover at 2500 Hz; handles 40 W music power, min. amp power 12 W/ch; 8-ohm nominal impedance; diecast aluminum enclosure with perforated metal grille; 7 1/16" H × 4 1/2" W × 4 9/16" D $99

ADS

2001A Bi-Amplified Speaker System

Two-way miniature bi-amplified speaker system primarily for use in mobile situations; 4-in woofer and 1-in acoustic-suspension soft-dome tweeter; crossover at 2700 Hz (acoustic), 1500 Hz (electronic, woofer), 3500 Hz (electronic, tweeter); woofer amplifier 60 W/ch continuous at 500 Hz with 0.3% THD, tweeter 20 W/ch continuous at 20,000 Hz with 0.3% THD; sensitivity 0.5 V rms into 43,000 ohms (low level), 4.0 V rms into 350,000 ohms (high level); S/N 85 dB ("A"); supply voltage 14.0 V dc negative ground. Features amplitude and frequency-sensitive opto-electronic feedback for woofers. Includes two 10-ft interface cables and two swivel brackets; black anodized finish with perforated aluminum grille; 4 1/4" H × 6 4/5" W × 4 3/5" D .... $599 pr.

2002A Bi-Amplified Miniature System

Two-way, miniature, bi-amplified speaker system primarily for in-car use with the Nakamichi 250 cassette player pre-amplifier, which incorporates on/off switching (see Audio Tape Equipment Section for Nakamichi 250). Optional connector cords for other systems; requires 11-15.5 V dc (ac power supply optional); employs 4-in long excursion woofer and 1-in soft-dome tweeter; crossovers at 2500 Hz (acoustical), 1450 and 3250 Hz (electrical); woofer amplifier 25 W/ch continuous into 1.5 ohms, 0.1% THD at 100 Hz; tweeter amplifier 5 W/ch continuous into 4 ohms, 0.1% THD at 10,000 Hz; total stereo output power at 15.5 V supply, 2 × 40 W min. continuous at clipping; sensitivity 500 mV rms for rated output, system (pair) acoustical output 103-dB SPL at 1 m; frequency response 85-17,000 Hz ±3 dB; S/N 90 dB; input impedance 47k ohms; black anodized aluminum enclosure on swivel bracket (flush-mount bracket and carrying case optional); 4 1/4" H × 6 4/5" W × 5 2/5" D.. ..... $470 pr.
With Nakamichi 250 ..... $800
2002 PS. 120/220 V ac adaptor and cables... $140

L300C Car Speaker

Acoustic-suspension speaker with ultra long excursion 5.25-in woofer and 1-in soft dome tweeter; frequency response 40-23,000 Hz; for surface mounting on quick-disconnect swivel bracket; satin finished aluminum housing is black anodized; 8.5" H × 5.8" W × 5.25" D $150

L300i Car Speaker

Two-way door or rear deck flush-mount car speaker system with 5.25-in long excursion woofer with high-temperature metal voice coil, and 1-in acoustic soft-dome tweeter with single layer high-temperature metal voice coil; frequency response 50-20,000 Hz ±3 dB; crossover at 2500 Hz; efficiency 90 dB SPL/W/m; recommended input range 10-100 W; 4-ohm nominal impedance; slim-line design to fit most imported cars and General Motor's X-bodies; black crinkle finish with removable metal grille; mounting hardware included; 5.7" H × 8.5" W $118

L200C Car Speaker

Incorporates 1-in diameter soft-dome acoustic sus-

12 CAR SPEAKERS

pension tweeter with single-layer high-temperature metal voice coil and 4-in diameter super-long excursion woofer with high-temperature metal voice coil; frequency response 85-20,000 Hz ±3 dB, 55-22,000 Hz ±5 dB; 4-ohm impedance; 30 W continuous power rating; solid, brushed and anodized aluminum cabinet available in black only; swivel bracket supplied for surface mounting; (optional recess frame and foam grille for flush mounting available); 6.85" H × 4.25" W × 4.65" D. $115

ALPINE

6004 Car Speaker System
Three-way 6 × 9-in car speaker system with 20-oz magnet, soft dome midrange, and Titanium dome super tweeter; frequency response 40-16,000 Hz; handles 40 W power; 4-ohm impedance; attenuator control.....$200 pr.

AUDIOTEX

All speaker systems are complete with grilles, wire, hardware and installation instructions; use Liquglide™ magnetic fluid injected into voice coil to increase longevity, extend frequency range, increase acoustic output and power handling; 4-8 ohm impedance; sold in pairs unless otherwise noted.

30-2656 3-D Sound
6 × 9-in triaxial speaker system with 1-in tweeter, 3-in mid-range, and 1-in aluminum voice coil; max. input 30 W peak; frequency response 40-20,000 Hz; 20 oz. magnet; flush mount; 6" H × 9" W × 4" D.....$90

30-2654
6 × 9-in dual cone speaker system with 3-in tweeter 1½-in aluminum voice coil; max. input 35 W peak; frequency response 40-18,000 Hz; 25 oz magnet; flush-mount; 6" H × 9" W × 4" D.....$86

30-2653
6 × 9-in two-way speaker system with 3-in tweeter and 1-in aluminum voice coil; max. input 25 W peak; frequency response 45-18,000 Hz; 20 oz magnet; flush mount; 6" H × 9" W × 4" D.....$71

30-2652
6 × 9-in two-way speaker system with 3-in tweeter and 1-in aluminum voice coil; max. input 20 W peak; frequency response 50-18,000 Hz; 10 oz magnet; flush mount, 6" H × 9" W × 4" D.....$64

30-2651
6 × 9-in dual cone speaker system with 1-in aluminum voice coil; max. input 25 W peak; frequency response 40-16,000 Hz; 20 oz magnet; flush mount; 6" H × 9" W × 4" D.....$54

30-2650
6 × 9-in flush-mount dual cone speaker system with 1-in aluminum voice coil; max. input 20 W peak; frequency response 50-16,000 Hz; 10 oz magnet; 6" H × 9" W × 4" D.....$48

30-2641
5¼-in round dual cone speaker system with 1-in aluminum voice coil; max. input 20 W peak; frequency response 55-15,000 Hz; 10 oz magnet; flush mount; 5¼" H × 5¼" W × 4" D.....$44

30-2640
5¼-in round dual cone speaker system with 1-in aluminum voice coil; max. input 16 W peak; frequency response 60-15,000 Hz; 5½ oz magnet; flush mount; 5¼" H × 5¼" W × 4" D.....$41

AUDIOVOX

COMP-60
Two-way car speaker system with two 6½-in woofers with 20-oz ferrite magnets and two 3½-in mylar dome tweeters; frequency response 50-20,000 Hz; 8-ohm impedance; max. input 40 W/ch; adaptor kit included for installation in OEM locations; "Sound-Flo" metal mesh grilles.....$110

DOME-20 Car Speaker
Coaxial 6 × 9-in car speaker system with 3-in dome tweeter.....$93

TRYVOX-30 Car Speaker
Three-way car speaker system with separate 5¼-in woofer and 20-oz magnet, 3-in midrange and 1-in short horn tweeter.....$87

TRYVOX-40 Car Speaker
Three-way car speaker system with 4 × 10-in woofer and 20-oz magnet, 2-in midrange and 1-in short horn tweeter; self-studded sound flow grilles.....$73

TRYVOX-20 Car Speaker
Three-way 6 × 9-in car speaker system; 20-oz ceramic magnet; 3-in midrange; 2-in tweeter; max. input 30 W; frequency response 60-15,000 Hz; 8-ohm impedance.....$73

TRYVOX-25 Car Speaker
Three-way car speaker system; 5¼-in woofer; 1½-in midrange; 1-in tweeter; 20-oz ceramic magnet; input 15 W; 8-ohm impedance; mesh grilles.....$64

COID-69/20 Car Speaker
Coaxial 6 × 9-in car speaker system; 3-in tweeter; 20-oz ceramic magnet; frequency response 60-18,000 Hz; input 20 W; 8-ohm impedance; chrome-accented padded vinyl grilles.....$54
COID-41/20. Similar to COID-69/20 except has 4 × 10-in woofer.....$54

COID-57/20 Car Speaker
Coaxial 5 × 7-in car speaker system; 2-in tweeter; 20-oz ceramic magnet; max. input 20 W; frequency response 100-16,000 Hz; 8-ohm impedance; diffuser grilles.....$54

COSC-5 Car Speaker
Coaxial car speaker system with 5-in woofer and 5-oz magnet, and sumarium cobalt tweeter with voice coil and magnet circuit; 1¼-in mounting depth; sound flow grilles.....$47

HI-COMP Line

HC-65 Car Speakers
Coaxial round speakers with 6½-in Butyl rubber-edge-suspension woofer with 20-oz magnet and short horn tweeter; frequency response 60-17,000 Hz; 4-8 ohm impedance; handles 50 W/ch max.; includes dual-mounting Sound-Flo grilles.....$104

HCS-15 Car Speakers
Two-way speakers with 5-in woofer and 5-oz magnet and samarium cobalt short horn tweeter; 5¼-in mounting depth; frequency response 120-15,000 Hz; 8-ohm impedance; handles 20 W/ch max. continuous; includes Sound-Flo grilles.....$58

BLACKMAX SYSTEMS

M5001 Car Speaker
Two-way speaker system with 5-in midrange/woofer and 1¾-in cone/dome tweeter; crossover at 3500 Hz; 8-ohm nominal impedance; frequency response 70-20,000 Hz; input range 8-50 W; mounts in side door panel, flush mount on rear deck, or free-standing; 9½" H × 6½" W × 2½" D.....$120 pr.

BLAUPUNKT

687 000 Car Speakers
Two-way flush-mount speaker system; frequency response 80-16,000 Hz; handles 25 W; fits 4⅜" dia. mounting hole; 5½" × 5½" × 2⅞".....$120 pr.

688 000 Car Speakers
Two-way flush-mount speaker system; frequency response 40-16,000 Hz; handles 35 W; fits 6⁹⁄₁₆ × 4⅜-in mounting hole; 6⅜" × 9⅛" × 3¾". $134 pr.

676 000 Car Speakers
Two-way flush-mount car speakers; frequency response 70-20,000 Hz; handles 25 W; fits 4⅜" dia. mounted hole, max. underdeck depth 7¾"; 5½" × 8¼" × 1⅜".....$72 pr.

639 000 Car Speakers
Enclosed air-suspension car speakers; frequency response 70-20,000 Hz; handles 25 W; 7¾" × 5½" × 5⅞".....$72 pr.

BRAUN by ADCOM

Braun L200 Car Speakers
Miniature two-way air suspension mobile speaker system with 5⅛-in dynamic woofer and 1-in hemispherical dome tweeter; frequency response 40-25,000 Hz; crossover 1500 Hz at 12 dB/octave; 4-ohm nominal impedance; power range 10-50 W, 40 W continuous; curved and perforated aluminum grille design; 10" H × 6¼" W × 5⅞" D.....$289 pr.

Braun Output C Car Speakers
Miniature two-way air-suspension mobile speaker system with 4-in dynamic woofer and 1-in hemispherical dome tweeter; frequency response 50-25,000 Hz; crossover 1500 Hz at 12 dB/octave; 4-ohm nominal impedance; power range 10-50 W, 35 W continuous; black aluminum extrusion cabinet with black perforated aluminum grille; 6¾" H × 4¼" W × 4⅜" D.....$249 pr.
Output C/WB. Same specifications as Output C; includes adjustable bracket and rubber padded edging.....$279 pr.

CANTON by ADCOM

HC 100 Car Speakers
Miniature two-way acoustic suspension mobile speaker system with 4.33-in long-throw woofer and 0.75-in dome tweeter; frequency response 48-30,000 Hz; crossover 1700 Hz at 12 dB/octave; nominal impedance 4-8 ohms; power range 5-60 W, 35 W continuous; diecast aluminum enclosure with perforated metal grille; available in black, silver, or bronze; 4.7" H × 7.5" W × 5.7" D.....$190 pr.

AC 200 Car Speakers
Rear-deck mount two-way speaker system with 4.33-in cone woofer and .75-in dome tweeter; frequency response 48-25,000 Hz; crossover 1700 Hz at 12 dB/octave; handles 30 W; diecast aluminum enclosure with perforated metal grille; available in black; one-point fixture; 120 mm H × 190 mm W × 144 mm D.....$300 pr.

CAR TAPES

JSL-1511 Car Speakers
Three-way car speakers with 5-in woofers and 20-oz magnet; frequency response 55-18,000 Hz; 8-ohm impedance; input 50 W; flush mount.....$100 pr.
JSL-980TX. Similar to JSL-1511 except 6 × 9-in system; frequency response 50-18,000 Hz .$70 pr.
JSL-963TX. Similar to JSL-980TX; can be purchased singly or in pairs.....$60 pr.
JSL-563TX. Similar to JSL-963TX except 5¼-in system with 55-18,000 Hz frequency response .$50 pr.

COBRA

SP693-20 Car Speakers
Three-way car speaker system with 6 × 9-in high-compliance air-suspension woofer with 20-oz ce-

ramic magnet, 3-in midrange, and 2-in tweeter with 1-in aluminum voice coil; frequency response 50-18,000 Hz; max. input 50 W; compatible with 4- or 8-ohm radio or tape units; acoustically transparent open mesh grille ..... $80 pr.

SP692-20. Similar to SP693-20 except two-way system has 3-in tweeter; frequency response 50-15,000 Hz; input 30 W max..... $60 pr.

CRAIG

R780 Car Speaker

5¼-in super full range Trans-Rib acoustical driver; surface-mount enclosure in black molded, rib-braced plastic; frequency response 80-17,000 Hz ±6 dB; 50 W music power rating; 41-oz magnetic structure; 1.4-in diameter voice coil; 4-ohm impedance; 12-ft connecting leads; enclosure size 6⅞" H × 11⅜" W × 9" D; two per kit $100

R731 Flush-Mount Car Speaker

One-way flush-mount, full-range speaker system with 5¼-in Trans-Rib braced-cone acoustic driver; frequency response from 60-17,000 Hz ±6 dB; max. input 50 W/ch; 4-8 ohms impedance; includes grilles, connecting cords, and mounting hardware; 6⅛" round, 2" D $85

V461 Car Speaker

6 × 9-in oval speaker with 20-oz magnet; coaxially mounted 3-in tweeter; 25 W music power rating; 8-ohm impedance; 6⅜" H × 9½" W × 7/16" D; two per kit $80

V460 Car Speaker

6 × 9-in oval speaker with 10-oz magnet and coaxially mounted 3-in tweeter; 25 W music power rating; 8-ohm impedance; 6⅜" H × 9½" W × 7/16" D; two per kit $70

9429 Car Speaker

6 × 9-in oval speaker with 30-oz magnet; flush mount; dual impedance 4 and 8 ohms; 25 W music power rating; 1-in diameter voice coil; 16-ft detachable connecting leads; 3 1/16-in deep; two per kit $60

EPICURE

LS-70 Car Speaker

Two-way 6 × 9-in auto speaker system with 6-in woofer and 1-in air-spring tweeter in side-by-side pattern; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 70-20,000 Hz; disperses sound 120 degrees max. at 15,000 Hz −3 dB; door panel, rear deck, van/wagon wall, and 5-in cutout installation; fits 6 × 9-in or 4- or 5-in cutout with optional adaptors; perforated metal grille $75

CSS Speaker System

Consists of two LS35 companion speakers and level control system. LS35 incorporates 3½-in full-range driver with aluminum voice coil; door, side-panel, or standard 6 × 9-in dash cutout mount. LCS controls front-to-back and side-to-side balance. System may be used with LS70; 60 W/ch input $75

FOSGATE ELECTRONICS

Type II Car Speaker Kits

The following speakers are compatible with Fosgate's Power Punch amplifiers.

SP-600. Two 6-in round woofers and two tweeters $110

SP-690. Two 6 × 9-in woofers and two tweeters..... $130

SP-694. Two 6 × 9-in woofers, two 4½-in round midrange drivers, and two tweeters $170

FUJITSU TEN

Car Speaker Systems

SSB8B5. Two-way air-suspension speaker system with 4-in woofer, 8-oz magnet, and 2-in tweeter; input 20 W; impedance 8 ohms ..... $140 pr.

SSB8G12. 6 × 9-in coaxial air-suspension speaker system with 20-oz magnet; input 20 W; impedance 8 ohms; wire mesh grilles ..... $125 pr.

SSB8G15. Three-way 6 × 9-in top-mount-flush speaker system; input 20 W; impedance 8 ohms; wire mesh grilles ..... $110 pr.

SSB8G13. 4 × 10-in coaxial speaker system with 10-oz magnet; input 20 W; impedance 8 ohms; wire mesh grilles ..... $90 pr.

SSB8G11. 4-in round door-mount speaker system with 6.6-oz magnet; input 20 W; impedance 8 ohms; comes with detachable rain guard and wire mesh grilles ..... $43 pr.

SSB8G4. 5¼-in round speakers with 10-oz magnet; input 20 W ..... $31 pr.

SSB8G5. 5 × 7-in elliptical speakers with 6.6-oz magnet; input 20 W ..... $31 pr.

SSB8G3. 5-in round speakers with 8-oz magnet; input 20 W ..... $30 pr.

SSB4G25. 5¼-in round speakers with 10-oz magnet; input 10 W ..... $29 pr.

SSB4G31. 5 × 7-in football speakers with 6.3-oz magnet; input 10 W ..... $27 pr.

SSB4G24. 5-in round speakers with 5.4-oz magnet; input 10 W ..... $26 pr.

GRUNDIG

HF 2040 Car Speakers

Two-way car speaker system with 4½-in woofer with foamed list, 2-in tweeter and crossover pad; frequency response 30-20,000 Hz; input 40 W music power; 20 W nominal continuous power; crossover frequency 4000 Hz; sensitivity 91 dB SPL/W/4-ft; 4-ohm impedance; 4⅞" H × 9⅜" W × 4½" D ..... $110 pr.

HF 2025 Car Speaker

4½-in integral dome speaker system with frequency response 30-20,000 Hz; max. power 40 W; 4-ohm impedance; 4 3/16" × 4 3/16" ..... $75 pr.

HEPPNER

6930 Tri-Pac Car Speaker

Three-way 6 × 9-in car speaker with 28-oz ceramic magnet, 1½-in high-temperature voice coil, 3-in midrange with 2½-oz ceramic magnet, and super dome tweeter with 3-oz ceramic magnet, and 1-in high-temperature voice coil; frequency response 35-20,000 Hz; handles 50 W power; 4¼" depth $50

6928 Center Dome Car Speaker

Two-way 6 × 9-in car speaker with 28-oz ceramic magnet, 1½-in high-temperature voice coil, and super dome tweeter suspended in woofer with 3-oz ceramic magnet, and 1-in high-temperature voice coil; frequency response 35-20,000 Hz; handles 50 W power; 4¼" depth $38

6925 Bi-Pac. Similar to 6928 Center Dome except has 3-in cone tweeter mounted on bracket with 2½-oz ceramic magnet; frequency response 35-18,000 Hz $40

HITACHI

HS-1M Mobile Speaker System

See Section 10, Speaker Systems, under Hitachi ... $200

INFINITY

InfiniTesimal Speaker System

Two-way mini speaker system designed for mobile situations; incorporates 5-in dual-drive polypropylene cone woofer with dual voice coils and Electromagnetic Induction Tweeter (EMIT) with samarium cobalt magnets; frequency response 65-32,000 Hz ±2 dB; crossover at 3000 Hz; power range 10-65 W/ch continuous; 4-ohm impedance; contour control for mobile or room environment adjustment; includes black metal mounting bracket and template for horizontal or vertical mounting anywhere in car; black anodized aluminum and oak finish with perforated aluminum grille; 11"H×6¼"W×5¼"D. $175

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JENSEN

J1001 Car Speaker
Three-way car speaker system incorporates separate woofer, midrange and tweeter. Woofer: 6 × 9-in, 20-oz magnet, frequency response 35-1000 Hz; midrange: 3½-in, 3-oz magnet, 1000-4000 Hz frequency response; tweeter: 2-in, 3-oz magnet; 4000-20,000 Hz frequency response; input 35 W; 4-8 ohm impedance; midrange and tweeter frequency controls; comes with custom grilles, wiring, and hardware $190

Series II Car Speakers
Triax II. Three-way bi-amplified car speaker incorporates 6 × 9-in woofer with 20-oz barium ferrite magnet and 1¼-in voice coil, 3-in cone midrange, and 2-in piezo-electric tweeter; frequency response 75-40,000 Hz; sensitivity 93 dB at 1 W; max. input 100 W continuous; impedance 4-8 ohms; 9½" H × 6⅝" W × 3¾" D $140
6 × 9-in Coax II. Two-way car speaker incorporates 6 × 9-in woofer with 20-oz barium ferrite magnet and 1½-in voice coil and 3-in cone tweeter; rear-deck mounting; frequency response 75-17,000 Hz; crossover 2500 Hz −6 dB; sensitivity 91 dB at 1 W; max. input 90 W continuous; impedance 4-8 ohms; 9½" H × 6⅝" W × 3¾" D $100
5¼-in Coax II. Two-way car speaker incorporates 5¼-in woofer and 2-in piezo-electric tweeter; frequency response 90-40,000 Hz; internal crossover; sensitivity 89 dB at 1 W; max. input 75 W continuous; impedance 4-8 ohms; in-door mount; 5½" H × 5½" W × 2¼" D $90
Tweeter/Midrange Module II. Three-piece system consists of two surface-mount modules and under-dash crossover control unit; 2-in cone midrange and 2-in piezo-electric tweeter; frequency response 1200-40,000 Hz; sensitivity 94 dB at 1 W; max. input 35 W continuous; impedance 4-8 ohms; 5⅜" H × 3" W × 1⅛" D $70

Triaxial Car Speaker Systems
Three-way speaker systems with 4-8 ohm impedance, custom grilles, wiring, and hardware.
C9945. 6 × 9-in woofer; 3-in midrange; 2-in tweeter; 4¹⁄₁₆-in deep; input 30 W; 20-oz magnet; frequency response 40-20,000 Hz $120
C9991. 4 × 10-in woofer; 2-in midrange; 2-in tweeter; 3¹³⁄₃₂-in deep; 20-oz magnet; input 30 W; 45-20,000 Hz frequency response $120
C9999. 5¼-in woofer; 2-in midrange; 2-in tweeter; 2¹⁵⁄₁₆-in deep; 20-oz magnet; input 30 W; 60-20,000 Hz frequency response $118

Coaxial Car Speaker Systems
Two-way speaker systems with 4-8 ohm impedance, custom grilles, wiring, and hardware.
C9740. 6 × 9-in woofer; 3-in tweeter; 3⁷⁄₁₆-in deep; 20-oz magnet; input 25 W; 40-18,000 Hz frequency response $80
C9994. 4 × 10-in woofer; 2-in tweeter; 3¹³⁄₃₂-in deep; 20-oz magnet; input 25 W; 45-18,000 Hz frequency response $80
C9943. 5 × 7-in woofer; 2-in tweeter; 3⁹⁄₁₆-in deep; 20-oz magnet; input 25 W; 50-15,000 Hz frequency response $79
C9852. 5¼-in woofer; 2-in tweeter; 2⁹⁄₁₆-in deep; 20-oz magnet; input 25 W; 60-15,000 Hz frequency response $78
C9853. 5¼-in woofer; 2-in tweeter; 2¼-in deep; 10-oz magnet; input 25 W; 60-15,000 Hz frequency response $67
C9851. 4-in woofer; 2-in tweeter; 1¾-in deep; 10-oz magnet; input 20 W; 70-15,000 Hz frequency response $66

Dual-Cone Car Speaker Systems
Two-way speaker systems with 4-8 ohm impedance, custom grilles, wiring, and hardware.
C9729. 6 × 9-in woofer; 2⁹⁄₁₆-in whizzer; 3⁹⁄₁₆-in deep; 20-oz magnet; input 25 W; 40-14,000 Hz frequency response $54
C9997. 4 × 10-in woofer; 2-in whizzer; 3¹³⁄₃₂-in deep; 20-oz magnet; input 25 W; 46-14,000 Hz frequency response $54
C9862. 5¼-in woofer; 2-in whizzer; 2⁹⁄₁₆-in deep; 20-oz magnet; input 25 W; 60-12,000 Hz frequency response $52
C9728. 6 × 9-in woofer; 2⁹⁄₁₆-in whizzer; 3¼-in deep; 10-oz magnet; input 25 W; 40-14,000 Hz frequency response $47
C9863. 5¼-in woofer; 2-in whizzer; 2¼-in deep; 10-oz magnet; input 25 W; 60-12,000 Hz frequency response $45
C9860. 4-in woofer; 1½-in whizzer; 1¾-in deep; 10-oz magnet; input 20 W; 70-12,000 Hz frequency response $44

Surface-Mount Car Speaker Systems
Enclosed surface-mount speaker systems with 4-8 ohm impedance, custom grilles, wiring, and hardware.
C9927. Coaxial speaker; 5¼-in woofer; 2-in tweeter; 20-oz magnet; input 25 W; 50-15,000 Hz frequency response $97
C9926. Dual-cone speaker; 5¼-in woofer; 2-in whizzer; 10-oz magnet; input 25 W; 60-12,000 Hz frequency response $64
C9809. Dynamount speaker; 5¼-in woofer; 2-in whizzer; 20-oz magnet; input 25 W; 60-12,000 Hz frequency response $62

KRIKET

8974 Domaxial Car Speaker
6 × 9-in woofer with 20-oz ceramic magnet and 1¼-in aluminum voice coil; 1-in soft dome tweeter with 5-oz ceramic magnet and 1-in aluminum voice coil; input 50 W continuous; frequency response 40-20,000 Hz; 4-8 ohm impedance; kit includes two speakers, two grilles, two 15-ft cables with quick-connect terminals, and hardware $120

Klassic Audio Separates System
Each kit contains two speakers, two grilles, two 15-ft cords, mounting instructions, and hardware.
0001. Environmental equalizer controls high frequency dome tweeter level, mid-woofer level, hiss, FM noise filter, and bi-amplification connection; unit wired for either single stereo amplifier connector or separate woofer and midrange/tweeter amplifiers; bracket and hardware included; 1¼" H × 4½" W × 2¾" D ..... $37 ea.
0002. 1-in polycarbonate dome tweeter with 6-oz ceramic magnet and 1-in high temperature voice coil; handles 50 W; frequency response 5000-20,000 Hz; impedance 4 ohms ..... $55 pr.
0003. 5-in molded cone, foam edge, extended range mid-woofer with 10-oz ceramic magnet and 1-in high temperature voice coil; handles 20 W continuous power; frequency response 65-5000 Hz; impedance 8 ohms ..... $50 pr.
0004. 6 × 9-in molded cone, foam edge, extended range sub-woofer with 20-oz ceramic magnet, and 1¼-in aluminum high temperature voice coil; handles 50 W continuous power; frequency response 40-5000 Hz; impedance 6 ohms ..... $65 pr.
0005. Bi-amplified "Domaxial"™ speaker with 1-in polycarbonate dome tweeter, 6-oz ceramic magnet, and 1-in high temperature voice coil; handles 50 W continuous power; frequency response 5000-20,000 Hz; impedance 4 ohms; sub-woofer is same as 0004 ..... $125 pr.

Series 6000 Car Speakers
Compatible with 4 or 8 ohm systems; incorporate 10-oz ceramic magnets and 1-in high temperature voice coils; convertible mounting capability; supplied with 18.5-ft cable with quick-connect terminals, mounting instructions, and hardware.
6079. 6 × 9-in coaxial speaker system; max. input 36 W continuous; frequency response 50-18,000 Hz −5 dB; 93-dB SPL/W/m (400 Hz) $65
6099. Two-way system includes independently-mounted 1-in soft dome tweeter with 5-oz ceramic magnet, 1-in aluminum voice coil, 5¼-in woofer with 10-oz ceramic magnet, and 1-in aluminum voice coil; input 40 W continuous; frequency response 50-20,000 Hz ±5 dB $85

LAFAYETTE

32-00508W Car Speakers
Two-way coaxial speaker system with 6 × 9-in oval speaker 1½-in high-temperature copper voice coil, and 3-in tweeters with 30-oz magnet; flush mount; power handling capacity 50 W continuous, 100 watts peak; 8-ohm impedance; kit includes heat resistant molded nylon grilles; mounting hardware and wire included in two-speaker kit $60

17A64018 Car Speakers
Three-way speaker system with 6 × 9-in woofer, 3-in midrange, and 2-in tweeter; 20-oz ceramic magnet; max. input 30 W; frequency response 50-20,000 Hz; kit includes two speakers, two high-impact plastic grilles, hardware and mounts $50

Triple Play Speaker System
Three-way speaker system with 6×9-in woofer, 20-oz magnet, 3-in midrange, and 2-in tweeter; high-impact grilles ..... $50 pr.

32A57201V Car Speakers
Two-way speaker system with built in 6 × 9-in air-suspension woofer and 3-in tweeter; max. input 50 W; 20-oz magnet; 4-8 ohm impedance; two per kit. $40

LAKE COMMUNICATIONS

6924 Car Speakers
6 × 9-in foam air-suspension speaker system with three-speaker chrome bridge for midrange and tweeters; 20-oz magnets; frequency response 25-20,000 Hz; 8-ohm impedance; max. input 25 W; wire mesh grilles; includes 18-ft wire kit. $31 pr.

6923 Car Speakers
6 × 9-in foam air-suspension speaker system with 3-in midrange, 2-in tweeter; and 20-oz magnets; frequency response 40-20,000 Hz; 8-ohm impedance; max. input 25 W; wire mesh grilles; heavy rubber gasket; includes 18-ft wire kit ..... $25 pr.

MARANTZ

SS-5000 Car Speaker System
Two-way speaker system with 6½-in woofer; input 15 W into 4 ohms from 20-20,000 Hz ..... $300 pr.
SS-5100. Same as SS-5000 except surface-mount speakers ..... $250 pr.

SS-569 Car Speaker System
Flush-mount five-way speaker system with 6 × 9-in woofer, 4-in midrange, 1½-in extended midrange, 1½-in tweeter, and ¾-in super tweeter; three separate capacitive high-pass crossovers; frequency response 40-20,000 Hz; 8-ohm impedance; efficiency 92-dB SPL/W/m; max. input 30 W music; mounting gasket; wire-mesh grilles ..... $130 pr.

SS-469 Car Speaker System
Flush-mount four-way speaker system with 6 × 9-in woofer, 2½-in midrange, 1½-in tweeter, and ¾-in super tweeter; two separate capacitive high-pass crossovers; frequency response 40-18,000 Hz; 8-ohm impedance; efficiency 92-dB SPL/W/m; max input 30 W music; mounting gasket; wire-mesh grilles; with speaker cables ..... $110 pr.
SS-3469. Similar to SS-469 except features front-insertion design for flexible installation ..... $110 pr.

SS-3357 Car Speaker System
Front insertion mount 5 × 7-in three-way speaker system ..... $100 pr.

SS-825 Car Speaker System
Door-mount three-way speaker system with 6¼-in woofer, 1¾-in midrange, and 1-in horn super tweeter; two capacitive high-pass crossovers; frequency response 50-20,000 Hz; 8-ohm impedance; efficiency 89-dB SPL/W/m; max. music power 20 W; wire-mesh grilles; with speaker cables ..... $90 pr.

SS-3410 Car Speaker System
Two-way speaker system with 4 × 10-in woofer and

3/4-in super tweeter; capacitive high-pass crossover; frequency response 50-20,000 Hz; 4-ohm impedance; efficiency 90-dB SPL/W/m; max. music power 20 W; wire-mesh grilles; with speaker cables ..... $80 pr.

SS-269 Car Speaker System
Flush-mount two-way speaker system with 6 × 9-in woofer and 3-in tweeter, capacitive high-pass crossover; frequency response 40-15,000 Hz; 4-ohm impedance; efficiency 91-dB SPL/W/m; max. input 30 W music; mounting gasket; wire-mesh grilles; with speaker cables ..... $70 pr.
SS-3269. Similar to SS-269 except features front-insertion design ..... $80 pr.

SS-725 Car Speaker System
Door-mount two-way speaker system with 6 1/4-in woofer and 1 1/2-in tweeter; capacitive high-pass crossover; frequency response 50-16,000 Hz; 4-ohm impedance; efficiency 89-dB SPL/W/m; max. music power 20 W; wire-mesh grilles; with speaker cables ..... $70 pr.

SS-169 Car Speaker System
Flush-mount dual-cone speaker system with 6 × 9-in woofer and cone; mechanical crossover; frequency response 40-13,000 Hz; 4-ohm impedance; efficiency 90-dB SPL/W/m; max. input 30 W music; mounting gasket; wire-mesh grilles; with speaker cables ..... $60 pr.

SS-140 Car Speaker System
Four-inch speakers designed for small or shallow installation; frequency response 60-14,000 Hz; 4-ohm impedance; efficiency 90-dB SPL/W/m; max. music power 10 W; wire-mesh grilles; with speaker cables ..... $40 pr.

SS-625 Car Speaker System
Door-mount dual-cone speaker system with 6 1/4-in woofer and cone; designed for tight installations; frequency response 50-13,000 Hz; 8-ohm impedance; efficiency 89-dB SPL/W/m; max. music power 12 W; wire-mesh grilles; with speaker cables ..... $40 pr.

MATRECS

4 × 10-In Car Speaker Kits
Air-suspension car speakers feature 4 × 10-in woofers with 20-oz Magnaflex ceramic magnets and Liqui-Flex magnetic lubricating fluid; impedance 4-8 ohms; 1-in aluminum voice coil diameter; kit includes two speakers, grilles, wire, and hardware.
MA-0410-20TP. Tri-Power system with 2 1/2-in midrange and 1-in tweeter; input 25 W peak; frequency response 70-20,000 Hz $110
MA-0410-20CP. Bi-Power system with 2 1/2-in tweeter; input 24 W peak; frequency response 70-20,000 Hz $96
MA-0410-020P. Dual cone; input 25 W peak; frequency response 70-16,000 Hz $64

6 × 9-In Car Speaker Kits
Air-suspension car speakers have 6 × 9-in woofers with 4-8 ohms impedance; kit includes two speakers, grilles, wire, and hardware; prices shown for pairs but some sold singly.
MA-0069-20TP. Tri-Power system with 3-in midrange, 1-in tweeter, and 40-oz Magnaflex ceramic magnet; input 30 W peak; frequency response 40-20,000 Hz $107
MA-0069-25CP. Bi-Power system with 3-in tweeter and 71-oz Magnaflex ceramic magnet; input 35 W peak; frequency response 40-18,000 Hz $101
MA-0069-20CP. Similar to MA-0069-25CP except has 40-oz Magnaflex magnet; input 25 W peak. $82

5 1/4-In Car Speaker Kits
Air-suspension car speakers have 5 1/4-in woofers with 4-8 ohms impedance; kit includes two speakers, grilles, wire, and hardware; prices listed for pairs but some sold singly.
MA-0525-20CP. Bi-Power system with 1 1/4-in piezo tweeter and 40-oz Magnaflex magnet; input 25 W peak; frequency response 50-20,000 Hz $84
MA-0525-020P. Similar to MA-0525-20CP except dual cone system with 50-16,000 Hz frequency response $56

MESA

Mini-Mesa 15 Car Speakers
Two-way speaker system has frequency response 60-20,000 Hz ±6 dB; max. power 30 W/ch, min. power 15 W/ch continuous; two per kit with mounting brackets and 30-ft cable; 6" H × 3 5/8" W × 3" D ..... $130 pr.

Mesa MB6 Car Booster Kit
6 × 9-in rear-deck mount bass with 40-oz magnet structure and 1 1/4-in voice coil; frequency response 37-200 Hz; handles 30 W/ch continuous power; kit contains two speakers, grilles, crossover network and cable $70

Mesa MB5 Car Booster Kit
5 1/4-in round flush-mount bass booster with 40-oz magnet structure and 1 1/4-in voice coil; frequency response 42-200 Hz; handles 15 W/ch continuous power; kit contains two speakers, grilles, crossover network and cable $65

MITSUBISHI CAR AUDIO

Surface-Mount Car Speakers
Two-way speaker system with 4-in woofer and 6.5-oz magnet and 1 1/8-in tweeter with attenuator control; input 50 W; aluminum die-cast baffle board enclosure $150
In addition, the company carries the SX-10BA-4, two-way reflex dual-cone system, and the SB-2SA-4, 4.5-in cabinet dome super tweeter.

6 × 9-In Flush-Mount Car Speakers
Three-way car speaker system with 6 × 9-in woofer with 21-oz magnet, midrange, and two tweeters $100
SG-40CA-4EM. 4 × 10-in coaxial speakers $70
In addition, the company carries three-way, two-way, and dual cone systems.

MOTOROLA

Pow-R-Handlers Car Speakers
Professional series car speakers feature 1-in voice coils, rolled-cloth-edged polycarbonate grilles, one-piece magnets, and ABS plastic mounting bases. Two per kit.
M5-20C. Two coaxial 5 1/4-in flush mount speakers; 20-oz magnets; 2-in tweeters; 25 W input $95
M69-20C. Two coaxial 6 × 9-in speakers for flush mounting on rear decks; integral 2-in tweeters; 20-oz ceramic magnets; top or bottom loading installation; 25 W power input $110
M69-20T. Two three-way 6 × 9-in speakers for flush mounting on rear decks; integral 2 1/2-in midrange and 2-in tweeters; 20-oz ceramic magnets; formed cloth grilles with wedge type extender; top or bottom loading installation; 25 W power input $140

Pow-R-Handlers II Car Stereo Speakers
Professional II Series car speakers feature voice coils, one-piece ceramic magnets, integral 2-in tweeters, rolled-cloth-edged polycarbonate grilles in silver and black matte, and ABS plastic mounting bases; compatible with 4- or 8-ohm units. Two per kit (unless specified).
D69-20T. Three-way 6 × 9-in speaker with 20-oz ceramic magnet, aluminum voice coil, and integral 2 1/2-in midrange; rear-deck flush mount; top or bottom loading installation; 25 W input $120
M41-20T. Three-way 4 × 10-in speaker with 20-oz magnet and 1-in voice coil; oval/flush mount; 25 W input $135
M41-20C. 4 × 10-in coaxial speaker with 20-oz magnet and 1-in voice coil; oval/flush mount; 25 W input $105
M68-15T. Three-way 6 × 8-in speaker with 13-oz magnet and 1-in voice coil; oval/flush mount; 25 W input $130
M68-15C. Coaxial 6 × 8-in speaker with 13-oz magnet and 1-in voice coil; oval/flush mount; 25 W input $100

MR. AUDIO

6924 Four-Axial Car Speakers
Flush-mount four-way car speaker system with 6 × 9-in air-suspension cone woofer with 20-oz ceramic magnet, separately mounted 3-in aluminum dome midrange, 2 in aluminum dome tweeter, and 1-in dome tweeter with 1-in voice coil; frequency response 40-22,000 Hz; max. input 30 W; 8-ohm impedance; custom-designed mesh grilles ..$70 pr.

6923 Three-Axial Car Speakers
Flush-mount three-way car speakers with 6 × 9-in air-suspension woofer with 20-oz ceramic magnet, separately mounted 3-in aluminum dome midrange, and 2-in aluminum dome tweeter with 1-in voice coil; frequency response 40-20,000 Hz; sensitivity 108 dB/W; max. input 30 W; 8-ohm impedance; custom-designed mesh grilles; includes 18-ft cable ..... $60 pr.

MUNTZ HI Z

1199 Speaker System
Two-way car speaker system incorporates separate 6 × 9-in woofer with 20-oz magnet and 60-5000 Hz frequency response and 4 5/8-in tweeter with 5000-20,000 Hz frequency response; max. 25 W per driver; includes grille and speaker wire ..$80 pr.

PANASONIC

EAB-920 Car Speaker
Four-way 6 × 9-in speaker system with 30-oz magnet, midrange and two piezo electric tweeters; max. input 100 W; impedance 4 ohms; frequency response 30-25,000 Hz ..... $160 pr.

EAB-910 Car Speaker
5-in speaker system with 10-oz magnet; max. input 100 W; impedance 4 ohms; frequency response 300-15,000 Hz ..... $60 pr.

Coaxial Speakers
EAB-905. 6 1/2-in speaker system with 20-oz magnet; max. input 20 W; frequency response 40-25,000 Hz; impedance 4 ohms; snap-on mesh grille ..... $78 pr.
EAB-904. Similar to EAB-905 except with 10-oz magnet ..... $67 pr.

Dual Cone Speakers
EAB-903. 6 1/2-in speaker system with 10-oz magnet; max. input 20 W; impedance 4 ohms; frequency response 45-20,000 Hz; snap-on grille ..... $50 pr.

Door-Mount Speakers
EAB-911. 5-in speaker system with 7-oz magnet; max. input 20 W; impedance 4 ohms; frequency response 70-15,000 Hz ..... $35 pr.
EAB-909. 5-in speaker system with 3-oz magnet; max. input 8 W; impedance 4 ohms; frequency response 80-12,000 Hz ..... $25 pr.

PIONEER

Surface and Rear-Deck Speakers
TS-X9. Two-way, surface-mount speakers; 3 5/8-in bass speaker; 1-in treble dome radiator; 50-22,000 Hz; 4-ohm impedance; 40 W input; die-cast aluminum enclosure $240
TS-X6. Two-way surface-mount speakers; 4-in bass speaker; 4-in passive radiator; 2 5/8-in treble driver; 80-20,000 Hz; 4-ohm impedance; 20 W input; black molded enclosure with chrome handles. $125
TS-35. Door and surface mount speakers; 5 1/4-in single cone, 80-13,000 Hz; 40 W input; 4-ohm impedance; black and chrome finish $48

12 CAR SPEAKERS

TS-5. Door and surface mount speakers; 5¼-in single cone; 2.9-oz magnet; 70-10,000 Hz; 8 W input; 4-ohm impedance; black and chrome finish.... $30

Deck Mount Speakers

TS-202. Rear deck-mount 8-in coaxial speaker system with 20-oz magnet; fits in 6 × 9-in opening; max. input 60 W; frequency response 30-20,000 Hz; mesh grille and bridgeless construction... $219

TS-M2. Dash-mount speaker with separate brilliance control and built-in crossover network; max. input 20 W; frequency response 450-20,000 Hz... $55

Door Mount Speakers

TS-168. Three-way 6½-in speaker system with 10-oz magnet, horn tweeter, and deep dish parabolic cone; max. input 40 W; frequency response 35-20,000 Hz; mesh grille and bridgeless construction $140

TS-167. Two-way 6½-in speaker system with 10-oz magnet, high-compliance low-frequency cone for bass response, and high frequency cone with exponential horn; max. input 20 W; frequency response 30-20,000 Hz..... $83

TS-165. Two-way 6½-in speaker system with 20-oz magnet, 2-in tweeter, and high-compliance low-frequency cone; max. input 20 W; frequency response 30-16,000 Hz..... $73

TS-164. Two-way 6½-in speaker system with 10-oz magnet, 2-in tweeter, and high-compliance low-frequency cone; max. input 20 W; frequency response 40-16,000 Hz..... $60

TS-162DX. 6½-in dual cone speaker system with 10-oz magnet; max. input 20 W; frequency response 40-20,000 Hz..... $60

TS-160. Similar to TS-162DX; frequency response 40-16,000 Hz..... $42

TS-107. 4-in dual cone speaker system with 6.5-oz strontium magnet; max. input 20 W; frequency response 50-16,000 Hz..... $55

TS-121. 5½-in single cone speaker system needs 1-in mounting depth; max. input 20 W; frequency response 80-16,000 Hz $52

TS-106. 4-in single cone with 7-oz magnet; max input 8 W; frequency response 50-16,000 Hz.. $48

TS-100. Similar to TS-106; frequency response 60-14,000 Hz..... $33

P-16L. 6½-in single cone speaker system; max. input 8 W; frequency response 50-10,000 Hz $29

P-10L. Similar to P-16L; frequency response 100-10,000 Hz..... $25

TS-411 Car Speaker

4 × 10-in coaxial speaker system with 10-oz magnet designed for GM products; max. input 20 W; frequency response 50-20,000 Hz..... $80

TS-410. Dual-cone system similar to TS-411; frequency response 50-16,000 Hz $55

TS-571 Car Speaker

Two-way 5 × 7-in speaker system with 10-oz magnet; max. input 20 W; frequency response 50-18,000 Hz..... $70 pr.

TS-681 Car Speaker

Two-way 6 × 8-in speaker system with 10-oz magnet designed for Ford products; bridgeless tweeter mounting; fits 5½ × 7½-in cutout; max. input 20 W; frequency response 40-20,000 Hz..... $80

6 × 9-In Car Speakers

TS-695. Flush-mount three-way speaker system with 20-oz magnet; bridgeless construction and mesh grille; max. input 40 W; frequency response 30-20,000 Hz..... $160

TS-696. Two-way speaker system with 20-oz magnet; mesh grille and bridgeless tweeter mounting; max. input 40 W; frequency response 35-18,000 Hz..... $140

TS-694. Two-way speaker system has high-compliance low-frequency cone with 20-oz magnet and 2⅜-in tweeter; max. input 20 W; frequency response 35-18,000 Hz..... $96 pr.

TS-693. Two-way speaker system with 10-oz magnet; max. input 20 W; frequency response 40-18,000 Hz..... $82 pr.

TS-692. Dual cone speaker system with 20-oz magnet; max. input 20 W; frequency response 35-16,000 Hz..... $74 pr.

BC-10 Bodysonic

Bodysonic corduroy cushion or back rest with two built-in transducers designed to transmit music vibrations to person sitting against it; available with amplifier; black covering..... $90

BC-11. Same as BC-10 only brown covering..... $90

BA-20. Combined amplifier/control adjusts intensity of Bodysonic; on/off switch; LED power indicator; output 15 W; can be installed in glove compartment or underdash $100

PSB

Alpha Car Speaker

Two-way acoustic suspension car speaker system with 3.9-in woofer and 0.88-in dome tweeter; frequency response 80-20,000 Hz ±2 dB; crossover at 2000 Hz; handles 35 W continuous power; 4-ohm impedance; black plastic casing with cloth grille; mounting bracket and hardware included; 4" H × 8" W × 5" D..... $220 pr.

PYLE

Coaxial Speaker Packages

PK69C290-FD. Coaxial speaker system with 6 × 9-in cone woofer, 30-oz ceramic magnet and bracket-mounted dome radiator tweeter with 1⅓-in voice coil; input 100 W; impedance 8-10 ohms; package contains two speakers with compliant foam edge rolls and enamel finish, two grilles, templates, color-coded wire, and hardware $167

PK69C190-FD. Coaxial speaker system with 6 × 9-in woofer, 20-oz ceramic magnet, and bracket-mounted dome radiator tweeter with 1¼-in voice coil; input 60 W; impedance 8-10 ohms; package same as PK69C290-FD..... $150

PK410C160-FP. 4 × 10-in coaxial speaker system with 16-oz ceramic magnet and bracket-mounted tweeter with 1-in voice coil; input 30 W; impedance 8-10 ohms; package same as PK69C290-FD. $110

PK52C165-FP. 5¼-in speaker system with 16-oz ceramic magnet and solid-state piezo-electric tweeter with 1¼-in voice coil; input 30 W; impedance 8-10 ohms; package same as PK69C290-FD. $108

Individual speakers and grilles with hardware are available.

PYRAMID

PMS-5A Car Speaker System

Three-way speaker system with 6 × 9-in subwoofer, two 5¼-in midranges, and two omni-directional-mounted tweeter; frequency response 25-22,000 Hz ±3 dB; crossovers at 225 and 4500 Hz; sensitivity 114 dB SPL/W/m; input 55 W/ch into 4 ohms $165

PMS-2A Car Speaker System

Bi-amplified two-way speaker system with 6 × 9-in woofer and 2½-in French tweeter; frequency response 35-20,000 Hz ±3 dB; crossover at 4500 Hz; sensitivity 104 dB SPL/W/m; input 40 W/ continuous into 4 ohms, 60 W max. power; complete with mounting hardware..... $110

REALISTIC

12-1854 Car Speaker

Flush-mount three-way car stereo speaker system with 5¼-in woofer, 2½-in midrange, and 2-in tweeter; electronic crossover; input 40 W..... $80

40-1256 Car Speaker

Three-way car speaker system has woofer with 1.8-oz ceramic magnet and 1-in voice coil, 2¾-in cone midrange, and solid-state piezo-electric tweeter; input 60 W continuous; impedance 8 ohms..... $50

40-1255 Car Speaker

Two-way car speaker system with 6 × 9-in woofer with 20-oz ceramic magnet and 1-in voice coil and separate tweeter $40

12-1850 Car Speaker

Car speaker system with 5¼-in speakers with 8-oz magnets; input 30 W; 8 × 8-in enclosures $40

12-1848 Car Speaker

Car speaker system with 5-in acoustic suspension speakers, 10-oz magnets, and 1-in voice coils; molded vinyl grilles..... $30

12-1855 Car Speaker

Door-panel-mount car speaker system with 5½-in speakers and 2.8-oz magnet; less than 1½-in depth required for installation; input 40 W; impedance 8 ohms..... $28

RECOTON

SM200 Car Speakers

Two-way speaker system comprises 4-in woofer with 6.5-oz magnet and 1-in tweeter with 5-oz magnet; features solid-state crossover network and computer-designed voice coils; impedance 8 ohms; frequency response 60-21,000 Hz; max. input 50 W; brushed aluminum black casing; 7" H × 4½" W × 4½" D..... $150 pr.

SM100. Mounting brackets for SM200..... $15 pr.

CS3690 Car Speaker System

Three-way 6 × 9-in speaker system with 5¼-in air-suspension woofer, 20-oz magnet, 3-in midrange, 1-in voice coil, and 2¾-in solid horn tweeters all housed in molded ABS plastic frames; frequency response 60-20,000 Hz; max. power 50 W; 8-ohm impedance; includes built-in wire mesh grilles with dust protectors, 2-in screw studs, hardware and speaker wire..... $120 pr.

ROYAL SOUND

RS-6100 Car Speaker System

Two-way car speaker system with 4-in woofer, ferrite magnet, 1³⁄₁₆-in voice coil, and 1³⁄₁₆-in soft dome tweeter, ferrite magnet and 1-in voice coil; frequency response 60-20,000 Hz ±6 dB; crossover 2800 Hz (car), 5800 Hz (home); sensitivity 82 dB SPL/W/m; 4-ohm impedance; handles 100 W max. power; aluminum diecast cabinet; 7⅞" H × 4¾" W × 5⅛" D..... $300

RS 6045 Car Speaker System

Two-way car speaker system with 4-in polyurethane woofer, ferrite magnet, 0.8-in voice coil, 2-in soft dome tweeter with Alnico magnet and 1-in aluminum voice coil; frequency response 80-20,000 Hz ±6 dB; crossover at 2800 Hz; sensitivity 86 dB SPL/W/m; 8-ohm impedance; handles 22.5 W continuous power; 45 W max. power; 6⅛" H × 4" W × 4⅛" D..... $200

RS 6030 Car Speaker System

Two-way car speaker system with 3-in woofer, ferrite magnet, ¾-in voice coil, 2¼-in cone tweeter, ferrite magnet, and ⅞-in voice coil; frequency response 100-20,000 Hz ±6 dB; crossover at 3000 Hz; handles 30 W max. power; sensitivity 92 dB SPL/W/m; 4-ohm impedance; 6" H × 3⅜" W × 3" D..... $150

SANYO

SP795 Car Speaker System

Two-way speaker system with 4-in woofer and 3-in hard-dome tweeter; designed for Sanyo biamp system with 6000 Hz rolloff; 4- or 8-ohm impedance; max. input 35 W continuous power; frequency response 100-20,000 Hz; black ABS cabinet; swivel mounting brackets and hardware included; 4⅞" H × 7½" W × 4⅛" D..... $100

SP777 Car Speaker
6 × 9-in woofer, 20-oz magnet, hard-dome midrange and diecast aluminum horn tweeter; for conventional or biamp system; 4- or 8-ohm impedance; max. input 30 W continuous power; frequency response 40-20,000 Hz; hardware and wire included $100

SP410 Car Speaker System
Three-way speaker system with 4 × 10-in woofer, 15-oz magnet, separate hard dome midrange and diecast aluminum mini-horn tweeter; max. input 25 W continuous power; frequency response 70-20,000 Hz; 4- or 8-ohm impedance; metal mesh grille, flush-mounting hardware, and wire included $90

SP780 Car Speaker System
Two-way, four-speaker system with 6 × 9-in woofer with 20-oz magnet and 3½-in tweeter; designed for Sanyo biamp system crossing over at 2000 Hz; 4- or 8-ohm impedance; 4 × 6-in adapters included; max. input 33.5 W continuous power; frequency response 30-18,000 Hz; hardware and wire included $90

SPARKOMATIC

LC-100 Amplified Car Speaker System
Full-range amplifier and two 6 × 9-in air suspension woofers with coaxial high-frequency tweeters; separate slide controls for bass and treble; standard boost and tone boost switches; power meter; 18 W/channel at 10% THD into 3 ohms: channel separation more than 45 dB; amplifier frequency response 20-20,000 Hz ±3 dB; input impedance 27 ohms; woofers have 10-oz magnets; speaker frequency response 45-20,000 Hz +3 dB $90

SK-525 Car Speakers
Three-way car speaker system has high-compliance long-excursion woofer with 10-oz magnet, air-suspension midrange, and dome horn tweeter; adjustable high frequency intensifier; frequency response 80-18,000 Hz; handles 25-50 W; impedance 4-8 ohms; aluminum cabinet housing; rear-deck surface or hang-on mount; 5½" H × 10¼" W × 5" D $90

SK-700V Speakers for Vans & RV's
Stereo speakers for vans and recreational vehicles; 6-in air-suspension woofers with 10-oz magnets and 1-in voice coils; 30 W max ; 2¼-in tweeters with aluminum dust covers and Alnico magnets; 4-8 ohm impedance; total mounting versatility $90

SK-6900 Car Speakers
Three-speaker flush-mount car stereo set designed to fit 6 × 9-in cutouts for rear deck installation; 5¼-in foam edge air suspension woofers with 20-oz ceramic magnets, 3-in foam edge air suspension midrange speakers with 3-oz ceramic magnets, and 1 × 2.5-in dome-horn loaded tweeters; frequency response 40-18,000 Hz; input range 25-50 W; 4-8 ohm impedance $90

Rear-Deck Car Speakers
Weather resistant speakers with ABS grilles; 4-8 ohm impedance; hardware and stereo wire harness included; two per kit.
SK-6922T. Three-way speaker system; 6 × 9-in air suspension woofers with 20-oz ceramic magnets, direct radiating midrange speakers, and dome-horn loaded tweeters; frequency response 30-17,000 Hz; handles 25-50 W $70
SK-4120C. Coaxial system with 4 × 10-in foam-edge air-suspension woofers with 20-oz magnets and built-in coaxial tweeters; frequency response 50-15,000 Hz; handles 25-50 W $48

Hang-On Car Speakers
Stereo car speakers include ABS housings and hardware; flush or surface in-door or hang-on mount; 4 and 8 ohm impedance; two per kit.
SK-522T. Three-way; 5-in air suspension woofers with 20-oz ceramic magnets, direct radiating midrange, and dome-horn loaded tweeters; frequency response 70-17,000 Hz; input range 25-50 W. $60
SK-622T. Similar to SK-522T except flush-mount system with 5¼-in woofers $50
SK-520C. Coaxial; 5-in foam edge air suspension woofers with 20-oz ceramic magnets and built-in coaxial 2-in tweeters $40
SK-620C. Similar to SK-520C except flush-mount with 5¼-in woofers $35
SK-510. Two 5-in air suspension speakers with 10-oz ceramic magnets; frequency response 90-12,000 Hz; handles 15-30 W $25
SK-610. Similar to SK-510 except flush-mount with two 5¼-in woofers $20

SPECO

DMS-3 Car Speaker System
Three-way miniature speaker system with 4-in air-suspension long excursion woofer with high-temperature voice coil, 2-in wide dispersion cone tweeter, with high-temperature voice coil, and 1-in dome tweeter with capacitive crossover; frequency response 55-20,000 Hz; input 3 W/ch continuous; 8-ohm impedance; quick-connect/disconnect speaker terminal; removeable mounting brackets, wire, and hardware included; 7⅛" H × 4⅜" W × 4⅛" D. $165

SK69CA20T-G Car Speaker Kit
"Super Trio" three-way air-suspension 6 × 9-in speaker system with 20-oz ceramic magnet, 3-in midrange, and 2-in tweeter with capacitor crossovers; frequency response 50-20,000 Hz; input 50 W; 8-ohm impedance $89

TENNA

HE-481 Mobile Speakers
Two-way mobile speakers with 4-in soft dome air-suspension woofer, 6-oz ceramic magnet and 1-in compliance dome tweeter; 100 W max. continuous input power; frequency response 120-20,000 Hz ±5 dB; 8-ohm impedance; capacitive crossover network; custom mounting brackets, quick-disconnect terminals, diecast housing and spring-type solderless terminals $140

HE-531 Car Speakers
Three-way rear-deck mount car speakers with 5¼-in air-suspension woofer, 9.3-oz ceramic magnet, 2½-in midrange with 3-oz ceramic magnet, and 1¼-in tweeter; high/low frequency switch; 60 W max. continuous input power; frequency response 90-20,000 Hz, ±5 dB; 8-ohm impedance; electronic (RLC) crossover network; removable mounting studs $120

TRUSONIC

All speakers compatible with 4- or 8-ohm units; waterproof cones; chrome cast baskets; complete kit includes two speakers, grilles, wire and hardware.

K6943
Three-way 6 × 9-in speaker with 3½-in midrange, 3-in tweeter; and 40-oz magnet; 120-Watt power handling; frequency response 25-25,000 Hz. $175
K6923. Same as K6943 except has 20-oz magnet, handles 80 W and frequency response 30-25,000 Hz $150

K6942
Two-way 6 × 9-in speaker with 3-in tweeter and a 40-oz magnet; 120-Watt power handling $145
K6922. Same as K6942 except has 20-oz magnet, 80 W power handling $120

K6941
6 × 9-in car speaker with 40-oz subwoofer; 130 W input; frequency response 25-2000 Hz $120

ULTRALINEAR

M16 Car Speakers
Two-way air-suspension speaker system with 4½-in woofer and 1-in ultra-wide dispersion soft dome tweeter; frequency response 53-23,000 Hz; crossover at 2500 Hz; input range 5-50 W continuous; 4-8 ohm nominal rated impedance; walnut laminate finish with mobile mounting brackets included; 7¾" H × 5¼" W × 4⅜" D ..... $200 pr.
M12. Similar to M16 except with 2½-in tweeter; frequency response 53-18,000 Hz; input range 3-40 W continuous ..... $150 pr.

UD-15 CARponent Speaker System
Two-way flush/rear deck surface-mount air-suspension speaker system with 4½-in midrange/woofer and 1-in soft dome tweeter; crossover at 2500 Hz; nominal impedance 4-8 ohms rated; frequency response 55-22,000 Hz; input range 3-50 W continuous; charcoal steel escutcheon front panel with handles and surface mount cradle; tweeter assemblies removable for front-door-panel mount; 4½" H × 12" W × 6" D $120

M-15 CARponent Speaker System
Two-way air-suspension speaker system with 4½-in midrange/woofer and 1-in soft dome tweeter; crossover at 2500 Hz; nominal impedance 4-8 ohms rated; frequency response 53-22,000 Hz; input range 3-50 W continuous; ebony matte or walnut laminated finish; can be used in home or moving vehicle; mounting bracket included; 7¾" H × 5¼" W × 4⅜" D $100

VISONIK

Car Speakers
See Section 10, Speakers, under "Visonik."
0-5000M0. ..... $125
0-302M0 ..... $100

12 CAR ACCESSORIES

ADS

Power Plate 100 Power Amp
Slim-line design power amplifier with built-in equalizers, subsonic filter, and remote turn-on. Output 50 W/ch continuous power into 4-ohms from 20-20,000 Hz with 0.8% THD; S/N 90 dB; frequency response 30-20,000 Hz ±0.5 dB; 13.5 V dc negative ground; flat black satin finish; optional bolt-on handles extend height to 2¼-in; 1¹⁵⁄₁₆" H × 12¼" W × 6¼" D $300

ALPINE

3005 Amplifier
20 W car stereo amplifier with eight electronic rhythms and separate mic and line inputs; LED output indicators; input sensitivity control; rhythm and tempo controls; rhythm function switch; digital time delay (60-130 msec) fader; separate bass and treble controls (±10 dB at 100/1000 Hz); mic and PA on/off switches; separate mic and line controls; frequency response 20-20,000 Hz; compatible with Alpine models 7100, 7111, and 7303; $350

3000 Graphic Equalizer
Four-channel five-band graphic equalizer with center frequencies set at 60, 250, 1000, 3500, and 10,000 Hz, ±12 dB; unit features bi-amp in/out switch, tuner/auxiliary switch, clipping indicators; accepts digital time delay (Model 3001) with digital time delay on/off switch, digital time delay max./min. control (0-1000 msec), and digital time delay gain control, and input sensitivity control; slide control detent midrange; 20 W/ch output power; frequency response 20-20,000 Hz; compatible with Alpine models 7100 and 7111 ..... $200
3003. Similar to 3000 except with preamplifier; no clipping indicators $150
3004. Similar to 3003 without digital time delay

compatibility; has two-channels, front-to-rear fader, power on/off switch, and clipping indicators .. $120

3002 Amplifier
50 W main amplifier with pulse-regulated power supply; input sensitivity control; auto remote power on switch; two inputs for preamp out and speaker out; frequency response 10-60,000 Hz with 0.2% THD..... $250

AUDIOVOX

AMP-600B Graphic Equalizer Amplifier
Underdash graphic equalizer amplifier with fader, power level meter, and slide controls; output 30 W/ch; 4-8 ohm impedance..... $110

HI-COMP Line

HCB-830 Power Booster
Power booster with output 30 W/ch with 0.3% THD into 4 ohms; four-channel power amp..... $200

HCE-750 Equalizer/Preamp
Five-band parametric equalizer and preamplifier; equalizer center frequencies set at 35-70, 125-280, 500-1000, 1750-3500, and 6000-12,000 Hz ±10 dB boost or cut; designed to plug into RCA preamp outputs of HI-COMP units and works with all amplifiers..... $150

BLAUPUNKT

BEA-200 Equalizer/Power Amp
Five-band graphic equalizer with power amplifier and reverb effect synthesizer. Equalizer: five slide controls with center frequencies set at 60, 250, 1000, 3500, and 12,000 Hz ±12 dB boost or cut. Power amp: front-to-rear four-speaker fader control, tone defeat switch, and power on/off; max. output 16 W/four channels. Reverb: on/off switch, time delay control, and gain control; delay time 30 msec; reverb time 180 msec; noise output 3 mV. Frequency response 30-40,000 Hz −4 dB; THD 1.0%; includes mounting bracket; 1.6" H × 7.5" W × 5.5" D..... $233
BEA-100. Similar to BEA-200 without reverb unit; 1.6" H × 5.5" W × 5.6" D..... $144

CAR TAPES

JS-120 Graphic Equalizer
Ten-band graphic equalizer with center frequencies set at 30, 60, 150, 400, 1000, 2400, 4000, 8000, 15,000, and 20,000 Hz, ±12 dB boost or cut; four-speaker fader; spring-loaded wire contacts; power and defeat controls; output 50 W/ch; 1.0% THD; 2 9/16" H × 7 9/16" W × 6 1/8" D..... $180
JS-70. Similar to JS-120 except has seven bands with 60-15,000 Hz frequency range; dual VU meters; 30 W/ch continuous output power..... $120

JS-31 Amplifier
Car amplifier has 30-W output into 4 ohms with 0.1% THD; 2 9/16" H × 4" W × 6 1/8" D..... $40

COBRA

GEA40-5 Graphic Equalizer/Amplifier
Five-band graphic equalizer/amplifier; center frequencies set at 60, 250, 1000, 4000, and 12,000 Hz with ±12 dB boost or cut; amplifier has "Bridge Transformerless Circuitry"; output 20 W/ch continuous; frequency response 30-20,000 Hz; front-to-rear fader control; power on/bypass control with LED; can drive four 6-ohm speakers..... $90
GEA60-7. Similar to GEA40-5 except seven-band equalizer with center frequencies set at 60, 150, 400, 1000, 2500, 6000, and 12,000 Hz; output 30 W/ch continuous; LED power level indicators/ch; frequency response 20-20,000 Hz..... $160

CRAIG

V503 Amplifier/Equalizer
Car stereo amplifier/four-band graphic equalizer. Amplifier: output 36 W/ch min. continuous into 4 ohms with 0.5% THD from 50-15,000 Hz; S/N 60 dB; OCL/OTL dc-coupled circuitry; automatic power switching. Equalizer frequency ranges from 20-150, 150-1000, 1000-7000, and 7000-20,000 Hz; electronic time delay; tone defeat and power range pushbuttons; reversible slide-out bracket $200

V505. Similar to V503 except 24 W/ch amp .. $145
V504. Similar to V503 except 12 W/ch amp .. $120

V501 Amplifier
Stereo amplifier; output 12 W/ch; 2.0% THD; auto power switching; compatible with four-speaker matrix system; plug-in installation..... $60
V502. Similar to V501 except 24 W/ch with 1.0% THD..... $85

DRACO LABS

D-45E Car Range Expander
Provides over 30-dB of added dynamic range and eliminates FM and tape hiss; features spectrum display for bass, midband, and treble frequencies; expansion ratio slide control; display control. Attack and release rates automatically adjustable to match program material; frequency response 20-20,000 Hz ±0.5 dB; THD and IM dist.; 12 V dc negative ground; 2 3/4" H × 8 1/2" W × 7 3/4" D..... $200

Car Amplifiers
db-90. 45 W/ch continuous into 4 ohms from 50-15,000 Hz with 0.25% THD and IM dist.; 12 V dc negative ground; 4" H × 9" W × 5 1/4" D..... $175
db-30. 15 W/ch continuous into 4 ohms with 10.0% THD; 1 3/4" H × 5 3/4" W × 5 3/4" D..... $50

EVADIN by TZL

EQB-61 Graphic Equalizer Booster
Five-band graphic equalizer/booster with transformerless direct-coupled circuitry; unit has front-to-rear fader, power-on/defeat pushbutton control, and slide controls with center detents; equalizing frequencies set at 60, 250, 1000, 3500, and 15,000 Hz ±12 dB boost or cut. Max. output 60 W continuous power; S/N 80 dB; input impedance 45 ohms; 4-ohm min. load/ch; power supply 14 V dc; 1 3/4" H × 5 3/8" W × 6 1/2" D..... $100

EQB-260 Graphic Equalizer/Booster
Miniature five-band graphic equalizer/booster with control frequencies set at 60, 250, 1000, 3500, and 10,000 Hz ±12 dB min.; unit has noise limiter; chrome-plated slide controls, and pushbutton by-pass control; max. output 30 W/ch continuous power; impedance 4-8 ohms; 1 1/2" H × 4" W × 4 3/4" D..... $70

EQB-60 Power Booster
Miniature power booster with fader, treble, and bass; power on/off switch and indicator lamp, front-to-rear fader control, and separate bass and treble controls; max. output 30 W/ch continuous power; frequency response 50-15,000 Hz; output impedance 4-8 ohms; 1 1/2" H × 4" W × 4 1/2" D..... $50

FOSGATE ELECTRONICS

Tetra I Tetrasound
In- or underdash Tate sound decoder/preamp/equalizer converts standard car stereo radio or tape player into four separate channels producing 360-degree spatial sound field; available with trunk-mount 200-Series 200-W Fosgate amplifier or 400-Series 200-W power biamp. Features LED peak-reading indicators with display on/off switch; front-to-back fader and left/right front and rear slide balance controls; left/right input indicators; stereo panorama/SQ decode mode switch; tape/radio input selector; input level trimmer pots; left/right equalization slide controls set at 45, 175, and 20,000 Hz. Decoder: incorporates automatic dimension control, phase corrector, and base combination circuitry; separation 35 dB between channels; THD 0.08% typically, 0.15% max. from 20-20,000 Hz; max. output 2.25 V rms; noise −80 dB at full level. Power amp: 200 W continuous total output into 4 ohms, 100 W continuous into 8 ohms; frequency response 20-20,000 Hz ±0.25 dB; slew rate 60 V/μsec; damping factor 1000; sensitivity 0.5 V rms in; input impedance 20,000 ohms; noise −80 dB; THD 0.05% at 50-W out, 4 ohms. Preamp: frequency response 20-20,000 Hz ±0.25 dB; THD 0.02% from 20-20,000 Hz; max. output 10 V rms; noise −90 dB; input impedance 20,000 ohms.
200-Series. 200-W amplifier..... $895
400-Series. 200-W power biamp..... $1095

PR-2100 The Punch Type II
Bi-amplified power amplifier with built-in variable electronic crossover and separate active equalizer with center frequencies set at 45, 175, and 20,000 Hz. Features automatic power switching with time-delay; LED array for source material level; auto system shut-off; radio and tape unit inputs; power supplies for each channel and fully regulated power supply with overload protection; pulse-width-modulated power supply. Power output 200 W continuous into 4 ohms and 100 W continuous into 8 ohms; frequency response 20-20,000 Hz ±0.25 dB; slew rate 60 V/μsec; damping factor 1000; sensitivity 0.5 V rms in; input impedance 20,000 ohms; noise −80 dB; 1 3/4" H × 8 3/8" W × 3 1/4" D..... $460

PR-250 The Punch Type II
Car amplifier with separate active equalizer with 45 and 20,000 Hz center frequencies. Features auto system shut-off; auto power switching with time delay; fully regulated power supply and separate power supplies for each channel; oversized heatsinks; pulse-width-modulated power supply. Output 100 W continuous into 4 ohms, 50 W continuous into 8 ohms; frequency response 20-20,000 Hz ±0.25 dB; slew rate 60 V/μsec; damping factor 1000; sensitivity 0.5 V rms; input impedance 20,000 ohms; noise 80 dB; 1 3/8" H × 4" W × 2 1/2" D.. $250
PR-252. Similar to PR-250 except equalizer has center frequencies set at 45, 175, and 20,000 Hz, separate radio and tape unit inputs, and LED array for source material level with on/off switch; 1 3/4" H × 8 3/8" W × 3 1/4" D..... $316

PR-220 The Punch Type II
Underdash or hidden-mount amplifier with auto stop, auto power switching with time delay, built-in six-position active equalizer, and oversized heatsinks. Output 40 W total continuous into 4 ohms; frequency response 20-20,000 Hz ±0.25 dB; slew rate 60 V/μsec; damping factor 1000; equalizer center frequencies set at 45 (+18 dB) and 20,000 (+12 dB) Hz; sensitivity 3.5 V rms in; input impedance 39 ohms; noise −80 dB; 2 1/2" H × 6 3/4" W × 4 3/4" D..... $120

GRUNDIG

ESO Series 70 Amplifier
35 W/ch min. power into 4-ohm load from 20-20,000 Hz at 0.2% THD; frequency response 10-50,000 Hz +0, −1 dB; S/N 95 dB; damping factor 300; connections for high or low level input; 2 1/2" H × 5 1/2" W × 6" D..... $178

ESO Series Equalizer/Preamplifier
Three-channel equalizer preamplifier with channel balance slide control; two peak level LED indicators; on-off volume control with LED indicator; bass, midrange and treble slide controls; screwdriver adjustable trimpot gain control; center frequencies set at 50, 1000, and 10,000 Hz ±15 dB; output 1 V rated, 5 V max. from 20-20,000 Hz into 5000-ohms; THD 0.1%; frequency response

10-50,000 Hz +0, −1 dB; input impedance 10,000 ohms; 1½" H × 4½" W × 3½" D; price includes ESO 70 amp $376

HANDIC

EQ-20-7 Graphic Equalizer/Amp
Seven-band graphic equalizer/amplifier with fader control; center frequencies set at 60, 250, 500, 1000, 4000, 8000, 15,000 Hz; built-in output power meter; separate power and defeat switch; RCA jacks for direct hookup; output 60 W; designed for two or four speaker systems; 1¾" H × 5¾" W × 6⅛" D $120

LAFAYETTE

EQ-60 Booster/Equalizer
Stereo power amplifier with built-in five-band graphic equalizer has illuminated power output meter, front-to-rear balance control, and metal construction; center frequencies set at 60, 260, 1000, 3500, and 10,000 Hz ±12 dB; 30 W/ch max. output power $90

LAKE COMMUNICATIONS

701 Graphic Equalizer/Booster Amp
Seven-band graphic equalizer/booster with slide equalizer controls at 60, 150, 400, 1000, 2400, 6000, and 15,000 Hz; power output 25 W/ch; fader control; pushbutton on/off with LED indicator; 1 13/16" H × 5½" W × 6½" D $43

MARANTZ

SA-2415 Stereo Power Amplifier
Compact wide-band switchable two- or four-speaker stereo power amplifier with booster and line-in modes. Two-amp: output 30 W/ch into 4 ohms from 20-20,000 Hz with 0.05% THD, four-amp: output 15 W/ch; input sensitivity/impedance 3 V/450 ohms (booster), 500 mV/10,000 ohms (line); 13.8 V dc; 2" H × 5⅛" W × 10¼" D $250
SA-2040. Similar to SA-2415 except four-speaker amp only; output 10 W/ch into 4 ohms from 30-20,000 Hz with 0.5% THD; 2" H × 3 9/16" W × 9 11/16" D $160

SA-247 Equalizer Amplifier
Seven-band graphic equalizer amplifier with up to 12-dB boost or cut at each frequency, 8-octave contour; ambience button; auto turn-on; front-rear fader control; detented slide controls; output 15 W/ch continuous into 4 ohms with 0.5% THD; frequency response 20-20,000 Hz; brushed aluminum plate in gold; 2⅛" H × 6¾" W × 5¾" D . $160

SA-230 Integrated Power Amplifier
10 W/ch continuous into 4 ohms from 20-20,000 Hz at 0.5% THD, 60 W continuous into 2 ohms; bass and treble controls ±12 dB; high filter; auto turn-on; brushed aluminum plate in gold; includes metal case; 1⅝" H × 4¾" W × 7¼" D $70

ABOUT PRICES. . .

With repeal of Fair Trade Laws, manufacturers are now providing "Suggested Retail" or "Fair Retail Value" figures for the guidance of their dealers and customers. Prices in this Directory are those provided by the manufacturers under these conditions.

MATRECS

MA-1050 Graphic Equalizer/Booster
Five-band graphic equalizer with balanced transformerless power amplifier; center frequencies set at 60, 250, 1000, 3500, and 10,000 Hz, ± 12 dB boost or cut; max. output 25 W/ch; frequency response 30-30,000 Hz; dist. 0.4% at 1 W, 1000 Hz; S/N 70 dB; input impedance 57 ohms; min. load impedance 4 ohms/ch; has booster bypass with power switch and complete protection against short circuit, overheating, excess voltage, and reverse polarity; 13.2 V dc; 2" H × 5½" W × 7⅛" D $125
MA-1040. Similar to MA-1050 except input impedance switchable 10/40,000 ohms; has fader control; 2⅝" H × 5⅞" W × 5¾" D $117

MA-1000 Stereo Booster
Balanced transformerless power amplifier; output 25 W/ch; frequency response 30-30,000 Hz; dist. 0.4% at 1 W, 1000 Hz; S/N 70 dB; input impedance 10/40,000 ohms; min. load impedance 4 ohms/ch; has tone/variable output control; booster bypass with power switch; complete protection against short circuit, overheating, excess voltage, and reverse polarity; 13.2 V dc; 2⅝" H × 5⅞" W × 5¾" D $78

MIDLAND INTERNATIONAL

60-150 Graphic Equalizer/Amplifier
Combination five-band graphic equalizer and amplifier; equalizer center frequencies set at 60, 250, 1000, 2500, and 10,000 Hz, ±12 dB boost or cut; amplifier output 12 W/ch continuous at 1.0% THD; frequency response 50-20,000 Hz; features fader control, pushbutton power switch with LED, and power on/off bypass; includes slide-on mounting bracket for top or bottom mounting; 2 7/16" H × 6" W × 6" D $100
60-100. 60-150 amplifier only $70

MITSUBISHI CAR AUDIO

CV-23 Equalizer/Booster
Six-band graphic equalizer/amplifier. Equalizer center frequencies set at 50, 150, 400, 1000, 3500, and 10,000 Hz, ±12 dB boost or cut; booster output 30 W/ch continuous; features volume/fader controls with five LEDs/side; balance slide control $160

MOTOROLA

EQB4001 Graphic Equalizer/Booster
Features ten color-coded power output LED indicators; fader control; 40 W continuous total power, 20 W/ch; slide controls for each of five bands centered at 60, 250, 1000, 3500, and 10,000 Hz; control range ±12 dB; frequency response 35-20,000 Hz −3 dB; power on/off switch with indicator light; 6-ohm output load impedance per speaker in two-speaker operation $140
EQB4000. Same as EQB4001 minus power output LED indicators $130

EQB-3000 Graphic Equalizer/Booster
Graphic equalizer/booster; 30 W continuous total power output; THD 1% at 10 W; slide controls for each of five bands; front-rear fader; LED power indicators; for use with two or four speakers $130

PA5000 Stereo Power Amplifier
Features switchable equalization comprising bass boost/flat response and treble boost/flat response; audio by-pass switch; output 50 W continuous, 25 W/ch; handles 4, 6, or 8-ohm speakers with power inputs of 25 W min.; compatible with units operating on 12 V negative ground; can be installed under dash, under seat, or in trunk $90

MUNTZ HI Z

Z50 Amplifier
Dc-dc inverted amplifier; output 50 W continuous into 4 ohms; frequency response 25-22,000 Hz; dist. 1.0%; high-impedance input; heavy-duty heat sink; 16-gauge wire and 6-pin DIN plug; 1⅝" H × 7½" W × 6" D $149

Z169 Amplifier/Equalizer
Seven-band graphic equalizer/30-W power amplifier. Equalizer center frequencies set at 60, 250, 500, 1000, 4000, 8000, and 15,000 Hz, ±12 dB. Amplifier: transformerless direct-coupled circuitry; output 15 W/ch continuous; frequency response 10-30,000 Hz −3 dB; output impedance 10,000-20,000 ohms; load impedance 4-8 ohms; 13.8 V dc; 1¾" H × 5¾" W × 6¼" D $100

Z77 Amplifier
Balanced transformerless amplifier; output 24 W continuous into 4 ohms; frequency response 30-20,000 Hz; dist. 1.0%; 18-gauge wire and 6-pin DIN plug; high-impedance input; 2⅝" H × 6½" W × 5¼" D $50

T-112 Amplifier
30-W amplifier with bass and treble slide controls, ±12 dB boost or cut; frequency response 30-18,000 Hz; S/N 70 dB; 1⅝" H × 4¾" W × 6" D $50

PIONEER

AD-50 Graphic Equalizer/Amplifier
Five-band stereo graphic equalizer/amplifier; five frequency band tone controls; fader control; LED "power on" indicator; 10-LED power level display (five LEDs per channel); max. output 25 W/channel continuous, 15 W with 1% dist. at 1 kHz into 4 ohms, frequency response 30-30,000 Hz −3 dB; S/N 65 dB; ±12 dB equalization range; equalization frequencies 60, 250, 1000, 3500, 10,000 Hz; 2⅝" H × 5⅞" W × 7" D $250

AD-360 Booster Amplifier
Booster amplifier with built-in protection circuits and auto on/off power switch; max. output 70 W/channel continuous, 50 W/channel into 4 ohms at 1000 Hz with 0.8% dist.; frequency response 20-30,000 Hz, 2 V input for max. output; 2½" H × 9" W × 8" D $230

GM-120 Amplifier
Component stereo amplifier with short circuit protection; max. output 60 W/ch, 30 W/ch min. (both channels driven) into 4 ohms over 30-20,000 Hz at 0.3% THD; frequency response 20-30,000 Hz at −3 dB; THD 0.04% at 25 W, 1000 Hz; S/N 75 dB; 2⅝" H × 7" W × 8¼" D $200

CD-7 Graphic Equalizer
Seven-band graphic equalizer features IC echo with time delay control and built-in dual amp balancer; equalization frequencies set at 60, 125, 250, 500, 1000, 3500, and 10,000 Hz ±12 dB; frequency response 20-30,000 Hz at ±3 dB; S/N 70 dB; output level 200 mV; delay time 0-7000 msec; 2" H × 5⅞" W × 6½" D $200

AD-30 Graphic Equalizer/Amplifier
Five-band stereo graphic equalizer/amplifier; five frequency band tone controls; fader control; two LED peak power indicators; LED power indicators; max. output 15 W/channel continuous, 10 W with 1% dist. at 1000 Hz into 4 ohms; frequency response 30-30,000 Hz −3 dB; S/N 65 dB; ±12 dB equalization range; equalization frequencies 60, 250, 1000, 3500, 10,000 Hz; 2" H × 5⅞" W × 6½" D $150

GM-40 Component Power Amplifier
Component power amplifier; max. output 20 W/ch continuous, 10 W/ch min. at 50-20,000 Hz into 4 ohms with 0.8% THD; 15-40,000 Hz −3 dB frequency response; less than 0.06% THD at 1.5 W, 1000 Hz; S/N 80 dB $85

GM-12. Similar to GM-40 except 12 W amplifier; 6 W/ch continuous $55

AD-320 Power Amplifier
Power amplifier has max. output 20 W/channel continuous, 16 W/channel into 4 ohms at 1000 Hz with 0.8% dist.; frequency response 40-20,000 Hz; 2 1/8" H × 4 3/8" W × 5 1/2" D $80

AD-312 Power Amplifier
Power amplifier with integrated circuitry has max. output 12 W/ch continuous, 9 W/ch into 4 ohms at 1000 Hz with 0.8% dist.; frequency response 40-20,000 Hz; 2 1/8" H × 4 3/8" W × 4 1/2" D..... $60

PYRAMID

PMA-270 Power Amplifier
270 W continuous power amplifier complete with mounting hardware and mating connector harness; frequency response 15-50,000 Hz; output impedance 4 ohms rated; clipping 110 dB; S/N 70 dB "A" weighted; slew factor 30 V/msec.; channel separation 70 dB; dist. 0.5% $500

PMA-100 Power Amplifier
100 W continuous power amplifier features floating/common ground inputs and comes with mating connector cables; frequency response 80-20,000 Hz ±3 dB; S/N 60 dB; THD 1.0%; output impedance 4 or 8 ohms; channel separation 45 dB.. $130

X1000-VL Graphic Equalizer/Amplifier
Ten-band graphic equalizer with 50 W continuous power amplifier; switchable high/low input impedance; concentric front-to-rear fader and volume controls; LED input stereo sensitivity indicators; molded rear-panel connector plugs; center frequencies set at 55, 110, 200, 360, 680, 1300, 2400, 4500, 8000, and 15,000 Hz ±12 dB boost or cut; frequency response 20-30,000 Hz; S/N 50 dB low impedance, 65 dB high impedance; THD 0.5%; output impedance 4 or 8 ohms; 1 3/4" H × 7" W × 6 1/2" D $170

X700-VL. Similar to X1000-VL except seven-band graphic equalizer with 44 W continuous power amplifier; center frequencies set at 60, 150, 400, 1000, 2400, 6000, and 15,000 Hz ±12 dB boost or cut; frequency response 20-20,000 Hz; 1 3/4" H × 4 3/8" W × 6 1/8" D $140

X-Spec-5 Equalizer/Preamp
Five-band equalizer with dual concentric frequency adjustments and either bi-amp or stereo preamp; unit has switchable high/low impedance inputs; LED vertical tracking outputs; balance control and front-to-rear fader; switchable tape/tuner impedance selector; complete with molded connectors and mounting hardware; center frequencies set at 60, 250, 1000, 3500, and 12,000 Hz ±12 dB boost or cut; frequency response 40-25,000 Hz; output impedance 10,000 ohms; S/N 60 dB; crossover frequency 4500 Hz; THD 0.05%; 8" H × 4 13/16" W × 1 9/16" D..... $260

X-420 Stereo Amplifier/Bi-amp Amp
100 W continuous stereo amplifier and 25-W 4-ch, bi-amplified amplifier with high/low impedance inputs and volume controls, complete with molded connectors and hardware; frequency response 40-25,000 Hz ±3 dB; THD 0.5%; input impedance 10,000 ohms (high), 22 ohms (low); channel crosstalk 65 dB; S/N 50 dB "A" weighted; 8 1/4" H × 1 15/16" W × 6" D $160

RECOTON

SE50 Graphic Equalizer/Power Amplifier
Power amplifier/frequency equalizer features multiple speaker and defeat switches and power on/off with LED; amplifier output 15 W/ch continuous with 1.0% THD; frequency response 10-30,000 Hz −3 dB at 1000 Hz; five slide equalizer switches with center frequencies set at 50, 250, 1000, 3500, and 10,000 Hz, 12 dB boost or cut; 13.8 V dc $110

ROYAL SOUND

RC-2000 Graphic Equalizer Amplifier
Seven-band graphic equalizer amplifier features LED threshold saturation level indicators, pushbutton loudness contour, muting, ambiance, and input sensitivity selector controls, and rotary fader/volume/balance control; fused protection circuit; center frequencies set at 55, 150, 380, 1000, 6800, 2600, 6800, and 18,000 Hz ±12 dB; output 1 V rated; frequency response 15-80,000 Hz ±1 dB; THD 0.02%; unit has two stereo amp connections, headphone jack, and gold-plated input and output terminals; 2.28" H × 7.4" W × 6.7" D..... $500

RA-6000 Power Amplifier
Power amplifier with fused protection circuit, auto power control, gold-plated input terminals, and push-type positive-lock color-coded speaker output terminals; output 60 W/ch into 8 ohms from 10-50,000 Hz with 0.2% THD; S/N 95 dB; 2.8" H × 7.95" W × 9.37" D..... $500

EA600 Graphic Equalizer Amplifier
Five-band graphic equalizer amplifier with auto power control and indicator light, threshold saturation level indicators for left and right channels, front-to-rear fader control; max. output 15 W/ch into 8 ohms; frequency response 10-40,000 Hz ±2 dB; center frequencies set at 60, 250, 1000, 3500, and 15,000 Hz, ±12 dB; 4-ohm load impedance; includes detachable wiring harness; 2 1/3" H × 7 1/12" W × 6 3/8" D $160

SANYO

PA6120 Biamp Stereo Power Booster
Trunk or under-seat mount biamplified stereo power booster delivers 120 W continuous total output power at 0.05% THD; biamp with two 50 W/ch continuous power woofer amps and two 10 W/ch continuous power tweeter amps; unit has motorized remote-control fader to adjust front/rear balance in four-speaker installations; dash-mount fader switch; auto power control; protective relay and five-sec turn-on delay; power bandwidth 20-20,000 Hz; slew rate 70 V/μsec; 3" H × 4 7/16" W × 7 3/4" D.$250

PA6060. Same as PA6120 except 60 W continuous total output power $200

PA6100. Similar to PA6060 without biamp and motorized fader; 100 W continuous total output power into 4 ohms at 0.05% THD; 3" H × 7" W × 7 3/8" D.. ..... $150

PA6050. Same as PA6100 except 50 W continuous total output power $120

PA7000 Biamp Stereo Power Booster
Connects to auto stereo unit with 7.5 W or less output and delivers 56 W continuous total output power at 3% THD; 23 W/ch low-frequency amplifiers; 5 W/ch tweeter amp; designed for trunk or rear mounting; automatic turn on and off; separate underdash control unit for high and low frequency level controls with 20-ft cable; built-in 2000-Hz electronic crossover; power bandwidth 100-20,000 Hz; amp unit 3" H × 9" W × 7" D, control unit 1 1/2" H × 4 1/2" W × 2 1/2" D..... $100

EQZ6400 Biamp Graphic Equalizer
Underdash biamplified seven-band stereo graphic equalizer combines four bands for woofer signal and three bands for tweeter signal with bass center frequencies set at 50, 150, 400, and 1000 Hz, ±12 dB and treble center frequencies set at 2.5, 6, and 1500 Hz, ±12 dB; unit has built-in control for motorized faders in PA6060 and PA6120 amps; four LED "bar graph" bass/treble signal level meters; RCA line level inputs and multi-pin connector with switchable sensitivity; auto on/off power by car stereo; 2" H × 7 1/2" W × 5" D $100

EQZ6200. Similar to EQZ6400 without biamp and remote fader control; center frequencies set at 50, 150, 400, 1000, 2500, 6000, and 15,000 Hz, ±12 dB; equalizer defeat switch; audio muting switch reduces sound level 20 dB; LED left/right channel "bar graph" signal level meters; 2" H × 6 1/2" W × 4 3/4" D..... $70

SOUND CONCEPTS

AD1060 Concert Machine
Automotive delay system for use with car radio or tape deck; on/off switch; rear level and continuously-variable delay controls; delay control allows user to select a delay setting from 5 to 70 msec corresponding to sound path lengths of 5-70 ft; contains two 10-W amplifiers: 3" H × 7" W × 7" D..... $300

1060RC. Remote control for AD1060; allows Concert Machine to be installed in hidden location in vehicle; includes 12-ft cable..... $40

SPARKOMATIC

GE-500 Graphic Equalizer/Booster
Car stereo booster amplifier produces visual response curve on illuminated screen; slide controls for five frequency bands (60 Hz, 250 Hz, 1000 Hz, 3.5 kHz, 10 kHz); front-to-rear fader control; power indicator light; audio by-pass switch; 20 W/ch continuous; frequency range 20-20,000 Hz; for use with all tape decks and radios, and speakers with power handling capability of 15 W or greater; 2" H × 6 3/16" W × 6 1/2" D $90

LC-101 Power Amplifier
Full-spectrum car power amplifier; output 36 W continuous at 10.0% THD, 30 W continuous at 1.0% THD; frequency response 20-20,000 Hz; input impedance 27 ohms; output impedance 3 ohms; separate treble and bass boost slide levers; power level meter; for use with all tape decks and car radios; 1 3/4" H × 6 3/8" W × 5 1/2" D $50

TENNA

PA-3021DF Graphic Equalizer
Five-band stereo graphic equalizer with dual fader that individually controls speakers front/rear and left/right; has equalizer defeat switch and BTL circuitry; center frequencies set at 60, 250, 1000, 3500, and 15,000 Hz at ±12 dB; slide-bars to boost or cut; output 80 W continuous stereo power, four channels driven, 60 W continuous power at 5% THD; speaker load 8-ohms/ch; S/N 80 dB..... $160

PA-3020EF. Similar to PA3021DF except 40 W continuous stereo output power and front/rear fader control..... $110

VISONIK

AS1000 Car Power Amplifier
35 W/ch output; dist. 0.25%; frequency response 20-20,000 Hz ±0.25 dB; S/N 70 dB $300

A-301 Car Power Amplifier
30 W/ch continuous into 4 ohms from 20-20,000 Hz with 0.25% dist.; includes two dc amplifier channels; oscillator-driven push-pull inverted circuit with ferrite-core power transformer; low-current remote turn-on feature; one-piece printed circuit board construction for all components and connectors; clamped power transistors to extruded heat sinks..... $150
With pair of D-302M0 speakers $200

PA-1 Preamplifier Equalizer
Features bass, midrange, and treble controls; input selection for phono 1 and 2; volume and power on/off..... $125

13 SIGNAL PROCESSORS (includes Mixers)

ACE AUDIO

5000 Subwoofer Electronic Crossover
Designed to operate with subwoofers or mini speaker systems; consists internally of precision metal film resistors and polystyrene capacitors mounted on single PC board; has level control and defeat switches; crossover 18 dB/octave at 100 Hz; noise −90 dB; dist. 0.025% at 2 V out, 0.01% typically; 2¼" H × 6" W × 4⅜" D.
Kit. Construction time 1.5-3 hrs. $75
Assembled and tested $125

6000 Electronic Crossover Kit
Designed for bi- or tri- (with two 6000s) amping; features plug-in frequency module; built-in power supply; choice of 15 crossover frequencies from 200-10,000 Hz at 12-dB/octave; has two tweeter level controls; THD or IM dist. 0.02%; input impedance 220k ohms; output impedance 100 ohms; hum and noise −90 dB; 2¼" H × 6" W × 4⅜" D.
Kit $65
Wired $90
Plug-in frequency module $28

ADC PROFESSIONAL PRODUCTS

Sound Shaper Three Paragraphic EQ
Three 12-band parametric graphic equalizer controlling up to 36 frequency ranges per channel,

ranging from 26-21,500 Hz ±12 dB; graphic equalizer center frequencies set at 32, 56, 100, 180, 320, 560, 1000, 1800, 3200, 5600, 10,000, and 18,000 Hz; features internal switching and monitoring, EQ bypass, 24 linear potentiometers, and two vertical LED signal level meters . $500

Sound Shaper Two MkII Equalizer
Twelve-band stereo frequency equalizer with center frequencies set at 30, 50, 90, 160, 300, 500, 900, 1600, 3000, 5000, 9000, and 16,000 Hz, ±12 dB boost or cut; each band/ch has linear potentiometer control with center detent. Features internal switching and monitoring with pushbutton line record and tape monitor controls; pushbutton equalization bypass; dual seven-segment ±12 dB LED meter with 1-dB adjust switch and two channel LEDs; rear-panel variable frequency spectrum level balancing controls/ch; two main and two tape monitor inputs; two main and two tape outputs. Frequency response 5-100,000 Hz ±1 dB; unity gain ±1 dB; output 9 V rms into 10k ohms; HD and IM dist. 0.02%; hum and noise −85 dB; **output impedance 10 ohms at 1000 Hz;** input impedance 75k ohms; 6¼" H × 16⅜" W × 6¾" D..... $330

Sound Shaper One Ten Equalizer
Ten-band stereo frequency equalizer with center frequencies set at 31, 62, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut; each band/ch has linear sliding controls with center detent. Features power, line record, tape monitor, and EQ bypass pushbutton controls; two main and two tape monitor inputs; two main and two tape outputs. Frequency response 5-100,000 Hz +0/−1 dB; unity gain ±1 dB; output 10 V rms min. into 10k ohms; HD and IM dist. 0.02%; hum and noise −80 dB; **output impedance 10 ohms at 1000 Hz;** input impedance 75k ohms; 6¼" H × 14¾" W × 6¾" D..... $230
Sound Shaper One. Similar to One Ten except five-band, two channel equalizer with center frequencies set at 60, 240, 1000, 3500, and 10,000 Hz; frequency response 5-100,000 Hz +0.5/−1 dB; no line record or EQ bypass control; 5⁹/₁₆" H × 10³¹/₃₂" W × 6¹¹/₁₆" D..... $120

ADS

ADS 10 Digital Time Delay System
Digital time-delay system with built-in amplifier (100 W/ch continuous into 4 ohms, 20-20,000 Hz, 0.08% THD), matching 2-way speakers. Delay section: three initial delays, first delay variable 10-40 msec, longest delay variable up to 100 msec; reverberation decay time 0-1.6 sec (variable 0 to −60 dB); controls include ambience-channel bandwidth, stage depth (first delay), hall size (remaining delays), extra outputs for additional amplifier-speaker systems; "Source Ambience Discriminator" extracts ambience in recordings, reduces reverberation of FM announcer voices; can be driven from line-level (preamp or tape out) or speaker terminals (using optional cables); LED delay indicators; ambience outputs, 30-13,000 Hz, +1,/−3 dB, less than 0.3% THD+noise, 83 dB dynamic range. Power amplifier section: 94 dB S/N (A-weighted), frequency response 30-20,000 Hz ±0.5 dB. Model L10 speakers: 2-way (7-in woofer and 1-in soft-dome tweeter); frequency response 48-18,000 Hz ±3 dB, 38-20,000 Hz ±5 dB; efficiency 90 dB/watt; input range 50-100 W. Delay/amplifier dimensions, 3½" H × 15¾" W (19" w optional rack mount) × 12" D. Speakers 15" H × 9¾" W × 6½" D..... $1150
10 01. Similar to ADS 10 minus built-in power amplifier and matching speakers; optional bolt on rack handles (extends to standard 19 in) and walnut side panels available; black satin finish $700

ADVENT

500 SoundSpace Control
Designed to enhance home acoustics through control of room size and reverberation; features short/long reverb and +/− size controls; sensitivity switch; LED digital initial delay/msec display; dual LED operating level bar indicators; volume, balance, bass, and treble controls; rear-channel direct/reverb/off switch; front channel on/off control. Rear-channel frequency response 20-20,000 Hz; dist. 0.1% for 1.5 V at 1000 Hz; dynamic range 80 dB; input impedance/sensitivity 150k ohms/0.3, 1, and 3 V for full output; output impedance/sensitivity 3.5k ohms max./3 V; 3¼" H × 15¾" W × 10¾" D..... $599

ALLISON

The Electronic Subwoofer
Two-channel bottom-octave equalizer and bandpass filter; rolloff 24 dB/octave below 20 Hz and 18 dB/octave above 20,000 Hz; turnover frequencies at +3 dB at 41 Hz, 35.5 Hz, 48 Hz (extends Allison loudspeakers flat to 20 Hz); FILTER ONLY position; S/N 100 dB min. ("A" weighted); used in tape monitor loop, external processor loop of preamp/control unit, integrated amp, or receiver; 2" H × 14¼" W × 4⅜" D..... $290

AUDIO PULSE

1000 Digital Time Delay System
Digital time delay system with built-in dynamic

range expander with LED gain display; features delay/decay time digital display; rear-panel jacks for remote ambience defeat switch; extra external long/short outputs for 6- or 8-channel operation; LED input level display; automatic defeat of ambience system; built-in headphone amplifier with ambience mix control; ambient signal mix in front channels; tape monitor facilities; separate rear-channel ambience control; individual secondary input/output level controls. Six initial delays continuously variable from 7-95 msec; ambience control 0.0-1.2 sec variable; frequency response 20-10,000 Hz ±3 dB (delay mode); THD 0.5% at 1000 Hz; S/N 75 dB (IHF). Dynamic range expander: expansion ratio 1.0-1.5; S/N 80 dB (IHF); headphone output 100 mW at 8 ohms; 110/220 V dc; black anodized finish; 3½" H × 17" W × 12" D..... $950
AP102. Secondary ducted-port speaker system designed for use with 1000; has two 6-in high-excursion woofer/midrange drivers, 2.25-in cone tweeter, and 2.25-in rear-facing cone tweeter; square column enclosure; frequency response 40-30,000 Hz; 8-ohm impedance; max. input 100 W music power; walnut end caps with wrap-around grille; 35" H × 8¾" W × 8¾" D..... $350 pr.

Model Two Digital Time-Delay System
Recreates multidimensional paths of live sound by electronically duplicating delayed reflected sounds; audio signals encoded digitally and fed into random access memory device at three different stages to recover audio signal. Features built-in 25-W/ch integrated amplifier for precise adjustment of secondary channels and bass and treble controls; input and output level controls with LED peak level indicators; long/short delay and direct/defeat function selector. Short initial delay 19, 33 and 51 msec, long delay 39, 66, and 103 msec; reverb decay time variable from 0.1-0.6 sec; input sensitivity for 0 dB 50 mV-3.3 V variable at 1000 Hz (low level), 1.2-60 V

variable at 1000 Hz (high level); input impedance 47,000 ohms (low level), 470,000 ohms (high level); output 0-1.5 V/16,000 ohms (aux.); output noise from 20-20,000 Hz unweighted −80 dB below rated out (direct), −72 dB below rated out (delayed); bass tone control +2.5/−12.5 dB at 70 Hz, treble tone control +4/−7 dB at 7000 Hz; 3½" H × 15" W × 19½" D..... $585

AP52. Two-way ducted-port speaker system designed for Model Two Digital Time-Delay System; has two 6-in high-excursion woofer/midrange drivers and 2-in cone tweeter; frequency response 80-20,000 Hz; 8-ohm impedance; max. input 25 W music power; walnut-grained vinyl cabinet with removable grille; 19½" H × 11" W × 7" D..... $129

AUDIO RESEARCH

EC-22 Electronic Crossover

Vacuum-tube electronic crossover features ten-position low and high frequency selectors; low-channel level control; test oscillator/mode switch for low and high channels and mute/operate modes; crossover on switch with LED; outlets on switch with LED; front-panel selectable 0 or −6-dB gain switch. Frequency response 1-50,000 Hz ±0.25 dB; HD 0.005% at 2 V rms out, 20-20,000 Hz; max. input 10 V rms above 10,000 Hz (high channel), overload proof (low channel); input impedance 50,000 ohms nominal; max. output 50 V rms (low channel); output impedance 500 ohms; noise −90 dB below 2 V rms out/in; includes rack-mount handles; 5¼" H × 19" W × 10¼" D..... $1195

EC-5 Electronic Crossover

Two-way fixed-frequency solid-state electronic crossover. Features two front-panel switch selectable crossover slopes (6 dB and 18 dB per octave); adjustable gain from −40 to +3 dB; field-replaceable frequency network cards available at extra cost; standard frequencies available at 50, 100, 400, 800, 1000, 2500, 5000, and 7500 Hz; low center channel output with 10,000-ohm output impedance; three switched relay-controlled amplifier power receptacles; separate left/right bass and treble controls. Frequency response 5-50,000 Hz ±1 dB; HD and IM dist. less than 0.005% at 2 V rms out; max. input and output 10 V rms; S/N 90 dB below 2 V rms. 3½" H × 19" W × 8½" D..... $1195

BOZAK

902S Time Delay System

Analog electronically-controlled time-delay system with built-in 35-W power amplifier and separate pair of speakers. Timer delay: features delay time, delay remix, signal blend, treble contour, and output level controls; delay 30-130 msec continuously variable; high-frequency EQ ±12 dB; THD + N 1.0%, delay line; frequency response 30-7700 Hz +0/−3 dB. Power amp: features auto-ranging peak-reading LED vertical bar graph display; frequency response 20-20,000 Hz +0/−0.5 dB; THD and IM dist. 0.01% at 1000 Hz. Loudspeakers; incorporates indirect-radiating full-range driver; frequency response 41-10,000 Hz; 8-ohm impedance; input 70 W program. Delay system 2½" H × 17¾" W × 9⅞" D; speaker 20" H × 13" W × 11" D $975

902. Same as 9025 without speakers $795

Celeste 900 Electronic Scund Delay

Electronic sound delay adds desired ambience to reproduced sound; time delay from 20 to 50 msec; frequency range 20-7500 Hz; input power 6 V rms; max. input impedance 50 k ohms; output capability 0.7 V rms nominal; output impedance 2500 ohms min.; front panel: 2½" H × 17½" W; chassis: 2" H × 17" W × 8¾" D $525

CERWIN-VEGA

CX-2 Electronic Crossover

Passive electronic crossover designed for home subwoofer systems; crossover frequencies available in 100, 150, and 250 Hz fixed frequencies; 12/dB/octave slope; requires no power supply. Dist. unmeasurable at or below 2.5 V out; insertion loss 1 dB max.; nominal input impedance 3.3k ohms; recommended output impedance 5k ohms; channel-to-channel crosstalk −70 dB at 20,000 Hz; max. input voltage 11 V; 1¼" H × 7" W × 2¾" D..... $100

DB-10 Bass Turbocharger

Incorporates 18 dB/octave subsonic filter to eliminate subsonic noise below 20 Hz; frequency response ±0.25 dB; rated output 2 V rms; max. output 8 V rms; HD or IM dist. 0.025%..... .....$90

CROWN

EQ-2 Synergistic Equalizer

Eleven-band two-channel octave center equalizer with center frequencies set at 20, 40, 80, 160, 320, 640, 1250, 2500, 5000, 10,000, and 20,000 Hz, ±15 dB boost or cut; each channel features octave frequency adjust controls; ±20 dB tone controls with bass hinge points adjustable from 180-1800 Hz and treble hinge points adjustable from 1000-10,000 Hz; equalizer cancel and tone cancel master controls; and overload indicators. Rear panel has unbalanced inputs, balanced inputs with switchable unity/+10 dB gain selection, screwdriver-adjusted attenuation controls, and normal/inverted outputs. Frequency response 10-100,000 Hz ±0.3 dB, 20-20,000 Hz ±0.1 dB, controls flat with IHF load; hum and noise 90 dB below rated output, 20-20,000 Hz bandpass; IM dist. 0.01% at rated output; rated output 2.5 V rms into IHF load; **input impedance 25,000 ohms unbalanced, 20,000 ohms balanced (transformerless); output impedance 300 ohms (normal), 600 ohms (balanced);** satinized aluminum front panel with grey Lexan inlay; 7½" H × 19" W × 14½" D.... . $1095

VFX-2A Crossover

Solid-state filters used for crossover or bandpass functions; two-channel, two filters/ch (high pass, low pass at 18 dB each) from 20-20,000 Hz ±0.1 dB; filter rolloff at 18 dB/octave. Stereo: 0-15.5 dB variable gain bridging input/channel along with unbalanced unit gain input; output impedance 300 ohms (inverted and non-inverted), 6 V max. output into 600 ohms; IM dist. 0.01% at rated output; hum and noise 100 dB below rated output with 0 dB gain. Mono: functions as combined bandpass/two-way crossover, or as three-way crossover (triamping); mono jack combines two input signals to form mono output; mono bass output combines low pass section of two filters which feeds the output jack. Satinized aluminum front panel with plexiglass front-panel cover; 3½" H × 19" W × 5¾" D... ..... $389

DAHLQUIST

DQ-LPI Variable Low Pass Filter

Low-pass electronic crossover for bi-amp bass speaker applications, including external low bass reproducers; each channel continuously variable from 40-400 Hz; low-pass cutoff slope at 18 dB/octave; controls adjustable from flat to 5 dB boost at 20 Hz; outputs: choice or combination of mixed center-channel and stereo bass; separate level controls for system balance and up to 15 dB gain; satin-brushed panel with walnut end blocks; 2¾" H × 12¾" W × 5¼" D..... $300

DQ-MX1 Passive Matrixing Crossover

Connects power amplifier to stereo speakers and subwoofer and combines low frequencies from both channels; stereo separation maintained for main speakers; includes three-position bass-level switch, 60-80 Hz crossover frequency switch, and phase switch; left and right inputs from power amp or receiver outputs; outputs to left and right speakers and to mixed-channel bass module; operates with 8-ohm speakers and subwoofer; 3⅜" H × 8¾" W × 7" D $135

DB SYSTEMS

DB-3 Active Crossover

Designed for bi- and tri-amplified speaker systems; asymptotic slope 12 dB/octave Gaussian or 18 dB/octave Butterworth; fixed crossover frequencies (to be specified on order); available as two- or three-way crossover (for common bass channel, designation is 1½-or 2½-way, respectively); individual channel gains screwdriver adjustable; THD 0.0008% from 20-20,000 Hz; noise −100 dB (shorted input); frequency response of summed output within 1 dB 5-50,000 Hz.

1½-way Butterworth crossover $310
2-way Gaussian crossover..... $250
2-way Butterworth crossover $325
3-way Gaussian crossover..... $270
3-way Butterworth crossover $420
Additional common bass (Butterworth) crossover $10

DB-3-100. Similar to DB-3 except two-way electronic subwoofer crossover with 18 dB/octave Butterworth crossover; must be used with DB-2 power supply..... $268

DB-2. Power supply for DB-3 and DB-3-100..... $62

dbx

120 Series Noise Reduction Systems

Provides 30 dB noise reduction and 10 dB additional headroom when recording with open-reel, cartridge, or cassette recorders; eliminates tape hiss and noise in live recording; prevents additional noise build-up in tape duplicating or recording off-the-air; also decodes dbx encoded discs.

Model 122. Two-channel switchable record or play. $275

Model 124. Four-channel switchable record or play. $399

Model 128. Two-channel switchable record or play plus linear and above-threshold expander/compressor..... $450

155 Noise-Reduction System

Professional format, 4-channel tape noise-reduction system gives 30 dB of tape noise reduction at all levels over the entire audio spectrum with an additional 10 dB recording level; true rms detection for accurate encode/decode tracking; linear decibel compression/expansion over 100 dB range; no pilot tones or level match adjustments necessary; front-panel record and play level adjust; **user-changeable modular circuit boards for each channel** (spares available)..... $457

Dynamic Range Expanders

Permits listener to restore up to 20 dB of the dynamic range missing from records, tapes, or FM broadcasts.

3bx. Three-band linear expander with 30 gain-change LEDs in −20 to +12 dB range; 3¾" H × 17¾" W × 10½" D..... $650

3bx-R. Remote control for 3bx; provides remote control of transition level, release time, and expansion ratio; system master volume; fade control..... $149

2bx. Two-band linear expander with 20 gain-change LEDs and program-dependent release rate; 3¾" H × 17¾" W × 10½" D..... $450

1bx. Single-band linear expander with ten gain-change LEDs and program-dependent release rate; 3¾" H × 11" W × 10½" D $245

118. Compressor/expander with peak limiting/unlimiting capability; allows recordist to make full dy-

ADC has four Sound Shaper® frequency equalizers that will improve your sound system. No matter how good it is. And at a cost that's lots less than trading in your components.

ADC Sound Shapers will improve your speakers. By extending the true bass response, including the critical mid bass.

ADC Sound Shapers will improve the relationship between your cartridge and speakers. From one of partial incompatibility to total compatibility.

They'll also eliminate rumble (low frequency overload), tape hiss and record scratches.

And that only scratches the surface of what ADC Sound Shapers can do. For instance, the walls, carpeting and furniture of your listening room physically bounce sound around so that some spots have less sound than other spots. Lots less. ADC Sound Shapers will bring these "dead" spots to life.

Perhaps best of all, though, is a Sound Shaper's ability to let you re-equalize what a recording engineer mixed. If a horn section is overwhelming a piccolo, for example, you just slide the appropriate frequency lever. Presto, more piccolo. You can also vanquish a voice. Or boost a tuba.

Sound Shapers segment the entire spectrum of sound. To let you re-shape a sound track to your personal musical preferences. It's all the control you've ever dreamed of but never dreamed possible.

To get into equalizers, start with our Sound Shaper One which operates in five frequency ranges. Or our Sound Shaper One Ten which gives you greater control by operating in ten frequency ranges.

For more professional equalizers, there's our Sound Shaper Two Mk II which functions in twelve frequency ranges with a two-channel LED meter. And there's our new Sound Shaper Three *Paragraphic*™ Equalizer.

It combines all the advantages of a graphic equalizer with all the advantages of a parametric equalizer. Twelve primary frequency controls per channel. Plus twenty-four ancillary control positions per channel. The Sound Shaper Three is the ultimate in controlling and creating with your stereo system.

Take the ultimate step up in sound, without trading in a thing.

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HOW TO TRADE UP YOUR RECEIVER, TUNER, AMP, TURNTABLE, CARTRIDGE AND SPEAKERS WITHOUT TRADING IN A THING.

ADC SOUND SHAPER®
FREQUENCY EQUALIZERS
A BSR COMPANY

CIRCLE NO. 29 ON READER SERVICE CARD

13 SIGNAL PROCESSORS

namic range tapes on moderately-priced recorders and obtain 20 dB or more improved (S+N)/N; LED indicator light..... $199

100 Subharmonic Synthesizers
Synthesizes frequencies between 25 and 50 Hz from program material above 60 Hz to recreate signals in bottom octave; can be inserted in tape monitor circuit of receiver or amplifier; synthesize and low-frequency boost controls plus bypass switch; input impedance 47,000 ohms; output level 7 V rms; frequency response 20-20,000 Hz ±1 dB; THD 0.1%; 3¾" H × 7⁹/₁₆" W × 10¼" D..... $199

21 Disc/Tape Decoder
Linear decibel compression and expansion system that encodes musical signal going onto record and decodes dbx-encoded disc or tapes upon playback; features noise reduction and tape/source monitor buttons; level match control; frequency response 15-30,000 Hz ±0.5 dB (Dolby off); max. output 4 V rms into 10,000-ohm load; THD 0.2% at 1000 Hz; hum and noise −94 dBV; 2¾" H × 8¾" W × 6⅝" D..... $109

DRACO LABS

Lab Series Dynamic Range Expander
Features LED spectrum display for bass, midband, and treble frequencies over −20 to +10 dB range; expansion ratio slide control; unity gain level control; post/pre, source/tape, and process/bypass controls. Expansion 1.0:1.6 dB; frequency response 20-20,000 Hz ±0.5 dB; HD and IM dist. 0.1%; dynamic range 110 dB; expansion linearity error 5%; channel balance ±0.5 dB; input noise −90 dB below 1 V; input impedance 50k ohms; output impedance 600 ohms; max. output 9 V rms at 1000 Hz; 3" H × 17" W × 12" D..... $600

FOSGATE ELECTRONICS

Tetra II Tetrasound
Multi-channel sound decoder system converts two-channel stereo, SQ, and CD4 program material into four separate channels producing 360-degree spatial sound field; Tate decoder incorporates automatic dimension control, phase corrector, and base combination circuitry. Features decode mode switch; LED peak-level input, output, and logic signal indicators with LED peak-reading display on/off switch; left/right input balance, front left/right balance, and rear left/right balance slide controls; input balance adjust; front-to-rear fader; two- and four-channel inputs; input level trimmer posts; remote control input with on/off switch; tape monitor switch; normal/line level output switch; master volume control. Separation 35 dB between all channels; THD 0.05% typically, 0.15% max. from 20-20,000 Hz at 0.5 V rms; max. output 2.25 V rms; noise −80 dB at full level..... $995

GARRARD

MRM 101 Music Recovery Module
Impulse noise suppression device with phono preamplifier; electronically detects clicks and pops, reducing output level to 30 dB below program level in 2.7 msec; gradual attenuation (0.5-0.75 msec) to −30 dB level; output gain stage boosts signal voltage to drive aux. inputs of phono preamp; nominal output 300 mV; rated output at 1.0% distortion 2.5 mV; dist. 0.01% (phono preamp), 0.1% (suppression circuitry); channel balance better than 2 dB; S/N 100 dB (phono preamp), 85 dB (suppression circuitry); input impedance 47,000 ohms; includes front-panel LED for suppression circuitry, LED indicator when suppression circuitry is in signal path, and defeat switch for suppression circuitry so unit can be used as phono preamp only; 2¾" H × 15" W × 12" D..... $220

HEATH

AD-1305 Stereo Equalizer Kit
Five-band, two-channel graphic equalizer kit; matches Heath AP-1615 preamp; HD and IM less than 0.05%; hum and noise 90 dB below rated output; slide control switches for tone flat and tape monitor; 4⁷/₃₂" H × 17¼" W × 8" D..... $130

AD-1304 Audio Processor
Separate expander (7-dB dynamic range to program) and noise-reducer (up to 10 dB) circuit for 17-dB total dynamic range; front-panel high-filter switch (12 dB/octave at 7000 Hz linear phase); front-panel LEDs; front-panel controls; rear-panel tape monitor facilities; rated input/impedance 200 mV/100k ohms; output impedance 500 ohms; gain ±0.5 dB (expander off), −3 dB/+4 dB (expander on); frequency response 20-20,000 Hz +0/−0.2 dB; THD 0.1% from 20-20,000 Hz; 12 lbs.; 4½" H × 17½" W × 8⅛" D. Kit..... $200

JVC

SEA-80 Graphic Equalizer
Ten-band stereo graphic equalizer with center frequencies set at 31.5, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut. Features fluorescent analyzer display with left/right mode switch, memory, and level control (covers 32-16,000 Hz frequency range over 0-26-dB level range); built-in pink noise generator; −6-dB SEA switch (doubles input sensitivity to accommodate high inputs without distortion); SEA record switch (transmits signal to tape deck); tape monitor switch; −20-dB mic switch. Input impedance 47k ohms (SEA and tape monitor in); output impedance 100 ohms (SEA and tape rec out); rated output 2 V rms; frequency response 10-100,000 Hz +0/−1 dB; THD and IM dist. 0.003%; gain 0 dB/−6 dB; 6¼" H × 17¾" W × 12¼" D..... $600

SEA-50 Graphic Equalizer
Ten frequency "tone-zone" control ranges (one per octave) with ±12 dB boost or cut; uses resonant circuits composed of resistors, capacitors and semiconductor inductors, one for each "tone zone" or frequency range band..... $290

SEA-20GL Graphic Equalizer
Seven frequency "tone zone" control ranges (one per 1½ octave); each slide control covers 60, 150, 400, 1000, 4000, 6000, or 15,000 Hz tone zone; includes defeat, record, tape monitor, and input attenuator (0 dB/−6 dB)..... $190

BN-5 Biphonic Processor
Binaural processor for binaural effects through speakers; input terminals Line In/Tape Play at 80 mV/−20 dB, 100 ohms input impedance; output terminals Line Out at 300 mV, −8 dB output level, 3.5k ohms Tape Rec output impedance; consumes 7 W; 3⅞" H × 15⅜" W × 9½" D..... $280

KLH

DNF 1201A Dynamic Noise Filter
Processes any two-channel or matrix encoded material from turntable, tape deck, cassette deck, receiver or tuner; pushbutton controls select proper noise reduction; sensitivity control with LED readouts; frequency response (min. bandwidth) −3 dB at 500 Hz, −10 dB at 1 kHz, −20 dB at 2.5 kHz; (max. bandwidth) ±0.5 dB max. 10 Hz to 20 kHz, −3 dB at 30 kHz, −25 dB at 100 kHz; attenuation rate 9 dB/octave; noise reduction levels up to 30 dB above 5 kHz, 14 dB above 400 Hz; HD 0.2% max.; 0.0 dB gain at 1 kHz adjustable to 10 dB; internal noise 100 μV rms 20 Hz to 20 kHz; has 8 phono jacks and tape deck connectors; 2⁷/₈" H × 17½" L × 8¼" D..... $379

TNE 7000 Transient Noise Eliminator
Impulse suppressor reduces or eliminates medium and small clicks, pops and ticks from turntable or tape deck; has defeat, tape monitor, threshold, and sensitivity controls; LED indicators for transient noise elimination and high-frequency calibration; frequency response 20-20,000 Hz ±0.5 dB; distortion 0.1% (THD), 0.5% (IM); internal noise 40 μV rms; 2⁷/₈" H × 16¾" W × 7⅜" D..... $299

LT SOUND

Thompson Analog Delay-4
Analog delay with bi-FET amps and spring unit reverberation; direct, echo, and reverb controls for front and rear levels, delay, echo repeat, echo EQ, and reverb EQ controls. Delay variable from 20-240 msec in 30-10k, 8.4k, 5.6k, 4.3k, or 3.5k Hz bandwidths; dynamic range 85 dB below 1 V; dist. 0.006% (direct). 0.5% (delay); frequency response 20-100,000 Hz ±0.2 dB; delay ±1.5 dB; S/N 90 dB; input impedance 47k ohms; output impedance 200 ohms; 2.5" H × 18.25" W × 7.5" D..... $550

PEQ Parametric Equalizer
Four-band stereo parametric equalizer covers 25-3000, 100-10,000, and 175-20,000 Hz bands; boost/cut band variable between 0.15 and 2.0 octaves, ±15 dB range. Frequency response 20-20,000 Hz ±0.5 dB; THD 0.007% and IM dist. 0.002%; S/N 90 dB below 1 V; slew rate 13 V/μsec; input impedance 47,000 ohms; balanced and unbalanced line inputs and outputs can drive 600-ohm loads; 3.5" H × 19" W × 7" D..... $475

AC-1 Amplitude Control Center
Functions as compressor, limiter, noise gate, and on board oscillator for amplitude modulated tremelo effects; each channel has compression threshold, compression ratio, gate threshold, gate ratio, and agc controls; three-color LED gain reduction indicators. S/N 90 dB below 1 V; dist. 0.05%; compression/limiting slope variable between 1:1 and 20:1; attack time 0.4 msec and 1 msec; release time 300 and 700 msec; frequency response 10-50,000 Hz ±0.25 dB; 2" H × 19" W × 7" D..... $360

RV-2 Stereo Reverberation Unit
Reverb unit for line-level inputs only; features −6-dB and peak amplitude LEDs; three equalization controls; direct, reverb, reverb drive controls; send-receive buss. Frequency response 2-40,000 Hz ±0.5 dB (direct); reverb 20-5500 Hz; reverb time 2.5 sec; input impedance 47k ohms; output impedance 200 ohms for 2k-ohm loads; S/N 90 dBm (direct); 2" H × 19" W × 7" D..... $305

NR-2 Noise-Reduction/Range Enhancer
Two-channel unit provides 2:1 compander noise-reduction system and dynamic range enhancement system; for dual or independent tracking. Frequency response 20-20,000 Hz ±0.75 dB; S/N 90 dBm; dist. 0.2% at 1000 Hz; input impedance 47,000 ohms; output impedance 200 ohms for 2k-ohm loads; 2.5" H × 12.75" W × 6.15" D..... $195

LUX

G-11 Stereo Graphic Equalizer
Stereo equalizer with 10 bands per channel (from 28 Hz to 14,000 Hz) to cover 10-100,000 Hz (+0/−1 dB). Max. variable ±12 dB and ±6 dB selectable; S/N better than 110 dB (IHF "A"); gain 0 dB-0.5 dB; output voltage of 1 V (more than 5 V at flat position); THD and IM dist. no greater than 0.005% (20 Hz to 20 kHz, 2 V flat position). Accessories include range selector switch, bypass switch and ac power outlet..... $495

Laboratory Reference Series

Luxman 5G12 Stereo Graphic Equalizer
Provides 10 dB boost or cut in each of 12 octave-wide bands centered over 14-28,000 Hz; three-position range switch sets all sliders for boost/cut of

How can equipment designed for an average listening room perform optimally in your environment?

There's nothing particularly wrong with your stereo system. It's just that different rooms have different acoustics.

Of course, you could build a room specifically designed around the needs of your speakers, and you could rebuild it every time you upgrade your system. But we have an easier way; an MXR Graphic Equalizer that enables you to achieve maximum performance from *your* system, in *your* room . . . without moving walls.

Our equalizers allow you to critically adjust the frequency balance throughout the entire musical spectrum. They can help to correct certain audible inconsistencies common in many of today's records and tape recordings. You can choose the MXR equalizer that best suits your needs. We make three models that differ in flexibility and precision/ sophistication, but each is built to the same exacting specifications and all three share MXR's reputation, in the professional field, for reliability and integrity.

Our popular ten band stereo EQ has one band per octave. Our stereo fifteen band model allows even greater control with two-thirds octave per slider; and for the true audiophile, the MXR thirty-one band equalizer provides ultimate control with one-third octave per slider.

Each of the MXR Graphic Equalizers can help you get the most from your stereo system by working with your room, not against it.

Your MXR dealer can help you choose the MXR equalizer that best suits your needs.

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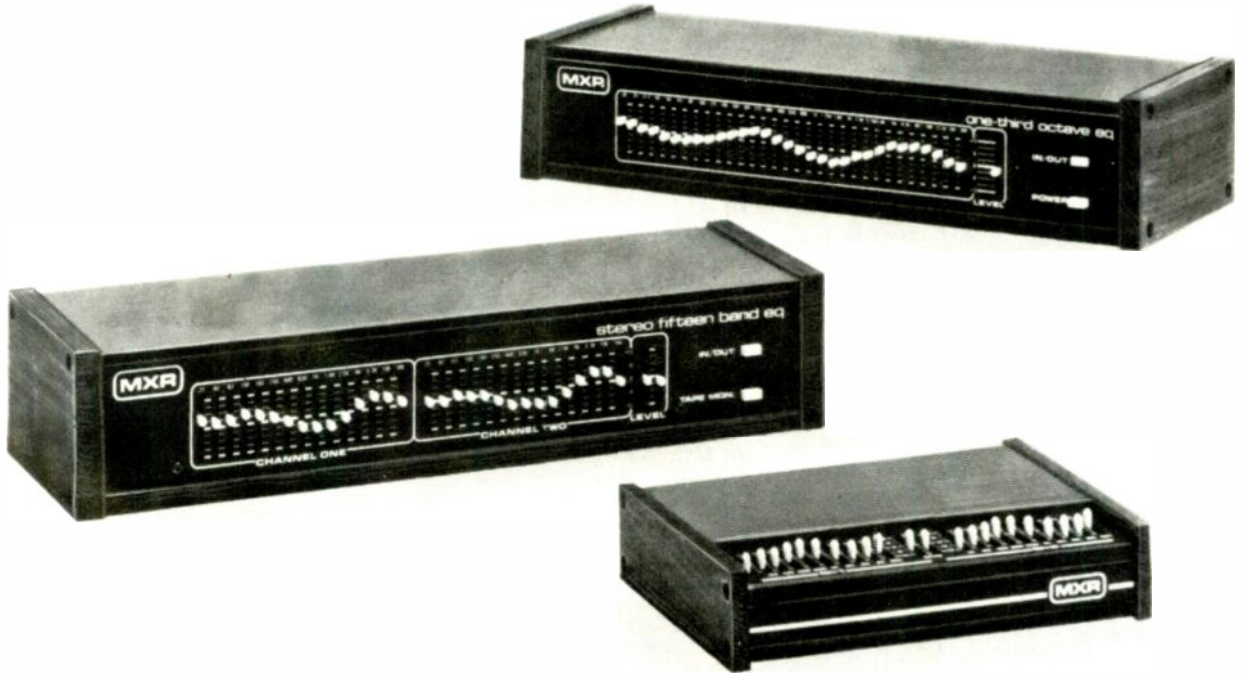
MXR Consumer Products Group



CIRCLE NO. 10 ON READER SERVICE CARD

13 SIGNAL PROCESSORS

10 dB ±2 dB and has bypass function; broad/sharp response selectable for each octave band; output 5 V max.; crosstalk −70 dB; noise 0.018 mV; S/N (IHF A) 115 dB; 4" H × 17.7" W × 16" D..... $695

Luxman 5F70 Stereo Tone Control
Designed to provide precision tonal compensation using "conventional" tone controls rather than a graphic equalizer; uses direct-coupled (dc) tone control amplifier including a Lux-developed dual-monolithic linear IC (DML-IC). Bass and treble controls each have four turnover frequencies: 125, 250, 500, and 1000 Hz for bass; 1000, 2000, 4000, and 8000 Hz for treble. 75-150 Hz notch filter included. Crosstalk 80 dB ±12 dB tonal adjustment at each crossover frequency; frequency response 10-100,000 Hz +0/−1 dB with 0.005% THD at 2 V output; input sensitivity 1 V; input impedance 100,000 ohms; output voltage 1 V rated, 4.5 V max.; output impedance 500 ohms; 2¼" H × 17⁷⁄₁₆" W × 16" D $395

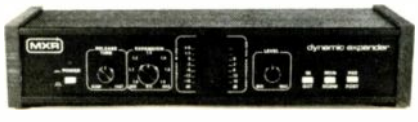
MXR

One-Third Octave Equalizer
31-discrete-band one-channel ⅓-octave equalizer with center frequencies set at 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, 10,000, 12,500, 16,000, and 20,000 Hz, ±12 dB boost or cut; EQ in/out switch; dynamic range 108 dB; THD and IM dist. 0.01% at 0 dBV; frequency response 10-20,000 Hz +0/−1 dB; max. slew rate 7 V/μsec; **max. input level +18 dBV; input impedance 40k ohms; output impedance 100 ohms;** equiv. input noise −90 dBV; **optional rack mount ears available;** walnut side panels..... $350

Fifteen-Band Equalizer
Fifteen-band stereo graphic equalizer, spaced ⅔-octave apart, with center frequencies set at 25, 40, 63, 100, 160, 250, 400, 630, 1000, 1600, 2500, 4000, 6300, 10,000, and 16,000 Hz, ±12 dB boost or cut; tape monitor and in/out switches; THD 0.02% at 0 dBV from 20-20,000 Hz, IM dist. 0.01% at 0 dBV from 60-7000 Hz; frequency response 20-20,000 Hz +0/−1 dB; **max. input +18 dBV; input impedance 40k ohms; output impedance 100 ohms;** equiv. input noise −95 dBV; max. slew rate 7 V/μsec; **optional rack mount ears available;** walnut side panels..... $325

Stereo Graphic Equalizer
Ten-band two-channel graphic equalizer with center frequencies 31, 62, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz; eight rear-panel phono jacks; two inputs, two low-impedance outputs, two tape record outputs, two tape-monitor inputs; two switches control tape monitor function and equalizer bypass. Dynamic range 110 dB; control range ±12 dB; gain: unity ±1 dB (controls centered); max. output level: +18 dBV (10k ohms); input impedance 20k ohms; equivalent input noise −95 dBV; frequency response 20-20,000 Hz ±1 dB at 0 dBV; THD 0.05% at 0 dBV (20-20,000 Hz); IM 0.05% at 0 dBV (60/7000 Hz 4:1) ... $220

Dynamic Expander
Linear dynamic expander provides up to 8 dB of upward expansion and 21 dB of downward expansion; features front-panel release time control; adjustable expansion control (1:1 to 1.6:1); LED gain change and noise-reduction display; level control; in/out, monitor/normal, and pre/post switching. Max. input level +12 dBV; max. output +18 dBV; input impedance 40k ohms; output impedance 100 ohms; max. dynamic range 110 dB; max. slew rate 7 V/μsec; frequency response 20-20,000 Hz +0/−1 dB; attack time 5 msec (depending on program material); release time variable between 50-500 msec; optional rack-mount ears available..... $300



Compander
Can be used with open-reel and cassette decks; dynamic range 100 dB; **output impedance will drive 600 ohms or higher;** equivalent input noise −88 dBV (20-20,000 Hz); input impedance 100k; compress/expand ratio 2:1; tracking accuracy ±1 dB per 20 dB; frequency response 30-20,000 Hz ±1 dB at 0 dBV, 3 dB down at 20 Hz and 40 kHz; THD 0.15% at 0 dBV (200 Hz-20 kHz), 0.75% at 0 dBV (50-200 Hz); IM 0.75% at 0 dBV (60 Hz/7 kHz, 4:1); level match control; bypass switch for cutting unit out of system; black anodized aluminum housing with walnut side panels..... $150

NAKAMICHI

HI-COM II Noise-Reduction System
Designed to improve dynamic range of high-quality cassette decks; compressor/expander with two independent frequency bands and 2:1 ratio for max. suppression of noise pumping; 20-dB reduction of noise plus 3-7 dB headroom improvement; built-in 400-Hz calibration tone; two wide-range peak level meters; defeatable subsonic and multiplex filters; removable 19-in rack mount adaptors $420

EC-100 Electronic Crossover
Designed for stereo bi-amplification; two additional EC-100's allow tri-amplification, etc.; 19 crossover frequency bands at fixed 12 dB/octave slope; phase correction; THD less than 0.005%, 20-10,000 Hz; requires PS-100 Power Supply; 2½" H × 7½" W × 4" D $110

PS-100 Power Supply. Provides ±10 volts dc to operate EC-100 and other Nakamichi BlackBox Series components; powers up to six components $75

NIKKO

ATD-1 Time Delay Synthesizer
Designed to recreate concert hall sound in any acoustical environment. Features three pushbutton selectors for acoustics of small, medium, and large halls; three pushbutton selectors for hall character; five pushbutton selectors for degree of reverberation from 100 msec-2 sec; stage distance or front-to-rear balance control; master output control; tape monitor and delay defeat switches; adjustable input level control with LEDs; two-/four-channel switch. Delay time 17-128 msec; reverb decay time 100 msec-2 sec; frequency response 20-7000 Hz ±3 dB (delay), 20-20,000 Hz +0/−0.1 dB (main); THD 0.5% (delay), 0.05% (main); S/N (A weighted) 60 dB (delay), 80 dB (main); input level/impedance 100 mV/100k ohms; max. output 0.775 V (delay), 1.2 V (main); 2½" H × 19" W × 11⅜" D..... $450

EQ 1 Graphic Equalizer
Ten-band stereo graphic equalizer (±12-dB boost or cut per band) with detented five-step boost/cut slider controls; frequency bands set at 31.5, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz; tape monitor switch; equalizer gain switch (−6 dB, 0 dB, +6 dB); pre + post EQ and tape monitor switch; LED equalizer in/out switch, LED power on switch. Frequency response 10-50,000 Hz±1 dB; THD 0.007%; S/N 105 dB (IHF "A"); 3⅓" H × 19" W × 9" D..... $300

EQ-2 Graphic Equalizer
Six-band stereo graphic equalizer with center frequencies set at 40, 125, 400, 1250, 4000, and 12,500 Hz, ±12 dB boost or gain. Features tape monitor switch; EQ in/out with LED; 12-position EQ slider control; power-on with LED. Frequency response 10-50,000 Hz ±1 dB; THD 0.05% from 20-20,000 Hz (IHF A); input impedance 100k ohms; output level/impedance 1 V, 5 V/560 ohms; gain 0 dB; rack mountable..... $200

ORBAN

622B Parametric Equalizer
Four-band two-channel parametric equalizer allows continuously variable control over entire frequency, bandwidth, and amount of peak or dip; controls: equalization, equalization in/out, bandwidth, and tuning for each of four bands, master equalization in/out, gain, power on/off; frequency response 20-20,000 Hz ±0.25 dB; +12 dB available gain adjustable to infinity; **input impedance 100k in parallel with 1000 pF, electronically balanced; output 47 ohms in parallel with 1000 pF unbalanced;** slew rate 6 V/μsec; THD less than 0.025%, 20-20,000 Hz; noise (equalization controls flat) less than −84 dBm, −87 dBm typical; interchannel crosstalk less than −90 dB, 20-20,000 Hz; Q range 0.29 to 3.2; equalization range +16 dB to infinity; tuning range 20-500 Hz, 68-1700 Hz, 240-5850 Hz, 800-20,000 Hz; tuning dials calibrated at ISO preferred frequencies; 3.5" H × 19" W × 5.2" D. $749

622A. Single-channel version of 622B $479

672A Graphic Equalizer
Eight-band graphic quasi-parametric equalizer with balanced input buffer amplifier, eight equalization amps connected in series, and tunable low- and high-pass positive-feedback 12 dB/octave filters. Tuning ranges set at 20-60, 40-150, 110-310, 230-750, 480-1900, 1100-4500, 2800-9000, and 5900-21,000 Hz with ±16-dB peaking equalization ranges. Controls include equalization, tuning, and bandwidth for each band, x1 and x10 tuning range, EQ in/out bypass switch, filter in/out for each filter, and gain; LED overload indicator. **Input impedance 100k ohms load (parallel with 1000 pF, electronically balanced), 600 ohms, balanced or unbalanced (driving); nominal input level −10 to +4 dBm; output impedance 47 ohms source (parallel with 1000 pF, unbalanced), 600 ohms (load); nominal output level +4 dBm;** frequency response 20-20,000 Hz ±0.25 dB; +12-dB gain; slew rate 6-13 V/μsec; THD 0.05% from 20-20,000 Hz; noise −84 dBm at output; overload/noise 113 dB/filter; dual-range low-pass filter from 200-2000 and 2000-20,000 Hz; high-pass filter range from 20-200 and 200-2000 Hz; 115/230 V ac, 50-60 Hz, 6 W; 5¼" H × 19" W × 5¼" D $499

PHASE LINEAR

6000 Series Two Analog Delay System
Touchbutton operation recreates sonic and spatial signatures of various acoustical environments; 15 and 60 msec initial delays adjustable by clock control to 20 and 90 msec; five discrete delay paths available; reverb delay time adjustable from 200 msec to 4 sec; THD 0.1% (direct), 0.5% at 0 dB (delayed); input impedance 47,000 ohms; max. input 5 V (direct), 2.5 V (indirect); output impedance less than 5000 ohms (direct and delayed); output level 8.0 V (direct), 4.0 V (delayed); output noise level from 20-20,000 Hz (A weighted) less than 100 μV (direct), less than 80 μV (delayed); frequency response 5-20,000 Hz ±0.1 dB (direct), 40-6000 Hz (delayed, short primary), 40-2500 Hz (delayed, long primary); 5½" H × 19" W × 10" D... ..... $600

1100 Series Two Parametric Equalizer
Five-band stereo parametric equalizer with center frequencies set at 63, 250, 1000, 4000, and 16,000 Hz, ±12 dB boost or cut; separate gain controls and overload indicators for each channel; tape monitor loop with status indicator; bypass switch. Frequency response 20-20,000 Hz +0/−1 dB; THD and IM dist. 0.02% at rated output; rated output 2.0 V rms; input sensitivity/impedance 1.0 V rms/50k ohms; S/N 100 dB at 2 V; gain +6 dB max.; 5½" H × 19" W × 8" D..... $600

1000 Series Two Noise Reducer
Combines features of dynamic-range-recovery system with a correlation noise-reduction system, reduces noise and improves dynamics without pre-encoding; works in the tape monitor of a receiver or preamp; provides 10 dB noise reduction; 7.5 dB of increased dynamic range; adjustable dynamic low

filter for reducing rumble and hum; total distortion less than 0.09%; input impedance 50,000 ohms; input level 250 mV rms; max. output voltage 8 V rms, better than 3 V rms into 2000 ohms; frequency response 20-20,000 Hz ±1 dB; high-frequency noise reduction begins at 2 kHz and is 3 dB, reaching 10 dB from 4 kHz to 20 kHz; low-frequency noise reduction begins at 200 Hz, ultimately reaching 20 dB at 20 Hz; passive subsonic filter rejection of −35 dB at 5 Hz; weighted overall noise reduction is −10 dB from 20 to 20,000 Hz; 3½" H × 19" W × 8½" D $350

PIONEER

SG-9800 Audio Frequency Equalizer
Stereo graphic octave equalizer for tone control with 12 elements: 16, 32, 64, 125, 250, 500, 1000, 2000, 4000, 8000, 16,000, and 32,000 Hz; level control range ±10 dB; frequency response 5-100,000 Hz +0/−3 dB; S/N 92 dB; output impedance 600 ohms max.; THD 0.006% at 1 V from 20-20,000 Hz; max. output 7.5 V; 5⅞" H × 16½" W × 14" D $395

SG-9500 Audio Frequency Equalizer
Stereo graphic octave equalizer for tone control with ten elements: 32, 64, 125, 250, 500, 1000, 2000, 4000, 8000, 16,000 Hz; level control range ±10 dB; frequency response 5-70,000 Hz ±0/−1 dB; S/N 90 dB; **input impedance 200,000 ohms; output impedance 600 ohms;** THD 0.04% at 1 V (20-20,000 Hz); max. output 6 V; 5⅞" H × 16½" W × 13½" D $345

RG-2 Dynamic Range Expander
Dynamic processor provides improvements in dynamic range to enhance realism in reproduced music and in noise reduction to eliminate unwanted tape and record noise; automatic operation; max. output 6.5 V; THD 0.05% at 1 V; dynamic expansion 4, 7, 10, 13, 16 dB; impulse response: attack time 0.3 msec; release time 120 msec; input impedance 50,000 ohms; output impedance 300 ohms; residual noise 10 μV; S/N 100 dB (1 kHz, dynamic expansion 16 dB); twin Fluroscan meters; 3⅞" H × 16½" W × 13¼" D $195

SR-303 Reverberation Amp
Bucket Brigade Device breaks analog signal in segments and passes each through a sequence of storage bits; reverb time 0-3 sec (eff. 1400 Hz) or 25-100 msec (eff. 2400 Hz); HD 0.05% at 1000 Hz, depth control min., output 1 V $195

PSB

InfraSonic Barrier
Designed to eliminate infrasonic frequencies below 20 Hz; 36-dB/octave rolloff. Frequency response 20-100,000 Hz ±0.25 dB; max. input 3 V; input impedance 10,000 ohms; output impedance 50 ohms; gain unity; S/N 100 dB (unweighted); channel balance 0.5 dB; THD 0.008%; 5.5 cm H × 19.5 cm W × 12.7 cm D $109

QSC

X1.2 Electronic Crossover
Two-way crossover incorporates 60 W/ch amp; features balanced/unbalanced phone jack inputs; calibrated crossover frequency controls; calibrated high and low frequency and power amp gain controls; high/low phase switches; dual power supplies; dc protection. Frequency response 20-20,000 Hz +0/−0.5 dB; THD 0.01%; S/N 90 dB (A weighted); input/output levels +20 dB; input impedance 50k ohms balanced, 25k ohms unbalanced; output impedance 300 ohms; black anodized finish; 5¼" H × 19" W × 5⅘" D $478

REALISTIC

TR-803 Dolby System
Reduces hiss and extends dynamic range; switcha-

13 SIGNAL PROCESSORS

ble for standard recordings; dual VU meters; min/sec digital timer; play and record, pause, and auto stop; mic inputs; level controls; walnut vinyl case... ..... $200

REFERENCE by QUADRAFLEX

210EQ Graphic Equalizer

Ten-band stereo graphic equalizer with center frequencies set at 31, 62, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut; has EQ/defeat output and rec out switches; source/tape monitor switch; rated output 2 V rms; THD 0.05%; S/N 85 dB; 7" H × 15½" W × 6¾" D. $200

RG DYNAMICS

Pro-20 Dynamic Processors

Provide up to 20-dB dynamic expansion; continuously variable expansion 4-20 dB; 12-element stereo LED display shows expansion ratios in 4-dB steps for each channel and noise reduction; two-position slop switch; selectable noise reduction; switchable tape output expanded or non-expanded; IM dist. 0.05% max.; THD 0.05% at 1 V (1000 Hz); attack time 600 μsec; hum and noise −86 dB at 1 V; designed for insertion in tape monitor or accessory loop; includes replacement tape monitor function.

Pro-20W. Dynamic processor with silver extruded panel, black finish case with hand-rubbed solid walnut end plates; 3½" H × 12" W × 12" D $395

Pro-20B. Dynamic processor with black extruded panel, black finish case, standard 19-in rack mount; 3½" H × 19" W × 12" D $395

Pro-20BW. Dynamic processor with black extruded panel, black finish case with hand-rubbed solid walnut end plates; 3½" H × 18" W × 12" D $410

Pro-16 Dynamic Processors

Provide up to 16 dB dynamic expansion; continuously variable expansion (4-16 dB); 10-element stereo LED display shows expansion ratios in 4-dB steps for each channel as well as noise reduction; two-position slope switch; 0.1% IM max.; 0.08% THD (1 V, 1 kHz); attack time 600 μsec; hum and noise −80 dB (1 V); designed for insertion in tape monitor or accessory loop; includes replacement tape monitor function.

Pro-16W. Dynamic processor with silver extruded panel, black finish case with hand-rubbed solid walnut end plates; 3½" H × 18" W × 12" D $299

Pro-16B. Dynamic processor with black extruded panel, black finish case, standard 19-in rack mounting; 3½" H × 19" W × 12" D $299

Pro-16BW. Dynamic processor with black extruded panel, black case with hand-rubbed solid walnut end plates; 3½" H × 18" W × 12" D $314

ROTEL

RE-2000 Stereo Equalizer

Ten-band stereo octave equalizer with center frequencies at 32, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut. Features coil-less circuitry; metalized film capacitor for output coupling; AMP-type constant voltage limiter in addition to current limiter circuits in power supply; tape dubbing facility; record/play and EQ bypass switches. Frequency response 10-100,000 Hz +0/−1 dB; THD 0.005%; S/N 100 dB (IHF "A"); input sensitivity/impedance 0.775 V/56,000 ohms; 5⅜" H × 19" W × 13¹³/₃₂" D..... $370

RE-700 Stereo Graphic Equalizer

Seven-band stereo graphic equalizer with center frequencies at 40, 125, 400, 1000, 2500, 6000, and 15,000 Hz, ±12 dB boost or cut; features tone defeat and tape monitor switch; frequency response 10-100,000 Hz +0/−2 dB; THD 0.009%; S/N 100 dB; input sensitivity/impedance 0.775 V/55k ohms; output sensitivity/impedance 0.775 V/600 ohms; 5¹¹/₁₆" H × 16¹⁵/₁₆" W × 10" D..... $180

SAE

2800 Stereo Parametric Equalizer

Four-band parametric equalizer system with control over cut/boost plus bandwidth frequency; separate controls for each channel; input level controls and peak indicators; tape equalization facilities for pre-equalized tape recordings; control functions are divided into four frequency bands (LO, LO-MID, HI-MID, HI); continuously variable frequency adjustment within each band covering 10-320 Hz, 40-1200 Hz, 240-7600 Hz, 1200-15,000 Hz; each band has slider control that adjusts gain over ±16 dB range, detent at center (0-dB) setting; bandwidth adjustment is slider control calibrated in octaves from 0.3-3.6; each channel has master-level slider providing up to 70 dB of attenuation; max. output before clipping 9 V into 10,000 ohms; **input impedance 100,000 ohms; output impedance 500 ohms;** nominal rated output 2.5 V; frequency response (controls at flat) 20-12,000 Hz ±0.25 dB; clipping level 8.5 V at 1000 Hz; THD 0.01% at 2.5 V, 0.028% at 8.5 V; −0.9 dB gain; front panel 8¾" × 19"; chassis depth 3½-in $600

1800. Similar to 2800 except two band..... $350

C-6. Unassembled walnut cabinet for 2800..... $50

C-4. Unassembled walnut cabinet for 1800..... $45

180 Parametric Equalizer

Two-band stereo parametric equalizer with adjustable bandwidth (0.3-3.6 octaves) and center frequency in each control group; features tape equalization facilities and level match controls; frequency response 20-20,000 Hz ±0.25 dB; THD and IM dist. 0.02%; S/N 90 dB; 4¾" H × 17½" W × 3½" D..... $250

4000 Electronic Crossover

Two-band crossover with independent high-low balance controls for each channel; independent high-pass and low-pass controls; THD and IM dist. 0.02%; S/N 95 dB; frequency response 20-20,000 Hz ±0.25 dB; insertion loss 1 dB; 75,000-ohm input impedance; 600-ohm output impedance; rack mountable; 3½" H × 19" W × 3½" D..... $225

5000 Impulse Noise Reduction System

Impulse noise reduction system for reducing clicks and pops (impulse noise) on phonograph records; THD and IM dist. 0.1%; S/N 90 dB; frequency response 20-20,000 Hz ±1 dB; insertion loss 1 dB; 2¾" H × 10" W × 8" D..... $225

SANSUI

SE-7 Graphic Equalizer

Ten-band graphic equalizer with center frequencies set at 32, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±12 dB boost or cut; features two-deck tape monitoring and dubbing, stereo output level control, and equalizer defeat/on/record controls. Frequency response 10-100,000 Hz +0/−1 dB; THD 0.08%; hum and noise −110 dB; matte black finish; 19-in wide with detachable handles for rack mounting..... $300

SE-5 Graphic Equalizer

Eight-band graphic equalizer with center frequencies set at 80, 160, 315, 630, 1250, 2500, 5000, and 10,000 Hz, ±12 dB boost or cut; frequency response 0-100,000 Hz +0/−1 dB; features tape monitor switch, equalizer defeat/on/record controls, and output level control; matte black finish; 19" W with removable rack-mounting handles..... $230

RA-700 Reverberation Amplifier

Continuously adjustable reverb time with visual indication; can handle two tape recorders simultaneously; adds echo effects during recording or playback; frequency response 20-30,000 Hz ±2 dB (at reverb time min.), 20-30,000 Hz ±10 dB (reverb max.); S/N 65 dB at 300-mV output; reverb time 1.9-3.2 sec (at 1000 Hz); input/output jacks; tape recording A and B, tape playback A and B; load impedance 100,000 ohms; simulated walnut-grain enclosure; 4¹⁵/₁₆" H × 11¹/₁₆" W × 10⁷/₁₆" D ... $190

SANYO

PLUS N55 Noise-Reduction System

Features Sanyo's "Super D" tape noise-reduction system designed to keep maximum separation between low and high frequencies with minimum distortion; fluorescent peak-reading signal level meters; multiplex filter, super D, tape/source monitor, and record calibration switches; left/right play level and left/right record level controls. Dynamic range 100 dB; THD 0.08% at 1000 Hz; frequency response 10-30,000 Hz ±1 dB; noise reduction 40 dB max. (using tape deck with 50-dB min. S/N); record/playback input level/impedance 350 mV/50k ohms; record/playback output level/impedance 350 mV/330 ohms; 1¾" H × 17⅜" W (19" with handles) × 11¾" D $360

SERIES 20

D-23 Electronic Crossover Network

Multi-amp electronic crossover network with pure complementary SEPP buffer amplifier and passive and active crossover filters; has low, two mid-low, two mid-high, and high crossover controls; four level controls with three active and three passive slope controls. Cut-off frequency: low and mid-low 63, 80, 100, 125, 160, 200, 250, 320, 400, 500, and 630 Hz; mid-low and mid-high 320, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, and 3200 Hz; mid-high and high 1600, 2000, 2500, 3200, 4000, 5000, 6000, 8000, 10,000, 12,-500, and 16,000 Hz; input impedance 50,000 ohms; output impedance 4000 ohms; THD 0.005% at 1 V out, 20-20,000 Hz; S/N 100 dB at 1 V out (IHF A); 5²⁹/₃₂" H × 16⁹/₁₆" W × 13⅞" D..... ..... $600

SHURE

SR107 Audio Equalizer

Ten-octave audio equalizer; rotary controls for each octave (15-dB boost or cut) at 31, 63, 125, 250, 1000, 2000, 4000, 8000, and 16,000 Hz; 15-dB master level control; LED overload indicator; 20-dB additional adjustable gain; equalizer bypass switch; designed for balanced or unbalanced line input, balanced microphone output, balanced/unbalanced line level output, and unbalanced aux. level output. $297

M63 Audio Master®

Combination equalizer, noise-reducer, and dynamic range enhancer/compressor system; two high-level inputs and five outputs (high-impedance high-level mic, high-impedance mic, low-impedance mic, 600-ohm balanced line, and headphone); high-pass and low-pass (6 dB/octave) filters; separate bass and treble (boost and cut) controls; output VU meter; 120 V ac ±10%, 50/60 Hz, 3 W; 2¾" H × 11¾" W × 6" D..... $176

M677. Transistorized accessory mixer provides six-channel mixer, 600-ohm output, VU meter, and headphone monitor..... $258

SONTEC

HF-230 Stereo Parametric Equalizer

Three-band discrete parametric equalizer with separately-tuned 10-800/100-8000/400-25,000 Hz ranges; infinitely variable slope from 4-14 dB/octave; infinitely variable amplitude ±12 dB in mirror image; switchable upper and lower sections; no transformers, capacitors, or ICs in signal path; usable dynamic range 110 dB; noise 84 dB below 1 V out; THD and IM dist. 0.002% from −30 to 24 dBV; slew rate 200 V/μsec; black anodized rack mount aluminum; 1¾" H × 19" W × 6" D..... $990

SONY

PCM-1 Digital Audio Processor

Analog-to-digital pulse-code-modulation signal conversion system using binary system; also converts coded signals into video signals for record/playback through video tape recording unit. Features 30-LED peak program display, calibrated in 2-dB increments with peak/hold meter switch and clip-level indicators; separate mic and headphone amps for left and right channels; emphasis switch; left/right record level control; input selector. Continuous audio waveform sampled 44,056 times/sec; code 94 bits/horizontal, 16 bits for CRC circuit; data 13 bits/ch; dynamic range 85 dB from 2-20,000 Hz (record and playback); THD 0.03%; frequency response 2-20,000 Hz ±1 dB; input level/impedance 0.3 mV/low (mic), 0.095 V/100k ohms (line), 1 V p-p/75 ohms (video); output level/impedance 0.435 V/100k ohms (line), 1 V p-p/75 ohms (video); headphone load impedance 8-32 ohms; 170 mm H × 430 mm W × 435 mm D..... $4400

SOUND CONCEPTS

SD550 Ambience Restoration System

Dual-channel audio delay system; continuous delay variation from 5 to 100 msec; continuous reverb variation from 0 to 100%; high frequency rolloff from −3 to +6 dB; front mix level from 0 to 100%, rear level 0 to 100%; 50 or 100 msec delay range; rear output delay or quad direct; front output direct or delay mix; input front or quad rear; **input impedance 60,000 ohms min.; output impedance 300 ohms max.**; frequency response 20-10,000 Hz +1, −3 dB with 5 msec delay and zero dB high frequency rolloff; dynamic range 90 dB min.; S/N 85 dB min., 90 dB weighted; 1% max. dist. at 1 kHz and 1 V rms, consisting almost entirely of 2nd harmonic; 3½" H × 15½" W × 9" D $700

SOUNDCRAFTSMEN

EA5003 Power Amp-Qualizer

Incorporates Class "H" integrated amplifier and ten-band two-channel graphic octave equalizer. Equalizer: center frequencies set at 30, 60, 120, 240, 480, 960, 1920, 3840, 7680, and 15,360 Hz, ±12 dB boost or cut; 18-dB zero-gain level controls/ch; EQ defeat; HD and IM dist. 0.01% at 2 V; S/N 105 dB at 10 V output. Amplifier: analog logic design; each channel features LED clipping, vari-portional, and overload indicators and gain controls; speaker switching; non-limiting circuitry and "Auto-Crowbar" protection circuitry with auto reset; output 250 W continuous into 8 ohms; THD 0.1%, IM dist. 0.05%, TIM dist. 0.02%; S/N 105 dB; frequency response 20-20,000 Hz +0.25 dB; slew rate 50 V/μsec; damping factor 100; input sensitivity/impedance 1.28 V rms/15-50,000 ohms. Includes environmental test record and Computone charts; walnut-grain side panels; rack handles; 7" H × 19" W × 15" D $949

SP4002 Signal Processor/Preamp

Ten-band two-channel graphic equalizer/preamplifier. Equalizer: center frequencies set at 30, 60, 120, 240, 480, 960, 1920, 3840, 7680, and 15,360 Hz, ±15 dB boost or cut; features LED input-to-output balancing indicators and 18-dB zero-gain control; HD and IM dist. 0.01% at 2 V; S/N 114 dB at 10 V out, 100 dB at 2 V output. Preamp: features two stereo or four mono phono preamps, each with inputs, outputs, and independently variable ±20 dB gain stage; accepts moving-coil, variable-reluctance, or moving magnet cartridges with 0.28-300 mV output; 0-750 pF variable cartridge loading; pushbutton switching from one to six input sources through subsonic filter, two external processing loops, equalizer, and mono A+B mixer to two tape or two line outputs; three-way tape dubbing; two amplified headphone outputs from 8-2000 ohms; ±20 dB stepped level control; frequency response 5-100,000 Hz ±0.25 dB (hi level), 20-20,000 Hz ±0.5 dB (phono); THD and IM dist. 0.01% at 1 V; phono impedance 47k or 100k ohms switchable; phono S/N 97 dB at 10 mV in. Includes environmental test record and Computone charts; rack-mount brushed aluminum black and silver panel; 7" H × 19" W × 11" D $699

TG3044-R Third-Octave Equalizer

Third-octave stereo equalizer with 15 center frequencies set at 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, and 1000 Hz on ⅓ octave and six center frequencies set at 1600, 2500, 4000, 6300, 10,000, and 16,000 Hz on alternate ⅓ octaves, 22 dB boost or cut (controls full), 15 dB boost or cut (controls flat); features pushbutton EQ defeat, lo-shelf, and separate monitor input and output controls; LED unity gain input-to-output balancing indicators; separate zero-gain level controls; THD and IM dist. 0.01% at 2 V; S/N 114 dB at 10 V out, 100 dB at 2 V out; **input impedance 47k ohms; output impedance 600 ohms (balanced); in/out voltage 12 V;** black anodized aluminum front panel; 5¼" H × 19" W × 11" D $550

PE2217-R Preamp-Equalizer

Ten-band two-channel graphic equalizer/preamplifier. Equalizer: features ±12 dB boost or cut and 18-dB zero-gain/LED input-to-output level balancing; HD and IM dist. 0.05% at 1 V; S/N 106 dB at full output, 96 dB at 2 V. Preamp: features three-way dubbing and tape monitoring; line/tape equalizer circuitry; two separate stereo (or four mono) phono preamps with own left and right and phono 1/phono 2 circuitry; two high-impedance headphone outputs; reverse stereo/mono switching; frequency response 5-100,000 Hz ±0.25 dB (hi level), 20-20,000 Hz ±0.5 dB (phono); THD and IM dist. 0.01% at 1 V; phono impedance 47k ohms; output impedance 600 ohms. Includes environmental test

13 SIGNAL PROCESSORS

record and Computone charts; rack-mount silver/black front panel; 5¼" H × 19" W × 11¼" D. $549

AE2420-R Analyzer/Equalizer
Incorporates dc differential/comparator circuitry for EQ analysis and equalizer; comparator converts wave shapes of pink noise input signal and speaker output signal to dc levels with 0.1-dB accuracy; eliminates precisely-calibrated pink noise generator and provides user with complete system analysis and automatic cartridge adjustment. Ten-band stereo graphic equalizer with center frequencies set at 30, 60, 120, 240, 480, 960, 1920, 3840, 7680, and 15,360 Hz, ±12 dB boost or cut with zero-gain slide controls; includes pink noise generator, 12-in pink noise test record, and Computone charts..... $499

RP2215-R Equalizer
Provides front-panel pushbutton control of line or tape equalization for conventional hi-fi systems or separate stereo outputs for multiple-system equalization; tape monitor circuit provides monitoring equalized program material during use. Features environmental test record for listening environment equalization; four LEDs for front-panel display controlled by zero-gain level controls for input vs output level balancing. S/N 114 dB; THD 0.01% at 2 V, 0.05% at 1 V (typical); ±15 dB boost or cut each octave; **600 ohm output;** black anodized aluminum panel; 5¼" H × 19" W × 11¼" D..... $370

RP2201-R. Similar to RP2215-R without LED/zero-gain balancing circuit; has 18-dB zero-gain controls; S/N 105 dB at 10 V out; ±12 dB boost or cut each octave..... $299
SE450. Same as RP2201-R without environmental test record, Computone charts, and line equalization; S/N 100 dB; available in brushed aluminum silver or black front panel with black vinyl cabinet; not rack-mountable..... $249

SUPEREX

GEM-1 Equallzer
Five-band stereo graphic equalizer module with center frequencies set at 60, 240, 1000, 3500, and 10,000 Hz, ±12 dB boost or cut. Features two-deck switching with tape record/play EQ and tape monitor controls; programmable capability with optional Superex program cards. Frequency response 10-150,000 Hz ±0.5 dB; 0.02% at 0 dB gain; rated output 2 V rms; dynamic range 8.5 V; S/N 92 dB; input impedance 50k ohms; output impedance 600 ohms..... $90

SYMMETRY

ACS-1 Electronic Crossover
Active crossover incorporates class A circuitry and FET input modules; features variable frequency control (infinitely adjustable between 45-450 and 450-4500 Hz); X1 and X10 Hz switch; variable gain and attenuator control; crossover defeat; mono/stereo 12 dB/octave low-pass switch. Input impedance 100k ohms; noise −100 dB below 3 V out at unity gain; THD and IM dist. 0.01% at 3 V; slew rate 200 V/μsec; high-pass gain 20 dB..... $650
ACS-1DC. Direct-coupled version of ACS-1..... $700

TEAC

GE-20 Graphic Equalizer
Ten-band two-channel graphic equalizer with center frequencies set at 31.5, 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz, ±10 dB boost or cut; each channel has 12 dB/octave high- (at 31.5 Hz) and low-pass (at 16,000 Hz) filters, input level control, and LED input overload indicator; unit features output level meter with output level control; operational amplifier-synthesized inductors. Frequency response 20-30,000 Hz ±0.5 dB; THD 0.03%; S/N 85 dB; input sensitivity/impedance 0.3 V, unbalanced/100k ohms; max. output level +18 dB at 8 V..... $350

TECHNICS

SH-9010 Frequency Equalizer
Stereo universal frequency equalizer offers variable center frequencies; five slide pots provided for each channel (60 Hz variable between 20-180 Hz, 240 Hz variable between 80-720 Hz, 1 kHz variable between 333-3000 Hz, 4 kHz variable between 1.3-12 kHz, 16 kHz variable between 5.3-48 kHz); equalizer in/out switch; power on/off switch; one pair input and two pair output jacks provided; rated output voltage/impedance 1 V/300 ohms (1 kHz); THD 0.02%; input sensitivity/impedance 1 V/47k ohms (1 kHz); frequency response 10-20,000 Hz +0, −0.2 dB, 10-70,000 Hz +0, −3 dB; gain 0 ±1 dB; S/N 90 dB; 3³¹/₃₂" H × 19" W × 14¹¹/₃₂" D..... $540

SH-8010 Graphic Equalizer
Five-band stereo graphic equalizer with center frequencies set at 100, 330, 1000, 3300, and 10,000 Hz, ±10 dB boost or cut; EQ on/off bypass and tape source monitor switches..... $180

WHITE INSTRUMENTS

4201 ⅓-Octave Active Equalizer
Active equalizer with 27 ⅓-octave bands from

40-16,000 Hz, 0 to −15 dB cut on continuous control. Features variable 20-160 Hz high-pass filter with 12 dB/octave rolloff; filter Q; all negative feedback circuitry; field-replaceable integrated circuits; **transformer isolated 20,000-ohm input;** two-buffered single-ended outputs; EQ in/out bypass switch. Frequency response 20 (−3 dB)-20,000 (−2 dB) Hz; dist. 0.1% from 20-20,000 Hz; noise −92 dBV at 20,000 Hz; **gain variable from unity to +10 dB;** max. output **+18 dBV into 600 ohms;** 3½" H × 19" W × 9" D $730

4203. Same as 4201 except has **two transformer-isolated 300-ohm outputs; max. output level +15 dBV into 600 ohms, +18 dBV into 5000 ohms** $780

4100 Active Stereo Octave Equalizer

Ten-band stereo active equalizer with center frequencies from 31.5-16,000 Hz, ±10 dB boost or cut. Each channel has input level control, high-pass filter, EQ in/out bypass controls, peak signal detector, and optional low-level crossover capability; all negative feedback circuitry. Frequency response 20 (−3 dB)-20,000 (−1 dB) Hz; THD 0.1% at +18 dBV; IM dist. 0.004% (SMPTE); noise −92 dBV at 20,000 Hz; **max. output level +18 dBV into 600 ohms;** 3.25" H × 19" W × 9" D $700

4220 Passive Octave Equalizer

Passive octave equalizer with nine filters from 63-16,000 Hz, 10-dB cut/band; filters are single-tuned parallel L-C circuits. Features front-panel EQ in/out bypass switch; optional low-level crossover networks for bi-amp systems. Impedance 1000 ohms (source), 10,000 ohms (load); dist. 0.05% to +20 dBV; 1¾" H × 19" W × 5½" D $220

BOLDFACE indicates that the machine has professional qualities.

13 MIXERS

BOZAK

CMA-10-2 Stereo Mixer

All-silicon solid-state ten-in/two-out stereo mixer; each input has individual level control, speech/music switch, and 10-dB input attenuator in mic mode, switchable at front panel to left or right output or both; modular design accepts variety of plug-in low- and high-level circuit cards. Output channels have separate bass and treble controls with 10 dB boost or cut, VU meter, and independent range switch; master gain control. Gain 78 dB max. with A-1002E card and CMA-481 transformer; frequency response 20-20,000 Hz ±0.25 dB; power output +24 dBm; input impedance 200 ohms (with mic transformer), 100k ohms (low-level direct), 47k ohms (magnetic phono), 50k ohms (high level); load impedance 600 ohms balanced (with CMA-558 transformer) or unbalanced; dist. 0.25% at +24 dBm; noise −125 dBm; 7" H × 19" W × 12" D $1250

CMA-10-1. Similar to CMA-10-2 except has mono output; gain 90 dB with A-1002E card and CMA-481 transformer; output hum and noise −70 dB; 5¼" H × 19" W × 5¼" D $825

A-1002E. Microphone preamp card $25

A-1017A. High-level preamp card $6

CMA-481. Microphone input transformer $43

CMA-10-2DL Stereo Mixer/Preamp

All-silicon solid-state mixer/preamplifier with two low-level phono magnetic and two high-level high-impedance stereo inputs with own fader and balance controls; two mic/line mono outputs switchable for use with high- or low-impedance microphones. Phono preamp input has RIAA equalization, input 47k ohms, overload 100 mV; low-level mic preamp input for low-impedance (200-ohm) mic. Two output channels with own bass and treble controls and adjustable master gain control; phone jack with level control; phone jack with level control; signal processing loop; output +24 dBm unbalanced or 12 V into 600 ohms. Frequency response 20-20,000 Hz ±0.25 dB; gain dBV (phono), 25 dBV (aux.), 85 dB (mic); noise −125 dBm; satin-anodized aluminum front panel; 5¼" H × 19" W × 17" D $825

DUBIE

CD-35 Sound Control System

Sound control system integrates up to six recorders, two turntables, four signal processors, and amplifier/receiver through one-time hookup of patch cords; multiple operations for recording, dubbing, mixing sound-on-sound, playback, fade, monitor on 12 different channels, fade from one turntable to another, and use of signal processors for sound enhancement. Front-panel controls include 12 patch devices for signal processors, two fade controls for amplifier/receiver and one for two turntables, two dub switches, 12-position monitor switch and five solid-state four-position recorder controls plus auxiliary switch for sixth recorder; rear panel connections for patch cord devices from signal processors, turntables, recorders, and receiver/amplifier; aluminum front and rear panels with walnut vinyl cabinet. Max. input signal 10 V at 1000 Hz; frequency response 0-100,000 Hz on all functions; 8" H × 16¾" W × 5½" D $400

CD-10 Sound Control System

Sound control system integrates up to six recorders and receiver/amplifier through one-time patch cord hookup; dubs, records, plays back, mixes sound-on-sound, monitors, and fades; six solid-state four-position recorder controls; eight-position monitor select control; two fade controls; rear-panel connections for recorders and amplifier/receiver. Max. input signal 10 V at 1000 Hz; frequency response 0-100,000 Hz on all functions; 4" H × 13¹³/₁₆" W × 5¾" D $150

CD-5. Similar to CD-10 except three-recorder capacity; 4" H × 9⅜" W × 4⅞" D $100

JVC

MI-5000 Master Mixer

Six-channel master mixer; each channel features 10-dB input level slide controls with 20-dB master input level control, independent pan pots, LED overload indicators, four-position mic/att/phono/line select switches, and echo switches with three-sec variable echo level control. Additional features include mix out/tape in monitor select switch; two VU meters; input jacks for phono, line, tape, and mic; recording, monitor, and headphone jacks. Min. input/impedance 0.2 mV/200-5000 ohms (six-channel mix), 1.4 mV/47k ohms (phono), 80 mV/100k ohms (line and tape); rated output level/impedance 0.3 V/600 ohms (rec and monitor), 0.3 mW/8-1000 ohms (headphones); frequency response 20-30,000 Hz −3 dB (mic and line), 30-20,000 Hz ±0.5 dB (phono RIAA), 10-25,000 Hz −1 dB (tape in); dist. 0.5%; S/N (IHF A) 56 dB (mic), 67 dB (line), 65 dB (phono); 127 mm H × 482 mm W × 347 mm D $430

MI-E60 Microphone Mixer

Six-channel microphone mixer with reverberator. Frequency response 30-25,000 Hz −3 dB; reverberation time about 3 sec from 200-2,000 Hz; gain loss in passive mode 13 dB min $250

PIONEER

MA-62A 6-Channel Mixer

Has input facilities for up to six mikes; each channel has alternative terminal for line or phono inputs; two channels equipped with pan pots, four with location switches; mike attenuators for each channel; low-cut filters for mike input; portable design; two stereo output terminals; pointer-index markers for each of six long-throw faders (plus master volume faders); 5¹³/₁₆" H × 15¾" W × 10⅜" D $250

ROTEL

RZ-8 Play Mixer

Stereo mixer with built-in electronic rhythm maker and echo chamber; designed to produce endless series of rhythm backups for solo instrumentalist or provide ambience for singer with electronic echo chamber. Mixer: seven-input mix includes two turntable, two tape deck, and three mic/guitar inputs with individual volume level control, 600/50,000/200,000 ohm impedance selector, and professional fader; inputs can be headphone-monitored. Rhythm section: produces up to ten different rhythms with selection of nine different instruments; solid-state echo chamber with blend controls. Frequency response 5-50,000 Hz (line and rhythm inputs), 5-30,000 Hz (mic); THD 0.04% and 0.05% (line, phono, and guitar inputs), 0.15% (mic in); S/N 80 dB (line in), 75 dB (other sections), 60 dB (mic in); two VU meters; 7¹³/₃₂" H × 19" W × 15" D $620

SANSUI

MA-7 Monitor Consolette

Monitor consolette features dual-function peak-hold meters reading watts or VU dBs and separate left/right full-range cue monitor speakers; has adjustable input sensitivity buttons (−20 to +20 dB) with variable level control; monitor level control; built-in 400 and 10,000 Hz calibration oscillator with oscillator level control; amplifier for headphones or speakers; rack-mountable $330

AX-7 Mixer/Recording Consolette

Four-input stereo mixer with built-in reverb unit features monitor selector (source, mixing out, tape 1, 2, 3); front-panel jacks for connection of portable stereo tape deck, etc; recording mode (tuner, AM/FM, mixing out, source/tape, three-position tape copy); mixing selector (source, tape 1, 2, 3, and off); mixing balance control; master volume control; reverberation selector permits addition of "reverb" to input connected microphones, guitars, and/or line sources; reverberation control (0-3.2 sec); input selector (line, guitar, and mic with sensitivities 1 mV, 20 mV, 150 mV); panpots left and right for each channel; level controls; attenuator; low-cut switch. Frequency response (source/tape) 20-20,000 Hz +0 dB, −0.5 dB, (mic/guitar/line) 20-20,000 Hz +0 dB, −1 dB; THD 0.1% at or below 2 V rms; IHF hum and noise (mic) 61 dB, (guitar) 58 dB, (line) 69 dB, (source) 78 dB; channel separation (source) 70 dB at 1000 Hz, (tape) 70 dB at 1000 Hz; max. output 5 V into 47k ohms at 0.1% THD; 4⅜" H × 16¹³/₁₆" W × 11¼" D. $300

SHURE

700 Pro Master Sound System

Six balanced low-level transformer-coupled input channels, each with pre-fader monitor send, effects/reverb send, high- and low-frequency equalization, pan pot, input attenuator, LED clipping indicator, and volume control; master controls; handles condenser microphones through built-in 24-V simplex power supply; two additional aux. level inputs for channels 7 and 8. Feedback finder ten-band stereo equalizer with ISO center frequencies set at 63, 125, 250, 500, 1000, 2000, 4000, 8000, and 16,000 Hz ±10 dB boost or cut. LED status, peak-reading, power amp overload, and temperature warning indicators; rear-panel patch block; frequency response 40-20,000 Hz ±2 dB $990

701. Speaker system for 700; has 15-in woofer and high-frequency horn; handles 150 W continuous; SPL 100 dB at 4 ft with 1 W; high-frequency horn has 60-degree long-throw and 120-degree wide-angle dispersion; ⅝-in plywood and structural foam enclosure $495

SE30 Gated Compressor/Mixer

High-quality gated memory compressor combined with a self-contained portable three-input mixer and remote amplifier; frequency response 30-20,000 Hz ±2 dB; gain below compression threshold, output terminated, (line) 600 ohms, (microphone) 150

13 MIXERS

ohms, (aux.) 47k ohms; input noise −129.5 dBV; dist. 0.5% THD at +15 dBm output, 30-20,000 Hz; compression ratio 10:1 typical from 10 to 20 dB compression, 5:1 min. from 10 to 30 dB compression; compression threshold (mike) −96 dBV at max. input gain, (line) −48 dBV; recovery time adjustable from 100 msec to 8 sec; attack time same as recovery time for increases up to 12 dB; gated memory less than 20 dB gain recovery after 1 min in "hold" condition; 108-132 V ac, 50/60 Hz; 3½" H × 15" W × 10" D $541

M67 Professional Mixer
Professional mixer provides four low-impedance transformer-coupled balanced microphone inputs (one convertible to line input); balanced 600-ohm line and microphone level outputs; illuminated VU meter calibrated for +4 and +10 dB out; extremely low noise and r-f susceptibility; 120 V ac ±10%, 50/60 Hz; 2¾" H × 11⅜" W × 7½" D $277

M677 Accessory Mixer
Transistorized six-input accessory mixer for use with Shure models M67 and SE30; obtains power from associated Shure mixer or battery power supply $258

Microphone Mixers
All models have independent volume controls and a master volume control which simultaneously controls the gain of all inputs; 2¾" H × 11⅜" W × 5¼" D; weight 4 lb.
M68. Input connections are male professional three-pin audio connectors for 120 V ac ±10%, 50/60 Hz..... $162
M68FC. Input connections are female professional three-pin connectors for 120 V ac ±10%, 50/60 Hz $162
M68FCE. Similar to M68FC, but for both 105-130 V ac, 50/60 Hz and 210-260 V ac, 50/60 Hz with three conductor cable..... $166

SONY

MX-20 Professional Microphone Mixer
Eight-channel in/four-channel out microphone mixer for studio or sophisticated amateur recordings. Features three-position mic input attenuator; balanced mic input and output with XLR connectors; cascade connector for coupling two MX-20's to produce 16-channel input mixer; five-step equalization control in channels one through six; pan pot and dead center controls; slide master fader; slanted front panel with carrying handle; four VU meters; abundant output level. Mic input sensitivity −72 dB (0.2 mV), low impedance; line-in impedance 100,000 ohms, sensitivity −22 dB (60 mV); mike attenuation off, −15 dB, −30 dB, −45 dB; output impedance (line-out) 600 ohms balanced, 10,000 ohms unbalanced; output impedance (headphone) 8 ohms; frequency response 30-20,000 Hz +0 dB/−1.5 dB; S/N 65 dB; 7 13/16" H × 18 9/16" W × 16¾" D..... $1275

MX-650 Microphone Mixer
Six in/two out channel microphone mixer for sophisticated two-channel recording; each input channel can be set to feed left or right line output and each output channel can be Y-ed to left and right line outputs simultaneously. Features pan pot control; two-position mic input attenuator; pre-set indicators; cascade connector; built-in oscillator; master fader. Mic input sensitivity −72 dB (0.2 mV), low impedance; 100,000 ohms line-in impedance, sensitivity −22 dB (60 mV); phono in impedance 50k ohms, sensitivity −51 dB (2.2 mV); mic attenuation off, −15 dB, −30 dB; output impedance (line-out) low, more than 600 ohms, high, more than 10,000 ohms; output impedance (headphone) 8 ohms; frequency response 30-25,000 Hz; S/N 60 dB; 3⅜" H × 17 7/8" W × 10" D..... $310

MX-510 Microphone Mixer
Five channel inputs; two channel outputs. Features two-way (battery/ac current) power source; five mic inputs for low impedance mikes; three line inputs for tape recorder, tuner or amplifier; two phono inputs for record player; pan pot control; slide master fader control pre-set indicators; two VU meters. Sensitivity −72 dB at 0.2 mV (mic in, low impedance), −22 dB at 60 mV (line in), −51 dB at 2.2 mV (phono in, RIAA); impedance 100k ohms (line in), 50k ohms (phono in); mic attenuation off −20 dB; output level/impedance −5 dB at 0.435 V/10k ohms (line), −24 dB at 49 mV/8 ohms (headphone); frequency response 30-25,000 Hz; S/N 60 dB; 3" H × 13¾" W × 9½" D..... $225
As of press time, Sony will introduce the MX-7, MX-5, and MX-670 microphone mixers at $70, $45, and $425, respectively. For more information, write directly to Sony.

SOUND WORKSHOP

1280 Recording Console
12-in/8-out recording console; 8 × 2 stereo control room monitor mix; 8 × 1 musician's cue mix; independent 2-track mixdown buss; each input has three-band equalization, 35 dB trim control, push-button track assign, full panning, echo send, locking solo and mute switches, straight-line fader, and pre- and post-fader patch points; Tri-Lite LED readout for all 10 output busses; 105-125-V ac, 50/60 Hz, 20 W; 5½" H × 27" W × 20" D..... $2900
1280B. Same as 1280 but with studio-quality balanced transformer mic-pres..... $3280

TAPCO

Catalina Series C-12 Mixing Console
12-in/four sub-group direct out/stereo and mono out sound reinforcement/mixing console; features mic/line switching; front-panel patching system; switchable metering of all outputs; two pannable effects returns; three separate sub-busses comprising monitor, pre EQ/channel gain, pre or post aux. buss, and post effects buss; full priority solo system; headphone monitor system; ±18 dB bass, ±12 dB midrange, and ±18 dB treble EQs/input channel; 100-mm slide-gain controls; front-panel mounted patchbay; +48-V phantom power for high-quality condenser microphone..... $1999

TASCAM by TEAC

Model 5B Mixing Console
8-in/4-out mixing console. Input module: 0, 20, or 40 dB of mic padding; 0-20 dB mic, tape, or line trim; foldback pre EQ and fader cue; foldback post EQ and fader echo; 15 dB boost or cut at 3 or 10 and 75 or 200 Hz; pan automatically engages for multi-output assignment; LED overload indicator; straight-line fader. Submaster module: buss tape monitor; tape cue; monitor gain and pan; echo receive; submaster fader. Master module: 400-Hz test tone; four-channel monitor; studio monitoring; control room monitoring; solo level control; master fader; VU-type level averaging meters and peak-indicating LEDs; optional talkback module available. Frequency response 30-20,000 Hz ±2 dB; S/N 75 dB weighted (one input, mic or line), 65 dB weighted (8 inputs, mic or line); crosstalk −60 dB at 1 kHz; 0.3% THD max.; 117-V ac, 60 Hz, 40 W; 7½" H × 23⅛" W × 24½" D..... $1900
Model 5BEX. Eight-input expander for Model 5B $1400

Model 3 Mixing Console
8-in/4-out mixing console. Input section: 0, 20, or 40 dB of mic padding; mic/line input selector; 15 dB boost or cut at 3 or 10 and 75 or 200 Hz; pan automatically engages for multi-output assignment; straight-line fader; three-position output-to-headphone (off/monitor/submix); master fader; PA mixing capability; six lo-Z balanced mic inputs; two hi-Z unbalanced mic inputs; aux. outputs in parallel with line outputs; accessory send and receive; VU-type level averaging meters and LED peak indicators. Frequency response 30-20,000 Hz ±2 dB; S/N 60 dB weighted min.; crosstalk −60 dB at 1 kHz; 0.3% THD max.; 117-V ac, 60 Hz, 18 W; 6¼" H × 18¼" W × 20½" D..... $990

Model 1 Mixer
8-in/2-out line level mixer; independent gain and pan for each input channel; master gain; foldback for each channel; aux. outputs in parallel with line outputs; separate buss inputs; contains 1-W amp with level control for two stereo headphone feeds; S/N 78 dB weighted; frequency response 30-20,000 Hz ±1 dB; crosstalk −50 dB at 1 kHz; 0.3% THD max.; 117-V ac, 60 Hz, 8 W; 4⅜" H × 17⅛" W × 4" D..... $180

TEAC

Model 2A Audio Mixer
Features six inputs (mike or line in any combination), four outputs; level controls for each input channel; master output level control; cue out jack on each input channel; accessory send/receive patch points on each output buss for reverb units, graphic equalizer, limiters, compressors, noise-reduction units, other signal processing equipment; four aux. outputs in parallel with four line outputs; selectable high-cut filters at 5 kHz or 10 kHz; low-cut filters at 100 Hz or 200 Hz; color-coded push-push channel assignment buttons with pan on each channel; 3 17/32" H × 13 7/16" W × 14 9/16" D..... $475

MB-20 Meter Bridge
For line-level applications; complements Model 2A Audio Mixer; four VU meters; LED peak-level indicator; built-in 4 × 2 monitor mixer; headphone amp; independent monitor switches; variable input sensitivity selector $250

14 ACCESSORIES

ACE AUDIO

4000 Subsonic Filter
Low-frequency filter with four rear-panel connectors providing 18 dB/octave rolloff at 20 Hz or under, −3 dB; IM dist. 0.01% at 1-V output; input impedance 47,000 ohms; output impedance 150 ohms; 8 V max. output; 10,000-ohm min. output load; hum and noise −86 dB; 2¼" H × 6" W × 4⅜" D $89.50
Kit $59.25

ADCOM

Record Care System
Record cleaning system contains two weighted unidirectional brushes, one to damp clean record surface and one dry brush to remove any excess fluid $19.95

Electronic Static Eliminator
Piezo-electric static-eliminating instrument with dual-emission chambers and damped trigger $19.95

Carbon Fiber Record Sweep
Anti-static brush has thousands of conductive fibers designed to remove dust from records or film..... $14.95

Carbon Fiber Headshell
Low-resonance low-mass carbon fiber headshell with non-tarnishing gold plated terminal pins..... $11.95

Carbon Felt Turntable Pad
Felt-like pad impregnated with electrically conductive carbon fibers to dissipate accumulated static electricity on records..... $9.95

R.B. ANNIS

K20/B5 Han-D-Kit
Kit's purpose to measure and eliminate magnetism in recorder components before recorded tapes are damaged; includes gauss-calibrated (5-0-5) pocket magnetometer that measures level of magnetism, magnetically soft and magnetically hard test sensor strips, 1¾-in clip-on extension probe, and dual-use demagnetizer with 350-oersted sine wave demagnetizing field strength ¼-in beyond tip of 2¼-in long probe $38.50
K25/S5. Same as K20/B5 except includes larger jewelled magnetometer with ten times calibration level; 400-oersted sine wave demagnetizing field strength $65.80

Company also sells individual components of kit separately as well as different gauss ranges of the 20 and 25 magnetometers.

AUDIO-KARE

Quietone
Anti-static record preservative lubricant..... $7.95

AUDIO-TECHNICA

AT6002 Autocleanica™
Double-action disc cleaning system combines soft carbon-conductive brush and plush pad to loosen and remove groove dirt; small arm on weighted base may be placed on motorboard; may be used with most manual turntables or automatic when in manual mode; replacement pad and brush kit available. $12.95
AT602. Replacement Kit for AT6002 ..... $2.95

AT6010a Disc Whisk™
Consists of dropper, anti-static cleaning fluid (applied from back for streaker-free use), pad holder, cleaning edge, adhesive for mounting holder, fluid (AT608), and instructions $6.95
AT608. Anti-static record-cleaning fluid $2.50

AT6012 Sonic Broom™
Record-cleaning system with controlled-density fibers 6 microns in diameter; cleaning fluid may be applied to reservoir or directly to pad; includes holder with cleaning surface, AT608 fluid .. $12.95

AT607 Stylus Cleaning Formula
Cleaning solution dissolves foreign material on stylus without harming known stylus adhesives; in bottle with stylus brush $3.95

PDQII Record Cleaning System
Kit including AT6002 brush, AT6012 cleaner, AT607 stylus cleaner, AT 608 solution $28.95

AT605 Audio Insulator System
Vibration-damping feet for use under speakers, turntables or both to prevent acoustic feedback; height individually adjustable; supplied in set of 4, with bubble level $26.95

AT617 Sonic Tonic
Fluid damping compound with applicator bottle; dries to clear; resilent gel $6.95

AT618 Disc Stabilizer
Solid brass disc with rubber coating designed to damp out sound-coloring resonances; fits over turntable spindle $19.95

AT6005 Pneumatic Tonearm Lift
Adapts to any tonearm, gently lifts stylus from any point on record; pneumatic action cushions motion; separate lift and control units allow control to be located where most convenient; for turntable platters 1⁹/₁₆" to 2" high, provides ⁹/₆₄" lift; requires just two ⁹/₁₆"-diameter holes; includes 20" control tube $29.95

AT6006a Safety Raiser™
Automatic pneumatic tonearm lift at end of play; height adjustable $19.95

Universal Headshells
AT-N. Basic type $6.95
AT-S. Similar to AT-N except with improved rigidity and lower mass $8.50
AT-D. Professional quality; low mass; cast aluminum alloy $12.00
AT-MS. Extra lightweight, low-resonance magnesium headshell with built-in damping; includes AT609 cartridge wires; built-in stylus overhang adjustment screw $24.95

Vital Link™ Cable Series

AT62C Super Conductivity Cable Set
Litz wire construction with double shielding and gold-plated connectors; for low impedance and maximum rejection of r-f interference; set of two..... $29.95

AT622 Universal Tonearm Cable
Low-resistance cable for manual turntables; 51-in braided copper shield; color-coded molded phono plugs; gold-plated connectors $19.95

AT618a Cable Set
Low-capacitance cables for connecting turntable and amplifier; 4-ft shielded cable with molded pair phono plugs each end; golf-plated connectors and separate ground wire; only one set needed per turntable $9.95

AT641 Cable Connectors
Two gold-plated female phono feed-through cable connectors; extends length of other Vital Link cables $7.95

AT609 Headshell Wire Set
Replaces original headshell wiring; set of four color-coded connectors made of silver litz wire and gold-plated $6.95

AUDIO TECHNOLOGY

510 Peak-Responding LED Display
Combines functions of peak power indicator and peak line level monitor; 16 LED/ch display peak value of complex waveforms within ±0.25 dB; dynamic range of 45 dB resolution; responds to peak power output from 0.003-400 W; rear panel switches set 0-dB reference to 25, 50, or 100 W and match speaker impedances of 4, 8, or 16 ohms; line level inputs continuously variable from 50 mV-5 V with calibrator that balances channels and returns line level mode to 0 VU reference; frequency response 20-20,000 Hz; input impedance 10,000 ohms (line), 20,000 ohms (power); display attack time 750 μsec; display decay time 650 msec; 1¾" H × 7½" W × 5½" D..... $140.00
510B. Multi-color display with green LEDs covering −39 to −1 dB range, yellow LED at 0 dB, and red LEDs covering +1 to +6 dB range..... $150.00

AUDIOTEX LABORATORIES

30-8710 Speaker Selector Switch
Controls up to five pairs of stereo speakers; contains two stereo headphone jacks; barrier-type terminal connectors; constant minimum load circuit with 50 W load resistors protects amplifier, min. impedance 4 ohms $49.50

14 ACCESSORIES

30-8714 Tape and Input Control Unit
Stereo switching panel contains input phono pin jacks for amp, two aux. and two tapes, output phono pin jacks for amp and two tape machines, and 5-pin DIN connector for signal processor input and output; permits dubbing in either direction while listening to another input source; equalizer can be switched in and out of circuit as desired; front-mounted controls include aux. 1 and 2, tape monitors 1 and 2, two tape dubs, and processor switch $38.50

LP Cleaning Kit
Includes aerosol Record Basic for removing lubricants, Record Plus lubricant, cleaning tools and book on record care..... $11.90

The company carries a complete line of tape accessories for use with open-reel, cassette, and 8-track equipment.
30-129. Tape Care Kit, Jr. contains head cleaner, cotton swabs, and cleaning cloth..... $2.70
30-630. "Blast-off" tape head cleaner, 3-oz aerosol can..... $2.00
30-128. Same except in 6-oz aerosol can..... $3.55
30-124-1. Recording head cleaner, 2-oz bottle $1.70
30-124-2. Recording head lubricant, 2-oz bottle $1.70
30-636. Tape player care kit contains cleaner and head lubricant, two 6-in brushes, 10 plastic pouches to protect tape reels, cassettes, or cartridges..... $4.15

BIB

90AE Tape Head Demagnetizer
Tape head demagnetizer designed for reel-to-reel and cassette machines $19.95

115AE Tape Head Cleaner
Multi-angled tape head cleaner for use on all tape recorders; includes inspection mirror, cleaning brush, bottle of cleaning fluid, and replacement tips $10.50

24AE Cassette Tape Splicer
1/8-in cassette tape splicer suitable for recording tape of any thickness; makes diagonal or butt splices..... $13.95
1/4-in recording tape splicer..... $13.95

116AE Disc Care Kit
Record maintenance kit contains Bib groov-stat static reducer, record valet manual record cleaner, and stylus cleaner with inspection mirror.... $46.00

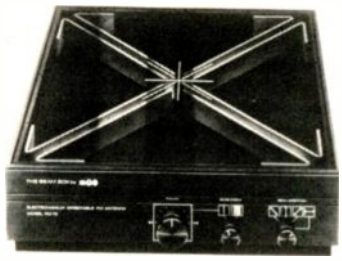
117AE Stylus Balance
Precision-made stylus balance calibrated to be accurate within 1/4 g, from 1/4 to 5 grams..... $13.95

101AE Groov-Kleen
Parallel tracking Groov-kleen record cleaner removes dust while record is playing..... $13.95

110AE Record Valet Cleaning Brush
Hand-held record cleaner with anti-static liquid supplied for reservoir..... $13.95

B·I·C

FM10 Beam Box FM Antenna
Component-styled electronically directable FM antenna; passive electronic circuit directs sensitivity patterns in four geographic quadrants with 8th-wavelength extruded aluminum elements; tunable front end; broad and narrow bandwidths; improves image rejection, i-f rejection; frequency range 88-108 mHz; gain −5 dB (narrowband), −12 dB



(broadband); output impedance 300 ohms (balanced), 75 ohms (unbalanced); standing wave ratio less than 1.5-1 (narrowband); bandwidth 3 mHz at −3 dB points (narrowband); comes with 44-in 300-ohm transmission line and spade lug connectors; black metal with opaque plastic cover; 4 1/4" H × 14 1/2" W × 14 3/4" D..... $89.95
FM8. Similar to FM10 except antenna gain −7 dB (narrowband), −14 dB (broadband); for 75-ohm operation, external transformer with coaxial connector required; walnut grain vinyl; 3 1/2" H × 12 7/8" W × 14" D $49.95

CROWN

RTA-2 Real-Time Audio Analyzer
Real-time spectrum analyzer in 1/3- and full-octave bands, switch selectable; consists of 32 single-pole-pair 1/3-octave bandpass filters centered on 1/3-octave intervals. Features 5-in scope; lighted graticule; built-in pink-noise generator; 800-20,000 Hz and 16-630 Hz fast/slow integration rate select controls; 5 or 10 dB/division select control; 0-70 dB input level control in 10-dB steps, 40-dB range vernier; internal balanced-input gain control. Frequency response 16-20,000 Hz; **sensitivity at full-scale indication 15.2 mV-150 V, max. in (unbalanced), 0.76 mV-3 V, max. in (balanced);** scans 32 channels in 16.6 msec; max. output 1.1 V rms min.; **balanced output 600 ohms/50 ohms (male XLR front connector), unbalanced output 300/25 ohms** (1/4-in phone jack front and rear panel connector); 7" H × 19" W × 15" D..... $2595

CUSTOM CASE

DL-30 Cassette Case
Attache-style cassette carrying case holds 30 cassette tapes and comes in black or brown vinyl finish with aluminum valance and nickel plated hardware $11.99

DL-24 8-Track Case
8-track carrying case holds 24 tapes and comes in black, chocolate, musket, burgundy, or camel vinyl finish with aluminum valance and nickel plated hardware..... $11.99

#C-30 Cassette Case
Briefcase holds 30 cassettes in red flocked styrene slots; comes in black alligator-grain vinyl leatherette $4.99
#C-12. Similar to C-30 except holds 12 tapes..... ..... $2.39

#54 Tape Case
Carrying case holds 24 tapes or 48 unjacketed cassettes in individual styrene slots; comes in black alligator-grain vinyl leatherette or blue denim.$4.99

DB SYSTEMS

DBP-6 Phono Equalization Kit
Designed to suit frequency response of moving-magnet cartridge to its capacitance load requirement; adds 100-400 pF on phono input of preamp or receiver; kit includes ten color-coded plugs with wired-in polystyrene capacitors for 100, 150, 200, 300, and 400 pF added capacitance, two 100-ohm loads for adjusting moving-coil cartridges, two spare plugs, two Y cable connectors, and capacitance chart..... $24.95
DBP-11. Capacitance-loading switching box similar to DBP-6; features switch-selectable capacitance loading for two moving-magnet cartridges... $80.20

DB-7 Phase Invertor/Bandpass Filter
Increases power output of stereo power amplifier by four times through bridging into mono amplifier and effects a 20-20,000 Hz frequency response to less than 0.3 dB; features buffered inputs and outputs, switchable positive or negative phase for either or both channels, stereo bridging outputs, 18-dB/octave subsonic and Bessel 18-dB/octave supersonic filters; gain in inverted mode 0.1 dB of non-inverted gain; requires DB-2 power supply or DBP-1 auxiliary cable..... $150.00
DB-2. Power supply for DB-7 ..... $62.00

DBP-10 Phono Alignment Protractor
Mylar-laminated protractor measures lateral tracking error of mounted cartridge to 1/4 of one degree; designed to optimize geometry and minimize distortion in tonearm/cartridge combination..... $19.95

DECCA

Record Brush
Record brush with a million conductive carbon fiber bristles to clean records and remove static.. $16.95
Zero Control. Similar to Record Brush except with conductive disc on handle that gives zero-ohm resistance between handle and bristles to improve static drain $18.95

Record Cleaner
Arm-type "dry" cleaner with 20,000 conductive carbon fiber bristles; ground wire to amplifier for static drain path..... .. $16.95

Microbe
Three-way cleaning brush that mounts on cartridge; adds 1/2-g tracking force; fiber brushes function as stylus protector, stylus cleaner, and record cleaner/static drainer..... $9.95

DEVLIN

Speaker Stands
Model 10. Chrome tubular steel stands for average sized speakers; 14-in high × 12-in wide.... $49.95
Model 20. Chrome stand supports speakers weighing up to 50-lb; 13-in high × 10.5-in wide. $59.95
Model 30. Black steel stand for speakers weighing up to 50-lb; 13-in high × 16-in wide $70.00

Record Care Products
Continuous Cleaner. Auto anti-static record cleaner $16.95
Brush. Manual anti-static record cleaner $14.95
BX7. Auto-record cleaning arm $14.95
Rexon Cleaner. Auto-record cleaning pad.... $11.95

DISCWASHER

DiscKeeper
Record rack has calculated compression bar to hold records flat and upright; bar pulls forward to "page through" albums; walnut and custom-formed anodized aluminum in dark natural wood and black matte; wall-mount hardware included $65.00

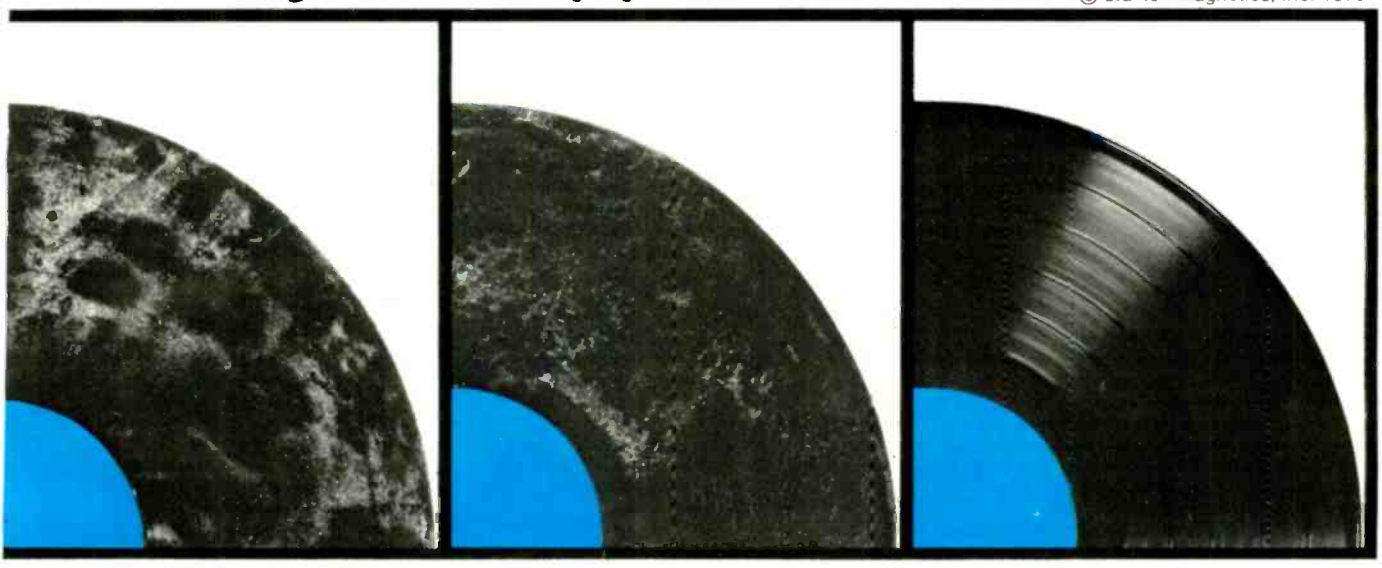
D3 Record Cleaning System
System comprises a two-part kit containing special fluid and soft-pile fiber brush. Removes micro-dust,

The Revolutionary Record Care Breakthrough weeping the Country... because it really works!

Permostat™

from Stanton

eliminates record static permanently with only one application!



UNTREATED RECORD **BRAND X** **PERMOSTAT**

Permostat from Stanton is a new and uniquely formulated fluid, which permanently eliminates record static and accompanying noise with a single application...with no degradation in sound quality.

To demonstrate Permostat's anti-static qualities, Stanton constructed a dust chamber to perform accelerated dust pickup tests. Three records were suspended vertically within the chamber...the first untreated...the second treated with anti-static products currently available (piezo electric guns, fluids, cloths and conducting brushes)...and the third treated with Permostat.

Only the Permostat-treated record showed no visible evidence of dust and no residual charge.

Each Permostat kit provides permanent protection for 25 records (both sides). Just spray it on, buff it in and eliminate static for the life of your records.*

You'll never play a dusty record!

Suggested retail:
Complete Kit:...$19.95
Refill:...$15.95

*Normal considered record life expectancy is 100 plays.

For further information contact: Stanton Magnetics, Inc., Terminal Drive, Plainview, New York 11803

STANTON

THE CHOICE OF THE PROFESSIONALS™

The only record care product selected for the 1979 Summer Consumer Electronics Show Design and Engineering Exhibition.

CIRCLE NO. 72 ON READER SERVICE CARD

14 ACCESSORIES

fingerprints, and cigarette smoke. Also eliminates destructive biological growth. Leaves no residue.
Complete kit $15.00
Replacement fluid..... $2.25
DC-1. Brush designed to clean Discwasher Record Care pad; available free of charge with all Discwasher Systems and DiscKits; also sold separately $0.69

Discorganizer
Milled walnut tray with dust cover which will house the record-cleaning system and provide space for reserve spindles, stylus guards, cartridges, and other phono accessories..... $12.50

D'Stat II Mat
Very thin fiber turntable mat which polarizes record surface to reduce static during playback $7.95

Hi-Fi Seer
Audio equipment illuminator has integral flashlight and mirror system; illuminates behind panels of

panel, shelf or rack-mounted equipment, and tonearm and record playback areas; positive locking off/on switch; 1" H × 2½" W × 1" D..... $7.00

V.R.P.
Record liner sleeves for protection against "stabilizer drift" and static; conventional size; 10 sleeves per package $2.75

SC-1 Stylus Cleaner
Stylus cleaning brush of calculated density nylon; won't snag cantilevers; mirror magnifies stylus and cartridge for examination; cleaning and magnifying system retracts into walnut handle..... $6.00

Zerostat
Total anti-static system which emits millions of (+) ions upon trigger squeeze and equal number of (–) ions on trigger release; never needs element replacement $20.00

Gold-ens
Gold-plated connector cables; gold flashed connector pins will never corrode or add resistance with age; protective steel strain reliefs; ultra-low capacitance cords; per 1-meter length matched pair. $9.25

DiscTraker
Damping device; attaches to tonearm head to reduce tonearm/cartridge and record-warp resonance; attaches to cartridge mounting screws..... $29.00
Mounting kit (for tonearm heads without top-accessible mounting screws) $0.75

DUBIE

CD-25 Speaker Control System
Moisture-resistant auto-transformer speaker control system controls four speakers individually with four separate nine-position sound controls $189.95

ELECTRONIC SPECIALISTS

The Isolator
Three individually filtered 3-prong AC sockets with integral surge suppression for isolating sensitive pre-amps and tuners from the power amp; accommodates 1875 W total load, with each socket able to handle 1000 W load $49.95

SFK-33S Super Filter/Suppressor
Features dual balanced Pi-Super Filter and 2000 Amp Spike/Surge Suppressor designed to clean up "pops" and "hash" from hi-fi and electronic organ installations; connecting to 120 VAC line with standard 3-prong plug; three sockets can accommodate 1250 W load..... $42.95

Equipment Protection
Line-cord transient suppressor to absorb repeated power surges; available in two-prong plug/socket $13.75
Three-prong plug/socket $16.75

Stereo Speaker Filter
Stereo speaker filter to help eliminate interference from entering through speaker leads $11.95

Stereo Phono-Input Filter
Filter designed to plug directly into amplifier input jack to reduce phono-input interference..... $10.50

EMPIRE SCIENTIFIC

"Dry System"
Complete record-care kit contains static eliminator, cleaning brush, stylus cleaning fluid and brush, and universal headshell; screwdriver and mounting hardware included..... . $79.95

FIDELITONE

3056 Spin 'n Clean
Record-cleaning device removes dirt and static charge; includes dual velvet brush system and 4-oz record wash solution; record is inserted between cleaning brush pads on roller grooves and spun..... ..... . $15.98

3052 Record Care Kit
Contains "Fidelistat" disc jockey, stylus cleaner, and anti-static fluid $16.98

3045 Record-Cleaning Arm
Cleaning arm attaches to turntable to clean record while it rotates; includes anti-static fluid.. ... $6.98

Record Conditioner & Purifier
Record brush is designed to pick up small particles from record in conjunction with purifier fluid; cleaning pad has unidirectional pile and is on a contoured cherry-wood handle with a purifier bottle storage compartment $10.95
Purifier fluid refill; 4 oz..... $4.99

Dust-Cover Wax
Designed to clean and polish record player dust covers; also for speaker enclosures and other stereo equipment..... .... $4.99

Cassette Storage Chests
Solid walnut chest with flocked vacuum formed insert, thumb-slot opener, kirf-mounted hinge and dado lid stop.
8500. Holds up to 64 cassettes..... . $81.95
8503. Holds up to 24 VHS video cassettes . $73.95
8504. Holds up to 24 Beta video cassettes. $69.95
3143. Holds up to 12 VHS or Beta video cassette... ..... . $54.95
3135. Holds up to 36 Cassettes..... $47.95
3135-01. Holds up to 24 cassettes $39.95
8508. Holds up to 12 cassettes..... $21.95

8512 Cassette Carousel
Solid walnut rotating cabinet with four twelve-compartment flocked vacuum formed inserts; holds up to 48 cassettes $47.95

Audio Cassette Trays
Solid walnut trays with flocked vacuum formed inserts.
8509. Holds up to 36 cassettes..... $19.95
8508. Holds up to 24 cassettes..... $17.95
8507. Holds up to 18 cassettes..... $14.95
8506. Holds up to 12 cassettes..... $12.95

FULTON MUSICAL INSTRUMENTS

Shielded Phono Leads
Black phono lead designed to complement any preamplifier accessory in or out—from preamp to power amp, preamp to tuner, and to all auxiliary inputs; 57-in..... $29.50

Phono Head Shell Leads
Replacement headshell connects cartridge and headshell; available in color-coded set of four with gold-plated connectors $6.95

GOLDRING by HERVIC

Ex-Static Platter Pad
Carbon-fiber platter pad designed to short out static charges and isolate disc from turntable noise $15.00

Ex-Static Record Brush
Carbon-fiber record brush; electrically conductive.. ..... $15.00

Hervic Antistat
Piezo-electric record brush produces ionized air to remove static from disc; requires no batteries..... ..... $14.00

GUSDORF

1490 The Tower
Top compartment consists of four ⅜-in thick shelves which adjust in one-inch increments to ac-

commodate any component size; enclosed by two smoked tempered safety glass doors. Bottom compartment with slide up door contains removable record dividers holding up to 230 albums. Unit features "U" configuration rear panels to allow for heat dispersion and connecting wire organization; protective rubber door stops; open/close push-plates; positive magnetic catches; locking device keeps glass doors in place; walnut tone finish protected by Rendura (resists scratches); hooded double-wheeled casters; matte black hardware and base molding; 64¾" H × 23¾" W × 18¹⁄₁₆" D.. $226.00

1435 Component Cabinet
Cabinet includes four interior shelves that adjust in two-inch increments to accommodate any component from turntable to reel-to-reel tape deck; two storage cabinets with disappearing slide-up doors feature removable record dividers; adjustable glide-feet allow for levelling and stable operation; full back has access holes with removable plugs and pressure sensitive retainers to organize and conceal connecting wires; simulated walnut finish; top shelf 48" H × 23¾" W × 17" D; top right shelf 48" H × 19½" W × 17" D..... $144.00

1560 Component Cabinet
Tempered double-glass-door cabinet with magnetic catches and three adjustable shelves; "U" shaped back panel allows for ventilation and neat wire exit; record dividers on lower shelf provide ample storage; black hardware and interior; case comes in pecan, rosewood or simulated walnut finish; top shelf 41½" H; side width 21½"; depth 17½"; shelf adjustment in 1-in increment..... $119.00

1805 Home Entertainment Credenza
Credenza supports TV and turntable or VCR on upper "gallery" shelf and stereo components or tape library below; disappearing slide-up door conceals removable record dividers for 270 albums; back panels are complete with access holes and contact fasteners for connecting wires; self-finished hardware and black accent base; pecan wood tone finish; 26¼" H × 51½" W (between sides) × 17¼" D; 53½" overall width..... $113.95

1655 Component File
File cabinet designed for amplifier/tuner/cassette systems; unit has lower record storage cabinet with dividers to hold up to 200 albums; interior shelves adjustable on 1⅛-in centers for custom component arrangement; 3½-ft tall top shelf designed for turntables; three-quarter back allows for heat dispersion and has access holes and pressure sensitive organizers for arrangement of connecting wires; top shelf 41¾" H × 21" W × 15⅜" D; 21½" overall width $67.95

1345 Mobile Audio Cabinet
Mobile unit has two 15⅞" W side speaker shelves, center storage section with removable record dividers and top shelf for turntable; steel tie-rods and simulated walnut finish; top shelf 25¾" H × 23¾" W × 15" D; 58¼" overall width..... $60.00

0130 Speaker Stands
Walnut finished speaker stands rest speakers 5¾-in off the floor at fixed five-degree angle for dispersion of bass frequencies; "horseshoe" support in rear adjusts in 1¼-in increments for large or small speakers; cushioning pads dampen speaker-to-floor vibration transmission and prevent movement of speaker cabinet at high operating levels; terminals and frequency range adjustments are accessable; finish protected by Rendura; 5¾" H × 4¾" (rear); 12" W, 11¾" D overall..... $20.00

INNOTECH

SF-2 Stereo Subsonic Filter
Active filter to remove harmful subsonics due to record warp, rumble, etc.; 18 db/octave below 22 Hz $90.00

JFD

FM Stereo Antennas
Super Nova antennas designed specifically for FM/FM stereo; features reciprocating aperture log periodic action; 300-ohm impedance match (convertible to 75 ohms by means of Color Shield-82 coaxial cable and 300 ohm/75 ohm matching transformer); gold anodized aircraft aluminum construction.
SNFM-40. Three-element system for suburban reception; 40-in crossarm length; 38-in turning radius; 68-in width..... $17.96
SNFM-75. Six-element system for fringe reception; 75-in crossarm length; 49-in turning radius; 68-in width $34.06
SNFM-112. Nine-element system for deep fringe reception; 112-in crossarm length; 69-in turning radius; 69-in width..... $45.82
SNFM-CTS. Turnstile system that performs in advanced circularly polarized mode or omni-directional horizontally polarized mode; crossarm length 24-in; turning radius 33-in; 65-in width $17.31

LECTRO TECH

PPI-400 Peak Power Indicator
Designed to monitor peak audio power across loudspeaker terminals. Power range selectable in 3-dB steps from 6.25 to 800 W continuous for 4, 8, and 16-ohm loads; power level indicators are green, yellow, and red LEDs, calibrated in 8 steps from 0 to −30 dB; input impedance 20,000 ohms min.; frequency response 20-20,000 Hz; max. input power 1250 W continuous into 8 ohms; min. input sensitivity 3.13 mW at 8 ohms; speaker impedance range 2 to 35 ohms..... $130.00

LUX

5E24 LED Peak Indicator
Two-channel peak level indicator; each display consists of 12 LEDs with turn-on points calibrated in 3-dB increments from −30 to +3 dB; metering ranges switchable for preamplifier (0 dB = 1 V and 0 dB = 0.316 V) and amplifier (0 dB = 20 W, 0 dB = 200 W); peak-hold button retains highest level reading until released, while continuing to display instantaneous peaks; ac convenience outlet; rack-mount and simulated wood-grain cabinet available; 2³/₁₆" H × 17¹¹/₁₆" W × 15¾" D..... $295.00

MAGNESONICS

Erase-Sure
Erases cassette or 8-track cartridge to −65 dB from 0 reference; includes four "AA" batteries; 2¾" H × 4" W × 3½" D $24.50

Rapid Rewind
Designed to check and test cassettes before recording for cassette tape tension stabilization, tape binding elimination, and uniform tape pack; winds C-60 cassette in 30 sec; includes four "AA" batteries..... $24.50

MARANTZ

RM-3100 Stack Rack
Can accept up to four Marantz components; equipped with RHA-1 or RHA-2 rack handles and two blank filler panels; walnut side panels; 19" W (EIA standard)..... $279.95

RM-3700 Stack Rack
Three fixed shelves with full-length smoked-glass door, accessory shelf, and divided record compartment; walnut side panels; 39⅛" H × 19⅞" W × 16⅛" D $239.95

RM-3060D Stack Rack
Three shelves for Marantz components with full-length smoked glass-door and adjustable lower shelf; walnut grain vinyl veneer; 40" H × 17" W..... $130.00
RM-3060. Similar to RM-3060D without glass door $80.00

RHA-8 Rack Handles
Component rack handles for all new Marantz components $35.00

McKAY DYMEK

DA5 BCB Directional Antenna
Shielded ferrite-rod directional AM broadcast-band antenna; can be used with any AM tuner or receiver with or without internal antenna; table-top mounting; provides gain and tuning through improved tuner/receiver sensitivity; rotatable and tilting ferrite-rod head; base contains r-f tuned circuits and solid-state preamp,; frequency range 540-1600 kHz medium-wave band; 11" H × 13" W × 9" D; ferrite rod length 12"; head tilt range 53 degrees; rotational range 270 degrees. Kit..... $135.00
Assembled $185.00
DA7. Same except frequency range 150-300 kHz long-wave plus 540-1600 kHz medium-wave bands. Kit..... $145.00
Assembled $200.00

DA 100 All-Wave
Omnidirectional antenna system in two modules: outdoor, weatherproof head amplifier and 4-ft whip mount; indoor power and control module; response claimed to equal or out-perform 100-ft long-wire antennas; covers 50 kHz to 30 MHz; control module dimensions 5" H × 9" W × 9" D..... $135.00
Marine version, with fiberglass whip..... $165.00

DP 40 R-F Preselector
Passive (non-amplified) r-f preselector covering 0-30 MHz frequency range; designed for use with wideband r-f front end receivers; selection of nine bands provides five-element low-pass filter for 0-0.15 MHz, dual-track tuned circuits for 0.150-30 MHz, and wideband bypass position that eliminates preselector filtering..... $125.00
DP4044. Same as DP 40 except rack mountable..... $135.00

MITSUBISHI

DR-720 Audio Equipment Rack
Mobile vertical five-shelf equipment rack with twin-glass double doors, the upper doors designed for easy access to most-used controls and the lower

doors designed to protect records from dust and designed for less often used meter-unit controls; lockable front two casters; 65" H × 22⅜" W × 24⅜" D. $380.00

DR-707. Similar to DR-720 except four shelves; 54⅜" H × 21⅜" W × 17⅜" D..... $280.00

DA-M10 Power-Level Meters

Measures instantaneous power peaks on dual-channel meters. Features logarithmic scales for continuous reading without switching ranges; response independent of frequency or waveshape. Meter section: peak level −50 to +3 dB; output 1 mW-200 W (× 1), 0.1 mW-20 W (× 0.1); frequency response 20-20,000 Hz ±1 dB; input sensitivity 1 V; response times 10 msec; recovery time 0.6 sec (0 to −30 dB). Buffer amplifier section: frequency response 20-20,000 Hz± 0.2 dB; THD 0.01%; S/N 100 dB at 1 V; gain 0 dB (variable); input impedance 50,000 ohms; output impedance less than 600 ohms. Front panel A/B speaker selector and left and right channel level settings; 6¾" H × 16¾" W × 4⅞" D..... $170.00

MK-30 Speaker Stands

Designed for use with Mitsubishi Honeycomb Speaker Series MS-10, 20, and 30; finished in flat black..... $55.00 pr.

MR. AUDIO

Record Cleaning Accessories

1004. Anti-static record cleaning spray; 2½-oz can contaons over 100 record applications $2.56
1001. Record cleaning kit with anti-static cleaner, Vel-pad applicator and pad brush $1.96
1000. Silicone-treated record cleaning cloth $1.73
1011. Record cleaning brush that attaches to tone arm..... $0.40

Tape Cleaning Accessories

1002. Tape head spray cleaner; 3-oz can comes with 5-in extension tube to reach recessed heads $2.11
1010. 1-oz tape head cleaner lubricant with cotton swabs for application $1.58

NAKAMICHI

T-100 Audio Analyzer

Measures and verifies performance of audio equipment; combines functions of an oscillator, a VTVM, a distortion analyzer, and a wow/flutter meter. Oscillator has 21 discrete frequencies from 20 to 20,000 Hz plus wideband pink noise; measures distortion from 0.01% to 3% at 400 Hz; measures level with either peak or average ballistics; measures speed accuracy and wow/flutter (weighted or unweighted); measures noise inputs down to 10 μV. Features non-mechanical bar-graph display and logic-controlled FET switching; 9.5 lbs. Includes carrying case; 3" H × 13½" W × 9½" D..... $800.00

MX-100 Microphone Mixer

Provides three inputs (left, right, and blend) and two outputs; input 10,000 ohms for low to medium impedance mics; sensitivity 0.2 mV; overload 1 V (+74 dB); THD less than 0.05% up to 10,000 Hz; requires PS-100 Power Supply; 2½" H × 7½" W × 4" D..... $85.00

LA-100 Line Amplifier

Corrects mismatches in component impedance and sensitivity (0, +6, +12, and +18 dB gain at line level); frequency response 10-75,000 Hz +0, −0.5 dB; S/N better than 100 dB at 18-dB gain; less than 0.005% THD from 20-20,000 Hz; requires PS-100 Power Supply; 2½" H × 7½" W × 4" D..... $75.00

PS-100 Power Supply

±10 volts dc for MX-100, LA-100, and other Nakamichi BlackBox Series component operation; can power up to six components..... $75.00

SF-100 Subsonic Filter

Filters out unwanted subsonic components; max. 50-dB attenuation at 10 Hz, no attenuating frequencies above 30 Hz; switchable 5-dB boost at 30 Hz and filter bypass; requires PS-100 Power Supply; 2½" H × 7½" W × 4" D..... $75.00

DM-10 Head Demagnetizer

Slim-line, easy-to-use recorder head demagnetizer, specially designed for company's cassette decks.... ..... $20.00

NORTRONICS

5600 Quadrasonic Record/Play Heads

Four-track, four-channel, laminated core heads with all-metal hyperbolic face construction.
5601. Special record-only head, low impedance, 50 mH, 500 μin gap spacer; for use with vacuum-tube or transistor circuits; no-mount type. $127.30
5602. Low impedance, 90 mH, 100 μin gap spacer; for use with vacuum-tube or transistor circuits; no-mount type..... $127.30
5603. Medium impedance, 370 mH, 100 μin gap spacer; for use with vacuum-tube or transistor circuits; no mount type $127.30

Head Demagnetizers

QM202. Head demagnetizer $19.20
QM203. 220-250 V version $21.20
QM206. Car-stereo version, 12 V..... $22.90
QM280A. Demagnetizer in 8-track cartridge shell with head cleaner..... $19.60

Bulk Erasers

QM211. Bulk eraser, 110-120 V ac $39.00
QM212. 220-250 V version $46.00
QM230. Cassette bulk eraser..... $29.00

Tape-Head Cleaners

QM102. Liquid, 2 oz bottle..... $2.80
QM108. Same, 8 oz $4.00
QM122. Headsaver; 1.7 oz $2.50
QM103. Spray cleaner, with 5-in extension nozzle, 3 oz net $3.20
QM116. Same, 16 oz net $5.40
QM104. Tape head lubricant; 2-oz bottle $2.80
QM140. Cassette Head Cleaner; non-abrasive belt in cassette shell..... $2.70
QM141. Cassette Life Extender. Same as QM140, but includes liquid cleaner for heavier dirt.... $3.30
QM180. 8-track cartridge version of QM140 . $2.90
QM181. 8-track version of QM141 ..... $3.50
QM182. 8-track head and capstan cleaner; one end of 8-track cartridge shell cleans heads, other cleans capstan $3.60
QM504. Maintenance brush..... $3.10
QM505. Cellulac foam swabs, package of 25. $8.00
QM506. Inspection mirror with light..... $5.30

Editing Aids

QM333. Splicer for ¼-in tape and cassette tapes; built-in blades slit rather than chop tapes; easy-to-obtain blades $14.95
QM311. Professional Splicing block with adhesive back; for ¼-in tapes..... $18.50
QM312. Same, for 0.15-in cassette tapes .. $18.50
QM313. Same, for ½-in tapes $28.00
QM521. Splicing tabs for ¼-in tape; pkg. of 50 .... $3.40
QM522. Cassette splicing tabs; pkg. of 50.... $3.40
QM553. Splicing tabs for ½-in tape; pkg. of 200 ... . $30.40
QM524. Metal-sensing tabs for ¼-in tape; pkg. of 50..... $3.70
(Above tabs also available in packages of 200 and 1000.)
QM501. Mylar splicing tape; ½-in × 150-in roll $2.60

Cassette Storage/Carrying Cases

Book-like cases for storing unboxed cassettes; cassette and hub locked in place when inserted.
QM408. For 8 cassettes $7.00
QM412. For 12 cassettes $7.80
QM416. For 16 cassettes $9.50

NUCLEAR PRODUCTS

3C500 Staticmaster

Soft-hair retractable brush with extra-strength polonium element; designed to neutralize static and remove dust from records $16.95
Replacement cartridge $10.95

ONKYO

CB-7U Custom Rack

Dual wood-grain cabinets, each with transparent glass doors and adjustable shelves; designed for vertical or horizontal layout; 29¹⁄₁₆" H × 43⅜" W × 15⅝" D (horizontal), 58³⁄₁₆" H × 21⅜" W × 15⅝" D (vertical) $350.00

OPTONICA

SY-9406 Audio Component Cabinet

Cabinet has three shelves for components (two removable for rack-mount) and record storage compartment with record dividers; rosewood-vinyl covered particleboard; glass door for turntable compartment; turntable compartment: 12.9" H × 15.2" W × 19.2" D; component section shelves 19.2" W × 14.8" D; component section height: upper shelf—12.1", middle—6.3", lower—7.5"; overall dimensions: 30.7" H × 42.5" W × 16.1" D $220.00

SY-800U Audio Component Cabinet

Cabinet with four shelves (three removable) for components, two-shelf record storage cabinet; component shelves 18.4-in W × 13.7-in D; heights vary from 6.1-in to 6.3-in with all shelves in place; record storage compartment for over 200 albums, 2 shelves 13.7-in W, with record dividers; magnetically latched glass door keeps dust from records, leaves album titles visible; in rosewood-vinyl covered particleboard; overall dimensions 33.3" H × 37.5" W × 17.5" D..... $200.00

OSAWA

Mark IV AC Speaker Stand

Raises speaker ten inches above floor to eliminate bass boominess and tilts speaker slightly backward to improve high-frequency dispersion; holds most home speakers; includes swivel casters; black nylon finish ..... $49.95 pr.
Universal Vari-Tilt. Similar to Mark IV except variable tilting to any angle for precise dispersion..... ..... $74.95 pr.

Universal Wall Bracket

Holds 9- to 14-in deep, 30-lb speakers; adjustable padded clamp holds speaker; swivels horizontally and vertically; black nylon finish ..... $39.95 pr.

DISK-SE22 Turntable Mat

Replacement turntable mat with high density (specific gravity 2.2) to inhibit vibration pickup and add to turntable's flywheel effect for lessened wow and flutter; surface slightly concave to support warped discs; smooth texture for easy cleaning..... $25.00

PHASE LINEAR

1200 Series Two Real Time Analyzer

Features 12-octave frequency bands and four-pole active filters from 16-31,500 Hz on LED matrix display with 20 rectangular LEDs/column and push-button mode for dot or bar-column viewing; display range 20- or 40-dB amplitude in 1- or 2-dB steps; fast (20 dB/sec) or slow (2 dB/sec) delay response switch; built-in pink noise generator synthesized by CMOS digital integrated circuits (frequency response 16-20,000 Hz ±1 dB, output 300 mV rms); sound level meter calibration control (52-100 dB with two 0-dB reference levels of 70- or 80-dB

SPL); source input with level control and mic/source pushbutton selection (input sensitivity impedance 7 mV/47k ohms); includes omnidirectional electret condenser microphone with 20-ft cord and connector (frequency response 20-20,000 Hz ±2 dB, sensitivity −65 dB at 1000 Hz); 3½" H × 19" W × 8" D $800

PICKERING

PST-2 Stylus Timer
Measures stylus wear time from 0-1000 hrs in 1000-hr increments; resettable for long-time use; can be reversed 180° to start over again; mounting time 1 min..... $15.95

RECOTON

AU-100 Home Audio Rack
Designed to store turntable, amplifier, receiver, and records; has three shelves 19-in wide and 14-in deep, trimmed in chrome and with walnut finish; available in black finish; 32" H × 20¼" W.. $79.99

V-100 Video Tape Cabinet
Universal design to hold 18 Betamax or VHS video tapes; cabinet can be nested to allow for maximum storage in limited space; walnut finish; 11" H × 23¾" W × 6" D..... $41.99

ROBINS

41-043 ROB-O-STAT Static Neutralizer
Complete with static sensor; removes static charge from records, film, etc.; static sensor checks for presence of static charge on records and indicates proper functioning of neutralizer; requires no outside power source or batteries..... $24.95

ROTEL

RK-100 Rolling Record Cleaner
Removes dirt, dust and fingerprints from records; washable..... $20.00
RK-88A. Arm-type record cleaner $15.00
RK-77W. Wet-type record cleaner..... $7.00
RK-66. Dry, velvet-cushion record cleaner $3.50

RK-5 Audio Rack
Vinyl-covered particleboard audio rack mounts standard EIA-EIJ-designated components; glass doors and casters with lock; 33⁹/₃₂" H × 22⁷/₁₆" W × 19¹¹/₁₆" D $320
RK-401. Metal rack..... $180

ROYAL SOUND

Add 'N Stac
Plastic storage modules for Beta and VHS video cassette tapes with dividers for slide-in and lock function on top and bottom; horizontal or vertical arrangement; free-standing on table or shelf or hang-on wall; black, dark blue, orange, brown, white, or red; holds six tapes per unit, 12 units per master carton; Beta: 7.65" H × 7" W × 4" D, VHS: 7.65" H × 8" W × 4.03" F..... $7.00

RUSSOUND/FMP

QT-1 Quad Patching/Control Center
Expands tape monitor loop of audio system to accept four- or two-channel noise-reduction systems, graphic equalizers, matrix decoders, and up to four stereo or quad tape recorders, with switching functions on front panel; includes set of 16 patch cords; walnut vinyl finish cabinet with black front panel; 4¹³/₁₆" H × 13⅞" W × 5" D $280.00
QT-1 RM. Metal case with black painted cabinet finish; rack-mountable; 5⁷/₃₂" H × 19" W × 5" D..... $280.00

TMS-2 Tape Recorder Selector Switch
Accommodates up to five tape recorders or other line level sources with complete monitoring and dubbing facilities; walnut vinyl finish cabinet; 4⅛" H × 7¾" W × 4⅛" D..... $79.95

MP-2 Speaker Amp Control Center
Accommodates four sets of stereo speakers with volume control and independent program selector for each pair; permits precise speaker level balancing for A-B testing; walnut vinyl cabinet; 4⅛" H × 7¾" W × 4⅛" D..... $99.95

SANSUI

GX-5 Audio Rack
Simulated walnut-grain-finish audio rack mounts up to six audio units with EIA 19-in width; free-mount system accommodates units of any height; handles up to 220 lbs of equipment; includes removable record album stand and two front casters with stoppers; 38¹/₁₆" H × 21¹/₁₆" W × 15¾" D..... $300.00

Audio Rack Kits
Audio racks have walnut-grain-finish panels and three fixed-position black shelves; solid heavy weight provides vibration-free base for turntable; includes removable record album stand.
GX-300. Includes resin legs; 63.3 lbs; 9¹/₁₆" H × 22¹¹/₁₆" W × 18½" D..... $195.00
GX-200. Includes resin legs; 47.8 lbs; 7⁷/₁₆" H × 19¹⁵/₁₆" W × 18½" D..... $150.00
GX-100. 30.9 lbs; 6⁷/₁₆" H × 17⁹/₁₆" W × 14³/₈" D $110.00

Rack-Mount Accessory Drawers
Hold headphones, microphones, tapes, styli, cartridge heads, tools, cables, etc.; protective foam insert can be cut to hold individual items; black matte finish.
RX-150. 5⁹/₁₆" H × 19" W × 11⅜" D..... $50.00
RX-100. 3¹⁵/₁₆" H × 19" W × 11⅜" D..... $40.00
RX-50. 1¹⁵/₁₆" H × 19" W × 11⅜" D..... $33.00

FA7 FM/AM Antenna System
System incorporates omnidirectional AM antenna, picking up signals within 360-degree horizontal circle and improving AM S/N 20 dB; gain −1.2 dB; two-element phased array antenna for FM reception and whip antenna for AM reception; 1.06 kg..... $110.00

SANYO

PLUS E55 Audio Program Timer
Designed to preprogram audio system requiring ac power timing; features dual programmable channels; recording standby for unattended recording; playback standby within 24-hr period with wake-up alarm; stores up to nine programs which can be set to go off at intervals during 24-hr period (can be extended to days or weeks); program prompter activates receiver when specified broadcast is on; LED real time (AM/PM, hr/min), Channel 1 on/off time, and Channel 9 on interval displays; 1¾" H × 17⅝" W (19" with handles) × 10" D..... $249.95

AR-200 Audio Cabinet
Walnut-grain-veneer cabinet includes three interior shelves adjustable on 1-in centers, removable record dividers (accommodates up to 200 albums), and two safety glass door enclosures; protective rubber door stops and rear panels; unassembled kit includes tools; shelf dimensions 21½" W × 14" D; usable interior dimensions 35¼" H × 21½" W × 16¹¹/₁₆" D; overall dimensions 41¾" H × 23" W × 18" D $119.95

AR-100 Audio Rack
Walnut-grain-veneer rack includes removable record album dividers; accommodates 19-in components according to EIA rack-mount standards; has twin-wheel cylindrical casters; unassembled; includes assembly tool and caster socket lubricant; 40⅜" H × 21⅞" W × 17⅝" D..... $99.95

SCOTCH

ERK-130 Cassette Edit/Repair Kit
Contains precision splicing block; spindle for manually winding cassette tape; six polyester picks (adhesive tipped for retrieval of tape ends lost in housing); six 130-mil splicing tabs; detailed instruction booklet..... $2.99

Pre-Cut Tabs
SPT-7/32-36. 36 pre-cut 1.0-mil polyester splicing tabs..... $1.19
SST-7/32-18. 18 pre-cut aluminized sensing tabs..... $1.19
SK-7/32. 12.5 ft of 1.9 mil polyester splicing tape in dispenser kit..... $1.99

Head Cleaners
S-C-HC. Cassette head cleaner..... $1.69
S-8TR-HC. 8-track head cleaner..... $2.99

C-Box Cassette Storage System
Stackable/interlocking cassette storage/carrying boxes with pushbutton drawers; easy access and index label for quick identification.
Sleeve of three empty C-Box units..... $2.49
C-Box wall bracket..... $1.69
C-Box carrying handle..... $1.69
Box of 10 empty "C-Box" units with handle and bracket..... $9.99
25 drawer labels and insert cards..... $1.99

14 ACCESSORIES

H.H. SCOTT

830Z Audio Analyzer
Audio analyzer indicates acoustical changes in speaker system's location, optimizes tape deck bias, equalization, record levels, and tape compatibility, and measures peak sound pressure level and dynamic range of program material; hooks into amplifier, receiver, or tape deck input. Features 110-LED visual display grid covering 32-16,000 Hz in 2, 3, or 4 dB range switch; ten-octave band oscillator level control; SPL, flat, A weighting, and C weighting mode switch; external mic/internal mic/aux./calibration input select switch; independent mic and line level controls; LED dimmer; includes remote condenser microphone; optional 19" rack-mount handle $600

SERIES 20

U-24 Program Source Selector
Program source pushbutton selection controls for three power amps, three phono, two aux., and four tape monitor and tape duplicate play or record; phono, aux., tape play and record, and pre out terminals for connecting amplifier; 3 3/16" H × 16 17/32" W × 12 31/32" D $225

SHURE

M615AS Equalizer Analyzer
Ten-octave band equalization analyzer from 32-16,000 Hz; adjusts sound system equalizer filters to desired equalization level with LED indicators; consists of M615 Analyzer, ES615 Analyzer Microphone, microphone cable, swivel adaptor, tilt bracket, test/interconnecting cable, and case; 108-132 V ac, 50/60 Hz $612
M615. Analyzer only $500
ES615. Microphone only $153

SOUND GUARD

Total Record Care System
Includes Record Preservation Kit and Record Clean Kit $16.99

Record Preservation Kit
Dry lubricant spray; provides record surfaces with a strong protective coating without impairing record fidelity; kit includes special-formulation liquid, buffing pad, pump spray; one kit treats about 30 LP's both sides; 2- and 6-oz fluid refills available $9.99

Record Cleaner Kit
For both heavy-duty record cleaning and light touch-up work; kit includes special cleaner formulation, pump spray, cellulose contaminant-extractor pad, velvet cleaning pad, foam grooming pad and instruction booklet; 2-oz record cleaner refill available $9.99

Record Care Work Pad
Neoprene, lint-free work surface for record cleaning and preservation without interference from contaminants; high friction coefficient for holding records, fluid receptacle area for excess cleaner, easily washable $7.99

Stylus Care Kit
Stylus maintenance system includes cleaning solution and all necessary tools: 1-oz bottle of Stylus Cleaner with applicator, dry brush, bulb air blower, and 3× and 10× Bausch and Lomb magnifier; components housed in storage unit $9.99

Record Buffer
Designed for wet cleaning and dry preening of discs; inverted mushroom handle $3.99

STANTON

Permostat Record Care Kit
Designed to eliminate record static permanently with one application of anti-static formulated fluid; kit includes 3-oz bottle of fluid (treats up to 25 records, both sides), pump sprayer, buffing pad, and record identification tabs $19.95
Refill $15.95

STATIBRUSH by REFERENCE

Record Care Accessories
Staticleaner. Carbon fiber disc sweep $39.90
Statibrush. Carbon fiber disc cleaner $16.90

SUPEREX

TSB-3 Graphic Tape Switching Console
Stereo tape switching console features color-coded tape duplication processes graphically illustrated on front-panel; three-deck capability; functions include duplicating recordings or broadcasting on three tape decks, mixing two sources for documentary effect, and transfer of program material from one tape deck to another while monitoring and recording additional different program source; both inputs and outputs include stereo, one amplifier, and three tape decks or auxiliary components; dubbing bank for use with any stereo amplifier or receiver with monitoring facilities; controls include three input and three output toggle switches and one output line selector toggle switch; rear-panel phone jacks; 2 3/4" H × 6 1/4" W × 4 3/4" D $50

TDK

CP-36 Cassette Cabinet
Holds up to 36 cassettes; has three separate drawers fitting 12 cassettes in each $49.00

HD-01 Head Demagnetizer
De-gaussing circuit demagnetizes recorder heads by loading cassette formed demagnetizer into cassette recorder and depressing play button; red LED lights up when recorder heads are demagnetized; reduces noise level in low and midrange frequencies and midrange and high frequency distortion and attenuation; battery-powered $27.50

HD-11 Tape Head Demagnetizer
Portable hand-held universal tape head demagnetizer designed for open-reel or cassette tape decks; red, LED "on" indicator and green LED "ready-to-use" indicator; side-mounted activator switch; plastic-covered metal tips; included two 1.5 V dry-cell batteries $43.75

HC-1 Head Cleaner
Cassette tape machine head cleaner $2.15

TA-OI Test Tape
Cassette shell conforms with IEC standards; easy adjustment and setting for optimum record/playback levels and balance between left/right channel levels; recorded contents −4 dB at 315 Hz, full track width; 3 1/2-min record time; equalization 3180 μsec + 120 μsec; recording azimuth 90 degrees ±2 min.; level deviation ±0.3 dB; level fluctuation within 0.5 VU; reference level at 0 dB 333 Hz (DIN) $17.50

Cassette Labels
EL-40. 40 labels $2.50
EX-25. 25 index cards $2.50

TEAC

E-1 Head Demagnetizer
Removes residual magnetism from heads and guides $25.00

E-2 Bulk Eraser
Handles 7- and 10 1/2-in reels; built-in pilot light and circuit breaker guard $100.00

RMK Recorder Maintenance Kit
Kit includes 3-oz bottle of HC-1 head cleaner, 3-oz bottle of rubber cleaner, 3-oz bottle of stainless polish, cotton swabs, and cleaning cloth $9.00

TECHNICS

SH-9038 Micom Programmable Timer
Functions weekly program with four-bit microprocessor, program content for day and time (hours, minutes), FM channel; two 200 W ac outlets; timer with individual second time counter capability, max. indication 59 minutes; reset, start, hold capability; 1 25/32" H × 18 3/16" W × 11 1/32" D $600

SH-9020 Peak/Average Meter Unit
Shorts high-energy peaks of 100 μsec at 0-dB input with peak-hold function switch (switch on, −3 dB peak level drop-off after 25 min.); attack time 330 μsec (average), 100 μsec (peak); recovery time 250 μsec (average, 0 to −20 dB), 750 μsec (peak, 0 to −3 dB); input sensitivity/impedance 20 dBm (7.75 V)/47,000 ohms (source 1, 2), 100 W (8, 6, 4 ohms)/10,000 ohms (source 3). Features twin peak/average meters (+10 to −50 dB), and three input selectors; 3 31/32" H × 19" W × 14 9/16" D. $360

15 HEADPHONES

AKG

K-340 Stereo Headphones
Two-way stereo headphones incorporate electret-condenser, high-frequency transducers, dynamic mid/low-frequency transducers, crossovers, and ten passive diaphragms in circumaural earcups; frequency response 15-20,000 Hz; matches 4-400 ohm output impedance; includes 9.8-ft coiled cable and standard stereo phone plug; 14 oz. . $189

K-240 Free-Field Headphones
Free-field stereo headphones; dynamic moving-coil transducer and six passive radiators; frequency response 16-20,000 Hz; 600 ohms +20% impedance over 16-20,000 Hz; sensitivity 13 μbar/V (96.5 dB SPL at 1μV) per channel; power requirements 1 mW (0.775 V) for 10 μbar (94 dB SPL) per channel, 50 mW (5.5 V) for 72 μbar (111 dB SPL) per channel; max continuous power for 1% THD or less at 100 Hz 200 mW (11 V) for 143 μbar (117 dB SPL) per channel; supplied with 3-m four-conductor cable and ¼-in phone plug; 10 oz $85

K-141 Monitor Headphones
Supra-aural, dynamic professional monitoring headphones; frequency response 20-20,000 Hz; matches 4-600 ohm output impedance; includes 9.8-ft four-conductor cable and standard three-conductor stereo phone plug; 9 oz $69

K-140S Stereo Headphones
Stereo headphones with dynamic sound transducers; frequency response 20-20,000 Hz; 600 ohms ±20% impedance over 20-20,000 Hz; sensitivity 15 μbar/V (97.5 dB SPL); power requirements 0.75 mW (0.67 V) for 10 μbar (94 dB SPL), 50 mW (5.5 V) for 80 μbar (112 dB SPL); max. continuous power for 1% THD or less at 100 Hz 240 mW (12 V) for 119 dB SPL per system; supplied with 3-m four-conductor cable and ¼-in phone plug; 6 oz . . . $55

K-40 Stereo Headphones
Ultra-lightweight supra-aural stereo headphones with dynamic moving-coil transducers; frequency response 50-15,000 Hz; matches 4-200 ohm outputs; 9.8-ft four-conductor cable; three-conductor stereo phone plug; 4½ oz $27

AUDIO-TECHNICA

ATH-7 Stereophones
Electret condenser stereophones; frequency response 20-22,000 Hz +2 dB; sensitivity 98 dB SPL at 1 kHz (0 dB = 0.002 μbar/V); impedance 4-16 ohms; includes impedance-matching adapter with headphone/speaker switching and normal/high-level LED indicators; 8¼-ft cord; adapter size 3½" H × 2⅜" W × 7" D; headset weight (less cord) 7.4 oz $150

ATH-6 Stereophones
Electret condenser stereophones; frequency response 40-22,000 Hz +3 dB; sensitivity 98 dB SPL at 1 kHz; impedance 4-16 ohms; includes impedance-matching adapter with headphone/speaker switching; 8¼-ft cord; adapter size 1⅜" H × 3" W × 3⅜" D; headset weight (less cord) 7.4 oz $100

ATH-5 Stereophones
Moving coil dynamic stereophones; frequency response 20-20,000 Hz; sensitivity 96 dB SPL at 1 kHz; impedance 4-16 ohms; 11½-ft cord; 7.25 oz. $80

ATH-3 Stereophones
Moving coil dynamic stereophones; frequency response 25-20,000 Hz; sensitivity 94 dB SPL at 1 kHz; impedance 4-16 ohms; 11½-ft cord; 7.25 oz. $60

ATH-1 Stereophones
Planar moving coil dynamic stereophones; frequency response 30-20,000 Hz; sensitivity 93 dB SPL at 1 kHz; impedance 4-16 ohms; 8¼-ft cord; 4.75 oz $30

AUDIOTEX

Professional Stereo Headphones
Frequency response 30-20,000 Hz; impedance 8-16 ohms; padded earpieces with adjustable padded headband; comes with 10-ft coiled cord, black vinyl carrying case. 30-5207 . . . . . $41

Deluxe Stereo Headphones
Frequency response 20-25,000 Hz; impedance 8 ohms; adjustable padded headband; padded earpieces; matches amps with output from 4 to 16 ohms; comes with 10-ft coiled cord, black vinyl carrying case. 30-5203 . . . . . $36

Featherweight Stereo Headphones
Frequency response 20-20,000 Hz; impedance 8 ohms; max. input 100 mW; adjustable foam ear cushions, color-coded and marked "right" and "left"; comes with 6-ft cord. 30-8300 . . . . $25

BANG & OLUFSEN

U-70 Headphones
Orthodynamic stereo headphones; frequency response 16-20,000 Hz; sensitivity 8 mW for 94-dB SPL; continuous load 2 W; dist. 1% max.; 140-ohm impedance; 10-ft straight cord with three-conductor phone jack; 10.6 oz. $85

BEYER/DYNAMIC

ET-1000-S Electrostatic Headphones
Electrostatic headphones; frequency response 10-25,000 Hz; sensitivity 100 dB SPL with 2 mV input; 4-8 ohm impedance; max. power 115 mV; comes with sintered bronze cover plates, 8-ft cord, and power supply capable of driving two sets of ET-1000 headphones. $279

ET-1000. Same as ET-1000-S without power suppy; 13 oz $160

DT-220 Dynamic Headphones
Closed-ear dynamic headphones; frequency response 20-20,000 Hz; sensitivity 1 mW for 100 dB; 400-ohm impedance; max. input 42 mW (for 116-dB SPL); 260 g (without cable) $65

DT-440. Similar to DT-220 but open high-velocity type; 600-ohm impedance; polyvinyl chloride diaphragm with Novodur housing; chrome-plated finish $65

DT-441. Same as DT-440 but with different casing style; polyvinyl chloride diaphragm with Novodur housing; matte-black finish $75

DT-302 Lightweight Headphones
Open-air high velocity dynamic headphones connect directly to high- or low-impedance outputs; frequency response 20-20,000 Hz; rated power 7 mW (2.1 V) for 600 ohms; sponge ear cushions; stereo phone jack plug; 2.3 oz (without cord). $30

BURWEN RESEARCH

PMB 8 Orthodynamic Headphones
Around-the-ear style with leatherette foam ear cushions; max. SPL 112 dB (1 kHz); 150-ohm impedance; max. input 2 W; sensitivity 130 mW for 100-dB SPL (1 kHz); 0.3% THD at 100-dB SPL (1 kHz); frequency response 15-26,000 Hz; has 10-ft cord; 12 oz $115

PMB 6 Orthodynamic Headphones
On-the-ear style with leatherette foam ear cushions; max. SPL 121 dB (1 kHz); 140-ohm impedance; max. input 2 W; sensitivity 7 mW for 100-dB SPL (1 kHz); 0.3% THD at 100-dB SPL (1 kHz); frequency response 16-23,000 Hz; has 10-ft cord; 9 oz . . . $95

PMB 4 Dynamic Headphones
Around-the-ear style with leatherette foam ear cushions; max SPL 114 dB (1 kHz); 400-ohm impedance; max input 0.1 W; sensitivity 4 mW for 100-dB SPL (1 kHz); 0.3% THD at 100-dB SPL (1 kHz); frequency response 20-20,000 Hz; has 10-ft cord; 7.5 oz $85

PMB 40 Dynamic Headphones
On-the-ear style with reticulated foam ear cushions; max. SPL 128 dB (1 kHz); 400-ohm impedance; max. input 0.1 W; sensitivity 0.2 mW for 100-dB SPL (1 kHz); 0.3% THD at 100-dB SPL (1 kHz); frequency response 20-20,000 Hz; has 10-ft cord; 7.5 oz $70

PMB 20 Dynamic Headphones
On-the-ear style with reticulated foam ear cushions; max. SPL 118 dB (1 kHz); 400-ohm impedance; max. input 0.1 W; sensitivity 2 mW for 100-dB SPL (1 kHz); 0.3% THD at 100-dB SPL (1 kHz); frequency response 20-20,000 Hz; has 10-ft cord; 3.9 oz $50

JVC

HM-200E Headphone/Microphone
Designed for binaural recording and monitoring; matched electret condenser mike with simulated

15 HEADPHONES

auricle in each earpiece; mikes powered by AA cells contained in earpieces; three-way headphone level selector; mike tone selector; supplied with dummy head for off-the-operator recording. Mikes: sensitivity −67 dB ±2 dB; output impedance 600 ohms; S/N 45 dB; frequency response 50-10,000 Hz ±10 dB. Headphone: 8-ohm impedance; 96-dB sensitivity; frequency response 50-10,000 Hz; 2-m cord with two phone-type mike plugs and stereo-type headphone plug; mike stand screw sockets (5/16", 3/8", 5/8", PF 1/2", 1/4"); 1.32 lb. $100

BN-5. Biphonic processor for HM-200E; processes binaural sources through stereo speaker $280

KOSS

ESP/10 Electrostatic Stereophones

Electrostatic design with energizer. Headset bandpass response 20-22,000 Hz ±2 dB; sensitivity for 100-dB SPL 1.9 V rms at 1 kHz into E/10 energizer, 2.0 V rms pink noise; THD at 1 kHz and 100 dB SPL 0.38%; radiating surface area of electrostatic element 25 cm²/ch; semi-vented design; black with silver accents; includes 10-ft cord. Energizer bandpass response 3 dB down at 15 Hz and 24 kHz; hum and noise 75 dB below sensitivity reference level (100 dB SPL); phase response at 20 Hz +30 degrees, at 15 kHz −30 degrees; input impedance 3 ohms min. at 20 Hz and 20 kHz, 180 ohms max. at 800 Hz; min. recommended amp power 35 W/ch; overload voltage (for relay cut-out) 5.3 V rms pink noise into energizer; semi-peaked-reading VU meters; LED overload indicators; automatic overload detector; wood-grain trim..... $350

PRO/4AAA Dynamic Stereophones

Frequency response 10-22,000 Hz; dist. less than 0.5% at 1 kHz, 100-dB SPL; sensitivity 0.7 V rms sine wave at 1000 Hz, 0.24 V rms pink noise; impedance 220 ohms at 1 kHz; supplied with Pneumalite ear cushions for noise isolation and 10-ft coiled cord; 15.5 oz..... $85

Technician/VFR Stereophones

Stereo headphones with variable-frequency-response controls; slide-type controls at base of each earcup permit fine tuning of shape of response curve; frequency response 10-22,000 Hz; THD 0.3% at 1 kHz (100-dB SPL); sensitivity for 100-dB SPL 0.6 V rms sine wave at 1000 Hz, 0.275 V rms pink noise; nominal impedance 245 ohms at 1000 Hz; features Pneumalite ear cushions to exclude outside sounds; wide vinyl headband with self-adjusting yoke; black and chrome; equipped with boom microphone mount for professional applications; 4-conductor coiled cord; 16.8 oz (less cord)..... $80

Tech/2 Stereophones

Dynamic stereo headphones with 2-in polyester driver elements; frequency response 10-22,000 Hz; nominal impedance 245 ohms at 1000 Hz; sensitivity for 100-dB SPL 0.7 V rms sine wave at 1000 Hz, 0.3 V rms pink noise; THD 0.3% at 1000 Hz, 100 dB SPL; adjustable cushioned vinyl headband with adjustable stainless-steel yokes and slidebars and Pneumalite ear cushions; includes 10-ft coiled cord; 15.9 oz less cord $60

HV/1A Stereophones

Features low-mass "Decilite" driver elements for 15-30,000 Hz coverage; will operate from outputs of 3.2 to 600 ohms; dist. 0.5% at 100-dB SPL; will handle 5 V rms continuous with provision for 14-dB SPL transient peaks; acoustical sponge ear cushions; extendable headband with self-adjusting, pivoting yokes and soft padded vinyl cover; 3-conductor coiled cord (10-ft extended); 10 oz $55

HV1LC. Same as HV/1A except volume/balance control per earcup; 10.8 oz $60

K/145 Dynamic Stereophones

Features 1.5-in polyester driver; frequency response 20-20,000 Hz; impedance 87-ohms at 1 kHz; level controls; Pneumalite ear cushions; padded simulated leather earcups, adjustable brushed stainless-steel yokes and slidebars; 10-ft coiled Y cord; molded plug; sensitivity at 100-dB SPL 0.25 V rms sine wave at 1 kHz, 0.10 V rms pink noise; THD 0.5% at 1 kHz for 100-dB SPL; weight (less cord) 12.6 oz $55

K/135. Similar to K/145 except response 10-18,000 Hz; 2.5-in dynamic elements; impedance 98 ohms at 1 kHz; sensitivity at 100-dB SPL 0.09 V rms sine wave, 0.11 V rms pink noise; THD 1% at 1 kHz for 100-dB SPL; weight (less cord) 13.4 oz..... $40

HV/1 Dynamic Stereophones

Has 2-in dia. driver and will operate from 3.2 to 600 ohm outputs; response 20-20,000 Hz; capacity 5 V continuous with provision for 14-dB SPL transient peaks; 10 oz; 10-ft coiled cord..... $50

KO/727B Dynamic Stereophones

Frequency response 10-18,000 Hz; THD 1.0% at 100-dB SPL; 3.2 to 600 ohms impedance; 10-ft coiled cord; 16.5 oz; black..... $40

K/6ALC Dynamic Stereophones

Frequency response 10-16,000 Hz; THD less than 1% at 1 kHz, 100-dB SPL; impedance 94 ohms at 1 kHz; individual volume controls; supplied with 10-ft coiled cord; 14 oz $40

K/6A. Same as K/6ALC but without volume controls; impedance 100 ohms at 1000 Hz $30

LAFAYETTE

F-780 Stereo Headphones

Professional-style two-way stereo headphones with separate woofer and tweeter in each earpiece; lightweight open-air design; frequency response 20-20,000 Hz; max. input 0.1 W; 4-150 ohm impedance $45

F-700 Stereo Headphones

Lightweight headphones feature ultra-thin diaphragm with rare-earth-magnet transducer; adjustable vinyl leatherette headband and foam-padded earcups; frequency response 18-22,000 Hz; max. input 100 mW; 4-150 ohm impedance; 6 1/2-ft cord with 1/4-in plug; 4.6 oz..... $35

SP-78 Stereo Headphones

Deluxe closed-acoustic stereo headphones; two-way design with separate woofer and tweeter in each earpiece; padded headband and earcups; independent volume/balance control on each earpiece; 15-ft coiled cord; frequency response 18-24,000 Hz $30

SP-77 Stereo Headphones

Features separate slide-rule volume control on each earcup, pre-adjusted to prevent speaker blast frequency response 20-18,000 Hz; 8-ohm impedance; 6-ft coiled cord $15

NAKAMICHI

HF-100 Monitor Headphones

Dynamic headphones; frequency response 20-20,000 Hz; impedance 8 ohms ±20% at 1 kHz; 90-dB SPL output (±3 dB) per mW at 1 kHz; channel balance within 3 dB at 1 kHz; vinyl-covered, foam-padded earpieces; adjustable headband; supplied with 8-ft straight cord with standard stereophone plug; 14.3 oz..... $55

PANASONIC

EAH-520 Headphones

Duo-cone headphone system; high efficiency; lightweight; separate bass and treble controls; adjustable head cushion; high-velocity design; 10-ft coiled fine cord; bronze and chrome finish..... $55-$65

EAH-510. Similar to EAH-520 except straight line cord; black and chrome finish ..... $45-$55

EAH-500. Similar to EAH-520 except straight line cord; gray and chrome finish ..... $35-$45

PICKERING

OA-7 Headphones

Lightweight open-audio design; REE used in permanent magnet compound; foam-cushioned headband; earpiece yokes incorporate pivoting system enabling snug fit; nominal input impedance 100 ohms; frequency response 20-22,000 Hz ±5 dB; sensitivity 110-dB SPL at 0.2 V; max. input 0.1 W continuous; dist. 0.5% at 110-dB SPL; supplied with flat 10-ft cord; 6 oz $70

OA-3A Headphones

Lightweight open-audio design; 15 ohms ±10% at 1 kHz; input 0.2 W/channel continuous; sensitivity 100 dB SPL at 0.10 V input at 1 kHz for each channel; frequency response 20-20,000 Hz; dist. less than 0.5% at 110 dB SPL; comes with extended-adjustable headband with pivot yokes and padded vinyl cover; 10-ft four-conductor cord with molded no-break connector; 8.5 oz..... $45

PIONEER

SE-700 Stereo Headphones

Features high-polymer driver elements; frequency range 20-20,000 Hz; matching impedance 4 to 16 ohms; sensitivity 100 dB/3 V $100

Monitor 10 Stereo Headphones

Dynamic type covering a frequency range of 20-20,000 Hz, with 2 1/4-in free-edged polyester-film cone speaker in each earpiece; sensitivity 100 dB/mW; max. input power 700 mW/ch; comes with 16-ft, 5-in coiled cord; 23 oz $80

SE-505 Headphones

Two-way stereo dynamic design with a woofer and tweeter in each phone; 8 ohms each channel; response 20-20,000 Hz; sensitivity 108 dB/0.3 V; features both tone and volume controls on each phone; max. input 500 mW each phone; 16-ft coiled cord $75

SE-6 Stereo Headphones

Dynamic open-air stereo headphones feature samarium cobalt magnets in 25-micron polyester film dome diaphragms; 150-ohm impedance; sensitivity 102 dB/mW at 1000 Hz; max. input 200 mW/ch; frequency response 20-20,000 Hz; includes 9 ft, 5 in cord and Y-type cord with 1/4-in short plug; 8.8 oz $70

SE-405 Stereo Headphones

Dynamic type covering a frequency range of 20-20,000 Hz; 8 ohms impedance; input power 500 mW each channel; unit features polyester-film diaphragm; special earpads with sliding-type adjusting headband and clickstops for easy listening; volume controls for both left and right channels; 16 1/2-ft coiled cord $55

SE-4 Hear-Through Headphones

Features super-thin polyester film dome drivers; frequency range 20-20,000 Hz; hear-through earpads; impedance 250 ohms; sensitivity 96 dB/mW (1000 Hz); max. input power 200 mW/channel; comes with 9-ft, 5-in Y-type cord; weight 7 3/5 oz without cord, 9 1/5 oz with..... $50

SE-305 Stereo Headphones

Dynamic type covering a frequency range of 20-20,000 Hz; 8-ohm impedance each channel; matching impedance 4 to 16 ohms; max. input power 500 mW each channel; comes with 16-ft, 5-in coiled cord; 15 oz..... $45

SE-2 Stereo Headphones

Dynamic stereo headphones feature ferrite magnetic circuits in 25-micron polyester film dome diaphragms; 150-ohm impedance; sensitivity 99 dB/mW at 1000 Hz; max. input 200 mW/ch; frequency response 20-20,000 Hz; includes 8 ft, 2 in cord and Y-type cord with 1/4-in plug; 9 oz $30

MADE FOR EACH OTHER.

Earphones are made for ears. Yours. That's why the Beyer DT 440 has sound so natural and is so light and comfortable you don't even know it's there, even after many hours.

At 9.6 ounces, it is one of the lightest headphones available. And its weight is evenly distributed among the sponge-padded earcups and air-filled headband. There's no great weight suspended from your head, and your ears never get squeezed.

Some people complain about the isolation of headphones that close them off from the world. So we built the DT 440 with a high velocity open design, to allow a natural mixture of recorded music and environmental sound.

How does it sound? Most people say "spectacular." A great combination of impact and intimacy. The overall sound is wonderfully smooth and transparent. With clean, rich bass response. Powerful, lifelike midrange. Crystal-clear, undistorted highs. And perfect stereo imaging.

For sound – and for comfort – nothing beats a Beyer. We'd like to make one for you.

Beyer Dynamic

BURNS AUDIOTRONICS, INC.
5-05 Burns Avenue, Hicksville, NY 11801
(516) 935-8000

15 HEADPHONES

SE-205 Stereo Headphones
Dynamic type covering a frequency range of 20-20,000 Hz; cone-type speaker in each earpiece; matching impedance 4 to 16 ohms; max. input power 500 mW each channel; comes with 8.2-ft cable; 16 oz $30

SANSUI

SS-100 Stereo Headphones
Omni-dynamic driver full-range speaker in each earpiece; matching amp impedance 4-100 ohms, 600 ohms nominal; frequency response 20-20,000 Hz; HD 0.3% at 94 dB SPL; max. input power 250 mW; sensitivity 94 dB/mW (at 200 Hz); 6.5-ft cord; weight 13.2 oz $118

SS-80 Headphones
Two-way thin film dynamic stereo headphones; has 50-μ-thick polyester diaphragms (2$^1/_4$-in wide); sensitivity 108 dB/mW; 200-ohm impedance; frequency response 20-20,000 Hz; separate volume and tone controls for each channel; adjustable stainless-steel headband; 12.2-ft coiled cord; 17.3 oz $72

SS-60 Headphones
Stereo dynamic headphones have 50-μ-thick polyester diaphragms (2$^1/_4$-in wide); max. input 500 mW; frequency response 20-20,000 Hz; 25-ohm impedance; separate volume controls for each channel; 6.6-ft cord; 15 oz $54

SS-40 Headphones
Thin polyester 2$^1/_4$-in wide dynamic drivers; frequency response 20-20,000 Hz; 25-ohm impedance; max. input 500 mW; sensitivity 108 dB/mW; 6.6-ft cord; 13.1 oz $42

SS-30 Headphones
Thin polyester 2$^1/_4$-in wide dynamic cones; frequency response 20-20,000 Hz; max. input 500 mW; 8-ohm impedance; 11.5 oz $30

SENNHEISER

HD 224 Headphones
Dynamic stereo headphones; frequency response 16-20,000 Hz; SPL 94 dB at 1 mW; THD 1.0%; 200-ohm nominal impedance; double-walled circumaural foam earpads cover entire ear; includes steel-stranded detachable 3000-mm cable; 252 g $136

HD 430 Headphones
"Open-aire" design dynamic headphones; frequency response 16-20,000 Hz; sensitivity 94 dB with 1 mW input, nominal SPL at 1000 Hz; HD 0.5%; impedance 600 ohms/ch; padded earpad rims and adjustable suspension strap; includes 10-ft cable; 7 oz $119

HD 424 Headphones
Deluxe "open aire" design dynamic headphones; frequency response 15-20,000 Hz; sensitivity 17.7 μbar/V; 1 mW (1.41 V) per channel for SPL of 102 dB; dist. 1% at 22 V, 1 kHz; 2000-ohm impedance per channel; removable head and ear cushions; 10-ft cable; 6.5 oz (without cable) $109

HD 420 Headphones
"Open-aire" design dynamic headphones; frequency response 18-20,000 Hz; sensitivity 94 dB with 1 mW input, nominal SPL at 1000 Hz; HD 1.0%; impedance 600 ohms/ch; adjustable suspension strap and cushioned earpads; includes 10-ft cable; 4 oz $85

HD 414 Headphones
"Open aire" design dynamic headphones; frequency response 20-20,000 Hz; sensitivity 17.7 μbar/V; 1 mW (1.41 V) per channel for SPL of 102 dB; dist. 1% at 22 V, 1 kHz; 2000-ohm impedance per channel; 10-ft cable; 5 oz (without cable) .. $75

HD 400 Headphones
"Open aire" design dynamic headphones; frequency response 20-18,000 Hz; sensitivity 1 mW for SPL of 88 dB; 600-ohm impedance per channel; 10-ft cable; 3 oz (without cable) $44

HD 44 Headphones
"Open aire" design dynamic headphones; under-the-chin configuration; frequency response 52-10,000 Hz; 600-ohm impedance per channel; 10-ft cable; 1.2 oz (without cable) $40

SIGNET DIVISION, A.T.U.S., INC.

TK33 Stereophones
Dipolar electret condenser stereophones with power adapter. Stereophones feature high-compliance film moving diaphragm 45 mm diameter and 2 microns thick; suede-finish inner headband construction and pivotal porous vinyl ear pads. Passive impedance matching transformer adapter features stereophone/speaker operation and hi/lo stereophone sensitivity switches; two dual-color LED arrays in groups of six, first four indicating medium-to-loud normal reproduction and last two indicating high level peaks; no external power required; can accommodate two headsets. Frequency response 20-22,000 Hz ±2 dB; sensitivity 100 dB at 1 V, 1000 Hz; THD 0.1% at 110-dB SPL; matching impedance 4-16 ohms; includes 8.2-ft cord with special plug and 3.9-ft adapter cable with four-conductor plug. Stereophone 9.7 oz with cord; adapter 4 lbs; adapter 5.5" H × 2.4" W × 8.7" D..... $250
TK33S. Additional stereophone only for TK33. $100

TK22 Stereophones
Moving-coil dynamic stereophones feature high-compliance polyester dome diaphragm 20 microns thick and 45 mm diameter with 40-micron self-supporting silver/copper voice coil and FXD magnet; full-swivel foam earpieces and soft suede-finish inner headband; frequency response 20-20,000 Hz; sensitivity 96 dB at 1 mW, 1000 Hz; THD 0.4% at 110-dB SPL; matching impedance 4-16 ohms; includes 11$^1/_2$-ft cord with plug; 9.2 oz with cord. $80

SONY

ECR-500 Electrostatic Headphones
Uni-electret open-back electrostatic stereo headphones with asymmetrical pentagon-shaped diaphragm; frequency response 20-20,000 Hz; sensitivity 91-dB SPL at 1 V rms (600 Hz); max. 114-dB SPL; HD less than 0.03% at 4 V rms, 1000 Hz in; lightweight construction; adjustable headband; push-pull driver system; includes adaptor with 30-ohm input impedance and 12-V max. input level; 3$^1/_8$" H × 3$^7/_8$" W × 7$^5/_8$" D; cable 7 ft, 6 in; weight 12 oz $120

Z Series Stereo Headphones
Stereo headphones feature lightweight palladium-coated construction, uniform piston action across diaphragm surface, 30-mm diameter voice coils, magnets with copper-coated yoke and thin copper-clad aluminum wire, litz wire, and SBMC grille material; 110-ohm impedance; sensitivity 104 dB/mW; 50-mW rated input; include 2-m cord.
DR-Z7. Frequency response 20-25,000 Hz; THD 0.03% at 1000 Hz, 93 dB SPL; 420 g with cord $100
DR-Z6. Similar to DR-Z7 except 400 g $85
DR-Z5. Similar to DR-Z6 except frequency response 20-22,000 Hz; THD 0.1%; 360 g $70

DR-6M Stereo Headphones
Mini stereo headphones designed for live or off-the-air sound monitoring; 28-ohm impedance; sensitivity 110 dB/mW; 10-mW rated input; frequency response 20-20,000 Hz; 2-m cord; 350 g $65

S Series Stereo Headphones
Stereo headphones feature 70-mm speaker, vinyl ear enclosures, rugged housing, and long curled cord; impedance 14 ohms; sensitivity 102 dB/mW; 100-mW rated input; frequency response 20-20,000 Hz; 3-m curled cord.
DR-S5. Volume and tone controls; 385 g $50
DR-S4. Volume control, 375 g $40
DR-S3. 350 g; no volume or tone control $30

DR-2 Stereo Headphones
Impedance 10 ohms; sensitivity 104 dB/mW; rated input 100 mW; frequency response 20-20,000 Hz; 2-m cord; 300 g $22

STANTON

Stereo/Wafers XXI Headphones
Ultra-lightweight professional-standard headphone; frequency response 20-22,000 Hz +4 dB; sensitivity 2 V for 100 dB; max. power input 0.1 W continuous; dist. 0.5% at 200-dB SPL; 100-ohm impedance at 1 kHz; brushed blue denim finish; supplied with 10-ft flat cord with heavy-duty plug; 5.9 oz $70

Dynaphase 35 Headphones
Dynamic headphones with open-audio construction and 1$^1/_2$-in Mylar diaphragm; 15-ohm impedance; frequency response 20-20,000 Hz; sensitivity 0.1 V for 100-dB SPL at 1 kHz; 0.5% dist. at 110-dB SPL; max. input 0.2 W/channel continuous; extend-adjustable headband with pivot yokes, padded vinyl cover, and vinyl-covered foam cushions; supplied with 10-ft cord and molded connector; 7 oz (less cord) $45

STAX

SR-Sigma Earspeakers
Electrostatic push-pull panoramic sound headphones; frequency response 30-35,000 Hz; max. sound pressure 103 dB; impedance 122k ohms at 10,000 Hz; 460 g $450

SRX-III Earspeakers
Electrostatic push-pull type; response 30-25,000 Hz; SPL 96 dB at 100 V rms input; maximum level 110 dB; weight 390 g including cord; comes with SRD-7 energizer, a polarizing supply and signal source; response 10-30,000 Hz ±2 dB; dist. 0.02% at 1 W, 1000 Hz; 4$^3/_4$" H × 2$^7/_8$" W × 8" D $300

SR-5 Earspeakers
Electrostatic push-pull type; response 30-25,000 Hz ±1 dB; SPL 96 dB at 100 V rms input; maximum level 110 dB; weight 432 g including cord; comes with SRD-6 energizer, a polarizing supply and signal source; response 10-30,000 Hz ±2 dB; dist. 0.02% at 1 W, 1000 Hz; overall size 2$^3/_8$" H × 2$^{11}/_{16}$" W × 6$^1/_2$" D $170

SR-44 Earspeakers
Electret condenser system combines SR-40 headphones with SRD-4 adapter; features wide latitude in headband adjustment; requires ac power source $120

SRA-12S Headphone Preamp/Amp
Input sensitivity: phono 2.0 mV, tuner, tape, aux. 250 mV; phono overload 100 mV; hum and noise; phono 58 dB, tuner, aux. 80 dB; frequency response 10-60,000 Hz ±1.5 dB; THD 0.05%; DIN output jacks; preamp can be used separately; designed for use with Stax Earspeakers $350

STUDER/REVOX

RH 310 Stereo Headphones
Open-type lightweight headphones designed for am-

plifiers rated for 4-600 ohm load impedances; frequency range 20-20,000 Hz $80

SUPEREX

PEP-81 Electrostatic System
Consists of PEP-81 headphones and CC-81 control console; headphone frequency response 15-18,000 Hz ±2 dB, 10-22,000 Hz ±5 dB; dist. 0.2%; impedance-matched to CC-81 for 4-16 ohms; isolation-type headphones with fully adjustable vinyl-covered headband and foam cushions and 15-ft coiled cord; control console has level controls for both channels (20-dB range), speaker/phone rocker, on/off switch; can accommodate two sets of headphones; requires 5 W per channel min. drive; console size 11" × 3¼" × 6½" $150

PEP-79E Electrostatic System
Consists of PEP-74 headphones and CC-79E control console; headphone frequency response 15-18,000 Hz ±2 dB, 10-22,000 Hz ±5 dB; negligible dist.; impedance-matched to CC-79E for 4-16 ohms; trans-air lightweight headphones with fully adjustable vinyl-covered headband and foam cushions and 15-ft coiled cord; control console is designed for use with main amp level controls, has self-protecting circuits; console size 2½" H × 7" W × 4" D $90

SM-700 Headphones
Dynamic headphones with 2¾-in Mylar diaphragm; 35-ohm impedance; frequency response 10-20,000 Hz ±3 dB; sensitivity 10 mW (0.6 V) for 110 dB at 400 Hz; 0.25% dist. at 400 Hz, 110-dB SPL; padded, fully adjustable steel and aluminum headband with foam-filled vinyl cushions; supplied with 15-ft cable, clothing clip, and molded stereo plug; 10 oz (less cable) $70

PRO B VI Stereophones
Each earcup features dynamic woofer, ceramic tweeter, and L/C crossover; impedance 4-16 ohms; frequency response 15-22,000 Hz; fully adjustable, vinyl-covered and padded spring steel headband with vinyl covered urethane foam cushions; supplied with 10-ft coil cord with molded stereo plug $60

Classic CL-1 Headphones
Lightweight, isolating-type headphones; frequency response 10-20,000 Hz; 35 ohm impedance; 0.3% dist. at 110-dB SPL (400 Hz); sensitivity 10 mW (0.6 V) for 110-dB SPL at 400 Hz; padded fully adjustable steel and aluminum headband with foam-filled vinyl cushions; 15-ft (extended) retractable cable with clothing clip and molded stereo plug; 10.6 oz (without cable) $60

TRL-99 Headphones
Dynamic headphones with 2¾-in Mylar diaphragm; 35-ohm impedance; frequency response 15-20,000 Hz ±4 dB; sensitivity 6 mW for 100-dB SPL; 0.4% dist. at 400 Hz, 110-dB SPL; padded, fully adjustable, aluminum and steel headband with fabric-faced, foam-filled cushions; supplied with 15-ft cable, clothing clip, molded plug, and strain relief; 10 oz (less cable) $55

TRL-3 Trans-Linear Headphones
Open design headphones; frequency response 40-20,000 Hz ±5 dB, 5-dB bass boost between 70 and 200 Hz; 80-ohm impedance; 0.6% dist. at 110 dB (400 Hz); sensitivity 6 mW for 100-dB SPL; max. input 5 V; padded, fully adjustable aluminum and steel headband; urethane foam, snap-on cushions; 15-ft (extended) retractable cable with clothing clip, molded plug, and strain relief; 8.5 oz (without cable) $45

TRL-77 Trans-Linear Headphones
Open design headphones; frequency response 45-20,000 Hz; 80-ohm impedance; max. input 5 V; adjustable, continuous padded stainless steel headband and open foam; snap-on cushions; 7-ft Y cord with molded plug and strain relief; 11.5 oz (without cable) $35

SC-3 Control Box
For use with receivers and amps without headphone jacks; left and right channel level controls; speaker/headphone switch; speakers off when phones are on $10

TECHNICS by PANASONIC

EAH-830 Linear-Drive Headphones
Low-distortion high power-handling capacity; frequency range 15-35,000 Hz; max. input power 3000 mW; 125-ohm impedance; 0.3% dist.; 3-meter coiled cord; Supra-Aural ear pads; precise-fit, soft, wide-contact leather head pads; 450 g $80

EAH-820 Linear-Drive Headphones
High power handling capacity; frequency range 15-30,000 Hz; max. input power 3000 mW; 125-ohm impedance; 0.3% dist.; 3-meter coiled cord; Supra-Aural ear pads; precise fit, soft, wide-contact leather head pads; 430 g $60

EAH-810 Linear-Drive Headphones
Open-environment waveform response at eardrum; frequency range 20-25,000 Hz; max. input power 1000 mW; 63-ohm impedance; 0.5% dist. at 100 dB; 3-meter cord; Supra-Aural ear pads; precise-fit, soft, wide-contact leather head pads; 230 g $40

TOSHIBA

HR-811 Headphones
Complementary back electret push-pull, full-face drive system; 2.5-micron diaphragm; frequency response 20-30,000 Hz; 8.4 oz; comes with adaptor plugs $75

HR-X1 Headphones
Complementary back electret push-pull, full-face drive system; 2.5-micron diaphragm; frequency response 20-20,000 Hz; 5.6 oz; comes with adaptor plugs $65

WHARFEDALE

ID-2 Isodynamic Headphones
Acoustically-damped ported isodynamic headphones with printed-circuited-on-polyester-sheet diapnragm; frequency response 20-20,000 Hz ±3 dB; sensitivity 90 dB SPL for 1 mW in, 0.3% dist.; max. SPL 120 dB; 60 ohms nominal impedance; supplied with straight cord; 12 oz (without cord) $120

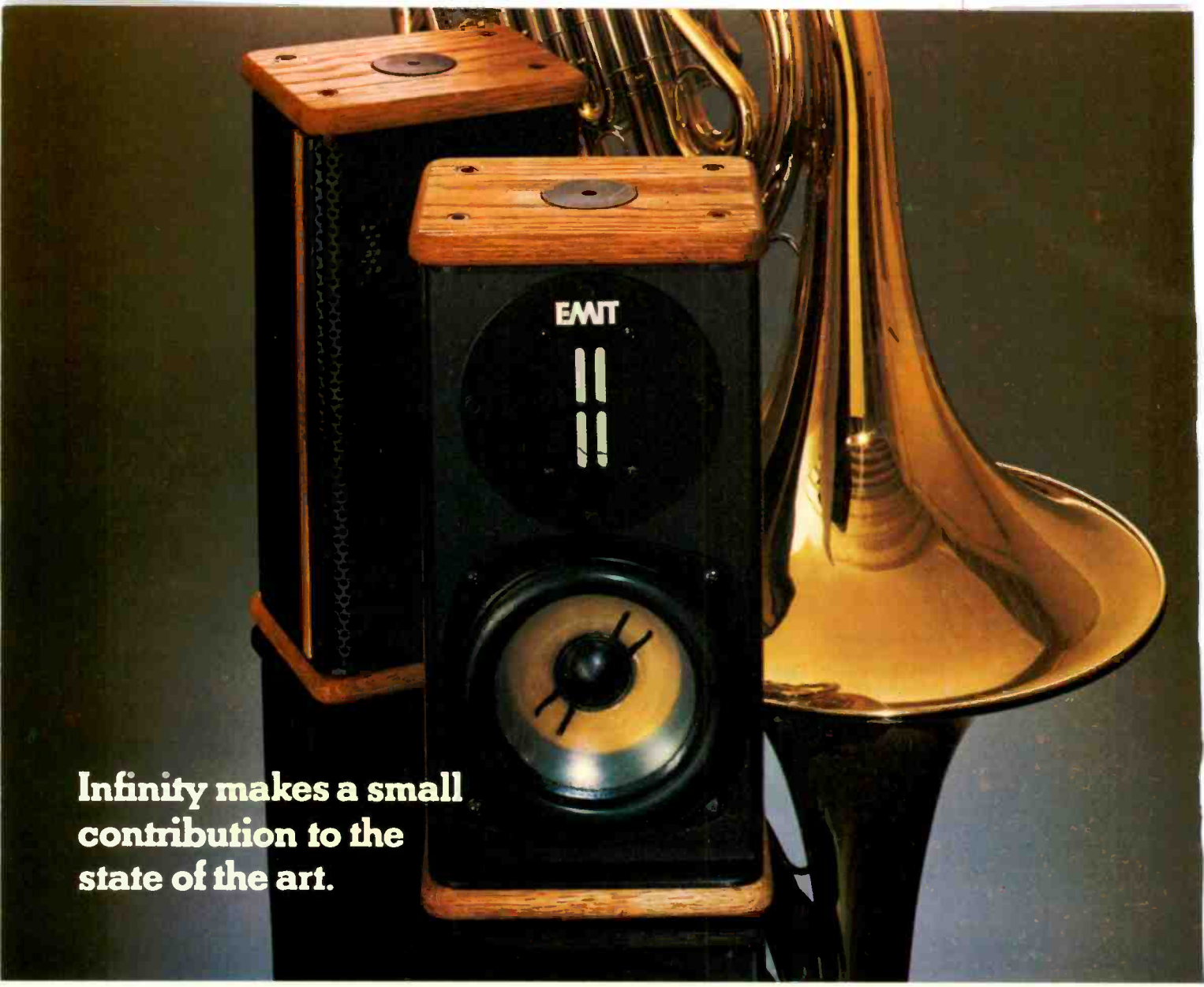
YAMAHA

YH-1000 Stereo Headphones
Orthodynamic-design headphones with 12.7-micron 30-mg polyester film diaphragm between cerium cobalt disc magnets; frequency response 20-20,000 Hz; output 103 dB/mW SPL; 3 W rated input, max. input 10 W; HD −50 dB at 90-dB SPL, −30 dB at 120-dB SPL; impedance 100 ohms; urethane foam-padded earcups, leather-finish head strap, universal ball-joint tilt adjustment, and lockable height-adjusting sliders; includes 7.9-ft cord with stereo plug; 19 oz. with cord $220

YH-1 Stereo Headphones
Lightweight "Orthodynamic" design featuring sintered ferrite disc magnets with combination voice-coil diaphragm between; frequency response 20-20,000 Hz; output 94 dB/mW SPL; 3 W rated input, max. input 10 W; HD 0.3% at 90 dB SPL, 3.0% at 120 dB SPL; impedance 150 ohms; soft leather strap distributes weight over entire head; supra-aural pads; 8-ft straight cord; weight 10.2 oz with cord $65

YH-2. Same as YH-1 except output 93 dB/mW SPL; weight 8.1 oz with cord $50

YH-3. Similar to YH-2 except 1 W rated input, 3 W max.; 7.4 oz with cord $35



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†Manufactured by Infinity under license from Watkins Engineering, Inc.

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16 SPEAKER SYSTEMS

AAL

PRO Series

PRO RH9040 Tweeter Speaker System
Wide dispersion high frequency horn tweeter; frequency response 400-10,000 Hz; 100° horizontal dispersion, 40° vertical dispersion; max. input 100 W continuous program; 8-ohm nominal impedance; 1/4-in phone jack; 3/4-in plywood cabinet with textured vinyl covering; 41" H × 19" W × 32" D.. $900

PRO W212 Speaker System
System has dual 12-in accordion-edged double-folded horn woofers with 1 1/2-in voice coils; frequency response 40-5000 Hz; max. input 200 W continuous program; 4-ohm nominal impedance; dual 1/4-in phone jacks; 3/4-in plywood cabinet with textured vinyl covering; 28" H × 48" W × 20" D..... $640

PRO BH15 Speaker System
Horn-loaded bass-reflex combination speaker system with 15-in accordion-edged woofer with 3-in voice coil; frequency response 45-5000 Hz; max. input 300 W continuous program; 8-ohm nominal impedance; 1/4-in phone jack; 3/4-in plywood cabinet with textured vinyl covering; 36 1/2" H × 30" W × 24" D $510

PRO MT70 Speaker System
Designed as building block for midrange and high-end tweeter; 8 × 18-in 70° radial horn with 60 W compression driver and four 3-in piezo electric tweeters; frequency response 1200-25,000 Hz; crossover at 7000 Hz; max. input 60 W continuous program; 8-ohm nominal impedance; push terminals and 1 1/4-in phone jack; 30" H × 11 1/4" W × 11 3/4" D $450

PRO MS212 Speaker System
Floor monitor two-way speaker system with dual 12-in accordion-edged woofer and 4 × 10-in compression horn with 60 W driver; frequency response 70-14,000 Hz; crossover at 1500 Hz; 4-ohm nominal impedance; input range 30-200 W continuous program; 1/4-in phone jack; 3/4-in plywood cabinet with textured vinyl covering; 36" H × 16" W × 16" D..... $370

PRO SC410 Speaker System
Portable vocal column for use by combos or soft rock groups; two-way system has four 10-in accordion-edged woofers and three 3-in piezo electric tweeters; frequency response 60-25,000 Hz; crossover at 5000 Hz; input range 20-150 W continuous program; 8-ohm nominal impedance; 1/ -in phone jack and push terminals; cabinet with 3/4-in vinyl covering; 48" H × 13" W × 11" D..... $320

PRO MS12 Speaker System
Foot monitor two-way speaker system with 12-in accordion-edged woofer and 3-in piezo electric tweeter; frequency response 100-20,000 Hz; crossover at 5000 Hz; input range 25-100 W continuous program; 8-ohm nominal impedance; 1/4-in phone jack; 3/4-in plywood cabinet with textured vinyl covering; 23" H × 16" W × 16" D $210

Disco Series

Super Jock Speaker System
Three-way speaker system with 15-in accordion-edged woofer, 3-in voice coil, 8 × 18-in 70° radial

horn midrange with 60 W compression driver, and four 3-in piezo electric tweeters; frequency response 30-25,000 Hz; crossovers at 1200 and 7000 Hz; input range 20-300 W continuous program; 8-ohm nominal impedance; rear-mounted midrange and tweeter control; 1/4-in phone jacks; cabinet with 3/4-in vinyl covering; 57" H × 24" W × 28" D $625

Disco Monster Speaker System
Resonant-free, rigid-wall enclosure houses two 12-in extended range speakers with 1 1/2-in voice coils; frequency response 30-8000 Hz; 4-ohm nominal impedance; max. input 250 W continuous program; black vinyl finish with chrome-plated metal corners and removable grille cover; 1/4" Switchcraft phone-jack connections; 50" H × 30" W × 25" D..... $585

Disco Tower Speaker System
Three-way speaker system with two 15-in woofers, 4 × 10-in die-cast horn midrange, and four 3-in piezo electric tweeters; frequency response 30-25,000 Hz; 16-ohm nominal impedance; crossovers at 1500 and 7000 Hz; max. input 300 W continuous; 1/4" female phone and push terminal connections; vinyl-covered cabinet with heavy-duty metal corners; 46 3/4" H × 21" W × 16" D $450

Disco One Speaker System
Three-way speaker system with 15" woofer, 2-in voice coil, 4 × 10-in die-cast horn midrange, and four 3-in piezo electric tweeters; frequency response 35-25,000 Hz; 8-ohm nominal impedance; crossovers at 1500 and 7000 Hz; max. input 200 W continuous; 1/4" female phone and push terminal connections; vinyl finish; 29" H × 21" W × 16" D .. $370

Studio Series

Studio 500 Speaker System
Three-way speaker system with 15-in woofer, dual 5 1/4-in cone midrange with 4-oz magnet, and 3-in piezo electric tweeter; frequency response 20-25,000 Hz; crossovers at 1000 and 5000 Hz; input range 10-60 W continuous program; 8-ohm nominal impedance; front mounted midrange and tweeter controls; push terminals; oak-grained vinyl cabinet; 31" H × 18" W × 11 1/2" D $259

Studio 400. Similar to Studio 500 except with dual 10-in woofers and 5 1/4-in cone midrange; frequency response 25-25,000 Hz; input range 10-75 W continuous; 35" H × 14 1/2" W × 11 1/2" D $239

Studio 300. Similar to Studio 400 except 12-in woofer; input range 10-50 W continuous program; 27 1/2" H × 16 1/2" W × 11 1/2" D..... $199

Studio 200. Similar to Studio 300 except with 10-in woofer; frequency response 27-25,000 Hz; input range 10-40 W continuous program; 24 1/2" H × 14 1/2" W × 11 1/2" D..... $159

Studio 100 Speaker System
Two-way speaker system with 8-in woofer, 6 1/2-oz magnet, 1-in voice coil, and 3-in piezo electric tweeter; frequency response 35-25,000 Hz; crossover at 4000 Hz; input range 5-30 W continuous program; push terminals; 8-ohm impedance; oak vinyl cabinet; 22 1/2" H × 12 1/2" W × 9" D $129

PRO W 215 Bass Speaker System
Bass system has dual 15-in accordion-edged woofers with 3-in voice coil; frequency response 40-5000 Hz; max. input 600 W continuous program; 4-ohm nominal impedance; dual 1/4-in phone jacks; 3/4-in plywood cabinet with textured vinyl covering; 35" H × 60" W × 24" D $875

Monster Tweeter Array
Incorporates 14 3-in piezo electric tweeters; frequency response 7000-25,000 Hz; max. input 250 W continuous program; push terminals and 1/4-in phone jack; 11 1/4" H × 30" W × 11 3/4" D..... $325

Pro Tweeter Array
Incorporates eight 3-in piezo electric tweeters; frequency response 7000-25,000 Hz; max. input 100 W continuous program; supplied with vinyl-covered carrying case with metal-reinforced corners; push terminals and 1/4-in phone jacks; 11 1/4" H × 16 3/4" W × 11 3/4" D $210

Add-Array Speaker System
Speaker system comprised of four 3-in piezo electric super tweeters; frequency response 5000-25,000 Hz; crossover at 5000 Hz; max. input 100 W continuous program; push terminals; walnut-grained vinyl cabinet; 6 3/4" H × 17 1/4" 10 1/2" D..... $119

ACOUSTIC RESEARCH

AR9 Speaker System
Four-way floor-standing speaker system features

16 SPEAKER SYSTEMS

five drivers consisting of two 12-in parallel and connected acoustic-suspension woofers handling from 20-200 Hz, 8-in acoustic-suspension low midrange

driver from 200-1200 Hz, 1½-in dome upper midrange driver from 1200-7000 Hz, and ¾-in dome tweeter; crossover frequencies at 200, 1200, and 7000 Hz; 4-ohm nominal impedance; sensitivity 86-dB SPL/W/m; input 400 W/ch continuous; low frequency response −3 dB at 28 Hz; three three-position switches for lower midrange, upper midrange and high range level control; walnut veneer cabinet with three grilles; "Acoustic Blanket," absorbent fiber sheet that absorbs front-surface-reflected soundwaves, behind front grille; 52¾" H × 15" W × 15 13/16" D..... $750

AR90 Speaker System

Four-way floor-standing acoustic-suspension speaker system with two 10-in side-firing woofers, 8-in high-temperature lower midrange, 1½-in high-temperature hemispherical-dome upper midrange, and ¾-in high-temperature hemispherical-dome tweeter; crossovers at 200, 1200, and 7000 Hz; recommended input range 50-300 W/ch continuous power; sensitivity 87 dB SPL/W/m; 4-ohm nominal impedance; three 3-position switches for lower and upper midrange and high-range levels; oiled walnut veneer finish with black contrast and dark grille; 43⅜" H × 14½" W × 15 5/16" D..... $550

AR91 Speaker System

Three-way floor-standing acoustic-suspension speaker system with 12-in woofer, 1½-in liquid-cooled dome midrange with semi-horn, and ¾-in liquid-cooled dome tweeter, crossovers at 700 and 7500 Hz; handles 200 W/ch continuous power; sensitivity 87 dB SPL/W/m; 4-ohm nominal impedance; two 3-position switches for midrange and high-range levels; walnut veneer over high density particle board cabinet; 31½" H × 14" W × 11 7/16" D $400

AR92. Similar to AR91 except with 10-in woofer; 31⅜" H × 14" W × 11 7/16" D..... $300

AR14 Speaker System

Two-way speaker system with 10-in acoustic-suspension woofer and 1-in dome tweeter; crossover at 1300 Hz; 8-ohm nominal impedance; sensitivity 1 W for 86-dB SPL (on axis at 1 m); max. input 100 W/ch continuous; system low-frequency response −3 dB at 44 Hz; two-position switch for tweeter contour control; oiled walnut veneer finish; 25" H × 13 15/16" W × 10¾" D..... $180

AR25 Speaker System

Two-way floor-standing acoustic-suspension speaker system with 8-in woofer and 1/14-in pressure tweeter; crossover at 2000 Hz; handles 100 W/ch continuous power; sensitivity 86 dB SPL/W/m; 8-ohm nominal impedance; two-position switch for high-range contour control; walnut-grain vinyl veneer finish; 21½" H × 11¾" W × 7 21/32" D $110

AR18 Speaker System

Two-way speaker system with 8-in acoustic suspension woofer and 1¼-in ring radiator tweeter; crossover at 2000 Hz; 8-ohm nominal impedance; sensitivity 1 W for 86 dB (on axis at 1 m); max. input 100 W/ch continuous; system low-frequency response −3 dB at 62 Hz; two-position switch for tweeter level control; walnut-grain vinyl veneer finish; 16½" H × 9⅝" W × 6¼" D..... $156 pr.

ACOUSTI-PHASE

Disco II Speaker System

Three-way floor-standing speaker system with 15-in woofer with 54-oz ceramic magnet, two 2 × 6-in piezo-electric horn midrange drivers, and four piezo electric super tweeters; frequency response 28-30,000 Hz ±3 dB; crossovers at 900 and 3000 Hz; input range 20-200 W; 4-ohm impedance; 29" H × 18" W × 15½" D..... $450

Phase III+ Speaker System

Three-way speaker system with 12-in woofer, 5-in midrange, and 1-in Mylar dome tweeter; frequency response 32-20,000 Hz ±3 dB; crossovers at 900 and 5000 Hz; input range 10-100 W continuous; impedance 4-8 ohms; tweeter level control; walnut veneer finish; 25" H × 15" W × 13½" D $310
Butcher block cabinet $360

Phase II Speaker System

Three-way bookshelf speaker system with 10-in woofer, 5-in midrange, and 1-in Mylar dome tweeter; frequency response 35-20,000 Hz ±3 dB; crossovers at 1200 and 5000 Hz; input range 10-70 W continuous; impedance 4-8 ohms; tweeter level control; walnut veneer finish; 24½" H × 14¼" W × 12½" D $230

Phase Monitor Speaker System

Two-way floor-standing speaker system with 12-in woofer and 1-in Mylar dome tweeter; frequency response 35-20,000 Hz ±4 dB; crossover at 1500 Hz; input range 10-70 W continuous; impedance 4-8 ohms; tweeter level control; 25" H × 14" W × 13½" D $190

Phase I Speaker System

Two-way bookshelf speaker system with 8-in woofer and 1-in Mylar dome tweeter; frequency response 40-20,000 Hz ±4 dB; crossover at 1600 Hz; input range 5-50 W continuous; nominal impedance 8 ohms; tweeter level control; 21½" H × 12½" W × 10⅞" D $140

ACOUSTIQUE 3a

Referance Speaker System

Four-way floor-standing acoustic pressure feedback speaker system with two 11-in woofers controlled through 150-W feedback amplifier, 8-in cone midrange, 2-in dome midrange, and 3a equiphase flat ribbon tweeter; frequency response 20-40,000 Hz ±3 dB; sensitivity 94 dB SPL/W/m; 47" H × 13" W × 13" D..... $2900

Telephonic Integrated Speaker System

Three-way acoustic pressure feedback system with sub-bass and satellite units.

TR 1200. Coffee table sub-bass includes four 11-in feedback APF woofers and 150 W continuous automatic switch-on feedback amplifier; frequency response from 30-100 Hz ±1.5 dB: sensitivity 84-96 dB/W/m; 100 Hz passive and electronic crossovers for bass and satellites; electret microphone with VU meters; linear/rock switch; walnut finish; 14" H × 35" W × 30" D..... $1665

TR 1000. Same as TR 1200 except lounge table sub-bass with three 11-in feedback woofers, finished in Black Chinese lacquer with brushed brass or chrome maple heart on angles; 12" H × 48" W × 12" D..... $1800

TR 800. Same as TR 1200 except corner table sub-bass with two 11-in feedback woofers and TR 1000 finish; 12" H × 30" W × 12" D $1300

Atom 2. Two-way PLD satellites with 7-in cone midrange woofer and Equiphase flat ribbon tweeter; frequency response from 100-40,000 Hz ±2 dB with 0.5% max. dist.; crossover at 5000 Hz; 150 W continuous max. input; 8-ohm impedance; sensitivity 94 dB/W/m; laminated back wave through flat tunnel; time aligned; 19" H × 9" W × 3" D..... $300

Atom 3. Three-way PLD satellites consisting of 5-in cone low midrange woofer, 2-in dome midrange, and ¾-in dome tweeter; frequency response from 100-30,000 Hz ±1.5 dB with 0.5% max. dist.; crossovers at 2000 and 8000 Hz; 80 W continuous max. input; 8-ohm impedance; 90 dB/W/m sensitivity; laminated back wave through very flat tunnel; time aligned; 17" H × 10" W × 7" D $330

Andante Master Control System

Three-way acoustic pressure feedback speaker system with 10-in woofer, 2-in dome midrange, and 2⅛-in × ⅞-in symmetrical ribbon tweeter; frequency response 25-40,000 Hz ±3 dB; crossovers at 300 and 5000 Hz; sensitivity 1.4 W for 96 dB SPL at 400 Hz and 6 ft on-axis; 8-ohm impedance; max. input 60 W continuous; 125 W built-in servo amplifier; dist. 0.7%; 18" H × 12" W × 8" D.$1000

Andante Linear System

Three-way acoustic pressure feedback speaker system with 11-in woofer, 2-in dome midrange, and ¾-in dome tweeter; response 30-30,000 Hz ± 3 dB; crossovers at 300 and 4000 Hz; max. input 80 W continuous; 8-ohm impedance; 120 W built-in servo amplifier; 18" H × 12" W × 8" D $679

Adaglo ∞ Speaker System

Three-way infinite-acoustic-load speaker system with 11-in woofer, 2-in dome midrange and ¾-in dome tweeter; frequency response 35-30,000 Hz ±3 dB; crossovers at 400 and 4000 Hz; max. input 80 W continuous; 8-ohm impedance; internal acoustic low-pass filter plus infinite transmission line; 31" H × 12" W × 12" D..... $559

Allegro Speaker System

Three-way floor-standing 3a-patented acoustic doublet speaker system with two 11-in woofers, 6¾-in cone midrange, and two compression chamber horn tweeters; response 50-20,000 Hz ±3 dB; crossovers at 800 and 6000 Hz; sensitivity 94 dB SPL/W/m; 37" H × 13" W × 13" D $539

Prelude Speaker System

Three-way acoustic pressure feedback speaker system with 11-in woofer, 4-in cone midrange and ¾-in 3a ferrofluid tweeter; frequency response 40-30,000 Hz ±3 dB; crossovers at 800 and 6000 Hz; sensitivity 92 dB SPL/W/m; room control adjustment; 18" H × 12" W × 8" D..... $499

Apogee Monitor Speaker System

Three-way Peripheral Laminar Decompression speaker system with 11-in woofer, 1⅜-in dome midrange, and ¾-in dome tweeter; frequency response 45-30,000 Hz ±3 dB; crossovers at 700 and 6000 Hz; max. input 70 W continuous; 8-ohm impedance; laminated back wave through flat tunnel; time aligned; 29" H × 13" W × 13" D..... $449

Allegretto Speaker System

Three-way bass reflex speaker system with 10-in woofer, 4-in × 8-in horn midrange, and horn tweeter; frequency response 50-18,000 Hz ±3 dB; crossovers at 2000 and 10,000 Hz; max. input 60 W continuous; 8-ohm impedance; 25" H × 12" W × 10" D $375

Auditorat Speaker System

Three-way 3a-patented Peripheral Laminar Decompression speaker system with 10-in woofer, 4-in cone midrange, and ¾-in 3a hemispheric dome ferrofluid tweeter; frequency response 50-30,000 Hz ±3 dB; sensitivity 92 dB SPL/W/m; 28" H × 12" W × 12" D..... $299

Apogee Speaker System

Two-way bass-reflex speaker system with 10-in

The Sound of Koss is no longer something you have to keep to yourself.

You no longer have to limit your listening to stereophones to enjoy the incredible Sound of Koss. Because now you can get the optimum loudspeaker system, and the Sound of Koss, in any Koss CM series system you choose.

KOSS CM 1010

Here's the ultimate 2-bandpass system. The Koss CM 1010 has a unique passive radiator to enhance the lower two octaves of bass. As well as a special 8-inch woofer to increase the midrange frequency response up to 3500Hz.

And with the CM 1010's 1-inch dome tweeter, you get the highest energy output, and lowest distortion, of any tweeter on the market.

KOSS CM 1020

No three bandpass loudspeaker system currently available offers the benefits of the Koss CM 1020. Its dual ports improve cabinet tuning and structural stability. And its 10-inch woofer provides a 3db gain in efficiency, as well as flat response over the lower bandpass. In addition, the CM 1020 uses a 4½-inch midrange driver to capture all the energy and presence of this critical bandpass. And the CM 1020's unique 1-inch dome tweeter produces the highest energy output and lowest distortion of any tweeter currently available. Indeed, the Koss CM 1020 is the 3-bandpass loudspeaker system you really have to hear to believe.

KOSS CM 1030

The Koss CM 1030 represents the ultimate in 4-bandpass loudspeaker systems. It includes a 10-inch woofer, mass aligned dual port system, a parallel midrange system with two 4½-inch drivers, and both a tweeter and a 1-inch treble tweeter that feature a unique acoustic transformer. Each has been carefully and specifically designed to produce the optimum spectral characteristics of their respective bandpass.

Uniting the CM 1030 into a total system that represents the ultimate in loudspeaker technology, is a unique, quasi second-order crossover network. In all, the CM 1030 is so amazing, no other 4-bandpass system even comes close in bass, midrange or high bandpass performance.

KOSS CM 530

Setting entirely new standards for bookshelf speakers is the Koss CM 530. Whether you place them horizontally or vertically, they deliver perfect mirror imaging, an incredible degree of dispersion, and the breathtaking Sound of Koss.

KOSS PRO 4/TRIPLE A

Write us, c/o Virginia Lamm for a free copy of our full-color loudspeaker catalog. And when you visit your audio dealer to hear the incredible Sound of Koss loudspeakers, take an extra moment for a private listening experience with the world famous Koss Pro/4 Triple A. Once you've heard the Sound of Koss for yourself, you'll know why hearing is believing.

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woofer and ¾-in dome tweeter; frequency response 50-30,000 Hz ±3 dB; crossover at 3500 Hz; max. input 60 W continuous; 8-ohm impedance; 25" H × 12" W × 10" D..... $249

Alto Speaker System
Two-way 3a-patented acoustic doublet speaker system with two 8-in woofers and piezo electric tweeter; frequency response 50-30,000 Hz ±3 dB; sensitivity 95 dB SPL/W/m; 30" H × 11" W × 11" D $219

Alphase Speaker System
Two-way Peripheral Laminar Decompression speaker system with 8-in woofer and ¾-in dome tweeter; frequency response 55-30,000 Hz ±3 dB; crossover at 5000 Hz; max. input 40 W continuous; 8-ohm impedance; laminated back wave through very flat tunnel; time aligned; 20" H × 10" W × 12" D..... $179

ACUSTA CRAFT

CVM-4 Speaker System
Four-way modular system contains two CVS-3 satellites with 10-in woofer, 6-in midrange, super horn tweeter, and two CVW-12 computer-vented dual woofers; frequency response 42-15,000 Hz ±3 dB; crossovers at 100, 400, 4000 Hz; sensitivity 91 dB SPL/W/m; recommended input range 20-250 W/ch continuous into 8 ohms; CVS-3: solid-walnut finish, 42" H × 17" W × 5½" D; CVW-12: 21½" H × 21" W × 21" D; available in kit form..... $979
CVM-4 (WK). Kit..... $779
CVM-3. Similar to CVM-4 except with one CVW-10 computer-vented bass module; available in kit form $845
CVM-3 (WK). Kit..... $665

CVM-2 Speaker System
Four-way speaker system contains two CVS-2 satellites with 8-in woofer, 6-in midrange, 1-in textile-dome tweeter, and one CVW-10 computer-vented dual woofer; frequency response 50-15,000 Hz ±3 dB; crossovers at 100, 400, and 4000 Hz; recommended input range 20-200 W/ch continuous into 8 ohms; sensitivity 91 dB SPL/W/m; available in kit form; CVS-2: "picture-frame" solid-walnut molding, 21½" H × 12" W × 5½" D; CVW-10: 21½" H × 21" W × 21" D $579
CVM-2 (WK). Kit..... $469

CVM-1 Speaker System
Three-way bookshelf speaker system with CVS-1 satellite that has 6-in long-throw woofer/midrange and 1-in textile-dome tweeter combined with CVW-10 bass module; frequency response 50-20,000 Hz ±4 dB; crossovers at 100 and 2500 Hz; recommended input range 20-125 W/ch continuous into 8 ohms; available in kit form; CVS-1: "picture-frame" solid-walnut molding, 12" H × 8" W × 5½" D; CVW-10: 21½" H × 21" W × 21" D $454
CVM-1 (WK). Kit..... $354

CV-19 Speaker System
Three-way floor-standing speaker system with 12-in woofer, two 6-in midrange drivers, and super horn tweeter; frequency response 42-15,000 Hz ±3 dB; crossovers at 400 and 4000 Hz; recommended input range 20-200 W/ch continuous into 8 ohms; sensitivity 96 dB SPL/W/m; 4-ohm impedance; walnut veneer finish; available in kit form; 44" H × 16½" W × 12¾"D..... $299
CV-19 (WK). Kit..... $249
CV-18. Same as CV-19 except 33" H × 18" W × 15¼" D; available in kit form $299
CV-18 (WK). Kit..... $249

CV-12 Speaker System
Two-way bookshelf speaker system with 10-in woofer with accordion-pleated edge and soft dome tweeter; frequency response 50-20,000 Hz ±3 dB; crossover at 1500 Hz; recommended input range 15-100 W/ch continuous into 8 ohms; sensitivity 91 dB SPL/W/m; 8-ohm impedance; vinyl clad or walnut veneer finish; available in kit form; 23⅝" H × 15³/₁₆" W × 11⅞" D..... $130
CV-12 (WK). Kit..... $105
CV-14. Same as CV-12 except three-way speaker with 6-in midrange; crossovers at 400 and 4000 Hz; recommended input range 20-175 W/ch continuous into 8 ohms; available in kit form $160
CV-14 (WK). Kit..... $135
CV-15. Same as CV-14 except floor-standing speaker with frequency response 42-15,000 Hz ±3 dB; available in kit form; 30" H × 16½" W × 11⅞" D..... $215
CV-15 (WK). Kit..... $185

ACUTEX

4.2 Speaker System
Two-way floor-standing speaker system with 10-in Perfect Piston™ woofer, long throw voice coil, heavy magnet, 3-in cone dome tweeter, and Passive Reflexer™; frequency response 35-20,000 Hz; sensitivity 99 dB SPL/W/m; 8-ohm nominal impedance; Rosenut™ cabinet with rounded corners and acoustically transparent knit fabric mounted on removable frame; 23" H × 13" W × 11" D..... $199
3.1. Similar to 4.2 speaker except has 8-in woofer; frequency response 40-20,000 Hz; 21" H × 11" W × 9" D..... $149

ADC

B-300 Subwoofer
Thiele B4 reflex subwoofer with built-in 100-W amplifier; incorporates 12-in woofer; frequency response 30-150 Hz ±1.5 dB; sensitivity 93 dB for 150 mV in; standard crossover 6 dB/octave (18 dB/octave optional); sensitivity, crossover frequency, defeat, and amp on/off/auto controls; rosewood, oak, or walnut veneer finish; 22¾" H × 23¾" W × 23¾" D $495
Standard 6 dB/octave crossover..... $99
Optional 18 dB/octave crossover..... $350

ADCOM

GFW-1 Subwoofer
Compact subwoofer with 10-in driver and 56-oz magnet; unit has built-in passive crossover, phasing switch and push terminals; frequency response 22-150 Hz ±3 dB; crossover at 150 Hz at 12 dB/octave with Braun L200 speakers; impedance 4 ohms; power 100 W DIN; 15½" H × 17½" W × 17½" D.
Vinyl veneer walnut finish..... $230
Genuine walnut veneer finish $290

ADS

L910 (II) Studio Reference Speakers
Three-way speaker system with two 10-in high-compliance woofers in separate acoustic-suspension chambers, 2-in soft-dome midrange, and ¾-in soft-dome tweeter; frequency response 28-20,000 Hz ±3 dB; crossovers at 550 and 4000 Hz (12 dB/octave); efficiency 93-dB SPL/W/m; input range from 15-300 W continuous, rated input 150 W continuous; 6-ohm nominal impedance; crossover is replaceable with optional tri-amplifier; round-cornered walnut cabinet with removable black grille and cast swivel stand; 33½" H × 19" W × 15¼" D. $720

L810 (II) Speaker System
Three-way acoustic-suspension speaker system with two 8-in high-compliance woofers, 2-in soft-dome midrange, and ¾-in soft-dome tweeter; frequency response 35-23,000 Hz ±3 dB; crossovers at 550 and 4000 Hz (12 dB/octave); efficiency 93-dB SPL/W/m; input range from 20-200 W continuous; 6-ohm nominal impedance; selected natural walnut finish with removable black grille; 25½" H × 14⅛" W × 11¾" D..... $370

L710 (II) Speaker System
Three-way acoustic-suspension speaker system with two 7-in high-compliance woofers, 2-in soft-dome midrange, and ¾-in soft-dome tweeter; frequency response 40-23,000 Hz ±3 dB; crossovers at 550 and 4000 Hz (12 dB/octave); efficiency 92-dB SPL/W/m; input range 15-150 W continuous; 6-ohm nominal impedance; selected natural walnut finish with removable black grille; 21⅝" H × 12¼" W × 10½" D..... $285

L630 Speaker System
Three-way floor-standing acoustic-suspension speaker system with 10-in long excursion woofer with 1.5-in high-temperature voice coil and shallow Stifflite™ cone, 1.5-in soft-dome midrange with 1.5-in high-temperature metal voice coil, and 1-in soft-dome tweeter with single-layer high-temperature metal voice coil; frequency response 33-20,000 Hz ±3 dB; crossovers at 650 and 4000 Hz; efficiency 91 dB SPL/W/m; recommended input range 20-200 W; 8-ohm nominal impedance; walnut vinyl finish with removable black cloth grille; black metal base optional accessory (ADS F800); 25⅝" H × 14³/₁₆" W × 11¾" D..... $285

L-620 Speaker System
Two-way acoustic-suspension speaker system with 10-in long-excursion woofer and 1-in soft-dome tweeter; frequency response 33-20,000 Hz ±3 dB; crossover at 1500 Hz (12 dB/octave); efficiency 91-dB SPL/W/m; input range from 15-150 W; 8-ohm nominal impedance; walnut vinyl finish with removable black grille; 25⅝" H × 14³/₁₆" W × 11¾" D $200

L 520 Speaker System
Two-way acoustic-suspension speaker system with 8-in high-compliance woofer and 1-in soft-dome tweeter; frequency response 38-20,000 Hz ±3 dB; crossover at 1500 Hz (12 dB/octave); efficiency 91-dB SPL/W/m; input range 10-100 W; 8-ohm impedance; walnut vinyl finish with removable black grille; 21¹¹/₁₆" H × 12¼" W × 10¼" D.. $150

300 Miniature Speaker System
Two-way miniature acoustic-suspension speaker system with 5¼-in high-compliance ultra-long excursion woofer and 1-in soft-dome tweeter; frequency response 68-20,000 Hz ±3 dB; crossover at 2500 Hz (12 dB/octave); efficiency 90-dB SPL/W/m; rated input 75 W continuous, min. input 5 W continuous; 4-ohm impedance, brushed satin finish; aluminum enclosure (black or silver anodized) with aluminum grille; 8.67" H × 5.9" W × 5.7" D.. ..... $145
300C. Same as 300; includes quick-disconnect swivel bracket and all hardware for car installation surface mounting; 8½" H × 5⅘" W × 5¼" D. $150

200 Miniature Speaker System
Two-way miniature acoustic-suspension speaker system with 4-in high-compliance ultra-long excursion woofer and 1-in soft-dome tweeter; frequency response 85-20,000 Hz ±3 dB; crossover at 2500 Hz (12 dB/octave); efficiency 90-dB SPL/W/m; rated input 30 W continuous, min. input 5 W continuous; 4-ohm impedance; brushed aluminum enclosure (black or silver anodized) with anodized aluminum grille; 6¾" H × 4¼" W × 4½" D $113
200C. Same as 200 except includes swivel bracket and all accessories for car installation surface mounting $118

L420 Speaker System
Two-way acoustic-suspension speaker system with 7-in high-compliance woofer and 1-in soft-dome tweeter; frequency response 40-20,000 Hz ±3 dB; crossover at 1500 Hz (12 dB/octave); efficiency 91-dB SPL/W/m; input range 15-75 W; 8-ohm nominal impedance; walnut vinyl finish with removable black grille; 20" H × 11¼" W × 8½" D .. $115

ADVANCE SPEAKER KORP

A-II Speaker System
Two-way speaker system with 8-in long-throw woofer, 10-in low-resonance cone passive radiator,

Introducing the Avid Model 110 Minimum Diffraction Loudspeaker.

The New Reference Standard Under $150.

Utilizing the innovative design techniques which have made our revolutionary line of loudspeakers so popular, Avid introduces a compact Minimum Diffraction Loudspeaker™ for less than $150.

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Overall system response (48 Hz to 20 kHz ±3 dB) is truly exceptional for a speaker in this price range, and few loudspeakers in its class offer 88 dB efficiency along with 100-watt power handling capability.

Avid builds its own drivers to meet the specific design objectives of each system, and the Model 110 is no exception.

Power handling of the 1-inch soft dome tweeter is achieved with a design incorporating magnetic fluids and a high-temperature voice coil. Avid's proprietary cone treatment techniques enable the 8-inch woofer to roll off mechanically, eliminating the need for an electronic crossover.

The Model 110 is a totally integrated design yielding a level of performance usually found only in the most expensive loudspeaker systems.

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16 SPEAKER SYSTEMS

and 1-in soft dome tweeter; frequency response 30-20,000 Hz ±4 dB; crossover at 2000 Hz; sensitivity 90 dB/W/m; input range 15-100 W continuous; impedance 6-8 ohms; tweeter level control; oiled walnut or walnut vinyl cabinet with knit grille; 26½" H × 14½" W × 10½" D..... $189

V-II Speaker System
Two-way speaker system with 8-in long-throw woofer and 1-in soft dome tweeter; frequency response 45-20,000 Hz ±3 dB; crossover at 1800 Hz; sensitivity 92 dB/W/m; input range 15-80 W continuous; 8-ohm impedance; oiled walnut or walnut vinyl cabinet with knit grille; 20" H × 11½" W × 9½" D..... $129

ADVENT

Powered Advent Loudspeaker
Two-way acoustic-suspension, biamplified powered speaker system; input sensitivity adjustable up to 0.3 V; input impedance 100,000 ohms; continuously variable equalization controls below 100 Hz (±6 dB at 30 Hz) and above 3000 Hz (±4 dB at 10,000 Hz); switchable subsonic filters; crossover frequency 1500 Hz; walnut veneer finish with walnut front molding and brown grille cloth; requires 120-V ac, 450 W max.; 28⅜" H × 14⅛" W × 11⅞" D..... $499

New Advent Loudspeaker
Sealed enclosure, two-way bookshelf system with 12-in woofer and 2-in impregnated-paper-cone tweeter; frequency response 20-15,000 Hz ±3 dB; crossover at 1500 Hz; tweeter control; 8-ohm impedance; min. input 15 W continuous; walnut enclosure; 25⅝" H × 14¼" W × 11½" D..... $179
Same but vinyl enclosure $155

Advent/1 Speaker System
Sealed acoustic-suspension two-way bookshelf system; frequency response 20-15,000 Hz ±5 dB; 8-ohm impedance; min. input 15 W continuous; vinyl-clad walnut enclosure; 13¼" H × 22" W × 9¼" D..... $120
Walnut enclosure $135

Advent/4 Speaker System
Two-way acoustic-suspension bookshelf speaker system; sold only in matched pairs due to symmetrically offset placement of tweeters left and right of respective woofers; frequency response 40-20,000 Hz; min. input 15 W/ch; 8-ohm impedance; walnut-grain vinyl cabinet; 18.5" H × 11" W × 8" D..... $189 pr.

Advent/3 Speaker System
Two-way acoustic-suspension system designed for smaller apartments; drivers and LCR network provide octave-to-octave tonal balance of more expensive Advent speakers; 8-ohm impedance; min. input 10 W continuous; non-resonant particle board finished in walnut-grained vinyl; 15¾" H × 9⅜" W × 6⅝" D..... $65

AKAI

SW-177 Speaker System
Three-way floor-standing closed-box speaker system with 15-in rolled-edge cone woofer, 5¼-in cone midrange, and two 1¾-in tweeters with acoustic lens covering each; features high- and mid-frequency level controls and one-touch pushbutton speaker terminals; frequency response 25-20,000 Hz; HD 3.0%; crossovers at 700 and 5000 Hz, 6 and 12 dB/octave; sensitivity 94 dB/W/m; max. input 100 W; 8-ohm impedance; walnut finish with removable cloth grille; 27.3" H × 17.3" W × 12.2" D..... $395

SW-157 II Speaker System
Three-way floor-standing bass-reflex speaker system with 12-in rolled-edge cone woofer, 5-in cone midrange, and 1¾-in tweeter with acoustic lens; features high- and mid-frequency level controls and one-touch pushbutton speaker terminals; frequency response 30-20,000 Hz; HD 3.0%; crossovers at 1500 and 5000 Hz, 6 and 12 dB/octave; sensitivity 92 dB/W/m; max. input 60 W; 8-ohm impedance; walnut finish with removable cloth grille; 26.9" H × 15.7" W × 11.8" D..... $295

SW-137 II Speaker System
Three-way floor-standing bass-reflex speaker system with 10-in rolled-edge cone woofer, 5-in cone midrange, and 1¾-in tweeter with acoustic lens; features midrange level control and one-touch pushbutton speaker terminals; frequency response 40-20,000 Hz; HD 3.0%; crossovers at 1500 and 5000 Hz, 6 and 12 dB/octave; sensitivity 92 dB/W/m; max. input 40 W; 8-ohm impedance; walnut finish with removable cloth grille; 23.3" H × 13.5" W × 11.8" D..... $200

SW-127 Speaker System
Two-way floor-standing bass-reflex speaker system with 8-in rolled-edge cone woofer and 1¾-in tweeter with acoustic lens; frequency response 40-20,000 Hz; HD 3.0%; crossover at 4000 Hz, 6 dB/octave; sensitivity 92 dB/W/m; max. input 30 W; 8-ohm impedance; walnut finish with removable cloth grille; 20.4" H × 12.2" W × 9" D..... $125

S-82 Speaker System
Two-way bookshelf speaker system with 8-in woofer and 3-in tweeter; frequency response 60-17,000 Hz; crossover at 4000 Hz; max. input 20 W; 8-ohm impedance; 19" H × 11" W × 6¾" D..... $90 pr.

ALLISON

Model One Speaker System
Stabilized radiation loading design with two 10-in woofers, two 3½-in convex midrange units, and two 1-in convex tweeters; crossovers at 350 and 3750 Hz; LC half-section crossover network, air-core chokes, and nonpolarized computer-grade capacitors; features three-position control switch for selection of system acoustic power response (flat to concert-hall balance slope); 8-ohm impedance; efficiency 0.7% when placed at floor-wall intersection; minimum amplifier power 30 W/ch for 100-dB SPL in reverberant field; acoustic power output ½ acoustic watt minimum over full frequency range, with 70-W input; system resonance 45 Hz nominal; sealed oiled walnut enclosure 40" H × 19" W × 10¾" D, internal volume 2550 cubic inches.. $420
Model Two. Same as Model One except has two 8-in woofers, two 3½-in convex midrange, and two 1-in convex tweeters; system resonance 52 Hz nominal; sealed oiled walnut enclosure 36" H × 16" W × 9⅜" D, internal volume 1775 cubic inches.... $350
Model Three. Stabilized radiation-loading system with 10-in woofer, 3½-in convex midrange, 1-in convex tweeter; LC half-section crossover network; crossovers at 350 and 3750 Hz; min. amp power 30 W/ch for 100-dB reverberant SPL; resonance freq. 45 Hz; designed for corner mounting; three-pos. control switch selects system acoustic power response; 4-ohm impedance; high-density particle board, walnut veneered, oil finished; 40" H × 15¼" W × 10" D (occupies 10⅞" wall space min.).. $290

Model Four Speaker System
Two-way stabilized radiation-loading system with 8-in woofer and two 1-in "Convex Diaphragm" tweeters; crossover at 2000 Hz; LC quarter-section network with three-pos. control switch to adjust response from nominally flat to "concert-hall" balance slope; 52 Hz resonance; 8-ohm impedance; amp power 30 W/ch for 100-dB SPL in reverberant field; designed to be used against wall or hung on wall (hardware included); walnut-veneer high-density particle board, oiled finish; 11" H × 19⅜" W × 10" D..... $195

Model Five Speaker System
Two-way stabilized radiation-loading speaker system with 8-in woofer and 1-in convex tweeter; crossover at 2000 Hz; LC quarter-section network with two-position control switch to adjust response to flat or HF slope; 52-Hz resonance; 4-ohm impedance; amp output 15 W/ch for 97-dB SPL in reverberant field; designed for placement against single wall; oiled walnut veneer finish; 11"H × 18½" W × 10" D..... $160
Model Six. Same as Model Five except has 59-Hz resonance; walnut-grain vinyl finish; 11¼" H × 11¼" W × 11¼" D..... $125

ALTEC

19 Speaker System
Two-way floor-standing vented enclosure with 15-in bass driver, "Radial Phase Plug" driver mounted on 811B sectoral horn; crossover at 1200 Hz; 8-ohm impedance; frequency response 30-20,000 Hz; operational power range 10 to 350 W; long-term broadband max. power 65 W; dispersion 105 degrees at −6 dB both vertical and horizontal; max. long-term acoustic output 120 dB at 65 W; hand-rubbed oiled walnut or oak finish; acoustically transparent knit fabric grille mounted on removable frame; 39" H × 30" W × 21" D (including base and grille)..... $800

18 Speaker System
Two-way floor-standing vented speaker system features 15-in bass driver with coaxially mounted, constant directivity control horn and compression driver; crossover at 1500 Hz; 8-ohm nominal impedance; frequency response 30-20,000 Hz; sensitivity 100 dB (SPL 6), 103 dB (SPL 7); 50-degree dispersion at −6 dB vertical, 70 degrees at −6 dB horizontal; 65 W max. power long-term broadband capacity; 10-350 W amplifier operating range; long-term max. acoustic output 118 dB SPL at 65 W; hand-rubbed oiled-oak finish with transparent black knit fabric on removable frame grille; 40" H × 26" W × 18" D..... $750

A7X Voice of the Theatre
Two-way floor-standing speaker system including 16-in bass speaker in combination front-loaded exponential horn and rear-loaded bass reflex baffle, high-frequency compression driver loaded with cast aluminum sectoral horn having exponential expansion and a dividing network/dual-band variable equalizer; crossover 12 dB/octave at 1200 Hz; 8-ohm impedance; frequency response 55-20,000 Hz ±6 dB; 65 W max. continuous power capacity from 20-20,000 Hz; pressure sensitivities 101 dB SPL at 4 ft with 1 W input from 500-3000 Hz, 102.5 dB SPL at 1 m with 1 W input from 500-3000 Hz; dispersion 40 degrees at −6 dB vertical, 90 degrees at −6 dB horizontal; max. midrange attenuation 12 dB at 2000 Hz; max. high-frequency attenuation −4 dB at 10 kHz; metallic gray finish; 52¼" H × 30" W × 24" D..... $691

Model 14 Speaker System
Two-way floor-standing speaker system with 12-in radial phase plug compression woofer mounted to Mantaray™ constant directivity horn; frequency response 35-20,000 Hz; crossover at 1500 Hz; recommended input range 10-350 W; sensitivity 95 dB SPL/W/4-ft; 8-ohm nominal impedance; vented enclosure; hand-rubbed oiled walnut finish with acoustically transparent black knit fabric grille mounted on removable frames; mid- and high-frequency level controls and Automatic Power control; 30" H × 21" W × 16½" D..... $500

Model 9 II Speaker System
Three-way bookshelf speaker system with 12-in long throw woofer, 6½-in frame cone midrange, and 5-in frame cone tweeter; frequency response 40-20,000 Hz; crossovers at 800 and 7000 Hz; recommended input range 12-250 W; sensitivity 93 dB SPL/W/4-ft; 8-ohm nominal impedance; vented enclosure; hand-rubbed oiled oak finish with acoustically transparent black or brown foam grille mounted on removable panel; baffle-mounted midrange and treble controls with ±6 dB range; 26½" H × 17½" W× 15" D..... $360

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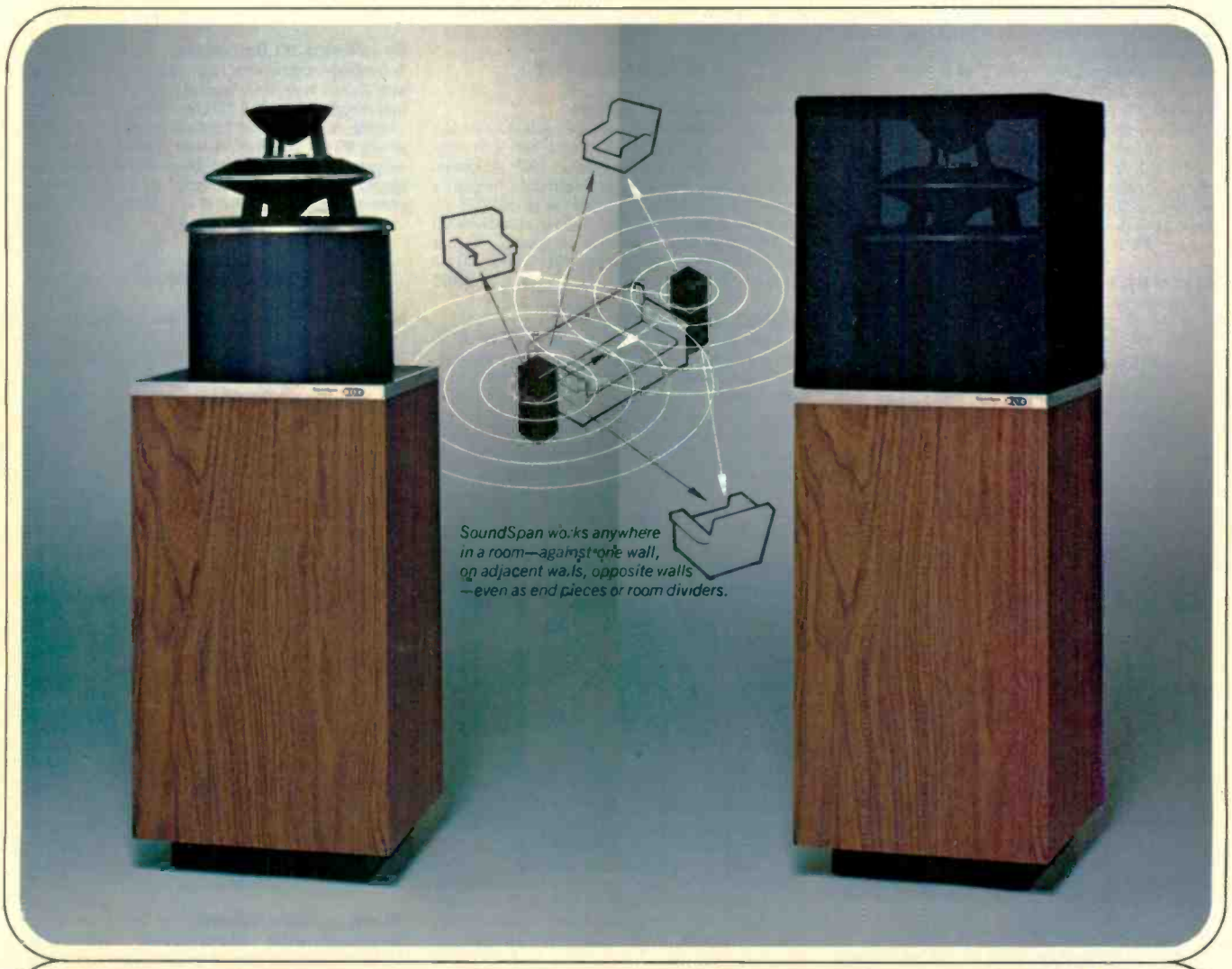

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16 SPEAKER SYSTEMS

Santana II Speaker System
Two-way floor-standing vented enclosure with 12-in bass driver and 5-in frame cone tweeter; crossover at 2500 Hz; 8-ohm impedance; frequency response 40-20,000 Hz; max. power 45 W; operational power range 12 to 150 W; long-term max. acoustic output 107.5-dB SPL at 45 W; hand-rubbed oiled walnut finish with composition slate top; acoustically transparent black knit fabric grille mounted on removable frame; 25⅜" H × 19" W × 16" D .. $300

Model 7 II Bookshelf Speaker
Three-way system with 12-in bass driver, 6½ cone midrange; and 4-in cone tweeter; crossovers at 850 and 8000 Hz; response 45-20,000 Hz; max. power 50 W; operational power range 15 to 200 W; hand-rubbed oiled-walnut veneer cabinet; removable foam grille in choice of black, brown, blue, or burnt orange; 25" H × 16" W × 14⅛" D $259

Model 5 II Speaker System
Two-way speaker system with 12-in woofer and two 4-in frame cone tweeters; frequency response 45-20,000 Hz; crossover at 1500 Hz; recommended input range 12-150 W; sensitivity 91.5 dB SPL/W/4-ft; 8-ohm nominal impedance; vented enclosure; hand-rubbed oiled walnut finish with acoustically transparent black knit fabric grille mounted on removable frame; 25½" H × 14½" W × 12" D $200

Model 3 II Speaker System
Two-way speaker system with 10-in woofer and 4-in frame cone tweeter; frequency response 50-20,000 Hz; crossover at 1500 Hz; recommended input range 10-100 W; sensitivity 90.5 dB SPL/W/4-ft; 8-ohm nominal impedance; vented enclosure; hand-rubbed oiled oak finish with acoustically transparent black knit fabric grille mounted on removable frame; 24" H × 12½" W × 11½" D .. $170

Model One II Bookshelf Speaker
Two-way system with 8-in bass driver and 4-in cone tweeter; crossover at 3000 Hz; response 50-20,000 Hz; max. power 30 W; operational power range 12 to 75 W; hand-rubbed oiled-oak veneer cabinet; brown knit fabric grille on removable frame; 21" H × 11½" W × 10⅜" D $129

Model 3 II. Similar to Model One but with 10-in bass driver; 1500-Hz crossover; max. power 35 W; operational power range 10 to 100 W; black knit grille; 24" H × 12½" W × 11½" D $149

Model 5 II. Similar to Model 3 except 12-in bass driver and two 4-in cone tweeters; response 45-20,000 Hz; max. power 45 W; power range 12 to 150 W; hand-rubbed oiled-walnut veneer cabinet; 25½" H × 14½" W × 12" D $189

AUDIOALLEY

AS-4 Speaker System
Four-way speaker system with 12-in woofer, 5-in cone midrange, 3-in cone tweeter, and 2-in dome supertweeter; frequency response 30-20,000 Hz −5 dB; crossovers at 700, 1300, and 10,000 Hz; sensitivity 97 dB SPL/W/m; 8-ohm impedance; input range 10-100 W; midrange and tweeter level controls; walnut veneer cabinet with detachable brown grille; 24" H × 15" W × 10½" D ..... $400 pr.

AS-3 Speaker System
Three-way infinite baffle speaker system with 10-in woofer, 4½-in cone midrange, and 3-in cone tweeter; frequency response 35-20,000 Hz −5 dB; crossovers at 1000 and 5000 Hz; sensitivity 97 dB SPL/W/m; input range 5-65 W; 8-ohm impedance; oiled walnut veneer cabinet with detachable brown cloth grille; 22" H × 13" W × 8" D ..... $230 pr.

AS-2 Speaker System
Three-way speaker system with 8-in woofer, 4½-in cone midrange, and 3-in cone tweeter; frequency response 40-20,000 Hz −5 dB; crossovers at 1000 and 5000 Hz; sensitivity 97 dB SPL/W/m; input range 5-45 W; 8-ohm impedance; walnut veneer cabinet with detachable brown grille; 22" H × 13" W × 6" D ..... $190 pr.

AS-1 Speaker System
Two-way speaker system with 8-in woofer and 3-in cone tweeter; frequency response 40-20,000 Hz −5 dB; crossover at 4000 Hz; sensitivity 97 dB SPL/W/m; input range 5-45 W; 8-ohm impedance; walnut veneer cabinet with detachable brown grille; 22" H × 13" W × 6" D ..... $160 pr.

AUDIOANALYST

A-400XL Speaker System
Four-way floor-standing speaker system with two 8-in woofers, two 8-in subwoofers, two 2-in midranges, and two 1½-in tweeters; 180° horizontal dispersion and 90° vertical dispersion; frequency response 28-20,000 Hz; input range 10-200 W; crossovers at 150, 2000, 10,000 Hz; sensitivity 90 dB SPL/W/m; 8-ohm nominal impedance; walnut vinyl finish with removable black fabric grille; 41¾" H × 17¾" W × 10½" D $360

A-200XL Speaker System
Four-way floor-standing speaker system with 12-in high-compliance woofer, 4½-in midrange (in separate subchamber), two 2-in tweeter, and 1½-in wide-dispersion angle-mounted super tweeter; frequency response 30-20,000 Hz ±3 dB; input range 10-175 W; dispersion 120° horizontal and 90° vertical; sensitivity 91 dB SPL/W/m; crossovers at 100, 4000, and 10,000 Hz; 8-ohm impedance; midrange and tweeter level controls; walnut vinyl cabinet and black removable grille cloth; 27" H × 15" W × 12¾" D $340

A-100XL Speaker System
Three-way bookshelf speaker system with 10-in high-compliance woofer, 2-in cone midrange, and 1½-in wide-dispersion tweeter; frequency response 40-20,000 Hz ±3 dB; input range 10-100 W; dispersion 100° horizontal and 90° vertical; crossovers at 1500 and 7500 Hz; sensitivity 90.5 dB SPL/W/m; 8-ohm impedance; midrange and tweeter level controls; walnut-grain vinyl finish with black grille cloth; 24⅜" H × 13¾" W × 12" D $207

A-76XL Speaker System
Two-way bookshelf speaker system with 8-in woofer and 1¾-in tweeter; 90° horizontal dispersion and 90° vertical dispersion; frequency response 50-18,000 Hz; crossover at 2000 Hz; input range 5-50 W; sensitivity 88.5 dB SPL/W/m; 8-ohm nominal impedance; walnut vinyl finish with removable black fabric grille; 21" H × 12¼" W × 10½" D $118

PhaseMatrix M8 Speaker System
Four-way speaker system with 12-in polymer cone woofer, 4½-in foam-damped midrange, 1-in tweeter, and ½-in tweeter; frequency response 27-25,000 Hz ±3 dB; input range 15-200 W; min. sensitivity 88 dB SPL/W/m; crossovers at 600, 2000, and 15,000 Hz; 8-ohm nominal impedance; front-mounted three-position midrange and tweeter contour controls; walnut veneer, lacquer finish with removable black fabric grille; 27½" H × 15½" W × 11¾" D $399

PhaseMatrix M6 Speaker System
Three-way speaker system with 10-in polymer cone woofer, 4½-in foam-damped midrange, and 1-in tweeter; frequency response 30-20,000 Hz ±3 dB; max. input 150 W, min. input 15 W; sensitivity 88 dB SPL/W/m; crossovers at 700 and 2000 Hz; 8-ohm nominal impedance; front-mounted three-position midrange and tweeter contour controls; walnut veneer, lacquer finish with removable black fabric grille; 24⅜" H × 13¾" W × 11¾" D ... $299

PhaseMatrix M4v Speaker System
Two-way floor-standing speaker system with 8-in polymer cone woofer and 1-in tweeter; frequency response 40-20,000 Hz ±4 dB; crossover at 2000 Hz; recommended input range 10-75 W; sensitivity 89 dB SPL/W/m; 8-ohm impedance; walnut veneer simulated vinyl with removable black fabric grille; 21" H × 12¼" W × 10½" D $139

PhaseMatrix M2 Speaker System
Two-way speaker system with 5-in polymer cone woofer and 1-in tweeter; frequency response 46-20,000 Hz ±4 dB; max. input 50 W; min. input 10 W; sensitivity 89 dB SPL/W/m; crossover at 2000 Hz; 4-ohm nominal impedance; walnut veneer, lacquer finish with removable black grille; 9⅜" H × 6" W × 7" D $149

BassMatrix B1 Subwoofer
Subwoofer incorporates 12-in polymer cone woofer with 2⅛-in aluminum/copper voice coil assembly; frequency response 22-120 Hz ±3 dB; crossover at 120 Hz; recommended input range 10-200 W; sensitivity 89 dB SPL/W/m; 4-ohm impedance; walnut veneer lacquer finish with black fabric grille; designed to accommodate compact bookshelf speaker systems; 27½" H × 15½" W × 11¾" D $279

AUDIO ILLUSIONS

Master Illusionist I Speaker System
Three-way floor-standing speaker system with two 12-in woofers mounted in tandem compression alignment, bi-source propagator midrange driver, and bi-source propagator high-frequency driver; all drivers phase-aligned in vertical plane; bi-source propagator results in multitude of teardrop-shaped ellipses densely packed to effect spherical sound dispersion. Frequency response 35-20,000 Hz ±4 dB; crossovers at 600 and 3000 Hz; input range 50-200 W/ch continuous (normal mode), 25-50 W/ch (biamped, upper frequencies), 50-200 W (biamped, low frequencies); 4-ohm nominal impedance; hand-rubbed walnut veneer; 44" H × 16½" W × 16½" D $725

AUDIO LAB

AL-60 Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 7-in cone midrange, and 1-in phenolic dome tweeter; frequency response 32-20,000 Hz; crossovers at 300 and 7000 Hz; input range 10-140 W continuous power; 8-ohm nominal impedance; three-position midrange and tweeter level controls; mahogany veneer finish with snap-on black acoustic front panel; 26.8" H × 17.3" W × 12.6" D $359

AL-40 Speaker System
Three-way passive radiator speaker system with 10-in woofer, 1-in passive radiator subwoofer, 5-in cone midrange, and 1-in phenolic dome tweeter; frequency response 40-20,000 Hz; crossovers at 800 and 8000 Hz; input range 10-90 W continuous power; 8-ohm nominal impedance; three-position tweeter level control; mahogany veneer finish with snap-on black front panel; 25.2" H × 16.6" W × 11.2" D $259

AL-30 Speaker System
Two-way passive radiator bookshelf speaker system with 8-in cone woofer, 8-in passive radiator, and 1-in phenolic dome tweeter; frequency response 55-20,000 Hz; crossover at 4000 Hz; input range 10-60 W continuous power; 8-ohm nominal impedance; three-position tweeter level control; mahogany veneer finish with snap-on black acoustic front panel; 22.7" H × 14" W × 9.8" D $159

AL-20 Speaker System
Two-way acoustic suspension bookshelf speaker system with 8-in cone woofer and 1-in phenolic dome tweeter; frequency response 60-20,000 Hz; crossover at 4000 Hz; 50 W input capacity; 8-ohm nominal impedance; three-position tweeter level control; mahogany veneer finish with snap-on black acoustic front panel; 21.3" H × 11.6" W × 9.1" D $129

AUDIO PRO by INTERSEARCH

A4-14 Biamplified Speaker System
Three-way biamplified bass-reflex bookshelf speaker system with two 5-in woofers, 4½-in cone midrange, and 1-in soft dome tweeter; frequency response 30-20,000 Hz; crossovers at 300 and 2500 Hz; dist. 0.5% at 86-dB SPL/half-space/1 m; features four-position speaker placement bass compensation switch, treble control, computer-optimized passive and active crossover filters, sensitivity control (100 mV-50 V range), left/right signal pushbutton, bass-blend button, auto/on pushbutton, and power on/off signal-actuated in automatic mode; walnut or black-ash finish; 20¼" H × 12⅛" W × 10½" D ..... $1600 pr.

B2-50 Amplified Subwoofer
Connects speaker coil to amplifier electronically; bass-reflex port design with two 6½-in cone drivers with ¾-in throw-in push-pull arrangement; frequency response 20-200 Hz ±1.5 dB; dist. 3% at 20 Hz and 1% above 50 Hz; 100-dB SPL/½ space/m; sensitivity adjustable 0-100% (96-dB SPL at 50 mV); 150 W power; built in amplifier; DIN connectors for left and right speaker channels; separate volume and crossover controls; power on/off signal-actuated in automatic mode; walnut or black-ash finish; 21⅛" H × 18³/₁₆" W × 17⁷/₁₆" D $795

AUDIO SCIENTIFIC by SUPEREX

Satellite/1 Tweeter Module
Designed for use with high-quality 4-16 ohm speaker systems; incorporates 1-in textile soft dome tweeter; frequency response 4000-20,000 Hz ±2 dB; dist. 1.0%; input 100 W continuous; continuously variable attenuator level control; system impedance 4 ohms; high-density, non-resonant smoked plexiglass cabinet; 10¼" H × 8½" W × 6" D $90

AUDIOTEX

94-1400 Speaker System
Three-way acoustic suspension speaker system with 12-in woofer with 12-oz ferrite magnet, 1-in aluminum foam multi-roll voice coil, 4½-in hardback midrange, and 1¾-in phenolic ring tweeter; frequency response 35-20,000 Hz; crossovers at 2500 and 5000 Hz; recommended min. input 8 W; handles 45 W continuous power; 8 ohm impedance; walnut vinyl finish with brown knit grille; 24" H × 15" W × 9⅝" D $100

30-5120 Omni-Sound Speaker System
Two-way air suspension mini speaker system with 4-in woofer and 1-in soft dome tweeter; frequency response 110-20,000 Hz ±6 dB; min. input 1 W; 4-8 ohm nominal impedance; black aluminum with black aluminum grille; 7¼" H × 4⅜" W × 4½" D $62

AVID

Model 330 Speaker System
Three-way acoustic-suspension floor-standing

speaker system with 12-in forward-aligned woofer, 2-in air-suspension midrange, and 1-in fabric dome tweeter; crossovers at 500 and 6000 Hz; 8-ohm nominal impedance; frequency response 35-20,000 Hz ±3 dB; input range 15-250 W/ch continuous (program); two front-mounted midrange and high-frequency balance switch controls; walnut veneer cabinet with dark brown grille; 30¼" H × 17" W × 10¼" D $400
Model H/200. Speaker stands ..... $60 pr.

Model 230 Speaker System
Three-way bookshelf speaker system with 10-in woofer, 4½-in midrange, and 1-in fabric dome tweeter; crossovers at 475 and 4000 Hz; 8-ohm nominal impecance; frequency response 40-20,000 Hz ±3 dB; input range 15-150 W/ch continuous (program); front-mounted midrange and high-frequency controls; walnut vinyl finish with dark brown grille; 25" H × 15" W × 10" D $225

Model 102a Speaker System
Two-way air-suspension bookshelf speaker system with 10-in woofer and 1-in plastic dome tweeter; crossover at 2200 Hz (12 dB/octave); 8-ohm nominal impedance; frequency response 44-18,000 Hz ±3 dB; input range 15-100 W continuous (program); front-mounted three-position high frequency level control; walnut vinyl finish with dark brown grille: 25" H × 15" W × 9⅜" D $165

110 Speaker System
Two-way floor-standing speaker system with 8-in high compliance woofer, 20-oz magnet, 1-in soft dome tweeter, and 1½-in high temperature voice coil; frequency response 48-20,000 Hz at ±3 dB; crossover at 2500 Hz; handles 100 W continuous power; 8-ohm nominal impedance; walnut grain vinyl finish with dark brown grille; 21⅜" H × 12¾" W × 9⅜" D $135

16 SPEAKER SYSTEMS

Model 80a Speaker System
Two-way air-suspension bookshelf speaker system with 8-in woofer and 1¾-in cone tweeter; crossover at 3000 Hz (12 dB/octave); 8-ohm nominal impedance; frequency response 55-17,000 Hz ±3.5 dB; input range 8-60 W continuous (program); walnut vinyl cabinet with dark brown cloth grille; 19½" H × 12" W × 8½" D $90

BANG & OLUFSEN

Beovox Phase-Link M-100-2 System
Four-way bass-reflex floor-standing monitor speaker system with 12-in woofer, 4½-in Phase-Link filler driver, 2½-in dome midrange, 1½-in dome tweeter, and ¾-in super dome tweeter; frequency response 35-22,000 Hz ±4 dB; crossovers at 550, 2500, and 8000 Hz; harmonic dist. 1% max.; max. input 100 W continuous, 150 W music power; 4- to 8-ohm impedance; 130° dispersion; LED overload indicator; includes speaker stand; rosewood veneer cabinet; 29⅝" H × 15¾" W × 12" D $1400

Beovox Phase-Link M-75 System
Three-way pressure chamber floor-standing monitor speaker system with 10-in woofer, 4½-in Phase-Link filler driver, 2½-in dome midrange, and 1-in dome tweeter; frequency response 38-20,000 Hz ±4 dB; crossovers at 500 and 4500 Hz; harmonic dist. 1% max.; max. input 75 W continuous, 125 W music power; 4- to 8-ohm impedance; 120° dispersion; LED overload indicator; includes speaker stand; rosewood veneer cabinet; 25⅝" H × 13⅞" W × 10¾" D $980

Beovox Phase-Link S-75 System
Three-way pressure chamber shelf- or wall-mount speaker system with 10-in woofer, 5-in Phase-Link filler driver, 2-in dome midrange, and 1-in dome tweeter; frequency response 42-20,000 Hz ±4 dB at 1% max. harmonic dist.; crossovers at 700 and 4000 Hz; max. input 75 W continuous, 100 W music power; impedance 4-8 ohms; 120-degree dispersion; rosewood veneer cabinet; optional speaker stand available; 23⅛" H × 12½" W × 10" D.. $570

Beovox Phase-Link P-45 System
Two-way pressure chamber wall-mount panel speaker system with two 5-in woofers, 3½-in Phase-Link filler driver, and 1-in dome tweeter; frequency response 55-20,000 Hz ±4 dB; crossover at 2000 Hz; harmonic dist. 1% max.; max. input 45 W continuous, 75 W music power; 4- to 8-ohm impedance; 120° dispersion; 25⅝" H × 13⅞" W × 5½" D $450

Beovox Phase-Link C-75 System
Two-way rear-radiating log-line bookshelf speaker system with two 4-in woofers and 1-in tweeter; frequency response 75-20,000 Hz ±4 dB; crossover at 2500 Hz; dist. 1.0%; max. input 75 W continuous, 90 W music; 6-ohm impedance; 90° dispersion; anodized black or brushed extruded aluminum finish; 12²⁹/₃₂" H × 4³/₁₆" W × 7¹³/₁₆" D $395

Beovox Phase-Link S-45-2 System
Two-way shelf- or wall-mount speaker system with 8-in woofer, 3½-in Phase-Link filler driver, and 1-in dome tweeter; frequency response 49-20,000 Hz ±4 dB; crossover at 2000 Hz; dist. 1.0%; max. input 45 W continuous, 75 W music; impedance 4-8 ohms; 120° dispersion; optional speaker stand available; rosewood veneer cabinet; 18¾" H × 10¼" W × 8¼" D $338

Beovox Phase-Link P-30 System
Two-way pressure chamber wall-mount panel speaker system with 6½-in woofer and 1-in dome tweeter; frequency response 58-20,000 Hz ±4 dB; crossover at 3000 Hz; harmonic dist. 2% max.; max. input 30 W continuous, 50 W music power; 4- to 8-ohm impedance; 120° dispersion; 21½" H × 11½" W × 4½" D $330

Beovox Phase-Link C-40 System
Two-way rear-radiating log-line bookshelf speaker system with 4-in woofer and 1-in tweeter; frequency response 120-20,000 Hz ±4 dB; crossover at 2500 Hz; dist. 1.0%; max. input 40 W continuous, 50 W music; 6-ohm impedance; 90° dispersion; anodized black or brushed extruded aluminum finish; 7¹³/₁₆" H × 4³/₁₆" W × 7¹³/₁₆" D $295

B.E.S.

D280w Sound Module Speaker System
Four-way speaker system activating four separate polymer diaphragms 3400 in² total radiating surface to disperse sound 360 × 360-degrees; frequency response 30-20,000 Hz; 10-W efficiency for 96-dB SPL; 8-ohm nominal impedance; power input range from 30-500 W/ch continuous; crossover frequencies at 1000, 4000 and 10,000 Hz; high frequency and midrange controls; 76" H × 26" W × 3¾" D $997

D190w Sound Module System
Four-way speaker system activating two separate polymer diaphragms 1700 in² total radiating surface to disperse sound 360 degrees; frequency response 35-20,000 Hz; 12 W efficiency for 96 dB SPL; 4-ohm nominal impedance; power input range 30-250 W/ch continuous; crossover frequencies 1000, 4000, and 10,000 Hz; 40½" H × 26" W × 3¾" D $649

D120w Speaker System
Geostatic four-way speaker system with three dynamic and one piezoelectric drivers activating 1700 in² polymer diaphragm pulsating plane; frequency response 35-20,000 Hz; efficiency 12 W for 96-dB SPL at 2 m; max. input 100 W continuous (8 hrs, 400 Hz); 4-ohm nominal impedance; recommended amplifier power 30-250 W continuous; crossovers at 800, 4000, and 10,000 Hz; high-frequency and midrange level controls; 52⅛" H × 20" W × 3¾" D $599

SM-260 Speaker System
Geostatic three-way speaker system with two dynamic and one piezoelectric drivers activating 850 in² polymer diaphragm pulsating plane; frequency response 40-20,000 Hz; efficiency 12.5 W for 96-dB SPL at 2 m; max. input 60 W (8 hrs, 400 Hz); 8-ohm nominal impedance; recommended amplifier power 25-150 W continuous; crossovers at 800 and 10,000 Hz; high-frequency and midrange level controls; wood cabinet; 28" H × 20" W × 3¾" D $249

SM-270. Same as SM-260 except input range 10-200 W; sensitivity 91 dB SPL/W/m; 27¹¹/₁₆" H × 21¹¹/₁₆" W × 6" D $339

SM-250 Speaker System
Geostatic two-way speaker system with two drivers activating 850 in² polymer diaphragm pulsating plane; frequency response 42-18,000 Hz; 8-ohm impedance; recommended amplifier power 15-100 W continuous; crossover at 800 Hz; wood cabinet; 25⅝" H × 17¾" W × 3¾" D $169

BETA SOUND

075 Speaker System
Three-way floor-standing speaker system with 12-in moderate compliance woofer, 10¾-in Beta horn and compression midrange, and compression driven horn tweeter; 140° bass dispersion, 80° mid dispersion, 50° high dispersion; frequency response 40-18,500 Hz ±3 dB; crossovers at 600 and 5500 Hz; recommended input range 15-200 W/ch; sensitivity 90 dB SPL/W/4-ft; 8-ohm nominal impedance; ±2 dB midrange control; hand crafted ported acoustic labyrinth cabinet with oiled walnut finish and acoustic foam grilles; 38¼" H × 20¾" W × 16½" D $640

065 Speaker System
Three-way floor-standing speaker system with 12-in moderate compliance woofer, 10¾-in Beta horn and compression midrange, and compression driven horn tweeter; 140° bass dispersion, 80° mid dispersion, 50° high dispersion; frequency response 38-18,500 ±3 dB; crossovers at 800 and 5500 Hz; recommended input range 15-150 W/ch; sensitivity 90 dB SPL/W/4-ft; 8-ohm nominal impedance; ±2 dB midrange switch control; hand crafted tuned port bass reflex optional riser cabinet with walnut veneer finish and acoustic foam grilles; 25¼" H × 17¼" W × 14¾" D $470

BEVERIDGE

Cylindrical Sound System 2SW-2
Incorporates direct-coupled amplifier, full-range electrostatic transducer with two specially matched dynamic subwoofers, lens, and 12-ft vertical line source enclosure aperture; optimized electrostatic speakers for 100-20,000 Hz range; dynamic subwoofers for 20-100 Hz; supplied with Beveridge Control Module with spectrum slope control, bass environmental control, and lateral stereo control; frequency response 20-20,000 Hz ±3 dB; crossover frequency at 100 Hz; subwoofer power supplied by separate enclosed solid-state amplifiers; oiled walnut finish with black foam grille; 78" H × 24" W × 15" D $7000

Junior System 3
Full-range electrostatic transducer; 6-ft vertical line source enclosure aperture; crossover frequency 250 Hz; 8-ohm impedance; frequency response from 20-20,000 Hz ±3.5 dB; 50 W min. input; sensitivity 86 dB SPL at 1-W input from 100-10,000 Hz; oiled walnut finish with black foam grille; 72" H × 17" diameter $2000

B·I·C

Sound Span TPR 600 Speaker System
Three-way floor-standing speaker system with total power radiator comprised of completely-aligned in-

tegrated 12-in horn-loaded woofer and matched horn-loaded compression midrange and horn-loaded tweeter; sensitivity 93 dB/W/m; max. input 130 W continuous music power; impedance 6-8 ohms; walnut veneer cabinet with transparent black top-covering wrap-around grille; 41¼" H × 15¼" W × 15¼" D $350

TPR 400. Similar to TPR 600 except uses 10-in woofer with smaller matched midrange and tweeter; sensitivity 92 dB/W/m; max. input 100 W continuous; 38¼" H × 13" W × 13" D $270

TPR 200. Similar to TPR 400 except uses 8-in woofer with smaller matched midrange and tweeter; sensitivity 90 dB/W/m; max. input 75 W continuous; 32½" H × 11¼" W × 11¼" D $180

BLACKMAX SYSTEMS

B50 Speaker System
Four-way bass-reflex floor-standing speaker system with 10-in woofer, 10-in sub-bass radiator, 5-in

midrange in "DiaMax™" coupling chamber and 1-in soft dome tweeter; crossovers at 65, 1250, and 4500 Hz; 8-ohm nominal impedance; frequency response 40-20,000 Hz ±3 dB; efficiency 89 dB/W/m; input range 10-200 W; low-diffraction column design; walnut top and black cloth wrap-around grille; optional base; 50" H × 12" W × 12" D. $330

B40 Speaker System
Three-way bass-reflex floor-standing speaker system with 10-in woofer, 5-in midrange in "DiaMax™" coupling chamber, and 1-in soft dome tweeter; crossovers at 1250 and 4500 Hz; 8-ohm nominal impedance; frequency response 50-20,000 Hz ±3 dB; efficiency 88 dB/W/m; input range 10-150 W; walnut top and black cloth wrap-around grille; optional base; 38" H × 12" W × 12" D..... $250

B30 Speaker System
Two-way bass-reflex floor-standing speaker system with 10-in woofer and 1-in soft dome tweeter; crossover at 2800 Hz; 8-ohm nominal impedance; frequency response 60-20,000 Hz ±4 dB; efficiency 89 dB/W/m; input range 10-100 W; walnut top and black cloth wrap-around grille; optional base; 26" H × 12" W × 12" D $170

BML

Tracer 2001 Sound Odyssey
Four-way floor-standing planar column speaker system with 8¼-in woofer, two staggered-resonance Bextrene ABRs, and two bimorph rear-sealed VHF drivers; frequency response 24-22,000 Hz +6 dB/−4 dB; textured black acrylic with oiled-walnut finish racks and base (white lacquer case and rosewood racks and base optionally priced) $879

Tracer 1501 Sound Rack
Bifurcated transmission line speaker system has two 1¾-in inverted-apex direct radiators, 4½-in bextrene ABR, 5½-in bextrene midrange; frequency response 29-22,000 Hz; input range 30-200 W/ch continuous; textured black acrylic with oiled-walnut finish racks and base (white lacquer case and rosewood racks and base optionally priced); 51" H × 20" W × 5" D $499

Tracer 1000 Sound Window
Three-way sealed planar column speaker system featuring DualPhase coupling with 7-in bextrene ABR, 7½-in lightweight woofer, and lead-zirconate, lead-titanate bimorph VHF driver; input range from 20-200 W continuous; black acrylic with oiled walnut sides and base with ebony grille $349

Tracer 1001 Sound Window
Two-way floor-standing planar column speaker system with 8-in ABR and lead-zirconate, lead-titanate bimorph VHF woofer; dual phase coupling of main drivers; frequency response 30-20,000 Hz ±3 dB; max. input 200 W continuous; min. input 25 W continuous; finished in black acrylic with natural oiled walnut sides and base with ebony grille; 33" H × 20" W × 5" D $349

Tracer 701 Sound Ends
Vented transmission line loading speaker system with 4½-in free piston bextrene ABR, 1½-in chemically-damped direct radiator VHF unit; frequency response 30-40,000 Hz; input range 30-200 W/ch; textured black acrylic with oiled-walnut finish racks; 18½" H × 19½" W × 5¼" D..... $249

Model Eleven Speaker System
Speaker system has 7½-in bexiform ABR with rubber surround, 10-in passive radiator, and 2-in edge-damped direct radiator VHF unit; frequency response 28-22,000 Hz; input range 20-200 W/ch; oiled walnut finish with ebony grille; 14½" H × 10" W × 25¾" D $199

Model Seven Speaker System
Speaker system has 4½-in free piston bextrene ABR, 1½-in chemically-damped direct radiating VHF unit; frequency response 30-40,000 Hz; input range 20-100 W/ch; black acrylic finish (oak finish additional); 15" H × 8½" W × 8½" D..... $130

BOSE

901 Series IV Speaker System
Direct/reflecting floor-standing speaker system with Active Equalizer. Eight rear-facing and one front-facing matched full-range speakers; min. input 10 W; 8-ohm impedance; cabinet utilizes injection molded core with particle board external panels and walnut veneer finish. Active Equalizer: continuously adjustable high-frequency contour slider with center detent provides shelving with range of ±3 dB above 4000 Hz; continuously adjustable mid-bass contour slider with center detent provides +3/−5 dB adjustment over band of 80-260 Hz; "Below 40" contour control has two positions for 8-dB decrease at 40 Hz; tape monitor switch; input impedance 60,000 ohms; min. load impedance 5000 ohms; noise (A-weighted) 85 dB below 1 V; sold only in stereo pairs with equalizer; equalizer 2½" H × 11" W × 5" D; speaker 12⅜" H × 21" W × 13" D $430/unit
Without equalizer ..... $665 pr.
901 Speaker Pedestals. Slim, contemporary speaker stands designed for 901 Series IV speakers.
Black ..... $55/pr.
Chrome..... $65/pr.

601 Speaker System
Direct/reflecting floor-standing speaker system with two 8-in woofers and four 3-in tweeters; crossover at 2000 Hz; min. input 20 W; 8-ohm impedance; two-position symmetry control; walnut veneer laminated cabinet; sold only in stereo pairs; 25½" H × 15" W × 13" D $293/unit

501 Speaker System
Direct/reflecting speaker system with 10-in woofer and two 3½ in tweeters; crossover at 1500 Hz; min. input 15 W/ch continuous, max. input 100 W/ch continuous; 4-ohm impedance; walnut-grain vinyl finish cabinet; sold only in stereo pairs; 24" H × 14½" W × 14½" D..... $213/unit

301 Speaker System
Direct/reflecting bookshelf speaker system with 8-in woofer and 3-in tweeter; woofer transition frequency 3000 Hz, tweeter transition frequency 1200 Hz; min. input 10 W/ch continuous, max. input 60 W/ch continuous; 8-ohm impedance; particle board cabinet with walnut-grain vinyl veneer finish; sold only in stereo pairs; 10½" H × 17" W × 9½" D..... $121/unit

Interaudio 1 Speaker System
Two-way bookshelf speaker system with 6-in high-compliance long-excursion woofer and 2-in wide-dispersion cone tweeter; input range 10-60 W; 8-ohm impedance; sold only in stereo pairs; 14" H × 9" W × 7" D..... $84/unit

BOZAK

CS-310B Concert Grand Contemporary
Incorporates four B-199B woofers, two B-209B midrange speakers, and eight tweeters in vertical column for uniform dispersion; frequency response 28-20,000 Hz; 8-ohm impedance; max. input 150 W; min. input 60 W; matte walnut enclosure; 52" H × 36" W × 19" D $1260
CS-410CL. Same as CS-310B except Classic cabinet $1350
CS-410M. Same as CS-310B except Moorish styling $1375

Symphony No. 1 CS-4000A Modern
Infinite-baffle, three-way floor-standing system incorporating two 12-in woofers, 6½-in midrange, and eight 2-in tweeters in vertical column; frequency response 35-20,000 Hz; crossovers at 400 and 2500 Hz at 6 dB/octave; 8-ohm impedance; max. input 150 W program; walnut enclosure; 44½" H × 26¼" W × 15⅝" D..... $750
CS-4000 CL. Same as CS-4000A with Classic styling..... $860
CS-4000M. Same as CS-4000A with Moorish styling..... $890
CS-4005A. Same as CS-4000A except low-boy enclosure; 27⅜" H × 36" W × 20" D $750

16 SPEAKER SYSTEMS

Concerto VII CS-501A Speaker System
Three-way floor-standing system with 12-in high-compliance bass driver, 6½-in midrange, and three tweeters mounted in arc array for improved dispersion; frequency response 40-20,000 Hz; crossovers at 800 and 2500 Hz at 6 dB/octave; 8-ohm impedance; max. input 60 W program; 30" H × 20½" W × 16" D $450

LS-400 Speaker System
Three-way floor-standing speaker system with 12-in woofer, 6-in midrange, and two tweeters; frequency response 40-20,000 Hz; 8-ohm impedance; power input range 20-80 W; phase corrected crossovers 6 dB/octave at 800 and 2500 Hz; three-position brightness switch; walnut veneer cabinet with slide-out grille; 25" H × 18" W × 13" D $300

LS-300 Speaker System
Three-way phase-coherent speaker system with woofer in self-contained enclosure, midrange, and aluminum-sectioned tweeter; frequency response 32-18,000 Hz ±3 dB; crossovers at 350 and 3500 Hz; input 150 W, 200 W above 100 Hz; impedance 4 ohms min.; walnut finish; 26¾" H × 17" W × 12¾" D $260
Teak finish $270
Ebony finish $280

Celestovox DS-1207 Speaker System
Floor-standing two-way speaker system; utilizes room sound-reflecting surfaces; high frequency roll-off control; 8-ohm impedance; max. input 70 W program; walnut veneer styling; 30" H × 15" W × 15" D $215

LS-250 Speaker System
Three-way bookshelf speaker system with 12-in woofer, 4-in midrange, and 2-in tweeter; frequency range 45-20,000 Hz; 8- ohm nominal impedance; power input range 20-80 W; phase-corrected crossovers 6 dB/octave at 800 and 2500 Hz; walnut-grain vinyl finish with removable grille; 23" H × 15" W × 12" D $195

B-1002 Bard Outdoor Speaker
Two-way all-weather speaker system with B-800 wide-range driver and coaxially mounted B-200Z tweeter; 8-ohm impedance; uses jack and plug connector $159

BRAUN

L 1030 Speaker System
Three-way acoustic-suspension floor-standing speaker system with 10-in woofer, 2-in dome mid-

range, and ¾-in hemispherical dome tweeter; crossovers at 500 and 3000 Hz, 12 dB/octave; 4-8 ohms nominal impedance; frequency response 20-25,000 Hz; input range 25-140 W; black or walnut finish with black metal grille; 27⅛" H × 12¼" W × 10¼" D ..... $950 pr.

SM-1004 Speaker System
Three-way floor-standing speaker system with 9.9-in cone woofer, 2-in dome midrange, and 0.75-in dome tweeter; crossovers at 500 and 3000 Hz, 12 dB/octave; 8-ohm impedance; frequency response 25-25,000 Hz; 80 W continuous, max. 140 W; walnut veneer with black aluminum grille; 18.9" H × 10.53" W × 9" D ..... $758 pr.

SM-1003 Speaker System
Three-way floor-standing speaker system with 8.3-in cone woofer, 2.-in dome midrange, and 0.75-in dome tweeter; crossovers at 500 and 3000, 12 dB/octave; input 70 W continuous, max. 120 W; frequency response 28-25,000 Hz; 8-ohm impedance; walnut veneer with black aluminum grille; 15.9" H × 9.25" W × 8.26" D ..... $678 pr.

SM-1002 Speaker System
Three-way floor-standing speaker system with 6.9-in cone woofer, 2.-in dome midrange, and 0.75-in dome tweeter; crossovers at 500 and 4000 Hz, 12 dB/octave; 8-ohm impedance; frequency response 33-25,000 Hz; input 60 W continuous, max. 100 W; walnut veneer with black aluminum grille; 13.6" H × 8.86" W × 7.09" D ..... $578 pr.

L 300 Speaker System
Three-way bookshelf speaker system with 5¼-in woofer, 2-in hemispherical dome midrange, and ¾-in hemispherical dome tweeter; crossovers at 600 and 3000 Hz; 4-ohm impedance; frequency response 35-25,000 Hz; input range 10-50 W; black matte finish; 10" H × 6¼" W × 6¾" D ..... $429 pr.

LW-1 Subwoofer
Stereo subwoofer with built-in passive two-way crossover that permits level matching between satellite and subwoofer; uses two 10-in drivers in acoustic suspension format; frequency response 18-200 Hz; 8-ohm impedance; handles 100 W continuous power, max. power 140 W; 12⅛" H × 27⅝" W × 27½" D.
Walnut finish ..... $700 ea.
Oak or rosewood finish ..... $750 ea.

BURHOE ACOUSTICS

The Burhoe Silver
Four-way speaker system with 10-in woofer and three 1⅛-in and one 1½-in inverted dome tweeters; tuned port enclosure; crossover frequencies at 1000, 2000 and 5000 Hz; sound pressure level 97 dB; 31½" H × 22⅝" W $500

Infra-Red Subwoofer
Dual 10-in subwoofer with 10-in passive radiator and passive crossover; frequency response 25-100 Hz; walnut veneer finish; 30" H × 18" W × 14" D $425

The Royal Blue
Four-way speaker system with 10-in woofer, 1-in bi-radial tweeter, 1-in bi-radial upward-firing recessed tweeter, and 2-in converted midrange; frequency response 30-26,000 Hz; crossovers at 1000 and 2000 Hz; input range 10-100 W/ch; sensitivity 94 dB SPL/W/m; 8-ohm impedance; walnut veneer finish; 30½" H × 18" W × 11½" D $400

The Burhoe Blue
Three-way speaker system with 10-in woofer, 1.5-in midrange, and 1.1-in bi-radial tweeter; tuned port enclosure; crossovers at 900 and 1800 Hz; three-position tweeter level control; walnut veneer cabinet; 24¼" H × 14¼" W × 10½" D $275

The Burhoe Light Blue
Two-way speaker system with 10-in woofer and 1½-in inverted dome tweeter; tuned port enclosure; crossover frequency at 1500 Hz; sound pressure level 98 dB; 24¼" H × 14¼" W × 10¼" D ... $190

The Burhoe White
Two-way speaker system with woofer and 1-in bi-radial tweeter; tuned port enclosure; crossover at 1500 Hz; walnut veneer cabinet; 22" H × 13¾" W × 10" D $180

The Burhoe Green
Two-way speaker system with 8-in woofer and 1.5-in "Felted-Dome" tweeter; tuned port enclosure; midrange control switch; crossover at 1000 Hz; vinyl finish cabinet; 18¼" H × 11⅜" W × 10" D $140

The Super Crimson
Two-way speaker system with 4-in woofer and 1.1-in inverted dome tweeter; frequency response 52-16,000 Hz; crossover at 2500 Hz; input range 8-40 W; sensitivity 89 dB SPL/W/m; 8-ohm impedance; push terminals; walnut vinyl cabinet; 12½" H × 8½" W × 7¼" D $90

B & W by ANGLO AMERICAN

801 Speaker System
Three-way vertical line speaker system with 270-mm thermo-plastic cone long-throw woofer, 100-mm aromatic polyamide fiber matrix cone midrange, and 26-mm multi-filament polyester-weave dome tweeter; frequency response 45-20,000 Hz ±2 dB; dispersion 60° +0/−3 dB horizontal, 10° ±1 dB vertical; min. input 50 W into 8 ohms; sensitivity 85 dB SPL/W/m at 300 Hz; midrange and tweeter level control; teak or walnut finish ... $1250

DM6 Speaker System
Three-way floor-standing linear phase speaker system with 224-mm cone woofer, 131-mm cone midrange, and 19-mm voice coil with dome-formed polyester weave tweeter; frequency response 50-20,000 Hz ±3 dB; crossovers at 500 and 5000 Hz; input range 25-350 W continuous; 8-ohm nominal impedance; sensitivity 95 dB SPL/7-6 W/m; contour controls for high and mid frequencies; walnut, teak, or black ash finish; black nylon finished cast alloy speaker stands 7-in high; 36⅝" H × 16⅛" W × 15" D $695
Rosewood or satin white finish $825

DM2/II Speaker System
Three-way speaker system with 200-mm bextrene cone woofer, 100-mm isolated bextrene cone midrange, and 25-mm multi-filament weave polyester dome tweeter; frequency response 50-18,000 Hz ±3 dB; dispersion 40° ±2 dB horizontal, 10° ±1 dB vertical; input range 25-100 W continuous; walnut, teak, or black ash finish; 28" H × 10⅝" W × 13" D $425
Rosewood or satin white finish $480

DM4 Speaker System
Three-way speaker system with 164-mm cone woofer, 34-mm midrange, and 19-mm voice coil; frequency response 80-20,000 Hz ±5 dB; crossovers at 2500 and 14,000 Hz; input range 10-30 W continuous; sensitivity 95 dB SPL/4-8 W/m; 8-ohm nominal impedance; walnut, teak, or black ash finish; 21" H × 10" W × 10" D $275
Rosewood or satin white finish $315

DM5 Speaker System
Two-way speaker system with 140-mm cone woofer, and 19-mm high frequency voice coil; frequency response 100-20,000 Hz ±5 dB; crossover at 4500 Hz; input range 10-25 W continuous; sensitivity 95 dB SPL/6-8 W/m; 8-ohm nominal impedance; walnut, teak, or black ash finish; 18" H × 9" W × 9½" D $169
Rosewood or satin white finish $195

CANNON

1232T Speaker System
Three-way tower speaker system with 12-in cone woofer, 12-in passive radiator, 5-in cone midrange, and 2 × 5-in piezo electric tweeter; frequency response 20-30,000 Hz; crossovers at 1000 and 5000 Hz; input range 18-175 W continuous; sensitivity 92.0 dB SPL/W/m; 5-ohm nominal impedance; midrange and tweeter level controls; 39" H × 14¼" W × 14" D $499
1232. Similar to 1232T except frequency response 23-30,000 Hz; input range 15-150 W continuous; 25" H × 14¼" W × 14" D $399

1032. Similar to 1232 except 10-in speaker system; frequency response 25-25,000 Hz; input range 12-120 W continuous; sensitivity 90.5 dB SPL/W/m $299

1022 Speaker System
Two-way speaker system with 10-in cone woofer, 2-in cone tweeter with 5-oz magnet, and 2½-in tuned port low frequency support system; frequency response 30-20,000 Hz; crossover at 2000 Hz; input range 10-90 W continuous; sensitivity 90.5 dB SPL/W/m; 5-ohm nominal impedance; tweeter level control; 22" H × 13⅛" W × 12¼" D..... $199

822. Similar to 1022 except 8-in woofer; frequency response 35-20,000 Hz; input range 5-70 W continuous; 21" H × 11¾" W × 10" D..... $149

CANTON

GLE 100 Speaker System
Three-way speaker system with 12.2-in woofer, ¼-in dome midrange, and 0.75-in dome tweeter; crossovers at 800 and 2600 Hz; 4-8 ohm impedance; frequency response 22-30,000 Hz; handles 100-150 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 13.3" H × 21.6" W × 11.2" D..... ..... $450

GLE 70 Speaker System
Three-way speaker system with 10¼-in woofer, 1⅛-in dome midrange, and ¾-in dome tweeter; crossovers at 800 and 2200 Hz; 4-8 ohm impedance; frequency response 25-30,000 Hz; input range 5.8-120 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 11⅜" H × 17⅜" W × 9⅜" D $319

Gamma 800 Speaker System
Three-way speaker system with 8-in woofer, 1.18-in dome midrange, and ¾-in hemispherical dome tweeter; crossovers at 750 and 2200 Hz; 4-8 ohms nominal impedance; frequency response 30-30,000 Hz; input range 25-100 W; black matte finish; 11" square..... $299

GLE 60 Speaker System
Three-way speaker system with 8.7-in woofer, 1.2-in dome midrange, and 0.75-in dome tweeter; crossovers at 800 and 2200 Hz; 4-8 ohm impedance; frequency response 28-30,000 Hz; input range 6.5-100 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 13⅛" H × 18⅛" W × 13⅛" D $259

GLE 50 Speaker System
Three-way speaker system with 7.9-in woofer, 1.2-in dome midrange, and 0.75-in dome tweeter; crossovers at 800 and 2200 Hz; 4-8 ohm impedance; frequency response 36-30,000 Hz; input range 7.4-80 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 8⅛" H × 16⅛" W × 12" D..... $195

GLE 45 Speaker System
Two-way speaker system with 7.9-in woofer and 0.75-in dome tweeter; crossover at 1700 Hz; 4-8 ohm impedance; frequency response 38-30,000 Hz; input range 7.6-70 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 12⅛" H × 16⅛" W × 12" D..... $165

GLE 40F Speaker System
Two-way speaker system with 6.3-in woofer and 0.75-in dome tweeter; crossover at 1700 Hz; 4-8 ohm impedance; frequency response 48-30,000 Hz; input range 9-60 W; walnut with bronze metal, matte black with black metal, or matte white with silver metallic removable grille; 8⅛" H × 12⅛" W × 3⅛" D..... $139

GLE 40. Similar to GLE 40F except crossover at 1400 Hz; frequency response 42-30,000 Hz; 7½" H × 10⅜" W × 6" D..... $125

CELESTION

Ditton 662 Speaker System
Three-way floor-standing speaker system with 12.9-in quasi-Butterworth fiber cone woofer with 1.9-in glass fiber voice coil and barium ferrite magnet, 12.9-in passive radiator, damped polypropylene midrange and hot pressed polyethylene terephthalate polymer tweeter with 0.75-in polyamide impregnated voice coil; frequency response 38-20,000 Hz ±3 dB; crossovers at 700 and 4500 Hz; sensitivity 90 dB SPL/2.9 W pink noise at 1 m; input range 20-160 W; 8-ohm impedance; available in oiled American walnut or elm finish; 41⅝" H × 15¾" W × 11 13/16" D..... $750

Ditton 551 Speaker System
Three-way floor-standing speaker system with 11.4-in quasi-Butterworth fiber cone woofer with 1.9-in voice coil and barium ferrite magnet, P.V.C. impregnated cellulose fiber woven soft dome midrange, and hot pressed polyethylene polymer tweeter with 0.75-in polyamide impregnated voice coil; midrange and treble level controls; frequency response 38-20,000 Hz; crossovers at 600 and 4500 Hz; input range 20-140 W; sensitivity 90 dB SPL/3.25 W pink noise at 1 m; 8-ohm impedance; available in oiled American walnut, elm, or black ash finish; 28⅛" H × 15⅛" W × 13" D..... $500
Chrome-plated speaker stands..... $60 pr.

Ditton 442 Speaker System
Three-way floor-standing speaker system with 12.9-in plasticized fiber cone woofer with 1.8-in high temperature polyamide voice coil and barium ferrite magnet, 5.1-in plasticized paper cone midrange with 0.98-in voice coil, and hot pressed polyethylene terephthalate polymer tweeter with 0.75-in polyamide impregnated voice coil; frequency response 45-20,000 Hz ±3 dB; crossovers at 600 and 4500 Hz; sensitivity 90 dB SPL/2.9 W pink noise at 1 m; input range 20-120 W; 8-ohm impedance; oiled American walnut, elm, or black ash finish; 30" H × 15⅜" W × 11 7/16" D $420

Ditton 33 Speaker System
Three-way speaker system with 12-in woofer, 5-in cone midrange, and 1-in dome tweeter; frequency response 50-20,000 Hz ±4 dB; crossovers at 500 and 5000 Hz; min. input 10 W; max. input 80 W; 8-ohm impedance; walnut or teak cabinet; 24" H × 14" W × 11" D..... $320

UL6 Speaker System
Two-way speaker system with 6-in woofer, 6-in passive radiator, and 1-in dome tweeter; frequency response 70-20,000 Hz ±4 dB; crossover at 2500 Hz; 8 ohm impedance; min. input 20 W; max. input 80 W; walnut or teak cabinet; 12" H × 16" W × 9" D..... ..... $235

Ditton 15XR Speaker System
Two-way speaker system with 8-in woofer, 8-in passive radiator, and 1-in pressure dome tweeter; frequency response 60-20,000 Hz ±4 dB; crossover at 2500 Hz; min. input 10 W; max. input 60 W; 8-ohm impedance; walnut or teak cabinet; 21" H × 10" W × 9" D..... ..... $200

CERWIN-VEGA

316R Speaker System
Three-way floor-standing speaker system with 15-in woofer, 6½-in cone-sealed midrange, 1-in voice-coil horn tweeter, and 1-in rear-reflecting accent tweeter; frequency response 30-17,000 Hz ±4 dB; crossovers at 500 and 3500 Hz; sensitivity 103 dB/W/m; max. input 150 W continuous; 8-ohm impedance; midrange, tweeter, and rear tweeter controls. $499

12TR Speaker System
Three-way floor-standing tower speaker system with 12-in floor-facing woofer, 6½-in sealed-cone midrange, 1.1-in SuperDhorm tweeter, and rear-reflecting 1-in voice-coil horn accent tweeter; frequency response 28-20,000 Hz ±4 dB; crossovers at 250 and 4000 Hz; sensitivity 102 dB/W/m; max. input

16 SPEAKER SYSTEMS

100 W continuous; 8-ohm impedance; midrange, tweeter, and rear tweeter level controls $470

S-1 Loud. Speaker
Three-way bookshelf speaker system with 12-in woofer, 6½-in sealed midrange, and 1.1-in Dhorm tweeter; frequency response 28-20,000 Hz ±4 dB; crossovers at 300 and 4000 Hz; efficiency 98 dB/W/m; max. input 200 W continuous; 8-ohm impedance; features Bass Turbocharger and Thermo Vapor Suspension; midrange and tweeter level controls; 25" H × 14½" W × 14" D $435

313 Speaker System
Three-way floor-standing speaker system with 12-in bass driver, 6-in sealed-cone midrange, and 1-in voice coil horn tweeter; frequency response 30-17,000 Hz ±4 dB;crossovers at 700 and 3500 Hz; sensitivity 100 dB/W/m; max. input 100 W continuous; 8-ohm impedance; midrange and tweeter level controls $330

A-123 Speaker System
Three-way bookshelf speaker system with 12-in woofer, 6-in sealed-cone midrange, and 1.1-in voice coil Dhorm tweeter; frequency response 38-20,000 Hz ±4 dB; crossovers at 500 and 5000 Hz; sensitivity 97 dB/W/m; max. input 100 W continuous; 8-ohm impedance; midrange and tweeter level controls $310
A-10. Similar to A-123 except two-way system using 10-in woofer; crossover at 2000 Hz; sensitivity 92 dB/W/m; max. input 40 W continuous; tweeter level control $189

18-SW Subwoofer
Incorporates 18-in Stroker bass driver with dual spider design mounted in floor-facing direction; frequency response 25-250 Hz; max. input 300 W continuous; sensitivity 100 dB/W/m; 4-ohm impedance $600

15-SW Subwoofer
Incorporates 15-in bass driver; frequency response 30-250 Hz; max. input 150 W continuous; sensitivity 100 dB/W/m; 8-ohm impedance $380

HED Series

UT-12R Tower Speaker System
Three-way direct-reflecting tower speaker system with 12-in cast aluminum frame woofer, two 6-in cone midrange drivers (one is rear-reflecting), and 1-in voice coil horn tweeter; frequency response 32-17,000 Hz ±4 dB; crossovers at 700 and 4000 Hz; sensitivity 98 dB/W/m; input range 5-80 W continuous; 8-ohm impedance; midrange and tweeter level controls $390

U-351 Speaker System
Three-way floor-standing speaker system with 15-in cast aluminum frame woofer, 6-in cone midrange, and 1-in voice-coil horn tweeter; frequency response 32-17,000 Hz ±4 dB; crossovers at 700 and 4000 Hz; sensitivity 103 dB/W/m; input range 5-100 W continuous; 8-ohm impedance; mid- and high-frequency level controls $375
U-321. Similar to U-351 except uses 12-in cast aluminum frame woofer; frequency response 38-17,000 Hz ±4 dB; sensitivity 98 dB/W/m; input range 5-60 W $265
U-15. Similar to U-351 except two-way system without midrange; crossover at 2000 Hz; tweeter level control $325

U-123 Speaker System
Three-way rear-ported tuned bookshelf speaker system with 12-in cast aluminum frame woofer, 5-in cone midrange, and 1-in voice coil horn tweeter; frequency response 45-17,000 Hz ±4 dB; crossovers at 700 and 4000 Hz; sensitivity 96 dB/W/m; input range 5-60 W continuous; 8-ohm impedance; midrange and tweeter level controls $215
U-12. Similar to U-123 except two-way system without midrange; crossover at 2000 Hz; tweeter level control $195

U-10 Speaker System
Two-way rear-ported tuned bookshelf speaker system with 10-in cast aluminum frame woofer and 1-in voice coil Dhorm tweeter; frequency response 42-20,000 Hz ±4 dB; crossover at 2000 Hz; sensitivity 94 dB/W/m; input range 5-40 W continuous; 8-ohm impedance; tweeter level control $170
U-6. Similar to U-10 except uses 6-in woofer; frequency response 60-20,000 Hz ±4 dB; crossover at 3000 Hz; sensitivity 90 dB/W/m $85

SW-12 Subwoofer
Incorporates 12-in cast aluminum frame floor-facing woofer with 7-lb magnet and 2-in dual voice coil; frequency response 38-150 Hz ±4 dB; crossover at 150 Hz; sensitivity 90 dB/W/m; input range 5-100 W continuous; impedance 8 X 2 ohms . $280

CHAPMAN SOUND

SCJ I Speaker System
Three-way floor-standing speaker system with 12-in calibrated high-compliance woofer, 5-in PlastiFlex bextrene cone midrange, and 1-in dome tweeter; frequency response 25-20,000 Hz; crossovers at 350 and 3500 Hz; sensitivity 90 dB SPL/W/m; input range 25-100 W continuous; 4-ohm impedance; sweep attenuation brilliance control; American walnut vinyl veneer; 28" H × 18" W × 13" D .... $800 pr.

310 Speaker System
Three-way speaker system with 10-in high-compliance woofer, 5-in PlastiFlex bextrene cone midrange, and 1-in dome tweeter; frequency response 30-20,000 Hz; crossovers at 400 and 3500 Hz; sensitivity 88 dB SPL/W/m; input range 25-80 W continuous; 4-ohm impedance; sweep attenuation brilliance control; American walnut vinyl veneer; 21½" H × 14" W × 11" D ..... $650 pr.

250 Speaker System
Two-way bookshelf speaker system with 5-in PlastiFlex bextrene cone woofer and 1-in dome tweeter; frequency response 60-20,000 Hz; crossover at 3500 Hz; sensitivity 86 dB SPL/W/m; input range 15-25 W continuous; 8-ohm impedance; sweep attenuation brilliance control; American walnut vinyl veneer; 13" H × 8" W × 7¾" D ..... $400 pr.

CHARTWELL by REFERENCE MONITOR

PM-450 Passive Speaker System
Two-way studio monitor with 1-in soft dome tweeter and 12-in polypropylene cone woofer; frequency response 40-20,000 Hz ±3 dB; 8-ohm impedance; crossover at 2000 Hz; sensitivity 94 dB SPL/W/m; input range 30-200 W; teak, walnut, or black finish with black foam grille (other colors on special order); 30" H × 17½" W × 15½" D $2400

PM-410 High Power Monitor Speaker
Three-way bass-reflex speaker system with 1-in fabric dome tweeter, 5¾-in polypropylene midrange, and 12-in woofer with polypropylene cone; frequency response 45-20,000 Hz ±3 dB; crossovers at 300 and 2400 Hz; sensitivity 92 dB SPL/W/m; input range 10-150 W; 8-ohm impedance; teak, walnut, or black finish with matte black grille; furnished with 2-in high wood base; optional chrome plated stand available; 34¼" H × 13" D × 15¼" W ..... $1500 pr.
Rosewood finish ..... $1560 pr.

PM-210 Monitor Speaker
Two-way bass-reflex speaker system with dome tweeter and 8-in polypropylene cone bass/midrange driver; frequency response 50-20,000 Hz ±3 dB; crossover at 2800 Hz; sensitivity 89 dB SPL/W/m; input range 10-100 W; 4-8 ohm impedance; teak, walnut, or black finish; 26" H × 13.5" W × 11.2" D ..... $850 pr.
Rosewood finish ..... $900 pr.

PM-110 Monitor Speaker
Two-way bass-reflex bookshelf system with 6.5-in bass/midrange driver with polypropylene cone and long-throw voice coil and 1.9-in soft dome tweeter; frequency response 65-20,000 Hz ±3 dB; crossover at 2500 Hz; sensitivity 86 dB SPL/W/m; input range 10-60 W; 4-8 ohm impedance; teak, walnut, or black finish; 18¼" H × 9" W × 8¼" D .. $499 pr.
Rosewood/black finish ..... $550 pr.

LS3/5A Baby Monitor
Two-way compact acoustic-suspension monitor speaker based on BBC design; has 4.5-in polystyrene bass/midrange and dome tweeter; frequency response 70-20,000 Hz ±3 dB; crossover at 3000 Hz; 15-ohm nominal impedance; max. input 25 W; teak, walnut, black or rosewood veneer with black grille; 12" H × 7.5" W × 6.3" D ..... $540 pr.

CIZEK

MG-27 Subwoofer
Acoustic-suspension subwoofer with two 10-in woofers; input range 25-600 W/ch; sensitivity 86 dB SPL/W/m; 4-ohm impedance; internal passive crossover for direct connection to Cizek Models 1, 2, and 3; bi-amped directly through input terminals; may be used in vertical or horizontal position; acoustically transparent foam grille; 29" H × 17¾" W × 12½" D $295

KA-1 Speaker System
Two-way acoustic-suspension bookshelf speaker system with 6½-in woofer and 1-in hemispherical dome tweeter; frequency response ±1.5 dB from 100 Hz on up, −3 dB at 70 Hz; input range 15-200 W clean power; sensitivity 88 dB SPL/W/m; 4-ohm nominal impedance; solid Hawaiian Koa wood cabinet with 1-in Acuthane™ baffle and acoustically transparent foam grille; 13¹⁵⁄₁₆" H × 9" W × 8¾" D $295

Model 1 Speaker System
Two-way speaker system with 10-in acoustic-suspension woofer and 1-in hemispherical dome tweeter; frequency response 35-17,000 Hz +1.5/−2 dB; crossover at 1500 Hz; efficiency 88 dB/W/m; min. input 15 W; max. input 200 W music power; tweeter level and contour controls and Q adjustment switch; walnut enclosure with transparent foam grille; 25" H × 15½" W × 9½" D $219
Model 2. Similar to Model 1 but with 8-in woofer; frequency response 35-17,000 Hz ±2 dB; hickory vinyl enclosure; 21" H × 13" W × 9½" D $149

Model 3 Speaker System
Two-way acoustic-suspension speaker system with 8-in woofer and 1-in hemispherical dome tweeter; frequency response from 42-18,000 Hz ±2 dB; crossover frequency 1500 Hz; efficiency 88 dB/W/m into 4.25 ohms; input range from 15-100 W/ch continuous into 4 ohms; 4.25-ohm impedance from 100-15,000 Hz; 19" H × 11¾" W × 7½" D $99

CLARKE

Precedent Speaker System
Three-way infinite-baffle speaker system with 12-in woofer, 5-in midrange, and 1-in soft-dome tweeter; crossover frequencies at 500 and 4200 Hz; input range 10-70 W continuous; efficiency rating 1 W at 1000 Hz for 90-dB SPL on axis at 1 m; wood cabinet with brown-fabric grille; 31" H × 15" W × 14" D $299

Encore Speaker System
Two-way resistive wave line tuning speaker system with 8-in woofer and 1-in dome tweeter; crossover at 2500 Hz; input range 10-45 W continuous; sensitivity 89 dB SPL/W/m at 1000 Hz; wood cabinet with brown fabric grille; 22" H × 12" W × 12" D $165

Prelude Speaker System
Two-way ported speaker system with 8-in woofer and 2-in tweeter; crossover frequency at 5000 Hz −6dB/octave; input range 10-40 W continuous; efficiency 1 W at 1000 Hz for 90 dB SPL on axis at 1 m; wood cabinet with brown-fabric grille; 22" H × 12" W × 12" D..... $129

CONCEPT

CEM Speaker System
Two-way passive-radiator floor-standing speaker system with 12-in cast basket woofer and Heil tweeter; frequency response 25-23,000 Hz ±3 dB; crossover at 1300 Hz; sensitivity 91 dB SPL/W/m; min. input 25 W; 6-ohm impedance; midrange and tweeter level controls; oiled walnut finish cabinet with brown cloth grille; 45" H × 18" W × 15½" D $595

CE1 Speaker System
Two-way passive-radiator floor-standing speaker system with 10-in cast woofer and Heil tweeter; frequency response 30-23,000 Hz ±3 dB; crossover at 1400 Hz; sensitivity 91 dB SPL/W/m; min. input 20 W; 6-ohm impedance; midrange and tweeter level controls; oiled walnut finish with brown cloth grille; 40" H × 15⅜" W × 15" D $445
CE2. Similar to CE1 except frequency response 35-23,000 Hz ±3 dB; crossover at 1500 Hz; 25½" H × 14¼" W × 14" D..... $345

CUSTOM CRAFT

MK XV Speaker System
Three-way floor-standing omnidirectional speaker system with 12-in woofer, 5-in midrange, and two 1-in dome tweeters; walnut veneer finish; 32" H × 17½" W × 12¾" D..... $359
Rosewood veneer finish $429

MK VIII Speaker System
Three-way speaker system with 8-in woofer, 5-in self-contained midrange, and 1-in acoustic-suspension dome tweeter; frequency response 57-20,000 Hz ±3 dB; crossover at 1500 and 4000 Hz; recommended input range 10-60 W continuous power; sensitivity 94 dB SPL/W/m; 4-ohm impedance; walnut veneer finish; 14½" H × 10" W × 6½" D . $199

MK XII Subwoofer
12-in acoustic-suspension subwoofer with high temperature metal voice coil; frequency response 30-100 Hz ±3 dB; sensitivity 92 dB SPL/W/m; recommended input range 25-150 W continuous power; 8-ohm impedance; walnut veneer finish with walnut trim; designed for use with MKI, MKII, MKVI and MKVIII speakers; power selector switch; 24" H × 16" W × 12" D $445

DAHLQUIST

DQ-10 Speaker System
Five-way Phased Array moving-coil speaker system with 10-in woofer in sealed air-suspension enclosure, 5-in mid-bass driver, 2-in soft-dome midrange; ¾-in dome tweeter, and piezoelectric ceramic super tweeter; frequency response 37-27,000 Hz; crossovers at 400, 1000, 6000, and 12,500 Hz; 8-ohm nominal impedance; max. input 200 W; min. input 60 W; features low-diffraction time-delay correction; continuously variable treble-slope control for boost or cut; solid walnut trim with black or white grille cloth; manufactured in mirror-imaged pairs; 31½" H × 30½" W × 9" D $435

DQ-1 W Subwoofer
Incorporates 13-in woofer in heavy cast frame mounted in walnut enclosure; recommended application is bi-amped systems but will perform with passive crossovers; typically adds an octave of low bass response to speaker systems; black or white grille cloth; 28" H × 18" W × 14" D..... $275

DALESFORD EXPORT by SONIKIT

Dalesford System 312 Speakers
Three-way acoustic-suspension speaker system with 12-in bextrene woofer, 6½-in bextrene midrange, and 1-in audax soft dome tweeter; frequency response 35-29,000 Hz ±3 dB; crossovers at 250 and 3500 Hz; input range 25-100 W; 8-ohm impedance; birch cabinet; 36" H × 15¾" W × 15¼" D. Kit..... $350
Dalesford System 310. Similar to System 312 except 10-in woofer and 5-in midrange; frequency response 35-20,000 Hz ±3 dB; 36" H × 15¾" W × 13" D. Kit..... $300

Dalesford System 210 Speakers
Two-way acoustic-suspension system with 10-in woofer and 1-in audax soft dome tweeter; frequency response 35-20,000 Hz ±3 dB; crossover at 2200 Hz; input range 25-100 W; 8-ohm impedance; birch cabinet; 25¾" H × 12½" W × 12" D. Kit $185

Dalesford System 208 Speakers
Two-way acoustic-suspension speaker system with 8-in bextrene woofer and 1-in audax soft dome tweeter; frequency response 55-20,000 Hz ±3 dB; crossover at 3000 Hz; input range 15-50 W; 8-ohm impedance; birch veneer finish; 19" H × 12" W × 9½" D. Kit..... $125

Daleford BSC 3 Mini Speakers
Two-way acoustic-suspension bookshelf speaker system with 5-in bextrene woofer and 1-in audax soft dome tweeter; frequency response 50-20,000 Hz ±3 dB; crossover at 3500 Hz; input range 25-50 W; 8-ohm impedance; birch cabinet; 13⅜" H × 8⅜" W. × 8⅞" D. Kit..... $115

DCM

Time Window Speaker System
Two-way floor-standing speaker system with cylindrical back and triangular prism front; incorporates two 6-in Philips woofers and two Philips dome tweeters symmetrically placed on two angled faces of prism; frequency response 25-18,000 Hz; input range 10-200 W continuous; impedance 6-8 ohms nominal; dispersion 180 degrees horizontal, 60 degrees vertical; 36" H × 14¾" W × 11¾" D..... ..... $660 pr.

DECCA

London Ribbon Speaker
Horn-coupled ribbon tweeter; uses optional crossover network with low-pass slope at 12 dB/octave and high-pass slope initially at 12 dB/octave with final slope at 45 dB/octave; crossover frequency 1000 Hz; insertion loss less than 1 dB in passband; impedance 8 ohms; power-handling capacity 30 watts max.; dist. less than 1.7% at 2500 Hz with 30 W input, 12¾" × 9" $200
Crossover network CO/1000/8..... $40

London Super Tweeter
Ribbon tweeter in enclosure without horn; impedance 8 ohms; crossover 7000 Hz; grey color .. $200

DESIGN ACOUSTICS

D-12A Speaker System
Three-way dodecahedron floor-standing/ceiling-hung speaker system with two 8-in woofers, 1½-in dome midrange, two 5-in cone midrange drivers, two 1-in dome tweeters, and three 1½-in cone tweeters; crossovers at 650 and 2000 Hz; 4-ohm nominal impedance; power response 30-18,000 Hz ±2 dB; efficiency 89-dB SPL/W/m; selectable 180− or 360-degree dispersion angle; input range 25-200 W/ch; two-step woofer, midrange, and tweeter level controls; walnut finish with black grille; available with chrome base; 26" H (with base) × 22" diameter..... $750
D-12AR. Same as D-12A but rosewood finish.. $900

D-8 Speaker System
Three-way acoustic-suspension floor-standing speaker system with two 10-in woofers, 5-in damped cone midrange, dome tweeter, three cone tweeters, and piezoelectric speaker; power response 30-17,000 Hz ±2 dB; crossovers at 600 and 1500 Hz; 8-ohm impedance; input range 15-150 W/ch; sensitivity 94.5−dB SPL/W/m; three-position switch for woofer, midrange, and tweeter level controls, oiled walnut finish with black grille cloth; 44" H × 16½" W × 12¾" D..... $590

D-6 Speaker System
Three-way vented acoustic-suspension floor-standing speaker system with 10-in woofer, 5-in damped cone midrange, and five 2½-in cone tweeters; power response 30-15,000 Hz ±2 dB; crossovers at 800 and 2000 Hz; 8-ohm impedance; input range 20-100 W/ch; sensitivity 92-dB SPL/W/m; woofer and tweeter level controls; oiled walnut finish with black/blue/cocoa/crimson grille cloth; 24½" H × 15½" W × 13¾" D..... $390

D-4A Speaker System
Three-way acoustic-suspension floor-standing speaker system with two 8-in woofers, 5-in damped cone midrange, and one 1-in dome and two 1½-in cone tweeters; power response 35-18,000 Hz ±3 dB; crossovers at 700 and 2000 Hz; 4-ohm impedance; input range 20-125 W/ch; sensitivity 92 dB SPL/W/m; woofer and tweeter level controls; oiled walnut finish with black grille cloth; 38" H × 16½" W × 11" D.. ..... $345

D-3 Speaker System
Three-way tuned-port bookshelf speaker system with 10-in woofer, 5-in cone midrange, and 1-in dome tweeter; crossovers at 500 and 2500 Hz; power response 40-20,000 Hz ±3.5 dB; input range 30-100 W continuous; oiled walnut finish with brown cloth grille; 25" H × 12" W × 11½" D $240

D-2 Speaker System
Two-way vented acoustic-suspension floor-standing speaker system with 10-in woofer and 1-in dome tweeter; power response 40-18,000 Hz ±3.5 dB; crossover at 1500 Hz; 8-ohm impedance; input range 20-50 W/ch; sensitivity 88-dB SPL/W/m; tweeter level control; oiled walnut finish with black grille cloth; 34" H × 12½" W × 12¼" D $220

D-1A Speaker System
Two-way vented acoustic-suspension bookshelf speaker system with 8-in woofer and 1½-in cone tweeter; power response 50-15,000 Hz ±3.5 dB; crossover at 1500 Hz; 6-ohm impedance; input range 15-30 W/ch; sensitivity 87.5-dB SPL/W/m; aluminum finish with black grille cloth; 20¼" H × 11" W × 8" D $125
D-1W. Same as D-1A but with walnut finish; 21¼" H × 12" W × 8" D $135

ELECTRO-VOICE

Sentry V Monitor Speaker System
Two-way ported floor-standing monitor speaker system with high-efficiency 10-in woofer and ST350A neckless radial horn tweeter; frequency response 45-18,000 Hz ±3 dB; crossover at 2000 Hz; sensitivity 96 dB SPL/W/m; long-term average power-handling capacity 30 W from 40-10,000 Hz, short-term 300 W from 40-10,000 Hz; impedance 6 ohms nominal, 4 ohms min.; 28½" H × 20" W × 11¾" D $325
SEQ. Two-channel active equalizer for Sentry V; frequency response becomes 32-18,000 Hz; has high-frequency slope control and tape/source input control; THD 0.01% at 1 V rms in; IM dist. 0.005% at 1.5 V rms in; max. input signal 7 V rms sine wave; noise output −80 dB below 200 mV; 2" H × 8" W × 8" D $96

Interface: D Series II Speaker System
Three-way vented floor-standing speaker system with 12-in downward-firing woofer, 6½-in vented midrange, and radial horn tweeter; includes active equalizer that extends bass response and eliminates

subsonic noise, has high-frequency control (installs into tape monitor circuit of amp or receiver or be-

tween preamp and power amp); frequency response 23-20,000 Hz, 28-18,000 Hz ±2.5 dB; crossovers 40 Hz (acoustic), 350 and 3000 Hz (electrical); sensitivity 97 dB SPL/W/m; min. input 1.5 W (for 90-dB SPL); max. input 500 W continuous (for 115-dB SPL); 8-ohm nominal impedance; built-in tweeter protector; woofer environmental control (floor or on floor, next to wall); walnut veneer cabinet; 32" H × 21¼" W × 15½" D.....$1750 pr.

Interface: C Series II Speaker System
Three-way vented floor-standing speaker system with 10-in woofer, 6½-in vented midrange, and 1½-in super dome tweeter with acoustic lens; supplied with active equalizer; frequency response 25-20,000 Hz, 30-18,000 Hz ±2.5 dB; crossovers 42 Hz (acoustic), 400 and 2500 Hz (electrical); sensitivity 93 dB SPL/W/m; min. input 2.8 W (for 90-dB SPL); max. input 350 W (for 110-dB SPL); 6-ohm nominal impedance; built-in tweeter protector; walnut veneer cabinet; 31½" H × 20" W × 12½" D .....$909 pr.

Interface: B Series III
Two-way vented speaker system with 12-in low-frequency radiator, 8-in midrange/woofer, and 1½-in super dome tweeter with acoustic lens; supplied with active equalizer; .frequency response 26-20,000 Hz, 30-18,000 Hz ±2.5 dB; crossover 42 Hz (acoustic), 1500 Hz (electrical); sensitivity 92 dB SPL/W/m; min. input 3.6 W (for 90-dB SPL); max. input 250 W (for 107-dB SPL); 8-ohm nominal impedance; built-in tweeter protector; walnut veneer cabinet; 29¼" H × 16" W × 11" D.$733 pr.

Interface: A Series III
Two-way vented bookshelf speaker system with 12-in low-frequency radiator, 8-in midrange/woofer, and 1½-in super dome tweeter with acoustic lens; supplied with active equalizer; frequency response 29-20,000 Hz, 35-18,000 Hz ±2.5 dB; crossover 49 Hz (acoustic), 1500 Hz (electrical); sensitivity 92 dB SPL/W/m; min. input 3.6 W (for 90-dB SPL); max. input 250 W (for 107-dB SPL); 8-ohm nominal impedance; tweeter-protection circuit is optional; walnut veneer cabinet; 24½" H × 15⅜" W × 8¼" D.....$546 pr.

Interface: 3 Series II Speaker System
Two-way speaker system with 12-in low-frequency radiator, 8-in midrange/woofer, and 1½-in super dome tweeter with acoustic lens; frequency response 34-20,000 Hz, 40-18,000 Hz ±4 dB; crossover at 1500 Hz; sensitivity 92 dB SPL/W/m; min. input 3.6 W (for 90-dB SPL); max. input 250 W (for 107-dB SPL); 8-ohm nominal impedance; simulated walnut-grained vinyl finish; 25¼" H × 14¾" W × 13⅜" D.....$200

Interface: 2 Series II Speaker System
Two-way speaker system with 10-in low-frequency radiator, 8-in midrange/woofer, and 1½-in super dome tweeter with acoustic lens; frequency response 39-20,000 Hz, 47-18,000 Hz ±4 dB; crossover at 1500 Hz; sensitivity 92 dB SPL/W/m; min. input 3.6 W (for 90-dB SPL); max. input 250 W (for 107-dB SPL); 8-ohm nominal impedance; simulated walnut-grained vinyl finish; 24¼" H × 13¾" W × 10¹¹⁄₁₆" D.....$160

Interface: 1 Series II Speaker System
Two-way speaker system with 8-in midrange/woofer and 1½-in super dome tweeter with acoustic lens; frequency response 47-20,000 Hz, 56-18,000 Hz ±4 dB; min. input 3.6 W (for 90-dB SPL); max. input 250 W (for 107-dB SPL); 8-ohm nominal impedance; simulated walnut-grained vinyl finish; 21¼" H × 11⅜ W × 9¹¹⁄₁₆" D.....$117

EMS

Model 5 Speaker Kit
Three-way speaker system with 10-in woofer with 20-oz ceramic magnet in B-4 Theile alignec reflex enclosure, 5-in midrange with 10-oz ceramic magnet with molded high density curvilinear cone, and 2 × 5-in piezo electric tweeter; frequency response 28-26,000 Hz ±2 dB; crossovers at 600 and 6000 Hz; max. power 200 W continuous program; sensitivity 88 dB SPL/W/m; 35½" H × 17½" W × 14½" D. Kit does not include cabinet.....$85
Model 2. Similar to Model 5 except with 8-in woofer; frequency response 36-26,000 Hz ±2 dB; crossovers at 900 and 6000 Hz; max. power 150 W continuous; sensitivity 87 dB SPL/W/m; 24" H × 14" W × 12" D. Kit does not include cabinet....$75

EPI

500 Speaker System
Three-way floor-standing speaker system with 10-in "Focused Field" woofer reinforced with two 12-in passive radiators, 4-in sealed-back midrange with aluminum voice coil and ferrofluid damping, and 1-in air-spring tweeter; frequency response 45-20,000 Hz ±3 dB; input range 15-125 W continuous; 4-ohm impedance; oiled walnut and ebony vinyl finish with acoustically transparent black cloth grille.....$400

200C Speaker System
Two-way floor-standing speaker system with 8-in woofer, 12-in passive radiator, and 1-in air-spring tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 34-20,000 Hz; input range 15-125 W continuous; front-panel high-frequency control; oiled walnut finish with black cloth grille; 32¾" H × 17" W × 11" D.....$275

120C Speaker System
Two-way speaker system with 10-in long-traverse woofer and 1-in air-spring tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 38-20,000 Hz; input range 25-80 W continuous; front panel high frequency control; woodgrain vinyl cabinet with bronze trim and black acoustically transparent grille; 25" H × 15" W × 11" D.....$159

100 Speaker System
Two-way speaker system with 8-in long-traverse woofer and 1-in air-spring tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 48-20,000 Hz; input range 12-80 W; oiled walnut finish with black cloth grille; 21" H × 11" W × 9" D.....$125
Wood-grained vinyl cabinet.....$115

EPICURE

1000 Speaker System
Omnidirectional floor-standing tower speaker system with four 8-in woofers and four 1-in air-spring tweeters; frequency response 20-20,000 Hz ±3 dB; 8-ohm impedance; max. input 250 W continuous; min. input 60 W continuous; transducers matched to within 1 dB efficiency; 75" H × 18" W × 18" D.....$1000

3.0 Trilogy Home Speaker System
Three-way floor-standing speaker system with 10-in woofer, 6-in midrange, and 1-in air-spring tweeter; crossovers at 475 and 2600 Hz; 4-ohm nominal impedance; frequency response 32-20,000 Hz ±3 dB; 180-degree dispersion off-axis from 32-10,000 Hz ±3 dB and from 10,000-18,000 Hz ±4 dB, 90-degree dispersion off-axis at 15,000 Hz; truncated pyramid; 41⅜" H × 17½" bottom × 8½" top $575

400+ Speaker System
Omnidirectional floor-standing tower speaker system with four 6-in woofers and four 1-in air-spring tweeters; frequency response 27-19,000 Hz ±3 dB; crossover at 1800 Hz; 8-ohm impedance; max. input 200 W continuous; min. input 25 W continuous; three-position tweeter level control; transducers matched to within 1 dB efficiency; 38" H × 14" W × 14" D.....$450

Twenty+ Speaker System
Two-way speaker system with two 8-in woofers and two 1-in air-spring tweeters; frequency response 35-20,000 Hz ±3 dB; crossover at 1800 Hz; 8-ohm impedance; input range 20-100 W continuous; tweeter level control; hand-rubbed walnut veneer finish with dark brown grille cloth; 29" H × 18½" W × 12" D.....$275

14 Speaker System
Two-way speaker system with 6-in controlled-excursion woofer, 8-in passive radiator, and 1-in air-spring tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 28-20,000 Hz; input range 15-80 W continuous; nearly hemispherical dispersion; three-position, front-panel high-frequency control; 24" H × 13½" W × 9" D $199

11 Speaker System
Two-way bookshelf speaker system with 6-in controlled-excursion woofer and 1-in air-spring tweeter; frequency response 38-20,000 Hz ±3 dB; 8-ohm impedance; max. input 80 W continuous; min. input 15 W continuous; nearly hemispherical dispersion; 21½" H × 13½" W × 9½" D.....$159

10 Speaker System
Two-way bookshelf speaker system with 8-in woofer and 1-in air-spring tweeter; frequency response 42-20,000 Hz ±3 dB; crossover at 1800 Hz (12 dB/octave); 8-ohm impedance; max. input 70 W continuous; min. input 20 W continuous; nearly hemispherical dispersion; vinyl finish cabinet; 22" H × 12" W × 9⅜" D.....$125

5 Speaker System
Two-way bookshelf speaker system with 6-in controlled-excursion woofer and 1-in air-spring tweeter; frequency response 50-20,000 Hz ±3 dB; crossover at 1800 Hz (12 dB/octave); 8-ohm impedance; max. input 70 W continuous; min. input 20 W continuous; nearly hemispherical dispersion; 15" H × 11" W × 7⅞" D.....$90

ESS

Transar/atd Speaker System
Two-way open-baffle speaker system with 32-in × 6-in Heil woofer and Heil air-motion transformer tweeter; Heil woofer consists of a total of twenty small bubble cones on five Lexan-sheet cones linked by four carbon-fiber rods; bi-amp comes with electronic crossover and current source amplifier; crossover at 1000 Hz; 4-ohm impedance; frequency response 30-20,000 Hz ±3 dB; efficiency 94-dB SPL/W/m; min. input for Heil midrange/tweeter 5 W; continuous frequency level controls; mirror, walnut, rosewood, or ebony finish with brown, sand, or coffee grille; 51" H × 40" W × 10" D.....$4400

amt Monitor Speaker System
Two-way speaker system with 12-in Bextrene

woofer, 12-in passive radiator, and 21.5 in² Heil air motion transformer; frequency response 30-23,000 Hz ±3 dB; crossover at 1000 Hz; max input 375 W clean music power; 5-ohm nominal impedance; 120° horizontal dispersion, 30° vertical dispersion; sensitivity 90-dB SPL/W/m; presence/brilliance control; oiled walnut finish with black-brown grille; 39.25" H × 15.63" W × 15.88" D $650

amt 1b Speaker System
Two-way speaker system with 12-in Bextrene woofer, 12-in passive radiator, and 21.5 in² Heil air motion transformer; frequency response 35-23,000 Hz ±3 dB; crossover at 1000 Hz; max input 375 W clean music power; 6-ohm nominal impedance; 120° horizontal dispersion, 30° vertical dispersion; sensitivity 90 dB SPL/W/m; midrange presence and brilliance controls; oiled walnut finish with black-brown grille; 35.25" H × 16.25" W × 16.25" D..... ..... $507

amt 1b Bookshelf Speaker System
Two-way bookshelf speaker system with 12-in Bextrene woofer, 12-in passive radiator, and 21.5 in² Heil air motion transformer; frequency response 40-23,000 Hz ±3 dB; crossover at 1000 Hz; max. input 375 W clean music power; 6-ohm nominal impedance; 120° horizontal dispersion, 30° vertical dispersion; sensitivity 90-dB SPL/W/m; presence/brilliance control; oiled walnut finish with black-brown grille; 24" H × 14" W × 14" D..... $456

Tempest Classic Speaker System
Two-way floor-standing speaker system with 10-in resin-impregnated cone woofer, 10-in resin-impregnated cone passive radiator, 20.25 in² Heil air-motion transformer midrange/tweeter; 120° horizontal dispersion, 30° vertical dispersion; frequency response 38-24,000 Hz at 3 dB; crossover at 1500 Hz; input 250 W clean power; sensitivity 90 dB SPL/W/m; 5-ohm nominal impedance; top mounted midrange and brilliance controls; genuine walnut veneer finish with dark brown grille; 33.75" H × 15.5" W × 15.5" D..... $410

Tempest Bookshelf-1
Two-way bookshelf speaker system with 10-in resin-impregnated cone woofer, 12-in fiberslate passive radiator, 10.4 in² Heil air-motion transformer midrange/tweeter; 120° horizontal dispersion, 40° vertical dispersion; frequency response 42-23,000 Hz at 3 dB; crossover at 2400 Hz; input 140 W clean power; sensitivity 93 dB SPL/W/m; 6-ohm impedance; front mounted brilliance control; genuine walnut veneer finish with dark brown grille; 24" H × 14" W × 14" D..... $310

Tempest Bookshelf-2
Two-way bookshelf speaker system with 8-in resin-impregnated cone woofer with 10-in fiberslate passive radiator and 10.4 in² Heil air-motion transformer midrange/tweeter; frequency response 50-23,000 Hz at 3 dB; 120° horizontal dispersion, 40° vertical dispersion; crossover at 2400 Hz; input 100 W clean power; sensitivity 93 dB SPL/W/m; 6-ohm impedance; rear mounted brilliance control; genuine walnut veneer finish with dark brown grille; 24" H × 12.25" W × 13" D..... $246

Tempest Series Model LS-4
Two-way speaker system with 10-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 35-24,000 Hz ±3 dB; crossover at 2400 Hz; max. input 160 W clean power; 6-ohm nominal impedance; 120° horizontal dispersion, 40° vertical dispersion; sensitivity 96-dB SPL/W/3 ft; oak finish with dark brown grille; 35" H × 12½" W × 12⅛" D..... $378

Tempest Series Model LS-5
Two-way bookshelf speaker system with 10-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 40-20,000 Hz ±3 dB; crossover at 2400 Hz; max. input 140 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 95-dB SPL/W/3 ft; oak finish with dark brown grille; 24⅛" H × 14" W × 14" D..... $325

Tempest Series Model LS-8
Two-way bookshelf speaker system with 8-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 50-20,000 Hz ±3 dB; crossover at 2400 Hz; max. input 100 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 94-dB SPL/W/3 ft; oak finish with dark brown grille; 22" H × 12½" W × 10⅜" D..... ..... $209

PS 4A Speaker System
Two-way speaker system with 10-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 35-24,000 Hz ±3 dB; crossover at 2000 Hz; max. input 160 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 93-dB SPL/W/3 ft; walnut-grain vinyl finish with dark brown grille; 35" H × 12½" W × 12⅛" D..... $370

PS 5A Speaker System
Two-way bookshelf speaker system with 10-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 40-20,000 Hz ±3 dB; crossover at 2400 Hz; max. input 140 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 93-dB SPL/W/3 ft; walnut-grain vinyl finish with dark brown grille; 24⅛" H × 14" W × 14" D.... .... $270

PS 8A Speaker System
Two-way bookshelf speaker system with 8-in woofer, 10-in passive radiator, and 10.4 in² Heil air motion transformer; frequency response 50-20,000 Hz ±3 dB; crossover at 2400 Hz; max. input 100 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 93-dB SPL/W/3 ft; walnut-grain vinyl finish with dark brown grille; 22" H × 12¼" W × 10⅜" D..... $205

PS 9A Speaker System
Two-way bookshelf speaker system with 8-in woofer and 10.4 in² Heil air-motion transformer; frequency response 55-20,000 Hz ±3 dB; crossover at 2400 Hz; max. input 75 W clean power; 6-ohm nominal impedance; 120° horizontal, 40° vertical dispersion; sensitivity 92 dB SPL/W/3 ft; walnut-grain vinyl finish with dark brown grille; 19¾" H × 11⅜" W × 9⅛" D..... $175

ESS Model 10
Two-way floor-standing speaker system with 10-in resin-impregnated fiber cone woofer, 1½-in copper voice coil, and 1-in Mylar dome tweeter with 1-in voice coil; 2½-in vented port Power Bass™; frequency response 35-24,000 Hz; crossover at 2500 Hz; input range 15-80 W; sensitivity 90 dB SPL/W/m; 6-ohm nominal impedance; alagash birch-grain vinyl finish with deep brown grille; 22" H × 12¼" W × 13" D..... $140

ESTranslator

320 Speaker System
Bi-polar-radiating electrostatic speaker system incorporates two 10-in plastic membranes surrounding one fixed plate; radiating surface 666 sq in; frequency response 30-22,000 Hz; LC high-pass filter crossover network; min. input 35 W/ch continuous; 8-ohm impedance; 43½" H × 8" W × 4½" D (top) an 9½" D (bottom)..... $499

310 Speaker System
Bi-polar-radiating electrostatic speaker system incorporates 12-in plastic membrane surrounding one fixed plate; radiating surface area 416 sq in; frequency response 40-22,000 Hz; LC high-pass filter crossover network; min. input 35 W/ch continuous; 8-ohm impedance; 38" H × 8" W × 4½" D (top) and 9½" D (bottom)..... $349

300 Speaker System
Bi-polar-radiating electrostatic speaker system incorporates 10-in plastic membrane; radiating surface area 126 sq in; frequency response 50-22,000 Hz; min. input 35 W/ch continuous; 8-ohm impedance; 24½" H × 8" W × 4½" D (top) and 7½" D (bottom) $199

16 SPEAKER SYSTEMS

290 Speaker System
Bi-polar-radiating electrostatic speaker system incorporates 8-in plastic membrane; radiating surface area 126 sq in; frequency response 70-22,000 Hz; min. input 25 W/ch continuous; 8-ohm impedance; 21¼" H × 8" W × 4½" D at top and 6½" D (bottom) $139

FABER AUDIO

TAS Speaker System
Three-way air-suspension floor-standing speaker system with 12-in woofer, 13-in horn midrange, and 3½-in piezo tweeter; frequency response 20-30,000 Hz; crossovers at 800 and 5500 Hz; recommended input range 20-150 W; 8-ohm nominal impedance; walnut wood veneer finish; 25" H × 17½" W × 16½" D..... $650

System II Speakers
Three-way air-suspension speaker system with 10-in woofer, 5-in cone midrange, and 1-in soft dome tweeter; frequency response 30-20,000 Hz; crossovers at 250 and 1500 Hz; recommended input range 20-150 W; 8-ohm nominal impedance; genuine walnut wood veneer finish; system includes subwoofer ..... $550 pr.

F100 Speaker System
Three-way floor-standing air-suspension speaker system with 10-in woofer, 5-in cone midrange, and 1½-in cone tweeter; frequency response 25-20,000 Hz; crossovers at 500 and 2500 Hz; recommended input range 20-80 W; 8-ohm nominal impedance; walnut vinyl veneer finish; 24" H × 13" W × 13" D..... $189

FISHER

ST460 Speaker System
Three-way bass-reflex floor-standing speaker system incorporates 15-in woofer with 40-oz magnet, two 5-in cone midrange drivers, and 3-in horn tweeter; frequency response 40-20,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 112 dB; input range 25-130 W; 8-ohm impedance; midrange and tweeter level controls; walnut-grain vinyl cabinet with removable transparent cloth grille; 29⅛" H × 18¼" W × 14⁹⁄₁₆" D..... $390
ST461. Same as ST460 except with walnut veneer cabinet..... $410

ST450 Speaker System
Three-way ported bass-reflex floor-standing speaker system with 12-in woofer, two 5-in cone midrange drivers, and 3-in flare dome tweeter; frequency response 45-20,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 110 dB; input range 20-100 W; 8-ohm impedance; midrange and tweeter level controls; walnut-grain vinyl cabinet with removable transparent cloth grille; 27⅛" H × 17" W × 13⁹⁄₁₆" D..... $330
ST451. Same as ST450 except with walnut veneer cabinet..... $350

XP95B Speaker System
Three-way bass-reflex floor-standing speaker system with 15-in woofer, two 5-in midrange drivers, and tweeter; frequency response 40-20,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 106 dB; input range 25-75 W; 8-ohm impedance; midrange and tweeter level controls; walnut-grain vinyl cabinet with removable grille; 28" H × 17½" W × 12⅞" D..... $280

ST440 Speaker System
Three-way ported bass-reflex floor-standing speaker system with 12-in woofer, 5-in cone midrange, and 3-in flare dome tweeter; frequency response 45-18,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 107 dB; input range 12-75 W; 8-ohm impedance; tweeter level control; walnut-grain vinyl cabinet with removable transparent cloth grille; 25½" H × 16" W × 12¹¹⁄₁₆" D..... $260
ST441. Same as ST440 except with walnut veneer cabinet..... $280

ST430 Speaker System
Three-way floor-standing speaker system with 10-in woofer, 8-in passive bass radiator, 5-in cone midrange, and 3-in tweeter; frequency response 50-17,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 104 dB; input range 6.5-50 W; 8-ohm impedance; walnut-grain vinyl cabinet with removable transparent cloth grille; 25½" H × 16" W × 12¹¹⁄₁₆" D..... $220

ST420 Speaker System
Two-way shelf-mount/floor-standing speaker system with 8-in woofer, 8-in passive bass radiator, and 3-in wide-dispersion tweeter; frequency response 50-16,000 Hz; crossover at 5000 Hz; max. SPL 101 dB; input range 3.5-35 W; 8-ohm impedance; walnut-grain vinyl cabinet with removable transparent cloth grille; 21⅞" H × 13⅜" W × 9⁵⁄₁₆" D. $150

MS145 Speaker System
Three-way bookshelf/floor-standing speaker system with 10-in woofer, 8-in passive bass radiator, 3-in midrange, and 2-in wide-dispersion tweeter; frequency response 55-17,000 Hz; crossovers at 1000 and 5000 Hz; max. SPL 104 dB; input range 6.5-45 W; 8-ohm impedance; walnut-grain vinyl cabinet with knit grille; 24½" H × 14⅜" W × 11" D $140

MS135A Speaker System
Three-way bookshelf/floor-standing speaker system with 8-in woofer, 8-in passive bass radiator, 3-in midrange, and 2-in wide-dispersion tweeter; frequency response 70-16,000 Hz; SPL 104 dB; input range 5-35 W; 8-ohm impedance; walnut-grain vinyl veneer cabinet with knit grille; 23½" H × 14⅜" W × 11" D..... $100

FRANKMANN RESEARCH

The Frankmann Stereo Speaker System
Integrated four-way speaker system with four 12-in woofers, each in left and right channels of one enclosure, and four 6-in midrange drivers, one diffraction horn tweeter, and one cone tweeter, each in left and right satellite panels; one attenuator as part of speaker design mediates response, recording, and listening room variations; crossovers at 200, 5000, and 10,000 Hz; 8-ohm impedance; frequency response 18-22,000 Hz ±4 dB; efficiency 98-dB SPL/W/m (pink noise); input range 10-200 W; bass drivers angularly mounted; fuse-protected; walnut, oak or birch cabinet finished in early American, walnut, or Mediterranean; custom-built hutch placed on top of common bass unit available extra; bass module 34" H × 49½" W × 25" D; satellite panels 38" H × 10" W × 6" D..... $1295

The Frankmann Reference Std. Monitor
Four-way speaker system with two 12-in woofers, each in left and right channels of one enclosure, and two 6-in midrange drivers, one diffraction horn tweeter, and one rear-panel cone tweeter, each in left and right satellite panels; one attenuator as part of design mediates response, recording, and listening room variations; crossovers at 200, 5000, and 10,000 Hz; 6-ohm impedance; frequency response 26-22,000 Hz ±4 dB; efficiency 94-dB SPL/W/m (pink noise); input range 10-125 W; fuse-protected; bass drivers angularly mounted; walnut, oak, or birch cabinet in early American, walnut, or Mediterranean finish; bass module 29" H × 29" W × 20" D; satellite panels 22" H × 10" W × 6" D..... $895
Bass Module A and Satellite A (The Frankmann) interchangeable with Bass Module B and Satellite B (the Frankmann RSM).
Bass Module A. Eight 12-in woofers; 34" H × 49½" W × 25" D..... $800
Bass Module B. Four 12-in woofers; 29½" H × 30" W × 20" D..... $500
Satellite A. Four 6-in treble drivers, one horn tweeter, and one cone tweeter; with matching stands; 59" H × 9¼" W × 6½" D..... $495 pr.
Satellite B. Two 6-in treble drivers, one horn tweeter, and one cone tweeter; with matching stand; 43½" H × 9¼" W × 6½" D..... $395 pr.

The Frankmann 8/4 Speaker System
Four-way two-enclosure floor-standing linear phase speaker system with 12-in woofer, 6-in midrange, diffraction horn tweeter, and cone tweeter; one attenuator as part of design mediates response, recording, and listening room variations; separate woofer and midrange enclosures geometrically stacked for linear phasing with midrange and tweeter mounted in pivoting assembly for angle adjustments; frequency response 32-22,000 Hz ±4 dB; crossovers at 250, 5000, and 10,000 Hz; 8-ohm nominal impedance; input range 10-125 W; sensitivity 90 dB SPL/W/m; fuse protected; walnut, oak, or birch cabinet in early American, walnut, or Mediterranean finish with black grille cloth; 42" H × 16" W × 17" D..... $650 pr.

FRAZIER

Eleven System
Three-way speaker system with 15-in and 12-in woofers, four 4-in midranges, each pair isolated in two sealed enclosures, and two dc piezoelectric super horn tweeters; crossovers at 400 and 4000 Hz; max. input 100 W continuous; 4-ohm impedance; efficiency 103-dB SPL/W/m; stepped high-frequency and midrange controls; oiled walnut veneer on fiberboard with black foam grille; 55" H × 30" W × 18" D..... $1440

Frazier's Thing
Three-way speaker system with 12-in and 10-in woofers, exponential midrange horn system, and two stacked piezoelectric super horn tweeters for columnar effect; crossovers at 800 and 4000 Hz; 4-ohm impedance; efficiency 99-dB SPL/W/m; handles 60 W continuous; front-panel brilliance and presence controls; natural oak finish with black knit grille; 48" H × 24" W × 18½" D..... $1074

Seven System
Three-way speaker system with 12-in woofer, two 4-in full-range sealed midranges stacked for columnar effect and two piezoelectric super horn tweeters stacked for columnar effect; crossovers at 400 and 4000 Hz; max. input 50 W continuous; 8-ohm impedance; efficiency 99-dB SPL/W/m; front-panel variable midrange and high-frequency compensators; oiled walnut veneer on fiberboard with removable black knit grille; 29" H × 18" W × 16" D.. $515

Mark V System
Three-way speaker system with 12-in woofer, two 4-in midranges in separate sealed enclosure, and piezoelectric super horn tweeter; crossovers at 500 and 4000 Hz; 8-ohm impedance; efficiency 96-dB SPL/W/m; handles 50 W continuous; front-panel variable midrange and high-frequency compensators; oiled walnut veneer on fiberboard with acoustically transparent, removable black knit grille; 25¾" H × 14" W × 12" D..... $385

Concerto System
Three-way speaker system with 10-in woofer, compression horn tweeter, and dc piezoelectric super horn tweeter; crossovers at 2000 and 4000 Hz; max. input 30 W continuous; 8-ohm impedance; brilliance control on front panel; oiled walnut veneer with acoustically transparent, removable black knit grille; 21½" H × 16" W × 16" D..... $315

Mark IV-A System
Two-way speaker system with 10-in woofer and high-frequency compression horn; crossover at 2000 Hz; max. input 30 W continuous; 8-ohm impedance; efficiency 93-dB SPL/W/m; front-panel variable high-frequency compensator; oiled walnut veneer on fiberboard with removable black knit grille; 24" H × 14" W × 12" D..... $233

Super Monte Carlo
Two-way speaker system with 8-in IF driver and direct-coupled piezoelectric super horn tweeter; crossover at 4000 Hz; max. input 30 W continuous; 8-ohm impedance; efficiency 95-dB SPL/W/m; walnut veneer on fiberboard with black fabric grille; 19" H × 10½" W × 12" D..... $132

CAD-1 System
Two-way bookshelf speaker system with 8-in woofer, 10-oz ceramic magnet, 1-in voice coil, and 3-in solid-backed cone tweeter; frequency response 50-14,000 Hz; crossover at 3000 Hz; input range 15-32 W continuous power; sensitivity 93 dB SPL/W/m; 8-ohm nominal impedance; walnut grain vinyl with acoustically transparent black double-knit fabric grille; 19" H × 10½" W × 10½" D $101

FRIED by SONIKIT

Fried Super Subwoofer
12-in bextrene woofer; frequency response 15-200 Hz; crossover at 75 Hz; sensitivity 92 dB SPL/W/m; 8-ohm impedance; birch veneer finish; available in kit form; 36½" H × 30" W × 15" D..... $1550
Kit..... $550

"C" Satellite Mini Monitor Speakers
Two-way speaker system with 5-in bextrene woofer/midrange and 1-in soft dome tweeter; frequency response 50-20,000 Hz ±3 dB; crossover at 3500 Hz; input range 25-100 W; sensitivity 92 dB SPL/W/m; 8-ohm impedance; birch veneer finish; available in kit form; 13½" H × 10½" W × 9" D ... $450
Kit..... $275

Fried Super Monitor System
Three-way speaker system contains Super subwoofer and "C" satellite speakers; available in kit form..... $2000
Kit..... $800

Fried "T" Subwoofer
10-in bextrene woofer with bi-amp facilities; frequency response 20-200 Hz; sensitivity 87 dB SPL/W/m; crossover at 100 Hz; birch veneer finish; available in kit form; 44¼" H × 21¼" W × 12¼" D $700
Kit..... $360

Fried B/2 Satellite Mini Monitor
Two-way speaker system with 5-in bextrene woofer/midrange and 1-in soft dome tweeter; frequency response 60-20,000 Hz ±3 dB; crossover at 3200 Hz; sensitivity 87 dB SPL/W/m; birch veneer finish; in kit form; 12½" H × 8½" W × 6¾" D..... $275
Kit..... $180

Fried H/2 Monitor System
Three-way speaker system contains "T" subwoofer and B/2 mini monitor speakers; available in kit form $950
Kit..... $550

Fried "D" Subwoofer
Subwoofer has 10-in bextrene woofer; frequency response 30-200 Hz ±2 dB; sensitivity 87 dB SPL/W/m; birch veneer finish; available in kit form; 31" H × 18" W × 14" D..... $500
Kit..... $338

FULTON MUSICAL INDUSTRIES

Premiere Speaker System
Seven-way floor-standing speaker system with 12-in subwoofer, 12-in mid-woofer, 10-in mid-woofer, 8-in midrange, and three tweeters; frequency response 13-80,000 Hz; crossovers at 39, 122, 425, 2400, 8000, and 26,000 Hz; input range 35-400 W; 8-ohm impedance; walnut veneer finish; 60" H × 25" W × 22" D ..... $4495 pr.

Nuance Speaker System
Four-way floor-standing speaker system with 10-in woofer, 5-in midrange, mid-tweeter, and super tweeter; frequency response 38-42,000 Hz; crossovers at 760, 6500, and 15,000 Hz; min. input 35 W; 8-ohm impedance; midrange and tweeter level controls; walnut veneer finish; 34" H × 14" W × 13" D $495

FMI 100 Speaker System
Two-way speaker system with 10-in woofer and four 2¼-in tweeters; crossover at 1200 Hz; 8-ohm impedance; frequency response 40-22,000 Hz; efficiency 105-dB SPL; input range 60-400 W; American walnut veneer; 22" H × 14" W × 9¼ D... $249

FMI 80 Speaker System
Two-way speaker system with 8-in woofer and two 2¼-in tweeters; crossover at 1600 Hz; 8-ohm impedance; frequency response 50-22,000 Hz; efficiency 96-dB SPL; input range 50-400 W; American walnut; 17¾" H × 9⅞" W × 8½" D... .... $199

FUNDAMENTAL RESEARCH

The Punch Disco Subwoofer
Vented floor-standing subwoofer designed for disco use; incorporates four 12-in woofers; input range 75-300 W; provides power in 35-50 Hz range; choice of 4- or 8-ohm impedance; must be bi-amped; choice of cabinet finishes; 60" H × 24" W × 18" D..... $750

Large Infrasonix Woofer
Air-suspension floor-standing subwoofer with two 10-in air-suspension loaded woofers; frequency range feeling-200 Hz; impedance 4 ohms; input range 60-400 W max. unclipped; simulated walnut finish (other available finishes); 38.25" H × 15" W × 16" D..... $450

Small Infrasonix Woofer
Air-suspension subwoofer with 10-in air-suspension loaded woofer; frequency range feeling-200 Hz; impedance 8 ohms; input range 60-200 W max. unclipped; simulated walnut finish (other finishes available); 28" H × 13" W × 13" D..... $299

GENESIS

Genesis 3+ Speaker System
Three-way acoustic-suspension floor-standing speaker system with 10-in passive radiator, 8-in woofer, 4½-in ferrofluid-suspension cone midrange, and 1-in ferrofluid-suspension inverted phenolic dome tweeter; frequency response 32-20,000 Hz ± 4 dB; crossovers at 800 and 3000 Hz; min. input 20 W; 8-ohm nominal impedance; three-position separate tweeter and midrange level controls; walnut or oak veneer finish with brown knit grille; 37½" H × 14½" W × 12" D $389

Genesis 2 Speaker System
Two-way bookshelf speaker system with 8-in long-excursion woofer and 1-in ferrofluid-suspension inverted dome tweeter; incorporates 10-in passive radiator; frequency response 32-20,000 Hz ±4 dB (88.5-dB SPL); 8-ohm impedance; max. input 100 W; min. input 15 W; two-position tweeter level switch; walnut vinyl finish with brown grille; 26½" H × 14½" W × 11½" D..... $185
With oak veneer finish $207

Genesis 2+ Speaker System
Two-way speaker system with 8-in woofer, 10-in passive radiator, and 1-in ferrofluid-suspension inverted dome tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 32-20,000 Hz ±4 dB; efficiency 88.5 dB/W/m; input range 15-100 W/ch continuous; two-position tweeter level control; walnut finish with brown knit grille; 33" H × 14½" W × 10½" D $253
Oak finish..... $253

Genesis 1+ Speaker System
Two-way acoustic-suspension speaker system with 8-in woofer and 1-in ferrofluid-suspension inverted dome tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 35-20,000 Hz ±4 dB; efficiency 88.5 dB/W/m; input range 15-80 W/ch continuous, two-position tweeter level control; walnut vinyl finish with brown knit grille; 22" H × 12½" W × 9½" D..... $133
Oak finish..... $147

Genesis V6 Speaker System
Two-way ported speaker system with 6½-in woofer and 1-in ferrofluid-suspension inverted dome tweeter; frequency response 52-20,000 Hz ±4 dB; crossover at 1800 Hz; 8-ohm nominal impedance; efficiency 88 dB/W/m; input range 15-80 W/ch continuous; walnut vinyl finish with brown knit grille; 18½" H × 10¾" W × 7" D $105

GRUCCI

G/36 Speaker System
Five-way acoustical-reflecting horn-loaded speaker system with 12-in woofer, adjustable 8-in low-midrange driver, adjustable 6-in midrange in tandem with 5-in upper-midrange direct-radiating driver, and two adjustable 1¾-in direct-radiating tweeters; frequency response 20-20,000 Hz; handles 100 W input power; 8-ohm impedance; features LED VU meter with digital readout; LED overload indicator; three-station pushbutton frequency crossover control for midrange and mid-high frequency transducers; choice of Leriex, zebrawood, olive-ash, rosewood, or American walnut hardwood veneers; 36" H × 17½" W × 18" D $1095

G/28 Speaker System
Four-way acoustical-reflecting horn-loaded speaker system with 10-in woofer, adjustable 6-in low-midrange driver in tandem with 5-in upper-mid frequency direct-radiating driver, and two adjustable 1¾-in direct-radiating tweeters; frequency response 20-20,000 Hz; input 100 W; 8-ohm impedance; features LED VU meter with digital readout; three-station pushbutton high frequency crossover control; LED overload indicator; choice of Leriex, zebrawood, olive-ash, rosewood, or American walnut hardwood veneers; 28" H × 13½" W × 14½" D $650

G/21 Speaker System
Three-way acoustical-reflecting horn-loaded speaker system with 8-in woofer, 6-in direct-radiating midrange, and 1¾-in direct-radiating tweeter; frequency response 30-20,000 Hz; handles 100 W; 8-ohm impedance; features LED VU meter with digital readout and three-station pushbutton high- and mid-frequency crossover controls; choice of Leriex, zebrawood, olive-ash, rosewood, or American walnut hardwood veneers; 20" H × 11¼" W × 12½" D $480

G/15 Speaker System
Three-way acoustical-reflecting horn-loaded speaker system with 6-in woofer, 5-in direct-radiating midrange, and 1¾-in direct-radiating tweeter; frequency response 30-20,000 Hz; handles 60 W; 8-ohm impedance; features three-station pushbutton frequency crossover control for midrange and tweeter; LED overload indicator; Leriex, zebrawood, olive-ash, rosewood, or American walnut hardwood veneers; 15" H × 8¾" W × 9¾" D..... $300

G/10 Speaker System
Two-way acoustical-reflecting horn-loaded transducer speaker system with 4-in woofer and 1¾-in tweeter; frequency response 30-20,000 Hz; handles 30 W; 8-ohm impedance; LED overload indicator; 10" H × 5⅞" W × 7" D..... $140

HARTLEY PRODUCTS

The Reference
Four-way floor-standing speaker system with 24-in super woofer, 10-in midrange, 7-in tweeter, and 1-in super tweeter; crossovers at 250, 3000, and 7000 Hz; impedance 5-8 ohms; frequency response 16-25,000 Hz; input range 25-300 W; wood cabinet with removable double-knit grille; 50¼" H × 36" W × 24" D $1725

The Concertmaster
Four-way floor-standing speaker system with 18-in

16 SPEAKER SYSTEMS

woofer, 10-in midrange, 7-in tweeter, and 1-in super tweeter; crossovers at 250, 3000, and 7000 Hz; impedance 5-8 ohms; frequency response 16-25,000 Hz; input range 25-300 W; wood cabinet with removable brown grille; 41½" H × 29" W × 18" D $1380

The Concert Jr.
Two-way floor-standing speaker system with 10-in full range woofer and 1-in dome tweeter; crossover at 5000 Hz; frequency response 25-25,000 Hz; input range 15-100 W; 5-8 ohm impedance; wood cabinet with removable brown grille and pedestal base; 38½" H × 15" W × 11¾" D $375

The Holton Tower
Two-way floor-standing speaker system with two 10-in woofers and 1-in dome tweeter; crossover at 2000 Hz; 4-ohm impedance; frequency response 20-25,000 Hz; input range 15-150 W; wood cabinet with removable brown grille; 49½" H × 20" W × 14" D $495

Zodiac 300B
Two-way speaker system with two 10-in woofers and 1-in tweeter; crossover at 2000 Hz; 4-ohm impedance; frequency response 30-25,000 Hz; input range 5-100 W; walnut cabinet with removable beige grille; 25" H × 23½" W × 11¾" D $275

Zodiac '78
Two-way speaker system with 10-in woofer and 1-in tweeter; crossover at 2000 Hz; 8-ohm impedance; frequency response 35-25,000 Hz; input range 5-100 W; walnut cabinet with removable beige grille; 30" H × 15" W × 11¾" D $180

Zodiac 1B
Two-way speaker system with 10-in woofer and 1-in tweeter; crossover at 2000 Hz; 8-ohm impedance; frequency response 40-25,000 Hz; input range 5-100 W; walnut cabinet with removable beige grille; 21¾" H × 14⅜" W × 8¾" D $135

Zodiac Jr.
Two-way speaker system with 8-in woofer and 1-in tweeter; crossover at 2500 Hz; frequency response 50-18,000 Hz; input range 5-50 W; 8-ohm impedance; walnut cabinet with removable beige grille; 19" H × 11½" W × 7½" D $96

HITACHI

HS-430 Speaker System
Three-way bass-reflex floor-standing speaker system with 30-cm single-sheet aluminum gathered-edge cone woofer, 6.5-cm single-sheet-aluminum gathered-edge cone midrange, and 2.5-cm titanium dome tweeter; frequency response 35-20,000 Hz −15 dB; crossovers at 700 and 4000 Hz; sensitivity 92 dB SPL/W/m; max. input 120 W music; 8-ohm impedance; midrange and tweeter level controls; walnut finish cabinet; 26¼" H × 14½" W × 14¹³⁄₁₆" D $400

HS-330 Speaker System
Three-way sealed acoustic-suspension speaker system with 10-in gathered-edge metal cone woofer, 2½-in gathered-edge metal cone midrange, and 1½-in metal cone tweeter; frequency response 40-18,000 Hz ±4 dB; crossovers at 900 and 3500 Hz; sensitivity 92 dB SPL/W/m; max. input 100 W; 6-ohm impedance; midrange and tweeter level controls; walnut finish with removable charcoal black grille; 22½" H × 12⅜" W × 12" D $250

HS-371 Speaker System
Three-way sealed acoustic-suspension speaker system with 12-in cone woofer, 6-in cone midrange, and 1-in titanium dome tweeter; frequency response 45-20,000 Hz −15 dB; crossovers at 1500 and 6000 Hz; sensitivity 90 dB SPL/W/m; max. input 60 W; 8-ohm impedance; tweeter level control; wood-grain vinyl cabinet with removable charcoal black grille; 23¾" H × 14½" W × 12⅜" D $200

HS-1M Mini Speaker System
Two-way mobile speaker system with 4-in cone woofer and 1-in titanium dome tweeter; frequency response 50-20,000 Hz −15 dB; crossover at 2700 Hz; sensitivity 85 dB SPL/W/m; max. input 50 W; 8-ohm impedance; optional mounting brackets for wall, ceiling, or car shelf installation; black diecast aluminum alloy cabinet with black grille; 7¼" H × 4⅜" W × 4¾" D $200

IMAGE ACOUSTICS

Model 3 Speaker System
Three-way acoustic-suspension floor-standing speaker system with two 10-in woofers, two 5-in midrange drivers, and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; frequency response 30-20,000 Hz ±5 dB; crossovers at 800 and 3300 Hz; sensitivity 91 dB SPL/W/m; dispersion 180 degrees; input range 25-125 W; 4-ohm impedance; oiled walnut veneer with walnut edging; 36" H × 16" W × 16" D $500

Model 8 Speaker System
Three-way acoustic-suspension speaker system with two 8-in woofers, two 5-in midrange drivers, and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; frequency response 35-20,000 Hz; crossovers at 800 and 3300 Hz; sensitivity 92 dB SPL/W/m; dispersion 180 degrees; input range 20-125 W; 4-ohm impedance; oiled walnut veneer with walnut edging; 30" H × 15" W × 15" D $400

Model 2A Speaker System
Two-way passive-radiator speaker system with two 6½-in woofers, two 8-in passive radiators, and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; frequency response 40-20,000 Hz; crossover at 2500 Hz; sensitivity 90 dB SPL/W/m; input range 20-75 W; 4-ohm impedance; oiled walnut veneer with walnut edging; 28" H × 14" W × 14" D $300

Model 7A Speaker System
Two-way passive-radiator speaker system with two 8-in woofers and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; bottom-loaded passive radiator; frequency response 40-20,000 Hz; crossover at 1800 Hz; sensitivity 92 dB SPL/W/m; input range 15-75 W; 4-ohm impedance; laminated walnut finish cabinet; 28" H × 14" W × 14" D $250

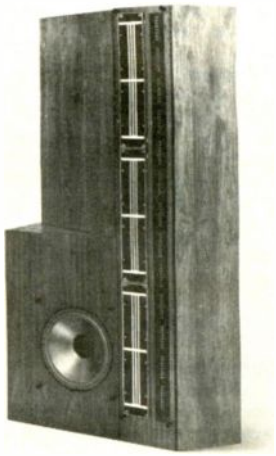
Model 6A Speaker System
Two-way passive-radiator speaker system with two 6½-in woofers and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; bottom-loaded passive radiator; frequency response 45-20,000 Hz; crossover at 2500 Hz; sensitivity 90 dB SPL/W/m; input range 15-50 W; 4-ohm impedance; laminated walnut finish cabinet; 24" H × 13" W × 13" D $200

Model 5A Speaker System
Two-way passive-radiator speaker system with two 5-in woofers and two 1-in dome tweeters in dual element arrays on adjacent sides of cabinet; bottom-loaded passive radiator; frequency response 50-20,000 Hz; crossover at 2500 Hz; sensitivity 89 dB SPL/W/m; input range 10-30 W; 4-ohm impedance; laminated walnut finish cabinet; 20" H × 12" W × 12" D $150

INFINITY

Quantum Series Speakers

Quantum Reference Standard
Biamped, dipole, four-way speaker and equalization system. Speaker: 38-cm dual-drive woofer, 168 cm × 2.2 cm three-module, line-source electromagnetic-induction midrange, 168 cm × 1.2 cm thirteen-module, line-source electromagnetic-induction



tweeter, and seven electromagnetic-induction rear-facing tweeters; electronic crossovers at 100 and 4000 Hz; variable controls for woofer, woofer crossover roll-off, high-pass crossover roll-off, midrange level, tweeter contour, and tweeter level; 4-ohm impedance; frequency response 18-32,000 Hz ±2 dB; min. input 150 W/ch (bass) and 100 W/ch (high-frequency); 60-degree horizontal dispersion −2 dB. Crossover network and equalizer: passive filters (6 dB/octave) with two high- and two low-pass filters and four FET low-gain voltage amplifiers; four three-position bass and midrange controls: bass crossover, bass level, lower mid-crossover, and mid/hi level. Includes mirror-image stereo speaker pairs with electronic crossover. Walnut veneer cabinet; 89⅜" H × 48" W × 24" D ..... $6500 pr.

Quantum Jr.
Three-way speaker system with 12-in woofer, 1½-in dome midrange, and electromagnetic-induction tweeter; crossovers at 600 and 4000 Hz; 4-ohm impedance; frequency response 40-32,000 Hz ±3 dB; input range 25-200 W/ch continuous; 60-degree left/right horizontal dispersion at 20,000 Hz −2 dB; walnut veneer cabinet with removable black grille; 25" H × 14½" W × 12" D $299

Reference Standard Series

Reference Standard 4.5 Speaker
Three-way bi-amped speaker system with two 12-in dual-drive polypropylene cone woofers, four electromagnetic induction midranges, and four electromagnetic induction tweeters (one faces rearward); frequency response 24-32,000 Hz ±3 dB; crossovers at 150 and 5000 Hz; min. input power 100 W/ch; control unit has bi-channel/equalizer and power on/off controls to adjust high/mid/low frequencies; 10¼" H × 14¼" W × 2⅛" D; speaker cabinet solid oak and veneers with cloth grille on removable frame; 64½" H × 26½" W × 14½" D ..... $3450 pr.

Reference Standard 2.5 Speaker
Three-way speaker system with 12-in dual-drive polypropylene cone woofer, two electromagnetic induction midranges, and two electromagnetic induction tweeters (one faces rearward); frequency response 30-32,000 Hz ±3 dB; crossovers at 300 and 5,000 Hz; recommended input range 100-300 W/ch; 4-ohm impedance; solid oak and veneer finish with cloth grille on removable frame; 51" H × 18" W × 11" D $836

High-Efficiency Series Speakers

Column II
Three-way, floor-standing speaker system with two 10-in woofers, 4½-in cone midrange, and two piezo tweeters; crossovers at 750 and 5000 Hz; 8-ohm impedance; frequency response 35-20,000 Hz ±3.5 dB; input range 15-250 W continuous; wal-

nut veneer cabinet with black cloth grille; 39¾" H × 14" W × 12½" D..... $384

3000B
Three-way speaker system with 12-in woofer, 4½-in cone midrange, and 2½-in tweeter; crossovers at 500 and 5000 Hz; 8-ohm impedance; frequency response 30-20,000 Hz ±4.5 dB; input range 10-125 W continuous; 24¾" H × 14½" W × 12" D $235

"Q" Series Speakers

Q_a
Two-way speaker system with 25-cm woofer and electromagnetic-induction tweeter; crossover at 2500 Hz; 4-ohm impedance; frequency response 42-32,000 Hz ±3 dB; input range 15-150 W/ch continuous; 60-degree left/right horizontal dispersion at 20,000 Hz −2 dB; tweeter level control; birch cabinet with removable brown-cloth grille; 25" H × 14" W × 12" D..... $175

INNOTECH

D-24 Speaker System
Three-way constant width asymmetric transmission line speaker system with two 5-in Bextrene woofers, 1½-in Mylar dome midrange, and 1-in Mylar super dome tweeter; frequency response 25-25,000 Hz; crossovers at 3500 and 8500 Hz; 5-ohm impedance; min. input 35 W; walnut finish; 36½" H × 10½" W × 15⅜" D..... $427

INTER-EGO SYSTEMS

SE 200 Speaker System
Three-way vented speaker system with 12-in woofer, 5-in cone midrange in isolation chamber, and 1-in Mylar dome tweeter; frequency response 30-21,000 Hz ±3 dB; crossovers at 500 and 5000 Hz; sensitivity 96 dB SPL/W/m; input range 15-200 W continuous; 4-ohm impedance; midrange and tweeter level controls; four-position LED power indicators and fuse protection; oiled walnut veneer; 30" H × 18⅛" W × 13⅞" D $385

SE 100 Speaker System
Three-way bass-reflex speaker system with 10-in woofer, 5-in cone midrange in isolation chamber, and 1-in Mylar dome tweeter; frequency response 36-21,000 Hz ±3 dB; sensitivity 97 dB SPL/W/m; crossovers at 500 and 5000 Hz; input range 12-150 W continuous; 4-ohm impedance; midrange and tweeter level controls; four-position LED power indicator and fuse protection; oiled walnut veneer; 24" H × 14½" W × 11⁹⁄₁₆" D $325

E12 Speaker System
Three-way bass-reflex speaker system with 12-in woofer, 5-in cone midrange, and 1-in Mylar dome tweeter; frequency response 36-21,000 Hz; crossovers at 700 and 5000 Hz; sensitivity 97 dB SPL/W/m; input range 10-100 W continuous; 4-ohm impedance; tweeter level control; 26¼" H × 15½" W × 11⅞" D..... $300

SE 80 Speaker System
Three-way bass-reflex speaker system with 8-in woofer, 4½-in midrange, and 1-in Mylar dome tweeter; frequency response 40-21,000 Hz ±3 dB; crossovers at 1500 and 9000 Hz; sensitivity 95 dB SPL/W/m; input range 10-50 W continuous; 4-ohm impedance; midrange and tweeter level controls; oiled walnut veneer cabinet; 23⅛" H × 13⅛" W × 10⁹⁄₁₆" D $250

E10 Speaker System
Three-way bass-reflex speaker system with 10-in woofer, 4½-in midrange, and 1-in Mylar dome tweeter; frequency response 42-21,000 Hz ±3 dB; crossovers at 1800 and 5000 Hz; sensitivity 97 dB SPL/W/m; 4-ohm impedance; midrange and tweeter level controls; 23½" H × 14" W × 11⁹⁄₁₆" D..... $240

JANIS AUDIO

W-1 Subwoofer
15-in subwoofer with slot loaded enclosure; frequency response 30-100 Hz ±1 dB; 1% HD; 17.5" H × 22" W × 22" D.
Unfinished $600
Walnut (std.) finish $675
Oak finish $675
Brazilian rose finish $775

W-2 Subwoofer
15-in subwoofer with slot loaded enclosure; frequency 33-100 Hz ±1 dB; 1.5% HD; 17.5" H × 22" W × 22" D
Walnut (std.) finish $450
Oak finish $475
Brazilian rose finish $550
Calibration tune option $25

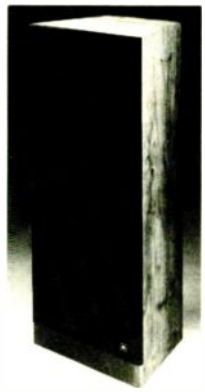
JBL

Paragon Speaker System
Radial-reflection, dual three-way floor-standing speaker system with two 15-in compression horn woofers, two midrange compression drivers, and two UHF ring radiators; crossovers at 500 and 7000 Hz; max. input 150 W/ch continuous, min. input 10 W/ch continuous; 8-ohm impedance; dual mid-range and UHF level controls; special dispersion surface to recreate stereo image; oiled walnut finish; 35½" H × 103⅜" W × 24¹⁄₁₆" D ..... $4800 pr.

L300 Speaker System
Three-way, ducted port, floor-standing speaker system with 15-in woofer, midrange compression driver with horn/lens assembly, and 077 ultra-high frequency ring radiator; crossovers at 800 and 8500 Hz (12 and 18 dB/octave); max. input 150 W continuous, min. input 10 W continuous; 8-ohm impedance; oiled walnut finish with smoked glass top and fabric grille (blue, black, brown, or camel); 31⅝" H × 23" W × 22½" D..... $1250

L212 Speaker System
Four-way floor-standing speaker system consisting of three elements: two three-way speaker arrays with 8-in woofer, 5-in midrange, and 1-in hemispherical tweeter; self-powered 12-in ultrabass; crossovers at 70, 800, and 3000 Hz; max. input 200 W/ch continuous, min. input 10 W/ch continuous; 8-ohm impedance; midrange and tweeter level controls behind grille; oiled walnut finish; ultrabass has smoked glass top; black fabric grille; Ultrabass 19⅛" H × 18½" W × 18½" D; wide-range systems 38⅝" H × 17" W × 13" D ..... $2000 pr.

L222 Disco Speaker System
Three-way floor-standing home disco system has 14-in woofer, 15-in passive radiator, 5-in midrange,



and 076 Ring Radiator tweeter; input range 10-400 W/ch continuous sine wave power; enclosures are compressed wood with American black walnut veneer finish and black grilles; 48½" H × 20⅛" W × 15⅜" D $895

L220 Speaker System
Three-way floor-standing speaker system with 14-in woofer, 5-in midrange, and ring radiator horn tweeter; crossovers at 800 and 5000 Hz; 8-ohm impedance; sensitivity 90-dB SPL/W/m; max. input 300 W/ch; oiled walnut finish with charcoal brown grille; 1225 mm H × 512 mm W × 390 mm D..... $875

L65 Speaker System
Three-way, ducted port, floor-standing speaker system with 12-in woofer, 5-in midrange, and 3.1 × 0.7-in ultra-high frequency horn tweeter; crossovers at 1000 and 6500 Hz; max. input 150 W/ch continuous, min. input 10 W/ch continuous; 8-ohm impedance; midrange and tweeter level controls behind grille; oiled walnut finish with smoked glass top and stretch fabric grille (blue, brown, or red); 24½" H × 17½" W × 13⅛" D..... $625

L150 Speaker System
Three-way floor-standing speaker system with 12-in woofer with heavy ferrite magnet, 3-in hand-wound copper voice coil, 12-in passive radiator, 5-in stiff cone midrange housed in isolated sub-chamber with ⅞-in voice coil, and 1-in dome radiator; input range 10-300 W/ch continuous sine wave power; midrange and high-frequency controls; enclosure panels of compressed wood with American black walnut veneer finish and brown, rust or camel grille; 41½" H × 17" W × 13" D..... $595

L166 Speaker System
Three-way, ducted port, bookshelf speaker system with 12-in woofer, 5-in midrange, and 1-in hemispherical tweeter; crossovers at 1000 and 6000 Hz (12 dB/octave); max. input 200 W/ch continuous, min. input 10 W/ch continuous; 8-ohm impedance; midrange and tweeter level controls; oiled walnut finish with acoustically transparent APP grille; 14¼" H × 23½" W × 13" D..... $510

L110 Speaker System
Three-way, ducted port, bookshelf speaker system with 10-in woofer, 5-in midrange, and 1-in dome tweeter; crossovers at 1000 and 4000 Hz; max. input 150 W/ch continuous, min. input 10 W/ch continuous; 8-ohm impedance; midrange and tweeter level controls behind grille; oiled walnut finish with semi-transparent black fabric grille; 23½" H × 14¹⁷⁄₃₂" W × 11¼" D..... $410

L50 Speaker System
Three-way ducted-port bookshelf speaker system with 10-in woofer, 5-in midrange, and 1½-in tweeter; crossovers at 800 and 3000 Hz; 8-ohm nominal impedance; sensitivity 88 dB SPL/W/m; input range 10-60 W/ch continuous; midrange and tweeter controls; oiled walnut finish with blue, brown, or rust grille; 24½" H × 14¼" W × 12¹¹⁄₃₂" D.... $325

L40 Speaker System
Two-way, ducted port, bookshelf speaker system with 10 in woofer and 1-in hemispherical tweeter; crossover at 1800 Hz; max. input 60 W/ch continuous, min input 10 W/ch continuous; 8-ohm impedance; tweeter level control behind grille; oiled walnut finish with stretch fabric grille (brown, rust, or tan); 23" H × 15" W × 11⅞" D..... $250

Radiance Series Speakers
Radiance Series models enclosed in walnut-grained vinyl finish with three-dimensional brown grilles and metal Mylar baffles underneath; input range 10-200 W/ch continuous sine wave power.
Model 502. Two-way speaker with 8-in woofer and 3-in tweeter; 21½" H × 13½" W × 11³⁄₁₆" D.. $140
Model 702. Three-way speaker with 10-in woofer, 5-in midrange, and 3-in tweeter; 25½" H × 15⁹⁄₁₆" W × 11¹⁵⁄₁₆" D..... $180
Model 902. Three-way speaker with 12-in woofer, 5-in midrange, and 3-in tweeter; 27½" H × 17¹⁄₁₆" W × 12⁷⁄₃₂" D..... $220

L19 Speaker System
Two-way ducted-port bookshelf speaker system with 8-in woofer and 1.4-in direct radiating tweeter; crossover at 2500 Hz; 8-ohm nominal impedance; efficiency 87-dB SPL/W/m; input range 10-60 W/

Robin Zander listened to us.

He's the lead singer with Cheap Trick.

Here's what he said about the Jensen System B.

"The sound covers the entire room perfectly. No matter where you are it just fills it all up."

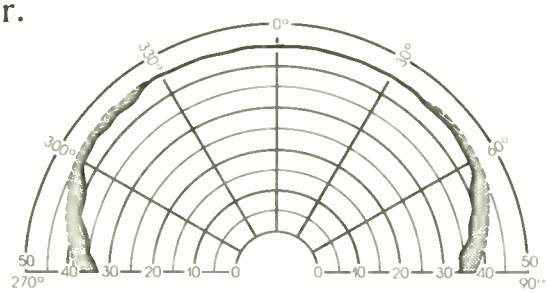
The System B is a vented 4-way, 5 driver loudspeaker system with high efficiency. And low distortion. And wide dispersion.

We've used advanced engineering technology to solve critical engineering problems that have plagued speaker designers for years.

To improve dispersion over the complete frequency range, we symmetrically positioned all four front-firing drivers along the vertical axis of the baffle surface.

What's more, the System B has two specially designed, but different high frequency drivers.

One on the front and one on the rear.



System B Half-space polar response at 5000 Hz. It shows improved dispersion (shaded area) as a result of rear firing driver.

With the System B positioned 12" from a wall, the reflected sound from the rear driver provides an increased sense of depth as well as uniform dispersion throughout the entire listening area.

The result is music that sounds virtually the same whether you're directly in front of the speaker or off to the side.

Robin, a professional musician, sums it up.

"The sound covers the whole area."

This is illustrated in the polar response diagram.

Of course, the system includes a new Impedance Compensated Crossover Network as well as a precision low frequency radiator and upper and lower midrange drivers.

We can't describe everything in this amazing speaker system in detail.

That's why you should go to your audio dealer for a demonstration.

After all, what's most important is how the speaker sounds to you.

You're the ultimate test.

But one more comment from Robin.

"I listen to music everyday. So when I hear a speaker that sounds good, I get excited about it. This is good and I'm excited."

Listen to our speaker in person.

Robin Zander did.

Listen with the professionals.

Listen to JENSEN speakers.

JENSEN SOUND LABORATORIES
Division of Pemcor, Inc., Schiller Park, IL 60176.

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16 SPEAKER SYSTEMS

ch continuous sine wave; black walnut finish with brown or black grille; 21" H × 13" W × 10" D. $175

JENSEN

System B Speaker System
Five-way floor-standing speaker system with 12-in woofer, 6-in lower midrange, 1¼-in upper midrange, 1-in tweeter and 2-in rear-firing tweeter; frequency response 37-21,000 Hz +2 dB/−4 dB; crossovers at 49, 300, 2000, and 8000 Hz; recommended input range 9-150 W; sensitivity 90 dB SPL/W/m; 8-ohm nominal impedance; dark walnut cabinet with dark grille on tilting wood-grain base; 33¾" H × 16½" W × 11¾" D..... $550

LS-6b Speaker System
Three-way four-element acoustic-suspension floor-standing speaker system with 15-in polyurethane foam cone woofer, two 3½-in direct-radiating midranges with Tuned Isolation Chambers™, and 1-in Mylar dome tweeter; frequency response 20-25,000 Hz; efficiency 96 dB/W/m; max. input 100 W continuous; min. input 10 W continuous; 8-ohm nominal impedance; tweeter and midrange level controls; hand-rubbed walnut veneer finish; 30¾" H × 18¾" W × 16¼" D..... $370

LS-5b Speaker System
Three-way four-element acoustic-suspension floor-standing speaker system with 12-in polyurethane foam cone woofer, two 3½-in direct-radiating midranges with Tuned Isolation Chambers™, and 1-in Mylar dome tweeter; frequency response 25-25,000 Hz; efficiency 95 dB/W/m; max. input 90 W continuous; min. input 10 W continuous; 8-ohm nominal impedance; tweeter and midrange level controls; wood grained vinyl finish; 26" H × 15¾" W × 13⅜" D..... $280

LS-4b Speaker System
Three-way three-element acoustic-suspension floor-standing speaker system with 10-in polyurethane foam cone heavy duty woofer, 3½-in direct-radiating midrange with Tuned Isolation Chamber™, and 2-in direct-radiating cone tweeter; frequency response 27-22,000 Hz; efficiency 93 dB/W/m; max. input 75 W continuous; min. input 10 W continuous; 8-ohm nominal impedance; midrange/tweeter level control; wood grained vinyl finish; 24½" H × 13½" W × 12⅛" D..... $220

LS-3b Speaker System
Two-way two-element acoustic-suspension floor-standing speaker system with 10-in polyurethane foam cone woofer and 2-in direct-radiating cone tweeter; frequency response 35-20,000 Hz; efficiency 92 dB/W/m; max. input 60 W continuous; min. input 10 W continuous; 8-ohm nominal impedance; tweeter level control; wood grained vinyl finish; 23" H × 12⅞" W × 10¼" D..... $155

LS-2b Speaker System
Two-way two-element acoustic-suspension floor-standing speaker system with 8-in polyurethane foam cone woofer and 2-in direct-radiating cone tweeter; frequency response 35-20,000 Hz; efficiency 91 dB/W/m; max. input 50 W continuous; min. input 10 W continuous; wood grained vinyl finish; 18¾" H × 11" W × 9⅞" D..... $100

Model 20 Speaker System
Two-way foam-suspension floor-standing speaker system with 8-in cone woofer and 2-in direct radiating tweeter; crossover at 4000 Hz; 8-ohm nominal impedance; usable frequency response 35-20,000 Hz; 160-degree dispersion; input range 10-80 W continuous; simulated wood veneer finish; 18½" H × 11" W × 8⅜" D..... $90

JR LOUDSPEAKERS by H&H INT'L

JR150 Speaker System
Two-way tensioned-aluminum cylindrical speaker system with two 5⅛-in parallel long-throw bextrene cone woofers and 1-in soft dome tweeter; frequency response 40-40,000 Hz; crossover at 2200 Hz, 24 dB/octave; sensitivity 87 dB/W/8 ohms; input range 15-100 W; impedance 4-16 ohms; available in teak, walnut, rosewood, yew, black, white, aluminum, and anodized gold or red, green, and brown leather inlaid into rosewood finish tops with removable transparent Declon foam wrap-around grille; 21" H × 11" dia..... $825 pr.

JR149 Speaker System
Two-way tensioned-aluminum cylindrical speaker system with 5⅛-in long-throw bextrene cone woofer and ¾-in dome tweeter; frequency response 40-40,000 Hz; crossover at 3000 Hz; sensitivity 83 dB/W/8 ohms; input range 20-100 W; impedance 4-16 ohms; choice of same finished tops as JR150 with removable transparent black Declon foam wrap-around grille; optional wall brackets available; 14⅜" H × 9" dia..... $475 pr.

JR Super Woofer
Barrel-shaped damped reflex super woofer that can be used as table; frequency response extends down to 30 Hz; 100 W program power; 8-ohm impedance at 120 Hz; system resonance 42 Hz; available in teak, walnut, rosewood, yew, black, and white or red, green, and brown leather inlaid into rosewood finish tops; supplied with nylon casters; 18½" H × 20" dia..... $395

L.P.A. System. 30-W amplifier with electronic 18 dB/octave low-pass Butterworth filter complements JR Super Woofer; input sensitivity 3 V rms max. for 25 W out; output 25 W continuous into 8 ohms; filter response −1 dB at 20 Hz, −3 dB at 72 Hz; dist. 0.25% for 25 W into 8 ohms; 3½" H × 10" W × 9" D..... $230

EX1 System. Two units comprised of electronic crossover and 60-W mono amplifier designed for JR Super Woofer; input sensitivity/impedance 200 mV −1 V rms/150k ohms; high pass output 0 dB gain; low pass output 0-6 dB; bass lift control +3 or +6 dB at 25 Hz; filter frequencies 72 and 100 Hz, 18 dB/octave; hum and noise −85 dB; power amp 60 W continuous into 8 ohms; input sensitivity 400 mV at 10k ohms; noise level −98 dB; damping factor 20; frequency response 20-30,000 Hz; must be used with separate (or separable) power and preamplifiers..... $550

JVC

SK-1000 II Speaker System
Three-way bass-reflex speaker system with 12-in woofer, 5-in midrange, and 1-in dome tweeter; frequency response 30-20,000 Hz; crossovers at 1000 and 8000 Hz; 8-ohm nominal impedance; max. input 150 W music; continuous input 75 W; sensitivity 93-dB SPL/W/m; midrange and high-frequency level controls; walnut veneer cabinet or silver tone on wood finish; 25½" H × 15¾" W × 12¾" D..... $280

SK-700 II Speaker System
Three-way bass-reflex speaker system with 10-in woofer, 5-in cone midrange, and 1-in dome tweeter; crossovers at 1000 and 10,000 Hz; 8-ohm impedance; frequency response 35-20,000 Hz; sensitivity 92 dB/W/m; handles 120 W peak power, 60 W continuous; continuous controls for mid- and high-range; walnut or silver finish; 22¼" H × 13½" W × 12⅜" D..... $180

S-M5 Micro Speaker System
Two-way hermetically-sealed speaker system with 5½-in cone woofer and 1-in dome tweeter; frequency response 45-20,000 Hz; crossover at 2500 Hz; sensitivity 88 dB/W/m; power handling 80 W peak; 8-ohm impedance; 9³⁄₁₆" H × 5¹³⁄₁₆" W × 5²⁹⁄₃₂" D..... $299 pr.

SK-500 II Speaker System
Two-way bass-reflex speaker system with 10-in woofer and 2½-in cone tweeter; crossover at 2000 Hz; 8-ohm impedance; frequency response 40-20,000 Hz; efficiency 91 dB/W/m; handles 70 W peak power, 35 W continuous; tonal transitions employed by Phase Moire Propagation method; walnut or silver finish; 19⅜" H × 12½" W × 11¼" D..... $210 pr.

KEF

Model 105 Speaker System
Three-way two-enclosure floor-standing speaker system with 12-in woofer, 5-in midrange, and 2-in Mylar dome tweeter; crossovers at 400 and 2500 Hz; 8-ohm nominal impedance; sensitivity 86 dB SPL/W/m; input range 40-200 W program; frequency response 38-22,000 Hz ±2 dB; switchable peak-level indicator; separate woofer and midrange enclosures geometrically piled; walnut finish with black grille; 38" H × 16.3" W × 17.9" D..... $950

Cantata Speaker System
Three-way speaker system with crossovers at 250 and 3000 Hz; frequency response 35-20,000 Hz ±3 dB; max. input 150 W program; min. input 15 W; 8-ohm nominal impedance; sensitivity 8 W for 96 dB at 400 Hz and 1 m; walnut or teak finish with mocha brown grille cloth; also available in kit form; 32.1" H × 15.4" W × 13.4" D..... $625
Kit..... $395

Model 104 aB Speaker System
Three-way speaker system with crossovers at 45 and 3000 Hz; frequency response 50-20,000 Hz ±2 dB; max. input 100 W program; min. input 15 W; 8-ohm nominal impedance; sensitivity 12.5 W for 96 dB at 400 Hz and 1 m; walnut or teak finish with black foam grille; also available in kit form; 24.8" H × 13" W × 10.2" D..... $425
Kit..... $250

Calinda Speaker System
Three-way speaker system with crossovers at 45 and 3000 Hz; frequency response 40-30,000 Hz ±3 dB; max. input 100 W program; min. input 15 W; 8-ohm nominal impedance; sensitivity 12.5 W for 96 dB at 400 Hz and 1 m; walnut or teak finish with mocha brown grille cloth; 27.5" H × 13.8" W × 11" D..... $350

Model 304 Speaker System
Two-way closed-box speaker system with two 200-mm woofers in vertical line and tweeter; frequency response 40-25,000 Hz; sensitivity 87 dB SPL/W/m; input range 10-100 W; 8-ohm impedance; designed to be placed at min. 23 cm from floor; satin black plinth cabinet with black cloth grille; 680 mm H × 280 mm W × 315 mm D. $295

Model 101 Speaker System
Two-way closed-box speaker system with 110-mm woofer and Melinex dome tweeter; frequency response 90-30,000 Hz ±2 dB; sensitivity 81 dB SPL/W/m; input range 20-100 W; 8-ohm impedance; teak/walnut cabinet with black/brown grille; 340 mm H × 180 mm W × 190 mm D..... $250

Coreili Speaker System
Two-way speaker system with crossover at 3500 Hz; frequency response 50-30,000 Hz ±3 dB; max. input 50 W program; min. input 25 W; 8-ohm nominal impedance; sensitivity 19 W for 96 dB at 400 Hz and 1 m; walnut or teak finish with mocha brown grille cloth; 18.5" H × 11" W × 8.6" D..... $215

KENWOOD

LS-1900 Speaker System
Three-way floor-standing bass-reflex speaker system with 13-in woofer, 5⅛-in midrange, and linear-response phase-coherent high frequency driver; midrange- and high-frequency level controls; frequency response 30-21,000 Hz; crossovers at 600 and 5000 Hz; sensitivity 92 dB SPL/W/m; max. input 170 W; 8-ohm impedance; 41¹⁷⁄₃₂" H × 22¹⁄₁₆" W × 17²³⁄₃₂" D..... $1165

YOU HARDLY NOTICE A HERESY® UNTIL YOU TURN IT ON.

If you're cramped for space, Heresy is a loudspeaker that won't cramp your style. The Klipsch® Heresy will fit anywhere in your apartment and it will just sit there, gentle as a kitten until you turn it on. Then, watch out. Heresy roars like a lion.

Here's a small loudspeaker that has both tremendous efficiency and wide bandwidth. It uses the same tweeter and mid-range driver as the Klipschorn,® the industry standard for the past 30 years. The rugged 12" woofer is matched to the box for optimum bass performance and bandwidth.

So, just because you can tuck a Heresy in out-of-the-way places, don't underestimate its power. Your neighbors may well be calling to see how you managed to get an orchestra into your apartment. Heresy is proof positive that big sound can come in small packages.

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16 SPEAKER SYSTEMS

LS-1600 Speaker System
Three-way floor-standing bass-reflex speaker system with 13-in woofer, 5 1/8-in midrange, and tweeter; features linear-response mid- and high-frequency level controls; frequency response 32-20,000 Hz; crossovers at 900 and 5000 Hz; sensitivity 92 dB SPL/W/m; max. input 120 W; 8-ohm impedance; 27 15/16" H × 15 11/32" W × 12 23/32" D..... $550

LS-1200 Speaker System
Three-way floor-standing bass-reflex speaker system with 10-in cone woofer, 4-in cone midrange, and 1 9/16-in cone tweeter; features mid- and high-frequency level controls; frequency response 35-20,000 Hz; crossovers at 1000 and 6000 Hz; sensitivity 90 dB/W/m; max. input 100 W; 8-ohm impedance; simulated wood grain finish; 25 19/32" H × 13 23/32" W × 12 7/8" D..... $365

LS-408B Speaker System
Three-way ported speaker system with 12-in cone woofer, 4 3/8-in cone midrange, and 1 3/4-in cone tweeter; mid- and high-frequency level controls; frequency response 40-20,000 Hz; crossovers at 2000 and 5000 Hz; sensitivity 92 dB/W/m; input range 20-160 W; 8-ohm impedance; walnut veneer finish; 29" H × 16 1/2" W × 14 1/4" D..... $310
LS-407B. Similar to LS-408B except has 10-in woofer; sensitivity 93 dB/W/m; input range 20-120 W; walnut grain vinyl finish; 25 3/4" H × 15" W × 13 3/4" D..... $245

LS-405B Speaker System
Two-way ported speaker system with 10-in cone woofer and 1 3/4-in cone tweeter; frequency response 50-20,000 Hz; crossover at 2500 Hz; sensitivity 93 dB/W/m; input range 10-100 W; 8-ohm impedance; walnut grain vinyl finish; 23 1/4" H × 13 1/2" W × 12 3/4" D..... $175

LS-403B Speaker System
Two-way ported bookshelf speaker system with 8-in cone woofer and 1 3/4-in cone tweeter; frequency response 60-20,000 Hz; crossover at 2500 Hz; sensitivity 92 dB/W/m; input range 10-80 W; 8-ohm impedance; walnut grain vinyl finish; 17 3/4" H × 11 7/8" W × 10" D..... $285 pr.

KLH

KLH 1 Speaker System
Three-way computer-controlled vented speaker system with two 8-in diecast frame dynamic polypro-

pylene cone woofers, 4 1/2-in polypropylene cone midrange, and 1-in butyl-loaded synthetic soft-dome tweeter. Crossovers at 750 and 3000 Hz; frequency response 30-20,000 Hz; input range 40-250 W/ch continuous; sensitivity 86 dB SPL/W/m; 4-ohm nominal impedance; comes with Analog Bass Computer™ for extended bass response in conjunction with high-flux motor system; computer has position, power indicator, tape, and in/out controls; speaker designed for vertical use; stand included; genuine walnut veneer finish with black removable grille; 30" H × 10.25" W × 11" D..... ..... $1100 pr.
KLH 2. Similar to KLH 1 except bookshelf speakers that can be placed horizontally or vertically; frequency response 40-20,000 Hz; input range 40-200 W/ch continuous; 20" H × 10.25" W × 8.5" D..... $660 pr.
KLH 3. Similar to KLH 2 except two-way speakers with crossover at 2750 Hz and sensitivity 84 dB SPL/W/m; 12.5" H × 8.5" W × 6" D..... $450 pr.
KLH 4. Similar to KLH 3 without the Analog Bass Computer; frequency response 63-20,000 Hz; input range 20-60 W/ch continuous..... $290 pr.

319B Speaker System
Three-way tuned phase-inverted speaker system with 12-in woofer, 5 1/4-in cone midrange, 1-in soft-dome front tweeter, and 2 1/2-in cone rear tweeter; crossovers at 1100 and 3000 Hz; 4-ohm nominal impedance; frequency response 52.5-22,000 Hz; 95-dB efficiency; input range 10-100 W/ch continuous; rear-mounted variable tweeter and midrange level controls; walnut vinyl cabinet with black pebble vinyl baffle and removable black knit grille; 24 1/2" H × 14 1/2" W × 11 1/4" D..... $239

337 Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 4-in cone midrange, and 2 1/2-in cone tweeter; crossovers at 900 and 3300 Hz; 8-ohm nominal impedance; frequency response 51-18,000 Hz; efficiency 92.5 dB; input range 20-100 W/ch continuous; rear-mounted variable tweeter and midrange level controls; walnut finish with black matte baffle and removable black knit grille; 24 1/2" H × 14 1/2" W × 11 1/4" D..... $209

327 Speaker System
Three-way acoustic-suspension speaker system with 10-in woofer, 4-in cone midrange, and 2 1/2-in cone tweeter; crossovers at 900 and 3600 Hz; 8-ohm nominal impedance; frequency response 55-18,000 Hz; efficiency 90.5 dB; input range 20-80 W/ch continuous; rear-mounted variable tweeter and midrange level controls; walnut vinyl cabinet with black matte baffle and removable black knit grille; 23 1/4" H × 14" W × 10 3/4" D. $189

317B Speaker System
Two-way acoustic-suspension bookshelf speaker system with 10-in woofer and 1-in soft dome tweeter; crossover at 1200 Hz; 8-ohm nominal impedance; frequency response 52-22,000 Hz; efficiency 91.5 dB; input range 15-60 W/ch continuous; walnut vinyl finish with black matte baffle and removable black knit grille; 23" H × 12" W × 9 3/4" D. $139

331B Speaker System
Two-way acoustic-suspension speaker system with 8-in woofer and 2 1/2-in cone tweeter; crossover at 3000 Hz; 8-ohm nominal impedance; frequency response 64-18,000 Hz; efficiency 90.5 dB; input range 8-50 W/ch continuous; walnut vinyl finish with black matte baffle and removable black knit grille; 21" H × 12" W × 8 3/4" D..... $109

KLIPSCH

Belle Klipsch Speaker System
Three-way speaker system with folded-type horn woofer with 15-in driver and straight-axis horns for high frequencies; frequency response 45-17,000 Hz ±5 dB; crossovers at 400 and 6000 Hz; max. input 105 W program; 104-dB SPL at 4 ft with 1 W; 8-ohm nominal impedance; priced according to finish; rosewood lacquer, oil on teak, oak lacquer, or cherry lacquer; 35 5/8" H × 30 1/8" W × 18 3/4" D..... ..... from $959

Klipschorn Speaker System
Three-way speaker system with folded-type horn woofer with 15-in driver and straight-axis horns for high frequencies; frequency response 35-17,000 Hz ±5 dB; crossovers at 400 and 6000 Hz; max.

input 105 W program; 104-dB SPL at 4 ft with 1 W; 8-ohm nominal impedance; priced according to finish; rosewood lacquer, oil on teak, oak lacquer, or cherry lacquer finish; 52" H × 31 1/4" W × 28 1/2" D.. ..... from $774

La Scala Speaker System
Three-way speaker system with folded-type horn woofer with 15-in driver and straight-axis horns for high frequencies; frequency response 45-17,000 Hz ±5 dB; crossovers at 400 and 6000 Hz; max. input 105 W program; 104-dB SPL at 4 ft with 1 W; 8-ohm nominal impedance; priced according to finish; birch, walnut, or maple plywood-lacquer; 35 1/4" H × 23 3/4" W × 24 1/2" D..... from $618

Cornwall Speaker System
Three-way speaker system with direct-radiating ducted-port woofer with 15-in driver and straight-axis horns for high frequencies; frequency response 38-17,000 Hz ±5 dB; crossovers at 600 and 6000 Hz; max. input 105 W program; 98.5 dB SPL at 4 ft with 1 W; 8-ohm nominal impedance; priced according to finish; rosewood lacquer, oil on teak, oak lacquer, or cherry lacquer; 35 3/4" H × 25 1/2" W × 15 1/2" D ..... from $459

Heresy Speaker System
Three-way speaker system with direct-radiating 12-in woofer and straight-axis horns for high frequencies; frequency response 50-17,000 Hz ±5 dB; crossovers at 700 and 6000 Hz; max. input 105 W program; 96-dB SPL at 4 ft with 1 W; 8-ohm nominal impedance; priced according to finish; rosewood lacquer, oil on teak, cherry lacquer, or oak lacquer; 21 3/8" H × 15 1/2" W × 13 1/8" D. from $285

KOSS

CM/1030 Speaker System
Four-way, four-bandpass, dual-port, floor-standing

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speaker system with 10-in woofer, two 4-in midrange drivers, 1-in dome treble tweeter, and 1-in dome tweeter; crossovers at 300, 2500, and 7000 Hz; bandpass response 3 dB down point (f_3) at 29 Hz (low frequency), 3 dB down point at 19,000 Hz (high frequency), 6 dB down points from 26-19,500 Hz (overall); 5-ohm nominal impedance; efficiency 94-dB SPL/W/m; input range 15-200 W/ch; midrange, treble, and tweeter spectrum-shaped controls ±3 dB range; 38⅞" H × 16½" W × 14½" D..... $550

CM/1020 Speaker System
Three-way, three-bandpass, vented box, floor-standing speaker system with 10-in woofer, 4½-in midrange, and 1-in dome tweeter; crossovers at 300 and 3500 Hz; bandpass response 3 dB down point (f_3) at 31 Hz (low frequency), 3 dB down point at 18,500 Hz (high frequency), 6 dB down points from 27-19,000 Hz (overall); 5-ohm nominal impedance; efficiency 92-dB SPL/W/m; input range 15-150 W/ch; midrange and tweeter controls; 33" H × 15½" W × 13¾" D..... $450

CM/1010 Speaker System
Two-way, two-bandpass, vented box, floor-standing speaker system with 8-in woofer, 10-in passive radiator, and 1-in dome tweeter; crossover at 3500 Hz; bandpass response 3 dB down point (f_3) at 35 Hz (low frequency), 3 dB down point at 17,500 Hz (high frequency), and 6 dB down points from 32-18,500 Hz (overall); 6-ohm nominal impedance; efficiency 90-dB SPL/W/m; input range 15-100 W/ch; tweeter spectrum-shaped control ±3 dB; 28" H × 15½" W × 11" D..... $350

CM/530 Speaker System
Two-way, two-bandpass bookshelf speaker system with 8-in woofer, 8-in passive radiator, and 1-in dome tweeter; crossover at 3000 Hz; bandpass response 3 dB down point (f_3) at 36 Hz (low frequency), 3 dB down point at 17 Hz (high frequency), 6 dB down points from 30-20,000 Hz (overall); 7-ohm nominal impedance; efficiency 88-dB SPL/W/m; input range 15-75 W/ch; tweeter spectrum-shaped control ±3 dB range; 24" H × 13¾" W × 11¾" D..... $230

KUSTOM ACOUSTICS

Trapezium
Four-way floor-standing speaker system with 12-in woofer, 6½-in bextrene cone midrange, 1¼-in dome tweeter, and 1-in dome super tweeter; crossovers at 90, 2000, and 7500 Hz; 8-ohm nominal impedance; frequency response 16-30,000 Hz ±2 dB; min. input 50 W; sensitivity 90 dB SPL/W/m; midrange, tweeter, and super tweeter controls; electronic or passive crossover in bass; walnut finish with black grille; 60" H × 18" W × 12" D.... $2495

Labyrinth
Four-way speaker system with 12-in woofer, 6½-in bextrene cone midrange, 1¼-in mid-tweeter, and 1-in dome super tweeter; frequency response 18-25,000 Hz ±2 dB; crossovers at 90, 2000, and 7500 Hz (12 dB/octave); input range 15-150 W/ch continuous into 8 ohms; 8-ohm nominal impedance; sensitivity 91 dB SPL/W/m; midranges and tweeters adjustable via three super-duty front-mounted T-pads; electronic and passive crossover can be used in conjunction with each other or separately; walnut veneer finish; 52" H × 16" W × 18" D $1595

Trapezoid
Four-way floor-standing speaker system with 12-in woofer, 5-in bextrene cone midrange, 1¼-in dome tweeter, and 1-in dome super tweeter; crossovers at 175, 2500, and 7500 Hz; 8-ohm nominal impedance; frequency response 29-25,000 Hz ±3 dB; input 15-150 W/ch continuous into 8 ohms; sensitivity 91-dB SPL/W/m; midrange, tweeter, and super tweeter controls; 40" H × 16" W × 14" D. $699

Stat
Two-way miniature speaker system with two 5-in mid/woofers and 1¼-in dome tweeter; crossover at 1800 Hz; 4-ohm nominal impedance; frequency response 36-22,000 Hz ±2.5 dB; input 5 W/ch continuous into 4 ohms; sensitivity 94 dB SPL/W/m; tweeter controls; walnut finish; 17.5" H × 10.5" W × 9" D..... $399

Impulse
Three-way floor-standing monitor speaker system with 12-in woofer, 5-in bextrene cone midrange, and 1¼-in dome super tweeter; crossovers at 175 and 2000 Hz; 8-ohm nominal impedance; frequency response 20-22,000 Hz ±2.5 dB; input range 15-150 W/ch continuous into 8 ohms; sensitivity 90-dB SPL/W/m; midrange and tweeter controls; walnut veneer finish; 26" H × 14.5" W × 14" D..... $499

Imp
Three-way floor-standing or bookshelf speaker system with 12-in woofer, 5-in bextrene cone midrange, and 1¼-in dome tweeter; crossovers at 300 and 2500 Hz; 8-ohm nominal impedance; frequency response 34-22,000 Hz ±2.5 dB; input range 10-150 W/ch continuous into 8 ohms; sensitivity 93 dB SPL/W/m; midrange and tweeter controls; walnut finish; 24" H × 14½" W × 9" D.. $269

Zoid
Two-way speaker system with 8-in woofer and 1-in dome tweeter; crossover at 1800 Hz; 8-ohm nominal impedance; frequency response 36-22,000 Hz ±2.5 dB; min. input 15 W; sensitivity 92 dB SPL/W/m; tweeter control; walnut finish; 17.5" H × 10.5" W × 9" D..... $189

Labyrinth Subwoofer
12-in long excursion woofer with synthetic composition deep cone; frequency response 20-2000 Hz ±2.5 dB; crossovers at 40, 90 or 175 Hz, or no internal crossover; 8-ohm impedance; tapered acoustical trapezoidal line labyrinth (p.p.); four built-in sets of terminals in back; bi-amp with or without electronic crossover; 48" H × 16" W × 18" D..... $699
Trapezoid Subwoofer. Same as Labyrinth subwoofer except 40" H × 16" W × 14" D..... $399
Impulse Subwoofer. Same as Trapezoid subwoofer except 26" H × 14½" W × 14" D $299

LAFAYETTE

Criterion 2003A Speaker System
Three-way speaker system with 15-in woofer, 16¼ × 4¾-in horn midrange, and two phenolic ring tweeters; crossovers at 2000 and 4000 Hz; 8-ohm impedance; frequency response 20-20,000 Hz; recommended input range 20-120 W/ch continuous power; tweeter and compensation/equalization controls; walnut vinyl finish with cafe brown knit grille; 29⁷/₁₆" H × 17¾" W × 11⁷/₁₆" D..... $200

Criterion 2002A Speaker System
Three-way speaker system with 12-in woofer, 2-in × 6-in exponential horn midrange, and two phenolic ring tweeters; crossovers at 2000 and 4000 Hz; 8-ohm impedance, frequency response 20-20,000 Hz; max. input 90 W program; tweeter and compensation/equalization controls; walnut vinyl finish with brown grille; 26" H × 15⅜" W × 12⅜" D..... $150

Criterion 2001A Speaker System
Three-way speaker system with 10-in woofer, 2-in × 6-in exponential horn midrange, and wide-dispersion phenolic ring tweeter; crossovers at 2000 and 4000 Hz; 8-ohm impedance; frequency response 30-20,000 Hz; max. input 70 W program; tweeter and compensation/equalization controls; walnut vinyl finish with cafe brown knit grille; 25" H × 13½" W × 12¼ D $120

Lafayette 1009 Speaker System
Three-way speaker system with 12-in foam-edged woofer, midrange, and tweeter; frequency response 40-18,000 Hz; 8-ohm impedance; max. input 60 W/ch; midrange and tweeter controls; birch vinyl finish with removable brown foam grille; 24" H × 14½ W × 10½"D..... $100

Criterion DS-1 Mini Speaker System
Two-way miniature high performance speaker system with 6½-in heavy-magnet butyl woofer and soft-dome tweeter; response 55-20,000 Hz; impedance 8 ohms; max. input 70 W/ch; walnut veneer finish; 11⅛" H × 7½" W × 6¾" D ..... $160 pr.

Lafayette 1007 Speaker System
Three-way speaker system with 10-in foam-edged woofer, 5-in midrange, and 3-in tweeter; frequency response 45-17,000 Hz; 8-ohm impedance; max. input 50 W/ch; tweeter control; removable brown foam grille; 22" H × 12½" W × 10⁷/₁₆" D $80

Lafayette Pip-Squeak Speaker System
Two-way miniature speaker system with long-throw woofer and 1-in soft-dome tweeter; frequency response 80-20,000 Hz; max. input power 40 W/ch; impedance 8 ohms; diecast aluminum case; 7⅜" H × 4½" W × 4⅜" D ..... $100 pr.

LANCER

Lancer SC-9T Three-Way System
Dynamic acoustic-suspension system with 10-in woofer, 5-in midrange, and two 1-in dome tweeters; frequency response 20-20,000 Hz; crossovers at 500 and 4500 Hz; min. input 10 W; max. input 100 W; impedance 8 ohms; midrange and high-frequency controls; multi-radiational tower design; oiled-walnut veneer cabinet; removable black double-knit grille; 38" H × 12" W × 12" D $250
SC-7A. Similar to SC-9T except 12-in woofer, 5-in midrange, one 1-in dome tweeter; frequency response 20-20,000 Hz ±5 dB; removable brown knit grille; 25½" H × 15" W × 11¾" D..... $270

Lancer SC-4A Three-Way System
Dynamic acoustic-suspension system with 12-in woofer, 5-in midrange, and 2¼-in tweeter; frequency response 20-20,000 Hz; crossovers at 750 and 6000 Hz; min. input 10 W; max. input 50 W; impedance 8 ohms; midrange and high-frequency controls; oiled-oak veneer cabinet; removable brown double-knit grille; 23½" H × 15" W × 12½" D..... $230
SC-10A. Similar to SC-4A except two-way system with 10-in woofer and 2¼-in tweeter; crossover at 2500 Hz; high-frequency control; oiled-walnut finish; 20¼" H × 12½" W × 10" D..... $150

Lancer 9535-2 Two-Way System
Dynamic bass-reflex design with 12-in woofer and 2¼-in tweeter; frequency response 30-20,000 Hz; crossover at 3000 Hz; impedance 8 ohms; min. input 5 W; max. input 35 W; oiled-walnut veneer cabinet with brown/white grille cloth; 25" H × 14¼" W × 11¾" D..... $120

LENTEK

S4 Speaker System
Two-way bookshelf moving-coil speaker system with 200-mm styrene-cone woofer/midrange and 25-mm hemispherical dome tweeter; crossover at 2500 Hz (18 dB/octave); 8-ohm impedance; frequency response 60-18,000 Hz ±3 dB; sensitivity 78-dB SPL/2.83 V/m; input range 25-100 W/ch sine wave; walnut or teak finish with brown grille; 19½" H × 9¾" W × 10" D..... $580

LINN by AUDIOPHILE SYSTEMS

DMS Isobarik Speaker System
Three-way Isobarik-loading speaker system with two 12 × 9-in woofers, two 5-in midrange drivers, and two 1-in dome tweeters; frequency response

16-20,000 Hz ±1.5 dB; crossovers at 375 and 3000 Hz; instantaneous dynamic range 54 dB; 4-ohm impedance; input range 50-500 W; 30" H × 15" W × 16½" D..... $3100 pr.

S.A.R.A. Isobarik Speaker System
Two-way Isobarik-loading speaker system with two 8-in woofers and 1-in dome tweeter; frequency response 40-20,000 Hz ±2 dB; 4-ohm impedance; laminated PVC construction; 17" H × 13" W × 10" D..... $1470 pr.

MAGNEPAN

MG-IIA Speaker System
Two-way floor-standing speaker system with 500-in² woofer and 68-in² tweeter; crossover at 2100 Hz; 6-ohm impedance; frequency response 45-16,000 Hz ±4 dB; sensitivity 82-dB SPL/W/3 ft; input range 25-200 W; mirror-image pair; oak frame with off-white or black grille; 71" H × 22" W × 2" D..... $825 pr.

MG-I Speaker System
Two-way floor-standing speaker system with 428-in² woofer and 68-in² tweeter; crossover at 2400 Hz; 5-ohm impedance; frequency response 50-16,000 Hz ±4 dB; sensitivity 82-dB SPL/W/3 ft; input range 25-200 W; mirror-image pair; oak frame with off-white or black grille; 60" H × 22" W × 2" D..... $495 pr.

MARANTZ

Design Series

940 Speaker System
Four-way floor-standing speaker system with 12-in woofer, 5-in midrange, 1½-in wide-dispersion dome tweeter, and 1-in dome super tweeter; frequency response 30-22,000 Hz ±3 dB; crossovers at 750, 2300, and 5000 Hz; sensitivity 90 dB SPL/W/m; max. input 250 W program; 8-ohm impedance; hand-rubbed oiled walnut finish cabinet with inlaid veneers; 45¾" H × 15" W × 12" D..... $440

930 Speaker System
Four-way bookshelf speaker system with 12-in woofer, 5-in midrange, 1½-in wide-dispersion dome tweeter, and 1-in dome super tweeter; frequency response 33-22,000 Hz ±3 dB; crossovers at 750, 2300, and 5000 Hz; sensitivity 90 dB SPL/W/m; max. input 200 W program; 8-ohm impedance; hand-rubbed oiled walnut finish cabinet with inlaid veneers; 28¼" H × 15" W × 12" D..... $380

920 Speaker System
Three-way floor-standing speaker system with 12-in woofer, 5-in midrange, and 1½-in wide-dispersion dome tweeter; frequency response 33-20,000 Hz ±3 dB; crossovers at 750 and 2500 Hz; sensitivity 90 dB SPL/W/m; max. input 200 W program; 8-ohm impedance; hand-rubbed oiled walnut finish cabinet with inlaid veneers; 38¼" H × 15" W × 12" D..... $380

900 Speaker System
Three-way speaker system with 10-in woofer, 5-in midrange, and 1½-in wide-dispersion dome tweeter; frequency response 35-20,000 Hz ±3 dB; crossovers at 750 and 2500 Hz; sensitivity 88 dB SPL/W/m; max. input 125 W program; 8-ohm impedance; hand-rubbed oiled walnut finish cabinet with inlaid veneers; 28¼" H × 15" W × 12" D..... $320

High Definition Series

HD880 Speaker System
Four-way floor-standing speaker system with 12-in woofer, 5-in midrange, 1½-in wide-dispersion dome tweeter, and 1-in dome super tweeter; frequency response 30-22,000 Hz ±3 dB; crossovers at 750, 2300, and 5000 Hz; sensitivity 90 dB SPL/W/m; max. input 250 W program; 8-ohm impedance; midrange, tweeter, and super tweeter level controls; 40¼" H × 16" W × 12" D..... $420

HD770 Speaker System
Four-way bookshelf speaker system with 12-in woofer, 5-in midrange, 1½-in wide-dispersion dome tweeter, and 1-in dome super tweeter; frequency response 33-22,000 Hz ±3 dB; crossovers at 750, 2300, and 5000 Hz; sensitivity 90 dB SPL/W/m; max. input 200 W program; 8-ohm impedance; midrange, tweeter, and super tweeter level controls; 26½" H × 15" W × 11¾" D..... $330

HD660 Speaker System
Three-way bookshelf speaker system with 10-in woofer, 5-in midrange, and 1½-in wide-dispersion dome tweeter; frequency response 35-20,000 Hz ±3 dB; crossovers at 750 and 2500 Hz; sensitivity 88 dB SPL/W/m; max. input 125 W program; 8-ohm impedance; midrange and tweeter level controls; 24¼" H × 14⅜" W × 11½" D..... $270

HD550 Speaker System
Three-way bookshelf speaker system with 8-in woofer, 5-in midrange, and 1½-in wide-dispersion dome tweeter; frequency response 40-20,000 Hz ±3 dB; crossovers at 800 and 3000 Hz; sensitivity 88 dB SPL/W/m; max. input 75 W program; 8-ohm impedance; midrange and tweeter level controls; 22½" H × 12¾" W × 9½" D..... $200

HD440 Speaker System
Three-way bookshelf speaker system with 8-in woofer, 3½-in midrange, and 3½-in tweeter; frequency response 45-18,000 Hz ±3 dB; crossovers at 2000 and 8000 Hz; sensitivity 87 dB SPL/W/m; max. input 50 W program; 8-ohm impedance; 19⅛" H × 11¼" W × 8½" D..... $100

Mk II Series

8MkII Speaker System
Three-way floor-standing speaker system with 15-in woofer, 5-in midrange, and 1¾-in tweeter; frequency response 30-20,000 Hz ±3 dB; crossovers at 800 and 3000 Hz; sensitivity 91 dB SPL/W/m; max. input 250 W program; 8-ohm impedance; midrange and tweeter level controls; 37½" H × 16¼" W × 12" D..... $260

7MkII Speaker System
Three-way bookshelf speaker system with 12-in woofer, 5-in midrange, and 1¾-in tweeter; frequency response 35-20,000 Hz; crossovers at 800 and 2500 Hz; sensitivity 88 dB SPL/W/m; max. input 200 W program; 8-ohm impedance; midrange and tweeter level controls; 25½" H × 14¾" W × 11½" D..... $180

6MkII Speaker System
Two-way bookshelf speaker system with 10-in woofer and 1¾-in tweeter; frequency response 35-20,000 Hz; crossover at 2500 Hz; sensitivity 88 dB SPL/W/m; max. input 125 W program; 8-ohm impedance; tweeter level control; 25½" H × 14¾" W × 11½" D..... $140

5MkII Speaker System
Two-way bookshelf speaker system with 8-in woofer and 1¾-in tweeter; frequency response 40-18,000 Hz; crossover at 2500 Hz; sensitivity 88 dB SPL/W/m; max. input 60 W program; 8-ohm impedance; tweeter level control; 23" H × 12" W × 9½" D. $115

MARTIN SPEAKER DIV.

Martin Transflex Systems

TL4050 Speaker System
Four-way floor-standing transflex enclosure direct-coupled line speaker system with two 11-in woofers, 5-in cloth curvilinear midrange and 1-in dome tweeter; crossovers at 100, 900, and 4000 Hz; frequency response 28-22,000 Hz ±4 dB; recommended input range 100-300 W/ch; sensitivity 92 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 52½" H × 12½" W × 11¼" D..... $650

TL3050 Speaker System
Three-way floor-standing transflex enclosure speaker system with 10-in woofer, 2-in dome midrange and 1-in dome tweeter; crossovers at 900 and 4000 Hz; frequency response 32-20,000 Hz ±4 dB; recommended input range 100-150 W/ch; sensitivity 87 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 48½" H × 12½" W × 11¼" D..... $550

TL2050 Speaker System
Two-way floor-standing transflex enclosure speaker system with 8-in woofer and 1-in dome tweeter; crossover at 1200 Hz; frequency response 36-22,000 Hz ±3 dB; recommended input range 35-100 W/ch; sensitivity 90 dB SPL/W/m; 8-ohm impedance; 29½" H × 9½" W × 10" D..... $350

TL1650 Speaker System
Two-way floor-standing transflex enclosure speaker system with 6½-in woofer and 1-in dome tweeter; crossover at 1500 Hz; frequency response 38-20,000 Hz ±3 dB; recommended input range 35-100 W/ch; sensitivity 88 dB SPL/W/m; 8-ohm impedance; designed for small to moderate room; 25½" H × 8" W × 11¼" D..... $250

Gamma Gold Series

3000 Monitor Speaker System
Three-way floor-standing bias port enclosure speaker system with 10-in butyl woofer, soft dome midrange, and soft dome tweeter; crossovers at 900 and 4400 Hz; frequency response 34-20,000 Hz ±3 dB; recommended input range 35-100 W; sensitivity 90 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 25¼" H × 14" W × 11¾" D..... $329

2008M Speaker System
Two-way floor-standing bias port enclosure speaker system designed for small studio monitor; speaker has 8-in woofer and soft dome tweeter; crossover at 1200 Hz; frequency response 36-20,000 Hz ±5 dB; recommended input range 35-85 W; sensitivity 91 dB SPL/W/m; 8-ohm impedance; high frequency balance control; 18" H × 10½" W × 9½" D..... $159

2006M Speaker System
Two-way floor-standing bias port enclosure speaker system with 6½-in woofer and soft dome tweeter; crossover at 1400 Hz; frequency response 40-20,000 Hz ±4 dB; recommended input range 25-75 W; sensitivity 91 dB SPL/W/m; 8-ohm impedance; high frequency balance control; 13" H × 18½" W × 9" D..... $129

Martin Gamma Series

Magnificat Speaker System
Three-way floor-standing acoustic-suspension speaker system with two 12-in woofers, 5-in convex midrange, and two 2-in polyaxial tweeters; crossovers at 500 and 4000 Hz; frequency response 28-20,000 Hz; recommended input range 35-100 W; sensitivity 92 dB SPL/W/m; 4-ohm impedance; hi/mid frequency balance control; 37½" H × 18" W × 14" D..... $449

315X Speaker System
Three-way floor-standing acoustic-suspension speaker system with 15-in woofer, 5-in midrange, and 2-in polyaxial tweeter; crossovers at 600 and 5000 Hz; frequency response 30-20,000 Hz; recommended input range 25-75 W; sensitivity 90 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 27" H × 15⅞" W × 11¾" D..... $289

412X Speaker System
Three-way floor-standing bias port speaker system with 12-in woofer, 5-in midrange, and 2-in polyaxial tweeter; crossovers at 750 and 4500 Hz; frequency

response 32-20,000 Hz; recommended input range 25-75 W; sensitivity 90 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 25¼" H × 14" W × 11¾" D..... $269

310X Speaker System
Three-way floor-standing acoustic-suspension speaker system with 10-in woofer, 5-in convex midrange, and 2-in polyaxial tweeter; crossovers at 900 and 4500 Hz; frequency response 36-18,000 Hz; recommended input range 15-60 W; sensitivity 91 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 21¾" H × 12¼" W × 10" D. $219

308X Speaker System
Three-way floor-standing acoustic-suspension speaker system with 8-in woofer, 5-in midrange, and 3-in phenolic tweeter; crossovers at 1000 and 5000 Hz; frequency response 40-18,000 Hz; recommended input range 15-50 W; sensitivity 90 dB SPL/W/m; 8-ohm impedance; hi/mid frequency balance control; 21¼" H × 12¼" W × 7" D..... $139

208X Speaker System
Two-way floor-standing acoustic-suspension speaker system with 8-in woofer and 3-in phenolic tweeter; crossover at 1500 Hz; frequency response 40-18,000 Hz; recommended input range 15-50 W; sensitivity 90 dB SPL/W/m; 8-ohm impedance; high frequency balance control; 18" H × 10¼" W × 9½" D..... $119

MATRECS

MA-130 Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 25-oz ceramic magnet, 1½-in aluminum voice coil, isolated 6-in midrange, and 1-in dome tweeter; frequency response 35-22,000 Hz; crossovers at 1000 and 5000 Hz; input range 8-75 W continuous; 8-ohm nominal impedance; pushbutton connection terminals and midrange/tweeter level control; walnut vinyl finish with brown knit grille; 24" H × 15" W × 9⅜" D..... $180

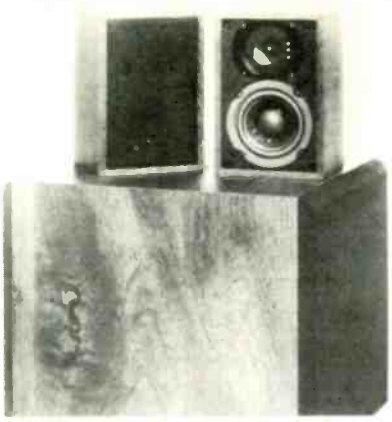
MA-124 Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 12-oz ceramic magnet, 1½-in aluminum voice coil, 4½-in midrange, and 1¾-in phenolic ring tweeter; frequency response 35-22,000 Hz; crossovers at 2500 and 5000 Hz; input range 8-45 W continuous; 8-ohm nominal impedance; pushbutton connection terminals; walnut vinyl finish with brown knit grille; 24" H × 15" W × 9⅜" D..... $132

MA-211 Speaker System
Three-way acoustic-suspension speaker system with 10-in passive radiator, 10-in dual-drive woofer, 10-oz ceramic magnet, 1-in aluminum voice coil, 4½-in midrange, and 1¾-in phenolic ring tweeter; frequency response 40-22,000 Hz; crossovers at 2500 and 5000 Hz; input range 8-50 W; 8-ohm nominal impedance; pushbutton connection terminals and tweeter and midrange level controls; walnut vinyl finish with brown knit grille; 32¹¹/₁₆" H × 14⅜" W × 10⅛" D..... $174

MA-105 Speaker System
Three-way acoustic-suspension speaker system with 10-in woofer, 25-oz ceramic magnet, 1½-in aluminum voice coil, 4½-in midrange, and 1-in dome tweeter; frequency response 35-20,000 Hz; crossovers at 2500 and 5000 Hz; input range 5-50 W continuous power; 8-ohm nominal impedance; pushbutton connection terminals and tweeter level control; walnut vinyl finish with brown knit grille; 22" H × 13⅜" W × 9⅜" D..... $166

MESA

MS-80 Subwoofer/S-35 Satellites
Subwoofer contains 10-in active bass driver with 10-in Mesa Bass Reciprocator driver; frequency response 30-115 Hz; handles 80 W/ch; level control to balance satellite speaker volume with subwoofer. S-35 Mesa miniature speakers designed as satellite speakers for MS-80; 5-in woofer and 4⅛-in soft dome tweeter; frequency response 115-17,000 Hz; handles 40 W/ch; walnut vinyl cabinet and black grille; 9¼" H × 6¼" W × 5½" D; MS-80: 18" H × 16" W × 16" D..... $378
MS-80. Subwoofer..... $239
S-35. Satellites..... $139 pr.

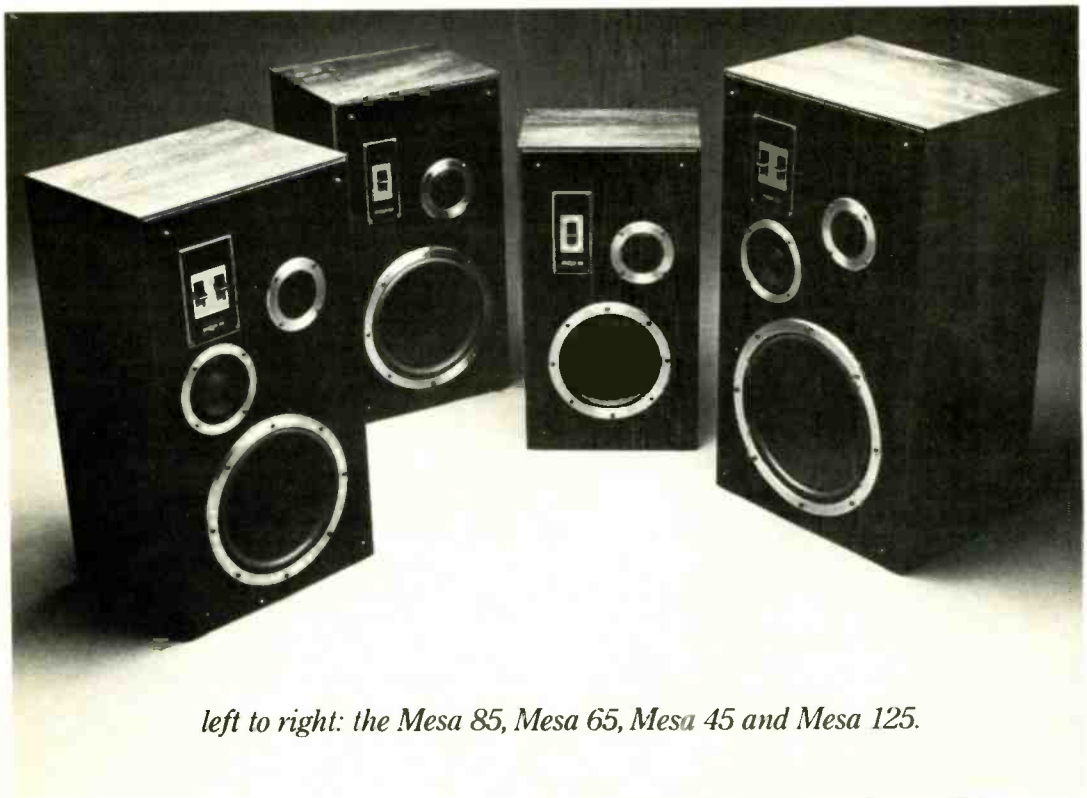


Mesa 125 Speaker System
Four-way speaker system with 12-in bass reciprocator, 12-in woofer, 5-in midrange in mini-enclosure, and 3-in Prismadome tweeter; frequency response 30-22,000 Hz; crossovers at 65, 900, and 6000 Hz; input range 15-125 W/ch continuous; 11-position double VICOM control with ±5 dB range; 8-ohm impedance; built-in circuit breaker with automatic reset; base reciprocator vented cabinet with walnut vinyl finish; 27½" H × 16" W × 13" D..... $279

We're Mesa Electronics. Who?

Mesa Electronics, and you're going to be hearing a lot from us.

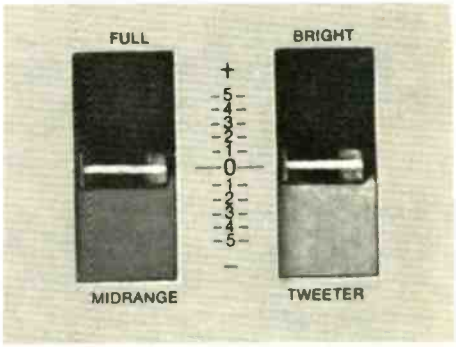
If you've ever heard our speakers, we'd need no introduction. If you've never heard them, you should. But it's entirely possible you haven't. Because we're barely two years old. But we're growing fast. So keep listening.



left to right: the Mesa 85, Mesa 65, Mesa 45 and Mesa 125.

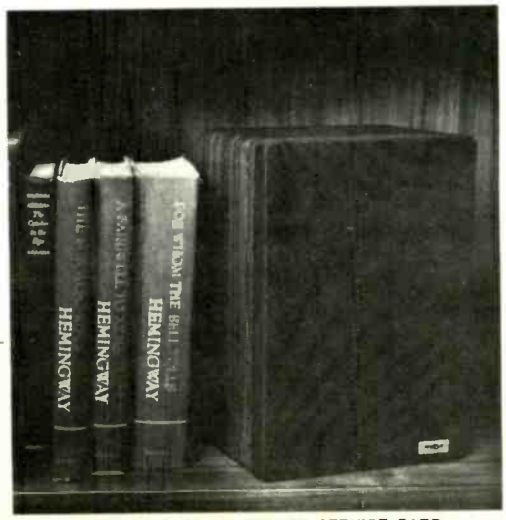
Ordinary speakers go from wall to wall, but a Mesa goes from room to room.

What makes Mesa special? One good example is our exclusive Vicom control switch on our line of Bass Reciprocator speakers. Ordinary speakers (no matter what they cost) are going to sound different in different rooms, simply because the environment they are in affects their sound. But with the Mesa Vicom control, you get consistently good sound anywhere, because it allows you to position your sound eleven different ways according to environmental conditions, or for different kinds of music. (That's up to eleven different ways more than the competition.)



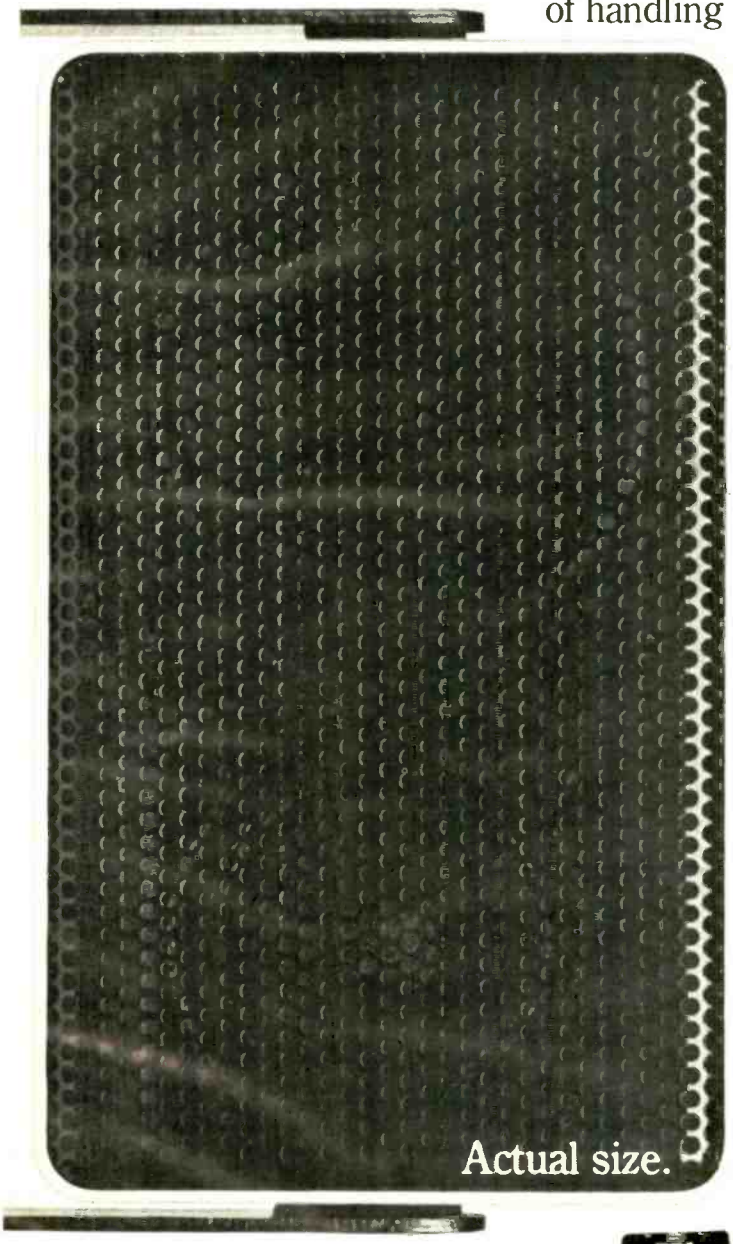
No small achievements: Our Mini-Mesa Series.

But Mesa doesn't just make big speakers. We also make terrific little speakers. In fact, so terrific, with your eyes closed you wouldn't know they were small. There's a full line, from our super compact Mini-Mesa 15 (less than 4 inches wide and 6 inches high) perfect for your car, van, boat or plane, to the Mini-Mesa 30, an unobtrusive bookshelf speaker at less than 5" wide and 8" high, to our Mini-Mesa 50



CIRCLE NO. 59 ON READER SERVICE CARD

3-way system complete with horn tweeter, yet only 6½" wide. We've already made a name for ourselves in the miniature speaker field, and small wonder.



Mobile speakers reach an all-time low: Mesa introduces subwoofers for cars.

For those unfortunates who didn't buy a Mesa mini speaker for their car, or those perfectionists who did and want even better sound, Mesa's new mobile Bass Boosters are guaranteed to bring you new lows in listening pleasure. Two sizes—5¼" round flush mount or 6" x 9" rear ledge mounts—work with any full range car speakers, adding the low notes and instruments the full range speakers aren't capable of handling alone. Wait until you hear what you've been missing.

Look! In the home! Under the lamp! It's an end table! No, it's a Subwoofer!

Mesa not only makes a subwoofer for your home stereo system, and makes it look like a beautiful piece of furniture

to boot, it makes it unique. The Mesa MS-80 Subwoofer is the only subwoofer you can buy with a dual level control that lets you balance satellite speaker volume. The MS-80 adds a new dimension to the sound of any stereo speaker system, and looks good while it's doing it. And since bass signals are omni-directional, you can place it anywhere in the room—even as an end table.

If Mesa speakers sound so good, why do we stand behind them?

A lot of speakers have 90-day warranties. Some have one year warranties. A few have more. But only Mesa offers 5-year limited warranties on *all* our products. We don't do it to make you think something might go wrong with them. We do it because we know nothing will.

Don't do anything until you hear from us.

We'd like to hear from you. Write us today and we'll send you more information on our products and a list of Mesa dealers in your area. Once you get to one of them, you'll get the idea a lot faster than we can explain it.

mesa™

We're always thinking of sound ideas.

Mesa Electronics Sales Ltd.
2940 Malmo Drive,
Arlington Heights, Illinois
60005. (312) 437-6500.

16 SPEAKER SYSTEMS

Mesa 85 Speaker System
Four-way speaker system with 12-in bass reciprocator, 10-in woofer, 5-in midrange in mini-enclosure, and 3-in Prismadome tweeter; frequency response 36-22,000 Hz; crossovers at 65, 900, and 6000 Hz; input range 15-85 W/ch continuous; 8-ohm impedance; 11-position double VICOM control with ±5-dB range; built-in circuit breaker with automatic reset; bass reciprocator vented cabinet with walnut vinyl finish; 25¼" H × 14¼" W × 11¾" D. $229

Mesa 65 Speaker System
Three-way speaker system with 10-in bass reciprocator, 10-in woofer, and 3-in Prismadome tweeter; frequency response 40-22,000 Hz; crossovers at 80 and 2500 Hz; input range 15-65 W/ch continuous; 8-ohm impedance; 11-position VICOM control with ±5-dB range; built-in circuit breaker with automatic reset; vented cabinet with walnut vinyl finish; 23" H × 12½" W × 10⅜" D $169

Mesa 600 Speaker System
Three-way speaker system with 10-in woofer; frequency response 35-20,000 Hz; handles 60 W/ch; dual controls for tweeter and midrange frequencies; 24¼" H × 14" W × 10¾" D $199

Mesa 45 Speaker System
Three-way speaker system with 8-in bass reciprocator, 8-in woofer, and 3-in Prismadome tweeter; frequency response 45-22,000 Hz; crossovers at 85 and 3000 Hz; input range 15-45 W/ch continuous; 8-ohm impedance; 11-position VICOM control with ±5-dB range; built-in circuit breaker with automatic reset; vented cabinet with walnut vinyl finish; 21" H × 11½" W × 9⅜" D $119

Mesa 500 Speaker System
Two-way speaker system with 8-in woofer; frequency response 40-20,000 Hz; handles 40 W/ch; three-position tweeter control; 21" H × 12½" W × 9" D $109

Mini-Mesa 50 Speaker System
Three-way bookshelf speaker system with 5-in foam-suspension woofer, ferrite magnet, 1.25-in aluminum bobbin voice coil, 3-in midrange, and 25 × 12-mm horn tweeter; crossovers at 1800 and 9000 Hz; 4- or 8-ohm impedance; frequency response 50-20,000 Hz; input range 10-50 W/ch continuous, 80 W max.; walnut vinyl cabinet with black cloth grille; 9½" H × 6½" W × 4¾" D .. $150

Mini-Mesa 30 Speaker System
Two-way bookshelf speaker system with 4-in foam-suspension woofer and hard-dome tweeter; can be used in mobile situations; crossover at 3500 Hz; 4- or 8-ohm impedance; frequency response 60-25,000 Hz; input range 10-30 W/ch continuous, 50 W max.; high-temperature resin and asbestos cabinet with black aluminum grille; 7¼" H × 4⅝" W × 4¼" D ..... $238 pr.

Mesa SS-6. Camera-type cannister-design miniature speaker stands accommodate Mini-Mesa 30 speakers and mini speakers with tapped mounting sockets; features tripod-type legs which telescope into stem of stands when not in use; measure 6-in high, to double height screw top end of stand into lower end of other; weather resistant black satin finish with aluminum trim rings ..... $25 pr.

Mesa BR-30. Mounting brackets ..... $13 pr.

Mini-Mesa 15 Speaker System
Two-way compact speaker system with 3-in foam-suspension woofer and 2¼-in cone tweeter; crossover at 3000 Hz; 4- or 8-ohm impedance; frequency response 60-20,000 Hz ±6 dB; input range 5-15 W/ch continuous, 30 W max.; high-temperature resin and asbestos cabinet with black aluminum grille; includes mounting brackets and 30-ft speaker cable; 6" H × 3⅝" W × 3" D ..... $130 pr.

MICRO-ACOUSTICS

FRM-1ax Speaker System
Two-way acoustic-suspension speaker system with 10-in woofer and four 1½-in drivers and super tweeter mounted in pentaxial array; dispersion 180 degrees, horizontal and vertical at 10,000 Hz; frequency response 32-18,000 Hz ±4 dB; crossover at 1700 Hz; input range 18-70 W continuous; 8-ohm impedance; tweeter level and dispersion controls; walnut vinyl cabinet with brown, black, blue, sandalwood, or orange cloth grille; 25¾" H × 15⅜" W × 12¾" D $225

FRM-2ax Speaker System
Two-way acoustic-suspension speaker system with 10-in woofer and two 1½-in tweeters with super tweeter mounted in triaxial array; dispersion 160 degrees; frequency response 40-16,000 Hz ±4 dB; crossover at 1750 Hz; input range 10-60 W continuous; 8-ohm impedance; tweeter level control; walnut vinyl cabinet with brown foam grille; 25¾" H × 15⅜" W × 12¼" D $180

FRM-3ax Speaker System
Two-way speaker system with 8-in woofer and 1½-in tweeter pivoted on vari-axis dispersion assembly; dispersion 140 degrees; frequency response 45-15,000 Hz ±4 dB; crossover at 2500 Hz; input range 7-50 W continuous; 8-ohm impedance; mechanical vari-axis control; sold as matched pairs only; walnut vinyl cabinet with brown acoustical foam grille; 12¾" H × 22" W × 9⅜" D ..... $279 pr.

MS-1 Speaker System
One-way miniature microstatic system with four 1¼-in tweeters; frequency response 3500-18,000 Hz ±3 dB; dispersion 180 degrees horizontal, 140 degrees vertical; has range selector and level control; 16-ohm impedance; max. input range 15-60 W continuous; for use with low- and medium-efficiency systems to augment treble; walnut cabinet; 3¾" H × 9⅛" W × 5¼" D ..... $135 pr.

MITSUBISHI

MS-40 Speaker System
Three-way air-suspension floor-standing speaker system with 12-in glass-fiber-reinforced plastic honeycomb-cone woofer, 4-in cone midrange, and 1½-in hybrid dome tweeter; frequency response 25-20,000 Hz; crossovers at 600 and 5000 Hz; sensitivity 87 dB SPL/W/m; max. input 150 W; 6-ohm impedance; four-step midrange and tweeter level controls; overload protection circuit; mirror image pairs; walnut cabinet and detachable grille; 34⅝" H × 15⅜" W × 14⅜" D $550

MS-30 Speaker System
Three-way, acoustic air-suspension, bookshelf speaker system with 12-in glass-fiber-reinforced plastic honeycomb-cone woofer, 4-in cone midrange, and 2¼-in dome tweeter; crossovers at 800 and 5000 Hz; 6-ohm nominal impedance; frequency response 30-20,000 Hz; efficiency 88-dB SPL/W/m; max. input 150 W; 12-dB/octave slope; four-step attenuated midrange and high level controls; detachable grille and walnut cabinet; 26⅝" H × 15⅜" W × 13½" D $395

MS-20 Speaker System
Two-way, acoustic air-suspension, bookshelf speaker system with 12-in glass-fiber-reinforced plastic honeycomb-cone woofer and 2-in cone tweeter; crossover at 1500 Hz; 8-ohm nominal impedance; frequency response 35-20,000 Hz; efficiency 88-dB SPL/W/m; max. input 120 W; 12-dB/octave slope; four-step attenuated level control for 1500-20,000 Hz range; detachable grille and walnut cabinet; 24¾" H × 14⅜" W × 11⅞" D. $275

MS-10 Speaker System
Two-way, acoustic air-suspension, bookshelf speaker system with 10-in glass-fiber-reinforced plastic honeycomb-cone woofer and 2-in cone tweeter; crossover at 1500 Hz; 6-ohm nominal impedance; frequency response 35-20,000 Hz; efficiency 87-dB SPL/W/m; max. input 100 W; 22½" H × 12⅝" W × 11½" D $165

M & K

Satellite-1 Speaker System
Two-way acoustic-suspension speaker system with two 5-in woofers and 1-in tweeter; frequency response 55-22,000 Hz; crossover at 1785 Hz; input range 7.5-200 W; 4-ohm impedance; midrange and tweeter adjustments; walnut finish with black grille; 21" H × 7¾" W × 6¾" D $195

The Volkswoofer Subwoofer
Servo-feedback 60 W internal amp subwoofer with 12-in woofer and bass crossover frequency adjustment; frequency response 14-100 Hz; crossover at 100 Hz; input range 7.5-400 W; walnut finish with black grille; 16½" H × 18" W × 18" D $445

Satellite-Volkswoofer System
Combines two Satellite-1 speakers and Volkswoofer $835

Goliath 2 Cube Subwoofer
Acoustic-suspension subwoofer with 12-in woofer and internal adjustable crossover network; frequency response 26-300 Hz; input range 30-150 W; walnut finish; 16½" H × 18" W × 18" D ... $235

Studio Disco IV Subwoofer
Acoustic-suspension subwoofer with four 12-in woofers; frequency response 30-300 Hz; input range 30-600 W; walnut finish; 40" H × 23" W × 23" D $495

MORDAUNT-SHORT

Signifer Speaker System
Three-way acoustic-suspension floor-standing speaker system with 300-mm woofer, 135-mm midrange, and 25-mm wide-dispersion synthetic dome tweeter; crossovers at 500 and 4000 Hz; frequency response 38-20,000 Hz ±2 dB; sensitivity 96 dB/4.5 W/m; input range 25-250 W/ch; THD less than 1.0%; includes matching stands; 31⅞" H × 15⅛" W × 12¾" D ..... $1480 pr.

Pageant Series 2
Two-way speaker system with 140-mm woofer/midrange and 25-mm wide-dispersion synthetic dome tweeter; frequency response 65-20,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; sensitivity 6.5 V rms (5.3 W) for 96 dB at 1 m; continuous program rating 20 V rms (50 W); recommended amp power 15-100 W/ch; midrange and tweeter level controls; teak or walnut veneer finish (others optional) with deep brown woven fabric grille; 21" H × 13" W × 9" D ..... $495 pr.

Festival Series 2
Two-way speaker system with 140-mm woofer/midrange and 19-mm wide-dispersion synthetic dome tweeter; frequency response 75-20,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; sensitivity 6.7 V rms (5.6 W) for 96 dB at 1 m; continuous program rating 19 V rms (45 W); recommended amp power 10-90 W/ch; teak or walnut veneer finish with deep brown woven fabric grille; 17⅞" H × 11" W × 7¼" D ..... $385 pr.

Carnival Series 2
Two-way speaker system with 140-mm woofer/midrange and 68-mm paper cone tweeter; frequency response 85-17,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; sensitivity 6.9 V rms (6 W) for 96 dB at 1 m; continuous program rating 18 V rms (40 W); recommended amp power 10-80 W/ch; teak or walnut finish with deep brown woven fabric grille; 15¾" H × 9½" W × 5¾" D ..... $275 pr.

OHM ACOUSTICS

Model F Speaker System
Floor-standing speaker system with 12-in diameter Walsh radiator and 16-in tweeter with 33.6-oz Alnico V-7, 10¼-lb magnet; frequency response 37-19,000 Hz ±4 dB; input range 75-250 W; 4/3.7-ohm min. impedance; oiled walnut cabinet;

44" H × 17¾" W × 17¾" D (tapers to 13" W× 13"

D at top)..... $950

Model I Speaker System
Four-way dual-vented floor-standing speaker system with 12-in subwoofer with 72-oz ferrite magnet, 8-in woofer with 32-oz magnet, 1.5-in soft dome tweeter, and two 1-in soft dome supertweeters; frequency response 32-21,000 Hz ±3.5 dB; crossovers at 100, 2000, and 10,000 Hz; input range 10-1000 W continuous; nominal impedance 4 ohms; walnut veneer cabinet on ¾-in flakeboard stock; 33¼" H × 15½" W × 15½" D at bottom, tapers to 13⅛" W × 13⅛" D at top $675

Model H Speaker System
Three-way floor-standing vented speaker system with 8-in woofer, 2-in midrange, and 1-in dome tweeter; frequency response 32-20,000 Hz ±4 dB; crossovers at 1700 and 5000 Hz; input range 10-100 W; 8-ohm impedance; three-position tweeter level control; ¾-in stock oiled walnut finish; 26½" H × 15" W × 10¾" D..... $360

Model N Speaker System
Dual-vented subwoofer incorporates two 8-in woofers with 32-oz magnets; frequency response 32-140 Hz; input range 10-100 W; nominal impedance 8 ohms; walnut veneer; 15" H × 16" W × 15" D..... $340

Model C_2 Speaker System
Three-way speaker system with 10-in woofer, 2-in tweeter, and 1-in super dome tweeter; frequency response 37-20,000 Hz ±4 dB; crossovers at 1700 and 5000 Hz; input range 10-100 W; 8/6-ohm impedance; three-position tweeter level control switch; oiled walnut finish on ¾-in stock with black Formica back; 25" H × 14" W × 9¾" D $275

Model L Speaker System
Three-way speaker system with 8-in woofer, 2-in low tweeter, and 2-in high cone tweeter; frequency response 42-20,000 Hz ±4 dB; crossovers at 1700 and 10,000 Hz; input range 8-100 W continuous; 8/4-ohm nominal impedance; three-position tweeter level control; input range 8-100 W; efficiency 100-dB SPL at 3 ft; oiled walnut finish on ¾-in stock; 20" H × 12" W × 9¾" D..... $185

Model M Speaker System
Two-way vented speaker system with 4-in woofer and 1-in cloth dome tweeter; frequency response 120-20,000 Hz ±4 dB; crossover at 3500 Hz; input range 5-100 W; impedance 4 ohms; cast aluminum cabinet; 7⅛" H × 4½" W × 4½" D $145

Model E Speaker System
Two-way speaker system with 8-in woofer and 2-in tweeter; crossover at 1700 Hz; impedance 6-8 ohms; frequency response 65-19,000 Hz ±4 dB; input range 7-50 W; three-position tweeter level control; walnut-grained vinyl finish on ⅝-in stock; 21½" H × 11½" W × 7¼" D..... $120

ONKYO

F-5000 Speaker System
Three-way air-suspension floor-standing speaker system with 12.2-in polyurethane/paper-laminated plane woofer, 4-in polyurethane/paper-laminated plane midrange, and 1.95-in direct-drive mem-

brane samarium cobalt tweeter in phase-aligned array; midrange and tweeter level controls; frequency response 28-20,000 Hz; crossovers at 1200 and 5000 Hz; input 200 W peak program; matched stereo pairs; includes two 4-in feet; African rosewood veneer finish..... $500

M-240 Speaker System
Three-way acoustic-suspension floor-standing speaker system with 15-in high-compliance woofer, 4-in carbon-fiber cone midrange, and 1-in titanium-foil dome tweeter; midrange and tweeter level controls; frequency response 35-20,000 Hz; crossovers at 700 and 4500 Hz; SPL 93 dB/W/m; max. input 100 W; 8-ohm impedance; rosewood-grain vinyl finish; 27" H × 16½" W × 13" D..... $260

M-160 Speaker System
Two-way acoustic-suspension floor-standing speaker system with 12-in paper cone woofer and 2¾-in duralumin dome tweeter; tweeter level control; frequency response 35-20,000 Hz; crossover at 2000 Hz; SPL 91 dB/W/m; input 80 W; 8-ohm impedance; 22" H × 13½" W × 12⅘" D..... $175

16 SPEAKER SYSTEMS

OPTONICA

CP-5151 Speaker System
Three-way floor-standing speaker system with 12-in woofer, 2-in dome midrange, and ribbon tweeter; frequency response 40-50,000 Hz; input range 20-90 W; 8-ohm impedance; midrange and tweeter level controls; individual speaker terminals allow multi-amping; rosewood veneer with removable grille; 27.6" H × 15.7" W × 13.3" D..... $400

CP-2121 Speaker System
Two-way floor-standing speaker system with 10-in woofer, 10-in passive radiator, and 3-in tweeter; frequency response 40-20,000 Hz; max. input 35 W; min. input 10 W; 8-ohm impedance; rosewood vinyl with removable grille; 28.7" H × 14.6" W × 12.1" D $210

PANASONIC

SB-800 Thrusters Speaker System
Two-way passive-radiator speaker system incorporates high-efficiency woofer and 1-in soft dome tweeter with twin 8-in wide-range drivers and 12-in convex drone cone; crossover at 47,000 Hz (active), 20 Hz (passive radiator); max. input 70 W; 8-ohm impedance; simulated wood cabinet; 28 11/32" H × 18 1/8" W × 11 13/16" D..... $300-350 pr.

JC PENNEY

MCS 8228 Speaker System
Three-way air-suspension floor-standing speaker system with 12-in woofer with 54-oz ferrite magnet, two 2-in soft dome midrange drivers with 25-oz ferrite magnets, and three 1-in soft-dome tweeters with 10-oz ferrite magnet; crossovers at 600 and 2000 Hz; input range 50-150 W continuous; 8-ohm impedance; three-position tweeter and midrange level controls; rosewood woodgrain vinyl cabinet with removable brown grille; 36 1/2" H × 16" W × 10 1/2" D $400

MCS 8227. Similar to MCS 8228 except 12-in woofer has 38-oz ferrite magnet; input range 25-100 W continuous; 27" H × 15 3/4" W × 11 1/2" D $300

MCS 8265 Speaker System
Three-way bass-reflex floor-standing speaker system with 12-in woofer and 20-oz ferrite magnet, 5 1/8-in midrange with 6.4-oz ferrite magnet, and horn tweeter with 1.3-oz Alnico magnet; input range 10-70 W continuous; 8-ohm impedance; tweeter level control; rosewood vinyl cabinet with grille; 25 19/32" H × 14 3/8" W × 12 13/16" D.....$600 pr.

MCS 8245 Speaker System
Three-way bass-reflex speaker system with 10-in woofer with 15-oz ferrite magnet, 5 1/4-in midrange with 8.64-oz ferrite magnet, and 2 1/2-in tweeter with 1.71-in magnet; 8-ohm impedance; tweeter level control; rosewood vinyl cabinet with grille; 22 27/32" H × 13 3/8" W × 11 13/16" D.....$400 pr.

MCS 8226 Speaker System
Three-way bass-reflex ported speaker system with 12-in woofer with 25-oz ferrite magnet, midrange with 15-oz ferrite magnet, and 2-in cone tweeter with 6-oz ferrite magnet; crossovers at 600 and 6000 Hz; input range 10-60 W continuous; 8-ohm impedance; midrange and tweeter level controls; rosewood wood-grain vinyl cabinet with removable black grille; 26" H × 14 1/2" W × 10 1/2" D..... $200

PETROFF LABS

PL-6D Speakers
Dipole radiating line-source speakers in boxless configuration; must be used with PL-6W subwoofer; incorporates four 4 1/2-in midrange drivers and two 2-in tweeters; frequency response 100-20,000 Hz ±2 dB; crossover at 5000 Hz; sensitivity 90 dB SPL/W/m; input range 40-200 W; 8-ohm impedance; three-position high-frequency level control; bi-amping not required; 42" H × 12" W × 4 1/2" D ... . $400 pr.

PL-6W. Subwoofer for PL-6D; incorporates two 10-in mass-loaded acoustic-suspension woofers; frequency response 30-100 Hz ±4 dB; crossover (with PL-6D) 100 Hz; sensitivity 90 dB SPL/W/m; input range 50-200 W; includes two internal 100-Hz passive crossover networks; smoked glass top inlay; 14" H × 25 1/2" W × 15 1/2" D..... $198
Total system price $598

PHILIPS

RH545 Speaker System
Motional feedback three-way speaker system with three built-in amplifiers; 12-in woofer powered by 50-W amp (0.2% THD), 2-in dome midrange powered by 35-W amp (0.2% THD), and 1-in dome tweeter powered by 15-W amp (0.2% THD); frequency response 20-20,000 Hz; crossovers at 500 and 3000 Hz; 4-ohm impedance; input sensitivity 1-23 V variable; 25 3/8" H × 17 4/32" W × 12 3/8" D $1500

RH567 Speaker System
Motional feedback three-way speaker system with two built-in amplifiers; 10-in woofer powered by 40-W amp (0.2% THD), 2-in dome midrange and 1-in dome tweeter powered by 20-W amp (0.2% THD); frequency response 27-20,000 Hz; crossovers at 500 and 3500 Hz; 4- and 8-ohm impedance; input sensitivity 1-20 V variable; 21 1/4" H × 13" W × 10 3/4" D..... $450

RH544 Speaker System
Motional feedback three-way speaker system with two built-in amplifiers; 8-in woofer powered by 40-W amp (0.2% THD) and 2-in dome midrange and 1-in wide-dispersion dome tweeter powered by 20-W amp (0.2% THD); frequency response 35-20,000 Hz; crossovers at 500 and 4000 Hz; 8-ohm impedance; input sensitivity 1-20 V variable; 15 1/2" H × 11 13/100" W × 8 1/2" D $400

AH477 Speaker System
Three-way air-suspension speaker system with 12-in woofer, 2-in dome midrange, and 1-in dome tweeter; frequency response 32-20,000 Hz; crossovers at 1500 and 5500 Hz; 8-ohm impedance; max. input 80 W continuous, recommended input 20 W/ch; midrange and tweeter level controls; oiled walnut veneer finish with removable black grille; 27 7/8" H × 15 3/8" W × 14 11/32" D..... $300

RH541 Speaker System
Motional feedback two-way speaker system with one built-in amplifier; 6-in woofer and 1-in dome tweeter powered by 30-W amplifier (0.4% THD); frequency response 35-20,000 Hz; crossover at 1400 Hz; 4-ohm impedance; input sensitivity 1 V at 10,000 ohms, 19 V at 100 ohms; 11 1/2" H × 9" W × 7" D..... $250

AH476 Speaker System
Three-way air-suspension speaker system with 10-in woofer, 2-in dome midrange, and 1-in dome tweeter; frequency response 35-20,000 Hz; crossovers at 1500 and 5500 Hz; 8-ohm impedance; max. input 60 W continuous, recommended input 20 W/ch; midrange level control; oiled walnut finish with removable black grille; 26" H × 13 3/4" W × 11 1/16" D $240

AH475 Speaker System
Two-way air-suspension speaker system with 8-in woofer and 1-in dome tweeter; frequency response 40-20,000 Hz; crossover at 3500 Hz; 8-ohm impedance; max. input 40 W continuous, min. input 10 W/ch; walnut-grain vinyl finish with removable black grille; 23 3/4" H × 13 3/4" W × 11" D.. $150

SJ2932 Speaker System
Three-way tuned-port speaker system with 10-in woofer, two 5-in cone midrange drivers, and 1-in dome tweeter; frequency response 46-20,000 Hz; crossovers at 2000 and 6000 Hz; 8-ohm impedance; max. input 60 W; walnut vinyl finish with removable black grille; 27" H × 14 1/2" W × 12 1/2" D $130

SJ2931 Speaker System
Two-way tuned-port speaker system with 10-in woofer and 1-in dome tweeter; frequency response 47-20,000 Hz; crossover at 4000 Hz; 8-ohm impedance; max. input 45 W; walnut vinyl finish with removable black grille; 24" H × 13 3/4" W × 11 1/2" D $100

SJ2930 Speaker System
Two-way tuned-port speaker system with 8-in woofer and 2 3/4-in cone tweeter; frequency response 48-17,500 Hz; crossover at 4500 Hz; 8-ohm impedance; max. input 20 W; walnut vinyl finish with removable black grille; 21 1/2" H × 13" W × 11 37/100" D $75

PIONEER

HPM-150 Speaker System
Four-way bass-reflex floor-standing speaker system with 15 3/4-in woofer, 4-in cone midrange, 1 3/4-in cone tweeter, and omnidirectional horn-loaded high polymer film super tweeter; frequency response 25-40,000 Hz; crossovers at 750, 2600, and 8500 Hz; 6.3-ohm impedance; sensitivity 92.5 dB/W/m; nominal input 125 W; min. input 10 W; grain finish; 38 25/32" H × 17 11/16" W × 17 11/16" D..... $550

HPM-100 Speaker System
Four-way bass-reflex bookshelf speaker system with 12-in woofer, 4-in cone midrange, 1 3/4-in cone tweeter, and high polymer molecular film super tweeter; frequency response 30-25,000 Hz; crossovers at 1200, 4000, and 12,000 Hz; 8-ohm impedance; sensitivity 92.5 dB/W/m; max. input 200 W; 26 3/8" H × 15 3/8" W × 15 1/2" D $350

HPM-60 Speaker System
Four-way bass-reflex bookshelf speaker system with 10-in woofer, 4-in cone midrange, 1 3/4-in cone tweeter, and high polymer molecular film super tweeter; frequency response 35-25,000 Hz; crossovers at 1200, 4000, and 12,000 Hz; 8-ohm impedance; sensitivity 92.5 dB/W/m; max. input 120 W; 24" H × 13 25/32" W × 12 3/8" D $260

HPM-40 Speaker System
Three-way bass-reflex bookshelf speaker system with 10-in woofer, 1 3/4-in cone tweeter, and high polymer molecular film super tweeter; frequency response 35-25,000 Hz; 8-ohm impedance; sensitivity 91 dB/W/m; max. input 100 W; 22 7/16" H × 12 13/16" W × 12 1/2" D..... $180

CS-99A Speaker System
Sealed five-way floor-standing speaker system with 15-in woofer, 5-in midrange, 4-in midrange, multicellular horn tweeter, and two 1/2-in dome super tweeters; frequency response 25-22,000 Hz; 8-ohm impedance; sensitivity 97 dB/W/m; max. input 100 W; midrange and tweeter controls; walnut finish; 24 13/16" H × 16 1/2" W × 11 13/32" D..... $275

Project 120 Speaker System
Three-way, ducted port, bookshelf speaker system with 10-in cone woofer, 5-in cone midrange and 1 7/8-in cone tweeter; crossovers at 1000 and 4000 Hz; 8-ohm impedance; frequency response 30-20,000 Hz; sensitivity 92 dB/W/m; max. input 60 W; walnut vinyl cabinet; 23" H × 13" W × 10 1/4" D..... $145

PLASMATRONICS

HIII Type-1 Plasma Speaker System
Three-way floor-standing speaker system with 14-in subwoofer, 6 1/2-in low midrange driver, and laser-like phase-coherent incandescent lavender plasma high-frequency driver with spherical radiation pattern; system must be bi-amped. Features separate interface unit with LED VU meter display, high-low

test and balancing, and selectable crossover point controls; electronic crossover; built-in vacuum tube Class A amplifiers; built-in helium tank with automatic LEDs on built-in monitor panel indicating when tanks must be exchanged (approx. every 300 listening hours). Frequency response 30-20,000 Hz ±3 dB; crossovers at 130 and user-selectable 700 or 1000 Hz; HD 1.0% at 90-dB SPL at 10 ft; max. steady-rate acoustical power 107 dB at 1 m SPL. Requires high-quality full-range preamp and 100-200 W/ch continuous power amp; solid walnut cabinet; interface unit 4⅛" H × 19" W, speaker 57½" H × 34½" W × 18½" D..... $7000

POLK AUDIO

R.T.A. 12 Monitor Speaker System

Three-way real-time-array floor-standing speaker system with low readout, low-resonance molded foam subwoofer, 12-in passive radiator, two 6½-in polymer laminated bass midrange drivers, and 1-in open-mounted moving-coil soft dome tweeter; frequency response 19-25,000 Hz; crossovers at 40 and 2000 Hz; sensitivity 120 dB; input range 10-500 W/ch; 6-ohm impedance; walnut or rosewood grain finish; 34" H × 16" W × 12" D..... $375
Speaker stands for R.T.A. 12 .....$50 pr.

TenA Speaker System

Three-way floor-standing speaker system with 10-in sub-bass radiator, two 6½-in bass/midranges, and 1-in soft-dome tweeter; frequency response 22-25,000 Hz; crossovers at 60 and 3000 Hz; 6-ohm impedance; max. input 200 W; min. input 10 W continuous; walnut or rosewood wood-grain finish; 28" H × 16" W × 11½" D $240

SevenB Speaker System

Three-way speaker system with 10-in sub-bass radiator, 6½-in bass/midrange, and 1-in soft-dome tweeter; frequency response 26-25,000 Hz ±2 dB; crossovers at 60 and 3000 Hz; 8-ohm impedance; max. input 100 W; min. input 10 W continuous; walnut or rosewood wood-grained finish; 24" H × 14" W × 9¼" D..... $175
FiveA. Similar to SevenB but with 8-in sub-bass radiator; frequency response 31-25,000 Hz; 21⅜" H × 10½" W × 9" D $130

PRECEDENT

MZ Mod 3 Speaker System

Rear-panel-switchable two- or three-way modular-designed floor-standing speaker system; three-way system incorporates individually-enclosed 8-in Bextrene cone woofer, 5-in Bextrene cone midrange, and 1¾-in tweeter; woofer and midrange feature 9½-ft and 7½-ft transmission lines, respectively; frequency response 40-20,000 Hz ±2.5 dB; crossovers at 600 and 3500 Hz; sensitivity 88-dB SPL/W/m; max. input 100 W; 8-ohm impedance; teak laminated cabinet with foam grille; 39" H × 29" W × 16" D..... $1495 pr.
Mod 2. Two-way system with 5-in midrange and ¾-in tweeter; frequency response 70-20,000 Hz ±2.5 dB; crossover at 3500 Hz; max. input 50 W; 36½" H × 7½" W × 13" D..... $748 pr.

Panorama Speaker System

Three-way floor-standing dynamic cylindrical speaker system with 8-in woofer, 2½-in midrange, and 1-in tweeter; frequency response 40-20,000 Hz ±2.5 dB; crossovers at 800 and 2500 Hz; sensitivity 92-dB SPL/W/m; max. input 200 W; 8-ohm impedance; 50" H × 13½" W × 13½" D...$795 pr.

Vista Speaker System

Two-way dynamic cylindrical speaker system with 8-in woofer and 1-in tweeter; frequency response 50-20,000 Hz ±3 dB; crossover at 2500 Hz; sensitivity 90 dB/W/m; max. input 150 W; 8-ohm impedance; 26" H × 15¼" W × 15¼" D.....$380 pr.

PRECISE TECHNOLOGY

Live Performance One Speaker System

Two-way floor-standing free-flow transmission-line speaker system with mirror-image phase-aligned 8-in woofer and 1-in dome tweeter; frequency response 36-20,000 Hz ±3 dB; crossover at 3000 Hz; sensitivity 93 dB/W/m; input range 15-200 W; 6-ohm impedance; walnut "tri-ply" enclosure; 32" H × 12" W × 13" D..... $420

Live Performance Two Speaker System

Two-way floor-standing free-flow transmission-line speaker system with mirror-image phase-aligned 5-in woofer and 1-in dome tweeter; frequency response 60-20,000 Hz ±3 dB; crossover at 3500 Hz; sensitivity 91 dB/W/m; input range 15-150 W; 6-ohm impedance; walnut tri-ply enclosure; 25" H × 9½" W × 8½" D $190

Live Performance Three Subwoofer

Incorporates 8-in low-mass woofer; frequency response 34-100 Hz ±3 dB; includes acoustical low-pass crossover filter; sensitivity 91 dB/W/m; input range 15-200 W; 8-ohm impedance; walnut tri-ply enclosure; 38" H × 12" W × 13" D $195

PSB

Beta IIa Speaker System

Two-way floor-standing acoustic-suspension speaker system with motional feedback bass unit, 8-in long-throw woofer, and 1-in soft dome tweeter with ferrofluid; frequency response 25-20,000 Hz ±2 dB; crossover at 1500 Hz; handles 40 W/ch continuous power; 4-ohm nominal impedance; fuse protected; rear panel of speaker has five-position subsonic frequency roll-off switch, eleven-position amplifier matching switch, and on/off switch; LED "power on" indicator located under black grille cloth; walnut veneer finish; 23" H × 12" W × 10½" D..... $595

Passif IIa Speaker System

Two-way 10-in passive radiator floor-standing speaker system with 8-in long-throw woofer and 1-in dome tweeter; crossover at 2000 Hz; frequency response 42-20,000 Hz ±2 dB; power range 15-60 W continuous; 8-ohm nominal impedance; walnut veneer finish with black cloth grille; 29¾" H × 13½" W × 12¾" D..... $295

Passif I Speaker System

Two-way 8-in passive radiator floor-standing speaker system with 7-in long throw woofer and 1-in soft dome tweeter; frequency response 50-20,000 Hz ±2 dB; crossover frequency 2000 Hz; input range 15-50 W continuous; 8-ohm nominal impedance; walnut veneer finish with black cloth grille; 26" H × 12" W × 10¼" D $230

QYSONIC

Array Speaker System

Four-way "Laminar Flow Vent" floor-standing speaker system with two 8-in woofers, 4½-in cone midrange, 2-in cone tweeter, and 1-in dome supertweeter; frequency response 28-25,000 Hz ±3 dB; crossovers at 500, 3000, and 8000 Hz; sensitivity 92 dB SPL/W/m; 6-ohm nominal impedance; min. input 30 W/ch; midrange, tweeter, and supertweeter level controls; oiled walnut cabinet with black cloth grille; 48" H × 12½" W × 8½" D..... $479

Tad II Speaker System

Three-way "Laminar Flow Vent" floor-standing speaker system with two 6-in woofers, 2-in cone tweeter, amd 2-in cone supertweeter; frequency response 40-25,000 Hz ±3 dB; crossovers at 2000 and 8000 Hz; sensitivity 90 dB SPL/W/m; 6-ohm nominal impedance; min. input 15 W/ch; tweeter level control; walnut-finished cabinet with black cloth grille; 29" H × 9" W × 6½" D..... $225

Spree Speaker System

Two-way "Laminar Flow Vent" speaker system with two 4½-in woofers and 2-in cone tweeter; frequency response 55-22,000 Hz ±3 dB; crossover at 3000 Hz; sensitivity 85 dB SPL/W/m; 6-ohm nominal impedance; min. input 10 W/ch; walnut-finish with cloth grille; 17" H × 6½" W × 5½" D..... $139

Micro Speaker System

Two-way terminal-line bookshelf speaker system with two 3-in woofers and 2-in cone tweeter; frequency response 80-22,000 Hz ±3 dB; crossover at 4000 Hz; sensitivity 80 dB SPL/W/m; 6-ohm nominal impedance; min. input 8 W/ch; walnut-finish cabinet; 12" H × 5" W × 4½" D $99

Laug Subwoofer

Terminal-line subwoofer with two 8-in woofers; frequency response 28-90 Hz ±3 dB; min. input 30 W/ch; walnut finish with foam black grille; 34" H × 11½" W × 10" D..... $229

REALISTIC

Optimus T-200 Speaker System

Three-way floor-standing speaker system with two 10-in woofers, 6½-in midrange, and 2-in cone tweeter; frequency response 50-20,000 Hz; 8-ohm impedance; max. input 150 W; midrange and treble L-pad controls; oiled walnut finish with removable grille; 34" H × 12½" W × 12½" D $260

Mach One Speaker System

Three-way floor-standing speaker system with 15-in woofer, multi-cell midrange horn, and high-compliance tweeter horn; frequency response 20-25,000 Hz; crossovers at 800 and 8000 Hz; 8-ohm impedance; LC crossover network; walnut veneer cabinet with acoustically transparent grille cloth; 28⅜" H × 17⅜" W × 12" D..... $240

Optimus T-100 Tower

Two-way floor-standing speaker system with two 8-in woofers and 3-in tweeter; frequency response 55-18,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; max. input 75 W peak program; treble adjustment control; phono jack and screw terminal connections; oiled walnut veneer cabinet; 35½" H × 13" W × 12½" D..... $180

Optimus 27 Speaker System

Two-way speaker system with 6½-in woofer, 8-in high-compliance passive radiator, and 1-in textile soft dome tweeter; 8-ohm impedance; slim-line minimum-reflection cabinet $150

Optimus-10 Speaker System

Sealed acoustic-suspension speaker system with 8-in woofer, 10-in drone, and 3¼-in dome tweeter; frequency response 42-20,000 Hz ±3 dB; max. input 75 W peak program; 8-ohm impedance; brilliance control; phono jack and screw terminal connections; walnut veneer with removable grille; 25" H × 15⅜" W × 10⅜" D..... $140

Optimus 25 Speaker System

Sealed three-way acoustic-suspension floor-standing speaker system with 12-in woofer, 4-in midrange, and 2½-in tweeter; frequency response 45-20,000 Hz; 8-ohm impedance; max. input 75 W; midrange and treble switches in hi-normal/lo-midrange and treble modes; walnut finish with removable grille; includes phono jacks and screw terminals; 25" H × 14" W × 11½" D $140

Optimus 23 Speaker System

Two-way acoustic-suspension speaker system with 10-in ported bass woofer and 3-in tweeter; frequency response 20-20,000 Hz ±4.5 dB; crossover at 1200 Hz; input range 7-70 W; 8-ohm impedance $100

REFERENCE by QUADRAFLEX

312L Speaker System

Three-way linear-phase acoustic-suspension floor-standing speaker system with 12-in woofer, 6½-in cone midrange, and 1-in soft dome tweeter; frequency response 32-22,500 Hz ±4 dB; crossovers at 600 and 4000 Hz; min. input 10 W; 8-ohm impedance; black and teak vinyl finish with gray cloth grille; 31⅜" H × 18" W × 13" D..... $270

310L Speaker System

Three-way linear-phase acoustic-suspension

16 SPEAKER SYSTEMS

speaker system with 10-in woofer, 6½-in cone midrange, and 1-in Mylar dome tweeter; frequency response 38-20,000 Hz ±4 dB; crossovers at 600 and 4000 Hz; min. input 10 W; 8-ohm impedance; black and teak vinyl cabinet with gray cloth grille; 28¾" H × 16" W × 11⅝" D..... $180

ROGERS by REFERENCE

The Reference Monitor System
System comprises pair of LS 3/5A speakers, XA 75 electronic crossover/amplifier, and pair of L 35B bass system speakers; frequency response (anechoic) 45-20,000 Hz ±2 dB; handles 150-170 W continuous, 200 W peak program; sensitivity 96 dB SPL/12.5 W pink noise/m; XA75 crossover at 150 Hz normal; bass system has 8-ohm nominal impedance, LS 3/5A has 15-ohm nominal impedance. L 35B has 12.5 paper pulp woofer and 1.5-in four-layer voice coil; teak or walnut finish; 32.4' H × 18" W × 16.5" D.

XA 75/L35B. Electronic crossover/amplifier and bass system speakers; teak or walnut finish . $2100

LS 3/5A. Monitor speakers.....$540 pr.

Monitor 2 Speaker System
Two-way monitor speaker with 8-in woofer, Celestion HF 1300 derivative tweeter and HF 2000 super tweeter; frequency response 40-20,000 Hz ±3 dB; handles 50 W continuous at 400 Hz, 100 W speech and music; 8-ohm impedance; teak or walnut veneer finish with black grille cloth; 25" H × 12" W × 12" D .....$840 pr.
Rosewood/black finish.....$890 pr.

The Compact Monitor Speaker
Two-way monitor speaker with 8-in woofer and 1.9-in butyl damped fabric dome tweeter; frequency response 50-20,000 Hz ±3 dB; handles 40 W continuous at 400 Hz, 80 W speech and music; 8-ohm nominal impedance; teak or walnut veneer finish with black grille cloth; 20" H × 11" W × 10¾" D .....$630 pr.
Rosewood/black finish.....$680 pr.

RTR

DR-1 Speaker System
Electrostatic dual-tandem speaker system with two 10-in woofers and one 12-in woofer; frequency response 28-375 Hz; power handling 125 W continuous, 250 W peak; crossover at 325 Hz; 8-ohm impedance. Electrostatic system: 27-element circumaxial, variable area radiator; frequency response 375-40,000 Hz ±2 dB. Direct-drive power amp: frequency response 375-30,000 Hz; drives electrostatic element, woofer system requires 75-150 W power amp. Woofer system and electrostatic amp housed in one cabinet plus one electrostatic cabinet; volume and tweeter control; hand-rubbed walnut veneer finish with black fabric grille; 49" H × 16½" W × 16½" D..... $1485

600 D Speaker System
Three-way acoustic-suspension speaker system with two 12-in woofers, 1½-in dome midrange, and two 1-in soft dome super tweeters; frequency response 32-20,000 Hz; crossovers at 950 and 10,000 Hz; 4-ohm nominal impedance; recommended amp power 25-120 W continuous; has continuously variable midrange and tweeter level controls, resettable circuit breaker protection, and five-way binding post connectors; Corinthian column design with walnut veneer finish and black doubleknit grille; 48" H × 16½" W × 16½" D..... $600

800D Speaker System
Four-way acoustic-suspension phased speaker system with 8-in and 10-in woofers, 1½-in soft dome midrange, and 1-in soft dome tweeter; crossovers at 150, 1500, and 9000 Hz; 6-ohm impedance; frequency response 36-20,000 Hz ±2 dB; efficiency 90.5-dB SPL/W/m; min. input 25 W; woofer, midrange, and tweeter level controls; oiled walnut finish with black knit grille; 37½" H × 13¼" W (bottom) and 4" W (top) × 23⅝" D..... $600

ESR-15 Speaker System
Electrostatic speaker system; frequency response 1250-20,000 Hz; incorporates 15 HF-50 electrostatic radiators; crossover frequency 1250 Hz; 8-ohm nominal impedance; recommended power 15-100 W/ch continuous; has continuously variable tweeter level control, resettable circuit breaker protection, surge voltage protection, and five-way binding post connectors; hand-rubbed walnut veneer finish; 19½" H × 16½" W × 16½" D..... $400

300D Speaker System
Three-way acoustic-suspension speaker system with two 10-in woofers, 1½-in dome midrange, and 1-in soft dome super tweeter; frequency response 36-20,000 Hz; crossovers at 1250 and 10,000 Hz; 4-ohm nominal impedance; recommended amp power 25-100 W continuous; has continuously variable midrange and tweeter level controls, resettable circuit breaker protection, and five-way binding post connectors; Corinthian column design with walnut veneer finish and black doubleknit grille; 42" H × 14½" W × 12½" D..... $400

PS/1 Speaker System
Three-way acoustic-suspension speaker system with 8-in woofer, 1½-in soft dome midrange, and 1-in soft dome tweeter; crossovers at 1500 and 9000 Hz; 6-ohm impedance; frequency response 65-20,000 Hz ±2 dB; efficiency 90.5-dB SPL/W/m; min. input 25 W; pyramid-shaped satellite designed for use with DAC/1; tweeter high-pass level control; oiled walnut finish with black knit grille; 21⅞" H × 12¾" W (bottom) and 5" W (top) × 8" D. $325

G-200 Speaker System
Two-way mass-tuned passive radiator modified-vent speaker system with 10-in woofer, 1½-in high-temperature voice coil, total emersion dampener impregnated cone 1-in soft dome wide-dispersion tweeter; frequency response 25-25,000 Hz ±3 dB; crossovers at 40 and 2000 Hz; input range 10-80 W continuous unclipped; sensitivity 91 dB SPL/W pink noise/m; 6-ohm nominal impedance; tweeter level control and color-coded pushbutton connectors; walnut veneer finish; 36" H × 14½" W × 12½" D $269

75D Speaker System
Three-way acoustic-suspension speaker system with 10-in woofer, 1½-in soft dome midrange, and 1-in soft dome tweeter; crossovers at 1250 and 10,000 Hz; 6-ohm impedance; frequency response 40-20,000 Hz ±3 dB; efficiency 90.5-dB SPL/W/m; min. input 20 W; midrange and tweeter level controls; textured vinyl finish with black knit grille; 25¼" H × 14¼" W × 11½" D..... $239

ESR-6 Speaker System
Electrostatic speaker system; frequency response 1500-20,000 Hz; incorporates six HF-50 electrostatic radiators; crossover frequency 1500 Hz; 8-ohm nominal impedance; recommended amp power 15-60 W/ch continuous; has continuously variable tweeter level control, resettable circuit breaker protection, surge voltage protection, and five-way binding post connectors; hand-rubbed walnut finish; 14½" H × 14½" W × 12" D..... $250

G-10 Speaker System
Two-way Helmsholtz-tuned dual port speaker system with 10-in woofer, 1½-in high-temperature voice coil, total emersion dampener impregnated cone, and 1-in soft dome wide-dispersion tweeter; frequency response 32-25,000 Hz ±3 dB; crossover at 2000 Hz; sensitivity 91 dB SPL/W pink noise/m; 6-ohm nominal impedance; input range 10-80 W continuous; tweeter level control and color-coded pushbutton connectors; walnut-grain vinyl (stain resistant) finish; 25½" H × 14¼" W × 11" D $189

SANSUI

SP-L800 Speaker System
Two-way floor-standing speaker system with two 12-in cone woofers (with staggered frequency responses) and 2¾-in rear-driven horn tweeter with rotatable acoustic lens (covers 120° area) and multi-port acoustic equalizer; frequency response 30-20,000 Hz; crossover at 1500 Hz; max. input 300 W; sensitivity 95 dB/W/m; 8-ohm impedance; may be bi-amped via separate terminals; solid walnut corner insets and walnut veneer finish with removable grille; four casters; 35¹³/₁₆" H × 18⅛" W × 15⁷/₁₆" D $950

SP-L700 Speaker System
Two-way floor-standing speaker system with two 10-in cone woofers (with staggered frequency responses) and multiport rear-driven horn tweeter with rotatable acoustic lens (covers 120° area); frequency response 30-25,000 Hz; crossover at 2000 Hz; max. input 200 W; sensitivity 93 dB/W/m; 8-ohm impedance; may be bi-amped via separate terminals; solid walnut corner insets and walnut veneer finish with removable grille; four casters; 32¹³/₁₆" H × 16¹⁵/₁₆" W × 14¹³/₁₆" D..... $680

SP-X9700 Speaker System
Four-way bass-reflex floor-standing speaker system with 17-in woofer, 8-in cone midrange, two horn tweeters, and three 2-in cone supertweeters; max. input 280 W; sensitivity 100 dB SPL/W/m; 8-ohm impedance; tweeter level control; simulated walnut grain finish with wood grille $390

SP-X8700 Speaker System
Four-way bass-reflex floor-standing speaker system with 17-in woofer, 6½-in midrange, 6¹/₁₆ × 2-in horn tweeter, and three 2-in cone supertweeters; sensitivity 98 dB SPL/W/m; max. input 220 W; 8-ohm impedance; tweeter level control; simulated walnut grain finish with wood grille $335

SP-X7700. Similar to SP-X8700 except has 16-in woofer; max. input 160 W; sensitivity 97 dB SPL/W/m..... $290

SP-X6700 Speaker System
Four-way bass-reflex speaker system with 13-in woofer, 4-in midrange, 6¹/₁₆ × 2-in horn tweeter, and two 2-in cone tweeters; max. input 160 W; sensitivity 95 dB SPL/W/m; 8-ohm impedance; tweeter level control; simulated walnut grain finish with wood grille..... $235

J33 Mini Speaker System
Two-way air-suspension mini bookshelf speaker system with 8¼-in seamed-sheet cone woofer and 1-in soft-dome tweeter; frequency response 45-20,000 Hz; crossover at 2000 Hz; max. input 60 W; sensitivity 90 dB/W/m (JIS); 6-ohm impedance; matched stereo pair; deep piano-black finish; 16⅛" H × 9⁷/₁₆" W × 7⅞" D.....$450 pr.

SPA-3100 Speaker System
Three-way acoustic-suspension bookshelf speaker system with 12-in cone woofer, 5½-in cone midrange, and 5 × 2-in oval piezoelectric tweeter; frequency response 35-22,000 Hz; crossovers at 800 and 2500 Hz; max. input 85 W; 8-ohm impedance; midrange control; circuit breaker; walnut-grain vinyl finish; 24¹³/₁₆" H × 15¹³/₁₆" W × 12" D..... $200

SPA-2100 Speaker System
Three-way acoustic-suspension bookshelf speaker system with 10-in cone woofer, 5½-in cone midrange, and 5 × 2-in oval piezoelectric tweeter; frequency response 40-22,000 Hz; crossovers at 800 and 2500 Hz; max. input 45 W; 8-ohm impedance; mid- and high-level controls; circuit breaker; walnut-grain vinyl finish; 22¹³/₁₆" H × 13¾" W × 11¼" D $150

J11 Mini Speaker System
Two-way paperback-book-sized speaker system with 4-in cone woofer, 4-in concave passive radiator, and 1-in soft-dome tweeter; frequency response 45-20,000 Hz; crossover at 2500 Hz; max. input 60 W; sensitivity 85 dB/W/m; 5-ohm impedance; silver-finished aluminum enclosure with precision-

punched metal grille; matched stereo pairs; 11 13/16" H × 4 13/16" W × 5 3/16" D.....$290 pr.

SPA-1100 Speaker System
Two-way acoustic-suspension bookshelf speaker system with 10-in cone woofer and 5 × 2-in oval piezoelectric tweeter; frequency response 45-22,000 Hz; crossover at 2500 Hz; max. input 30 W; circuit breaker; walnut-grain vinyl finish; 22 13/16" H × 13 3/16" W × 11 1/4" D.....$100

H.H. SCOTT

Pro-100B Speaker System
Three-way bi-directional air-suspension floor-standing monitor speaker system with 15-in woofer, two 4 1/2-in midrange drivers and two 1-in dome tweeters; crossovers at 700 and 3500 Hz; 4-ohm controlled impedance; frequency response 36-20,000 Hz; efficiency 94-dB SPL/W/m; input range 20-300 W; three-position tweeter and midrange level controls and top speaker adjust control; oiled walnut finish with two removable grilles; 29 1/4" H × 19" W × 14 1/2" D.....$550

197B Speaker System
Three-way air-suspension floor-standing speaker system with 15-in woofer, 4 1/2-in midrange, and 1-in dome tweeter; crossovers at 750 and 3500 Hz; controlled impedance 6-8 ohms; frequency response 38-20,000 Hz; efficiency 95-dB SPL/W/m; input range 15-150 W; three-position tweeter and midrange level controls; walnut vinyl with removable grille; 27 1/4" H × 16 7/8" W × 13 1/4" D.....$280
196W. Similar to 197B except with 12-in woofer; efficiency 96-dB SPL/W/m; crossovers at 800 and 3500 Hz; input range 15-120 W; oiled walnut finish; 25 1/2" H × 15" W × 10 5/8" D.....$280
196B. Similar to 196W except walnut vinyl finish $240

188T Speaker System
Three-way air-suspension floor-standing speaker system with 10-in woofer, 4 1/2-in midrange, and 1-in dome tweeter; crossovers at 900 and 3500 Hz; controlled impedance 6-8 ohms; frequency response 38-20,000 Hz; efficiency 95.4-dB SPL/W/m; input range 10-100 W; three-position tweeter and midrange level controls; walnut vinyl finish with removable grille; 33 3/8" H × 13 1/8" W × 10 1/2" D.....$230
186B. Similar to 188T except bookshelf system with 95-dB SPL/W/m efficiency; 24" H × 13 1/2" W × 10 1/2" D.....$200

166 Speaker System
Two-way air-suspension bookshelf speaker system with 6 1/2-in woofer and 1-in textile dome tweeter; frequency response 55-20,000 Hz ±4 dB; crossover at 2200 Hz; sensitivity 92.5 dB SPL/W/m; 8-ohm controlled impedance; power range 10-100 W; vinyl cabinet with removable knit grille; 13" H × 7 9/16" W × 6 1/2" D.....$120

177B Speaker System
Three-way air-suspension bookshelf speaker system with 8-in woofer, 4 1/2-in midrange, and 1 3/4-in tweeter; crossovers at 1200 and 3500 Hz; controlled impedance 6-8 ohms; frequency response 50-18,000 Hz; efficiency 94-dB SPL/W/m; input range 7-70 W; walnut vinyl finish with removable grille; 19" H × 11" W × 9 1/8" D.....$120

176B Speaker System
Two-way bass-reflex bookshelf speaker system with 6 1/2-in woofer and 1-in dome tweeter; crossover at 3500 Hz; controlled impedance 7-8 ohms; frequency response 55-20,000 Hz; efficiency 93.5-dB SPL/W/m; input range 5-60 W; walnut vinyl finish with removable grille; 18" H × 10 1/2" W × 8 1/2" D.....$90

SEAS by SONIKIT

Seas Disco Monster 47 Speaker
Four-way speaker system with two 12-in high-density paper woofers, two 6-in midrange units, two 4-in cone tweeters and horn-loaded super tweeter; frequency response 40-20,000 Hz ±3 dB; crossovers at 1000, 3000, and 8000 Hz; input range 10-200 W; sensitivity 100 dB SPL/W/m; 8-ohm impedance; 39 1/2" H × 19 1/2" W × 13 1/2" D.
Kit.....$354

Seas System 603 Speaker
Three-way speaker system with 13-in plastic-doped paper cone woofer, 4 1/2-in plastic-doped midrange and 1-in soft dome tweeter; frequency response 30-25,000 Hz ±3 dB; crossovers at 600 and 3000 Hz; input range 10-80 W; sensitivity 91 dB SPL/W/m; 8-ohm impedance; lacquered ash veneer finish; 26" H × 15 3/4" W × 12 1/2" D.
Kit.....$220
Seas System 403. Similar to Seas System 603 except 10-in woofer; frequency response 35-25,000 Hz ±3 dB; crossovers at 700 and 3000 Hz; input range 10-60 W; 22 1/2" H × 13" W × 11 3/4" D.
Kit.....$150

Seas System 253 Speaker
Three-way speaker system with 8-in high-density paper cone woofer, 4-in plastic-doped paper cone midrange, and 1-in soft-plastic dome tweeter; frequency response 35-25,000 Hz ±3 dB; crossovers at 800 and 4000 Hz; input range 10-60 W; sensitivity 89 dB SPL/W/m; 8-ohm impedance; lacquered ash veneer finish; 19 1/8" H × 11 1/8" W × 10 3/8" D. Kit.....$120

SHAHINIAN ACOUSTICS

Obelisk Speaker System
Two-way folded double-prism 48-in hybrid transmission line speaker system with 8-in asymmetrically-placed shallow-cone woofer with 28-oz ceramic magnet, 10-in rear-end mass-loaded-membrane, viscous-damped passive radiator, and four 1-in Mylar dome tweeters; frequency response 35-18,000 Hz +2/−3 dB; crossover at 2000 Hz; 6-ohm nominal impedance; 150 W average music program; Brazilian rosewood-veneer cabinet; 26 3/4" H × 14" W × 12" D.....$500
Mexican rosewood or teak cabinet.....$450
Walnut or oak cabinet.....$400

SHARP

The Tower I Speaker System
Two-way floor-standing speaker system with two 8-in woofers and 3-in tweeter; Tri-Bass Accelerator increases efficiency and low-end response; frequency response 30-20,000 Hz; crossover at 5000 Hz; 8-ohm impedance; simulated wood grain vinyl finish; 31 3/8" H × 11 7/8" W × 11 7/8" D.....$190 pr.

SP 4000A Speaker System
Two-way speaker system with two 8-in woofers and 3-in wide-band tweeter; has Tri-Bass Accelerator to increase efficiency and low-end response; frequency response 35-20,000 Hz; crossover at 5000 Hz; 8-ohm impedance; simulated wood grain vinyl finish; 24 7/8" H × 15" W × 9 1/2" D.....$110 pr.

SNELL ACOUSTICS

Type A Speaker System
Three-way floor-standing speaker system with 10-in fused woofer placed very close to floor and rear wall, 4-in fused midrange, and 1-in fused and ferrofluid-induced tweeter; frequency response 36-18,000 Hz ±1.5 dB (on axis and up to 25° off axis); crossovers at 275 and 2500 Hz; min. input 80 W/ch continuous; 4-ohm impedance; hand-rubbed walnut veneer cabinet; 46.5" H × 23.75" W × 13" D.....$1680 pr.
Oak veneer cabinet.....$1780 pr.

SONY

SSU-4000 Speaker System
Three-way bass-reflex floor-standing speaker system with 10-in cone woofer, 14-in rectangular passive bass radiator, 3 1/4-in balanced-drive cone midrange, and 1-in titanium dome tweeter; crossovers at 500 and 5500 Hz; 8-ohm impedance; frequency response 30 20,000 Hz; input range 20-150 W; midrange and tweeter level controls; hand-rubbed lacquer coating and hardwood veneer finish; 45 15/16" H × 13 1/2" W × 14 3/16" D.....$400

SS-5GX Speaker System
Two-way acoustic-suspension bookshelf speaker system with 5-in cone woofer and 1-in dome tweeter; frequency response 65-20,000 Hz +4/−8 dB; crossover at 1500 Hz; sensitivity 86 dB/W/m; max. input 100 W; 8-ohm nominal impedance; diecast magnesium driver frame; walnut-finish cabinet; 9 9/16" H × 6 1/4" W × 8 3/8" D.....$600 pr.

SSU-3000 Speaker System
Three-way bass-reflex floor-standing speaker system with 10-in cone woofer, 3 1/4-in balanced-drive midrange, and 1-in titanium dome tweeter; crossovers at 600 and 5500 Hz; 8-ohm impedance; frequency response 35-20,000 Hz; input range 20-150 W; midrange and tweeter level controls; hand-rubbed lacquer coating and hardwood veneer cabinet; 34 3/16" H × 13 1/3" W × 14 3/16" D.....$300

SSU-2070 Speaker System
Three-way acoustic-suspension bookshelf speaker system with 10-in woofer, 3 1/4-in midrange, and 2 1/4-in tweeter; sensitivity 92 dB/W/m; min. input 20 W/ch; midrange and tweeter level controls; walnut vinyl cabinet with detachable cloth grille; 25 7/8" H × 14 7/8" W × 14 1/2" D.....$200

SSU-1270 Speaker System
Three-way acoustic-suspension bookshelf speaker system with 10-in cone woofer, 3 1/4-in cone midrange, and 2-in cone tweeter; frequency response 40-20,000 Hz; crossovers at 2000 and 7000 Hz; input range 20-70 W; 8-ohm impedance; removable grille allowing vertical or horizontal speaker placement; 25 5/8" H × 14 1/2" W × 10 3/4" D.$200 pr.

SOUND RESEARCH

G-Series Speaker Systems
All G-Series woofers have 1 1/2-in aluminum high-temperature voice coils; direct-radiator-perforated dome tweeters; crossover networks are LC type combining high power level controls, non-polar electrolytic capacitors, and heavy-gauge chokes for extended high power usage; dispersion 105° horizontal, 60° vertical; cabinets are tanglewood birch wood grain vinyl finish with removable grilles.
1200-G. Three-way floor-standing 12-in bass-reflex speaker system with 5 1/2-in midrange; frequency response 25-20,000 Hz; crossovers at 1000 and 3000 Hz; (6 dB/octave); input range 75-125 W continuous program; sensitivity 91 dB SPL/W/m; 25 1/2" H × 15" W × 10 3/8" D.....$179
1000-G. Two-way floor-standing 10-in bass-reflex speaker system; frequency response 32-20,000 Hz; crossover at 2000 Hz; input range 50-75 continuous program; sensitivity 90 dB SPL/W/m; 21 3/4" H × 12 3/4" W × 10 1/4" D.....$139
800-G. Two-way 8-in bass-reflex speaker system; frequency response 38-20,000 Hz; crossover at 2000 Hz; input range 35-50 W continuous program; sensitivity 88 dB SPL/W/m; 17 1/4" H × 10 1/4" W × 8 3/4" D.....$109

K412 Speaker System
Three-way bass-reflex-rear vented speaker system with 12-in woofer with 1 1/2-in aluminum voice coil, 4 1/2-in closed-back midrange with 1-in aluminum voice coil, and two dual 3-in direct radiator tweeters in phased array; dispersion 120° horizontal, 155° vertical; frequency response 30-21,000 Hz; crossovers at 1200 and 6000 Hz; input range 80-135 W continuous program; sensitivity 95 dB SPL/W/m; 27" H × 15" W × 10 7/8" D.....$169

K310 Speaker System
Three-way bass-reflex rear-vented speaker system with 10-in woofer with 1 1/2-in aluminum voice coil, 4 1/2-in closed-back midrange with 1-in aluminum

voice coil, and 3-in direct-radiator tweeter; dispersion 110° horizontal, 90° vertical; frequency response 35-19,000 Hz; crossovers at 1200 and 6000 Hz; input range 50-80 W continuous program; sensitivity 93 dB SPL/W/m; 22½" H × 13" W × 10⅜" D $149

SPEAKERLAB

SD-1000 Speaker System
Three-way acoustic-suspension speaker system with active equalization, 12-in woofer-subwoofer, 6½-in midrange, and 1-in dome tweeter; crossovers at 160 and 2000 Hz (satellites); input range 15-100 W; sensitivity 94 dB SPL/W/m; 8-ohm impedance; system comes with 130 W subwoofer-drive amplifier with internal electronic crossover and equalizer; controls include tweeter switch, subwoofer crossover point, subwoofer bass contour, master volume, and subwoofer level; comes with 29-in stand for satellite speakers; 13" H × 7½" W × 7½" D (satellites); 16" H × 20" W × 20" D (subwoofer) .. $1190
Kit. Amplifier is assembled $990

SK Speaker System
Three-way horn-loaded speaker system with 15-in woofer, 17-in × 6-in (mouth) horn midrange, and 4-in × 8¾-in wave aperture™ tweeter; 8-ohm impedance; crossovers at 400 and 5000 Hz; efficiency 101 dB SPL/W/m; input range 10-150 W; midrange and tweeter level controls; oiled-walnut finish with brown grille cloth; 50½" H × 32¼" W × 28" D $650
SKa. Kit $445

Super 7 Speaker System
Three-way acoustic-suspension speaker system with 10-in and 12-in woofers, 14-in × 3¼-in horn midrange, and 4½-in × 1¼-in horn tweeter; crossovers at 1000 and 6000 Hz; 4-ohm impedance; efficiency 92-dB SPL/W/m; input range 15-150 W; midrange and tweeter level controls; oiled walnut finish with brown grille; 29 H × 18" W × 15" D .....
..... $520
Vinyl kit $341
Walnut kit $385

S7WA Speaker System
Three-way acoustic-suspension speaker system with 10-in and 12-in "Nestorovic" woofers (driven in parallel), 14¾-in × 4¾-in wave aperture™ midrange, and 4 × 8¾-in wave aperture™ tweeter; 4-ohm impedance; crossovers at 1000 and 6000 Hz; efficiency 92 dB SPL/W/m; input range 15-150 W; midrange and tweeter level controls; oiled-walnut finish with brown grille cloth; 36" H × 18" W × 13" D $500
Vinyl kit $309

S30 Speaker System
Three-way speaker system with 8-in and 10-in "Nestorovic" woofers in separate enclosures, 5-in cone midrange, and 1-in recessed dome tweeter; crossovers at 750 and 4000 Hz; 8-ohm impedance; frequency response 100-10,000 Hz ±1 dB; efficiency 91 dB SPL/W/m; input range 25-350 W; three-position woofer damping switch; midrange and tweeter level controls; oiled walnut finish with brown cloth grille; available only as kit; 31" H × 13" W × 10¾" D $330
Vinyl kit $285

S6WA Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 14¾-in × 4¾-in wave aperture™ midrange, and 4-in × 8¾-in wave aperture™ tweeter; 8-ohm impedance; crossovers at 1000 and 5000 Hz; efficiency 91-dB SPL/W/m; input range 15-200 W; midrange and tweeter level controls; oiled-walnut finish with brown grille cloth; 27¼" H × 15½" W × 11⅞" D..... $360
Vinyl kit $256

S4 Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 6-in cone midrange, and 4-in × 8¾-in wave aperture™ tweeter; 8 ohm impedance; crossovers at 600 and 5000 Hz; efficiency 91 dB SPL/W/m; input range 15-200 W; midrange and tweeter level controls; oiled-walnut finish with brown grille cloth; 27¼" H × 15½" W × 11⅞" D...
..... $310
Vinyl kit $199
S3. Same as S4 except 1-in dome tweeter $265
Vinyl kit $160

S2.5 Speaker System
Three-way acoustic-suspension speaker system with 10-in woofer, 6-in cone midrange, and 1-in dome tweeter; crossovers at 600 and 4000 Hz; 4-ohm impedance; efficiency 91 dB SPL/W/m; input range 10-50 W; 8-ohm impedance; midrange and tweeter level controls; oiled walnut finish with brown cloth grille; 26¼" H × 15¼" W × 10¾" D..... $215
Vinyl kit $139

S2 Speaker System
Two-way acoustic-suspension speaker system with 10-in woofer and 1-in recessed dome tweeter; 4-ohm impedance; crossover at 2000 Hz; efficiency 92 dB SPL/W/m; input range 10-100 W; 4-ohm impedance; tweeter level control; oiled-walnut finish with brown grille cloth; 26¼" H × 15¼" W × 10¾" D $159
Vinyl kit $97

S1 Speaker System
Two-way acoustic-suspension speaker system with 8-in woofer and 1-in dome tweeter; 8-ohm impedance; crossover at 2500 Hz; efficiency 92 dB SPL/W/m; input range 10-75 W; tweeter level control; oiled-walnut finish with brown grille cloth; 20¾" H × 11¾" W × 8¾" D..... $115
Vinyl kit $67

PSW1 Subwoofer
Acoustic-suspension subwoofer with two 10-in woofers; crossover at 150 Hz; input range 15-150 W; sensitivity 88 dB SPL/W/m; designed for use with Speakerlab S1 speakers; 18" H × 29" W × 15⅛" D $400
Vinyl kit $250

SYNERGISTICS

S-92 Speaker System
Sealed three-way floor-standing speaker system with two 12-in woofers in computer-designed bass commode, six 4½-in midrange drivers in linear array, and two flat-film, wide-band, bi-polar screen tweeters; crossovers at 140 and 2000 Hz; frequency response 24-20,000 Hz; efficiency 92 dB/W/m; max. input 600 W/ch continuous; midrange and tweeter level controls; external electronic crossover for bi-amp; designed to accommodate digital recording/playback; screens 62" H × 22" W × 4" D; commode 40" H × 14" W × 16" D..... $2000

S-73 Speaker System
Three-way speaker system with 12-in passive radiator, two 8-in high-compliance woofers, bi-polar samarium cobalt tweeter/midrange; frequency response 30-20,000 Hz ±3 dB; crossovers at 45 and 2000 Hz; input range 15-150 W continuous; 8-ohm nominal impedance; walnut veneer finish; 46½" H × 21¾" W × 15" D..... $575

S-63 Speaker System
Three-way speaker system with 12-in passive radiator, 8-in high-compliance woofer, four 2½-in extended range tweeters, and piezo electric super tweeter; frequency response 32-24,000 Hz ±4 dB; crossovers at 45 Hz acoustical, 2500 and 12,500 Hz electrical; input range 6-100 W continuous; 8-ohm nominal impedance; walnut veneer finish; 40" H × 21½" W × 15" D $400

S-53 Speaker System
Three-way speaker system with 10-in passive radiator, 8-in woofer, and four 2½-in extended range tweeters; frequency response 40-18,000 Hz ±4 dB; crossovers at 50 and 2500 Hz; input range 6-60 W continuous; 8-ohm nominal impedance; walnut veneer finish; 30" H × 14½" W × 12½" D..
..... $325

S-51C Speaker System
Four-way speaker system with 12-in passive radiator, 8-in high-compliance woofer, 2½-in extended range tweeter, and piezo electric super tweeter; frequency response 35-24,000 Hz ±4 dB; crossovers at 45, 2500, and 12,500 Hz; input range 6-80 W continuous; 8-ohm nominal impedance; walnut veneer finish; 25½" H × 14¼ W × 11½" D $325

S-46 Speaker System
Three-way speaker system with 12-in passive radiator, 8-in high-compliance woofer, and 2½-in extended range tweeter; frequency response 35-18,000 Hz ±4 dB; crossovers at 45 and 2500 Hz; input range 6-60 W continuous; 8-ohm nominal impedance; walnut vinyl finish; 25½" H × 14" W × 11½" D $250
S-33. Similar to S-46 except 10-in passive radiator; frequency response 40-18,000 Hz ±4 dB; input range 6-50 W $175
S-22. Similar to S-33 except 8-in passive radiator; frequency response 44-18,000 Hz ±4 dB; input range 6-40 W continuous; 23" H × 12" W × 9½" D
..... $150

TANNOY

Buckingham Speaker System
Three-way ducted port floor-standing speaker system with two 12-in bass drivers and integrated phase-coherent 8-in midrange/tweeter incorporating midrange driver with high-energy magnet system, and tweeter unit that consists of pressure unit, phase compensating throat, exponential horn assembly, and acoustic lens; frequency response 40-20,000 Hz ±3 dB; crossovers at 350 and 3500 Hz; 8-ohm impedance; input range 10-250 W; treble rolloff and treble energy controls; oiled walnut cabinet; 46" H × 24" W × 18" D..... $2250
Oiled rosewood cabinet..... $2500

Windsor Speaker System
Three-way ducted port speaker system with integrated phase coherent midrange/tweeter and separate 12-in bass driver; frequency response 40-20,000 Hz ±3 dB; crossovers at 350 and 3500 Hz; 8-ohm impedance; input range 10-150 W; treble rolloff and treble energy controls; oiled walnut cabinet; 33" H × 23" W × 16" D..... $1250
Oiled rosewood cabinet..... $1450

Arden Speaker System
Two-way phase coherent bass-reflex integrated speaker system with 15-in direct-radiating Girdacoustic-cone woofer integrated with high-frequency compression driver and crossover network; frequency response 45-20,000 Hz ±3 dB; crossover at 1000 Hz; 8-ohm impedance; input range 10-150 W; treble rolloff and treble energy controls; 39" H × 21" W × 14¼" D $777

Berkeley Speaker System
Two-way phase-coherent ducted port integrated speaker system with 15-in direct-radiating woofer and high frequency compression tweeter mounted on common axis; frequency response 50-20,000 Hz ±3 dB; crossover at 1000 Hz; 8-ohm impedance; input range 10-150 W; treble energy and treble rolloff controls; 33" H × 21" W × 12¼" D. $655

T225 Monitor Speaker System
Two-way passive radiator glass-top floor-standing speaker system with 10-in woofer and high-frequency compression tweeter mounted on common axis; frequency response 45-20,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; input range 10-150 W; treble rolloff and treble energy control; 28" H × 15" W × 12" D..... $495

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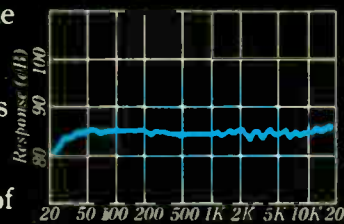

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**Recording Institute of America Survey.

CIRCLE NO. 8 ON READER SERVICE CARD

16 SPEAKER SYSTEMS

T185 Monitor Speaker System
Two-way passive radiator bookshelf speaker system with 10-in woofer and high-frequency compression tweeter on common axis; frequency response 45-20,000 Hz ±3 dB; crossover at 3500 Hz; 8-ohm impedance; input range 10-150 W; treble rolloff and treble energy controls; phase coherent integrated design; 26" H × 15" W × 11" D $425

T125 Monitor Speaker System
Two-way ducted port bookshelf speaker system with 10-in woofer and high-frequency compression driver; frequency response 50-20,000 Hz ±3 dB; crossover at 5000 Hz; 8-ohm impedance; input range 10-150 W; treble rolloff and treble energy controls; 24" H × 12" W × 10" D $228

TECHNICS

SB-X50 Speaker System
Linear phase three-way vented bookshelf speaker system with 10-in cone woofer, 3½-in cone midrange, and 1-in soft dome tweeter; crossovers at 1000 and 3000 Hz; 6-ohm impedance; frequency response 43-20,000 Hz; efficiency 93 dB/W/m; input range 50-120 W continuous (DIN); includes thermal-relay speaker protection device and tweeter and midrange attenuators; 24" H × 13⅜" W × 12⅞" D ..... $500 pr.

SB-L300 Speaker System
Three-way linear-phase vented bookshelf speaker system with 12-in cone woofer, 4-in cone midrange, and tapered-flare radial horn tweeter; 130 W music power, 90 W continuous; 8-ohm impedance; tweeter and midrange level controls; resettable thermal protectors; simulated wood finish with removable brown cloth grille $250

SB-L200 Speaker System
Three-way linear-phase tube-vented bookshelf speaker system with 10-in cone woofer, 4-in cone midrange, and tapered-flare radial horn tweeter; 100 W music power, 65 W continuous; 8-ohm impedance; tweeter level control; resettable thermal protectors; simulated wood-grain finish with removable brown cloth grille $200

SB-X30 Speaker System
Linear phase three-way vented bookshelf speaker system with 8-in woofer, 3½-in cone midrange, and 1-in soft dome tweeter; crossovers at 1200 and 3000 Hz; 6-ohm impedance; frequency response 44-20,000 Hz; efficiency 93 dB/W/m; input range 40-90 W continuous (DIN); includes thermal-relay speaker protection device and tweeter and midrange attenuators; 21⅛" H × 11" W × 10" D ..... $360 pr.

SB-L100 Speaker System
Two-way linear-phase tube-vented bookshelf speaker system with 10-in cone tweeter and tapered-flare radial horn tweeter; 75 W music power, 50 W continuous; 8-ohm impedance; resettable thermal protectors; simulated wood-grain finish with removable brown grille $150

SB-X10 Speaker System
Linear phase two-way vented bookshelf speaker system with 8-in cone woofer and 1-in soft dome tweeter; crossover at 2300 Hz; 6-ohm impedance; frequency response 46-20,000 Hz; efficiency 90.5 dB/W/m; input range 30-50 W continuous; includes thermal-relay speaker protection device; 18" H × 10⅜" W × 9⅜" D ..... $200 pr.

THIEL

Model 03 Speaker System
Three-way coherent-source speaker system with 10-in woofer, 5-in midrange, and 1-in soft dome tweeter; frequency response 27-20,000 Hz ±2 dB; crossovers at 500 and 4000 Hz; sensitivity 92 dB/W/m; input range 20-250 W; 8-ohm impedance; walnut, rosewood, teak, or oak cabinet finishes; 38" H × 12" W × 12" D ..... $875 pr.

Model 04 Speaker System
Two-way coherent-source floor-standing system with 8-in bass radiator, 6½-in woofer-midrange, and 1-in soft dome tweeter; frequency response 37-20,000 Hz ±2 dB; crossover at 4000 Hz; sensitivity 89 dB/W/m; input range 20-150 W; 8-ohm impedance; walnut, rosewood, teak, or oak cabinet finishes; 36" H × 10" W × 10" D ..... $500 pr.

Model 02 Speaker System
Two-way ported bookshelf speaker system with 6½-in woofer and 1-in cloth dome tweeter; frequency response 45-20,000 Hz ±3 dB; crossover at 2500 Hz; sensitivity 92 dB/W/m; input range 10-100 W; walnut, rosewood, teak, or oak cabinet finishes with double knit black polyester grille; 19" H × 11" W × 9.5" D ..... $250 pr.

THORENS

Sound Walls

HP-380 Flat Speaker System
Dipole radiator speaker system; three-way crossover network; thermidor-controlled constant 40-ohm impedance; frequency response 35-22,000 Hz; sensitivity 95 dB SPL/W/m; power rating 80 W DIN; max. input 200 W continuous; nominal impedance 4 ohms; 47¼" H × 31½" W × 3 1/16" D; base plate 19 11/16" square $1100

HP-360 Flat Speaker System
Power rating 80 W DIN; max. input 150 W continuous; nominal impedance 4 ohms; 31½" H × 22¼" W × 4" D; base plate 13¾" square $750

TRINITY AUDIO

Cathedral System Speakers
Speaker system has two main panels with an array of 12 drivers and two separate 12-in woofers in internally braced isothermal infinite baffles; frequency response 20-20,000 Hz; crossovers at 100 and 2600 Hz; input power range 50-250 W; 8-ohm nominal impedance; panels are finished in oak, natural or stain with black or white cloth grilles; oak formica, natural or stain woofer cases with charcoal foam grilles; panels: 72¾" H × 21¼" W × 5" D; woofers: 29" H × 15½" W × 14" D $850

Trinity Speaker System
Three-way floor-standing acoustical suspension speaker system with 12-in butyl rubber suspension woofer with 8.7-lb magnet assembly and high temperature copper voice coil, 5-in resin roll suspension midrange with 1.8-lb magnet assembly, 1-in soft dome tweeter with 1.5-lb magnet assembly; frequency response 40-20,000 Hz ±3 dB; crossovers at 600 and 5000 Hz; input power range 35-250 W; 8-ohm nominal impedance; walnut or rosewood finish with charcoal foam grille (not removable); 40.5" H × 15.5" W × 14" D $400

Model Two Speaker System
Two-way floor-standing speaker system with two 8-in butyl rubber woofers with 3.5-lb magnet assemblies and 1½-in voice coils; 1-in impregnated cloth open dome tweeter with 1-in copper voice coil and 0.75-lb magnet assembly; frequency response 40-20,000 Hz ±3 dB; crossover at 2600 Hz; input power range 15-180 W; 8-ohm impedance; walnut or rosewood finish with charcoal foam grille; woofer: 25.5" H × 15.5" W × 11" D; tweeter: 6" H × 10.5" W × 4" D $225

Monitor Speaker System
Two-way speaker system with two 5¼-in butyl rubber woofers with 1.6-lb magnet assemblies, 1-in long throw voice coils, and 1-in short horn loaded dome tweeter; frequency response 60-20,000 Hz ±3 dB; input power range 35-200 W; 8-ohm impedance; rosewood or walnut finish with charcoal foam grille; treble controls; 13.5" H × 14.5" W × 7.5" D $200

TRUSONIC

Monitor Seven Speaker System
Three-way floor-standing speaker system with two 12-in cast-frame linear-excursion woofers with Alnico magnets, 6-in cast-frame midrange housed in own sub-enclosure, and four direct-radiating solid-state high frequency drivers; frequency response 25-22,000 Hz ±4 dB; crossovers at 500 and 4000 Hz; sensitivity 94 dB/W/m; oak veneer cabinet with removable double-knit brown grille; 44" H × 24" W × 17" D $990

ULTRALINEAR

TM116 Speaker System
Three-way air-suspension system consists of bass module and satellites; has 10-in foam-edge woofer, 10-in foam-edge passive radiator, 4½-in air-suspension midrange, and 1-in ultra-wide dispersion soft dome tweeter; frequency response 29-23,000 Hz; crossovers at 300 and 2500 Hz; input range 10-70 W continuous; 8-ohm nominal impedance; walnut finish.

TMS 16. Satellites; 7¾" H × 5⅛" W × 4⅜" D $430

S-1. Bass module; 18¾" H × 5⅛" W × 4⅜" D $250

265 Speaker System
Four-way tuned-port floor-standing speaker system with 15-in foam-suspension woofer with dual-aperture tuned bass port, 6-in midrange in separate sealed enclosure, 1-in soft dome tweeter, and 1-in soft dome super tweeter; crossovers at 700, 4000, and 6000 Hz; 8-ohm nominal impedance; frequency response 25-22,500 Hz; input range 12-90 W continuous; front-mounted midrange and tweeter level controls; walnut-grain finish with black or brown knit grille; 31¼" H (including base) × 18" W × 16⅜" D. $420

265 W. Walnut hardwood finish $450

228 Speaker System
Three-way air-suspension speaker system with 12-in woofer, 6-in foam-suspension midrange in separate sealed enclosure, and 1-in soft dome tweeter; crossovers at 700 and 4500 Hz; 8-ohm impedance; frequency response 27-22,000 Hz; input range 10-80 W continuous; front-mounted midrange and tweeter level controls; walnut-grain finish with black/brown knit or herringbone acoustic-foam grille; 24⅜" H × 14½" W × 12" D $280

228 W. Walnut hardwood veneer $300

DW-10 Speaker System
Three-way speaker system with two 10-in high-compliance woofers, 6-in foam-suspension midrange, and two- ½-in wide dispersion tweeters; frequency response 29-19,000 Hz; crossovers at 600 and 3500 Hz; input range 8-75 W continuous; 4-ohm nominal impedance; walnut-grained finish; 34½" H × 14½" W × 12" D $250

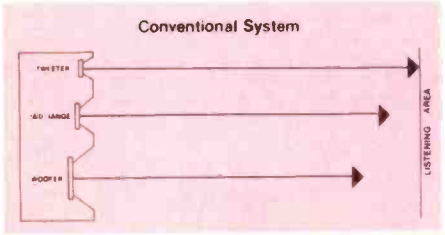
HPS 112 Speaker System
Three-way speaker system with 12-in high-compliance woofer and 2-in four-layer voice coil; frequency response 28-20,000 Hz; crossovers at 1800 and 3800 Hz; input range 7-100 W continuous; 8-ohm nominal impedance; walnut-grained finish; 24⅜" H × 14½" W × 12½" D $250

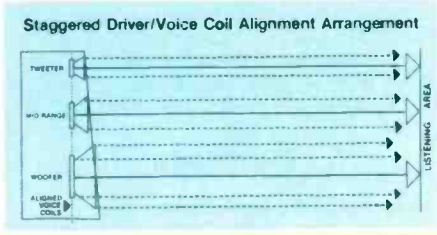
188 Speaker System
Three-way air-suspension speaker system with 12-in foam-edge woofer, 5-in self-enclosed midrange, and 1-in soft dome tweeter; crossovers at 1400 and 5000 Hz; 8-ohm impedance; frequency response 29-21,000 Hz; input range 10-60 W continuous; front-mount tweeter level control; walnut grain finish with black knit, transparent or brown acoustic-foam grille; 24⅜" H × 14½" W × 12" D $239

188 W. Walnut hardwood veneer $260

Onkyo's Total Solution to Speaker Phase Problems

Model F-5000 Phase Aligned Array™ Speaker System





By now, most audiophiles understand the importance of phase accuracy. During a live performance all the notes —or frequencies—produced by the musicians have specific phase *(time)* relationships to each other. And the many overtones—harmonics—within each note also have specific orders in time and strength. If these subtle musical phase relationships are confused or lost, so is true fidelity.

Loudspeakers, because they operate simultaneously in the separate worlds of electronics, mechanics and acoustics, have the worst problem with phase accuracy. And the most difficult to correct. In the attempt to correct for phase aberrations, speaker manufacturers have produced an odd assortment of peculiarly shaped enclosures and driver configurations. But these half-measures create as many problems as they solve.

Only Onkyo provides a *total* solution to the phase problem. The Onkyo Model F-5000 Phase Aligned Array™ is a three-way system whose *individual drivers are inherently phase accurate* because of their radically different—and technologically superior—construction.

The three planar (flat-diaphragm) drivers in the Model F-5000 were developed through laser interferometry and computer analysis of the phase-randomizing break-up modes in conventional driver cones. Onkyo's solutions for the F-5000 are embodied in the diaphragms of the 12″ bass and 4″ mid range drivers. They consist of essentially flat annularly ribbed polyurethene/felted paper patented laminations that are inert, stiff, and yet have exceptionally low mass.

The critical high-frequency reproducer (DDM — Direct Drive Membrane™) in the F-5000 employs an extremely thin and light polyamide membrane. The result is electrostatic-like clarity, definition and center imagery, without the typical electrostatic drive problems.

The computer-developed crossover network, designed for the required phase characteristics, employs only air-core inductors and Mylar® capacitors.

Onkyo's efforts and quality construction have resulted in smooth, wide frequency response, flat amplitude and precise linearity. Thus, the sound waves that come out of the system are almost mirror images of the sound waves that go into them.

The overall effect is one of clarity and transparency delivered from a unit that looks as good as it sounds.

Artistry in Sound

ONKYO®

CIRCLE NO. 58 ON READER SERVICE CARD

16 SPEAKER SYSTEMS

128 Speaker System
Three-way air-suspension speaker system with 12-in woofer, 4½-in self-enclosed sealed midrange, and 2½-in tweeter; crossovers at 1500 and 4000 Hz; 8-ohm nominal impedance; frequency response 30-19,000 Hz; input range 8-50 W continuous; walnut grain finish with black/brown acoustic foam or knit grille; 24⅜" H × 14½" W × 12" D..... $200

77C Speaker System
Three-way air-suspension speaker system with 10-in foam-edge woofer, 5-in self-enclosed sealed midrange, and 2½-in tweeter; crossovers at 1800 and 4000 Hz; 8-ohm nominal impedance; frequency response 32-18,000 Hz; input range 8-50 W continuous; front-mounted midrange level control; walnut grain finish with black transparent, brown knit, or black/brown herringbone acoustic-foam grille; 23⅛" H × 11¾" W × 9¼" D..... $180

DW-8 Speaker System
Three-way speaker system with two 8-in high-compliance woofers, 4½-in midrange, and 2½-in tweeter; frequency response 33-18,000 Hz; crossovers at 800 and 3000 Hz; 4-ohm nominal impedance; input range 6-50 W continuous; walnut grained finish; 30" H × 11¾" W × 9¼" D..... $179

100C Speaker System
Three-way bass-reflex speaker system with 12-in woofer, 4½-in sealed midrange, and 2½-in tweeter; crossovers at 1500 and 4000 Hz; 8-ohm nominal impedance; frequency response 32-18,000 Hz; input range 5-40 W continuous; walnut-grain finish with black/brown knit or acoustic-foam grille; 24⅜" H × 14½" W × 12" D..... $175

93 Speaker System
Three-way speaker system with 10-in high-compliance woofer, 4½-in midrange, and 2½-in tweeter; frequency response 34-18,000 Hz; crossovers at 2000 and 4500 Hz; input range 5-40 W continuous; 8-ohm nominal impedance; walnut-grained finish; 23⅛" H × 11¾" W × 9¼" D..... $150

66A Speaker System
Three-way air-suspension bookshelf speaker system with 8-in foam-edge woofer, 4½-in sealed midrange, and 2½-in tweeter; crossovers at 2000 and 4500 Hz; 8-ohm nominal impedance; frequency response 38-18,000 Hz; input range 5-40 W continuous; simulated walnut grain finish with black/brown knit or acoustic foam grille; 23⅛" H × 11¾" W × 9¼" D..... $140

UNITRONEX

Impact Model 8 Speaker System
Three-way floor-standing balanced ducted-port speaker system with 12-in woofer, 7-in midrange, 2 × 5-in horn tweeter; frequency response 30-23,000 Hz; crossovers at 300 and 7000 Hz; input range 10-150 W continuous power; sensitivity 105 dB SPL/W/m; 8-ohm nominal impedance; ±3 dB tweeter and midrange level controls; oak veneer finish with chocolate-brown double-knit polyester stretched over removable wood frame; 26.8" H × 17.3" W × 12.6" D..... $399

Impact Model 6 Speaker System
Three-way floor-standing balanced ducted-port speaker system with 10-in woofer, 5-in midrange, and 2.5-in tonsil horn tweeter; frequency response 45-22,000 Hz; crossovers at 800 and 8000 Hz; sensitivity 104 dB SPL/W/m; input range 10-100 W continuous power; ±3 dB tweeter and midrange level controls; oak veneer finish with chocolate-brown double-knit polyester over removable wood frames; 25.2" H × 16.6" W × 11.2" D..... $299

Impact Model 4 Speaker System
Two-way balanced ducted-port speaker system with 10-in woofer/midrange and 2.5-in tonsil horn tweeter; frequency response 50-20,000 Hz; crossover at 2500 Hz; input range 5-70 W continuous power; sensitivity 97 dB SPL/W/m; 8-ohm nominal impedance; ±3 dB tweeter level control; oak veneer finish with chocolate-brown double-knit polyester stretched over removable wood frame; 22.7" H × 14" W × 9.8" D..... $199

Impact Model 2 Speaker System
Two-way balanced ducted-port speaker system with 8-in woofer/midrange and 2.5-in tonsil horn tweeter; frequency response 60-20,000 Hz; crossover at 3500 Hz; input range 5-50 W continuous power; sensitivity 98 dB SPL/W/m; oak veneer finish with chocolate-brown double-knit polyester; 21.3" H × 11.6" W × 9.1" D..... $149

VISONIK

Sub-1 Speaker
Floor-standing subwoofer with 12-in woofer and matrix crossover at 160 Hz; frequency response 16-200 Hz; 6-ohm impedance; input range 50-300 W/ch continuous; walnut finish with brown knit grille; designed for use with D-502 or D-602 speakers; 23¾" H × 17" W × 13¾" D..... $400

Euro 7 Speaker System
Three-way bookshelf speaker system with two 7-in woofers, 1½-in midrange, and 1-in soft dome tweeter; crossovers at 550 and 4000 Hz; 4-ohm impedance; power response 45-18,000 Hz ±2 dB; input range 20-70 W/ch; walnut finish with brown knit grille; 23" H × 13" W × 9⁹⁄₁₆" D..... $300

9000 Speaker System
Three-way speaker system with 7-in woofer, 1½-in midrange, and ¾-in tweeter; frequency response 35-25,000 Hz +4/−8 dB; crossovers at 900 and

4500 Hz; input range 20-120 W/ch; impedance 4 ohms; nextel grey or simulated walnut finish; 14³/₈" H × 9¼" W × 9¾" D..... $300

D-803 Speaker System
Compact three-way speaker system with 6¾-in woofer, 1½-in dome midrange, and ¾-in dome tweeter; frequency response 30-30,000 Hz; crossovers at 700 and 4600 Hz; recommended amp power 25-90 W; impedance 4-8 ohms; grey cabinet with black grille; 12⅞" H × 7⅞" W × 7⅞" D . $250
D-803WN. Same as D-803 but walnut cabinet..... ..... $280

D-702BL Speaker System
Two-way compact speaker system with 6¾-in woofer and ¾-in dome tweeter; frequency response 30-25,000 Hz; impedance 4-8 ohms; max. input 90 W; LED overload indicator; grey cabinet with black grille $210
D-702WN. Same as D-702BL except walnut finish with brown knit grille..... $230

7000 Speaker System
Two-way speaker system with 5-in woofer and 1-in tweeter; frequency response 40-25,000 Hz; crossover at 2500 Hz; input range 15-70 W; 4-ohm impedance; nextel grey or simulated walnut finish; 9⅞" H × 6¼" W × 6⅜" D $185

Euro 5 Speaker System
Two-way air-suspension bookshelf speaker system with 8-in woofer and 1-in sealed soft-dome tweeter; crossover at 1300 Hz; 4-ohm impedance; frequency response 30-25,000 Hz +4/−8 dB (DIN); input range 10-60 W/ch; walnut finish with brown knit grille; 19" H × 11" W × 9½" D $170

D-602 Speaker System
Compact two-way speaker system with 5⅛-in woofer and 1-in dome tweeter; frequency response 38-25,000 Hz; crossover at 1600 Hz; recommended amp power 18-80 W; impedance 4-8 ohms; LED overload indicator; grey cabinet with black grille; 9⅛" H × 5¾" W × 5¾" D $160
D-602WN. Same as D-602 but walnut cabinet with brown metal grille..... $170

6000 Speaker System
Two-way speaker system with 4-in woofer and 1-in tweeter; frequency response 45-25,000 Hz; crossover at 2500 Hz; input range 10-60 W; 4-ohm impedance; nextel grey or brown finish; 7¾" H × 5" W × 5¼" D..... ..... $150
Sub-2. Subwoofer designed for use with 6000; 10-in woofer extends total system frequency response down to 25 Hz; adds 150-Hz crossover; input 30-120 W; 19" H × 14¼" W × 12¼" D... $300

D-5000 Speaker System
Compact two-way speaker system with 4-in woofer and 1-in soft dome tweeter; frequency response 50-25,000 Hz; crossover at 2500 Hz; recommended amp power 12-50 W; impedance 4-8 ohms; nextrel-finished, wedge metal cabinet; 6¾" H × 4⅓" W × 4⅓" D..... $115
Brackets for car mount ..... $20 pr.

WHARFEDALE

E-90 Speaker System
Three-way computer-optimized bass-reflex floor-standing speaker system with two low-mass 10-in woofers, two 4-in high-flux midrange drivers, and 1-in compression-drive tweeter; frequency response 43-18,000 Hz ±3 dB; crossovers at 1000 and 5000 Hz; sensitivity 95 dB/W/m; 8-ohm impedance; max. input 280 W; five-position midrange and tweeter level controls; supplied with casters; walnut-grain-finish cabinet with open-mesh black grille $850

E70 Speaker System
Three-way computer-optimized bass-reflex floor-standing speaker system with 10-in woofer, two 4-in midrange drivers, and 1-in horn tweeter; crossovers at 800 and 7000 Hz (6 and 12 dB/octave network); 8-ohm impedance; frequency response 50-18,000 Hz ±3 dB; efficiency 94-dB SPL/W/m; input range 13-100 W; high- and low-frequency contour controls; hand-finished walnut veneer with black cloth grille; 32" H × 13½" W × 14" D $525

E50 Speaker System
Three-way computer-optimized bass-reflex speaker system with 10-in woofer, 4-in cone midrange, and 1-in compression-drive horn tweeter; crossovers at 800 and 7000 Hz; 8-ohm impedance; frequency response 55-18,000 Hz ±3 dB; efficiency 94-dB SPL/W/m; input range 3-70 W continuous; high- and low-frequency contour controls; walnut finish with semi-opaque grille; 26" H × 13½" W × 13½" D..... $430

SP120 "Dovedale" Speaker System
Three-way computer-optimized bass-reflex speaker system with two 7-in woofers, 4-in multi-layered-cone midrange, and isotropic barium ferrite isodynamic super tweeter; frequency response 35-26,000 Hz ±3 dB; crossovers at 800 and 5000 Hz; 6-ohm impedance; efficiency 88-dB SPL/W/m; input range 10-60 W; hand finished walnut veneer; 25" H × 15½" W × 12½" D..... $385

E-30 Speaker System
Two-way computer-optimized bass-reflex speaker system with two 6.7-in bass/midrange drivers and horn tweeter; frequency response 63-18,000 Hz ±3 dB; sensitivity 94 dB SPL/W/m; 100 W peak music power; 8-ohm impedance; tweeter level control; hand-finished walnut vaneer matched pairs; 22.8" H × 13.2" W × 10.3" D..... $300

SP100 "Teesdale" Speaker System
Three-way computer-optimized bass-reflex speaker system with 8-in woofer; 4-in midrange, and isodynamic tweeter; crossovers at 800 and 5000 Hz;

6-ohm impedance; frequency response 40-26,000 Hz ±3 dB; efficiency 87-dB SPL/W/m; max. input 40 W continuous, 80 W peak; walnut veneer cabinet; 23" H × 13⅓" W × 11" D..... $285

L-300 Speaker System
Three-way laser-beam-holography computer-optimized speaker system with 10-in woofer, 4-in midrange, and isotweeter; frequency response 38-26,000 Hz ±3 dB; sensitivity 88 dB SPL/W/M; peak program-handling 90 W; 6-ohm impedance; hand-finished walnut veneer matched-pair cabinets $275

L-200. Similar to L-300 except uses 6.7-in woofer; frequency response 45-25,000 Hz ±3 dB; sensitivity 86.5 dB SPL/W/m; peak program-handling 60 W $250

XP80 "Glendale" Speaker System
Three-way computer/holograph acoustic-suspension speaker system with 10-in woofer, 4-in midrange, and 0.75-in dome tweeter; frequency response 50-20,000 Hz; 6-ohm impedance; efficiency 86-dB SPL/W/m; input range 10-50 W; hand-rubbed walnut or teak finish; 22⅛" H × 12" W × 10⅜" D..... $210 pr.

WINDSOR LABS

6000V Speaker System
Four-way vented floor-standing speaker system with 15-in low-frequency radiator, 8-in midrange/woofer, 2½-in tweeter, and 2½-in super tweeter; crossovers at 58, 1500, and 8000 Hz; 8-ohm nominal impedance; frequency response 35-20,000 Hz; input range 10-200 W; 30" H × 19½" W × 10¾" D $275

5000V Speaker System
Three-way vented floor-standing speaker system with 12-in low frequency radiator, 8-in midrange/woofer, and 2½-in tweeter; crossovers at 67 and 1500 Hz; 8-ohm impedance; frequency response 40-20,000 Hz; input range 10-200 W; 29" H × 18" W × 10¾" D..... $210

4000S Speaker System
Three-way acoustic-suspension speaker system with 12-in woofer, 4-in midrange, and 2½-in tweeter; crossovers at 700 and 3000 Hz; 8-ohm impedance; frequency response 45-20,000 Hz; input range 10-200 W; 26" H × 15¾" W × 11⅛" D..... $150

3000S Speaker System
Two-way acoustic-suspension bookshelf speaker system with 10-in woofer and 2½-in tweeter; crossover at 2500 Hz; 8-ohm impedance; frequency response 50-20,000 Hz; input range 10-150 W; 24½" H × 14" W × 8⅞" D $105

YAMAHA

NS-1000 Speaker System
Three-way speaker system with 11.8-in woofer, 3.46-in mid-range, and 1.18-in tweeter; drivers are vapor-deposition beryllium-dome type; frequency response 40-20,000 Hz; crossovers at 500 and 6000 Hz; 8-ohm impedance; max. input 100 W; 90-dB SPL/W/m; midrange and tweeter level controls; ebony enclosure with polyurethane finish; sold in mirror-image pairs only; 28" H × 15½" W × 14½" D $750

NS-1000 M. Same as NS-1000 but with semi-gloss black finish and detachable black grille; 26½" H × 14¾" W × 12¾" D..... $560

NS-890 Speaker System
Four-way sealed floor-standing speaker system with 12-in cone woofer, 4¾-in cone mid-bass driver, 2-in beryllium dome mid-high driver, and 1¼-in beryllium dome tweeter; frequency response 40-20,000 Hz; crossovers at 600, 2000, and 6000 Hz; sensitivity 92 dB SPL/W/m; input range 40-80 W; 8-ohm impedance; continuously variable mid-high and tweeter level controls; oak finish cabinet with removable black fabric grille; 19¼" H × 14¾" W × 12½" D..... $530

NS-690II Speaker System
Three-way speaker system with 12-in woofer, 3-in mid-range, and 1¼-in tweeter; frequency response 35-20,000 Hz; crossovers at 800 and 6000 Hz; 8-ohm impedance; max. input 80 W; midrange and tweeter level controls; may be multiamped via separate driver terminals; walnut finish; 24¾" H × 13¾" W × 11½" D..... $350

NS-590 Speaker System
Three-way sealed speaker system with 12-in cone woofer, 4¾-in cone midrange, and 1⅜-in beryllium dome tweeter; frequency response 40-20,000 Hz; crossovers at 700 and 6000 Hz; sensitivity 91 dB/W/m; input range 35-70 W; 8-ohm impedance; continuously variable midrange and tweeter level controls; polished oak finish cabinet with black cloth grille; 26⅜" H × 14⅜" W × 12⅞" D . $320

ZENITH

MC4000 Allegro Speaker System
Three-way tuned-port floor-standing speaker system with 12-in cone woofer with 2-in phenolic voice coil, 5-in cone midrange in own sub-enclosure, and 3.5-in horn tweeter with phasing plug; frequency response 35-20,000 Hz; crossovers at 600 and 2000 Hz; sensitivity 91.5 dB/W/m; max. input 100 W continuous; 8-ohm nominal impedance; midrange and treble level controls; walnut wood veneer cabinet; 28" H × 17" W × 13.18" D $255

MC3000 Allegro Speaker System
Two-way tuner-port speaker system with 10-in cone woofer and 3.5-in horn tweeter; frequency response 40-20,000 Hz; crossovers at 2000 Hz; sensitivity 90 dB/W/m; max. input 60 W continuous; 8-ohm nominal impedance; treble level control; 24.75" H × 15.62" W × 10.68" D..... $310 pr.

DIRECTORY OF MANUFACTURERS

(cont'd from p. 10)

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M & K, MILLER & KREISEL SOUND CORP.
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NAD, New Acoustic Dimension
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NAGATRON, Nagatronics Corporation
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NAIM, c/o Audiophile Systems
57510 Rymark Court, Indianapolis, IN 46250

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10 Keystone Pl., Paramus, NJ 07652

ORBAN ASSOCIATES, INC.
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ORTOFON, Tannoy-Ortofon, Inc.
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PLASMATRONICS, INC.
2460 Alamo SE, Suite 101, Albuquerque, NM 87106

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907 Fox Plaza, San Francisco, CA 94102

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PS AUDIO
1563 W. Betteravia, Santa Maria, CA 93454

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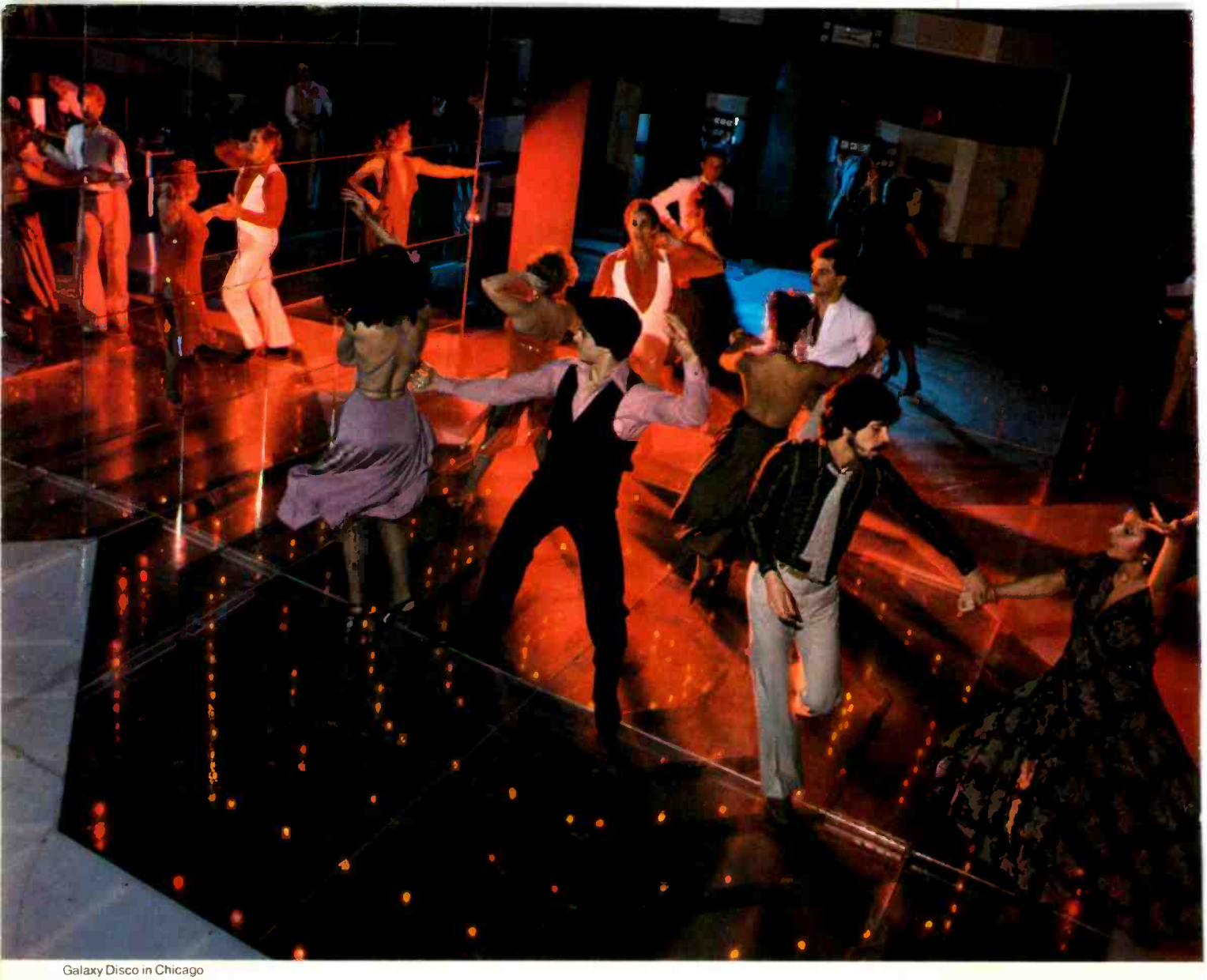

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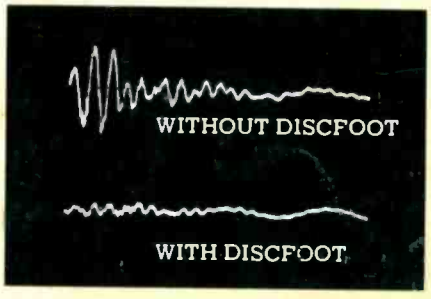
- Works in combination with existing feet for dramatic reduction of feedback.
- Isolates better than original or "replacement" feet.

Home environments can "upset" a turntable by feeding back both speaker and footfall vibrations. Acoustic isolation of a turntable involves the complex variables of turntable weight, room/floor conditions and audio system placement. The Discwasher DiscFoot has been specifically designed to successfully isolate most turntables in the home environment.

The "Material" Solution

The major components of the Discwasher DiscFoot System are new, "totally engineered" chemical complexes that behave radically different than other plastic, rubber or spring systems. These proprietary compounds are durable and precise in behavior, although difficult and expensive to synthesize. Laboratory and real-world tests justify the use of these unusual materials in the DiscFoot System.



The Telling Test

The oscilloscope photo shows the output of two identical audio systems on the same shelf with their styli contacting the platters. The shelf is being struck by a rubber mallet. The top trace shows a turntable with absorptive "replacement" feet. The lower trace shows a DiscFoot System operating in conjunction with the existing turntable feet. Note the dramatic (tenfold) improvement in shock and feedback isolation.

The DiscFoot System contains four isolation feet, four platform caps, four furniture-protecting sheets and four special damping pads (to adapt DiscFoot units to certain turntables.) Additional single DiscFoot units are available for turntables weighing over 22 lbs. The system costs $22.

DiscFoot™

Discwasher DiscFoot can be found at audio dealers interested in preserving your music.

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