

EQUALIZERS Stereo Review

14276

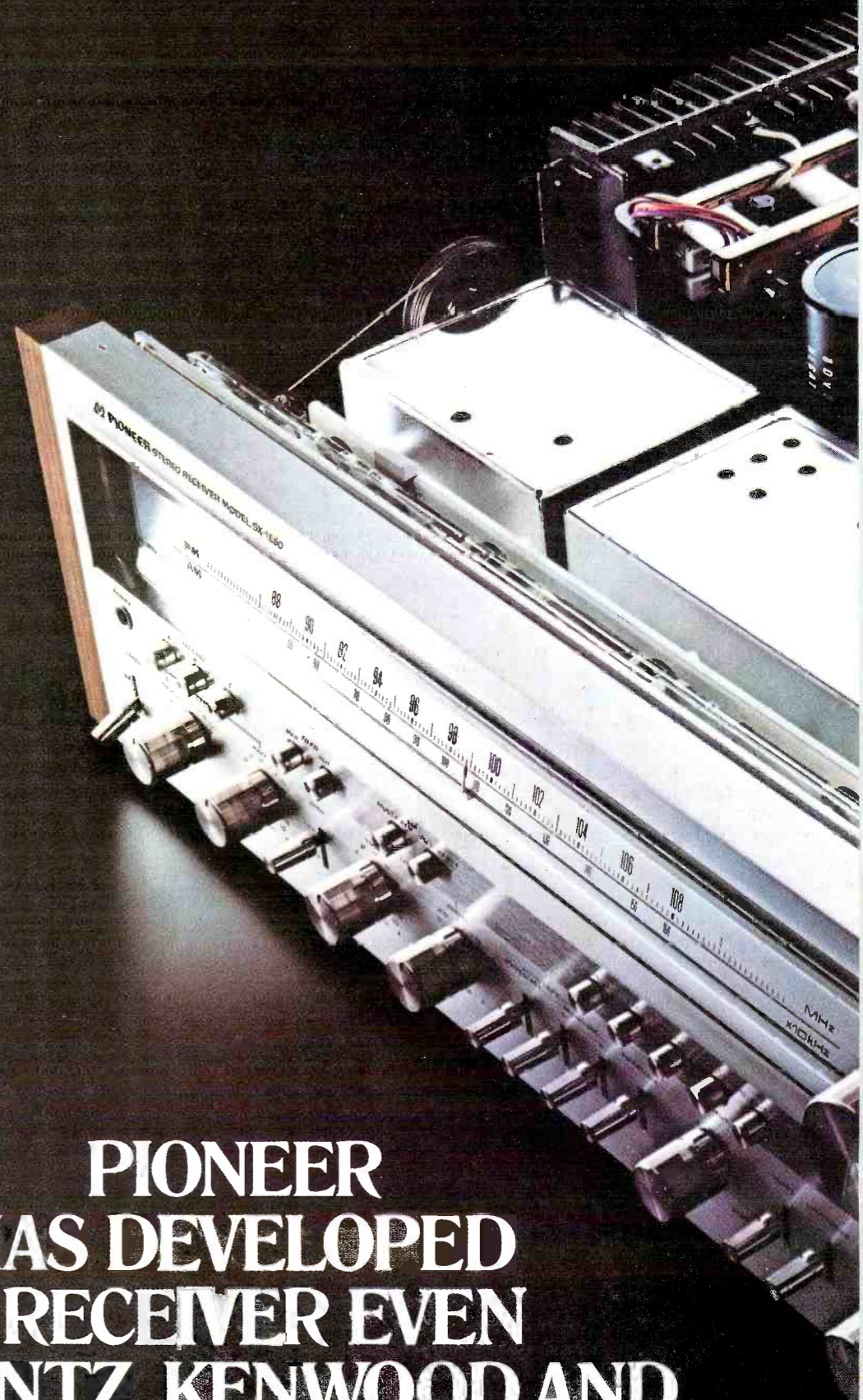
MAY 1976 • ONE DOLLAR

AUDIO EQUALIZERS: HOW TO TUNE YOUR SYSTEM
GARY BURTON * TREEMONISHA * PHOEBE SNOW



262912 SIT B0268890 741J N0V77
E GLENN SMITH
RT 5
BOX 268-C
PHENIX CITY AL 36867

**PIONEER
HAS DEVELOPED
A RECEIVER EVEN
MARANTZ, KENWOOD AND
SANSUI WILL HAVE TO
ADMIT IS THE BEST.**



One look at the new Pioneer SX-1250, and even the most partisan engineers at Marantz, Kenwood, Sansui or any other receiver company will have to face the facts.

There isn't another stereo receiver in the world today that comes close to it. And there isn't likely to be one for some time to come.

In effect, these makers of high-performance receivers have already conceded the superiority of the SX-1250. Just by publishing the specifications of their own top models.

As the chart shows, when our best is compared with their best there's no comparison.

160 WATTS PER CHANNEL: AT LEAST 28% MORE POWERFUL THAN THE REST.

In accordance with Federal Trade Commission regulations, the power output of the SX-1250 is rated at 160 watts per channel minimum RMS at 8 ohms from 20 to 20,000 Hz, with no more than 0.1% total harmonic distortion.

That's 35 to 50 watts better than the cream of the competition. Which isn't just something to impress your friends with. Unlike the usual 5-watt and 10-watt "improvements," a difference of 35 watts or more is clearly audible.

And, for critical listening, no amount of power is too much. You need all you can buy.

To maintain this huge power output, the SX-1250 has a power supply section unlike any other receiver's.

A large toroidal-core transformer with split windings and four giant 22,000-microfarad electrolytic capacitors supply the left and right channels independently. That means each channel can deliver maximum undistorted power at the bass frequencies. Without robbing the other channel.

When you switch on the SX-1250, this power supply can generate an inrush current of as much as 200 amperes. Unlike other high-power receivers, the SX-1250 is equipped with a power relay controlled by a sophisticated protection circuit, so that its transistors and your speakers are fully guarded from this onslaught.

PREAMP SECTION CAN'T BE OVERLOADED.

Perhaps the most remarkable feature of the preamplifier circuit in the SX-1250 is the unheard-of phono overload level of half a volt (500 mV).

That means there's no magnetic cartridge in the world that can drive the preamp to the point where it sounds strained or hard. And that's the downfall of more than a few expensive units.

The equalization for the RIAA recording curve is accurate within ± 0.2 dB, a figure unsurpassed by the costliest separate preamplifiers.

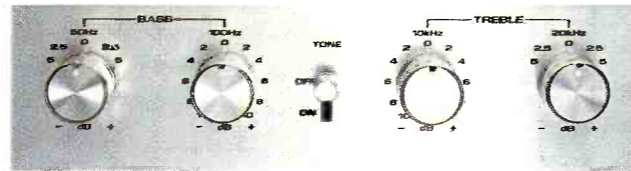
THE CLEANEST FM RECEPTION THERE IS.

Turn the tuning knob of the SX-1250, and you'll know at once that the AM/FM tuner section is special. The tuning mechanism feels astonishingly smooth, precise and solid.

The FM front end has extremely high sensitivity, but that alone would be no great achievement. Sensitivity means very little unless it's accompanied by highly effective rejection of spurious signals.

The SX-1250 is capable of receiving weak FM stations cleanly because its front end meets both requirements without the slightest compromise. Thanks, among other things, to three dual-gate MOSFET's and a five-gang variable capacitor.

On FM stereo, the multiplex design usually has the greatest effect on sound quality. The SX-1250 achieves



Twin tone-control system with step-type settings, permitting 3025 possible combinations.

its tremendous channel separation (50 dB at 1000 Hz) and extremely low distortion with the latest phase-locked-loop circuitry. Not the standard IC chip.

Overall FM distortion, mono or stereo, doesn't exceed 0.3% at any frequency below 6000 Hz. Other receiver makers don't even like to talk about that.

AND TWO MORE RECEIVERS NOT FAR BEHIND.

Just because the Pioneer SX-1250 is in a class by itself, it would be normal to assume that in the class just below it the pecking order remains the same.

Not so.

Simultaneously with the SX-1250, we're introducing the SX-1050 and the SX-950. They're rated at 120 and 85 watts, respectively, per channel (under the same conditions as the SX-1250) and their design is very similar.

In the case of the SX-1050, you have to take off the cover to distinguish it from its bigger brother.

So you have to come to Pioneer not only for the world's best.

You also have to come to us for the next best.

U.S. Pioneer Electronics Corp., 75 Oxford Drive, Moonachie, New Jersey 07074



Click-stop volume control calibrated in decibels, with left/right tracking within 0.5 dB.



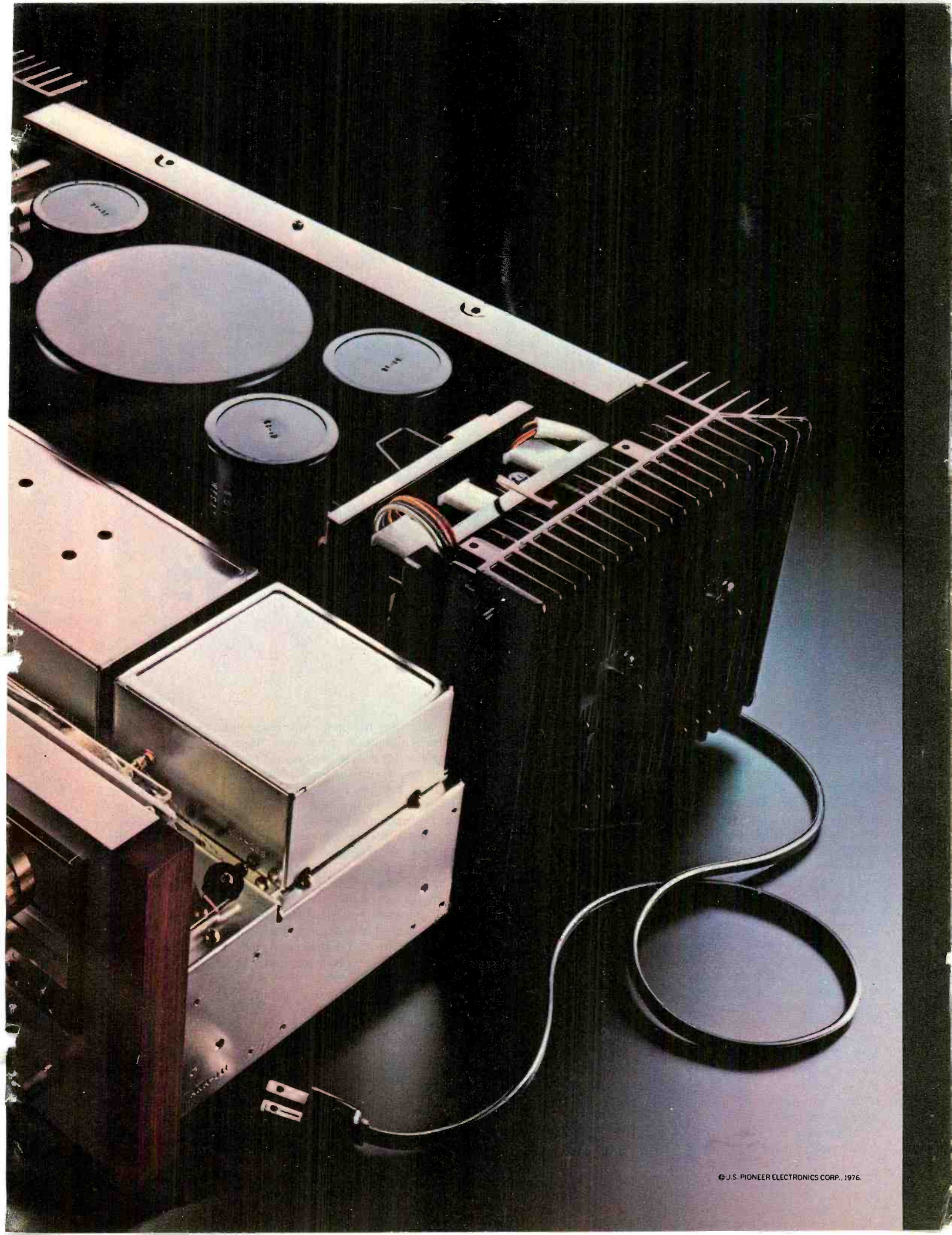
PIONEER
Anyone can hear the difference.

CIRCLE NO. 1 ON READER SERVICE CARD

For informational purposes only, the SX-1250 is priced under \$900. The actual resale price will be set by the individual Pioneer dealer at his option.

A COMPARISON THAT'S NO COMPARISON.

	PIONEER SX-1250	MARANTZ 2325	KENWOOD KR-9400	SANSUI 9090
POWER, MIN. RMS. 20 TO 20,000 HZ	160W+160W	125W+125W	120W+120W	110W+110W
TOTAL HARMONIC DISTORTION	0.1%	0.15%	0.1%	0.2%
PHONO OVERLOAD LEVEL	500 mV	100 mV	210 mV	200 mV
INPUT: PHONO/AUX/MIC	2/1/2	1/1/no	2/1/mixing	1/1/mixing
TAPE MON/ DUPL	2/yes	2/yes	2/yes	2/yes
TONE	Twin Tone	Bass-Mid-Treble	Bass-Mid-Treble	Bass-Mid-Treble
TONE DEFEAT	Yes	Yes	Yes	Yes
SPEAKERS	A.B.C	A.B	A.B.C	A.B.C
FM SENSITIVITY (IHF '58)	1.5 μ V	1.8 μ V	1.7 μ V	1.7 μ V
SELECTIVITY	90 dB	80 dB	80 dB	85 dB
CAPTURE RATIO	1.0 dB	1.25 dB	1.3 dB	1.5 dB





Two dates that bring you tomorrow's speakers today.

In the field of acoustics, where just about everything has been done, B-I-C VENTURI™ speaker systems have been awarded *two* fundamental patents within a six month period. This supports our contention that these speakers are truly unique, and will remain so by virtue of patent protection.

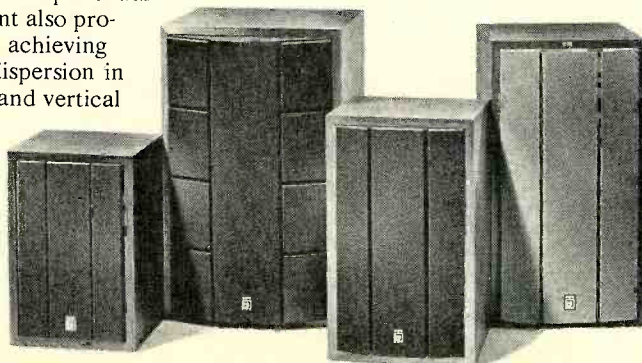
On July 1, 1975, Patent #3,892,288 was granted, covering the application of the "venturi" principle to acoustics for the first time. The result is a new method of producing bass response from modest sized speaker systems that otherwise would be incapable of yielding such extended, clean and efficient bass. As you may have noticed, this has already changed the direction of many of our competitors' designs.

On January 6, 1976, Patent #3,930,561 was awarded for the BICONEX™ horn. This transducer combines the distortion-free virtues of a conical flare rate with the unexcelled efficiency of an exponential flare rate. This patent also provides a new way of achieving wide-angle sound dispersion in *both* the horizontal and vertical planes, making speaker positioning and placement in the room less critical. You may have also noticed a proliferation of *conventional* horns

now beginning to appear in some competitors' designs.

The combination of these two important achievements in a single series of speaker systems results in performance capabilities you would not expect from their reasonable size and attractive pricing. Furthermore, it provides significant improvement in the overall performance of a hi-fidelity system. For example, high sensitivity with high power handling yields heretofore unachievable musical dynamic range. Transient response is substantially improved because *all* the sound is reproduced. Amplifiers behave electrically as though they possess several times their rated power; amplifier "clipping" is remarkably reduced.

Here, at last, is a line of speaker systems to fulfill the musical demands of today...and tomorrow. Our 20-page "Consumer's Guide to Loudspeaker Performance" tells you what you should know about judging and using speakers. For your free copy, write to: B-I-C VENTURI, Westbury, N.Y. 11590. Or better yet, ask your franchised B-I-C VENTURI dealer. He'll be pleased to give you a demonstration at the same time.



B-I-C VENTURI™
S P E A K E R S Y S T E M S

Canadian inquiries to C.W. Pointon, Ontario.
B-I-C, B-I-C VENTURI and BICONEX are trademarks of
British Industries Company, Division of Avnet, Inc.

©1976

CIRCLE NO. 12 ON READER SERVICE CARD

FORMERLY HI FI/STEREO REVIEW

Stereo Review®

MAY 1976 • VOLUME 36 • NUMBER 5

The Equipment

NEW PRODUCTS	
<i>A roundup of the latest in high-fidelity equipment</i>	14
AUDIO QUESTIONS AND ANSWERS	
<i>Advice on readers' technical problems</i>	LARRY KLEIN 20
AUDIO NEWS	
<i>Views and comment on recent developments</i>	LARRY KLEIN 22
AUDIO BASICS	
<i>Glossary of Technical Terms—27</i>	RALPH HODGES 25
TAPE HORIZONS	
<i>Recorder Fundamentals—An Overview</i>	CRAIG STARK 27
EQUIPMENT TEST REPORTS	
<i>Hirsch-Houck Laboratory test results on the Epicure Model Four preamplifier, BGW 500D stereo power amplifier, Genesis I speaker system, and the Heath Modulus audio components</i>	JULIAN D. HIRSCH 29
AUDIO EQUALIZERS	
<i>Frequency-response adjustments can enhance musical reality</i>	DANIEL SHANEFIELD 64

The Music

THE MUSIC OF THEIR MAJESTIES	
<i>A panorama from King David to the Duke of Windsor</i>	ARAM BAKSHIAN, JR. 54
PHOEBE SNOW	
<i>"... now I sing funny blues—the dirtiest ones I can find!"</i>	PENELOPE ROSS 62
GARY BURTON	
<i>A modern jazz man of the old school</i>	CHRIS ALBERTSON 70
MUSIC TO GET PREGNANT BY	
<i>Exploring the relationship between sex and syncopation</i>	MIKE ROYKO 74

The Reviews

BEST RECORDINGS OF THE MONTH	77
POPULAR DISCS AND TAPES	82
<i>"Pacific Overtures": a minimalist musical</i>	ERIC SALZMAN 89
<i>Allan Clarke and the Hollies</i>	STEVE SIMELS 90
<i>Stéphane Grappelli, Violinist</i>	CHRIS ALBERTSON 102
CLASSICAL DISCS AND TAPES	112
<i>At Last, Scott Joplin's "Treemonisha"</i>	ERIC SALZMAN 116
<i>Ladies' Day at the Turntable</i>	PAUL KRESH 124

The Regulars

EDITORIALLY SPEAKING	WILLIAM ANDERSON 4
LETTERS TO THE EDITOR	6
TECHNICAL TALK	JULIAN D. HIRSCH 28
GOING ON RECORD	JAMES GOODFRIEND 44
THE SIMELS REPORT	STEVE SIMELS 46
THE OPERA FILE	WILLIAM LIVINGSTONE 48
THE BASIC REPERTOIRE	MARTIN BOOKSPAN 51
CHOOSING SIDES	IRVING KOLODIN 110
ADVERTISERS' INDEX	132

COVER: Design by Borys Patchowsky; photo by Bruce Pendleton. The equalizers shown are, in bridge-table order: north—JVC SEA-10, Ace Audio AE-2002, and MXR; east—Pioneer SG-9500 and Soundcraftsmen RP2212; south—SAE MK 2700B; west—BSR FEW-III and Heath AD-1305. See table on page 69 for specifications and prices.

COPYRIGHT © 1976 BY ZIFF-DAVIS PUBLISHING COMPANY. All rights reserved. Stereo Review, May 1976, Volume 36, Number 5. Published monthly by Ziff-Davis Publishing Company, Editorial and Executive Offices at One Park Avenue, New York, N.Y. 10016; Telephone: 212 725-3500. Hershel B. Sarbin, President; Furman Hebb, Executive Vice President; Vincent Perry, Financial Vice President and Treasurer; Charles B. Seton, Secretary. Also the publishers of Boating, Car and Driver, Cycle, Flying, Modern Bride, Popular Electronics, Popular Photography, and Skiing. One-year subscription rate for U.S., \$7.98; U.S. possessions and Canada, \$8.98; all other countries, \$9.98. Second-class postage paid at New York, N.Y., and at additional mailing offices. Authorized as second-class mail by the Post Office Department, Ottawa, Canada, and for payment of postage in cash. SUBSCRIPTION SERVICE: Forms 3579 and all subscription correspondence should be addressed to Stereo Review, Circulation Department, P.O. Box 2771, Boulder, Colorado 80302. Please allow at least eight weeks for change of address. Include your old address, as well as new—enclosing if possible an address label from a recent issue. Material in this publication may not be reproduced in any form without permission. Requests for permission should be directed to Jerry Schneider, Rights and Permissions, Ziff-Davis Publishing Company, One Park Avenue, New York, New York 10016.

Editorially Speaking

By William Anderson



WELCOME TO THE BASIC REPERTOIRE

IN the journalism department of Syracuse University there is a professor with a Better Idea. Students in his class in magazine editing are required, as part of their course work, to run up an intensive study of a current periodical and then set down their findings in a report. It strikes me as a quick and effective way of hauling a sizable piece of the real world into the classroom for study without slowing the wheels of commerce.

The most fruitful of these investigations quite naturally involve both exterior (the magazine itself) and interior (staff interview) research, and having been the target of such scrutiny several times over the past few years I can state that these young sleuths are nothing if not thorough. Most of the information sought is of a rather technical or statistical nature, so I was somewhat surprised the other week when Joseph Urtz, my latest inquisitor from Syracuse, suddenly asked a philosophical question: What, in your opinion, has been the most significant innovation in STEREO REVIEW during the time of your editorship?

I had no ready answer, first because there have been any number of innovations over the eleven-year period concerned, and second because an editor usually thinks of such things in terms of necessity and opportunity rather than of "significance." So I waffled on a bit about our service function, how it is reflected in our editorial goals, and what are the visible manifestations of those goals, until I was able to collect my thoughts. The significant innovation I finally came up with was the Basic Repertoire—not in its guise as Martin Bookspan's popular monthly column, which has been appearing in these pages since November 1958, but in its "reconsiderations and recommendations" form, the yearly reprint (now in its twelfth edition) that examines the whole thing at once in a neat little pamphlet.

Now, it doesn't take a Syracuse University journalism major to uncover the fact that STEREO REVIEW is a magazine of both *means* (audio equipment) and *ends* (musical recordings), and I would not like it to appear for an instant that we play any favorites around

here, that there have been no innovations in our coverage of the technical means over the same period. The Basic Repertoire, however, was specifically designed to implement one of the central tenets of our editorial coverage—the encouragement of catholicity and the discouragement of snobbishness in musical taste—and *that* is significant. Snobbishness works both ways, of course: there are minds just as narrow, noses just as far in the air on the popular-music side as on the classical side. Classical snobs, however, would appear (damn their ears!) to be the more successful, and it is a matter of some personal distress to me that they operate so effectively, in word and deed, to keep a whole world of musical pleasure in quarantine, pretending that its delights are available only after rigorous instruction, arduous struggle, and a lengthy apprenticeship. Hardly. All it takes is that same little drop of courage that permits an adventurous neophyte to ignore the dire warnings of "experienced travelers" and step bravely into a country where the customs and surroundings will surely be different—but wonderful as well. STEREO REVIEW counsels courage and offers lots of encouragement to the timid in its regular monthly issues, but I think the Whole Basic Rep does the job best.

The latest edition of this useful compendium is just now off press, and if you are a classical beginner in need of help, you will welcome its sixteen closely printed pages of advice. A short introduction spells out what the Basic Repertoire is and how it got that way, and the text gets right down to cases, listing critic Richard Freed's recommendations for 175 classical works in disc and tape formats. Knowing that 175 items could likely appear to be an unscalable peak to a real beginner, I have taken the liberty of checking off in the margin just *ten* works, any one of which could easily unlock the door to all the rest. I speak on this subject with unimpeachable authority, for one of the ten—Sibelius' *Finlandia*—was all by itself responsible for introducing *me* to the classical world, and, as the saying goes, I never had a lesson in my life. The ad on page 128 tells you how to order the Basic Repertoire. And welcome to the club.

Stereo Review

PUBLISHER
EDGAR W. HOPPER

EDITOR
WILLIAM ANDERSON

MANAGING EDITOR
WILLIAM LIVINGSTONE

EDITORIAL COORDINATOR
LOUISE GOOCH BOUNDAS

MUSIC EDITOR
JAMES GOODFRIEND

TECHNICAL EDITOR
LARRY KLEIN

ART DIRECTOR
BORYS PATCHOWSKY

ASSOCIATE TECHNICAL EDITOR
RALPH HODGES

POPULAR MUSIC EDITOR
STEVE SIMELS

ASSISTANT MUSIC EDITOR
VIVIENNE WINTERRY GOODMAN

PRODUCTION EDITOR
PAULETTE WEISS

LONDON EDITOR
HENRY PLEASANTS

CONTRIBUTING EDITORS

CHRIS ALBERTSON
MARTIN BOOKSPAN
NOEL COPPAGE
RICHARD FREED
DAVID HALL
ROY HEMMING
JULIAN D. HIRSCH
GEORGE JELLINEK
IGOR KIPNIS
IRVING KOLODIN

PAUL KRESH
STODDARD LINCOLN
J MARKS-HIGHWATER
LINCOLN PERRY
PETER REILLY
CHARLES RODRIGUES
ERIC SALZMAN
CRAIG STARK
JOEL VANCE

ADVERTISING DIRECTOR
JAMES J. SULLIVAN

ADVERTISING SERVICE MANAGER
LINDA BLUM

EXECUTIVE ASSISTANT
PEGI McENEANEY

ASSOCIATE PUBLISHER
STANLEY NEUFELD

Editorial and Executive Offices
Ziff-Davis Publishing Company
One Park Avenue, New York, New York 10016
212 725-3500

Eastern Advertising Manager: Richard J. Halpern

Midwestern Office: The Pattis Group
4761 West Touhy Ave., Lincolnwood, Illinois 60646
312 679-1100
Arnold S. Hoffman

Western Office
9025 Wilshire Boulevard
Beverly Hills, California 90211

213 273-8050; 272-1161
Western Advertising Manager: Bud Dean

Japan: James Yagi
Oji Palace Aoyama, 6-25, Minami Aoyama
6-Chome, Minato-ku, Tokyo, Japan
Telephone: 407-1930/6821, 582-2851

Circulation Office
P.O. Box 2771, Boulder, Colorado 80302

EDITORIAL CONTRIBUTIONS must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for the return or safety of art work, photography, or manuscripts.

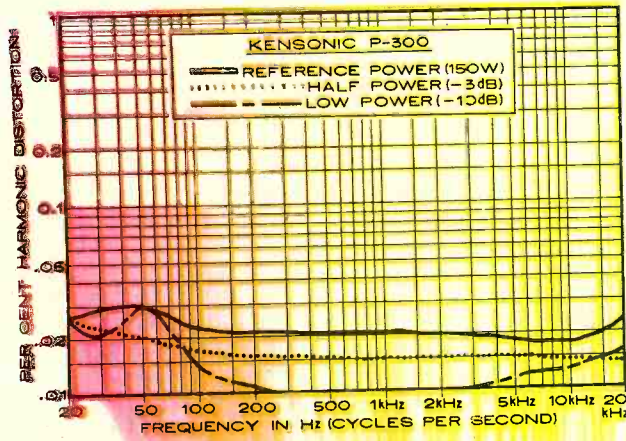
Member Audit Bureau of Circulations



ZIFF-DAVIS PUBLISHING COMPANY

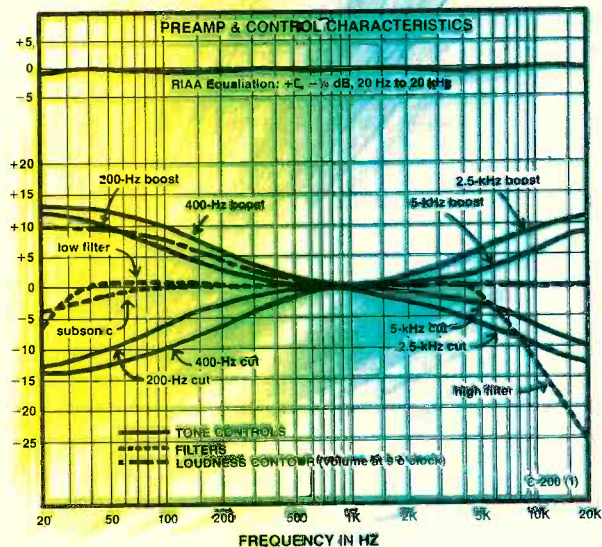
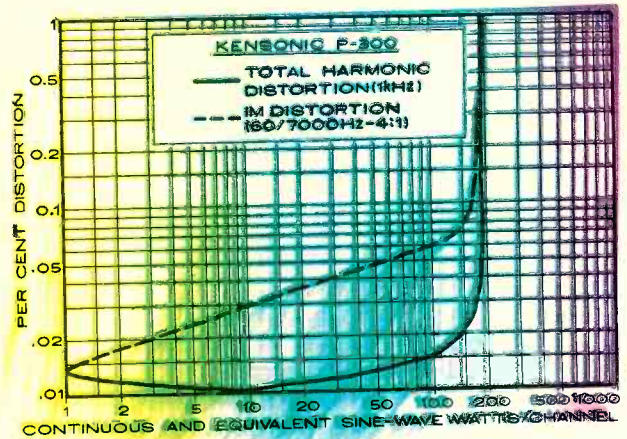
Hershel B. Sarbin, President
Furman Hebb, Executive Vice President
Vincent Perry, Financial Vice President and Treasurer
Phillip T. Heffernan, Senior Vice President, Marketing
Edward D. Muhlfeld, Senior Vice President, Sports Div.
Philip Sine, Senior Vice President
Frank Pomerantz, Vice President, Creative Services
Arthur W. Butzow, Vice President, Production
Lawrence Sporn, Vice President, Circulation
George Morrissey, Vice President
Sydney H. Rogers, Vice President
Sidney Holtz, Vice President
Al Traina, Vice President
Philip Korsant, Vice President
Charles B. Seton, Secretary
Edgar W. Hopper, Vice President, Electronics Div.

William Ziff, Chairman
W. Bradford Briggs, Vice Chairman



HARMONIC DISTORTION. "An input signal of 0.2 volt drove the amplifier to a reference 10-watt output at maximum gain. We could not measure the output noise, which was less than our minimum meter reading of 100 microvolts (roughly -100dB referenced to 10 watts)."

TOTAL HARMONIC/IM DISTORTION. "With regard to the sound quality of the two components, since they add neither noise nor distortion, there is little to be said."



PREAMP & CONTROL CHARACTERISTICS. "The tone controls and filters are more effective than most."

"If you are looking for the proverbial 'straight wire with gain,' this combination meets all the requirements."

Hirsch-Houck Laboratories wrote that headline over a year ago. Since then, quite a number of independent laboratories have attested to the uncompromising quality of Accuphase.

We've assembled them for you in a free 36-page booklet. It's the second most informative way you can learn about these superb stereo components.

The best way is to audition them yourself. Then you'll understand why the critical acclaim has been as impressive as the product itself.

Accuphase

FREE

details . . . A DIFFERENT KIND OF RECORD CLUB

You can now own every record or tape that you may ever want . . . at tremendous savings and with no continuing purchase obligations. You can get valuable free dividend certificates, you can get quick service and all the 100% iron-clad guarantees you want.

Now you can stop price increases that leave you with less music for your record and tape budget. You can guarantee yourself more music for less money through membership in Discount Music Club.

Look at these benefits:

TREMENDOUS SAVINGS

on every record and tape in print—no “agree-to-purchase” obligations of any kind.

DISCOUNTS OF 43% TO 73%

off mfg. suggested list . . . special catalog features hundreds of titles and artists.

ALL LABELS AVAILABLE

including most imports through special custom ordering service. If we don't stock it we'll get it for you.

SCHWANN CATALOG

lists thousands of titles; classical, pop, jazz, ballet, opera, musical shows, folk, rock, vocal, instrumental, country, etc.

DISCOUNT DIVIDEND CERTIFICATES

Dividend Gifts—Every shipment carries a dividend gift or dividend certificate. Certificates redeemable immediately for extra discounts.

NEWSLETTERS

happenings in the world of music; concerts, critiques, new releases . . . special super-sale listings at discounts of up to 73%.

DISCOUNT ACCESSORY GUIDE

Diamond needles, cloths, tape cleaners, etc. Discount Music Club is your complete one stop music and accessory buying service.

QUICK SERVICE

same day shipping on many orders . . . rarely later than the next several days. Partial shipments always made in the event of unforeseen delay . . . all at no extra cost to you.

100% IRON-CLAD GUARANTEES

on all products and services. Everything is guaranteed factory fresh and free of defects or damages of any sort. Your total satisfaction is unconditionally guaranteed.

Discount Music Club is a no-obligation membership club that guarantees tremendous discounts on all stereo records and tapes and lets you buy what you want . . . when you want . . . or not at all if you choose.

These are just a few of the money-saving reasons to write for free details. You can't lose so why not fill out and mail the coupon below for immediate information.

dmc DISCOUNT MUSIC CLUB, INC. DEPT. 9-561
650 Main Street, New Rochelle, N.Y. 10801

NAME _____

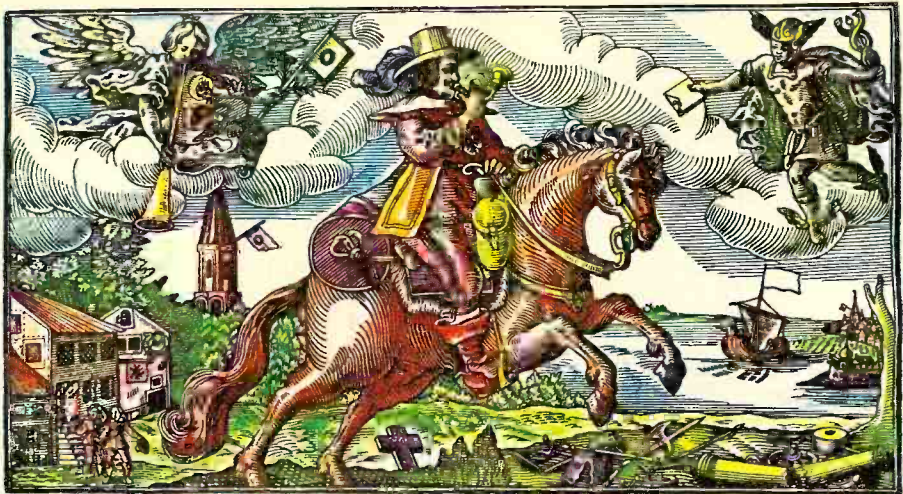
ADDRESS _____

CITY _____

STATE _____

ZIP _____

CIRCLE NO. 15 ON READER SERVICE CARD



LETTERS TO THE EDITOR

Music to Our Eyes

● I read James Goodfriend's "Seeing Music" in the February issue with a glad heart. Of course, a printed score is not a prerequisite to enjoyment, but the insight gained from its use is undeniably satisfying. Scores provide the reader with visual experiences which intensify listening and emotional awarenesses and enhance intellectual ones. There is a definite pleasure in seeing the way a composer has done something, but it is equally pleasurable to see how a performer treats it.

DAVID A. MILLER
Killeen, Tex.

● James Goodfriend's February column was one of his best yet. The first score I read was Beethoven's Fifth Symphony, and the thrill I felt after listening and reading can only be likened to how I felt when classical music first exploded on my consciousness over two years ago. I read music marginally, but, as Mr. Goodfriend points out, it's not the notes themselves that matter but the flow of the notes, the melodic contour. *The Norton Scores*, published by W.W. Norton & Company, is a good introductory book, containing various works from the fifteenth to the twentieth centuries. The major works are printed against a gray background, while the most prominent line in the music at any one time is highlighted in white, thus making the music easy to follow.

FRED ROSS
Ballwin, Mo.

● How many times have I tried to convince my classical-music listening companions to enhance their enjoyment of music by "seeing" what is actually happening on the printed page! Better to sit back, close your eyes, and concentrate on listening, they argue with stubborn resistance. Watching notes only distracts you from the music. But now, having read James Goodfriend's article, "Seeing Music" (February), they have reluctantly consented to let me teach them the basics of reading scores. Miracle of miracles!

JOSEPH R. SUTTON
New York, N.Y.

● It's been a couple of years since I've embarked on the same course James Goodfriend proposed in "Seeing Music" (February). I started out by borrowing miniature scores

from the public library to supplement my recordings, managing to keep up with the main thought only rather haphazardly. But, with persistence and perseverance, more and more details in orchestral scores became apparent. My enjoyment of music has now multiplied a hundred-fold.

JAY J. FORAKER
San Antonio, Tex.

Pet Lover

● Thank you very much for your article "Take David Bowie, For Instance" (March). Even though I am not a Bowie collector, I know what it's like to try to obtain every record by a certain artist. I am an avid collector of Petula Clark records, and may I tell you it's ten times more difficult finding her records than David Bowie's. She has been recording since 1949, in English, French, German, Spanish, and Italian, on 78's, 45-rpm singles, 10-inchers, EP's, and LP's, and 95 per cent of her records are out of print. I agree with Mr. Giangrande that a good way to get foreign records is to obtain pen-pals ("Pet"-pals in my case!). I have acquired about ten through the International Petula Clark Society in London.

BRUCE KOTZKY
Bayside, N.Y.

More Bowie

● I'd like to make a few corrections and additions to Mark Giangrande's enjoyable summary of David Bowie's recording history which appeared in the March issue.

The first single of *Space Oddity* had as its B side *Wild Eyed Boy from Freecloud*, featuring Paul Buckmaster on cello and Bowie on acoustic guitar. It was not *The Man Who Sold the World*.

Arnold Corns put out two singles, the other being a version of *Moonage Daydream*, different from the one on the "Ziggy" album. I have seen only one copy of this, and it is presumably the rarest and most expensive thing in the Bowie catalog.

The Prettiest Star with Marc Bolan on guitar does exist and was featured at the Rock 'n' Roll Expo at the Hotel McAlpin, New York City—for a mere thirty dollars.

Many, many items never recorded in the studio are available on bootlegs and tapes from England, such as *My Death*, *Waiting for the Man*, *Come Back My Baby*, *John I'm Only Dancing*, and *Foot Stompin'*. Moreover,

Bowie has tons of material waiting to be released—or sacked. He has additional material from the Pinups motif that was to be released as "Pinups Two," an entire show planned around the 1984 concept, and two Bruce Springsteen tracks that were booted off the "Young Americans" album.

GASTON MUSELLA
Brooklyn, N.Y.

● A "first" occurred in the pages of STEREO REVIEW's March issue: David Bowie was mentioned without a single put-down of him or his music. I think this is a step in the right direction. Keep up the good work.

EDWARD LEBRUN
Greensboro, N.C.

Hard Rock/Soft Ears

● Concerning the February article on high sound levels in music, it helps, I think, if the reproduction is clean, well-mixed, and undistorted. I've heard really loud but clean reproduction at a top sound studio, and using that for comparison I would think the distortion from overdriving amps and/or speakers would do more damage to the ear than exposure to loud levels alone. Recently, for example, I was impinged upon at a local bar by a band with an SPL that was a wee intense. The distortion was so bad that my ears still hissed the next morning.

MICHAEL WALMSLEY
Oshawa, Ontario, Can.

● I read with interest the article on the effect of loud noises on human hearing. I am the second bassoonist in the Honolulu Symphony, and a great part of my life is spent in close proximity to the open bells of trumpets and trombones. I am interested in determining just how much a threat this poses to me and others in similar positions in the orchestra. All of us in the bassoon and clarinet sections, as well as those who sit near the tympani and percussion instruments, have at times resorted to the use of ear plugs, but the demoralizing effect this has on our musical perception makes them highly undesirable. I would therefore appreciate it if you could tell me where I could acquire the sound-level measuring instrument mentioned in the article.

MARSHA SCHWEITZER
Honolulu, Hawaii

Try the DuPont Co., Room 24914, Wilmington, Delaware 19898, or General Radio Co., 300G Baker Avenue, Concord, Maine 01742.

March Cover

● During the many years I have been a subscriber, I can't remember seeing a better cover than the March one. My compliments to Borys Patchowsky and Bruce Pendleton.

RONALD E. DODGE
St. Paul, Minn.

Avant-garde

● Concerning the January-issue article on the avant-garde and particularly the apparent scarcity of new music on records: it is only natural that store owners will be reluctant to stock any item that does not sell in volume, so a new-music release is ordered (if at all) in ones or twos. If and when that supply is sold, months may pass before it is reordered. The excuses given by sales "help" in record shops range all the way from the obvious ("we are out of it at the moment") to the outrageous ("it has been discontinued"), with a whole

Is it live, or is it Memorex?

The amplified voice of Ella Fitzgerald can shatter a glass. And anything Ella can do, Memorex cassette tape with MRX₂ Oxide can do.

If you record your own music, Memorex can make all the difference in the world.

MEMOREX Recording Tape.
Is it live, or is it Memorex?



©1976, Memorex Corporation, Santa Clara, California 95052

string of variations in between, limited only by the clerk's imagination. Most damaging are statements to the effect that "this label is unavailable." In our case, at least, simply not so: every Orion record listed in the Schwann catalog is available, and if your store won't supply you we will!

GIVEON CORNFIELD
Orion Master Recordings Inc.
5840 Busch Drive
Malibu, Calif. 90265

Performers I Hate

● Please bear in mind that the critics of "Ten Performers I Hate" (December) have disqualified themselves from any future reviews of the performers they respectively named. Unfortunately, this means the fans of

Emerson, Lake and Palmer will miss Noel Coppage's *ad hominem* arguments against both the group and its fans, and the fans of jazz-rock will no longer have Steve Simels' accusation of "neo-psychedelia" to kick around any more. Overall, this will be good, because it will enable other reviewers to judge these albums competently and objectively.

S. D. ANDERSON
Norwalk, Calif.

Now if we could just find some nice objective reviewers around here somewhere. . . .

● "Ten Performers I Hate" was a worthwhile feature (December), but will someone please explain to me why Emerson, Lake and Palmer have never been received favorably

by critics? Their competence and perfectionism fill a need in today's rock. And if anyone feels that ELP rip off the classics in music they claim to have written, please cite a specific example.

THOMAS ACE
Rockville Centre, N.Y.

Popular Music Editor Steve Simels replies: Well, discounting ELP's "arrangements" of Moussorgsky, Copland, and Ginastera, on the trio's first album Béla Bartók's 1911 Allegro Barbaro is retitled The Barbarian and the composition credits are claimed by the band. If that doesn't qualify as a rip-off, then I don't know what does.

Havergal Brian Lives!

● It is good to see a review of Havergal Brian's Tenth and Twenty-first Symphonies on Unicorn RHS-313 in the February issue even if that record first appeared several years ago. But David Hall is in error in saying Brian died at the age of ninety-two; he was, in fact, nearly ninety-seven. It should also be noted that, with one exception, Brian's orchestral music has not been performed in the U.S. The Unicorn record and the other two records on Lyrita and CBS mentioned by David Hall have all sold extremely well, which ought to convince conductors here that there is plenty of music by Brian that merits their attention. This is Brian's centennial year, and it is just his luck that he has to compete with the U.S. Bicentennial!

PAUL RAPOPORT
Edmonton, Alberta, Can.

Heart Like a Hammer

● Concerning Steve Simels' comments on Linda Ronstadt in his March column "Can Women Rock?," I too saw the lady in question recently and agree with him except for one thing: how can he question her emotional commitment? I could hear her heart beat as far back as the tenth row!

TIMOTHY STAMPER
Asheville, N.C.

Pulp

● We the undersigned find Steve Simels' monthly articles (as well as Mr. Simels himself) spurious, bogus, and a sham. Pulp music (February) indeed! Mr. Simels must have been one of the personages Mr. Agnew referred to in his address concerning "the effete corps of impudent snobs."

MARC GUILBERT
B. HENDRICKSON
Durham, N.H.

● I liken Steve Simels' critical stance to the musical stance of the Stones—unpretentious, lively, and to the point. His February column on "Pulp Music" is only the most recent example of the kind of analysis he excels at; he refuses to take himself or the music too seriously. I think that the tendency to inflate the "importance" of the music and its foremost artists has contributed to an overall dulling of the level of rock-and-roll smarts. Bruce Springsteen could fall victim to this debilitating effect.

STEVE MCCUE
Billings, Mont.

Back Issues

● Some people saved *Life* magazine; others save *National Geographic*. I have saved ev-
(Continued on page 10)

We just made you an important part of our new speakers.

Ever wish you could add a little more rock to a pop tune? Or a bit more pizzazz to some jazz? It's easy with Jensen's all-new OPC speaker systems. Each comes with exclusive front-mounted Optimum Performance Controls that allow you to adjust speaker frequency response to any kind of music or mood. No matter what type of listening environment you're in.

One thing that never changes—the rich crystal-clear Jensen sound.

No matter how you set your OPC controls, you're going to hear sound quality you can't find in any comparably priced speaker systems. That's because inside we've placed features like Flexair™ woofer suspension for distortion-free bass. Sonodome™ ultra tweeter for improved high frequency response. And much more.

Make Jensen OPC speakers a part of your system.

When you add these new Jensens to your new or existing component system, it's not only going to add quality to the sound. It's going to add a little bit of you.

See and hear the new Jensen OPC speakers for yourself. For a free catalog and listing of Jensen dealers in your area, write: Jensen Sound Laboratories, 4310 Trans World Road, Schiller Park, Illinois 60176.

JENSEN
SOUND LABORATORIES
Division of Pemcor, Inc.
Schiller Park, Illinois 60176

CIRCLE NO. 26 ON READER SERVICE CARD

The new Sherwood S9910. Everything you hear is true.

It has all the power you need [at the lowest achievable level of distortion]: 100 watts per channel, minimum RMS [both channels driven at 8 ohms, 20-20,000 Hz], with Total Harmonic Distortion no more than 0.1%. The componentry used to achieve this rating features exceptional stability characteristics: a paralleled OCL direct-coupled output configuration... twin 15,000 μ f filter capacitors... and a zener regulated secondary power supply.

It has all the controls you need for fully flexible centralized operation: 5-position Mode switch, 6-position Selector switch, 8-position Speaker switch. Two Tape Monitor circuits [with a two-way, inter-deck dubbing capability]. Front-panel Mic input and Mixing, with a frequency response suitable for use with a professional caliber microphone. And a Main-In/Pre-Out switch, which allows independent usage of the main amplifier section. You can operate two speaker groupings, two turntables, three tape decks and any auxiliary equipment—with no discernible white noise.

It has State-of-the-Art tuner specs: an IHF FM Sensitivity rating of 9.9

dBf [1.7 μ V]. Four-ganged tuning capacitors, dual-gate MOS FET's provide superior image rejection and spurious response rejection, with minimal cross modulation. The digital detector introduces absolutely no distortion to the signal, and never requires alignment. The Ceramic FM IF Filters are matched for optimal phase linearity. The Phase Lock Loop integrated circuitry in the multiplex decoder improves separation and SCA rejection, while limiting distortion.

It has all the features you need for the purest sound: Loudness Compensation and Hi-Filter switches; separate detented Bass, Midrange and Treble controls [each with exceptional variance characteristics], and a master Tone Defeat switch, for instant reference to flat response. Switchable FM Stereo Only and FM Muting. Dual tuning meters. And a Positune™ indicator LED, which visually signals perfect tuning.

It has switchable FM de-emphasis [25 μ sec. and 75 μ sec.], to accommodate an outboard noise reduction unit. A built-in Ambience Retrieval System, which adds much

of the extra coloration you get with true 4-channel sound. And a 4-channel adaptor circuit, which makes it easy to convert to the real thing.

It has plug-in driver boards [to facilitate servicing], which feature an I.C. differential amplifier input for stable operation regardless of temperature fluctuations.

It has relay speaker protection circuitry, which automatically disengages your speakers, if a potentially damaging situation arises.

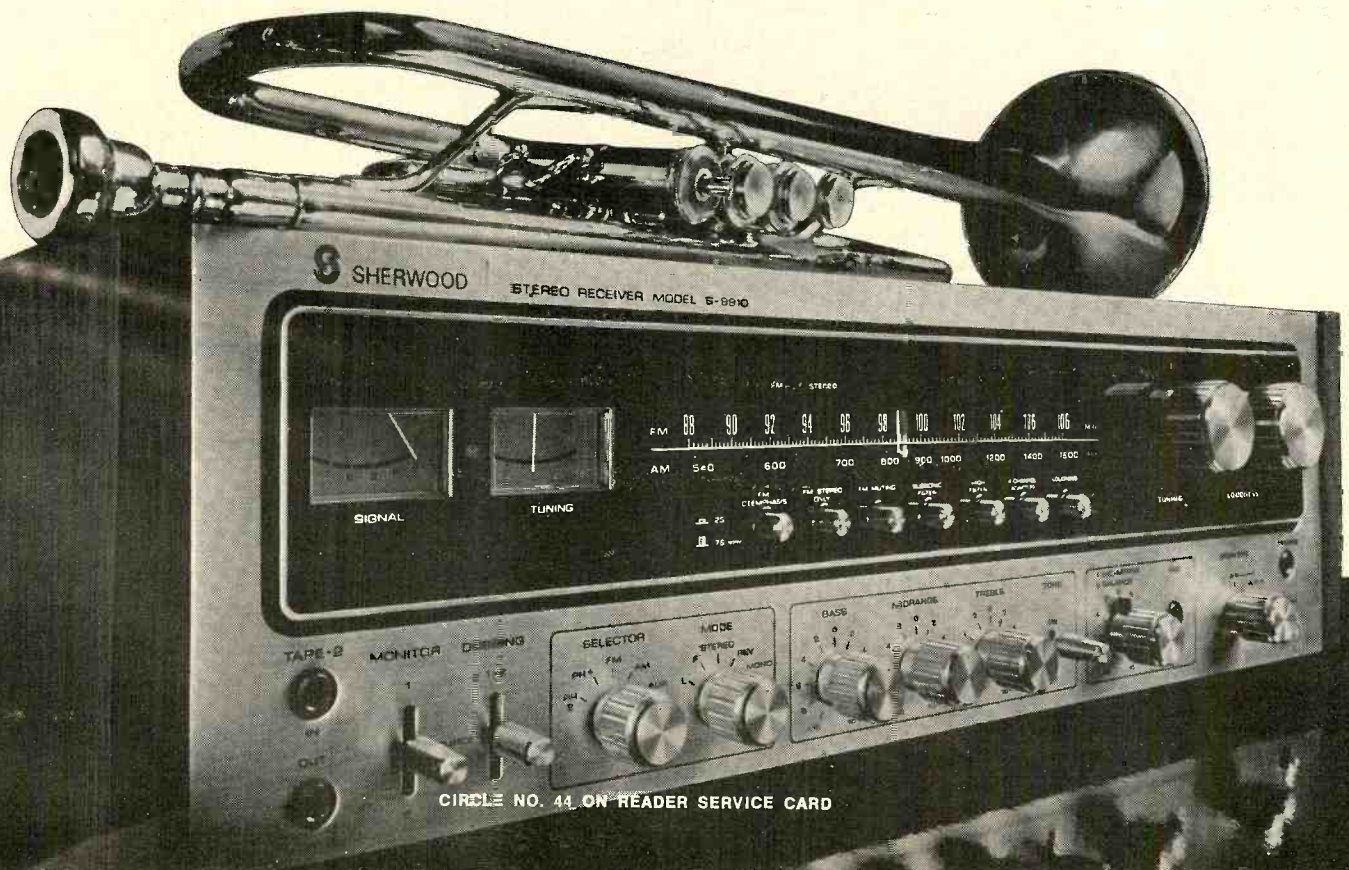
It has everything we've mentioned. It has some features we haven't mentioned.

Best of all, it has a price of less than \$700.*

Sherwood Electronic Laboratories
4300 North California Avenue
Chicago, Illinois 60618

 **SHERWOOD**
Everything you hear is true.

*The value shown is for informational purposes only. The actual resale price will be set by the individual Sherwood Dealer at his option. The cabinet shown is constructed of select plywood with a walnut veneer covering.



THE SOUND VAULT



Every UD cassette gives you stainless steel guidepins to keep your recordings secure.

Tough steel pins form part of the internal security system inside every UD cassette.

They make sure your UD tape runs smooth and winds even. (Ordinary cassettes have plastic posts that can wear out and cause wow and flutter.)

These steel pins are another reason

your Ultra Dynamic cassette captures the very best sounds (both high and low) your equipment can produce.

Use Maxell Ultra Dynamic cassettes and you'll always play it safe.

Maxell Corporation of America, Moonachie, New Jersey 07074. Also available in Canada.

maxell.
For professional recordings
at home.



CIRCLE NO. 28 ON READER SERVICE CARD

ery issue of (HiFi) STEREO REVIEW since mid-1960 when I first began reading your fine magazine. I have decided, however, that I would like to donate my collection of back issues to an individual or institution that might wish to have them.

CHARLES W. COSSEY
903 Park Avenue
New York, N.Y. 10021

Women in Rock

● After reading Steve Simels' report on women in rock (March), I have two questions for him:

1. If rock is "aimed at women," why don't we have any women critics in STEREO REVIEW? (Linda Frederick's article on the Kinks was interesting—but who takes the Kinks seriously any more?)

2. If women want male sex objects in music, do they also want male reviewers? Does Steve Simels think of himself as a sex object?

JOHN PAPPAS
Shillington, Pa.

Mr. Simels replies: (1) Because they are so hard to find—perhaps they'd rather listen than write. (2) You better believe it.

Spinelessness

● In the November issue, two columns were devoted to a discussion of Ravel's *Le Tombeau de Couperin*. Intrigued, I ordered the record, received it, played it, and liked it. Most certainly, I am much indebted to you for rendering your readers this type of service. But . . . The spine on this disc reads as follows: M32159 Boulez conducts Ravel Vol. 2 New York Philharmonic Columbia Stereo. What I would like to see standardized throughout the industry is this: Number (probably important to the manufacturer, distributor, and dealer, but meaningless to me once I own the record); Composer; Work or Works; Conductor; Orchestra; Manufacturer; Type of Record. For example: *M 32159 Ravel: Couperin, Valses, Barque Boulez/N.Y. Philharmonic-Columbia Stereo.*

LUDWIG F. ROEHMANN
Spokane, Wash.

Elton

⊗ Hats off to Noel Coppage for telling it like it is in his February review of Elton John's latest mess, "Rock of the Westies." It's about time someone recognized Elton for the teenage hypnotist he is.

BRAD BAUDER
Fargo, N.D.

Shocking

● The reader who announced in the April Letters column that he was going to start wearing his headphones into the shower may be about to take his last one—or was he just kidding?

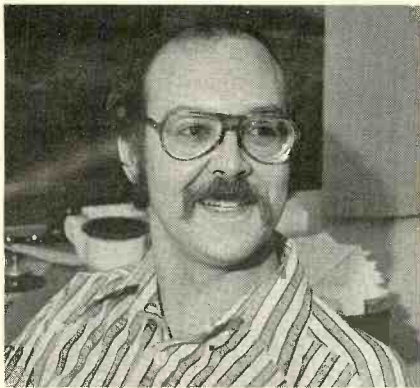
G. BATES
Southampton, N.Y.

He was. Not all phone jacks are "hot," but some are—very.

Correction

● In the April 1976 issue, Arnis Balgalvis should have been named co-author, with Ralph Hodges, of the article "Hot Platters." In the confusion of press time Mr. Balgalvis' name was inadvertently omitted. We regret this omission, and we wish to express our appreciation to Mr. Balgalvis for his indispensable help in preparing the article.

Charles Barker on the Bose Model 301 Direct Energy Control.



"When the Model 301 project came into the engineering department, our goal was to design a bookshelf speaker with minimal placement constraints, that sold for less than \$100, yet had the unique spatial qualities characteristic of the Bose 901® and 501 Direct/Reflecting® speakers.

"Initially, two quite unconventional design concepts evolved. First, we deliberately operated the woofer and tweeter simultaneously over a significant portion of the mid-range. This Dual Frequency Crossover™ network gave us very smooth midrange response and an open spatial quality.

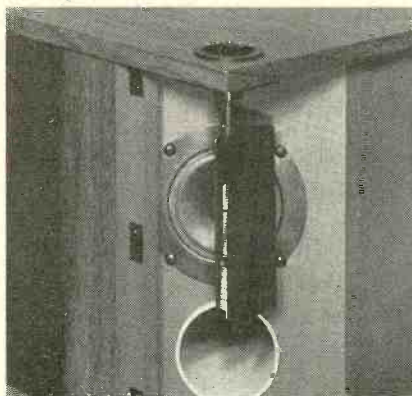
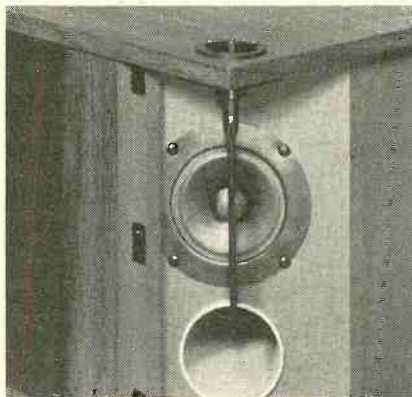
"Second, we perfected a very precise asymmetrical configuration, with the woofer radiating straight ahead, and the tweeter angled to the side, to reflect sound off the room's side wall and into the listening area. From our experience with the Bose 901 and 501 speakers, we knew that this combination of direct and reflected sound would give us the open, spacious sound we wanted.

"At this point, we felt we had an extraordinarily fine loudspeaker. But we were also

aware of a problem. Since this design relied on side wall reflections to maintain its spacious sound, what happens in a room with no convenient side wall?

"We felt this was a crucial problem, since we wanted this speaker to sound very good in any listening room.

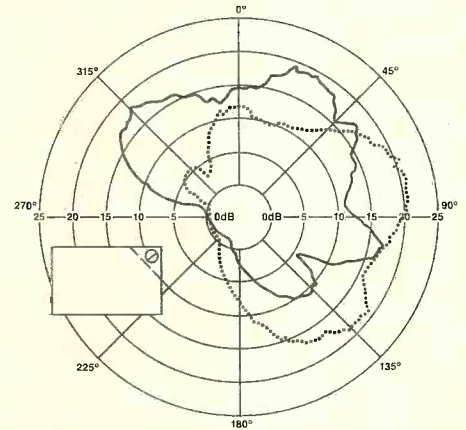
"The solution was the Direct Energy Control — an adjustable deflector in front of the tweeter and hidden behind the grille. The Control can be set to reflect sound off a side wall, or, if there is no side wall, it can deflect high frequency



sound back toward the center of the room, so energy balance is maintained in the listening area.

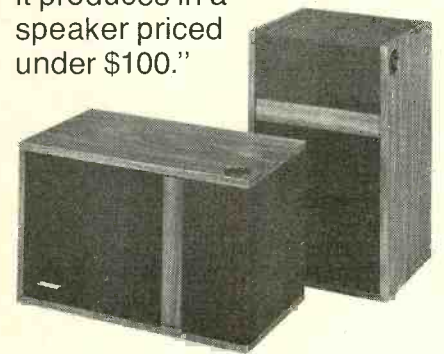
"Beyond that, the Control lets the listener adjust the spatial qualities of the speaker

for different types of music: very spacious for an orchestra, or a much more intimate sound for a soloist.



The solid line is the polar characteristic for the Model 301 with the Direct Energy Control set for maximum direct energy and a more intimate sound. The broken line is the polar characteristic with the Control set for maximum reflected energy and a more spacious sound. Frequency is 8 kHz, bandwidth is 1/3 octave.

"The Direct Energy Control is deceptively simple: of all the things we did in the Model 301, it's the one I get most excited about, because I've seen how people react when they hear the unique dimension it produces in a speaker priced under \$100."



BOSE®

The Mountain,
Framingham, Mass. 01701

Patents issued and pending.
For a full color brochure on the Model 301,
write: Bose, The Mountain, Framingham, Mass.
01701.

The \$900 Sony Turntable.



Study this page, because we don't want the price to suck you in.

It would be a shame.

People responding to something because it costs \$900*. Not because it's worth \$900.

People captivated by price, not performance.

We at Sony don't want anyone spending good money for a great turntable for a bad reason like an impressive price tag.

Especially because there's so much technology in the PS-8750 for you to fall backon. After you spring for the \$900.

So before you spend a lot of money on us, spend at least a little time with us.

Total speed accuracy is our speed.

Speed accuracy can be a problem for turntables because the stylus continually puts pressure on the record (and, in turn, on our engineers.)

In fact, as little as one gram of stylus pressure can cause a slow-down in record speed. A slow-down that is particularly noticeable in loud passages.

Up till now, most good turntables achieved accuracy with a direct drive motor and a servo-system to control speed variations.

It was fine for most people. And it still is.

But for those with more elegantly attuned hearing, it's just not good enough.

That's because the servo-system will not serve when it comes to small, low-frequency speed variations. It is not sensitive enough, and the result is there to be heard — if you have the discernment to hear it.

To get around this, Sony took the conventional servo-system and revolutionized it by adding a quartz reference and a phase lock circuitry.

That mouthful is really easy to digest. The stable quartz generator emits a constant frequency. Any variations in speed monitored by the magnetic head are converted to changes in the phase of the signal. This is then compared against the quartz generator's phase signal.

If they do not match, our Xtal-Lock corrects the speed variation instantly.

A conventional servo-system has to wait for the error to appear as a change in frequency, and then it takes time to correct it.

Sony can make the corrections 10 times faster. And within one cycle. All because Sony uses the phase difference as a source of information on speed error, rather than using the angular velocity.

Chart A dramatically illustrates the dramatic difference.

Why our tone-arm costs an arm and a leg.

After conquering the drive system, Sony sped along to the tone-arm. The problem: constructing a light, strong tone-arm that has a low resonance quality.

A high resonance quality means the tone-arm vibrates — performing a duet with whatever record is playing.

Sony wrestled with the arm problem and

ating both the drive system and the return mechanism. Meaning that the turntable is linked to the tone-arm. And very often, this linkage produces a drag on the arm.

The PS-8750, however, proves that two motors are better than one. The motor that runs the tone-arm is totally isolated from the other motor that runs the turntable.

This eliminates the drag, particularly the drag at the very end of the record.

This drag is really a drag, because the return mechanism is preparing to activate itself, and the friction is therefore increased.

Sony further innovates by designing pick-up and return cues that are optically activated. Like the doors in a supermarket, if you will.

With the PS-8750, you get the best of the direct drive manual and the best of the semi-automatic. With none of the worst of either.

Does your turntable give you bad vibrations?

The same sound waves that travel from your speakers to your ears also travel to your turntable.

This transference excites the equipment. Becoming acoustic feedback, or IM distortion. And the louder you play your record, the more of it you get. There's cabinet resonance. Caused by sound waves.

And there's something called record resonance. Caused by the friction of the stylus in the groove of a warped record.

Sony, however, deals resonance a resounding blow.

We have built the PS-8750's turntable base of an inorganic material that is acoustically dead.

We have also undercoated the platter with an absorbing material that prevents it from transferring any bad vibrations to the good vibrations on the record.

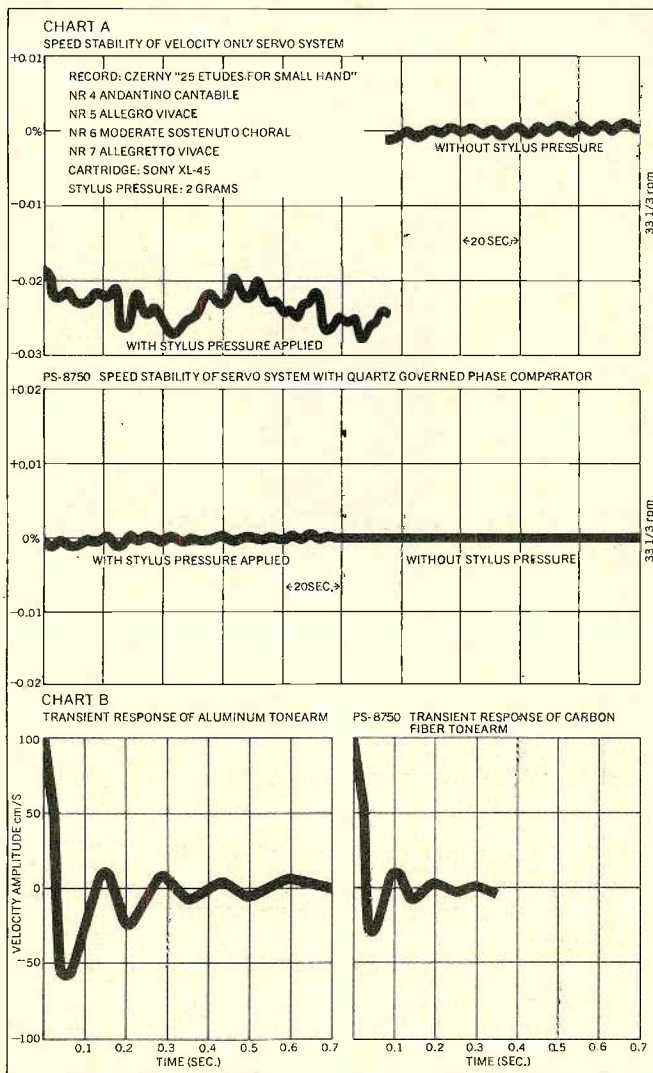
And we cut down on record resonance by pumping a silicone damping material into the record mat itself. By having contact with the entire record surface, it offers more support.

Not for people who want the latest. But the greatest.

The PS-8750 represents a tonnage of innovation and a couple of real breakthroughs.

It is not for those who want to spend \$900 so they can say they spent it.

It is for those who want to spend \$900 so they can hear they spent it.



came up with a different material: a carbon fiber of enormous strength and equally enormous lightness. Moreover, it has a much smaller resonance peak than the aluminum alloy commonly used. (See Chart B, where the difference is demonstrated.)

The carbon fiber worked so well that it was even incorporated into the head shell of the PS-8750. But Sony didn't stop at the tone-arm's construction. Next came the actual operation of it.

Most turntables have one motor, oper-

*Cartridge sold separately.

CIRCLE NO. 46 ON READER SERVICE CARD

©1976 Sony Corp. of America, Sony, 9 W. 57 St., N.Y. 10019. SONY is a trademark of Sony Corp.

SONY®

New Products the latest in high-fidelity equipment and accessories

Technics RS-671US Stereo Cassette Deck

The Model RS-671US from Technics by Panasonic is a front-loading two-motor stereo cassette deck with solenoid-operated trans-



port functions switched by light-touch push keys. Both motors are d.c. operated; in addition, the capstan motor is electronically regulated to maintain speed accuracy independent of line-voltage fluctuations or load variations. Among the special features of the RS-671US is a pushbutton that converts the recording-level meters from quasi-VU characteristics to signal-peak indication. The meters are calibrated from -20 to +6 dB. The deck also has Dolby B-type noise-reduction circuits and bias and equalization that are adjustable for standard, low-noise, chromium-dioxide, and ferri-chrome tape formulations.

The transport controls of the RS-671US are standard and include a pause control. With an external timer the deck can be set up for unattended recording. Recording-level controls are separate for microphone and line inputs and for each channel. There is an output-level control as well, affecting both channels simultaneously. A memory-rewind feature works in conjunction with the three-digit index counter, returning the tape at high speed to any preselected point. Microphone jacks are located on the front panel, along with a stereo headphone jack that has a nominal output of 65 millivolts into 8 ohms.

Frequency response of the deck is 30 to 17,000 Hz with chromium-dioxide tape, 30 to 15,000 Hz with standard tape. Wow and flutter are 0.075 per cent, and signal-to-noise ratios are 52 dB without the Dolby circuits, 60 dB with. Fast-forward/rewind time is approximately 90 seconds with a C-60 cassette. The microphone jacks are intended for microphone impedances from 600 to 20,000 ohms. In its black crackle-finish metal cabinet with brushed aluminum front panel the RS-671US has dimensions of 16 $\frac{3}{8}$ x 5 $\frac{1}{2}$ x 13 inches. The cassette compartment is illuminated and equipped with a mirror that permits virtually the entire cassette to be viewed during use. Price: \$399.95.

Circle 115 on reader service card

Lafayette Model L-8 Speaker System

Lafayette's new L-8 "Pedestal" speaker system is a three-way ducted-port design intend-

ed for floor-standing installation. Drivers consist of a 10-inch woofer, a 5-inch cone mid-range, and four 2 $\frac{1}{4}$ -inch cone tweeters mounted on the front and sides of the enclosure. Crossover frequencies are 2,200 and 6,000 Hz, with the crossover networks providing slopes of 12 dB per octave. There are continuously variable controls on the rear panel to adjust the outputs of the mid-range and tweeters.

Frequency response of the L-8 is rated at 30 to 20,000 Hz, with a nominal impedance of 8 ohms. Power-handling capability is 30 watts continuous, 50 watts program material. The manufacturer advises that an amplifier capable of at least 10 watts continuous per channel should be used. The enclosure has a walnut finish with a brown foam grille covering the entire front surface of the system. Grille-covered openings on either side are for the side-



mounted tweeters. Overall dimensions are 37 $\frac{1}{2}$ inches high by 12 $\frac{1}{2}$ inches square. Price: \$169.95.

Circle 116 on reader service card

Sansui 331 AM/Stereo FM Receiver

The Model 331 is a modestly priced (approximately \$200) stereo receiver with a rated power output of 12 watts per channel continuous into 4 or 8 ohms over a bandwidth of 40 to 20,000 Hz. Harmonic and intermodulation distortion are both less than 1 per cent at rated power, and signal-to-noise ratios are better than 70 dB for the phono inputs and 80 dB for the high-level inputs. Frequency response for a 1-watt output is 25 to 30,000 Hz +2, -3 dB. The phono inputs match the RIAA equalization characteristic within ± 1.5 dB.

The FM section of the 331 has an IHF sensitivity of 2.5 microvolts and a capture ratio of 1.5 dB. Alternate-channel selectivity exceeds 60 dB; image rejection is better than 50 dB, and i.f. and spurious-response rejection are both greater than 70 dB. Ultimate signal-to-noise ratio for FM is more than 65 dB, and stereo separation exceeds 35 dB at 1,000 Hz.

Harmonic distortion is rated at less than 0.8 per cent in mono and under 1 per cent in stereo.

The Model 331 has inputs for external phono and auxiliary sources as well as the built-in AM and FM facilities. Knob controls are provided for volume, balance, bass, and treble. The speaker selector turns on the receiver and



switches on either, both, or neither (for headphone listening) of two pairs of speaker systems. The bass control has a range of ± 12 dB at 50 Hz; the treble control's range is ± 10 dB at 10,000 Hz. Switchable loudness compensation boosts both high and low frequencies at low volume-control settings. The receiver has a front-panel headphone jack and complete tape-monitor facilities for one tape deck. Approximate dimensions are 16 $\frac{3}{4}$ x 5 x 10 $\frac{1}{2}$ inches.

Circle 117 on reader service card

Nakamichi 610 Stereo Preamplifier

The first purely electronic product from Nakamichi Research is the Model 610, a stereo preamplifier also designed to function as a multiple-input mixer for up to three tape decks, a test instrument with built-in test-tone generators and peak-indicating level meters, and an equipment comparator with facilities for A-B'ing two magnetic-phono cartridges or up to three power amplifiers and three pairs of speaker systems. The basic inputs of the Model 610 consist of two magnetic-phono inputs (with separate phono preamplifiers for each), two pairs of microphones, tuner, auxiliary, and three stereo tape decks. These are selected by two rows of pushbuttons, the upper row feeding one pair of mixing busses and the lower row the other. There is also a fifth mixing buss that can be fed by an L + R "blend" microphone for which an input is provided on the rear panel. Each of these five lines has its own level control by means of which a final two-channel mix is achieved. In addition there is a phase-inverter pushbutton for each line so that phase anomalies between microphones or other signal sources can be corrected without rewiring.

The final mix is routed through a precision attenuator (the REC MASTER control) to the tape-output jacks, and then through a MONITOR level control to one set of preamplifier outputs (the second set is at a fixed level). The step-type REC MASTER control employs printed metal-film resistors that maintain close level tracking between the two channels over the 60-dB calibrated range. Levels of the two

(Continued on page 18)

Micro-Acoustics 2002-e cartridge.

Because good tracking isn't enough.

Tracking is just the beginning.

While good tracking ability is vital, it's only an indication of how well the stylus keeps contact with record grooves on louder, harder-to-follow passages, at stylus pressures low enough to minimize wear. *But surprisingly, tracking ability tells almost nothing about how well a cartridge reproduces most musical sounds.*

Transient ability is just as important.

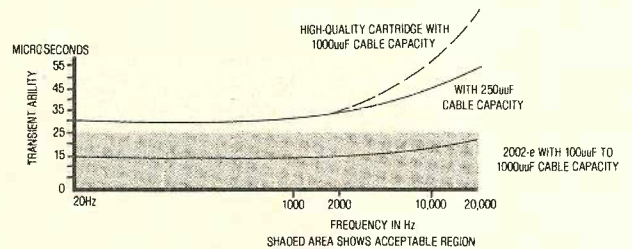
After all, transients are what music is made of: sudden start-and-stop bursts of sound at all frequencies. From the attack of a low organ note to the bite of a plucked string. Transient information is essential to differentiate the sound of one instrument from another, and in stereo, to localize instruments in space. That's why, *without good transient ability, no cartridge can reproduce music with really lifelike clarity.*

Until now, it was simply one or the other.

Tracking or transient ability. Popular high-compliance cartridges, on the one hand, offered good tracking ability and low record/stylus wear, but sacrificed transient ability. And low-compliance cartridges provided good transient ability at the expense of tracking ability and increased wear.

A new technology.

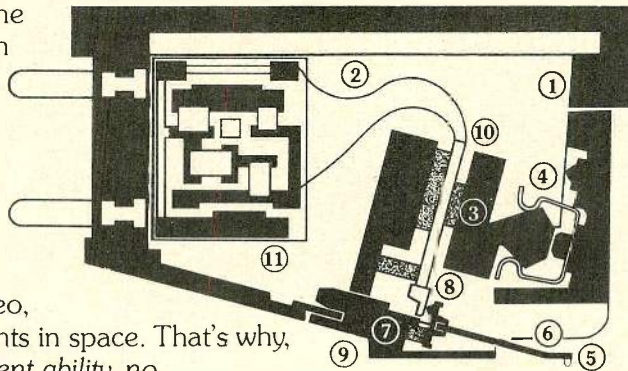
Micro-Acoustics, the world's leading manufacturer of record-mastering styli, has combined for the first time superb transient *and* tracking ability. In the radical design of the 2002-e (patent pending), direct-coupled electrets and critical damping provide optimized transient ability, as shown in the graph. While an ultra-low-mass beryllium stylus bar and high-compliance dual-bearing suspension provide maximum tracking ability at 1 gram, for lowest possible record and stylus wear.



Transient ability best defines how accurately a cartridge can reproduce a musical burst at different frequencies. (Note that the 2002-e's results are independent of cable capacity!)

A simple way to convince yourself.

Micro-Acoustics has prepared a unique demonstration record to help you evaluate and compare cartridge transient and tracking ability. Just send \$3.50, and we'll mail you a record postpaid. For free information and the name of your nearest dealer, just complete and return the coupon.



- ① Low mass body (4.0 grams) reduces warp flutter
- ② pure gold connecting wires
- ③ mechanical damper (one of 8) helps optimize transient and tracking ability
- ④ retainer spring for precise stylus assembly alignment
- ⑤ elliptical diamond stylus ground with the same precision as our famous Micro-Point recording styli
- ⑥ beryllium stylus bar 35% lower mass than aluminum; for optimum high-frequency tracking and transient ability
- ⑦ dual bearings and resolver for optimum tracking ability and precise signal resolution
- ⑧ direct coupling of stylus bar to electret for lossless transmission of groove undulations to transducers
- ⑨ user-replaceable stylus assembly
- ⑩ electret transducer permanently-polarized dielectric generator, linear from 5Hz-50kHz
- ⑪ microcircuit, passive circuit makes cartridge output impedance fully resistive, eliminating effect of cable capacity; shunts preamp input, reducing thermal noise

ma MICRO-ACOUSTICS CORPORATION

MICRO-ACOUSTICS CORPORATION List Price: \$115.00
8 Westchester Plaza
Elmsford, N.Y. 10523

- () Please send me free information on the 2002-e cartridge, and the name of my nearest dealer.
- () Enclosed is \$3.50. Please send me a postpaid copy of your stereo transient/tracking ability test record.



NAME _____
 ADDRESS _____
 CITY _____ STATE _____ ZIP _____

SR576

You're looking at our attitude about cassette decks. The HK2000.

harman/kardon

We make only one cassette deck. We certainly are capable of making more. Perhaps some day we will. But it's unlikely — unless there are compelling mechanical or sonic reasons for doing so.

We have an attitude about high fidelity instruments: to give the finest expression to every function of music reproduction. And wherever we feel we have something to contribute, to do so without compromise. The HK2000 (with Dolby*, of course), represents our attitude about cassette decks.

Its predecessor (the HK1000), was evaluated by High Fidelity Magazine as, "the best so far." When our engineering explorations suggested that improvements were feasible, we replaced it. With the HK2000.

We consider that the cassette deck has a definite and honorable utility as a means of conveniently capturing, retaining and reproducing material from phonograph records, tapes or radio broadcasts.

With one major caveat. It must perform on a level equivalent to the source.

The HK2000's specifications offer measurable evidence of its quality. For example, wow and flutter levels of 0.07%.

Other elements are less subject to quantification. Since it was designed to be the performance equivalent of our own electronic instruments, the HK2000 boasts wide-band response—going beyond human hearing to improve the sound you do hear.

It utilizes solid metal heads (the only heads used in professional studio tape machines) instead of the common ferrite heads which record low frequencies with distortion. The low frequency response of the HK2000 is so accurate that it required the incorporation of a subsonic filter control that can be used to remove the signals issued by warped discs.

These few factors, not individually decisive in themselves, indicate the attitude with which we conceived, designed and built the HK2000 — the only cassette deck we make.

There is, of course, a good deal more to say. Please write *directly* to us. We'll respond with information in full detail: Harman Kardon, 55 Ames Court, Plainview, New York 11803.

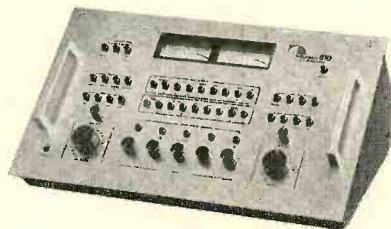


New Products the latest in high-fidelity equipment and accessories

channels are displayed on a pair of equalized peak-reading meters calibrated from -40 to +6 dB. Other controls affecting only the preamplifier outputs include a stereo-balance control and a series of PHASE CHECK pushbuttons that permit verification of the in-phase condition of the various signals that are to be mixed.

The test facilities of the Nakamichi 610 include a pink-noise generator plus a test-tone oscillator with pushbuttons for 1,000, 3,160, and 10,000 Hz. In addition, pressing any two of these buttons yields a signal that is the sum of the designated frequencies. The A-B'ing facilities for power amplifiers and speakers work in conjunction with an optional remote-control unit, and the output controls on the back of the 610 provide a 10-dB range of adjustment to match levels for such equipment comparisons.

The output at clipping of the Model 610 is 5 volts into 1,000 ohms. For a 2-volt output, distortion is under 0.01 per cent for the microphone inputs and under 0.005 per cent for the phono inputs. The A-weighted signal-to-noise ratio (phono inputs) exceeds 90 dB for an in-



put of 3 millivolts. The phono inputs overload at 250 millivolts. Frequency response for all inputs is ± 0.3 dB or better over the full audio range (+0, -1.5 dB to 150,000 Hz for the high-level inputs). Switches adjacent to the phono inputs provide a choice of input impedances: 200, 50,000, or 100,000 ohms. The microphone inputs (unbalanced) are designed to accept microphone impedances ranging from 200 to 1,000 ohms, and switches provide 15 and 30 dB of input attenuation to prevent overload with microphones of unusually high output. The headphone jack is rated to provide a maximum output of 300 milliwatts per channel into 8 ohms. The Nakamichi 610 has an angled front panel that tilts toward the operator, with grab handles at either side. Overall dimensions are $15\frac{3}{4} \times 6\frac{3}{4} \times 9\frac{3}{8}$ inches. Price: \$550.

Circle 118 on reader service card

Magnesonics Cassette "Rapid-Winder"

The latest accessory from Magnesonics is the "Rapid-Winder" for cassettes, which is intended to wind through a cassette at high speed, providing a smooth and uniform tape pack and thus reducing the possibility of cassette jamming or the tape's suffering from uneven winding tension. The compact Rapid-Winder ($4 \times 3\frac{1}{2} \times 2\frac{3}{4}$ inches) is powered by

four AA cells (supplied); an adapter for operation from a normal a.c. outlet is also available. A C-60 cassette placed on the device is



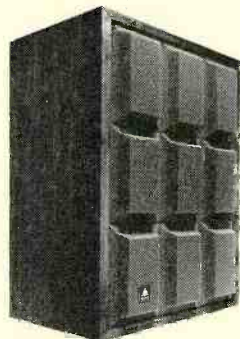
run through in approximately 30 seconds, with the supply spindle providing a uniform hold-back tension. The take-up spindle is driven through a slip-clutch mechanism. Price: \$19.95.

Circle 119 on reader service card

Stark Designs SR-3 Speaker System

The Model SR-3 from Stark Designs is a three-way speaker system with mid-range and tweeter drivers mounted on both the front and rear of the enclosure to augment dispersion. The two mid-range drivers are 5-inch cone devices covering the range from 450 to 4,500 Hz. The tweeters, also two in number, are 1-inch domes not mounted flush with the cabinet surfaces, but recessed into hemispherical concavities and aimed outward at a slight angle. These hemispheres can be rotated 360 degrees by the user so that the tweeters' radiation can be directed up, down, or to either side. Continuously variable controls adjust the output levels of the mid-ranges and tweeters. The woofer is a 12-inch unit installed in a sealed enclosure.

The nominal impedance of the SR-3 is 8 ohms, and minimum amplifier power recommended is 15 watts continuous per channel. The system is rated to tolerate continuous-power inputs as high as 60 watts and short-term drive signals as high as 120 watts. Dimensions of the enclosure are $24 \times 16\frac{1}{2} \times 13\frac{3}{4}$ inches. The cabinet is available in finishes of natural walnut and soft white, with sculpted-foam grilles in red, orange, blue, umber, and



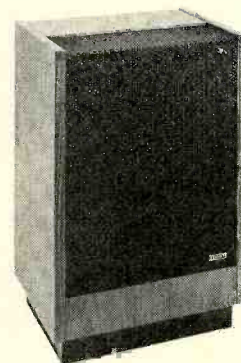
black. Price: \$240. Additional grilles cost \$15 each, and an optional kick base for floor installation costs \$30. Stark Designs also offers

the Models SR-2 and SR-1 without rear-firing drivers and, in the case of the SR-1, a 10-inch instead of a 12-inch woofer. Prices are \$195 and \$165, respectively.

Circle 120 on reader service card

Scott PRO 100 Speaker System

A new "PRO" line of speaker systems has recently been inaugurated by H. H. Scott with the Model 100, a three-way floor-standing design with drivers radiating both forward and upward. The woofer of the PRO 100 is a 15-inch driver in a sealed enclosure. At 700 Hz there is a crossover to two $4\frac{1}{2}$ -inch mid-range drivers, one mounted on the top of the enclosure and the other on the front. A second crossover at 3,500 Hz brings in two 1-inch dome tweeters that also occupy top and front



locations. Crossover slopes in the PRO 100 system are generally 12 dB per octave (6 dB per octave for the woofer, which also employs a mechanical rolloff at the top of its range). Three-position switches adjust the outputs of the mid-ranges and tweeters over a 6-dB range, while a third switch alters the ratio of top-radiated to front-radiated energy. Frequency response of the system is 40 to 20,000 Hz ± 4 dB.

The PRO 100 has a nominal impedance of 4 ohms; actual impedance does not fall below 4 or above 12 ohms over the full audio range. The power-handling capability of the system is rated at 125 watts of program material, and the woofer is fused to protect it from overdrive. Minimum amplifier power recommended is 25 watts per channel. The PRO 100's cabinet is constructed of walnut veneers with dimensions of $29\frac{1}{4} \times 17\frac{5}{8} \times 14\frac{1}{2}$ inches, including an integral base. Dark brown grille material covers the front and top of the enclosure where the upward-radiating drivers are located. Price: \$350.

Circle 121 on reader service card

PUBLISHER'S NOTICE: Recent fluctuations in the value of the dollar will have an effect on the price of merchandise imported into this country. So, please be aware that the prices quoted in this issue may be subject to change.

Garrard. The Automatic Choice.

Rolls Royce. Burberry. Wedgwood. Classic British trademarks of our time. There is another. Garrard. No other brand in the world is as instantly associated with turntables.

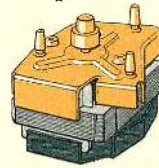
The reason is simple. An emphasis on fundamentals has shaped all progress at Garrard. Precision and mechanical integrity have always held high priority over "glamour" and pizzazz. Any model change means an indisputable improvement in performance or durability, not just a new sales "promotion."

The new 990B belt-driven, multiple-play turntable is an excellent example of Garrard's basic design philosophy. We believe it to be the best value Garrard has ever offered in its quarter century of designing and producing high fidelity turntables. That's a pretty strong claim. But the 990B's superiority to competitive record players anywhere near its price (\$169.95) is readily apparent.

The 990B is belt-driven. An idler mechanism provides an inventive method of controlling speed as well as an additional stage of isolation between the motor and platter. It has a full size,

5 lb., die-cast, dynamically balanced platter which smoothes out even the tiniest fluctuations of speed. Cueing is continuously damped in both directions. Records are supported at the center hole *and* edge and the release mechanism operates at both points to ensure complete protection for all

your records. The Synchro-Lab motor incorporates both a 4-pole induction section for high starting torque and a synchronous section for constant speed.



The stylus force and anti-skating adjustments use no springs for absolute, unchanging precision. The newly designed S-shaped tonearm boasts impressively low tracking error plus low mass and bearing friction.

True, *some* competitors have *some* of these features. The 990B has them *all*.

As for specifications—Rumble: -64dB. Wow: 0.06%. Flutter: 0.04%.

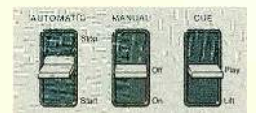
Finally, the 990B is fully automatic. The arm indexes, lifts at the end of play, returns to the arm rest and shuts off the motor.

The result is exceptionally gentle handling of your valuable record collection. And since the

automatic mechanism is completely disengaged during play, you get the convenience of automation and multiple-play without compromising performance.

When you purchase the new 990B, you buy two things: a company that has earned a superlative reputation over many years of design and manufacture *and* a turntable demonstrably superior to anything in its price range.

For your free copy of the New Garrard Guide, write: Garrard, Div. of Plessey Consumer Products, Dept. A, 100 Commercial St., Plainview, N.Y. 11803



Garrard
® The Automatic Choice

Audio Q. and A.

By Larry Klein
Technical Editor



Beyond the Sensory Level

Q. *Contrary to what most manufacturers would like us to believe, isn't it true that the reason some equipment costs more than it should is that it is built for performance qualities far beyond the hearing sensitivities of most people?*

CRAIG B. MACDONNELL
Hermosa Beach, Calif.

A. The question you raise has been argued among audiophiles for years. No hard and fast answer can be given because we are dealing with the type of subjective perception that varies enormously from person to person. Specific kinds of distortion that will pass unnoticed by one person will be heard as a grave sonic affront by another. And it is not simply a matter of trained-vs.-untrained ears. For example, I am very sensitive to mid-range frequency aberrations in speakers. For me, the "honky" nasal quality produced by a speaker with a peaked mid-range response will make it virtually unlistenable; other people, whose ears I respect, hear the peak but are not especially bothered by it. On the other hand, I appear to be quite insensitive to phasing aberrations. I have a friend who can walk into a room and without really concentrating tell instantly whether the speakers are in or out of phase in two or four channels. It seems that the ability to detect sonic phenomena is dependent both on learning and on having the perceptual gift.

To return to the specifics of the question, as far as the actual hearing sensitivities of most people are concerned, there is no way of knowing without individual testing whether any particular individual falls above or below average in any particular area. Furthermore, a lot of the data are just not available and a lot of the available "data" are, in my view, of somewhat dubious validity.

As I have said before in this column, it is very difficult to conduct a truly scientific experiment in psychoacoustics because it is so difficult to isolate the specific factor of concern from all the other variables. For example, let's say that an engineer makes a complex measurement of a speaker system and is able to show that it has severe "multiphase unilinear distortion" (MUD). He then finds a way to eliminate the distortion, and the speaker sounds a lot better in subsequent listening tests. But has the designer proved that the MUD distortion he measured was responsible for the audible distortion he heard? Not nec-

essarily. In the process of eliminating the MUD he may have simultaneously cured some other problem which produced another type of distortion he was not measuring and was not aware of, and which was, in truth, responsible for the audible effects he heard. My point here is not to construct a paradox, but to illustrate a very real problem of testing and design.

There are additional reasons why engineers design for specifications "beyond hearing sensitivities." For one thing, it is necessary to incorporate very wide frequency bandwidth into equipment simply in order to ensure proper performance within the normal audible band. The reasons for this are somewhat complex, but today it is quite simple to design wide-range amplifiers without running into excessive cost or engineering problems. It is also obvious that *all* equipment is subject to wear and slow deterioration in use. When a component specification is raised beyond that which is necessary, the component will still remain within specs even though its distortion, wow and flutter, noise level, or whatever may have gone substantially down hill owing to inevitable deterioration over the years.

Basically, the question comes down to this: are we paying too much money for non-audible improvements? The question obviously has no easy answer—but I for one seldom find myself muttering under my breath about rip-offs when examining a new piece of hi-fi gear.

Solid Status

Q. *From what exactly is the term "solid state" derived? What is "unsolid" about tubes?*

T. C. DYE
Troy, Mich.

A. Tubes are considered "unsolid" because there is a vacuum (or gas) inside them. In a transistor, the signal travels through a "solid" semiconductor material. The term "semiconductor" refers to the fact that the active ingredients in a transistor are neither insulators nor conductors but can have the properties of either, depending on the circuit conditions.

Speaker Specs

Q. *I have been trying to select a new pair of speaker systems for my stereo rig. According to most of the catalogs, systems ranging in price from \$40 up to \$400 all seem to*

have pretty much the same specifications. Are the figures lying or are the liars figuring?

ARNOLD BRACKEN
Cambridge, Mass.

A. Since the only specification usually found in ads relating to audible performance is the frequency response, I assume that this is the specification you are referring to. When some manufacturers claim that their speaker has a response from 30 to 15,000 Hz, for example, they may mean simply that an audio signal between 30 and 15,000 Hz will cause the speaker to "respond." It might twitch inaudibly at 30 Hz (or produce large amounts of 60 or 90 Hz harmonics) and distort terribly at the highs—but it would respond.

For an overall frequency-response specification of a speaker system to even start to be meaningful it must be given not only in terms of plus or minus so many decibels, but in addition the response must be given either graphically or numerically for off-axis as well as on-axis outputs. And even if such a "family of curves" for a speaker system were provided, it still would not indicate the amount of harmonic distortion produced by the system, at what output levels, or how well the speaker performs on transient signals. For transient testing, some type of pulse or tone-burst test is required. Speakers are usually measured acoustically, meaning that a known electrical input is fed to the speaker and the acoustic output of the speaker is picked up by a microphone in a given acoustic environment. The measurement results are influenced greatly by the measurement environment—which usually bears only slight correspondence to the listening environment of a consumer's home.

As you can see, there are good reasons why speaker-system specifications seem vague, inadequate, or noncomparable. This is not to say that some specs, if rigidly defined, are not more informative than others, but unless you have the time and knowledge to compare the measurement techniques of the different manufacturers, there's really no point in trying to compare the measurement numbers. So, to answer your question about liars and figurers, this is another one of those areas where honest men can figure differently.

Test-report Reprints

Q. *Can you send me reprints of the reports on all receivers you have tested in the 40-watts-per-channel and above range?*

RONALD KRENITZ
Chicago, Ill.

A. We do not have individual reprints of our test reports available. When readers see reprints of STEREO REVIEW reports in hi-fi showrooms they have been printed by the manufacturer of the product rather than by STEREO REVIEW. We do, however, have an index of all products tested since 1965. It is available for 25¢ and a stamped self-addressed long envelope sent to STEREO REVIEW, Dept. TRI, 1 Park Avenue, New York, N.Y. 10016. The test-report index also provides information on ordering available back issues.

Because the number of questions we receive each month is greater than we can reply to individually, only those letters selected for use in this column can be answered. Sorry!



Our performance can be put into words.

Your enjoyment will go beyond that.

To help you get the most out of BASF open reel tapes, we've improved our package.

We've included on it everything you need to know to achieve the most enjoyable listening experience possible. We're proud to, because there's no tape quite up to BASF standards.

Our Performance Series (formerly LH) is the DIN standard recognized throughout the world for open reel tapes.

Our Studio Series (formerly LH Super) with its high density formulation, results in a 50% increase in volume without distortion

across the full frequency range.

And our Professional Series is of mastering quality that's just that and not in name only.

All, of course, are polished for the extraordinary clarity that is BASF sound.

And while that sound can be put into words, charts and numbers, the listening experience itself can only be

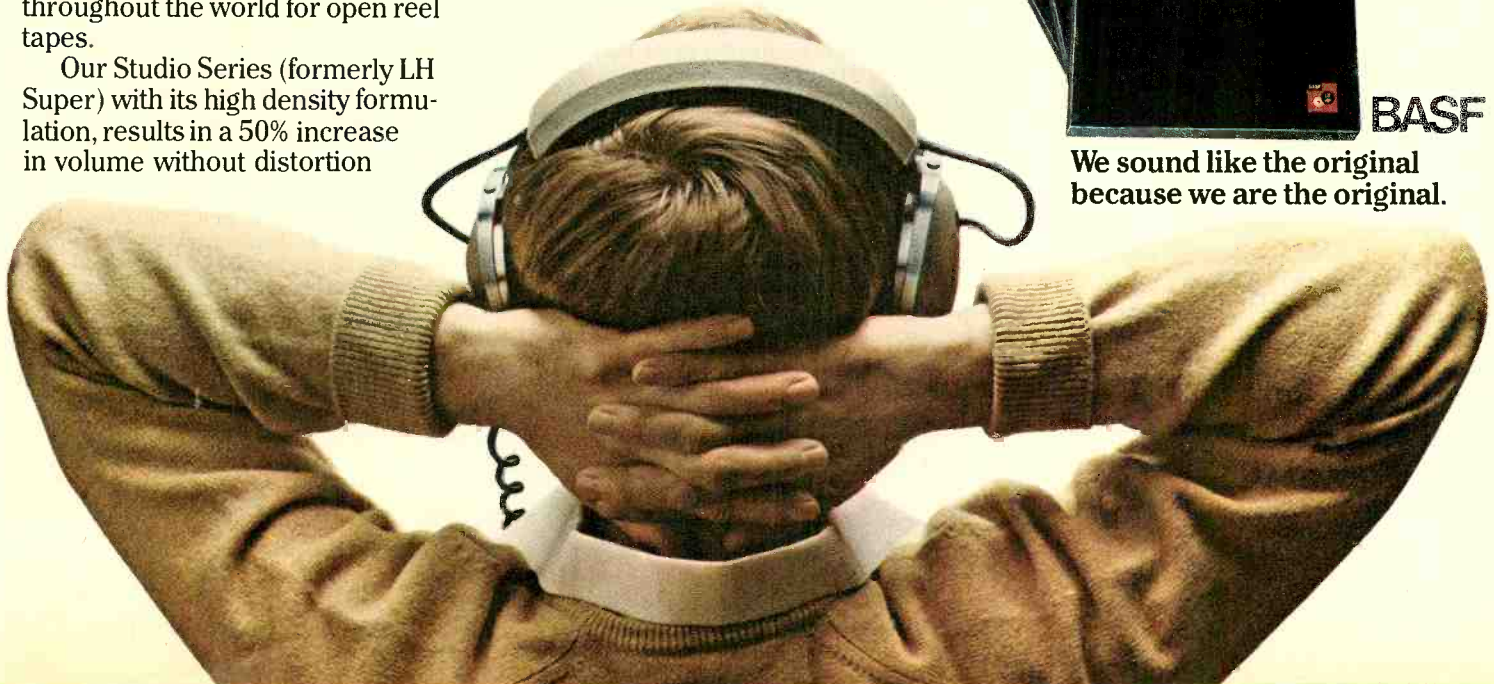
felt the moment you hear it.

Which isn't surprising, considering BASF invented audio tape in the first place.

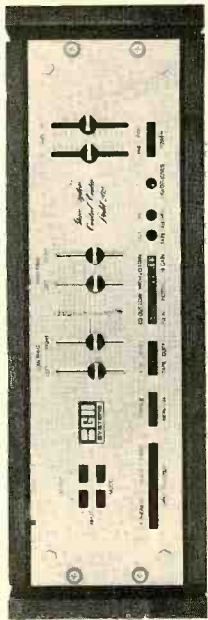


BASF

We sound like the original because we are the original.



THE FIRST! PREAMP BY BGW



THE BGW 202 HAS —

- Dual discrete OP amp phono stage for unprecedented accuracy
- Active tone controls using sliding step switches
- Active 18-dB/OCT. High and low pass filters
- Two phono inputs plus accessory socket for moving coil pre-preamp converter
- Separate power amp switching
- Remote AC switching unit accessory available

Guaranteed specifications:

Phono stage: Gain=42-dB, ± 25 -dB of RIAA, S/N=82-dB, THD=.01%.

Tone controls: Active baxandall controls add virtually no distortion. ± 18 -dB at 50-Hz and 15-kHz in 3-dB steps.

High and low pass filters: Active 3-pole, 18-dB/OCT. Low frequency at 40-Hz, high frequency at 12-kHz.

Maximum output voltage: At line output, 8-volts RMS into 600-ohms (+20-dBm). Phono at tape output, 10-volts RMS into 5-kohms. Rated output, 4-volts RMS into 5-kohms.

Total harmonic distortion: Less than .01% at rated output, 20-Hz-20-kHz.

Write for the location of your nearest dealer.



BGW Systems
P.O. Box 3742
Beverly Hills
CA 90212
(213) 973-8090

in Canada . . . **Omnimedia Corporation**
Quebec

CIRCLE NO. 11 ON READER SERVICE CARD

Audio News Views and Comment

By Larry Klein
Technical Editor

Reverb and Reality

● It's customary—but not correct—to refer to speakers as the “weak” link in the audio-reproduction chain. For many years now, I've been convinced that the weakest links are *not* to be found in the hi-fi components, but rather in the sound-to-microphone interface at one end of the reproduction chain and the speaker-to-ear interface at the other. These are the reasons, as I hear it, that we can usually achieve “high fidelity,” but we can seldom attain a convincing imitation of acoustic reality.

Probably 99 per cent of available recordings simply do not include enough sonic information to create the illusion that some original sonic event is being duplicated before your very ears. And even if by chance the information is present in the recording, it gets messed up by the listening environment somewhere between your speakers and your ears.

In the twenty-odd years I've been pursuing the will-of-the-wisp of high fidelity, I've heard successful I-am-there/they-are-here sonic illusions perhaps a half-dozen times. It is clear that conventional stereo reproduction just can't do it. The only times I've experienced a really convincing simulation of sonic reality, either quadraphonics or headphone listening to a true binaural recording was involved. A good binaural recording (done with two microphones installed in the ears of a dummy head), when played back through headphones, can provide a fantastic I-am-there illusion and—this is significant—the headphones used for listening need not even be of top quality! I suspect that the same is also true of a correctly done quadraphonic recording; the playback equipment should be adequate, but it doesn't have to be pushing the state of the art for the illusion of reality to come through if the recording is made correctly. This is not to say that there's no point in upgrading your equipment, but rather that the achievement of the illusion of reality—no matter how good your equipment—is not to be expected without improvements both in the way the recordings are made and in the way the reproduced sound is delivered to your ears.

It is evident that, with few exceptions, even our very best records and tapes provide a simulation of reality that is on the level of, say, a beautifully photographed country scene. The color may be exact, the visual details precise, and the enlargement may be life size, but when you view the photo you know you are looking at a picture, not through a window. What's missing? The crucial third dimension: depth or space. It is the failure to record and

then realistically reproduce the ambiance, the acoustic spatial environment of the performance, that is the true weak link. Sure, you can invest in better audio equipment and achieve improvements, but they will be almost exactly analogous to getting a better lens for your camera. The superior lens will provide greater detail, less distortion, and more accurate color rendition. The improvement is certainly worthwhile, but it won't make the breakthrough to “reality” in the reproduction.

ASIDE from quadraphonic and binaural recording and reproduction, there is another way of preserving (actually, restoring) the depth or space in a reproduced sonic performance: the use of artificial reverberation. Although professional recording studios habitually employ reverb devices during the sonic processing of musical material *previous* to its being fed to the disc cutter, adding reverberation during the production of a recording won't produce a breakthrough to realism in conventional stereo playback. In any case, the studio reverb devices that provide a fairly accurate simulation of natural reverberation are *very* expensive, and the audiophile units up until recently almost always employed a simple vibrating-spring arrangement. These, for good reason, are sometimes referred to as “bwaanng boxes.”

The ideal way to provide a clean, uncolored, noise-free simulation of natural reverberation is with electronics. However, electrons flow a lot faster than sound waves. There is no *simple* way to slow electrons down by the 10 to 20 milliseconds (0.01 to 0.02 second) or so required to simulate natural acoustic delays, and then to recirculate the delayed signals to simulate the arrival of multiple reflections at the listener's ears. In a sense, the problem of creating a natural-sounding reverberant field is very similar to the one dealt with by the manufacturers of music synthesizers attempting to simulate electronically the sound of a conventional musical instrument.

WHAT this is leading up to is that I've recently been talking to the gentlemen from Audio Pulse, a firm that was the first to approach (and educate) me on the matter of digital time-delay systems for the consumer. Their Model One is designed to accurately simulate a live listening experience by adding multiple continuous time delays to the stereo content of a disc, tape, or FM broadcast. The original signals come out unaltered from the existing front speakers, and the treated signals are fed to a rear-channel amplifier and speakers. When set up correctly, the effect achieved provides a substantial step in the direction of sonic realism.

The Audio Pulse digital time-delay system sells for \$585, which is a bargain compared with the present \$1,000-and-up prices for equivalent-quality studio units. For full technical information about its features, functions, and circuit design, write to: Peter Tribe-man, Audio Pulse, Bedford Research Park, Crosby Drive, Bedford, Mass. 01730.



The pushbuttons of the Model One are used for level matching, time-delay selection, and tape-monitoring switching. The LED indicators (left, bottom) indicate peak input levels.

Blueprint for Flat Frequency Response

In the graph below, frequency response was measured using the CBS 100 Test Record, which sweeps from 20-20,000 Hz. The vertical tracking force was set at one gram. Nominal system capacitance was calibrated to be 300 picofarads and the standard 47K ohm resistance was maintained throughout testing. The upper curves represent the frequency response of the right (red) and left (green) channels. The distance between the upper and lower curves represents separation between the channels in decibels. The inset oscilloscope photo exhibits the cartridge's response to a recorded 1000 Hz square wave indicating its resonant and transient response.

Smooth, flat response from 20-20,000 Hz is the most distinct advantage of Empire's new stereo cartridge, the 2000Z.

The extreme accuracy of its reproduction allows you the luxury of fine-tuning your audio system exactly the way you want it. With the 2000Z,

you can exaggerate highs, accentuate lows or leave it flat. You can make your own adjustments without being tied to the dips and peaks characteristic of most other cartridges.

For a great many people, this alone is reason for owning the Z. However, we engineered this cartridge to give you more. And it does. Tight channel balance, wide separation, low tracking force and excellent tracking ability combine to give you total performance.

See for yourself in the specifications below, then go to your audio dealer for a demonstration you won't soon forget.

The Empire 2000Z.

Already your system sounds better.

Frequency Response—20 to 20K Hz \pm 1 db using CBS 100 test record
Recommended Tracking Force— $\frac{3}{4}$ to 1 $\frac{1}{4}$ grams
(specification given using 1 gram VTF)

Separation—20 db 20 Hz to 500 Hz
 30 db 500 Hz to 15K Hz
 25 db 15K Hz to 20K Hz

I.M. Distortion—(RCA 12-5-105) less than .08% .2KHz to 20KHz @ 3.54 cm/sec

Stylus—0.2 x 0.7 mil diamond

Effective Tip Mass—0.2 mg.

Compliance—lateral 30×10^{-9} cm/dyne
 vertical 30×10^{-9} cm/dyne

Tracking Ability—0.9 grams for 38 cm per sec @ 1000 Hz
 0.8 grams for 30 cm per sec @ 400 Hz

Channel Balance—within $\frac{1}{4}$ db @ 1 kHz

Tracking Angle—20°

Recommended Load—47 K Ohms

Nominal Total System Capacitance required 300 pF

Output—3mv @ 3.5 cm per sec using CBS 100 test record

D.C. Resistance—1100 Ohms

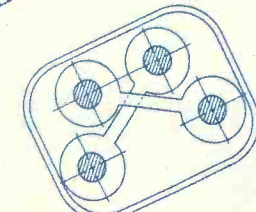
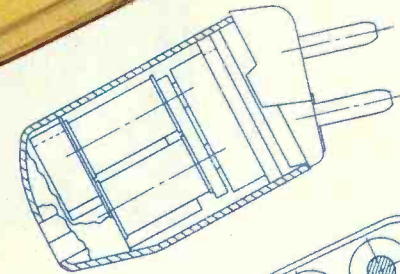
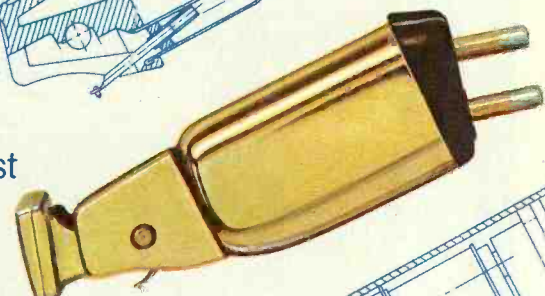
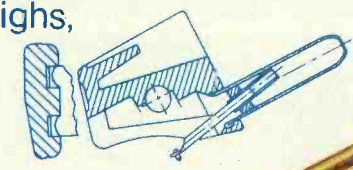
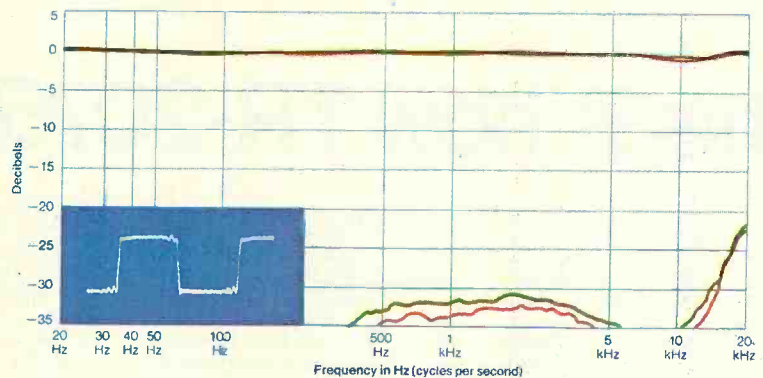
Inductance—675 mH

Number and Type of Poles—16 Laminations in a 4 pole configuration

Number of Coils—4 (1 pair/channel—hum cancelling)

Number of Magnets—3 positioned to eliminate microphonics

Type of Cartridge—Fully shielded, moving iron



The Rule:

“Only separate components can deliver truly great performance.”

This is how TR-2075 broke the rule.

Very powerful amplifiers can degrade tuner and preamplifier performance. So separate components became the rule and—for years—the rule made sense. But now we've found ways to break the rule and build a very high-powered receiver with better performance for less cost than comparable separate components.

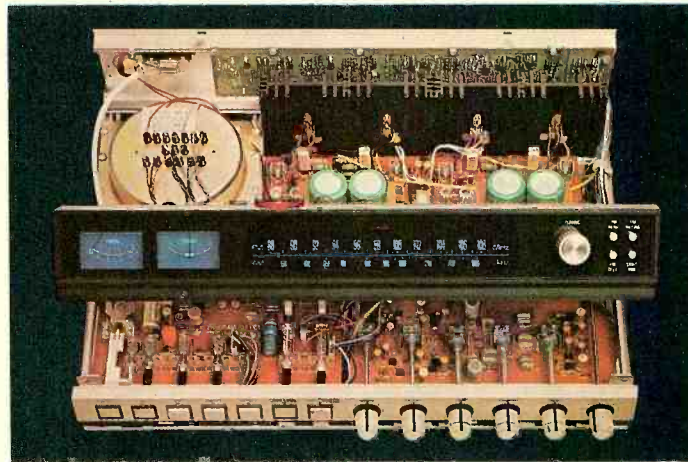
We started with a high-power toroidal transformer to eliminate stray electrical influence on other components within the unit. An expensive device not usually found in consumer products, it offers superior stability and performance.

The transformer feeds two powerful amplifiers. They have a wide frequency range for transparent sound. Ample overload margin for low distortion. And true complementary, direct-coupled circuits. Four protective circuits help deliver this exceptionally clean high power safely to your speakers.

TR-2075 has separate preamplifiers for each input to keep low-level signals noise-free. And sensitivity controls to equalize listening levels. (First stages of amplification occur within millimeters of signal input. An expensive, but effective, way to achieve low noise and clean sound.)

Push-button electronic time-delayed diode switching provides noise-free blends when changing program sources. This innovation allows us to put the controls in the best position for easy operation and the electronics where they can deliver the best performance. Independent tape-to-tape facilities add to the extreme versatility of TR-2075.

TR-2075 also offers electronic FM tuning for stability and long life. Phase-locked loop decoding for superb stereo separation. And phase linear filtering for low distortion. (Just a few of the reasons why this FM tuner/IF circuitry equals—or excels—any we know.)



Put it all together and you can see Tandberg has actually built three separate components—and overcome the problems of combining them on one chassis. Your ears can tell you more than our technical descriptions. So we invite you to listen to the new TR-2075. But don't compare it only to receivers that cost the same. Compare it to separate components that cost far more. (While you're at it, check *all* the Tandberg receivers, including the brilliant TR-1055 AM/FM and TR-1040 FM only.) You'll be glad you listened to Tandberg.

TANDBERG

We're our only competitor.

Tandberg of America, Inc., Labriola Court, Armonk, New York 10504. Available in Canada.

CIRCLE NO. 53 ON READER SERVICE CARD

Audio Basics

By Ralph
Hodges



GLOSSARY OF TECHNICAL TERMS—27

● **Port** or **vent** is the usual term for the opening in a speaker enclosure such as a *bass-reflex* cabinet. In a bass-reflex cabinet, the size (area) of the port and the volume of the enclosure interact to create a resonant acoustical "circuit," such as originally described by Helmholtz, a German physicist, during the late nineteenth century. This circuit is "tuned"—by adjusting cabinet volume or port size—to complement certain characteristics of the woofer chosen for the speaker system, with the object of obtaining uniform, extended low-frequency response with minimum loss of speaker efficiency. Occasionally such terms as "ducted port" and "damped port" are used to describe vents to which additional acoustical-loading elements (tubular extensions, passive cones, or various acoustically resistive materials) have been added.

● **Power** describes the *rate* at which a device (such as an amplifier or an automobile engine) is able to do work. Thus a "powerful" audio amplifier is able to do a lot of work quickly and produce, through speaker systems, a great amount of acoustical energy for each increment of passing time; in short, it can play louder than a less powerful amplifier.

Amplifier power is expressed in terms of an electrical unit called the *watt*. Power in watts is equal to the amount of the voltage times the amount of the current at the amplifier's outputs or, more relevantly, the voltage squared divided by the resistance connected to the amplifier (V^2/R). Audio amplifiers are generally tested for power by measuring the voltage they can develop across a resistor.

There are two methods of rating the power of high-fidelity amplifiers: *continuous* power and *dynamic* or *music* power. Continuous power, the basic rating method insisted upon by the Federal Trade Commission at the present time, theoretically specifies the maximum amount of power an amplifier can pro-

duce nonstop for an indefinite period of time. It is frequently, but illogically, also often called *rms* (root-mean-square) power. The dynamic/music-power rating was introduced when it was realized that most music does *not* require a continuous high-power output from an amplifier. It calls upon the amplifier for short bursts of high power (for very loud notes or passages) at times but is otherwise rather moderate in its power demands. Thus the dynamic/music-power rating indicated the maximum power-output capability of an amplifier for *brief* periods, after which its potential would often begin to sag rapidly. Since the rating was rarely clear as to *how long* a time period this extreme power was available (a factor intimately related to the frequency of the signal being handled), it was open to criticism as being nonrigorous and difficult to interpret. Nowadays it appears on specification sheets rather rarely.

Nevertheless, it should be realized that all amplifiers have a continuous *and* a dynamic/music-power capability. Depending upon the amplifier's design, dynamic power may exceed continuous power or be almost exactly the same (it is never less). Evidence seems to indicate that a high dynamic-power rating (given an adequate continuous-power rating) may indeed be audibly beneficial for some music under some circumstances—a point worth keeping in mind. Another noteworthy point is that *any* power rating means next to nothing unless the *distortion* at that power level is specified as well as the frequency of the signal being used to derive the power measurement.

● **Power amplifier** refers to the circuit or component that develops the high power/current levels necessary to drive loudspeakers. As a separate component, a power amplifier is frequently large and heavy and it has few controls, being dependent on a separate *preamplifier* to provide the knobs and switches.

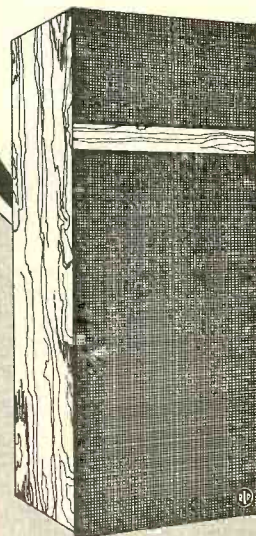
RTR ignites your receiver

with the HPR-12 Magnum
music system

Fiery reproduction capabilities are buried within many contemporary lower-powered amps and receivers. Only mating with ordinary speakers keeps them from delivering blazing performance.

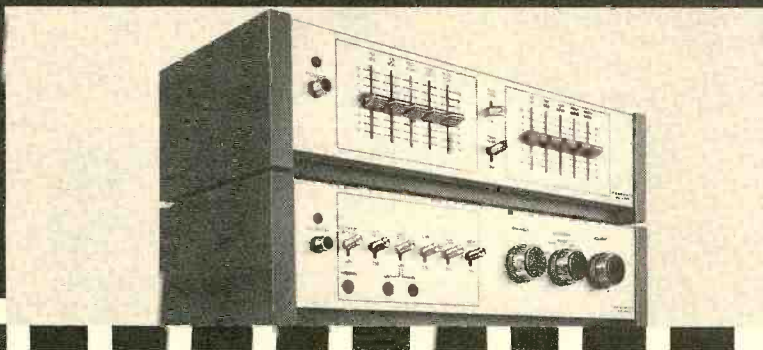
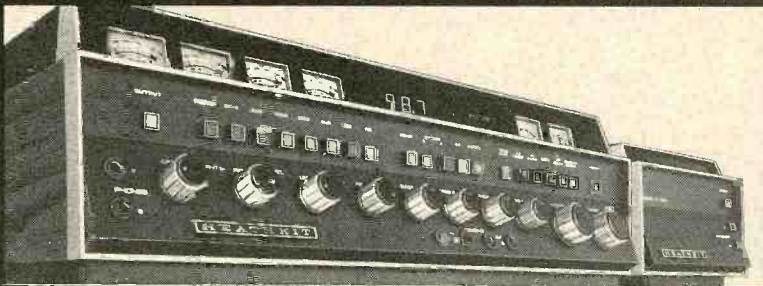
Now RTR ignites average components with the HPR-12 Magnum. From the Helmholtz driven passive radiator to the 12" woofer and piezo-electric tweeter, this speaker complements components to deliver 100 watts of pure, powerful music.

Plug into a pair at your RTR franchised dealer. Listen to the fireworks!



For dealer list and specifications, write
RTR, Dept. SR, 8116 Deering Ave.
Canoga Park, CA 91304.

CIRCLE NO. 38 ON READER SERVICE CARD



**who builds the
most exciting
audio equipment
in the world?...**

YOU DO!

Heathkit hi-fi gives more features and performance for your money, because you build it yourself. You get all the parts you need, plus foolproof, step-by-step instructions.

At just \$149.95 each, we think you can't buy a better speaker than our AS-1373.

Heathkit Modulus™ is the talk of the industry — a system that combines state-of-the-art performance with protection against obsolescence. It can be stereo now, 4-channel later — without "black box" converters. The digital-readout AM/FM tuner/preamp costs just \$599.95 and matching stereo amplifiers start at \$159.95.

The new AP-1615 stereo preamp is one of the world's finest, yet costs just \$129.95. The matching AD-1305 five-band stereo equalizer provides exceptionally versatile tone control. It costs an incredibly low \$119.95.

See the complete Heathkit hi-fi line — send for your free catalog today!

**HEATH
Schlumberger**

**HEATH COMPANY, Dept. 40-17
Benton Harbor, Mich. 49022**

Send me my FREE Heathkit Catalog.

Name _____

Address _____

City _____ State _____ Zip _____

HF-303A



**NEW Heathkit Catalog
FREE! SEND
TODAY!**

**HEATH COMPANY, Dept. 40-17
Benton Harbor, Mich. 49022**

Tape Horizons

By Craig Stark



RECORDER FUNDAMENTALS—AN OVERVIEW

JUST what goes on in the electronic innards of your tape deck when you make and play a recording? Understanding the process by which rapid and minute fluctuations in barometric pressure ("sound waves") are transformed into strings of millions of microscopically small magnets that can be stored indefinitely and converted back, as often as you please, into sound waves is not only a fascinating exercise in itself. Knowing what happens at each step along the way will also alert you to the pitfalls that trap the unwary, thus improving your chances of getting the most from both tape and machine. So, in this and succeeding columns, let's explore *how* a tape recorder works, starting by tracing the signal path from input to output.

When you place a microphone in a sound field—even a very loud one (a 90-dB sound-pressure level, for example)—it generates an electrical alternating current whose voltage is extremely low—typically a millivolt (0.001 volt) or so. The input stage of the recorder amplifies this minuscule signal by about a thousand times (60 dB) to a more useful level of about one volt ("line level"), where it is well above the noise level of stray hum fields and the inherent noise of the remaining tape-recorder circuitry.

At this point the signal goes through a volume control ("record level") to the recording amplifier, where the bass frequencies are boosted slightly and, in anticipation of predictable losses in the recording process, the treble is boosted quite sharply. (The slower the tape speed, the greater this high-frequency *pre-emphasis* must be.) The process of shaping the frequency response of the signal before it gets to the tape is called "recording equalization."

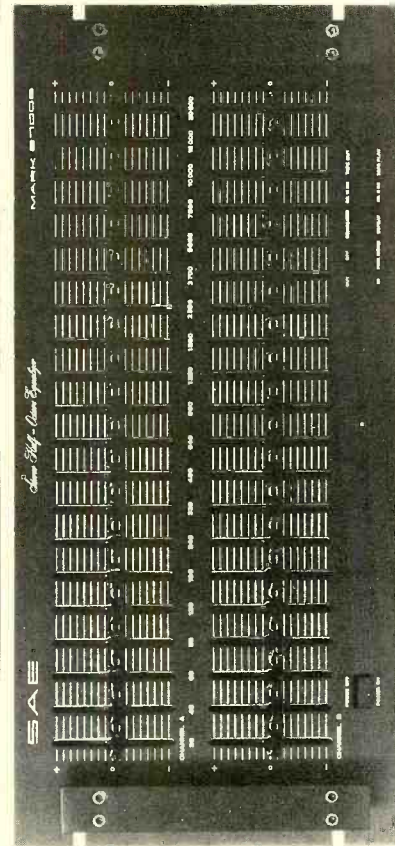
The audio signal is now mixed together with a high-level ultrasonic tone (usually about 100,000 Hz) called the "bias signal." (A *cross-field head* applies the bias signal separately.) The use of bias lowers distortion in the recording and

improves the signal-to-hiss ratio on the tape. The signal then flows through the record head, which is, in fact, an electromagnet with a gap in its front across which the tape passes. The magnetic current circulating in the head in response to the electrical current flowing through its coil seeks to cross the gap from one pole piece to the other, and in doing so flows out into and through that portion of the magnetically sensitive tape currently in front of it. The magnetic particles being pulled past the record-head gap are thus exposed to a magnetic field that is constantly changing in polarity and amplitude in accordance with the "+" and "-" swings of the electrical signal. As a given oxide particle leaves the influence of the record-head gap, it takes on—and holds—the last magnetic "charge" to which it was exposed, thereby creating a magnetic record of the signal.

In playing a tape, the string of variously magnetized particles is pulled across a similar (perhaps even the same) head gap. This time, the pattern of its continuously changing magnetic field induces an a.c. voltage in the head coil. Like a microphone signal, this voltage is extremely small—mere millivolts—so it needs immediate, high-gain preamplification. For reasons we will see subsequently, the preamplifier section that accomplishes this must also have a very pronounced and precise bass-boost/treble-cut frequency response characteristic—the "playback equalization." From here, the signal may pass through another volume control ("playback level") and then to a final output amplifier stage, after which it goes to your power amplifier and loudspeakers. At some point in the recorder's circuitry there will be a recording-level meter or other indicator that makes it possible to adjust the signal to the proper level by visual means. This meter may also serve other functions.

That's the *overall* picture, then: in upcoming columns I'll take up each of the stages in greater individual detail.

Flexible alternative



The SAE 2700B Half-Octave Stereo Equalizer

The 2700B can bring to your system the clarity & definition you have been looking for. Wayward sounds (booming bass, missing highs, blaring horns, or stifled solos) are all put in their place with the SAE 2700B Half-Octave Equalizer. The flexibility of 20 controls per channel only begins to tell the story. Some facts:

- * 0.02% THD & IM
 - * -100dB S/N Ratio
 - * Can drive any system
 - * FREE 5 YEAR Service Contract PLUS, long-throw oil-damped slide pots for better accuracy, precision wound toroid inductors for low distortion & a pink noise generator for system balance. Built with SAE quality, the 2700B is value packed with the capability and performance you need to control your system.
- PRICE: \$550.00 (suggested list)**

SAE
Scientific Audio Electronics, Inc.

P.O. Box 60271, Terminal Annex
Los Angeles, Calif. 90060

Please send me more information on the
SAE 2700B Half-Octave Equalizer.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

CIRCLE NO. 39 ON READER SERVICE CARD

Technical Talk

By Julian D. Hirsch



● **PEAK AND AVERAGE POWER RE-VISITED:** From time to time (most recently in the March 1975 issue of *STEREO REVIEW*) I have tried to shed some light on the often misunderstood relationship between *peak* and *average* (or continuous) power ratings. Judging from reader mail, I have not been entirely successful, so here we go for another round!

Apparently some confusion arises from the fact that *peak* power is equal to $(E_{\text{peak}})^2/R$ (the *peak* voltage squared and divided by the load resistance), while *average* power is $(E_{\text{rms}})^2/R$ (the *rms* voltage squared and divided by the load resistance). In the case of a sine-wave signal, the peak voltage is mathematically 1.414 (or $\sqrt{2}$) times the rms voltage, which causes the power rating based on the peak voltage to be double that calculated from the rms voltage. This relationship was exploited by many amplifier manufacturers before the FTC stepped in to rationalize amplifier power ratings.

One reader, referring to a statement in the March 1975 Technical Talk column to the effect that peak levels are typically 10 dB (ten times) greater than average power levels, expressed some puzzlement. He reasoned that since the average levels are already equivalent to twice as much peak power, the peak levels are only *five* times greater than the average values, not ten. This is not the case, but it is an easy mistake to make because of the confusion between the terms "peak level" and "peak voltage" as they are commonly used. Peak and average *levels* can theoretically be compared in terms of their *peak* voltages or their *rms* voltages, as long as one or the other system is adhered to throughout the comparison. The two systems cannot validly be mixed, however. Therefore, if the *peak voltage* of a peak level is three times the *peak voltage* of the average level, the power ratio between the two is roughly 10 to 1. And if the rms voltages of the two quantities (assuming they are readily measurable or calculable) are also in a 3

to 1 ratio, the power ratio is again roughly 10 to 1.

There is an even greater difficulty with such comparisons, however. We are accustomed to specifying audio levels in terms of a single-frequency (sine wave) waveform, which seldom exists in practice with real music or vocal program material. Sine waves are convenient for measurement, and the relationship between their peak and average values is precisely and simply defined. This is not so with music, however, in which there is no specific relationship between the two values.

Because of this, we must depend on instrument measurements of *specific musical passages*, rather than calculations, when dealing with music waveforms. The oscilloscope is a true peak indicator, but it is poorly suited to quantitative measurements of transients unless a storage cathode-ray tube is used to "hold" a transient for later analysis.

Most level meters are average-reading instruments, but their readings are valid only for steady-state signals. When transients are involved, the ballistic characteristics of the meter can have a profound effect on its reading. For this reason, the standard VU meter is required to respond to a 1,000-Hz sine-wave tone burst of 0.3-second duration, occurring once per second, with a reading from 99 to 101 per cent of its steady-state reading on a tone of the same amplitude. This provides a common basis for comparing readings made on the same program by different VU meters. Even though this is

an obvious convenience—actually, a necessity—in broadcast and recording work, it tells little about the real "average" level of the program.

Implicit in an average-level reading is the time period over which the program is averaged. This can vary widely, depending on the reason for taking the average. If we are concerned with the heating effect on a power amplifier, we may wish to average the program signal for many minutes. If the survival of the tweeter in a speaker system is at issue, a duration of a second or even less may be very significant.

A few recent tape decks and amplifiers are equipped with very fast-acting peak-reading meters, some of which can also be switched to give a conventional VU response. These meters are not mechanically faster than other types, but are driven by electronic circuits that "hold" a peak waveform long enough to let the meter read its true value. In this application, such a meter makes a lot more sense than the slower-responding conventional meter, since we are primarily interested in the effect of the signal on a medium (tape) that has a limited peak-handling ability and will overload if overdriven. It is instructive to monitor a variety of programs with such meters, switching between the peak and VU modes and noting the difference in readings. This gives a rough idea of the actual peak-to-average ratio of the program material, subject to the limitations of the peak meter in responding to fast peaks (some can respond in a few milliseconds or less) and of the VU meter in reading a meaningful average value (whatever that might be!).

All of this leads us naturally to a question raised by another reader, who has speakers rated by their manufacturer at 100 watts rms (once again, for the record, this means 100 watts *average*, since the term "rms" has no practical meaning when applied to power) and is operating them—with some trepidation—from an

TESTED THIS MONTH . . .

Epicure Model Four Preamp
BGW 500D Stereo Power Amp
Genesis I Speaker System
Heath "Modulus" Components

amplifier rated at 250 watts per channel. He notes that our test reports sometimes refer to a speaker rated at less than 100 watts absorbing the full output of a 200-watt-per-channel amplifier without damage or excessive distortion. His admirably worded question is "How many watts rms (*sic*) can go into how many watts at 8 ohms (speaker rating) before the guts of the speaker become the owner's new wallpaper design?"

I wish I could supply an answer as straightforward as the question, but it is not that simple. There is no standard for rating the power-handling ability of a loudspeaker, and each manufacturer is free to choose his own criteria. Whatever method is used, it must always be a function of frequency, and usually of time as well. The point at which distortion becomes severe is sometimes used as the basis for a speaker's power rating, but physical damage is probably more meaningful and more widely used. In any case, we have to know the frequency ranges involved. A woofer can withstand a prodigious continuous-power input, often for extended periods of time, without burning out, although eventually the voice-coil temperature may rise to the point where the wire melts or the in-

sulation ignites. Mid-range drivers can be destroyed by a fraction of the power input that the woofer will absorb. Most fragile of all is the tweeter, which can be burned out in a fraction of a second if grossly overloaded.

These considerations apply specifically in the case of sine-wave testing, and many speaker manufacturers warn against applying sine-wave signals at power levels greater than 1 watt or so. With conventional music waveforms, it is entirely possible for such a speaker to be safely driven by, say, a 100-watt amplifier, since the long-term average power (which is what heats up the voice coil) is not likely to exceed one-tenth of the maximum power and is usually concentrated at the lower frequencies where the rugged woofer can easily absorb it. The occasional peaks of 100 watts, even if they reach the high-frequency drivers, will usually be so brief that they will not cause thermal damage.

Obviously, a speaker manufacturer will rate his products conservatively, since to do otherwise would be to invite their wholesale destruction by today's high-power amplifiers. This is why I may drive a "100-watt" speaker with the full power of a 200-watt amplifier without

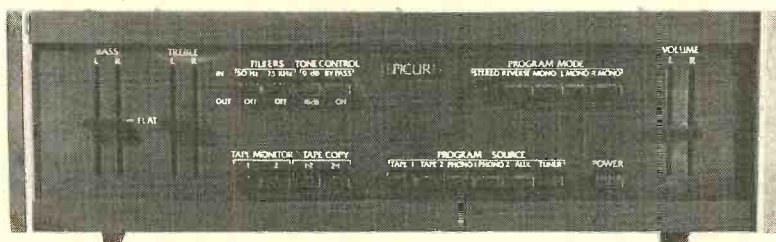
causing any damage. Any manufacturer of a "100-watt" speaker who failed to include at least that great a safety margin would be courting disaster, given the present state of high-fidelity amplifier development. Incidentally, when I refer to the "full output" of a 200-watt-per-channel amplifier, I do *not* mean 200 watts of sine-wave signal over any extended period of time, but rather occasional peaks to 200 watts with an average power on music program material of less than 50 watts (and usually less than 20 watts). In any event, there is no reason for anyone to continuously use every watt of his "super-power" amplifier's capability, any more than he would drive his automobile "flat out" all the time. The power is there as a reserve for peaks, and should be considered in that light.

A final warning is in order. Some electronic synthesizer music may be similar in its thermal effects to a sine-wave signal. The rough estimate of a 10-dB peak-to-average ratio frequently does *not* apply in this case, and it is possible to have a sustained high-frequency note that could easily blow a tweeter, even at volume-control settings that would be perfectly safe with conventional musical program material.

Equipment Test Reports

By Hirsch-Houck Laboratories

Epicure Model Four Preamplifier



● ALTHOUGH Epicure's Model Four preamplifier is priced well below most other fine preamplifiers, it rivals many of them in flexibility and refinement of performance. The Model Four presents a distinctive appearance. It is finished in satin black accented only by walnut edge strips and gold lettering on the panel (its styling matches that of Epicure's Model One power amplifier).

No conventional rotary knobs appear on the front panel of the Model Four. All variable control functions are handled by slider potentiometers, and all switching is done by pushbuttons. The volume control, at the right of the panel, consists of two vertical sliders for left and right channels (channel balance is achieved by a slight differential adjustment of the two). At the left side of the panel are two pairs of vertical sliders for bass and treble

tone control (these are also independent for the two channels). Their center positions are marked *FLAT* and are lightly detented.

Across the upper portion of the panel are two horizontal rows of pushbuttons. Two buttons engage the low-frequency and high-frequency filters (using active circuits with 12-dB-per-octave slopes and cutoff frequencies of 50 and 7,500 Hz). One button changes the tone-control turnover frequencies and maximum adjustment range (it is marked 9 dB and 18 dB to indicate the maximum control range), and a fourth button causes all tone-control circuits to be bypassed.

The other row of pushbuttons selects the program mode (*STEREO*, *REVERSE stereo*, *MONO*, and either *L* or *R* input through both outputs). Across the lower portion of the panel are the tape- and program-selector

switches. They can control two tape decks, monitoring the playback from either when the appropriate button is pressed. Two buttons cross-connect the two machines for dubbing from either one to the other, and it is possible to monitor the output from either one. The program sources include *TAPE 1*, *TAPE 2*, *AUX*, *TUNER*, *PHONO 1*, and *PHONO 2*. The power switch is a separate button that lights the *EPICURE* logo when on.

Each of the four phono-input jacks on the rear apron of the Model Four has a small control next to it that provides a sensitivity adjustment over a range of about 7 dB. There are also six a.c. convenience outlets, two of which are switched by the *POWER* button.

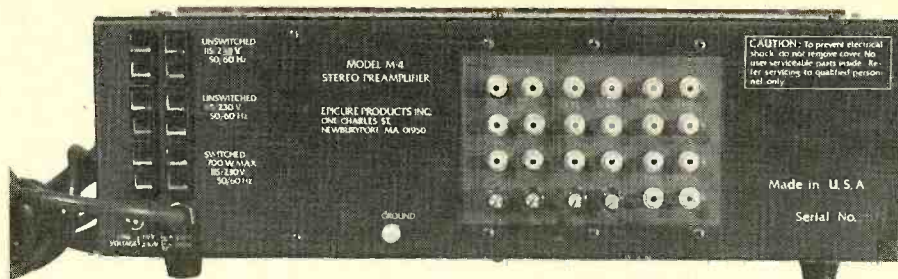
The performance specifications of the Epicure Model Four are impressive by any standards. The rated frequency response (± 0.25 dB) is 20 to 20,000 Hz through the phono inputs and 10 to 100,000 Hz through the high-level inputs. Phase shift at 20,000 Hz is rated at 2 degrees through the high-level inputs and 5 degrees through the phono inputs. Total harmonic distortion (THD) is rated at 0.005 per cent or less between 20 and 20,000 Hz for outputs up to 2.5 volts. Even the input capacitance is specified: 37 picofarads (pF) at both phono inputs and 47 pF at the high-level inputs. Start-up transients are prevented from

reaching the speakers by a 2.5-second time delay that mutes the preamplifier outputs until the circuits have stabilized. The Epicure Model Four is 18½ inches wide, 9½ inches deep, and 5½ inches high; it weighs 9 pounds. Price: \$349.

● **Laboratory Measurements.** The THD measurements of the Epicure Model Four for the most part reflected the residual distortion of our test equipment. The measured THD at the rated 2.5-volt output was 0.03 per cent at 20 Hz, 0.016 per cent at 1,000 Hz and 0.042 per cent at 20,000 Hz. However, separate measurements of signal-generator distortion verified that the actual distortion of the Model Four was considerably lower, and almost certainly within its 0.005 per cent rating. The output clipped at 8 volts, and even at 7 volts the THD was essentially as measured with 2.5 volts output. Intermodulation distortion (IM) was 0.006 to 0.007 per cent between 1 and 2.5 volts output, 0.02 per cent at 7 volts, and 0.09 per cent at a low 80-millivolt (mV) output.

The high-level sensitivity was 0.1 volt. The phono sensitivity was adjustable from 0.65 to 1.5 mV, all for a 1-volt reference output. The corresponding signal-overload points were 85 and 190 mV. The wideband noise measurement was 64.5 dB below a 1-volt output through all inputs, but this figure included small amounts of hum and radio-frequency pickup. The hum level was measured with a spectrum analyzer and found to be 65 dB below 1 volt at reference gain and -84 dB at minimum gain. With "A" weighting, the output noise was less than our minimum measurement threshold of 100 microvolts (-80 dB referred to 1 volt) through all inputs.

The frequency response was as flat as rated, including the RIAA phono equalization, which was within ±0.25 dB from 20 to 20,000 Hz and was affected negligibly (a decibel or so down at 10,000 Hz) by phono-cartridge inductance. The overall frequency response of the



The compact jack panel of the Epicure Model Four has sensitivity controls for the two pairs of phono inputs. It is positioned well away from the a.c. line cord and six convenience outlets.

preamplifier was flat from 5 Hz to beyond the audible frequency range, down 1 dB at 58 kHz, and down 3 dB at 110 kHz. The slew rate of the preamplifier is rated at 4.8 volts per microsecond, and our tests confirmed this.

The bass tone-control turnover frequency could be adjusted between about 40 and 350 Hz, depending on the slider and pushbutton settings, and the treble turnover range was from 1,500 to 3,000 Hz. The filters were excellent, with 12-dB-per-octave slopes and -3-dB frequencies of 65 and 6,500 Hz.

● **Comment.** The performance of the Epicure Model Four is impressive, and its construction is of high caliber. In general, the materials and workmanship of the preamplifier suggest a good laboratory instrument rather than a rather moderately priced consumer product. (For example, a toroidally wound power transformer is used to minimize hum fields, and there are three separately regulated power supplies.)

As we have written on several occasions, audible differences between components of comparable quality and measured performance are usually insignificant, and even when they can be established, it would be difficult to

state with certainty that one or the other is superior. Nevertheless, we subjected the Model Four to critical A-B comparison against other preamplifiers of known good quality, using the same program source, power amplifier, and speakers. Our tests of the Epicure Model Four had left us with such a positive feeling about it that we probably were expecting to hear differences, and at first that seemed to be the case (we felt that it was unusually quiet and "open"). But a more careful matching of signal levels resulted in no audible differences between the Model Four and the comparison units, confirming our earlier views. This, of course, does not detract in any way from the ranking of the Model Four in our estimation. Perhaps other test conditions would have revealed some differences.

In sum, we are satisfied that the Epicure Model Four preamplifier is at least as clean and quiet as any other we have used, as well as having all the operating flexibility one could desire. Add to this the functional, human-engineered design and attractive appearance of the unit—and its price—and you have what is certainly one of the better values in de luxe control centers.

Circle 105 on reader service card

BGW 500D Stereo Power Amplifier



● THE BGW 500D is a "super-power" amplifier with several important differences, both internal and external, from competitive units. Looking at its exterior, one is struck first by what it does *not* have. The 500D has no meters, no level controls, no flashing lights—in fact, the satin-finish aluminum front panel is adorned only with a heavy rocker-

type power switch, a tiny LED pilot light, and two handsomely styled handles. The rear apron is as stark, with the heavy-duty speaker binding posts flanked by the ¼-inch phone-jack audio inputs and a protective grille covering the cooling-fan vents. In fact, the only control on the 500D besides the power switch is a push-type switch in the rear that

interconnects its two channels to provide higher-power single-channel operation.

The absence of visible fuse holders offers a clue to the BGW amplifier's unusual electrical design. Unlike practically every other high-power amplifier, the 500D has no current-limiting protective circuits and no output or line fuses. Each output stage uses ten transistors, each of which is rated to dissipate 150 watts, so that the output devices can dissipate the full output of the power supply and need no protective circuits for normal operation. It has been claimed that electronic protective circuits are potential sources of distortion, especially with highly reactive speaker loads. The severity of this problem is debatable, but there is no doubt that BGW has removed it from the picture in no uncertain manner.

Although no fuses are needed to protect the output transistors, a power-line protective device is required by safety and common-sense considerations. In the BGW 500D this is a

(Continued on page 32)

We're #1—and the critics totally agree!

HIRSCH-HAUCK LABS . . . Stereo Review

“The Pickering XUV/4500-Q is obviously one of the best phono cartridges presently available. There are few stereo cartridges that can outperform it in any of its individual characteristics, and we know of none that could be said to be a better stereo/CD-4 pick-up.”

B. V. PISHA . . . Audio Magazine

“The Pickering XUV/4500-Q ranks among the top cartridges for stereo, SQ, QS and CD-4. The sonic clarity is exceptionally good, with superb transient and applause response, and good definition, particularly in the low bass region.”
“To sum up, we can recommend the Pickering XUV/4500-Q cartridge without reservations, based upon our laboratory and listening tests.”

MAURICE HOLTHAM . . . Canadian Stereo Guide

“In fact the reproduction of all material . . . stereo, CD-4 and matrix . . . was absolutely superb. Good recordings were reproduced with outstanding fidelity and clarity, and tracking was secure at one gram with even the most heavily modulated bands. Solo instruments and voice were rendered with exciting realism; large orchestral and choral works came through in all their magnificence.”

Hi-Fi Stereo Buyers Guide

“In both stereo and CD-4 one of the most outstanding under any program conditions. Sound so clean and crisp it almost hurts.”
“This pickup is a perfect example of why measurements cannot truly express the sound quality from a transducer; though the measurements are good, the sound quality was rated by the entire listening panel as superb.”

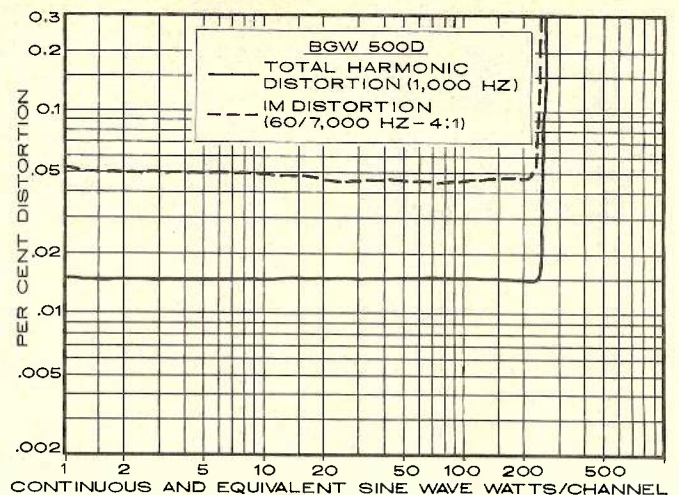
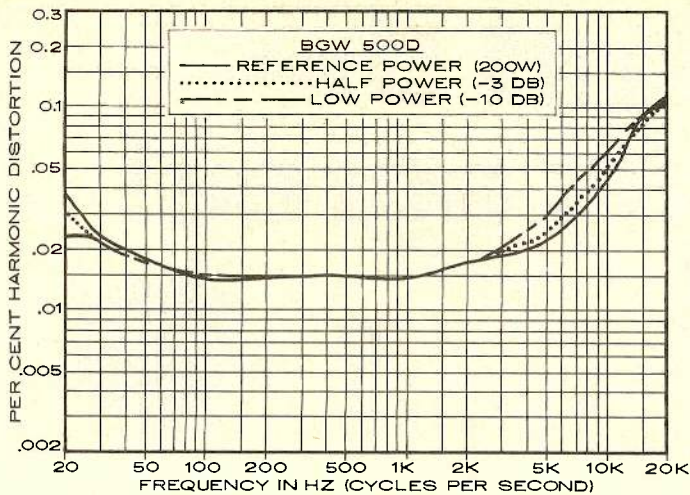
The specifications of the XUV/4500-Q are so exciting that we hope you will write to Pickering and Company, Inc., Dept. SR, 101 Sunnyside Blvd., Plainview, New York 11803 for further information.

 **PICKERING**

“for those who can hear the difference”

Reprinted by permission of Audio, Canadian Stereo Guide, Hi-Fi Stereo Buyers Guide and Stereo Review Magazines.





fast-acting circuit breaker whose reset control is actually the front-panel power switch. Of course, there is also the possibility of speaker damage to be considered—catastrophic failure could place the power-supply voltage across the output terminals. BGW's answer to this is characteristically simple and straightforward, if somewhat spectacular in its operation. The BGW 500D is protected by a SCR (silicon controlled rectifier) "crowbar" circuit. Excessive current drawn by the output transistors, arising from an internal short circuit or the use of a load impedance less than the 2-ohm minimum rating of the amplifier, instantly "turns on" the SCR, which literally short-circuits the power supply (as though a crowbar were placed across its outputs, and hence the name). This trips the line circuit breaker in milliseconds, with a rather distinctive mechanical sound. When the fault is removed, the front-panel power switch is moved to "on" and normal operation is resumed automatically.

The cooling system of the BGW 500D is also very effective. The output transistors and their large heat sinks occupy the entire top of the amplifier; they are covered by a protective plate except for perforations along the upper side edges of the amplifier. The cooling fan draws air in at the rear of the amplifier, passes it up and over the heat-sink fins, and exhausts the warm air through the side openings. Normally, the fan runs very quietly at a low speed. Should the transistor case temperatures reach 75 degrees Celsius, the fan speed is automatically increased to cope with the greater heat load.

For home audio systems, the BGW 500D's most applicable rating is 200 watts continuous output per channel from 25 to 15,000 Hz into 8-ohm loads, with less than 0.2 per cent harmonic distortion at any power level from 250 milliwatts to 200 watts. An alternate rating covers 10 to 20,000 Hz, over which range the amplifier will deliver 150 watts per channel with less than 0.2 per cent distortion. With the MONO switch engaged and an 8-ohm load connected across the two "hot" outputs, the amplifier is rated to deliver at least 501 watts from 20 to 15,000 Hz with less than 0.25 per cent distortion. The BGW 500D has front-panel dimensions of 7 inches high, 19 inches wide (slotted for rack mounting), and it is 12 inches deep. It weighs 49 pounds. Price: \$799. Optional dual peak-reading LED VU-type meters will be available for the 500D for approximately \$125 additional.

● **Laboratory Measurements.** After a conditioning period of one hour at one-third power and five minutes at full power, the BGW 500D remained relatively cool; no part of its external metal structure became too warm to touch. With both channels driven into 8-ohm loads at 1,000 Hz, the power at clipping was 231 watts per channel. Into 4 ohms it was 361 watts, and into 16 ohms the power was 139 watts per channel.

The distortion characteristics of the BGW 500D were as unusual as its mechanical and electrical design features. The distortion was almost constant with power output over a very wide range. At 1,000 Hz, with 8-ohm loads, the total harmonic distortion (THD) was 0.015 per cent from less than 1 watt to 225 watts per channel, reaching 1 per cent at 255 watts. The intermodulation distortion (IM) was between 0.022 and 0.054 per cent for all power outputs from 6 milliwatts to 225 watts per channel, and it measured 1 per cent at 255 watts.

Over the full 20- to 20,000-Hz frequency range the distortion was virtually the same at any power level from 20 to 200 watts per channel. It was about 0.015 per cent from 70 to 1,500 Hz, reaching 0.1 per cent at 20,000 Hz. Below 70 Hz distortion rose slightly—to 0.036 per cent at 20 Hz—but we suspect this figure represents the residual distortion of our test equipment rather than the performance of the amplifier. The distortion was predominantly second-harmonic at low and middle frequencies, with the third harmonic becoming visible above 5,000 Hz. There was a notable lack of higher-order harmonics, as could be inferred from the very low IM distortion at

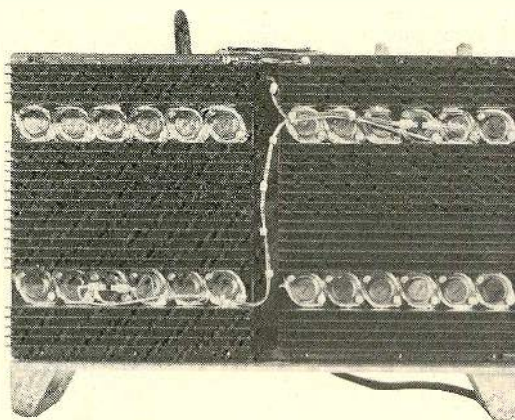
power outputs of a few milliwatts. In other words, no crossover distortion was observed.

A 0.45-volt signal into the amplifier's 47,000-ohm input impedance provided a reference 10-watt output (2 volts is needed for the rated 200-watt output). The output noise, in a wide-band measurement, was 0.5 millivolt, or 85 dB below 10 watts. The BGW rating of -110 dB is based on a 200-watt reference (which would add 13 dB to our figure) and a measurement within the 20- to 20,000-Hz audio band. Considering the difference in our test methods, our reading is perfectly consistent with the BGW rating.

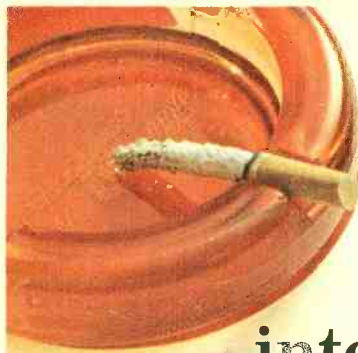
The low-level frequency response was flat within ± 0.1 dB from 5 to 10,000 Hz and down 0.2 dB at 20,000 Hz; it fell to -1 dB at 40,000 Hz and to -3 dB at 70,000 Hz. The square-wave rise time was about 5 microseconds, and the slew rate was about 13 volts per microsecond. When we shunted a 2-microfarad capacitor across the 8-ohm resistive load, a square-wave test signal showed a single overshoot spike of about 50 per cent amplitude, with one heavily damped cycle of ringing at about 50,000 Hz.

With 8-ohm loads we were unable to trip the crowbar circuit even when driving the amplifier into hard clipping. Into 4 ohms it tripped swiftly when severely overdriven. Repeated operation of the protective system—by shorting the outputs at full power—had no effect on the amplifier other than to open the circuit breaker.

● **Comment.** In a field of very fine and generally conservatively rated high-power amplifiers. (Continued on page 34)



With the top cover removed, the 500D's twenty-four output transistors are seen mounted atop the amplifier, where heat sinks cover the entire surface. The visible wires connect to thermal sensors clamped to some of the transistor cases.



You work hard when you're recording. It takes time and concentration. And a tape about to run out usually means stopping to interchange reels, rethread, and generally get the feeling that you're starting all over again. The 4070G lets you keep on recording because it records and plays in both directions. With full monitoring capabilities. And for the



times when music makes the mood, the automatic repeat function lets you enjoy a favorite tape for as long as you like. The 4070G.



You won't have to worry about running out of tape right in the middle. Just press the button and keep on recording.



reverse the machine, not the tape.



TEAC 4070G

The leader. Always has been.

TEAC Corporation of America 7733 Telegraph Road, Montebello, Ca. 90640 ©TEAC 1976

Just call (800) 447-4700 or (800) 322-4400 in Illinois, toll free, for the name of your nearest TEAC retailer. He'll be happy to show you the 4070G in action.

ers, the BGW 500D impressed us as perhaps the most rugged we have seen. We normally approach potentially destructive tests with trepidation (and many highly regarded amplifiers have met their doom at our hands), but after some experience with the BGW 500D we had to admit we simply could not damage it or impair its operation.

The only way we were able to trip the crowbar circuit in actual use was to drive very low-

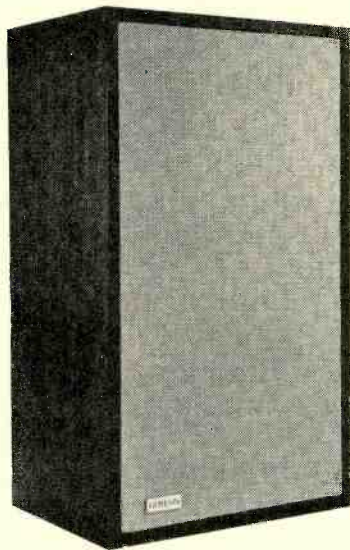
efficiency 4-ohm speakers at very high levels. With more efficient speakers, or with any 8-ohm speaker, we doubt that the circuit would be operated by anything less than a catastrophic failure in the amplifier (and our experience suggests that this would be a most unlikely occurrence).

At its normal (low) speed, the cooling fan is so quiet that we doubt that it would be audible in a home listening environment. At its higher

speed it is very audible, but nothing less than discotheque or other professional service should make the amplifier warm enough to increase the fan speed, and it would not be heard under the prevailing ambient sound levels. We have no comment on the sound characteristics of the BGW 500D other than to say that it has none. And that is exactly as it should be.

Circle 106 on reader service card

Genesis I Speaker System



GENESIS PHYSICS CORPORATION is a new name in the high-fidelity industry, but its founders have had years of experience in loudspeaker design and manufacture with such well-known companies as AR, KLH, and EPI. Their first product, the Genesis I, is a small, modestly priced two-way speaker system that employs a woofer with an effective diameter of only 6½ inches. The light but rigid woofer cone is driven by a four-layer voice coil operating in a 14,000-gauss magnetic field, and it is capable of the large excursions necessary for low bass output from such a small radiator. The woofer response rolls off naturally above 1,800 Hz without assistance from external crossover components.

The 1-inch tweeter, which has a concave or inverted dome, operates above 1,800 Hz. To protect it against excessive low-frequency input, a 12-dB-per-octave high-pass network is used in the tweeter circuit. According to Gen-

esis, the two-layer tweeter voice coil is suspended in a liquid magnetic material that we will doubtless be hearing more about in future products.

The Genesis I components are housed in a compact cabinet measuring 21 x 12 x 8¾ inches; it is finished in walnut-grain vinyl veneer. The system weighs 25 pounds. There are no external level or balance adjustments. The Genesis I carries a lifetime (nontransferable) warranty against defects in material or workmanship. Price: \$94.

Laboratory Measurements. The integrated frequency response in a normally "live" room, combined with a close-miked woofer measurement, was uniform within ±3 dB from 40 to 16,500 Hz. There was very little mid-bass emphasis, with the woofer output being uniform within ±1 dB from 47 to 350 Hz. The bass distortion at a 1-watt input (as-

suming a nominal 8-ohm load) was very low, remaining under 2 per cent down to 40 Hz and reaching 5 per cent only at 28 Hz and 10 per cent at 21 Hz. As would be expected from such a small woofer, the distortion rose rapidly at higher power inputs. At 10 watts, the distortion was about 5 per cent down to 50 Hz, and 10 per cent at 43 Hz.

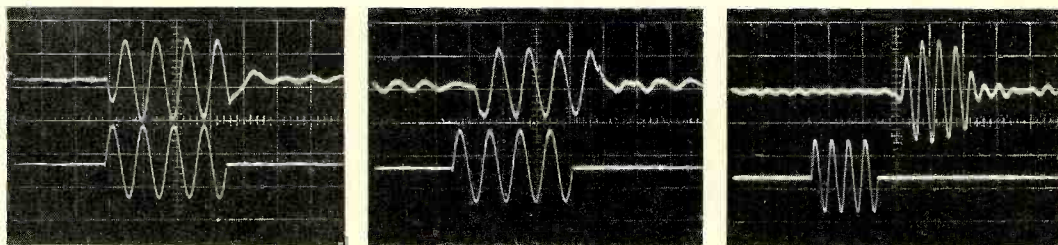
The impedance was between 4 and 5 ohms at 20 Hz as well as between 100 and 200 Hz and 4,000 and 10,000 Hz. The bass resonance was at 45 Hz, with an impedance of 25 ohms, and there was a broad impedance peak of 20 ohms centered at 1,100 Hz. The efficiency was moderately low (typical of most good acoustic-suspension speakers), and a noise input of 1 watt in the octave centered at 1,000 Hz gave an acoustic sound-pressure level of 88.5 dB measured at a distance of 1 meter. The tone-burst response was generally very good, although at 10,000 Hz about 0.2 millisecond was required for the burst amplitude to build up and decay.

Comment. The simulated live-vs.-recorded test revealed a slight brightness in the frequency range where most speakers are slightly deficient. We also noted this bright quality in our fairly "live" room during subsequent listening tests. It suggests to us that in a normally furnished room the Genesis I should give an exceptionally flat, extended high-frequency response. There was also a trace of coloration in the mid-range, possibly associated with a response-curve depression of about 3 dB between 1,000 and 4,000 Hz.

In direct listening tests and in A-B comparisons between the Genesis I and other speakers with whose sound we were familiar, the diminutive Genesis produced a caliber of sound that belied its size and price. It was basically very smooth and free of the sort of colorations that give so many speakers a heavy or "boxy" quality. Furthermore, our tests

(Continued on page 36)

The Genesis I exhibited very good tone-burst response. Shown here are frequencies of (left to right) 100, 1,000, and 10,000 Hz.



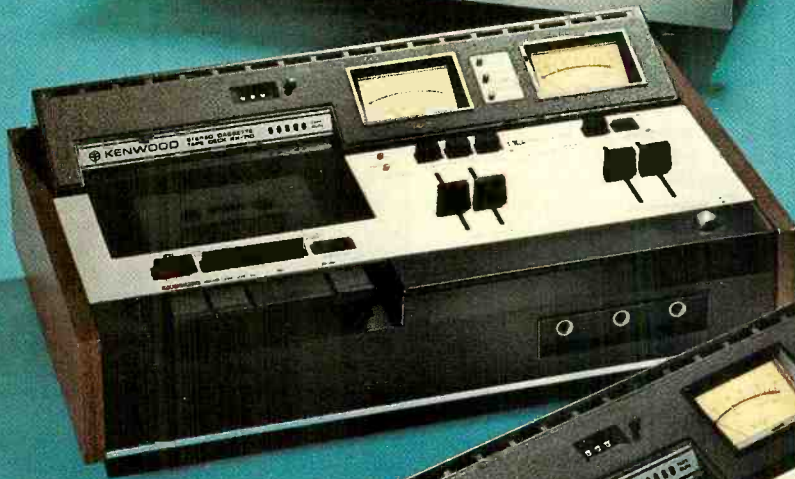
KENWOOD Cassettes ...when quality is your priority

KENWOOD Cassettes are quality-engineered for superb reproduction, professional recording results, smooth and easy operation, and exceptional dependability. The precision drive systems keep wow and flutter at new lows (less than 0.09% for the KX-620).

A one-micron head gap brings frequency response to new highs (30-16k Hz for the KX-910 and KX-710).

And a host of automatic features and well-designed controls make each unit virtually 'mistake-proof.' For cassette performance at its impressive best, you can depend on KENWOOD — the name synonymous with quality in stereo components throughout the world.

KX-620 — Front-Load Stereo Cassette Deck with Dolby®



KX-710 — Stereo Cassette Deck with Dolby®



KX-910 — Stereo Cassette Deck with Dolby®

For complete information, visit your nearest KENWOOD Dealer, or write...

the sound approach to quality



KENWOOD

15777 S. Broadway, Gardena, CA 90248 • 72-02 Fifty-first Ave., Woodside, N.Y. 11377 • In Canada: Magnasonic Canada, Ltd.

Dolby is the trademark of Dolby Laboratories, Inc.

CIRCLE NO. 3 ON READER SERVICE CARD

confirmed Genesis' recommendation that the speaker be located near the junction of two room surfaces such as floor-wall, wall-ceiling, or two walls. That placement makes for well-balanced sound with the clean, solid bass that we have come to associate with the better acoustic-suspension systems but *without* the upper-bass coloration that mars the sound of some otherwise fine speakers.

Obviously, Genesis has designed this speaker to be used at normal home-listening levels. Although no recommendations are

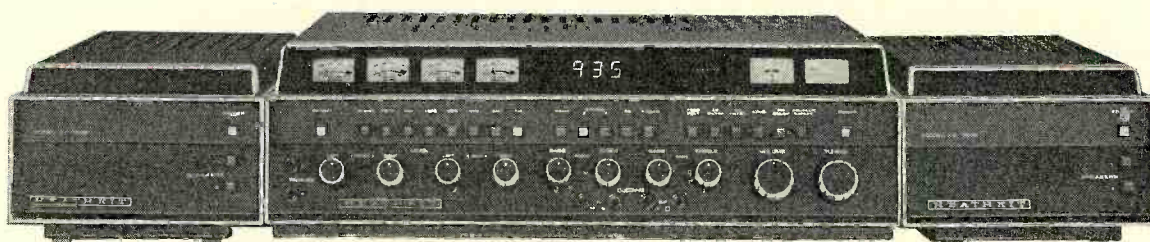
supplied as to the amplifier power required, the speaker's power-handling capability is rated at 40 watts. We would therefore judge that it is suitable for use with most low-power receivers in the 15- to 25-watt-per-channel range (its low impedance is in its favor, since most amplifiers will deliver considerably more power to a 4- or 5-ohm speaker load than to 8 ohms). Higher power is not particularly dangerous to the speaker (we used it with 200-watt amplifiers also, but did not attempt to "push" the speaker too far). However, in

most cases such power levels could not be used advantageously because of the rise in bass distortion.

We see the Genesis I as an unusually accurate, smooth-sounding small loudspeaker system for the home, rivaling the performance of many speakers costing several times its modest price. If you do not plan to listen to music at discotheque level or fill an auditorium with sound, you could hardly get a better-sounding speaker in this price range.

Circle 107 on reader service card

Heath Modulus Audio Components



● In its new Modulus line, Heath Company has taken a bold step toward total flexibility of performance and the elimination of potential obsolescence in an audio system. The heart of the Modulus is the AN-2016, an integrated AM/FM stereo tuner and stereo/quadrasonic preamplifier in a single unit. The styling of the AN-2016, like its design, is unique, with the front panel and top finished in black with contrasting aluminum accents and the side panels done in walnut wood grain. Like most Heath products, it is available only as a kit.

The display functions are contained in a narrow strip across the top of the panel. Four meters indicate the output levels of the individual channels on expanded logarithmic scales with a range of more than 30 dB. The two tuning meters are conventional signal-strength and zero-center types. In the center of the display panel is a prominent digital frequency readout (lit only when the tuner is in use) using ½-inch red LED numerals. The FM frequencies are indicated to the nearest 0.1 MHz (only the odd-numbered channels used in this country are displayed), and the AM frequencies are shown to the nearest 10 kHz.

Immediately below the display panel a row of twenty-one small square pushbuttons occupies the full width of the panel. When pressed in they are internally illuminated (in red for the POWER button, yellow for the others). Illuminated identifiers appear above the buttons when the unit is turned on. Eight buttons are program selectors; for PHONO, CD-4 (there are separate phono inputs for stereo and matrixed quadrasonic records and for CD-4 records), AUX (auxiliary), TAPE monitor, AM, FM, and DUB. This last is used to make tape copies on or from an external tape deck plugged into jacks on the front panel.

Five mode buttons select MONO, STEREO (front outputs only, or with the front and back channels on each side carrying the same program), SQ, or 4 CHANNEL discrete (for the

auxiliary and CD-4 inputs). Other buttons bypass the tone controls, activate the 12-dB-per-octave low- and high-frequency filters, the loudness compensation, and the FM Dolby decoder, and disable the FM interstation-noise muting system. The final button disables all outputs except the front- and back-channel stereo headphone jacks on the panel, which are driven by separate amplifier stages capable of providing adequate volume with *any* dynamic headphone.

Across the lower part of the panel are ten control knobs, all of the same size except for the larger knobs used for volume and tuning functions. An individual LEVEL control adjusts the gain of each channel, while the master VOLUME affects all channels. There are separate bass and treble tone controls for the front and back channels (each controls both left and right channels). The four DUBBING jacks at the bottom of the panel are standard ¼-inch phone jacks for the front and back inputs and outputs.

All other signal inputs and outputs are in the rear of the AN-2016, together with a two-position PHONO SENSITIVITY switch. Two of the four a.c. convenience outlets are switched. Antenna inputs are provided for 75- or 300-ohm FM antennas. Instead of the usual ferrite-rod AM antenna, the AN-2016 comes with an external shielded AM loop antenna. Outputs are provided for an external oscilloscope (such as Heath's AD-1013) for use as a multipath and FM tuning indicator.

In its basic form, the Heath AN-2016 consists only of the AM and FM tuner sections and the preamplifier, with no internal four-channel decoding or FM Dolby circuits. It is constructed on plug-in boards, eleven of which are required for the basic unit; the additional boards for the four-channel and Dolby functions can be purchased if needed. The SQ full-logic wave-matching variable-blend decoder, the CD-4 demodulator, and the Dolby

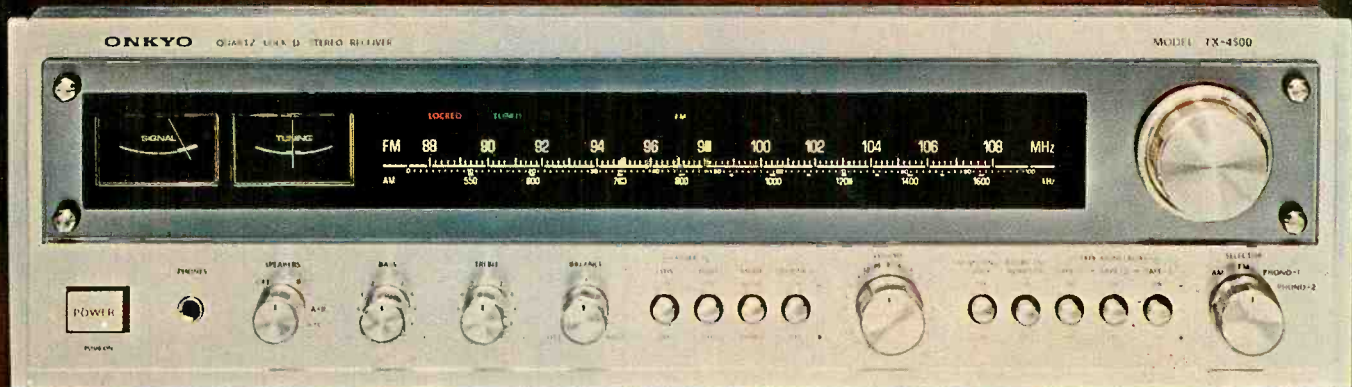
FM decoder are on separate plug-in boards for which sockets are wired into the main unit. They are sold as separate kits, and they can be added at any time after building the AN-2016 simply by plugging them in.

The circuits of the AN-2016 have advanced and unusual features too numerous to describe in detail. The FM tuning unit has two FET r.f. amplifier stages, and the i.f. amplifier has a linear-phase inductance-capacitance (LC) filter and a digital detector instead of the usual tuned discriminator. The AM tuner also has MOSFET r.f. and mixer stages and a nine-pole LC filter for maximum fidelity. The digital station readout is provided by an electronic frequency counter, although tuning is still done with the aid of the meters. Aside from its attractiveness, the digital indicator is necessary since it would have been difficult to provide a readable, accurately calibrated dial in the limited space available on the panel. To prevent start-up transients from being amplified and possibly damaging the speakers, a delay relay mutes the audio outputs of the AN-2016 for a few seconds after it is turned on and again when it is turned off.

The Heath Modulus concept gives the purchaser a wide choice of amplifier powers. Two stereo basic amplifiers, styled to match the AN-2016, are now available from Heath. Of course, any other stereo basic amplifier (or a pair for quadrasonic operation) can be used—even a pair of Heath's 200-watt-per-channel AA-1640's! At the other extreme, it is not really necessary to use *any* power amplifiers, since the AN-2016 can drive almost any two- or four-channel headphones to perfectly adequate listening levels.

The AA-1505 and AA-1506 are the two basic power amplifiers designed as companion pieces for the Heath AN-2016 control center. They match the styling of the AN-2016, and they are physically and electrically identical

(Continued on page 41)



It's new. It's exclusive. It's infinitely superior circuitry approaches the theoretical limits of sound perfection.

The Onkyo Quartz-Locked Receiver. Compare it against every known receiver. You'll see there's no comparison.

Succinctly, Quartz-Locked technology is a dramatic breakthrough in automatic drift-free and virtually distortion-free FM reception.

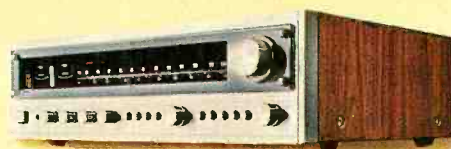
There are no buttons to push, no switches to throw, nothing extra to do to lock in a signal. Once a station is tuned in, it's locked in. Quartz-Locked in! And any factor which can cause tuner drift is automatically compensated for so the TX-4500 assures constant pinpoint FM reception, maximum channel separation and minimum distortion.

But that's only the FM story. There's virtually nothing you can't accomplish with the TX-4500.

Flawless programs come off records and tapes. Or use the TX-4500 to make your own tapes. Or mix your own programs with multiple tape inputs and dubbing.

ONKYO®
QUARTZ
LOCKED
RECEIVER

**the ultimate in
 drift-free/distortion-free
 FM reception**



The TX-4500 does it all. Rated according to FTC specs, the TX-4500 delivers 55 watts minimum RMS per channel, both channels driven into 8 ohms over a 20 Hz to 20kHz spectrum, showing less than 0.1% THD. FM sensitivity 1.8uV.

In addition, the TX-4500 also evidences exceptional transient response, the ability of an amplifier to follow sudden changes in the level of sound signals. Dual oscilloscope traces, with a 50 Hz square wave fed through, have shown less than a 5% tilt (sag). Generally, conventional amplifiers under the same conditions have shown a 25-50% tilt (sag).

The Onkyo Quartz-Locked Receiver offers one more important advantage . . . outstanding value for superior performance.

For more information and the name of your nearest dealer where you can see a complete demonstration of the TX-4500, write to Onkyo today.

ONKYO®
 Onkyo U.S.A. Corporation

Eastern Office: 25-19 43rd Ave., Long Island City, N.Y. 11101, 212-729-2323 Midwest Office: 935 Sivert Drive, Wood Dale, Ill. 60191, 312-595-2970
 Canadian Office: Tri-Tel Associates Ltd., Ontario, Canada
 CIRCLE NO. 34 ON READER SERVICE CARD



The Dual 1249. It will give you more reasons than ever to own a Dual.

For several years, independent surveys of component owners—audio experts, hifi editors, record reviewers, readers of the music/equipment magazines—have shown that more of them own Duals than any other turntable. This is quite a testimonial to Dual's quality performance, reliability and fully automatic convenience.

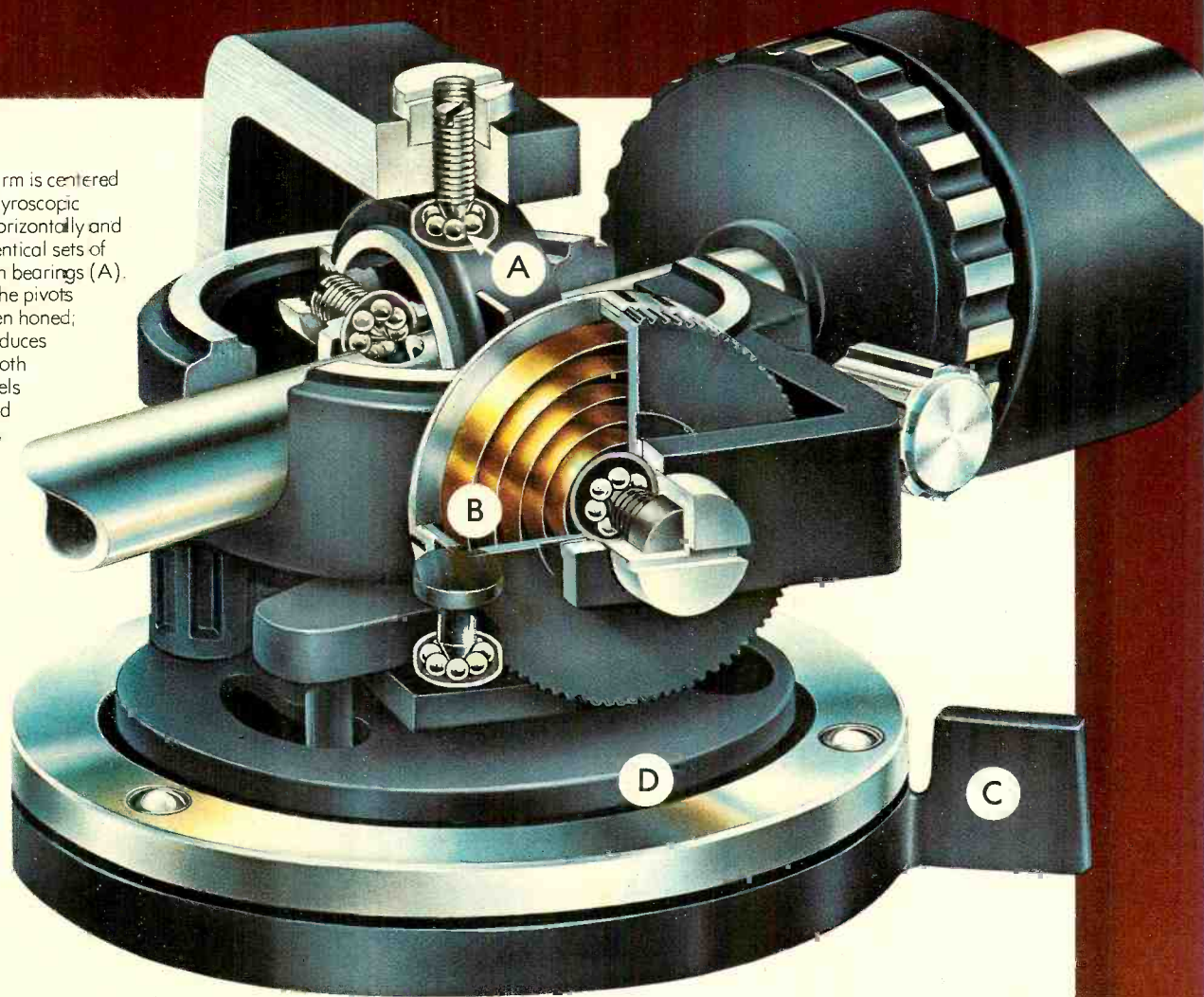
We believe the new 1249 will add even more serious music lovers to the roster of Dual owners, as it provides every feature, innovation and refinement long associated with Dual turntables plus some new ones. And all in a newly designed chassis that complements the superb design and meticulous

engineering of the 1249.

The low-mass tubular tonearm pivots in a true four-point gyroscopic gimbal suspended within a rigid frame. All tonearm settings are easily made to the exacting requirements of the finest cartridges. The tonearm is vernier-adjustable for precise balance; tracking pressure is calibrated in tenths of a gram; anti-skating is separately calibrated for conical, elliptical and CD-4 styli.

Tracking is flawless at pressures as low as a quarter of a gram. In single-play, the tonearm parallels the record to provide perfect vertical tracking. In multi-play, the Mode Selector lifts the

The Dual tonearm is centered within a four-point gyroscopic gimbal and pivots horizontally and vertically on four identical sets of precision low-friction bearings (A). The metal used for the pivots is first hardened, then honed; a process which produces microscopically smooth surfaces. (Dual models with gimbal-mounted tonearms: 1228, 510, 601, 1249 and 701.)



Stylus pressure is applied by long coiled spring (B), centered around vertical pivot. This system applies stylus pressure perpendicular to record and thus maintains the pressure equally on both groove walls even if turntable is not perfectly level.

Ideally, the stylus angle in play should be identical to the angle used in cutting records. This is accomplished in the Dual 1249 by the Mode Selector (C) which moves the tonearm base (D) up or down according to the mode of play. In single-play the tonearm is parallel to the record; in multiple-play, parallel to the center of the stack.

entire tonearm to parallel the center of the stack.

All operations are completely flexible and convenient—and they are foolproof. The tonearm can be set on the record manually or by using the viscous-damped cue-control or by simply pressing the automatic switch. You also have the options of single-play, continuous-repeat, or multiple-play.

The dynamically-balanced cast platter and flywheel are driven by an 8-pole synchronous motor via a precision-ground belt. Pitch is variable over a 6% range and can be conveniently set to exact speed by means of an illuminated strobe, read directly off the rim of the platter.

Of course, if you already own a current Dual, you won't really need a new turntable for several years. However, we would understand if you now feel you must have nothing less than the new 1249. Under \$280, less base.

Still, we should advise you of two other models in our full-size belt-drive series. The 601; single-play, fully automatic, under \$250. (CS601; with base and cover, under \$270. The 510; single-play, semi-automatic, under \$200.

United Audio Products,

120 So. Columbus Ave., Mt. Vernon, N.Y. 10553

Exclusive U.S. Distribution Agency for Dual

Dual®

CIRCLE NO. 50 ON READER SERVICE CARD

Phase Linear 8,515,200 watts later.



Back in '71 Phase Linear was Bob Carver, an audiophile with 200 square feet in the basement of an A & P store in the Pacific Northwest and one all-consuming obsession: to design and build the world's most powerful stereo amplifier.

Today Phase Linear Corporation is an acknowledged leader in high power technology, selling a complete line of amps and pre-amps throughout the world, operating out of one of the most advanced stereo component plants in the industry.

Phase Linear is now a household word among serious listeners, a word synonymous with power, quality, reliability and way-out-front technology.

And Bob Carver, Steve Johnson and A. P. VanMeter have come to be

recognized as the gurus of state-of-the-art amplifier design and development.

Phase Linear has dispensed over 8½ million watts of power to music lovers everywhere, starting with the famous super reliable, virtually distortion free Phase Linear 700, the first successful 700 watt amplifier. The popular Phase Linear 400 watt amplifier quickly followed. The incredible Phase Linear 4000 pre-amplifier was then perfected followed by a smaller version, the Phase Linear 2000. Recently the Phase Linear 1000 Noise Reduction System was added to the line . . . and there are many more advanced products in the wings.

Technological milestones along the way have included a unique Amplifier Protection Circuit (Patent # 3,727,148),

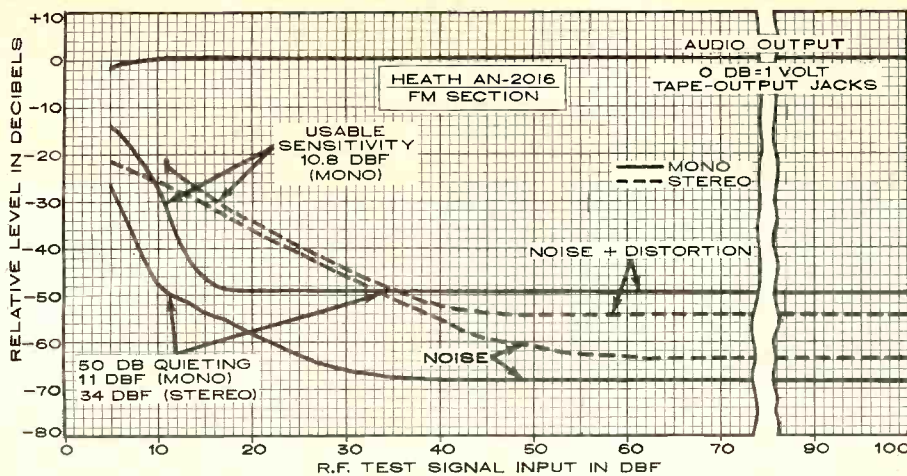
the first practical Expansion System, the innovative Auto Corralator Noise Reduction System and a unique Ambience Injection System for pre-amps.

Phase Linear has come a long way from that basement lab of Bob Carver's. But products are still made one at a time, and one out of every three people in production is involved in quality control or testing.

And that's the way it'll be for the next 8,000,000 watts.

Phase Linear
A POWERFUL DIFFERENCE

Phase Linear Corporation,
20121 48th Avenue W.
Lynnwood, Washington 98036



except for their power ratings (35 watts and 60 watts per channel, respectively, into 8 ohms with less than 0.1 per cent total harmonic distortion from 20 to 20,000 Hz). The only internal differences between the two amplifiers are the type of output transistors used and the power transformer (the more powerful AA-1506 requires a higher d.c. operating voltage). Again, they are available only as kits.

The only front-panel controls on the amplifiers are three pushbuttons. One is an on-off switch, and the other two individually activate the two sets of speaker outputs. The speaker-output terminals in the rear feature special polarized sockets and plugs that simplify speaker connection and insure correct phasing. The signal inputs are also in the rear, together with a level control for each channel.

The amplifiers are direct-coupled throughout, except for an input blocking capacitor. The output transistors are protected by electronic dissipation-limiting circuits. The amplifier circuits are constructed on two printed boards, and the power transformer plugs in for easy removal (it must be removed before shipping a completed amplifier). There are no setup adjustments, but a test meter, with attached clip leads, is built into each amplifier for testing and trouble shooting. It can be switched to serve as both an ohmmeter and a voltmeter.

The amplifiers are rated to deliver full power with a 1.5-volt input. The input impedance is between 15,000 and 25,000 ohms, depending on the setting of the level control. The hum and noise, with inputs shorted, is rated at 95 dB below full power.

The Heath AN-2016 is 19 inches wide, 14½ inches deep, and 6½ inches high; it weighs 29 pounds. Prices: AN-2016, \$599.95; AM-1503

(SQ circuit board), \$49.95; AN-1504 (Dolby circuit board), \$39.95; AD-1507 (CD-4 circuit board), \$79.95. The AA-1505 and AA-1506 both measure 8 x 5½ x 14¾ inches and weigh a little over 20 pounds. Prices: \$159.95 and \$179.95, respectively.

● **Laboratory Measurements.** Our test sample of the Heath AN-2016 was one of the early units assembled by Heath's engineering department to verify its performance and the accuracy of the instruction manual. It had been aligned at the factory, and the only internal adjustments we made were in the CD-4 demodulator to match the phono-cartridge output (a CD-4 test record is supplied for that purpose).

The FM tuner had an IHF sensitivity of 10.8 dBf or 1.9 microvolts (μV) in mono and 16.1 dBf (3.5 μV) in stereo. The 50-dB quieting sensitivity in mono was 11 dBf (2 μV) with 2.2 per cent total harmonic distortion (THD). In stereo, 50-dB quieting was obtained at 34 dBf (27.5 μV) with only 0.4 per cent THD. The ultimate quieting in mono was 68 dB; in stereo it was 63 dB. Minimum distortion at 65 dBf (1,000 μV) was 0.35 per cent in mono and 0.2 per cent in stereo.

The capture ratio was 1.9 dB at a 45-dBf input. AM rejection was a very good 71.5 dB. The image rejection was 94 dB and alternate-channel selectivity was 80 dB—both good figures. The muting threshold was at 22 dBf or 7 μV (it is internally adjustable), and the stereo-switching threshold was at about 11 dBf (2 μV).

In the stereo FM mode, the frequency response was a ruler-flat ± 0.4 dB from 30 to 15,000 Hz. In spite of the exceptional flatness, the multiplex filters reduced the 19-kHz leak-

age in the outputs to a very good 63 dB below 100 per cent modulation. The stereo channel separation was typically 35 to 36 dB at most frequencies and remained a very good 24 dB at 15,000 Hz.

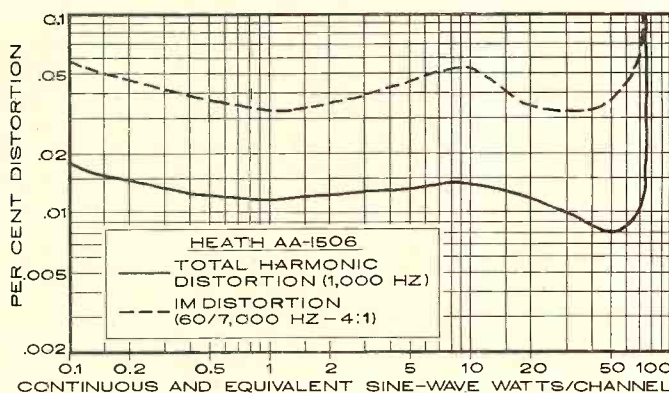
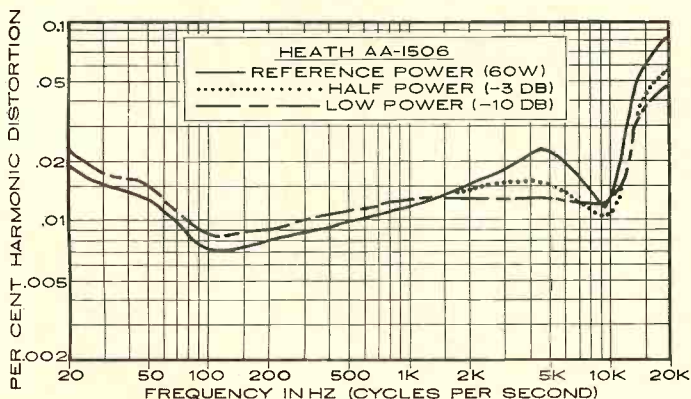
As Heath points out, the AM tuner section of the AN-2016 is considerably more refined than those commonly found in hi-fi components. Its frequency response of ± 2 dB from 20 to 7,000 Hz gives it very nearly "hi-fi" quality, and the shielded-loop antenna eliminates most of the noises that usually mar AM reception.

The feedback-type tone controls permit the audio response to be varied appreciably at the frequency extremes with little or no effect on the mid-range response. The sliding bass turn-over frequency varied from about 100 to 300 Hz. The treble response was hinged at about 3,000 Hz. The loudness compensation was quite moderate in its effect, boosting the lows and extreme highs (above 10,000 Hz) at low volume-control settings. Unlike most preamplifiers, the AN-2016 has individual channel-level controls that make it possible to use any desired amount of loudness compensation at a given listening level. The excellent 12-dB-per-octave filters had their -3-dB response points at 37 and 6,500 Hz. The preamplifier section's frequency response was flat within ± 0.25 dB from 20 to 20,000 Hz with the tone controls bypassed; it was virtually the same with the controls in and centered. The RIAA phono equalization was flat within ± 0.25 dB from 20 to 20,000 Hz, and it was affected only minimally by phono-cartridge inductance (the response at the highest frequencies changed by less than 1 dB when measured through a cartridge coil).

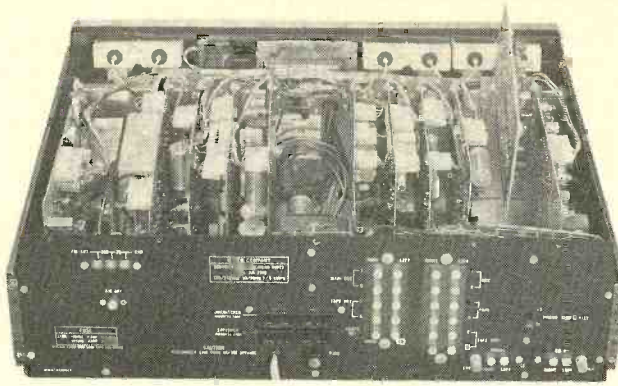
The input sensitivity for a 1-volt output was 90 millivolts (mV) through the high-level inputs and 3.7 or 1.3 mV through the phono inputs at low and high sensitivity settings. The signal-to-noise ratio (S/N) through any input was 67 to 69 dB relative to a 1-volt output. The phono inputs overloaded at 55 mV at high sensitivity and 175 mV at low, and the AUX inputs overloaded at a safe 4.4 volts.

When we adjusted the CD-4 separation controls for maximum separation, the sensitivity was about 0.9 mV for a 1-volt output. Like most CD-4 demodulators, this one overloaded at the rather low input (compared with normal stereo phono preamplifiers) of about 9 mV. However, since the peak velocities recorded on CD-4 discs (and thus the maximum output of a phono cartridge playing them) are generally much less than will be encountered on stereo records, this is not as serious a problem as it might appear.

The output of the AN-2016 (rated at 1.5



The circuit boards in the AN-2016 are attached by one corner to a lateral crossbrace. Each board can be pivoted upward for easy access or replacement.



volts) clipped at 5.9 volts into a high-impedance termination and at 3.15 volts into a 600-ohm load. The distortion, either 1,000-Hz THD or intermodulation distortion (IM), was between 0.01 and 0.02 per cent at all outputs from 0.1 to 3 volts. No measurements were made on the SQ or Dolby circuits, whose performances were judged subjectively.

The FTC preconditioning period left the AA-1505 and AA-1506 amplifiers only moderately warm. Following it, the output of the AA-1505 clipped at 47.5 watts per channel at 1,000 Hz, both channels driven into 8-ohm loads. Into 4 and 16 ohms, the clipping power outputs were 69 and 27 watts, respectively.

At the rated power of 35 watts or less, the harmonic distortion (THD) into 8 ohms was less than 0.01 per cent at 20 Hz and 0.05 per cent at 20,000 Hz. Over most of the audio range it was between 0.005 per cent and 0.01 per cent. At 1,000 Hz, THD was about 0.006 per cent from 1 to 30 watts output, and less than 0.01 per cent over the range from a fraction of one watt to more than 40 watts. The intermodulation (IM) distortion was 0.01 per cent at 0.1 watt, and it rose smoothly to about 0.03 per cent between 5 and 30 watts and to 0.05 per cent at 40 watts.

A 0.64-volt input drove the amplifier to a reference 10-watt output, and the hum and noise with a normally terminated input were 80 dB below 10 watts. The low-level frequency response was ± 0.1 dB from 5 to 30,000 Hz, and was down 1 dB at 150,000 Hz and 3 dB at 320,000 Hz. The slew rate of the amplifier was 6 volts per microsecond.

The AA-1506 clipped at 75.6 watts per channel into 8 ohms, 120 watts into 4 ohms, and 45.6 watts into 16 ohms. The THD at the rated 60-watt output and lower levels varied between 0.007 per cent and 0.02 per cent from 20 to about 12,000 Hz, rising to 0.05 or 0.08 per cent at 20,000 Hz. At 1,000 Hz, THD was between 0.008 per cent and 0.02 per cent from 0.1 to 70 watts, and the IM distortion was between 0.03 and 0.055 per cent over the same power range.

For a reference output of 10 watts, an input of 0.5 volt was needed, and a -82-dB hum and noise level resulted. The frequency response was essentially identical to that of the AA-1505, and the slew rate was 10 volts per microsecond. Because of the strong similarities between the two amplifiers, we have shown only the curves for the AA-1506.

⊗ **Comment.** We found nothing whatever lacking in the AN-2016's performance as an FM tuner. It is very sensitive, as shown by its outstanding 50-dB quieting sensitivity. Tuning was noncritical, and the digital frequency indicator was accurate, unambiguous, and easi-

ly readable from across the room. The muting was completely positive and noise-free. The FM Dolby section appeared to function properly, with a noticeable noise reduction (it includes an automatic change of de-emphasis from 75 microseconds to 25 microseconds when the Dolby circuit is switched on).

The AM tuner section ranks with the two or three best we have seen. The shielded-loop antenna must take considerable credit for this, since it makes possible a noise level approaching that of FM reception. Also, unlike most AM tuners, which make the audio quality of all stations sound virtually the same, this one reveals distinct differences between stations.

The level available from the headphone jacks was excellent, and we doubt that many people will find it inadequate for their listening needs. Of course, electrostatic phones or other types requiring high signal voltages must still be driven from a power-amplifier output.

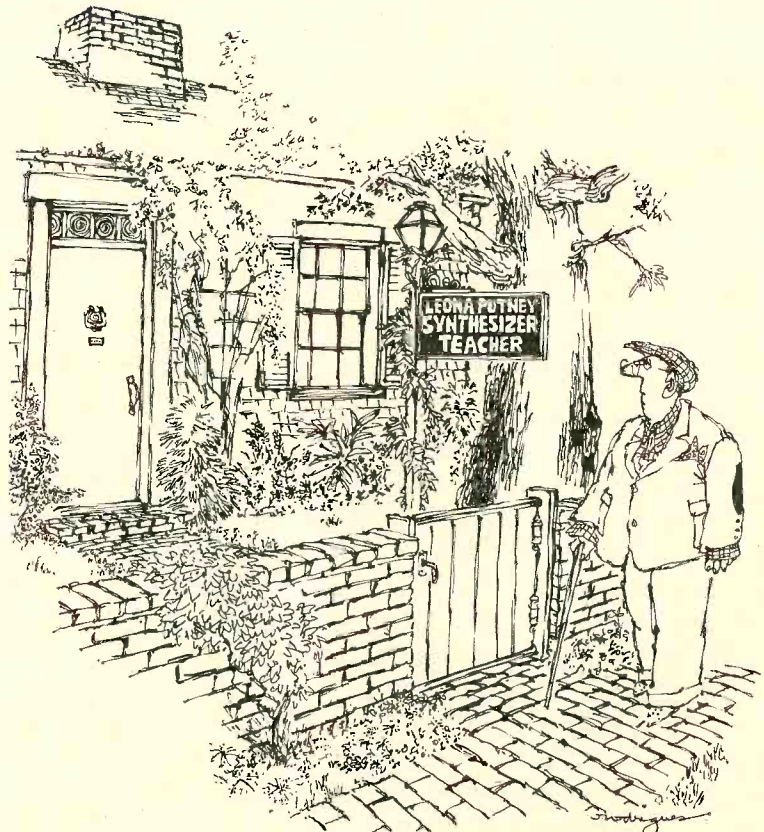
The SQ decoder is rated to provide at least 20 dB of separation from front to back and across the diagonals of the room. Judging

from the audible results with a number of SQ records, it does that very handily. In other words, its sound is what one would expect from a modern wave-matching, variable-blend SQ decoder. Unfortunately, the QS listener will have to settle for the ambiance enhancement that this circuit provides, without any definite front-back directionality.

In spite of the apparently limited "head-room" of the CD-4 demodulator, performance was excellent with several good cartridges we tried. We played a large number of records, both old and new, and made A-B comparisons against a high-quality accessory CD-4 demodulator. Anyone familiar with CD-4 reproduction is aware that some combinations of record, cartridge, and demodulator are prone to shattering distortion or "break-up" at times. Often, simply changing to a different cartridge or demodulator will clean up a troublesome record. The reverse is also true, so that an apparently "ideal" combination of pickup and demodulator may not perform at its best with some records that are playable with other components. In general, recent record releases and newer cartridges and demodulators are less critical in this respect, most of the troublesome models being of earlier vintage.

With today's best cartridges, the Heath CD-4 module produced a clean, distortion-free sound. In the few cases where we heard distortion (on some older records) the comparison demodulator usually had less audible distortion than the Heath unit. But—and this is an important "but"—it achieved this at some reduction in channel separation and not without some sacrifice of the higher frequencies.

On the other hand, with recent CD-4 releases, the clarity and definition of the Heath CD-4 system was outstanding, to the point that we would judge its frequency response to be fully as good as in the stereo mode.



There are only two points on which we can criticize the design or performance of the AN-2016. First is the provision for only one tape deck (the front-panel DUBBING jacks are not really meant for a permanently connected recorder). This is especially unfortunate since the addition of certain accessories (dynamic-range expanders and noise reducers, for example) requires the use of the system's tape-monitoring circuits and not all accessories duplicate these connections. Second, although it may seem to be carping to comment on the lack of provision for more than one matrix four-channel decoding system, in this respect the AN-2016 falls short of being the totally flexible control center that it could have been. Even if, for example, a QS Vario-Matrix board were to be made available, it would have to replace the SQ board, and the same criticism would still apply.

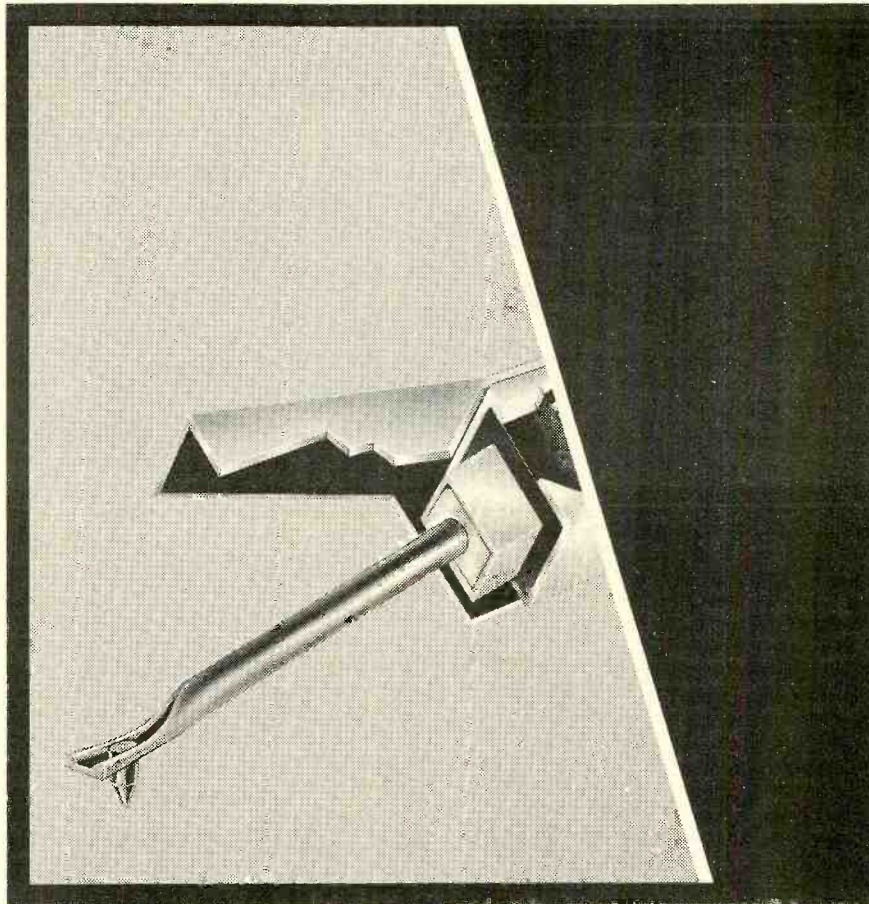
The Heath AA-1505 and AA-1506 not only surpassed their specifications handily, but proved to be completely reliable and bug-free in use. They have nearly unmeasurable distortion and enough clean audio power for the vast majority of users, and with the amplifiers flanking the AN-2016 control center, the appearance of the ensemble is very attractive.

While we recognize that a conservative 35 watts per channel is enough for many people, it seems to us that the small extra cost of the AA-1506 makes it one of today's more notable amplifier bargains (especially if it is to be used with 4-ohm speakers, which can extract a total of 240 watts from the two channels of the amplifier). However, it is perfectly practicable to mix the amplifiers in a four-channel system. Along with the AN-2016, we used the AA-1506 for the front channels and the AA-1505 for the back channels and never felt any lack of reserve power or any imbalance between the front and back channels of the total system.

As an overall system, the Heath modulus concept is not easy to assess in terms of previously available components, since we have never seen any other designed with the same philosophy. It is expensive, and probably no job for a neophyte kit builder to tackle (by Heath's count, it has 28 integrated circuits, 134 transistors, and 55 diodes!). Purely as a stereo component, its expense would be difficult to justify. On the other hand, for someone assembling a four-channel system or planning to convert in the future, this product insures against obsolescence in the most effective manner, with its impressive existing facilities and the prospect of plug-in boards being made available for future developments as they arise.

Even though each individual performance parameter of the AN-2016 could probably be equaled or surpassed by some other more conventional component, our tests show that it rates from "good" to "excellent" in practically every respect. In conclusion, the Heath Modulus concept is a bold and generally successful attack on the complexity and cumbersome nature of modern high-fidelity component systems. As always, we must admire the thoroughness and ingenuity of the Heath engineers in producing a handsome and functionally packaged component having almost total versatility and top-grade performance, yet capable of being constructed by a layman and aligned without instruments in spite of its formidable complexity. To top it off, it should set new standards as a living-room conversation piece!

Circle 108 on reader service card



This...protects your most expensive hi-fi investment.

Recognizing that a penny saved is a penny earned, may we suggest that trying to economize by putting off the replacement of a worn stylus could be like throwing away five dollars every time you play a record. (Multiply that by the number of records you own!) Since the



Look for the name SHURE on the stylus grip and the words "This Stereo Dynetic® stylus is precision manufactured by Shure Brothers Inc." on the box.

stylus is the single point of contact between the record and the balance of the system, it is the most critical component for faithfully reproducing sound and protecting your record investment. A worn stylus could irreparably damage your valuable record collection. Insure against this, easily and inexpensively, simply by having your dealer check your Shure stylus regularly. And, when required, replace it immediately with a genuine Shure replacement stylus. It will bring the entire cartridge back to original specification performance. Stamp out waste: see your Shure dealer or write:

Shure Brothers Inc.
222 Hartrey Ave., Evanston, IL 60204
In Canada: A. C. Simmonds & Sons Limited

Manufacturers of high fidelity components, microphones, sound systems and related circuitry.

CIRCLE NO. 45 ON READER SERVICE CARD

Going on Record

By James
Goodfriend

Music Editor



RIPPLES OF AN ENGLISH SPRING

OLD saws are frequently contradicted by other old saws. That eternal command about doing unto others found its opposite in the more recent, but still venerable, advice never to give a sucker an even break. There is another oft-quoted bromide about a prophet's never being without honor save in his own country, and while I can't think of any immortalized statement in contradiction, it is incontestable fact that *some* prophets—composers, writers, artists of every sort—are honored *only* in their own countries. In particular, there seems to be a certain quite high level of artistic ability and accomplishment that yet is not sufficiently high—or sufficiently startling—to rise above local fame and become a matter of international concern. Virtually every country produces composers on this level, and it is probably as mystifying to the Germans that a bust of Marschner does not decorate every opera house in the world (as it seems to decorate virtually every opera house in Germany) as it is to us that the name and music of William Schuman, for example, are not everyday currency in the musical circles of Budapest, Paris, and Bonn.

What happened musically in England in the early years of this century, however, was startling enough to attract international attention and establish the notion of an English musical renaissance. England (and Britain in general) had been a dead land, musically speaking, ever since the colossal figure of Handel and the phenomenon of the Italian opera effectively cut off the development of the indigenous musical language. Even the very English Elgar still spoke, at times, a Germanic language, and neither Stanford nor Parry were quite strong enough musically to turn things about themselves. But the appearance of such composers as Delius, Holst, and particularly Vaughan Williams unquestionably showed the world that there was a new artistic spring in England that would contribute importantly to the musical mainstream.

The problem (if problem it is) has come to be that the English renaissance is seen outside of England as comprising Delius, Holst, Vaughan Williams, Britten, Walton, most recently Tippett, and not very much more. The host of composers who in many cases followed parallel and contemporary courses or who struck out in somewhat different directions has remained largely unknown away from home. But there is a company in Eng-

land called Lyrita (accent on the first syllable) devoted to putting out the work of such men, and Lyrita records are now generally available here. As a matter of fact, many are available in two forms: as pressed and released by the Musical Heritage Society on their own label, and as imported directly by H.N.H. Distributors, P.O. Box 222, Evanston, Illinois 60204 at a list price of \$7.98 per disc (retail orders are accepted at that price, shipping in-



E. J. MOERAN: *musical ecstaticism*

cluded). A good deal of this music is well worth getting to know, and some of it is—yes—startling in what it tells us about the generally accepted “major” figures: that they are not as strikingly individual as we have been led to believe but are, rather, the crests of stylistic waves shared by other composers.

I have listened to quite a large number of Lyrita and Lyrita-derived records in the last few weeks, and I am bound to say that the music I found *most* interesting (some of it I've fallen in love with) is not even that of those composers whose names we hear around once in a while (John Ireland, Lennox Berkeley, Sir Arnold Bax, Sir Arthur Bliss), but that of such men as Herbert Howells (born 1892), Gerald Finzi (1901-1956), E. J. Moeran (1894-1950), and William Wordsworth (born

1908), the first three of whom share exactly one sentence in a recent book on twentieth-century British music, and the last of whom is not even mentioned in it.

All of them share a recognizably “English” style, frequently modal and folk-tune-based—what we have come to think of as the Holst-Vaughan Williams style. But there are considerable differences among them. In fact, their musical personalities are strong enough that even on such brief acquaintance I doubt that I could mistake the music of one for another, or any of them for Holst or Vaughan Williams or even Ireland.

THERE are three chamber works by Howells on Lyrita SRCS 68, all of them dating from the teens of the century, and they are probably superior to anything Vaughan Williams turned out in that genre. They fall in time between the latter's Second and Third Symphonies, so that while the probability of influence is there, the mere aping of an established style is a historical impossibility. Much of this music is gripping and quite intensely moving (particularly the Piano Quartet), and on any overall scale it is far more valuable artistically than most of the Romantic-revival camp, the barrel scrapings of the Baroque, and a hell of a lot of contemporary products, all of which have received more than their due.

E. J. Moeran's Symphony in G Minor (Lyrita SRCS 70) was, apparently, *almost* a famous piece in England in years gone by, though it was criticized for unevenness. Unevenness be damned! The work has something to say and says it with power, beauty, and individuality. In particular, Moeran seemed to be able to command a special type of musical ecstaticism (most apparent in the second group of the first-movement exposition) that is more melodically based than Vaughan Williams' and as luscious as a ripe peach. That highly individual sound is also evident in the last movement of his Cello Concerto (Musical Heritage Society 1411), and what an incredible antidote it makes to all that music written only because its composers have learned how!

Gerald Finzi's *Intimations of Immortality* (Lyrita SRCS 75) is a setting for tenor, chorus, and orchestra of nine of the eleven stanzas of William Wordsworth's poem of that name. Right from its opening horn solo it is an arresting and beautiful work, the words sensitively set, the meanings affectingly underscored. It breathes something of the same air as the Delius choral works, and devotees of those may find it comparable, perhaps superior. Both performance and recording here are glorious.

BUT there is *another* William Wordsworth apart from the poet, a seldom-heard-from and apparently quite self-sufficient man and composer, a descendant of the poet's brother who studied with Sir Donald Francis Tovey and who professes a “lack of belief in originality for its own sake.” Composers of his obvious qualities may well assume such a position. Though there is both Berg and the English modal style to be heard in his Piano Sonata (Lyrita RCS 13), there is also the originality inherent in music whose subject material is intrinsically valuable and whose working out leaves one with the feeling that everything that should have been done with it *has* been done—quietly, subtly, and with great musical logic. The work proclaims itself a natural classic. Where has this man been all my life?

Musical Heritage Society

New from Motorola... The hot cassettes with the hot button



Model TC876AX.
In dash AM/FM Stereo Radio with Stereo Cassette and push button tuning. Optional overlays available to fit most domestic cars.



POW-R-BOOST® makes dynamite sound a blast and a half!

Model TC877AX.
In dash AM/FM Stereo Radio with Stereo Cassette. Designed to fit compacts, imported and domestic.



If you want the stereo cassette for your car that has everything, check out one of these new Motorolas.

Each is a complete entertainment center with AM/FM Stereo Radio and each has POW-R-BOOST®. Hit this hot button and it boosts the sound level and enhances the highs. Makes dynamite sound a blast and a half!

And that's just the beginning. You name it and Motorola's got it... fast forward with mute and cuing... slide bar switching for AM/FM... cartridge activated tape/radio switch. Why settle for just a stereo cassette when Motorola gives you one in a complete entertainment center.

See and hear the new cassettes at your nearest Motorola dealer.

Limited One Year Warranty

Motorola warrants that it will correct product defects during the first year following your purchase... you merely have to take your record of purchase and your Motorola car stereo to one of our authorized stations.

There are thousands of Motorola authorized warranty stations covering all 50 states to help keep your Motorola sound on wheels sounding just right.

Complete warranty details are packed with each unit. Ask your Motorola dealer to show them to you and read them carefully.



MOTOROLA®

SOMETHING ELSE in sound on wheels

CIRCLE NO. 32 ON READER SERVICE CARD

The Simels Report

By Steve Simels



THE SUN HAS FINALLY SET (MAYBE)

LIKE a lot of people, I've developed, over the years, a vivid fantasy picture of Britain, and especially London, on the basis of having been obsessed with English rock-and-roll. What with *Blow Up* (that classic club sequence featuring the Beck-Page Yardbirds), the Beatles movies (I must have seen them at least twenty times each), all those *Top of the Pops* segments with English bands that appeared on American television in the mid-Sixties, and any number of albums (the Small Faces' "Ogdens Nut Gone Flake" being a good example—you can practically *smell* the English beer they must have been drinking in between sessions), one can't help but get some sort of feeling, no matter how romanticized, for the milieu all this was created in.

I had long been looking forward, therefore, to my first trip to London. So I went. As I should have expected, it was a disappointment after the initial rush. The club scene and all those wonderful pub bands one had heard about seem to have disappeared (moved to the provinces, I'm told), the radio is atrocious, the record stores stock mostly American imports, Kings Row seems to be an endless succession of schlock joints selling American jeans, and the IRA picked the week of my arrival to resume their bombings. In general, although I remained charmed by the English, London itself struck me as the kind of city that is dying and either nobody has had the heart to tell it or nobody cares. (New York, by way of contrast, is a dying city, but *everybody* knows it—and is putting up a fight.)

"Sleepy London town" indeed; no wonder

the Stones couldn't do any street fighting. Oh, some of the trip was fun; I made pilgrimages to Shepherd's Bush, the suburb where the Who and the Mod movement got started, and to the Marquee, the legendary club every important English rocker of the last decade has played at some time or other. But it all seemed so grey and depressing. Frankly, the biggest buzz I got out of the whole affair was seeing that some graffiti artist had spray-painted "It's only rock 'n' roll" on the back of a highway sign.

All of which is by way of leading up to telling you the *reason* for my presence in the British Isles: I was being hyped. RCA, you see, has just signed a Greek keyboard wizard named Vangelis (that's his first name, by the way, in the grand tradition of such stars as Sabu, Hildegard, and Tonto) in an attempt to get a piece of the market now dominated by Rick Wakeman and ELP. He was making his debut at Royal Albert Hall, and so off we (myself, some RCA folks, and two other writers) went. Close readers of these pages will remember that Mr. Papathanassiou made J Marks' "Hall of Obscurity" in April of 1975, when his stuff was characterized as "perfect ritual background music for anyone looking for primal roots in an uptown duplex."

Vangelis is something of an oddball. He's been a pop star in Europe for a while as a member of a group called Aphrodite's Child. He now dismisses their work as bubblegum (and, indeed, their former lead singer, Demis Roussos, has gone on to become a sort of farm-club Engelbert Humperdinck), but he

obviously has quite a fair amount of musical smarts. When I met him at his home, he sat down at the piano and ripped off a ten-minute impromptu performance that ran the gamut from Hoagy Carmichael to Meade Lux Lewis to Chopin.

His concert . . . well, I have to say that I've never heard or seen anything quite like it. It began with Vangelis seated at the Albert Hall pipe organ, which is immense, playing a brief and rather lovely late-Romantic-style solo piece which I assumed to be by Louis Vierne or Charles-Marie Widor, but which he later assured me was strictly off the top of his head. (Probably true; that kind of improvisatory noodling is easy to do on the organ.) After that, he proceeded to dash around a staggering number of electronic and acoustic keyboard instruments, beginning by performing a quiet duet for grand piano and Arp string synthesizer that could easily have been a slow movement from an unpublished Prokofiev concerto.

The rest of the music (some drawn from his just released "Heaven and Hell" album, but not much of it) managed to ring in influences from all sorts of composers. I caught Rimsky-Korsakov, Bartók, Stravinsky, Vaughan Williams, Shostakovich, a lot more Prokofiev, and even Leonard Bernstein—all done, mind you, with a minimum of flash or ostentation, and quite harmonically complex. There was little of that Keith Emerson *ostinato* nonsense, or even any Mike Oldfieldish slow modal drones.

While all this was going on, I suddenly realized, the stage was filling up with (are you ready, Rick Wakeman?) the white-robed English Chamber Choir brandishing long red wooden sticks, twenty—count 'em—twenty female kettle drummers, a like number of young ladies in red skirts running circles around and banging vigorously at a collection of congas, and even, way off in back, two black guys in loin cloths carrying spears and serving no musical function I could discover. By the time the piece had reached its climactic section—a longish chant sort of thing with all involved pounding away as if possessed—I had decided that none of Vangelis' major influences were composers at all. Obviously, the man had seen Maria Montez and Jon Hall in *Cobra Woman*, and it had changed his life forever. I emerged from all this, as you can imagine, utterly confused. What is this guy up to, anyway?

VANGELIS was no help when I tried to pin him down later; he talked a lot about "vibes" (not the instrument), and dime-store metaphysics is just not my long suit. Next day the concert was slugged, as the British say, by the prestigious *Guardian*, but Van shrugged it off; the crowd, after all, had adored it. ("Remember Beethoven's reviews," he told me, "or Stravinsky's." I do; Beethoven, at least, got some pretty good ones.)

The big question now, of course, is Will He Make It in the States? God only knows. The cost of a production like the one I saw would probably be prohibitive in America, and musically he's either too good or too trashy for the audience he's going after, I simply have no idea which. What I'm wondering now, though, is when a major record label is going to buy Michael Tippett or Benjamin Britten a recording studio and a mountain of electronic equipment and sign him to a six-figure contract with a healthy advance up front. That seems to me like the only logical next step.

MARIA MONTEZ:
the magic of her performance
in *Cobra Woman* inspires
us even today.



The Memory Shop



Soundcraftsmen

THE EQUALIZATION LEADER...

WHY? Because we CARE about HOW an equalizer does its job BEST! That's why we provide our customers with our exclusive...

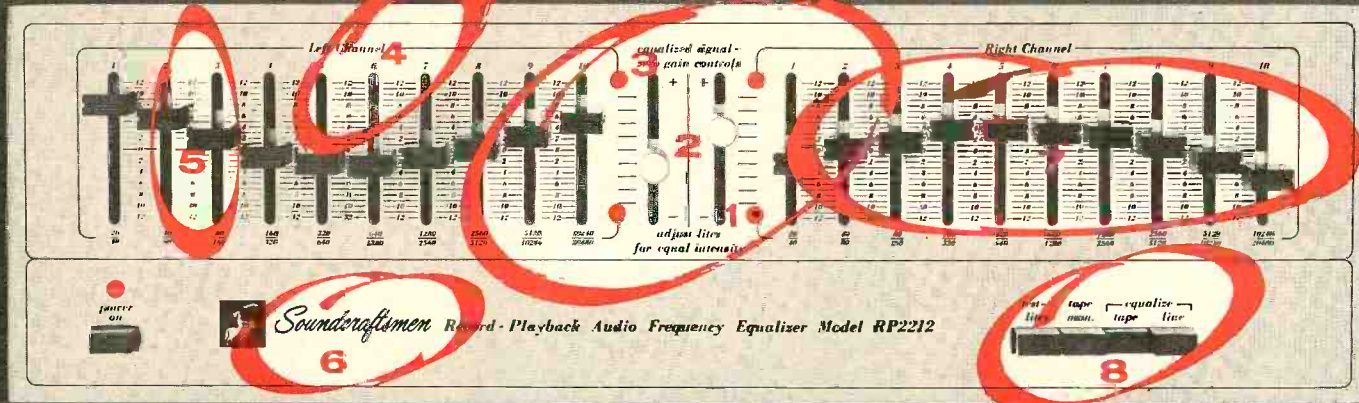
10-POINT "TOTAL-SYSTEM EQUALIZATION"

YOU NEED MORE THAN JUST AN EQUALIZER... FOR OPTIMUM EQUALIZATION BENEFITS, HERE ARE THE TEN ESSENTIAL ELEMENTS YOU NEED:

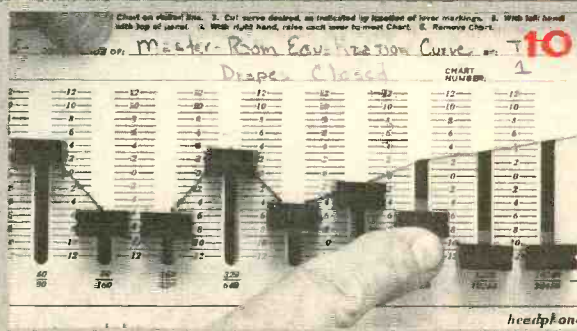
- 1 YOU NEED VISUAL ZERO-GAIN LEVEL INDICATION:** SOUNDCRAFTSMEN provides combination zero-gain controls with LIGHT EMITTING DIODE indicators to show when exact zero-gain is accomplished. Adjusting the zero-gain controls for equal L.E.D. intensity assures you of input vs. output level matching.
- 2 YOU NEED FULL-SPECTRUM BOOST OR CUT CONTROLLABILITY:** SOUNDCRAFTSMEN'S "zero-gain" circuit provides an additional 18 dB control-range over the full spectrum 20 to 20,480 Hz on each channel for instantaneous input-output zero-distortion signal matching.
- 3 YOU NEED AUTOMATIC/CONTINUOUS OUTPUT-OVERLOAD WARNING SIGNAL:** SOUNDCRAFTSMEN'S 2 top L.E.D.'s glow brightly, (bot-

tom L.E.D.'s off), if output voltage is boosted excessively, thus eliminating the danger of distortion and/or damage to related equipment resulting from the high voltages that can be generated by any fine equalizer.

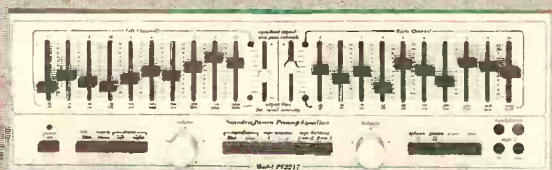
- 4 YOU NEED A POSITIVE METHOD OF READING 1 dB SETTINGS...**
- 5 YOU NEED AT LEAST 24 dB TOTAL CONTROL OF EACH OCTAVE...**
- 6 YOU NEED A UNIT THAT WILL ADD ZERO NOISE AND DISTORTION:** SOUNDCRAFTSMEN'S signal-to-noise and distortion performance figures are far superior to most high fidelity components. SOUNDCRAFTSMEN products are used in professional broadcast and recording systems, assuring you of completely noise-free and distortion-free integration into your system.
- 7 YOU NEED TO BE ABLE TO LOOK AT YOUR ACTUAL "EQ" CURVES.**
- 8 YOU NEED THE ABILITY TO EQUALIZE TAPE RECORDINGS...**



- 9 YOU NEED AN ACCURATE, EASY-TO-USE INSTRUCTIONAL TEST RECORDING FOR ENVIRONMENTAL EQUALIZATION:** SOUNDCRAFTSMEN includes Test Record recorded and designed exclusively for SOUNDCRAFTSMEN equalizers. Without any expensive test equipment or technical knowledge, you can quickly tune the acoustics of your room, just by following the announcer's step-by-step directions.



YOU NEED A MEMORY SYSTEM FOR "EQ SET-RESET REFERENCING": SOUNDCRAFTSMEN provides you with a quantity of "COMPUTONE CHARTS" for recording the exact setting of each octave control for future reference and resetting. Automatic "Instant-Memory Programming" is readily available by cutting off the "Computone Chart," holding against front panel, and moving up knobs into position.



"THE PERFECT PRE-AMP"

for all the great new Super-Power amps — rated "State-of-the-Art" and "Best-Buy" in magazine Test Reports. PE2217 has ALL RP2212 features, PLUS 4 separate phono preamps, 3-tape dubbing/patching, front tape in/out, etc.

PE2217 inc. Cabinet or Rack Mounts) \$499.50

GUARANTEED SPECIFICATIONS

FREQUENCY RESPONSE: ±0.5 dB 20-20,480Hz
THD: Less than .1% @ 2v., Typ.: .05% @ 1v.
S/N RATIO: Better than 106 dB @ full-output
 Better than 96 dB @ 2v. RMS
FILTER TYPE: Toroidal and Ferrite-core.
INDIVIDUAL OCTAVE-CONTROL RANGE: Minimum ±12 dB (Typ. ±14 dB), each octave centered at 30, 60, 120, 240, 480, 960, 1920, 3840, 7680, and 15,360Hz.

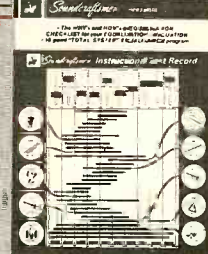
RP2212 \$349.50
 (Includes Cabinet or Rack Mounts)

20-12A \$299.50
 (Same as 2212, except no LED's and Tape EQ thru rear panel patching)

FREE!

THE "WHY'S AND HOW'S OF EQUALIZATION,"

an easy-to-understand explanation of the relationship of acoustics to your environment. This 6 page booklet also contains many unique ideas on "How the Soundcraftsmen Equalizer can measurably enhance your listening pleasures," "How typical room problems are eliminated by Equalization," and a "10-point self-rated Equalization Evaluation Check-List," plus Specs and Reviews.



The Opera File

By William Livingstone



BIDÚ SAYÃO

It is a common fallacy in talking about the bel canto revival to suggest that Rossini, Donizetti, and Bellini were entirely forgotten composers until Maria Callas came along in the middle of this century to breathe new life into their operas. Giving credit to Callas for her great contribution should not make us forget earlier singers who also mastered the bel canto style and repertoire. And when some enterprising scholar writes *The History of Bel Canto—B.C. and A.D.* (Before Callas and After Divina), I hope he includes a chapter on one of the singers who first attracted me to opera, Bidú Sayão.

Born in 1902 in Brazil, Mme. Sayão studied there with the Rumanian soprano Elena Theodorini and in France with the tenor Jean de Reszke. The fiftieth anniversary of her operatic debut has just passed—her first role was Rosina in *Il Barbiere di Siviglia*, and she sang it for the first time in Rome in March of 1926.

She had great success in Italy and soon added to her repertoire such other bel canto works as *La Sonnambula*, *Lucia di Lammermoor*, and *I Puritani*. She was equally successful in Paris, especially in such French operas as *Lakmé*, *Roméo et Juliette*, and *Manon*, and for the first ten years of her career she divided her time between Europe and South America. She married the Italian baritone Giuseppe Danise, who was, she says, her most influential teacher.

In 1936, Sayão and Danise visited the United States, and exactly forty years ago she made her American debut (April 16, 1936) as a soloist in Debussy's *La Damselle Élue* with the New York Philharmonic conducted by Arturo Toscanini. This led to a Metropolitan debut the following season, and she became such a favorite with American audiences that she remained with the company until 1952.

Since at that time the late Lily Pons almost monopolized the coloratura domain, Sayão's *Lakmé*, *Lucia*, and *Sonnambula* were not heard in this country. She was known here primarily as a lyric soprano. With her exotic beauty, immense charm, and delicate femininity she made young men and boys of my generation fall in love with her over and over again as *Manon*, *Violetta*, *Juliette*, *Mélanide*, and *Mimi*.

Her skill as a comedienne made her an outstanding Susanna in *Le Nozze di Figaro* and contributed to her success in her roles in the bel canto operas *Il Barbiere di Siviglia*, *Don*

Pasquale, and *L'Elisir d'Amore* which were among her few coloratura assignments at the Met. No one who heard her as Rosina in *Barbiere* could doubt her qualifications to participate in a bel canto revival had the public been ready for one. In the Music Lesson scene she interpolated the aria "Bel raggio" with some of the most brilliant coloratura



BIDÚ SAYÃO
As *Violetta* in Verdi's *La Traviata*

singing I have ever heard. The dazzling cadenza still echoes in my ears.

Like most singers of her period, Sayão did not document her entire repertoire on discs, but she recorded for both RCA and Columbia, and the latter company's *Legendary Performances* series on the budget Odyssey label contains enough samples of her work to give you a very good idea of how this unique and much beloved artist sang.

In 1945, Sayão made one of the most famous vocal recordings in history, *Bachianas Brasileiras No. 5*, composed for her by her

compatriot Heitor Villa-Lobos. It has never been out of the Columbia catalog—justly so—and no vocal collection is complete without it. This remarkable performance is now on a recital disc (Odyssey 32 16 0377) which also includes nine arias in French and Italian. I will rest my case for Sayão as a bel cantist on only one of them: "Ah, non credea mirarti" from Bellini's *Sonnambula*. It shows her mastery of the beauty of tone, smooth legato, and elegant phrasing that are the hallmarks of bel canto style. The album also contains a souvenir of her Susanna as well as four arias from *Manon* that preserve the gaiety, coquettishness, fragility, and pathos she brought to one of her most beguiling impersonations, the role with which she began and ended her Metropolitan career.

Two Gounod arias, the Jewel Song from *Faust* and the Waltz from *Roméo et Juliette* on another recital album (Odyssey Y 31151) display in some measure her facility with coloratura. This disc also contains three Mozart arias and five by Puccini. The one complete opera she recorded, *La Bohème* (Odyssey Y2 32364), can be recommended only with reservations because of undistinguished work by some of her colleagues. It should not be your first or only *Bohème*, but it is worth its modest price for Sayão's death scene alone.

I had few opportunities to see Sayão in opera, but I came to know her through radio, recordings, and recitals. She was a frequent guest with American orchestras, and she sang solo recitals in large and small cities from one end of the country to the other. Coinciding with the French revival now gathering strength, Columbia will soon release "On Wings of Song," an album of French songs from Sayão's concert repertoire. I have heard a test pressing, and it is beautiful, especially in the way she projects the language.

EXCELLENT diction is a characteristic Sayão had in common with Callas. Although they were vastly different singers, they shared such traits as sensitivity to the meaning of the words they sang, the ability to convey emotion through song, and a superior musical intelligence which made them experts at shaping a line or phrase with taste. Like Callas, Sayão could act with the voice and was a vivid interpreter of the characters she portrayed as well as the music she sang. But, unlike Callas, Sayão had a voice of great inherent beauty produced with no apparent effort or strain. The sound of her voice is so well preserved on her Odyssey reissues that it is difficult to believe most of them were recorded thirty years ago in mono and on 78's. Listening to these records made me stop for a moment to marvel at the great musical wealth the phonograph is permitting us to store up for the delight of future audiences and for the instruction of future performers.

In her youth Sayão was tireless in seeking out such older singers as Gemma Bellincioni and Rosina Storchio who had worked with Verdi or Puccini so that she could study her roles with them. When I ask young singers today if they listen to recordings, they usually say they don't because they prefer to "find their own interpretations" and do not wish to be influenced by other singers. Perhaps that is why so few of them have any sense of tradition or style. As a collector I have derived immense pleasure from Bidú Sayão's recordings, which for years have been my constant companions; if I were a singer, they would be my constant study.

I don't judge my cigarette by its length.

There's only one reason to smoke: taste.
Not length. Not looks. Winston Super King gives me
the real Winston taste I like and the extra
length I want. So I get as much taste per millimeter as
any cigarette can give. For me, Winston is for real.

Warning: The Surgeon General Has Determined
That Cigarette Smoking Is Dangerous to Your Health.

Beauty in sound. By Fuji.

Every Fuji cassette means beauty and purity in sound. No hiss, no dropouts. Widest frequency response and dynamic range. Total reliability. Fuji high-fidelity cassettes such as the FX will give you the best performance possible on your tape recorder. Already widely recognized by experts as the finest cassette in the world. Fuji. The cassette of the pro.



FUJI

Fuji Photo Film U.S.A., Inc., The Empire State Building, New York, N.Y. 10001
CIRCLE NO. 17 ON READER SERVICE CARD

The Basic Repertoire

By Martin Bookspan



BRAHMS' SYMPHONY NO. 1

DESPITE the occasional mutterings of jaded performers or critics, the four symphonies by Johannes Brahms continue to be pillars of the basic orchestral repertoire. This is so because the symphonies inherently contain the power to ennoble and enrich—a power that simply refuses to roll over and die. Each of the symphonies has this quality in profusion, the First perhaps even more than its companions.

Brahms' First Symphony was long and hard in coming. During his early twenties the composer worked painstakingly on a symphony, but the more he worked, the more convinced he became that he was not yet ready for such an undertaking. Much of the material from that "pre-First Symphony" finally did turn up in the composer's First Piano Concerto, and the original third movement eventually became the chorus "*Denn alles Fleisch, es ist wie Gras*" in the German Requiem.

As years went by Brahms developed his skills into those of a mature master, but there was still no symphony from this genius who had been proclaimed, years earlier and by no less an authority than Robert Schumann, the "new musical Messiah." To write a symphony after the nine of Beethoven was "no laughing matter," Brahms once wrote to conductor Hermann Levi. "I shall never compose a symphony! You have no conception of how the likes of us feel when we hear the tramp of a giant like him behind us."

In 1873, twenty years after he was first hailed by Schumann, Brahms produced the first purely orchestral score of his maturity: the Variations on a Theme by Haydn, Opus 56a. This served only to heighten the impatience of audiences and critics. Finally, three years later, at the age of forty-three, Brahms was ready to submit his First Symphony to a waiting musical world.

The audience received the symphony at its initial hearing with respect and admiration, but without any great enthusiasm or love. Its epic qualities, which have endeared the First Symphony to succeeding generations, were probably lost on its initial hearers; furthermore, the score, possibly because of Von Bülow's enthusiastic but perhaps misplaced characterization of it as "Beethoven's Tenth," became central in the conflict between the Brahms and Wagner factions.

There is a majestic thirty-seven-bar introduction to the first movement, in which a feel-

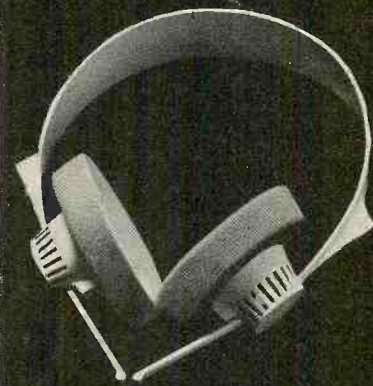
ing of intense inner turmoil is created by ascending chromatic phrases in the strings with simultaneous descending phrases in the woodwinds. The tension is sustained in the *Allegro* that follows, but the coda brings some repose. The two middle movements provide poetic and lyrical relief, and the finale ends in a blaze of jubilant affirmation.

WE have not lacked for superb recorded performances of Brahms' First Symphony for half a century now, beginning with a stunning one from the early days of electrical recording by Leopold Stokowski and the Philadelphia Orchestra. One of the best of the currently available recordings is also conducted by Stokowski: it was recorded in London in June 1972 at a concert celebrating the sixtieth anniversary of Stokowski's debut with the London Symphony Orchestra. The performance has the flame and passion of newly discovered greatness. The orchestra plays with total commitment, and the recorded sound is clean and full-bodied (London SPC 21131, reel E-421131, cartridge O-821131, cassette O-521131). Otto Klemperer (Angel S 35481), Eugene Ormandy (Columbia MS 6067), and George Szell (included in Columbia D3S 758, a three-disc set of all the Brahms Symphonies) all offer sturdy, heroic versions.

Of the several more recent accounts, my own favorites are those conducted by Bernard Haitink (Philips 6500519, cassette 7300247) and István Kertész (London CS 6836, reel E-46836, cartridge O-86836, cassette O-56836). Haitink's is a rock-solid, traditional Central-European account of the music; Kertész brings a heightened intensity to his vision of the score, and, in addition, he observes the repeat of the first movement's exposition, a powerful bonus in delineating the architectural structure of the movement. The recent RCA release by James Levine and the Chicago Symphony (ARL1-1326) presents an unusually scaled-down approach that is beautifully played and recorded.

The 1976 UPDATING OF THE BASIC REPERTOIRE is now available in convenient pamphlet form. Send 25¢ and a stamped, self-addressed No. 10 envelope (9½ x 4½ in.) to Esther Maldonado, Stereo Review, 1 Park Avenue, New York, N.Y. 10016 for your copy.

SPEAKERS AT \$600 A PAIR?



OR THESE AT \$49.75* A PAIR?

If your ears are ready for \$600 speakers, but your budget isn't, we have a way to satisfy both. Sennheiser headphones. Using the same acoustic design principles that have made our professional microphones industry standards, Sennheiser Open-Aire® headphones reproduce sound with a realism most loudspeakers can't begin to approach. With wide, flat response. Low distortion. Excellent transient response (even in the bass region!) And sheer intimacy with the music. All *without* sealing in your ears. Whether you're waiting for that pair of \$600 speakers or just curious about a pair of headphones some experts have compared with \$1000 speakers... the answer's at your audio dealer's.

*Manufacturer's suggested list for Model HD414. Deluxe Model HD424 also available at \$79.75.

SENNHEISER
ELECTRONIC CORPORATION
10 West 37th Street, New York 10018 (212) 239-0190
Manufacturing Plant: Bissendorf/Hannover, West Germany

CIRCLE NO. 43 ON READER SERVICE CARD



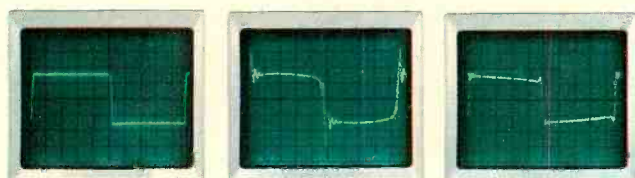
SONY 880-2

THE WORLD'S BEST.

DIRECT DRIVE SERVOCONTROL SYSTEM.

The name may be long — **Close-Loop Dual Capstan Tape Drive** — but the concept is simple: one capstan is just an extension of the motor shaft itself (the other connects through a belt-drive inertia fly-wheel). Gone are the intervening gears that can often impair optimum operating reliability as well as speed accuracy. The result — almost nonexistent wow and flutter — a mere 0.02% @ 15 ips.

PHASE COMPENSATOR CIRCUIT.



Original Source*

Source
After Recording*

Source Through
Phase Compensator*

Ideally, what you want on recorded tape is a "mirror image" of the original signal. No more. No less. Problem: the very nature of the recording process causes phase distortion. Solution: during playback, Sony's exclusive Phase Compensator Circuit compensates for phase distortion. Result: sound quality that's virtually identical to the original source. (REFER TO OSCILLOSCOPE READINGS.)

SYMPHASE RECORDING.

Thanks to the durability of Sony's **Ferrite and Ferrite Heads** and incredible precision fabrication and alignment of the head gap, you can record any matrix 4-channel signal (like SQ** or FM), play it back through a 4-channel decoder/amplifier, and retain the exact positioning of signal throughout the 360° 4-channel field. What started out in right front channel stays there. What began in left rear doesn't wander over to right rear. There's no phase shift whatsoever.

PEAK READING VU METERS.

They're versatile. Accurate. And incredibly informative. **1.** You can set for standard VU operation to determine recording level. **2.** Set to display transient peaks only (up to +15 dB). **3.** A third display, Peak Hold, retains transient reading, letting you accurately measure audio input and adjusts accordingly with 2dB **Stepped Record Level Attenuators.**

SYNCRO-TRAK.

This means you can lay down two individually recorded tracks in perfect synchronization with each other. Record head has playback-monitor function in record mode. This eliminates time lag that occurs when monitoring through playback head. Thus both tracks can be first generation, keeping noise levels at minimum. Flashing **Standby Signal** alerts you that the unrecorded channel is record-ready. And **Punch-In Record** puts you into record mode instantly, without stopping tape.

SONY. Ask anyone.

Brought to you by **SUPERSCOPE.**



TC-880-2

TC-756-2

Other Distinguished Sony Decks. TC-788-4





The Music of Their Majesties

A panorama from King David to the Duke of Windsor

By Aram Bakshian, Jr.

FRIEDRICH SCHILLER, whose Ode to Joy inspired one of Beethoven's best-known works, wrote that "the singer should accompany the king: both dwell on the heights of mankind." Perhaps the parallel decline of music and monarchy in our own time lends credence to Schiller's words. But even if one is optimistic about the future of music in an egalitarian age, the past contributions of royalty, not only as patrons and musicians but even as composers, are impressive.

Sometimes the music they wrote, inspired, or commissioned was intended solely for their own enjoyment, but, more often than not, it enriched the lives of millions of simple people in their own lifetimes and for generations afterward. History even provides a few examples of royal Pied Pipers, first and foremost of them being King David, who with "all the house of Israel played before the Lord on all manner of instruments of fir wood, even on harps, and on psalteries, and on timbrels, and on cornets, and on cymbals." The resultant cacophony was probably much less pleasant to hear than to read about.

An ancient ruler of a different stripe, the Roman Emperor Nero, attempted the same sort of thing—with rather dismal results. Not content with privately performing on the harp, he belched out his clumsy compositions to vast captive audiences of troops, courtiers, and private citizens.

The royal family at play: left to right, Anne, Princess Royal (1709-1759), Princess Caroline (1713-1757), Frederick, Prince of Wales (1707-1751), and Princess Amelia (1711-1786). Painting by Philip Mercier in the National Portrait Gallery, London.



Nero was convinced to the very end that if he could just sing to the rebel legions he could woo them back to loyalty.

Charles of Orleans . . . set a style that would be imitated by emperors, kings, and princes for more than four centuries.



After one too many of these command performances in reverse, the Romans rebelled. Nero perished unrepentant and still thoroughly deluded. In fact, he was convinced to the very end that if he could just *sing* to the rebel legions and their commanders he could woo them back to loyalty. His few remaining friends suggested suicide instead, and the least successful of all royal musical amateurs fell on his sword declaring, quite mistakenly, "O, what an artist dies in me!"

In the centuries since, many crowned heads have succeeded where Nero failed. A considerable body of royal music—light, serious, patriotic, martial, secular, and religious—has come down to us, and a good selection of it is on record. They make up a rather motley crew, these musical monarchs, from bright but brutal Henry VIII of England and bitchy but brilliant Frederick the Great of Prussia to an unusually cultivated Turkish sultan and an agile royal adventurer who served as both Emperor of Brazil and King of Portugal in his time. Some were first-rate princes and second-rate musicians, some the opposite. A few were equally adept at both music and monarchy.

Such a man was Charles of Orleans, a colorful late-medieval prince who excelled as a warrior, a diplomat, a poet, and a balladeer. After a perilous youth spent on the battlefield and as a prisoner of war (discovered unconscious beneath a pile of corpses on the field of Agincourt, he was carried off to twenty-five years of captivity at the hands of his British victors), Charles helped negotiate a truce to the Hundred Years War and then retired to Blois, which he converted into an oasis for the arts. A great patron, he attracted some of the best musicians and poets in Europe along with a steady flow of blue-blooded guests, each of whom was expected to contribute an impromptu rondeau to the ducal visitors' book. Charles' own compositions are still included in anthologies of the period and capture the

spirit of the princely pleasuredom he created where, as he explains in lines from his *Rondeau No. 109*, he found repose:

All by myself, wrapped in my thoughts,
And building castles in Spain and in
France.

Charles died, aged seventy-one, in 1465, but he had set a style that would be imitated by emperors, kings, and princes for more than four centuries. In fact, sixty-three years after his death, Baldassare Castiglione would declare that, to succeed, a prince must also be a musician, "and besides his understanding and cunning upon the book, have skill in like manner with sundry instruments," music being a "most acceptable food of the mind," and the surest means of pleasing the fair sex, "whose tender and soft hearts are soon pierced with melody and filled with sweetness."

At least one experienced royal womanizer, Henry VIII of England, heartily agreed and composed as eagerly as he made love. Two-thirds of the surviving songs he wrote deal with the pleasures of love, hunting, or the table, a fairly congenial combination. Thanks to the Musical Heritage Society and the St. George's Canzona directed by John Sothcott, twenty-nine of Henry's songs are available to modern listeners in authentic form—sung in period English and bastardized Norman French to the accompaniment of recorders, crumhorns, and rebecs ("King Henry VIII, Complete Works," MHS 1530). Since Italian and German musical influences were not strong in England when Henry put pen to paper, the lute and viol that play such an important part in later courtly compositions are absent. The result is excellent early Tudor music in the Anglo-French vein. The performance is knowledgeable and spirited, and all but the sourest listeners are bound to agree with the opening lines of one of Henry's better efforts:

Pastime with good company,
I love and shall until I die.
Gruch [grudge] who lust, but none deny;
So God be pleased, thus live will I. . . .

The long, eventful reign of Henry VIII's daughter Elizabeth brought the full flower of the Renaissance to England, and theater, poetry, and music flourished. Although Queen Bess was no composer herself, she was an avid singer and dancer. As a vocalist she was something of a horror—praise came hard even from the most shameless flatterers—but as a dancer she was as nimble as she was eager, performing as many as "six or seven galliards a morning, apart from music and singing." Old age did nothing to dim her enthusiasm, and at least one eye-witness records the spectacle of the shriveled Virgin Queen, then close to seventy, hopping about to the tune of "the Spanish Panic."

If Elizabeth could cut a graceful caper, the same cannot be said for her ungainly heir, James I, England's first Stuart king. A strange mixture of idiot and savant, James has been called, among many other things, the wisest fool in Christendom. His bloated torso, barely supported by two puny, bandy legs, ruled out grace on the dance floor, and a slobbering tongue, several sizes too large for his mouth, made his efforts at singing a grotesque parody. Yet James was a music lover, and a knowledgeable one at that. In Scotland, "understanding the art of musick to be neglectit & to becom almost in decay within our realme," and "not willing it sa to be," he used funds from his privy purse to found a "Sang Scule" (singing school) in Edinburgh.

James also presided over a number of drunken musical frolics at Whitehall where the boozy antics of the noble masquers, including his plump blond consort, Anne of Denmark (on at least one occasion, she passed out in mid-masque and had to be carried off to bed) were redeemed only by the quality and spirit of the masque music. A

Nonesuch production, performed by the *Concentus Musicus of Denmark*, offers a delightful sampling of instrumental and vocal "Stuart Masque Music" (H-71153) of the sort that kept things hopping until the Roundheads and Puritans intervened.

In sober Holland, music was put to much more practical use by at least one prince, William of Nassau, who led his countrymen to victory against their Spanish oppressors in a long and bloody war of independence. A small but significant offshoot of the struggle is a simple verse, written in the first person for Prince William, that eventually became the Netherlands National Anthem, the oldest national anthem still in use today. It is a proud but simple statement of patriotic resolve:

*My name is William of Nassau
I am of Dutch descent,
True to the land of my fathers
Until my life is spent.
A prince I am of Orange
A free man without fear. . . .*

The words, though William's, were put into verse by his close friend and follower, Philip Marnix of St. Aldegonde, and set to an old German tune. Depending on how it is arranged, it can sound like a somber, mournful hymn of resistance or a forceful song of victory. Two interesting and very contrasting interpretations can be found on "National Anthems of the World" (Everest 3239), rousingly played by the Vienna State Opera Orchestra, and "I Remember Holland," Volume II (Fiesta FLP-1298), a grimmer, more Calvinistic rendition by the Dutch Royal Military Band.

WHILE the Stuarts guzzled and the Dutch glowered, France gave birth to a king, Louis XIII, who is best remembered as the feeble pawn of Cardinal Richelieu. But this meek, sickly little man had a genuine flair for music. He composed, choreographed, and even costumed royal ballets in which he often took part himself, sometimes in fe-

male roles which cannot have been helped very much by his luxuriant black moustache and goatee. Louis was also his own best *maitre de chapelle*, and he did a creditable job of setting Psalms No. 5 and No. 103 to music as well as turning out a number of dances and ballads. Some of these can be heard in an authoritative performance by the Ancient Instrument Ensemble of Paris directed by Roger Cotte, along with an excellent Mass for Several Instruments by Charpentier (Nonesuch H-71130). An unexpected echo of Louis XIII's work is to be found on an altogether different sort of record, "Fritz Kreisler Souvenirs" (RCA Victrola VIC-1372), a modern reissue of fourteen pieces recorded by the great Austrian violinist and originally released at various times in the late Twenties. Kreisler took a roguish delight in passing off his own compositions as rediscovered antiques, but his *Chanson Louis XIII*, which he attributed to Louis Couperin, really is authentic if not in the way Kreisler said. It is, in fact, the violinist's arrangement of King Louis' own chanson.

The great rivals of the Bourbons in Louis XIII's day were the Hapsburgs, and it was one of the Hapsburg emperors, Leopold I, who was to prove Louis' only royal rival as a Baroque composer. Like Louis, Leopold was not a very impressive specimen at first glimpse. His drooping Hapsburg lip and diminutive stature were anything but regal, and he was chronically shy. A younger son, he had been raised for the church and was called to the throne only after the unexpected death of his older brother. Yet Leopold was made of sterner stuff than Louis. He proved himself a tough, tenacious emperor during a turbulent reign of nearly fifty years that saw Austria reach the height of her power. He spent lavishly to improve the Italian orchestra he inherited from his predecessor and built a theater so that it could be used for profane as well as sacred music. As one German chronicler of the Hapsburgs points out,

Leopold was "not only fond of music, but he also performed himself. His thick hanging lip did not prevent him from playing the flute; he even composed very prettily," and, at each of his four principal palaces, the Hofburg, the Laxenburg, the Favorita, and the Ebersdorf, "there was a spinet with which he beguiled his leisure hours."

Some historians even credit Leopold with first imbuing his capital, Vienna, with that passionate love of music which survives to the present day, perhaps the greatest legacy of his departed dynasty. A number of musical manuscripts, written in his own hand, have survived, and some of Leopold's works are still performed. A 1971 presentation of the Austrian Institute of London, for example, featured the Chamber Ensemble of the Cappella Academica Vienna and violinist Eduard Melkus in a Baroque program that included Leopold's *Gavotte e Ciaccona a Cinque and Balletto a Quattro* side-by-side with works by such acknowledged masters as Heinrich Ignaz Biber and Johann Heinrich Schmelzer, both of whom Leopold befriended in life. For a musical tour of Leopold's reign, the record collector can, with luck, turn to a Vanguard/Bach Guild release (BGS-70690, "Music at the Court of Leopold I," unfortunately now out of print) that features a solid performance by the *Concentus Musicus* directed by Nikolaus Harnoncourt. The instruments used are all period pieces, played with their original bows, brass bars, and necks, and the result is outstandingly authentic. The only fault to be found is with the record jacket, which mistakenly labels as "Leopold I, from an old wood engraving," a picture of some unknown nineteenth-century horseman, bristling with plumes, medals, and gold braid, tipping his hat to a group of cheering bourgeois citizens clustered around a distinctly non-Austrian tricolor—wrong century, wrong country, and *definitely* wrong lip!

As with all royal amateurs, one won-



BETTMANN ARCHIVE

Henry VIII of England . . . composed as eagerly as he made love . . . two-thirds of the surviving songs he wrote deal with the pleasures of love, hunting, or the table, a fairly congenial combination.

James I of England, "understanding the art of musick to be neglectit," used funds from his privy purse to found a singing school in Edinburgh.



CULVER PICTURES

ders if Leopold could have made it as a humbly born musician. His bandmaster professed to think so, remarking one day that it was a shame that the emperor could not be a full-time musician. "Never mind," was Leopold's sensible reply, "we are rather better off as it is."

WHEN it came to royalty, the Hapsburgs were an old established firm, very conservative and very respectable. By the middle of the eighteenth century their sprawling realm included substantial chunks of modern Hungary, Czechoslovakia, Italy, and a much larger Austria than today's postage-stamp republic. However, as elected leaders of the Holy Roman Empire, the Hapsburgs' primary interest lay in Germany, where they attempted to hold sway over several hundred independent kings, electors, landgraves, margraves, and princes. Competition against the old firm built gradually. By the time Leopold's granddaughter, Maria Theresa, came to the throne, a new star was blazing across Germany—Frederick the Great of Prussia, the man who, for better or worse, put the Hohenzollerns on the map.

If the Hapsburgs were a little stiff and old-fashioned, the Hohenzollerns were downright odd. Frederick's grandfather had been a preening, vain little hunchback who spent a fortune aping French manners and even hired mistresses purely for display purposes (he was no longer capable of anything impure) because that sort of thing was expected of a king. Frederick's father, Frederick William I, was nothing short of mad, a deranged Archie Bunker of a monarch who nevertheless proved a talented administrator and built up the magnificent military machine that Frederick inherited and put to such impressive use.

Frederick almost did not live to inherit it, however, having enraged his unhinged father by his effete ways as crown prince. Frederick adored everything Italian and French. Worse yet, he had his hair curled, wore frilly clothes, and played the flute! What was a father to do? Frederick William tried everything from beating and strangulation to imprisonment, all without success. Meanwhile, Frederick received covert aid from his mother, brothers, and sisters, all of whom enjoyed defying papa—from a safe distance. It is to his mother, Queen Sophia Dorothea, that credit goes for introducing her son to the man who turned a frivolous amateur into a serious composer and flutist.

Johann Joachim Quantz was a recognized composer and the author of a classic handbook, *On Playing the Flute*. He had also made some technical

refinements on the instrument itself and was a virtuoso player. Quantz first met the crown prince in the 1730's and stayed with him until his own death in 1773. Times were hard until 1740 when the royal ogre died and Frederick ascended to the throne. A neurotic, keenly intelligent homosexual who dabbled in philosophy and the arts, Frederick also managed to be a successful general and the greatest of the benevolent despots. Even more curiously, he was also a champion of a free press and religious toleration—altogether an odd blend. More than anything, he loved good music, good books, and good conversation. Berlin and his tiny palace of Sans Souci at Potsdam became havens for all three. Distinguished foreign visitors were frequent, among them Voltaire and Dr. Burney, the English musicologist, who has left us a description of one of Frederick's evening musicales and has this to say about the royal flutist's talents:

... he played the solo parts with great precision, his *embouchure* was clear and even, his finger(ing) brilliant and his taste pure and simple. I was much pleased and surprised with the neatness of his execution in the *allegros* as well as by his expression and feeling in the *adagios*; in short his performance surpassed in many particulars anything I had ever heard among the dilettanti or even professors. His *cadenzas* were good, but long and studied. Quantz beat time with his hand and cried out 'Bravo!' to his royal pupil now and then at the end of solo passages.

THE king's own compositions were many, and a good number of them have stood the test of time. How much credit the editorial pen of Quantz deserves we shall never know, but one should bear in mind Frederick's habit of sending rough drafts of his French verse to Voltaire for a little polishing ("cleaning the king's dirty linen," Voltaire called it). At any rate, Frederick has left behind a number of compositions for the flute and one powerfully moving march that has become an enduring part of German tradition. The *Hohenfriedberg*



March is still included in many German military anthologies; two good examples of it are to be found in "More German Army Choruses" (London SW 99028), a solid choral version with modern instrumentation, and in "March Music at the Royal Prussian Court of Brandenburg" (Telefunken 641016), a more historically interesting performance by the musicians of the Sixth Military Music Corps, Hamburg, using the original instrumentation for small woodwind band. And, of course, the piece makes a brief appearance in the score for the film *Barry Lyndon* (Warner Bros. K56189). The Telefunken record also includes a march by one of Frederick's talented sisters, Philippina, Duchess of Brunswick. Written in 1751, it is a pleasant, typically Baroque little piece. The original manuscript has survived, the oldest of its kind.

But Frederick was most serious about his serious music, and it, too, is readily available on record. "The Flute at the Courts of Frederick the Great & Louis XV" (Everest 3180) would probably have won Dr. Burney's approval as it features Jean-Pierre Rameau in a program of works by Quantz and several other French and German masters. It also includes Frederick's own Sonata in C Major, a first-rate piece that bears traces of Bach's influence. Even better is Odeon's "Potsdam, *Am Hofe Fried-*



FRENCH CULTURAL SERVICE

Louis XIII of France . . . composed, choreographed, and even costumed royal ballets in which he often took part himself.

Leopold I . . . his thick hanging lip did not prevent him from playing the flute; he even composed very prettily.

Frederick the Great . . . close your eyes and you can almost see Frederick in his salad days, before gout and lost teeth put an end to his flute playing.

Pedro de Braganza . . . the only ruler on record who composed a national anthem used by two different countries.



BETTMANN ARCHIVE

richs des Grossen" (STC 91100) with the Berlin Philharmonic directed by Hans von Benda, still occasionally available as an import. This is really a resurrected musical evening with the Philosopher King at *Sans Souci*, including his own Sinfonia in D Major and other pieces by Carl Heinrich Graun, Quantz, and Carl Philipp Emanuel Bach. Close your eyes and you can almost see Frederick in his salad days, before gout and lost teeth put an end to his playing and the death of most of his friends turned him into an embittered old misanthrope with affection reserved only for his pet greyhounds.

ANOTHER of Frederick's sisters, Ulrica Louise, took the Hohenzollern love of music north to Sweden as consort of King Adolf Frederick. Under her aegis the old summer palace of Drottningholm became the site of gala fêtes, pageants, plays, and operas. A Bolognese composer, Francesco Antonio Uttini, was engaged, along with competent musicians, a French acting troupe, and an Italian opera company. In 1766 a splendid new theater was opened at Drottningholm (the old one had burnt down four years earlier), and, for the first time, a Swedish theater existed that was on a par with some of the finest in France, Germany, and Italy.

But Ulrica's greatest gift to Swedish

culture was her son, who ascended the throne as Gustavus III in 1771. Nicknamed "King Charming," Gustavus was an ambitious, sophisticated ruler, determined to restore the power and prestige of the old Swedish monarchy at home and abroad. This led to many collisions with the entrenched nobility, several fruitless foreign wars, more than one *coup d'état*, and, ultimately, a violent death.

However, his clouded reign had a musical silver lining. Gustavus wanted to develop a distinctly Swedish national theater, and he employed the considerable financial resources at his command, plus his own restless talent, to that end. In 1773 he had Uttini compose the first Swedish opera, *Thetis och Pelée*. Others followed, and Gustavus became involved in the creative work himself, assisted by Johann Gottlieb Naumann, a Saxon musician and composer of European fame who paid several extended visits to Sweden. Naumann's greatest contribution to Swedish music was the opera *Gustaf Wasa*, based on the life of the first Vasa king of Sweden, founder of Gustavus III's line. It is still considered the Swedish national opera, and Gustavus himself worked out the scenario and wrote the rough version of the libretto, which was transformed into verse by another hand.

Some of its best moments (along with highlights of the work of Uttini and of the leading Swedish-born composer of the eighteenth century, Johan Helmich Roman) are performed by the present-day Chamber Orchestra of the Drottningholm Theater under the baton of Ulf Björilin in "Music at Drottningholm" (Nonesuch H-71213). It would do Gustavus' heart good to know that at least one of the projects he worked so hard at survived his troubled reign, for little else did. His biggest mistake was the establishment of a crown liquor monopoly—the one act guaranteed to unite all classes and factions of the heavy-drinking Swedes against their king. From then on, it was one con-

spiracy after another until, in 1792, at a great masked ball (appropriately enough, it was held in the Stockholm Opera House), Gustavus was felled by an assassin's bullet. The event struck no responsive chord among Swedish composers, but, ironically, later inspired a major Italian operatic work—Verdi's *Un Ballo in Maschera*.

FAR from Gustavus' northern realm an equally cultivated contemporary, another idealistic monarch, made a lasting contribution to his country's music. Sultan Selim III of Turkey resembled Gustavus in many ways. The refined leader of a backward people, he, too, was destroyed by reactionaries who opposed his reforms. But during his eighteen-year reign, which ended in 1807, he brought an element of color, gallantry, and taste to the Turkish throne that had been missing for centuries. From his earliest years, Selim had been fascinated by poetry and music; he mastered both, writing secular and religious music and a number of sensitive love poems. He also made a rather daring (by Ottoman standards) innovation, introducing women into the palace chorus, thereby enriching Turkish classical music immeasurably. His twin mottoes were, "The people love the throne and Selim loves art," and "Wisdom and art are more precious than the sultanate," an adage he had the opportunity to test during the last year of his life—after he had been removed from the throne but before he was murdered by his nervous usurpers. Two of his best works, a classic love song and a long rhythmic fragment, both with a melancholy undertone that hints at the composer's forebodings, are masterfully performed by the Chorus of Classical Turkish Music under the direction of Ruşen Ferid Kam, along with selections by other old Ottoman masters. The complex rhythms and the use of mixed chorus give a depth to this music that is wanting in its Persian equivalents, and the instrumentation is the same as in Selim's day—tambur, oud, and other native Ottoman instruments as they were played in the court of the sultan ("Musique Classique Ottomane," Pathé STX 218, available as an import).

Gustavus and Selim both worked in national idioms but not in a blatantly political form. An adventurous Braganza prince of the nineteenth century took matters a step further. The ruling house of Portugal inherited the oldest and farthest-flung of early colonial empires, with enclaves in Africa, Latin America, and the Far East. The biggest prize of all was Brazil, and, when agitation for autonomy there became irresistible, Dom Pedro de Braganza, pre-



BETTMANN ARCHIVE



George IV . . . an eager violinist, he found music one of his few solaces as a failing old man.

Prince Albert . . . played the organ so charmingly, precisely, and accurately that it would have done credit to a professional.



BETTMANN ARCHIVE

viously acting as regent for his father, the king of Portugal, went along with the rebels, becoming Brazil's first independent emperor (1822-1831). Besides being a flexible politician, Pedro was also an accomplished amateur composer with a complete opera to his credit. But his unique accomplishment was more political: he is the only ruler on record who composed a national anthem used by two different countries. The song came to him on a hill above São Paulo in the twilight hours of September 7, 1822. As only an emperor can, he jotted it down and, ordering out a chorus for accompaniment, sang and directed its première the same night! But times change, and when King John VI of Portugal died in 1826, Pedro, perhaps tiring of the limited cultural resources of his New World realm, packed up his possessions and returned to Portugal where he acquired a second crown. One of the things he took with him was his Brazilian Anthem, which he then made the anthem of the Kingdom of Portugal. The *Himno da Carta* lasted as long as the monarchy, falling with it in the revolution of 1910.

A century before King-Emperor Pedro invented the anthem transplant, a German dynasty was transplanted from Hanover to Great Britain, bringing with it the usual German enthusiasm for music. The four Georges (I through IV) were not very splendid statesmen, but each, in his way, loved music and encouraged an influx of foreign musical talent and the development of a more appreciative British audience. None of the Hanoverians composed, but many of them played. The painting reproduced at the head of this article is by Philip Mercier. It shows several of George II's pop-eyed, weak-chinned progeny grinding away at a musical evening at home. Frederick, Prince of Wales, who plays the cello in the Mercier painting, never wore the crown, predeceasing his father. A music lover to the last, he "died suddenly in the beginning of 1751 at Leicester House, in

the arms of Desnoyers, the celebrated dancing-master, who being near his bedside engaged in playing the violin for his Royal Highness's amusement, supported him in his last moments."

Prince Frederick's grandson, George IV, was a fat figure of fun, nicknamed "Prinny" from his days as prince regent during George III's madness. An eager violinist, he found music one of his few solaces as a failing old man. Captain Gronow, the celebrated diarist, describes how this diseased old royal Falstaff was "very fond of punch made from a recipe by his *maitre d'hotel*, Mr. Maddison, and which he drank after dinner; this was the only time when he was agreeable, and on these occasions he would sing songs, relate anecdotes of his youth, and play on the violin-cello: afterwards going to bed in a 'comfortable' state. . . ."

SAD to relate, the king invariably rose the next morning in what Gronow calls "the most unamiable of tempers." Such royal hangovers went out the window when Queen Victoria came to the throne in 1837. Although she thoroughly disapproved of her "wicked uncles," she shared their love of music. Three years later, when she married Prince Albert of Saxe-Gotha-Coburg, a really accomplished amateur musician and composer, her interest deepened.

The young couple had many musical friends. Perhaps the greatest of them was Felix Mendelssohn, who paid them several visits and has left us a delightful picture of himself, Victoria, and Albert spending a carefree afternoon in 1842, chatting, singing, playing, and generally having an innocent good time. According to Mendelssohn (who expressed the opinion in a private letter home where there was no need for flattery), Albert played the organ "so charmingly, precisely, and accurately that it would have done credit to a professional," while Victoria, after evicting a pet parrot which threatened to "scream louder than I can sing," performed with great style, botching only

one note, a D-sharp she mistook for D.

Victoria and Albert developed a real fondness for the gentle, well-bred Mendelssohn, and Albert's own compositions are strongly influenced by his work, as well as by Schubert's. The discerning listener can judge for himself by playing "Music of Albert" (Argo ZRG 597), a delightful collection of the prince's pieces, mostly in German lied style, smartly performed by the Purcell Consort of Voices directed by Grayston Burgess.

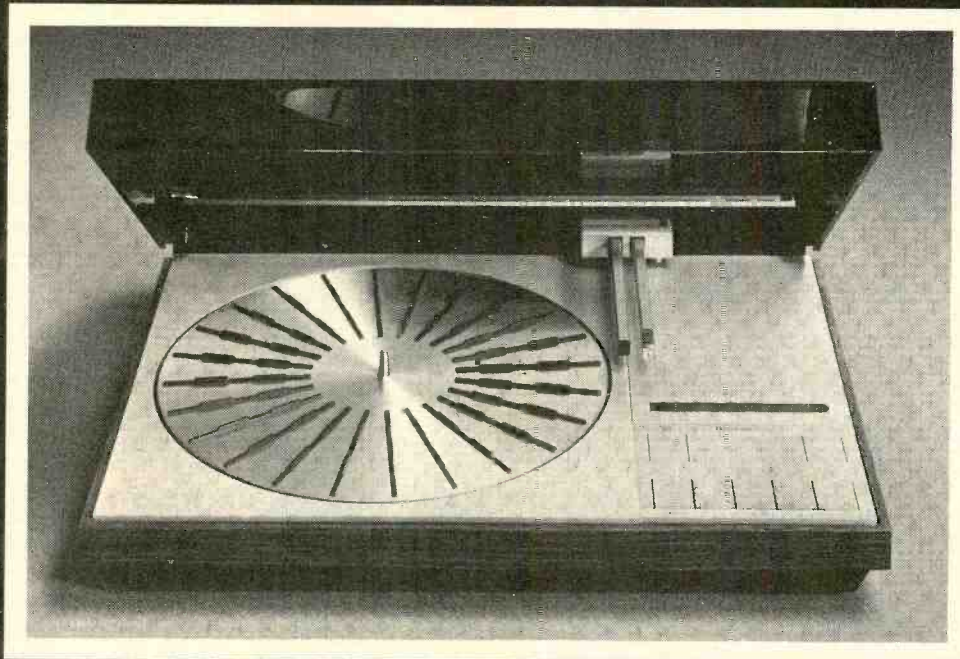
It was King Farouk who once predicted that soon there would be only five kings left—four of them in the deck of cards plus the monarch who sat on the throne of England. His prediction seems closer to realization each year, and those rulers who remain fall into three rather unpromising categories—hard-bitten Asian potentates with little time to spend in the music room, even assuming they have one; nice but dowdy matrons who must bend most of their energies to opening trade exhibits or dedicating power plants; and somber blue-bloods gone grey who could easily pass for honorary board chairmen of small corporations.

OF course, considering recent musical trends, things could be much worse. So far we have at least been spared the spectacle of a Royal Rolling Stone or a gravel-voiced grand duchess fobbing herself off as a more majestic Janis Joplin. Even when they do let their hair down musically, most "royals" still know where and how to draw the line. Consider the case of the late Duke of Windsor. During a rather unpleasant stint as governor of the Bahamas, the former king of England used to let off steam by hopping into the back seat of his limousine with the duchess and a battered set of bagpipes in tow. More than one puzzled islander, fascinated by the haunting sound of improvised Highland strathspeys and laments echoing down some dusty road, never guessed he was listening to one of the last of the royal composers at work. □

The Beogram® 4002.

A turntable unequalled in concept, performance, and design.

As you and your audio system gain in sophistication, you begin to define high performance far more critically. You also become sensitive to the many details which separate the good products from those considered exceptional. It is at this point that Bang & Olufsen becomes more important, and components such as the Beogram 4002 turntable are worth your careful evaluation.



Exceptional resistance to vibration. A leaf spring pendulum suspension system (patented) actually transforms horizontal shock into vertical motion, damped by the entire chassis assembly.

Electronically controlled tangential tracking.

A sophisticated system operated by its own DC motor. It eliminates the problems of angular distortion, skating force, horizontal and vertical friction.

Complete stylus protection. The raising and lowering of the tone arm is automatically controlled by a pneumatically damped, solenoid operated system which functions via independent electronic circuits.

One touch music.

A finely engineered control panel allows fully automatic operation (cueing cycle: 2 seconds) by depressing a single micro switch. Power assisted manual operation permits you to scan the entire record in either direction at fast or slow speed.

An extraordinary cartridge. The Beogram 4002 comes with the MMC 6000 cartridge, Bang & Olufsen's finest. It features an effective tip mass of only .22 mg., tracks at one gram, and has received critical acclaim throughout the world.

CD-4 capability. An optional CD-4 demodulator/phone preamplifier can be installed in the turntable housing, the optimum location for CD-4 reproduction.

Stable, accurate drive system. A high torque DC motor with integrated electronic speed control drives only the turntable platter via a precision ground, flat rubber belt.

Elimination of warp wow. An extremely short, low mass tone arm, which weighs only 8.4 grams with cartridge, eliminates the distortion caused by warped records.

Bang & Olufsen

Bang & Olufsen of America, Inc., 515 Busse Road, Elk Grove Village, Illinois 60007

CIRCLE NO. 10 ON READER SERVICE CARD

Phoebe Snow



By Penelope Ross

In the summer of 1972, Phoebe Snow was playing audition nights at various clubs around New York's Greenwich Village, only a short bus and subway ride from her home in Teaneck, New Jersey. During one of those nights at the old Gaslight, word went around that John Hammond (the man who discovered Billie Holiday and Dylan, among others) was coming to see Bruce Springsteen. Who? Never mind. What interested Phoebe was that Hammond would be present. She remembers the occasion vividly. "At that time I was primarily a blues singer. I played Mississippi Delta blues guitar and I sang blues songs, and I figured if anyone should hear me, it should be John Hammond. He came in and was sitting right there, but I was so shy I couldn't go up to him and say, hey, I'm a blues singer."

Hammond didn't stay long enough to hear Phoebe's set. "When he left, I followed him out to the street, still holding my guitar and still not being able to say a word. Then I went into the bathroom and cried. I was in such a depressed state. I wanted John Hammond to discover me." She paused for a minute, thinking of that other time, and giggled. "Poor baby!" she said. Phoebe recently met Hammond, but by then she had made a record that had been praised by an impressive range of rock and jazz critics, and it was too late for her to be one of his discoveries.

The same summer of that nondiscovery, a man named Dino Airali did stay long enough to hear Phoebe sing, this time at the Bitter End. Phoebe still sounds a bit stunned by what happened. "He really liked me. My act wasn't too together in those days, and I don't know why, but he came backstage and said, 'How'd you like to make a record, kid?' It was really very funny. I was very bored at the time. Stagnating. I never really thought I would make a career out of music, but I thought I would try, like I had tried any number of things. So if someone offered me a recording contract, it was almost like a joke. I was writing songs only sporadically then. I had written *Poetry Man* and one or two others around that time."

Phoebe Snow (née Laub) has come a long way since then—artistically and emotionally, if not geographically. She still lives in New Jersey, a few miles south of her parents' home in Teaneck. When I interviewed her, she was happy and very busy settling into her new home, where she lives with her husband Phil Kearns and their baby daughter Valerie Rose. She seemed far removed from the girl who thought she would never make a career in music because of an inferiority complex and a

monumental, continuous case of stage fright.

Often she got on stage only because she was encouraged by a friend—occasionally she had to be physically pushed into her place in the spotlight. Stage fright was one of the reasons she was so attracted to the Delta blues. “More than being a singer, I always wanted to be a guitar virtuoso. The singing was just an embellishment. A lot of the really rural Mississippi blues were mumbled, and I thought, ‘Great.’ The reason they mumbled is probably because of all that heavy *double-entendre* dirty stuff, but I was mumbling because I was so nervous I couldn’t unclench my teeth.

“Everybody had a remedy for my stage fright. Once someone told me that the only way to do it was to have a drink. I overdid it a little bit and got loaded and went up on stage and fell asleep. There were only two people in the audience anyway.”

Phoebe didn’t usually fall asleep, but often she might have appeared to be dozing because of another trait born of fear—she kept her head down (“so no one could see my face—it took me about two years to get my head up to look at the audience”).

INSECURITY or no, joke or no, a chance to make a record was too good to pass up, so Phoebe went into the studio to make a demo—which led to a record contract, which led to her first album, “Phoebe Snow.” It featured such gifted and diverse instrumentalists as Teddy Wilson, Zoot Sims, Dave Mason, and David Bromberg. Obviously, there was something about her voice and songs that cut across a lot of musical lines—she was good enough at jazz singing to appeal to Wilson and rocked enough to attract Mason. The album was released in June 1974 and was soon being played on the radio.

By that fall, audiences and critics were noticing the oddly appealing voice singing songs that tapped Phoebe’s fears and insecurities in a way that was seemingly universal. Phoebe set out to play club dates, conquering, in the process, most of her stage fright. Working on the road is, in music-biz parlance, part of “paying your dues,” and Phoebe seems to have paid in full. “I was doing clubs and small halls in upstate New York and down South. Boy, did I get broken in.”

But the stage fright dissolved, and by the time she played New York she was relaxed and confident, sitting down (but head up) and beaming at the audience. Then followed the first (and so far the only) major tour of her career. “I went out on the road with Jackson Browne. From mid-January to the end

of May I worked pretty constantly. I was exhausted. Plus, I was pregnant and didn’t know it. I knew I felt unusually tired at the end of it all.

“The road was pretty gritty. I was the only woman, but that doesn’t matter. It was just that the men were doing men’s stuff like drinking beer and lugging instruments around. We didn’t have a road crew, so I did my share of hoisting instruments, helping push things around. I was with Jackson two months, and it was tough going. But I don’t regret any of it. I needed it.”

Phoebe needed not only the experience in performing, but she needed something to take her mind off the wel-

“If you’re making money from whatever you’re doing somebody’s going to want a piece of that money. . . .”

ter of lawsuits and countersuits that had started to rage around her. She wanted to get away from her first record company on the grounds that they had not lived up to their contractual obligations. But the company knew it had found a prize and didn’t want to let her go. Eventually she won her case and was free to sign a new deal (with Columbia Records, which has now issued her album “Second Childhood,” reviewed in this issue).

By now she can view it all philosophically. “There’re a lot of bizarre things in my career so far. I’m probably looked on as one of the most bizarre people around, and that’s not true at all. The most consoling thing for me is that *everybody* goes through lawsuits. If you’re making money from whatever you’re doing publicly, somebody’s going to want a piece of that money, and if they can’t have it, they’ll just sue you for it.

“It’s sad and your creativity is stifled. For a very long time, if it hadn’t been for the road, I don’t know what I would have done because I just felt really smothered by the situations around me. They were detracting from my creative energy and cutting down on my energy in general, which is what lawsuits are supposed to do, I guess. Now I just think I wasted a lot of time, because I’m really writing again and enjoying it.”

After the settlement of the lawsuit, Phoebe had to endure one last disappointment in her short, rocky career—the cancellation of her tour with James Taylor last summer—because of ex-

haustion and the morning-sickness phase of her pregnancy. “I wanted to go out so badly with James Taylor. I really love his music.”

But lately disappointments have been more than offset by personal and professional upswings in Phoebe’s life. For whatever it is worth, only three years after playing those audition nights in Greenwich Village, Phoebe was named Most Promising New Female Performer at the First Rock Music Awards. The “Rocky,” a monstrous gold medal attached to a chain that would do a sommelier proud, is hanging over her parents’ fireplace.

Phoebe was present at the awards show at the behest of her record company, who were so insistent that she travel to Los Angeles for the big night that she concluded they had some inside information. As I recall it, it was a tacky show, but Phoebe loved being there. It gave her a chance to meet and shake hands with some of her idols—“Ella Fitzgerald. She’s another generation, but a genius”—and to let energy flow from one hand to the other. Phoebe really believes in the transmission of energy, both the negative energy of lawsuits and the positive energy of an introduction to an idol.

She feels that her life has changed radically in the past year, inside as well as out. “The changes have all been 100 per cent positive. You come to a point in your life where you say, it’s *got* to get better—I’m sure everyone says that—because it can’t get worse. I said it and it was chronologically perfect. As soon as I knew I had reached the bottom, then I started to pull myself out. You may think the things you feel are inflicted on you by other people, but *you* open the channel for that affliction to come through. I take the blame for a lot of bad stuff that happened. One of the ways I got out of it was to accept the responsibility for the fact that I had let my life get cruddy.”

PHOEBE’S positive new outlook is helping her get smoothly through a time of considerable change and flux. She managed to write most of the songs on “Second Childhood,” and she can now even contemplate the road again—with or without the baby—with interest. “I feel pretty positive about the future. I’m not going to let the past hang me up. See what’s coming next, that’s my motto. Never succumb to the Now. Some of my most ridiculous dreams have come true.

“I don’t want to give any more substance to the myth that you have to be depressed and frustrated to write songs. I can still sing the blues, but now I sing *funny* blues—the dirtiest ones I can find!” □

MANY engineers and audiophiles have long felt that frequency response is the most important single characteristic in determining the sonic "character" of a sound system. And it is well known that minute changes of level in critical areas of the audio-frequency band can significantly alter a listener's impression of that sound character. Over the

years, component designers have not only extended both the upper and the lower limits of their products' frequency ranges, but in addition they have successfully maintained linearity, making sure that a given amplifier, for example, will operate with equal effectiveness—in other words, amplify "evenly"—from the top to the bottom of the frequency range.

Even perfect electronic linearity, however, can do nothing about certain frequency irregularities that can have a noticeable effect on the sounds you hear—the frequency-response characteristics of your listening room, those of your speaker system, or even the shortcomings of the recording itself. Getting at these problems requires the special, highly selective talents of a

AN equalizer can be considered nothing more than a very elaborate set of tone controls. In some cases it comes already built into a preamplifier or receiver, but it is usually bought as a separate component. Compared with conventional bass and treble controls, which raise or lower a broad swath of frequencies (usually at the opposite ends of the audio band), the equalizer's many controls are far more selective. A five-band equalizer, for example, has separate controls that can adjust the relative strengths of frequencies in the deep bass, mid-bass, mid-range, mid-treble, and extreme treble, as shown in the curves in Figure 1. More complex and flexible units have a control for each octave of frequency (which means about ten controls for the audio range—see Figure 2). Sometimes, in units intended for professional use or for critical "room-voicing" applications, there is a control for each one-third octave for a total of thirty controls covering the 20- to 20,000-Hz audio band.

Equalizers designed for home use are usually stereo devices, frequently with an independent duplicate set of controls for each channel. Almost all equalizers have vertical slider controls rather than rotary knobs, probably because the slider-control positions usually provide a graphic (if not precisely accurate) visual picture of the response variations (if any) being introduced by the equalizer at any given moment.

An equalizer is installed in an audio system somewhere ahead of the power amplifier. The tape-monitor input/output loop is commonly the recommended juncture, although installation between the preamplifier and power amplifier is also frequently possible. Many equalizers have "bypass" switches that enable the user to switch the equalization in and out of the signal path for instant A-B comparison, and a few also have controls that make it possible to match the levels of the equalized and unequalized signals, making such comparisons significantly easier and of greater validity.

AUDIO EQUALIZERS

They can bring your system another step closer to the goal of sonic fidelity

By Daniel Shanefield

Facing page: Altec equalizer being used in conjunction with a BSR sound-level meter.

So much for the basics. Let us now consider some of the good and useful things you can do with your equalizer:

1. Decrease the "boomy" mid-bass sounds and other irregularities present in many records, rooms, and speaker systems.
2. Increase the deep-bass sounds, thereby compensating for weak bass in certain recordings and systems.
3. Decrease the nasality and "sound-from-a-box" character that afflicts a number of speaker systems.
4. Move the apparent source of the sound closer or further away.
5. Increase the apparent definition of high-frequency transients.
6. Decrease harshness and shrillness.
7. Decrease some types of noise.
8. Improve stereo image stability.

Note that the word "decrease" is regularly used rather than "eliminate." Control over frequency response is never precise, and even if it were, that would not completely eliminate all harshness, all noise, etc.

System and Room

It would be a wonderful state of affairs if we could go out and buy just the frequency response we want from a

sound system by choosing the appropriate loudspeakers and other components. In fact, many novices pore over frequency-response specifications under the apparent impression that they can do just that. In every case, however, the ultimate response of a system as it is delivered to your ears is determined mostly by the speakers and their interaction with the specific acoustic circumstances of the listening room. The combined result, as measured at any one point in a room—even with loudspeakers with a respectably "flat" response—is often a curve like the one in Figure 1a, or even worse. To those unfamiliar with such measurements, it may come as a shock to learn that the overall frequency-response graph (which includes the listening room) of a good system can be that irregular.

It is important, however, to view the curve of Figure 1a from the proper acoustical perspective. Most of the peaks and dips above about 500 Hz will, upon investigation, turn out to be extremely dependent upon just where within the room the measurements were made from. Moving the measurement microphone even a very small distance—a few inches or less—will

newly popular audio component called, among other things, a sonic equalizer. The equalizer is a component specifically designed to enable the engineer or audiophile to manipulate an audio system's frequency response with the goal of improving in some way the "reality" of its musical reproduction.

The equalizer (also known as a *multi-band equalizer*, *graphic equalizer*,

frequency equalizer, *SEA*, or simply *stereo equalizer*) is no longer the novelty it was six or seven years ago. The chart on page 69 lists no fewer than twenty manufacturers of such devices. Obviously, quite a number of home music systems now contain multi-band equalizers, and more are destined to acquire them in the future. A new owner's first experience with an equalizer

can be slightly frustrating, either because the device will not do what he hoped it would or because its effective application (which takes practice) appears to be too difficult to master. Some discussion of just what equalizers can do and how they do it is therefore in order. As you will see, the equalizer is not an audio panacea, but it *can* improve the sound you hear.

ways be helpful. But after you've done the best you can, an equalizer may make the final difference. The great advantage of an equalizer for this application is its ability to alter a relatively narrow band of frequencies while leaving all the others untouched. Consequently, it is often possible to reduce the mid-bass levels, where standing waves tend to cluster, and still retain—or even boost—the low-bass output of the system. Given the nature of standing waves, it is usually impossible to equalize for optimum results *throughout* a room; however, it is possible to improve conditions in a specific listening area, and that may be all that is necessary.

Another effect of the listening environment is the uneven absorption of the higher frequencies by furniture, drapes, and acoustic tile. With conventional tone controls it is difficult, if not impossible, to restore the lost frequencies without simultaneously providing an unwanted boost elsewhere in the high end.

Non-flat Recordings

It has often been observed by classical music buffs that European recording companies such as Philips and Deutsche Grammophon generally impart a different sound to their discs than do such American companies as Columbia and RCA. A clear example is the difference between the solo violins in two very realistic recordings, the Szeryng/Starker/Arrau Beethoven Triple Concerto (Philips 6500 129) and the Heifetz Mozart Concerto No. 4, in D Major (RCA LSC-2652). The two recordings can be made to sound quite similar (though not identical) by decreasing the mid-range of the U.S. disc by about 4 dB or, conversely, by boosting the Philips mid-range by 4 dB. This is just one example of a recording-based difference that can be compensated for, *if desired*.

Judging from their recorded releases, some record companies appear to as-

turn many of the dips into peaks and vice versa. Furthermore, most of the jagged response irregularities span too narrow a band of frequencies to be audible. In short, we needn't be too concerned about the *fine details* of the response curve, since the ear tends to ignore them or to smooth them out; however, the overall *trend* in the shape of the curve is audibly significant.

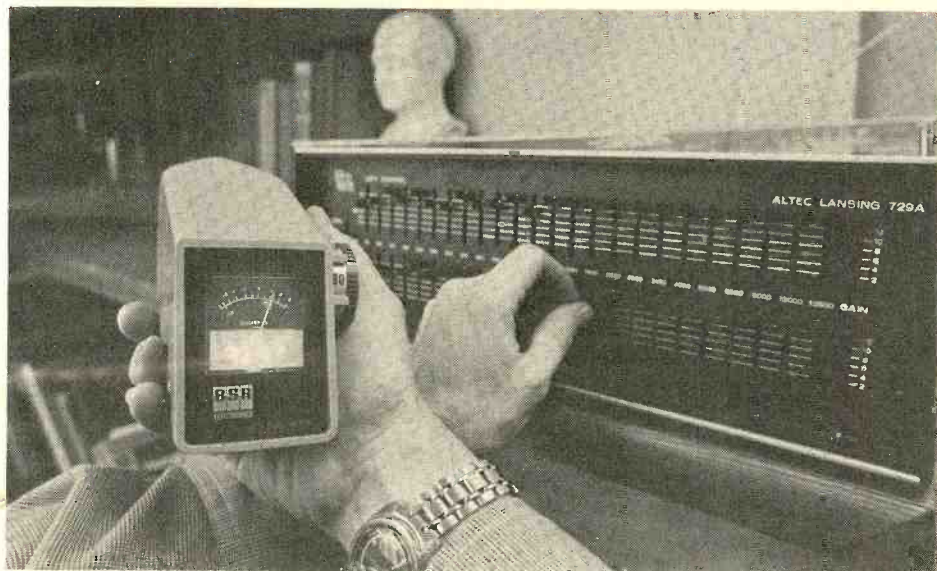
Below 500 Hz the measurement situation changes. The frequency peaks become less localized and can be detected over an area of several square feet by the measuring microphone. They may also begin to "cluster," as is evident in the frequency range between 100 and 300 Hz in Figure 2. This activity indicates the presence of one or more *standing waves* in the listening room. "Standing" waves become such because their frequencies—and therefore their wave lengths—relate directly to the dimensions of the listening room.

Typically, rooms will exhibit several prominent irregularities in the range of perhaps 40 to 200 Hz. When the specific frequencies of the standing waves are reproduced in the room, walking around in it will usually reveal areas (mostly near the walls) of abnormally

high sound pressure alternating with "nulls" toward the room center, where the sound seems almost to disappear.

For any dimension of a room, the frequencies at which the standing waves are likely to occur are easy to calculate. The dimension (in feet) is simply divided into the number 565, which represents half the speed of sound in feet per second. For example, if a wall-to-wall distance is 15 feet, there will probably be a standing wave with a frequency of about 37.6 Hz (565/15). And there will also be some effects at the multiples ("harmonics") of 37.6 Hz, such as 75.2, 112.8, 150.4, and so on. Furthermore, if there is *another* room dimension approximately equal to 15 feet (or a multiple thereof), it will *reinforce* the original standing wave and the bass problem will be very much aggravated.

Orchestral music is often rich in those mid-bass frequencies that are most altered by normal-size listening rooms. One result is a heavy, boomy, or tubby sound. Since the audible effects of standing waves will vary from one location to another within a room, some care taken with speaker and listener placement will almost al-



EQUALIZERS

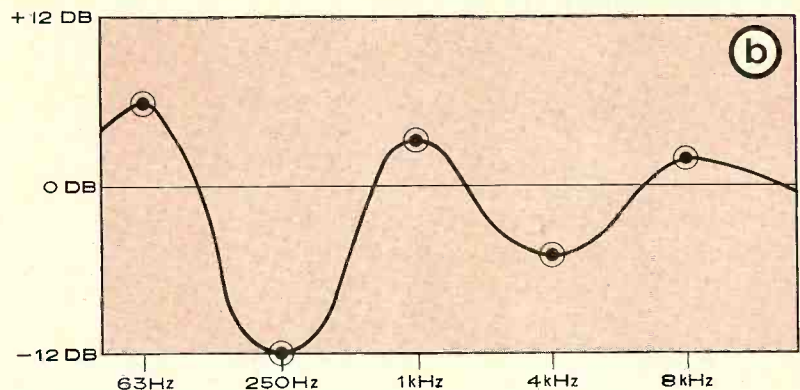
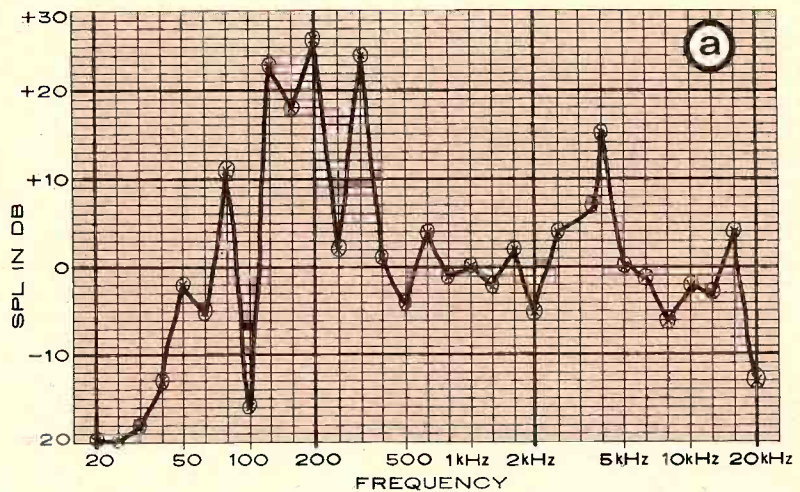
sume that their market contains millions of decidedly non-flat playback systems, so they accordingly adjust their sound to make it "pleasant" on those systems. Other companies apparently assume just the opposite. In any case, individual recording engineers and producers do adjust response curves by relying on their own ears to make final subjective corrections. And, of course, this correction process involves monitoring loudspeakers in a listening room of some sort, with all their inevitable imperfections. Needless to say, considerable individual taste (*read* sonic bias) is bound to creep in.

As may have become apparent, the process of adjusting the frequency response of audio components to achieve a desired sonic result is called "equalization" by engineers and designers. What is not so obvious is that this term (usually abbreviated verbally to EQ) is used *whether or not the final intended response is actually flat*. Assuming that "high fidelity" to live sound is the goal, then the way to achieve it is to correct the playback system so as to achieve a reasonably flat overall recording-studio/home-playback response curve. It so happens that after the room-acoustic plus playback-system response has been straightened out, the additional corrections necessary for each individual disc are usually relatively small, yet such "touch-ups" can do much to enhance the illusion of sonic reality.

Adjusting Playback Response

There are a number of methods of equalizing a playback system; three will be described here. The first two methods require a test record (a list of sources of such records is given in the box on page 68).

● **Sound-pressure-level method:** The most precise (but also the most tedious and costly) way to equalize a playback system uses a sound-pressure-level (SPL) meter. The meter is used to make the same sort of acoustic measurements that would be done to calibrate a professional studio monitoring system. An SPL meter consists, in effect, of an omnidirectional microphone coupled to an amplifier driving a voltmeter calibrated in decibels. The

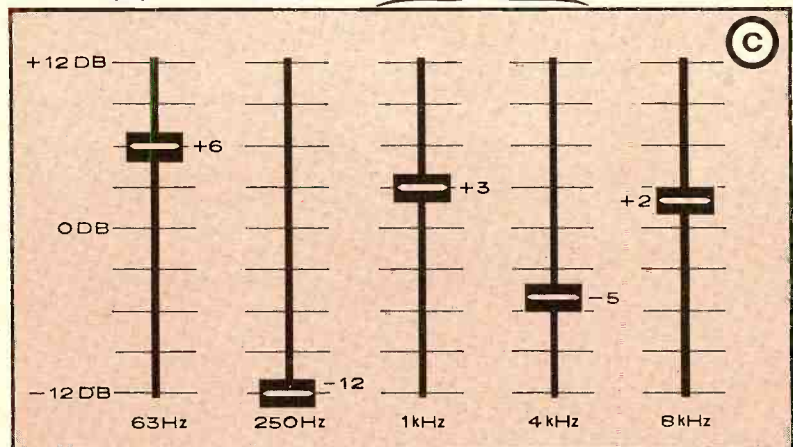


Improves weak bass

Adds warmth

Enhances solo voice, adds presence and definition

Adds "snap," improves high-frequency transients



Cuts back hum or over-heavy low bass

Minimizes boom or over-heavy mid-bass

Eliminates nasality, "closed-in" sound

Minimizes harshness, shrillness

Reduces record and tape noise

Figure 1. A typical room curve is shown in (a). The narrow peaks and dips can be ignored since they are basically determined by microphone placement; however, the "trends" (such as the rise between 70 and 400 Hz) are audible. Curve (b) shows the equalization applied by a five-band equalizer to flatten the curve shown in (a); the specific settings of the controls will of course be determined by the individual characteristics of the equalizer used. The control settings shown in (c) are approximately what would be necessary for the equalizer to achieve the curve in (b). The callouts above and below the 0-dB line show the general effects of specific boosts and cuts.

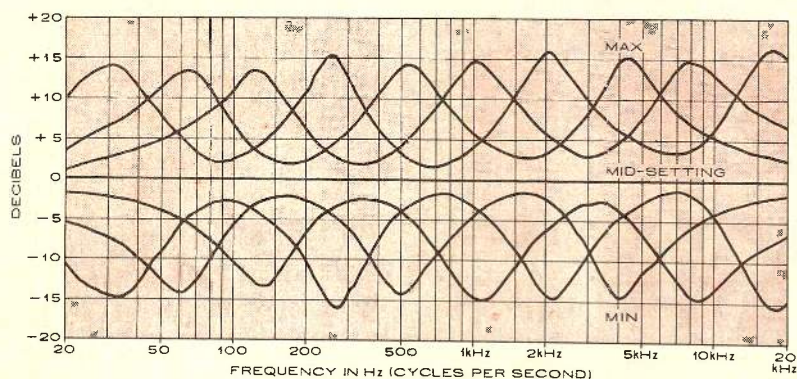


Figure 2. The boost/cut potential for the ten controls of an octave equalizer are shown above. The curves were plotted with alternate controls full up and full down.

controls of the equalizer are first set at "flat." A sweep-frequency test record is played, and the SPL meter is used to measure the response at one given listening position. A curve similar to the one in Figure 1a should result.

The equalizer controls are then set to provide an inverse (oppositely shaped) response curve. It is not possible—nor is it necessary—to compensate precisely for each dip and peak, but one can easily achieve a considerably flatter overall response and hence a much improved sound (see Figures 1b and 1c).

● **Warble-tone method:** A more convenient adjustment method employs a number of recorded warble-tone or noise signals each centered within some practical frequency range such as a full octave. For instance, the frequencies might rapidly and repeatedly sweep across the 800- to 1,600-Hz octave, which would also be the range of one of the equalizer sliders. This produces what is called a warble—for a reason that will be obvious if you've ever heard one—and is the method used in the STEREO REVIEW SR-12 test record. Pink or white noise, which is

used in some other test discs, consists of randomly varying frequencies (it sounds like noise) within a single octave or one-third octave instead of the fast repetitive sweep of discrete frequencies that produces a warble.

The signal frequencies in both types of test records provide a useful average measurement value (even though the slow action of the SPL meter smooths out the narrowest peaks and valleys, their influences are still felt). The measurement process is repeated for each octave, resulting in a reasonably detailed but easily interpreted curve.

A minor problem with the warble signal is that some types of loudspeaker and room resonances may take as long as 1/20 of a second to build up acoustically, and the quickly changing frequency does not permit full peak heights to be reached. These resonances are not properly excited by the test signal, and they are therefore not compensated for during the later equalization. Music contains many bursts of sound longer than 1/20 of a second in duration, and for this reason the fine tuning of the equalizer settings is best done by ear while listening to music.

Another reason for using the ear as a final judge is that a number of purely subjective effects should really be included, and they are likely to be overlooked when test instruments alone are used. For example, the ear's frequency response changes somewhat if the volume is increased or decreased, becoming markedly less sensitive to bass and somewhat to treble (as compared to the mid-range) at low volume. Therefore, if you customarily keep the volume down when listening to music, some boost in the bass and possibly the treble might be desired. Also, peaks in the response curve are far more noticeable than valleys; such peaks should therefore be given extra consideration when you are seeking a subjectively flat response—which brings us to . . .

● **The ear method:** The use of the unaided ear in adjusting the settings of an equalizer is the least technical—all you need are a few favorite music recordings as test material. With a little bit of practice, you can get surprisingly good results. If you are going to use the ear alone, a five-control (two-octave) equalizer is recommended rather than the more complex ten-control types. (Soundcraftsmen, however, has a special test record designed to be used with their units that permits octave equalization by ear; the resulting corrections can be quite good.)

One caution which should be observed with any equalizer is to avoid overloading the power amplifier or loudspeaker at the very low or high end. Some users are tempted to demand amounts of bass from their woofers far beyond what they are capable of delivering. Excessive bass boost will cause a gritty or scratchy sound quality, indicating amplifier or woofer overload. At the other end of the frequency range, adding excessive boost in the highs because of deficiencies in your system—or in your ears—can possibly result in blown-out tweeters.

The Uses of Equalization

Figure 1c shows some of the other ways an equalizer can be used to enhance performance; some corrections require a boost, others a cut in specific frequency bands. It should be evident that excessive "correction" in any band can easily result in poorer performance. However, by listening for the qualities noted in the illustration, one can train oneself to produce a fairly flat response curve entirely by ear. The process of sensitization and self-instruction with one's hands on the controls is, furthermore, a pleasurable

experience, and an increased awareness of subtle sound differences can be a useful side effect.

To some degree, an equalizer is also useful in removing tape hiss and disc noise, as Figure 1c indicates. True, there are other components specifically designed to reduce noise that are far more effective in this role, but an equalizer can certainly be helpful with minor problems. It can also decrease the low-pitched rumble and hum of old recordings, and it can optimize the sound from 78-rpm and older LP discs

made before the present RIAA equalization curve was adopted.

FM radio stations have occasionally been known to employ some rather peculiar equalizations, mostly in order to avoid overmodulation, and these can be corrected by ear and equalizer too. And, as we all know, many disc recordings betray a certain poverty of sonic talent among their producers and mix-down engineers. If a recording's frequency balance has not been totally devastated by someone's personal notion of what the average music lover

EQUALIZERS

will buy, an equalizer can help to restore a semblance of sonic sanity.

Harmonic distortions can be considered weak, spurious, high-frequency sounds added to the original music by

the recording-playback process. This is the probable reason why a slight reduction in the treble tends to remove "harshness" or "shrillness." Often the cut is necessary only in a particular region, where the distortion is at its strongest, and the nice selectivity of the equalizer can therefore be especially useful. Again, at the low-frequency end, there are many recordings, particularly of popular singers, that have

been poorly served by studio engineers, and the first thing to try with a vocal sound that is "unreal" is to cut the mid-bass.

A peripheral use for the equalizer is in the A-B testing of other audio components. When you are listening to two units in a comparison test, you want to know whether the audible differences are attributable to an easily corrected frequency-response discrepancy (and where it is) or whether the differences reflect inherent levels of distortion and the like. It is a fact that "harshness" can be either too much treble or too much distortion, and though a slight error in treble response can be corrected with an equalizer or ordinary tone controls, the effects of distortion can only be minimized, not eliminated.

The frequency-response curves of various components may differ, and components sometimes interact with the other units to which they are connected, causing subtle but audible response effects. For example, the output circuit of a preamp can interact with the capacitance of cables connecting it to other components, leading to a subtle loss of treble response. Similarly, the output circuit of a preamp can interact with the low-impedance inputs of other components, causing a slight low-bass roll-off. The sonic effect of these *frequency-response* variations can easily be mistaken for differences in openness, transient response, etc. Putting an equalizer into the act sometimes reveals them to be trivial anomalies that can be eliminated by a change of 1 dB or so in an equalizer control.

TEST RECORDS FOR EQUALIZATION

Company	Model and Price	Notes
B & K Instruments, Inc. 5111 West 164th Street Cleveland, Ohio 44142	QR-2011, \$16	1/3-octave pink-noise bands.
BSR Ltd. Route 303 Blauvelt, N.Y. 10913	FEW-R, \$9.95. SLM-1, \$69.95	Record only Includes sound-level meter.
CBS Technology Center CBS, Inc. 227 High Ridge Road Stamford, Conn. 06905	STR-101, \$6.98 STR-140, \$15	Pink-noise bands. 1/3-octave pink-noise bands.
Lafayette Radio Electronics 111 Jericho Turnpike Syosset, N.Y. 11719	24R45070, \$3.45	Warble tones.
Radio Shack 2617 West Seventh Street Fort Worth, Tex. 76107	50-1001, \$2.49	Warble tones.
Z-D Consumer Service Division (Stereo Review) 595 Broadway New York, N.Y. 10012	SR-12, \$5.98	Warble tones.

Altec and Soundcraftsmen also provide a test disc with their equalizers.

Objections to Equalizers

Some people who own expensive playback systems with elaborate tone-control facilities often find it psychologically necessary to keep the controls at neutral or switched out. For them, the use of the neutral setting somehow "proves" that their expensive system needs no correction. Of course, this ignores both the effects of the room and of the usual aberrations in the recording process, and it should be apparent by now that a blind faith in the flatness of the recording process is, at best, somewhat naïve.

A few sophisticated audiophiles nevertheless object to the use of equalizers, citing the fact that such circuits occasionally *ring*. This means that the electrical signal "jiggles" for a moment at the end of a musical note. It is true that some equalizers do produce minor oscillation of square-wave signals when maximum boost settings are used. However, music contains so

many damped oscillations (and the spurious ringing disappears so quickly) that all such effects are masked and/or simply inaudible. I have conducted extensive experiments, with double-blind tests and listening juries, in which ringing-prone equalizers were compared to non-ringing ones. They failed to reveal any *audible* differences between the equalizer models that rang slightly on test instruments and those that did not.

Another popular objection is that phase aberrations can be introduced by equalization. This is certainly true as far as measurements are concerned, at least at extreme slide settings. But in these days of multi-miking, the chances of finding a phase-accurate recording, stereo or quadraphonic, tape or disc, are very, very slim.

IN truth, when it comes to equalization, the one thing we can really be sure of is that *we are already getting it*

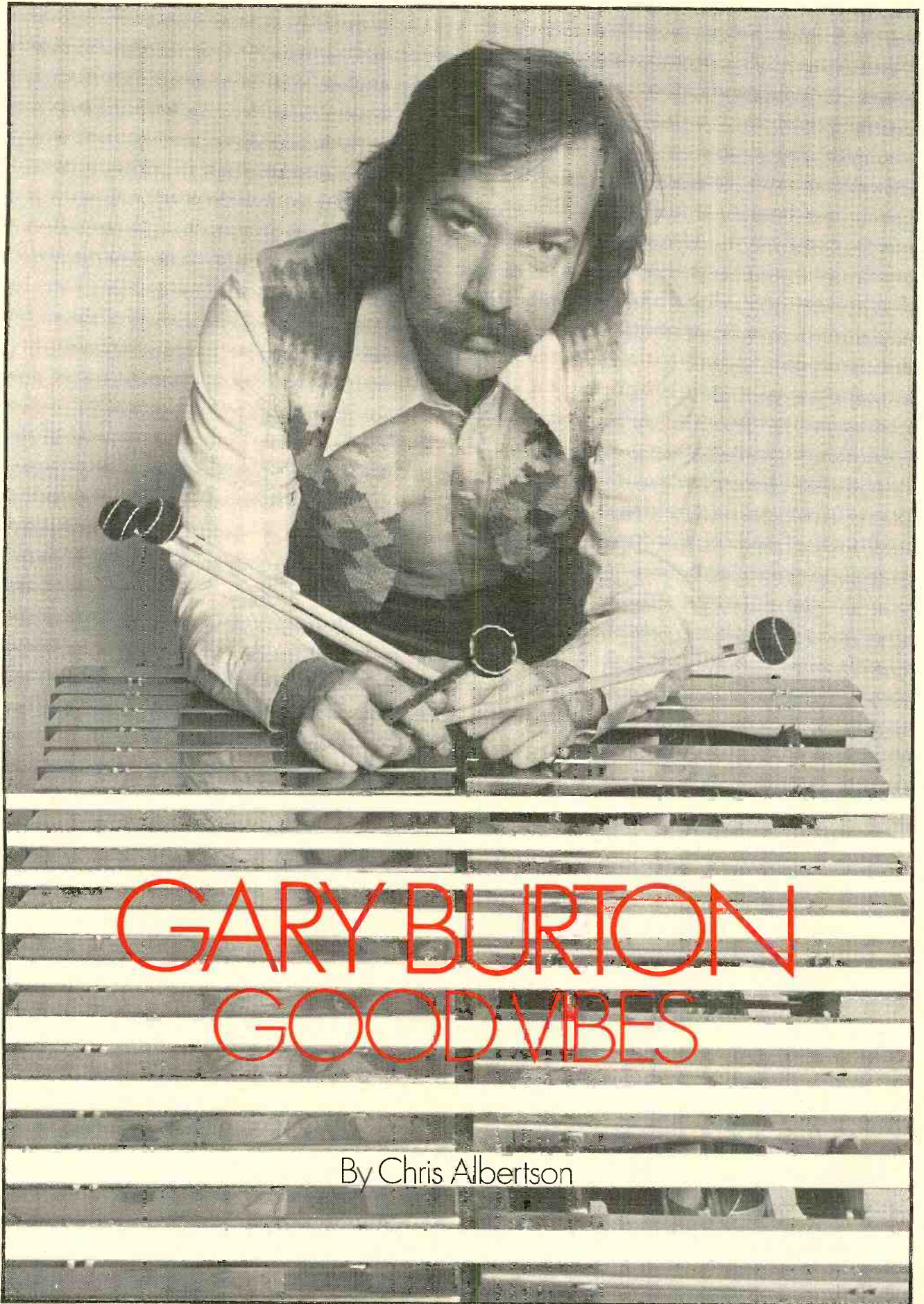
whether we know it or not—it's built right into our recordings. Much of the musical material coming through our audio systems, of course, sounds at least a *little* "harsh" or "edgy" or "boomy" or "dull." And yet a touch of the controls of an equalizer can make a wide variety of modern recordings sound far more realistic or, at the very least, much less disagreeable. The best thing to do, therefore, is to seize the reins yourself. With an equalizer you can place the management of the overall frequency response of your program material and of your audio system where it belongs—in your own two hands and at the service of your own two ears. □

Daniel Shanefield, a Bell Telephone component development engineer, has long been concerned with audio transmission both professionally and as a zealous audiophile.

STEREO EQUALIZERS

Company	Model Number	Number of Controls per Channel	Center Frequency of Bottom and Top Controls (Hz)	Price (when available)	Comments
Ace Audio Company Huntington, N.Y.	AE-2002	5	50-20k	\$133.75 wired, \$84.25 kit	Available in kit form or factory-wired.
Altec Sound Products Anaheim, Calif.	729A	24	63-12.5k	\$875	Controls cover 1/3-octave bands. Interaction between filters provides great versatility, but adjustment with instruments required for best results. Provides cut but no boost.
BSR Electronics Westbury, N.Y.	FEW-II	5	60-10k	\$99.95	Unusually small unit. Unit has two meters to indicate output levels. Sound-level meter and test record available.
	FEW-III	12	30-16k	\$199.95	
Cerwin-Vega No. Hollywood, Calif.	GE-2	13	31.5-16k	\$470	Has 1/2-octave controls up to 180 Hz, full-octave controls above. Has infrasonic filter and master level control.
Dayton Wright Associates Ontario, Canada	SG Mk.2	8	45-13.5k	\$862	Has elaborate tape-recorder switching facilities plus high- and low-frequency filters.
Dynaco/Dynakit Blackwood, N.J.	NA	10	30-15.3k	NA	Available factory-wired or in kit form.
JVC America, Inc. Maspeth, N.Y.	SEA-10	5	40-15k	\$129.95	Controls affect left and right channels together. Outermost controls can be switched to different center frequencies.
Heath Company Benton Harbor, Mich.	AD-1305	5	60-16k	\$129.95	Available in kit form only.
MXR Innovations Rochester, N.Y.	None	10	31-16k	\$199.95	Horizontal rather than vertical control panel.
Orban/Parasound Products San Francisco, Calif.	621B/R	4	Variable	\$739	Designed for professional use. Range and bandwidth of controls and center frequencies continuously variable.
Pioneer Electronics Corporation Moonachie, N.J.	SG-9500	10	32-16k	\$300	Can be switched to process record or playback signals, or both simultaneously.
Quintessence Group Sacramento, Calif.	1	5	150-12.5k	\$500	Uses knob controls instead of sliders.
SAE, Inc. Los Angeles, Calif.	MK XVII	10	40-15k	\$300	Control range switchable to ± 8 or ± 16 dB. Built-in pink-noise generator. Controls have range of ± 8 or ± 16 dB. Professional version of above.
	MK XXVII	20	20-20k	\$550	
	MK 2700B	20	20-20k	\$550	
Soundcraftsmen Santa Ana, Calif.	20-12A	10	30-15k	\$299.50	Has master level controls. Test record included. As above. Also has LED indicators to adjust for unity gain. De luxe version of above. Professional version of above.
	RP2212	10	30-15k	\$349.50	
	SG2205	10	30-15k	\$399.50	
	TG2209-600	10	30-16k	\$550	
Southwest Technical Products San Antonio, Tex.	EQ-1	9	50-15k	\$99.50	Available in kit form only.
Spectro Acoustics Pasco, Wash.	210	10	30-15.3k	\$275	Controls provide ± 15 -dB range.
Tapco Edmonds, Wash.	2200	10	30-15k	\$289	Controls provide ± 15 -dB range. Two level meters, master gain controls provided.
Technics by Panasonic Secaucus, N.J.	SH-9090	12	Variable	NA	Range and bandwidth of controls and center frequencies adjustable by means of continuously variable knobs. Controls affect both channels together. Unit not yet available.
Thompson Electronics Co. Santa Rosa, Calif.	10	10	30-15k	\$525	Has knob controls instead of sliders; time-delay relays prevent turn-on transients.
UREI No. Hollywood, Calif.	530	9	50-12.5k	\$424	Designed for professional or home use.

The above listing omits mono equalizers, equalizers that control fewer than five frequency bands, equalizers built into amplifiers and receivers, and units intended mainly to suppress acoustic feedback in public-address systems.



GARY BURTON GOOD VIBES

By Chris Albertson

IN October of 1931, Louis Armstrong fronted the Les Hite orchestra for a series of California record dates. During one of the sessions, as the story goes, Hite's drummer, Lionel Hampton, spotted a vibraphone in the studio hallway and started "messing around with it." That led to his playing the instrument on the date and—on *Memories of You*—recording the first vibraphone jazz solo.

The rest, as they say, is history: Hampton gained international fame as a vibist with the Benny Goodman Quartet during the swing era, whipping hepcats into a frenzy of excitement with such exhibitionistic numbers as *Dizzy Spells* and *Avalon*, sedating them with *Moon Glow* and *Stardust*. Red Norvo—already a veteran jazz xylophonist—switched to the vibraphone in 1943. It was a successful switch, but the instrument failed to capture the imagination of budding musicians, so Hampton remained the virtually unchallenged vibes king until the late Forties, when bop spawned the first "modern" vibists, Milt Jackson and Terry Gibbs.

The following two decades saw Hampton and Jackson sharing top honors on the instrument, unaffected by such contenders as Dave Pike, Bobby Hutcherson, Eddie Costa, Lem Winchester, and Gary Burton, all of whom emerged in the late Fifties or early Sixties. Except for Burton, who has enjoyed flourishing activity and acclaim in recent years, this third generation of vibes players has all but disappeared: Pike took up residence in Europe for several years and has been inconspicuous since his return; Hutcherson still records occasionally but seems to be maintaining a low profile; Costa and Winchester met with fatal accidents just as their careers were beginning to blossom.

There are other vibes players, of course, and some, like Cal Tjader—a percussionist who applied Latin rhythms to the instrument with commercial success—have done very well, but, as Gary Burton has pointed out, none of them have distinguished themselves as *musicians*. Burton submits that even Hampton and Jackson would have remained relatively obscure had their instrument been as conventional as the piano or saxophone. He first voiced this opinion in a 1965 *down beat* interview, thereby causing quite a stir. "The remark has haunted me for years," he says. "I didn't go so far as to say that Milt Jackson can't read, that he can't really handle complicated situations, or that he specializes in ballads, blues, and fairly simple tunes, but if that were true of a tenor player, he wouldn't even be taken seriously. I'm

talking about an absolute major player on the scene. One has to be a complete, total musician like Coltrane in order to get that kind of reputation and following, but vibes players are notorious for not having much together in the way of technique on the instrument, and none of them have been musical heavyweights.

"When you think of pioneers of new material and new sounds, you think of people like Coltrane, Miles, Sonny Rollins, Parker, and Mingus, men who, through their instruments or the medium of their groups, really broke all kinds of new ground and moved the styles of music forward in their generation. Vibes players had not done that ten years ago when *down beat* interviewed me, and I just used Milt as an example because most critics considered him the ultimate vibes player, and today I still don't see Milt in the same light as even Stan Getz."

One reason that even the best vibraphonists have been conspicuously

“. . .vibes players are notorious for not having much together in the way of technique on the instrument. . .”

unadventuresome is probably the nature of the instrument itself. "The vibraphone has always struck me as the most mechanical instrument around," says Burton. "It lacks some of the musical attributes that we seek out in jazz instruments—vocal qualities, phrasing effectiveness, and so on—and it has kind of a fixed pitch and fixed tone. A saxophone player can hit one note and make it tell a whole story by vibrating it and changing the color of the tone. The piano also has a fixed tone, of course—but you don't play it with two fingers."

Prompting Burton's last remark is the fact that vibraphone players have traditionally used only two mallets. He, on the other hand, uses as many as six, a technique that gives the instrument a very different, more flexible sound harmonically. Similar mallet techniques are now employed by Bobby Hutcherson and former Burton student Dave Liebman—who, Burton complains, "sounds alarmingly like me"—but no one disputes who led the way. "It came about when I was still a teenager living at home in Princeton, Indiana," recalls Burton, who is now thirty-three. "For ten years I played unaccompanied in our living room, and it sounded so empty with just two mallets that I started

using more. At first I used the technique only for ballad pieces and that sort of thing—where I could force chords—but I soon found out that it wasn't difficult to think pianistically on the vibes."

In 1960, after eleven years of playing the marimba and vibes—mostly by himself, but also occasionally at small public events in southern Indiana—Burton was recommended by saxophonist Boots Randolph for a jazz record date with guitarist Hank Garland. The session took place in Nashville, where vibraphone players were virtually nonexistent, but Garland had a fondness for the instrument and he was sufficiently impressed with Burton's handling of it to suggest that he spend the summer in the country-and-western capitol. It turned out to be sound advice: weekend jobs and a couple of record dates as a sideman brought Burton to the attention of guitarist Chet Atkins, who, in his capacity as producer, secured for him a deal with RCA.

"They saw me as a possible child prodigy, a promising seventeen-year-old-hot-shot type," says Burton, who remained under contract to Victor for eight years. "I was sort of the house jazz artist, and they left me pretty much alone to do what I wanted. I guess they liked having a straight-ahead, reliable, good-image jazz musician who made noncontroversial records for the label." Several albums resulted from the association—from trio and quartet dates to elaborate affairs with strings and explorations with pianist Carla Bley—but Burton's activities during that period were not limited to making records.

IN the fall of 1960, he enrolled as a student at Boston's Berklee School of Music. He participated in some of the school's recording ventures and even took a group from there to perform at a 1962 jazz festival in Uruguay, but in the late summer of that year Burton left Berklee and decided to try his luck in New York. "I was hoping to get some kind of a sideman job with a major group, or to get into some studio work," he recalls. "Eddie Costa had just died in a car crash, and he had been doing most of the studio work on mallets, so I thought the field would be wide open, but I sat there six months without a gig. I did all the right things, went to all the right places and let everyone know I was in town, but nothing happened until Marian McPartland told George Shearing about me. It wasn't exactly as hip a thing as I was looking for, but I had become desperate by the time George called, so I took the job.

"Actually, it turned out better than I had expected. The image everyone

had—and still has—of George is one of very commercial music, playing supper clubs with no solo space, but the group was excellent. With Gene Cherico on bass and Vernel Fournier on drums it was the most professional rhythm section I had ever played with, and the highest-quality group. Besides, it was the first time I got to play major concerts, to go on lengthy tours, foreign trips and that sort of thing. It was a great education.”

The most interesting product of Burton's one-year experience with Shearing is an album (“Out of the Woods,” Capitol T-2272) on which the quintet, augmented by five woodwinds, plays twelve contrapuntal compositions by Burton. “To this day, that’s the biggest

notably “Alone at Last” (Atlantic SD-1598) and “Gary Burton and Keith Jarrett” (Atlantic SD-1577), which teamed him up with one of the most remarkable artists on the scene today. “Of the younger players,” says Burton of Keith Jarrett, “I think he’s the most all-encompassing talent. When I look at musicians of my own generation, he’s my favorite, and I have a feeling that he will probably be the most dominant name from this generation in the history of the music.”

Admiration and successful collaboration notwithstanding, Burton says that he and Jarrett will henceforth go their separate ways. “We have a funny relationship,” he points out. “We’re good friends and we’ve man-

the right message from his music, so he has to choose his partners and his music very carefully, especially when he records. You can’t be carefree about a recording because it allows your work to be scrutinized and opinionated over for years to come.”

Unlike many of his contemporaries, Gary Burton has yet to resort to electronic gimmickry, the bane of many a jazz player’s existence. “I got interested in electronic applications of my own instrument about six or seven years ago,” he says, “but the instrument lost its ability to phrase and really have any kind of variety in the attack. I’ve reached the point where I don’t even turn the flutter on, in an attempt to make my vibraphone less mechanical and more of a natural instrument like the piano. I try to use it for phrasing in much the same way as a pianist does, to imply, with dynamics and really careful slurring, that I have the vocal freedom of a horn. Electronics just sort of dirtied that all up and wiped out all the finesse that I had spent years trying to develop. So, I’ve always seen myself as an expert on the *acoustic* properties of the instrument, and I feel there’s a niche for somebody now to come along and fill in the electronic vibes category that no one is really exploring. But I’m generally very skeptical about electronic devices applied to jazz groups. The sound always strikes me as gimmicky—I mean, those records might sound awfully hip the first couple of times, but I can’t see taking them with me to a desert island.”

Burton admits that he only recently acquired stereo playback equipment and that there are too many quad systems for him to get interested. Besides, he says that he never keeps more than forty or fifty albums in the house, and that he rarely listens to records. Now in his fifth year of teaching at Berklee, he records for ECM, a company that gives him total freedom, and prefers to stay home when he is not working. “I don’t even go to concerts unless I’m involved in them,” he says. “Concerts are healthy for jazz because they create a certain contact between musicians and their audiences, but the universities are taking that away. All the big projects are now financed by grants, special funds, or committees that allow, encourage, or make room for even the most grotesque artistic eccentricities, and although all of that plays its part in evolution, it can be overdone and end up being very dilettantish. The result is that jazz ultimately suffers in much the same way legit music has suffered from foundation-funded concerts of non-musical antics.” Gary Burton, it appears, is a modern jazz man of the old school. □



Burton is now in his fifth year of teaching at Boston's Berklee College of Music

effort I ever made in writing. It was at George's insistence and I'm proud of those things. Other than that, I've done very little writing because it has just never been my style to be as prolific as, say, Keith [Jarrett], who writes on a constant basis, turning out material for himself and for everyone else in the process.”

As the Sixties drew to a close, Burton began recording for Atlantic, an experience he recalls as being frustrating. “You come in with your ideas and they sit there and tell you what you can't do or what they'd rather you did instead, until you finally compromise. It was all very friendly, but there were a lot of things I couldn't do at Atlantic, and some of the things I did almost weren't released—the Stéphane Grappelli album, for instance (“Paris Encounter,” Atlantic SD-1597). I doubt if it cost more than \$1,500 to make, yet it took them two years to get it out.”

Despite frustrations, Burton made some good albums for the label, most

aged to keep it that way by staying somewhat independent—we will play the same concerts, but never together like we used to when we were both with Atlantic. Keith is very sensitive about it: we went to the same school, but, being older, I was always a few years ahead of him, so my career got started about three or four years before his did, and we have both tacitly decided that it would be unhealthy if we let competition come between us.

“It's the same with Chick [Corea]. Whenever we've done projects together we've been extremely careful to keep the presentation equal. It's a touchy thing among younger musicians—you can take guys who are in their sixties and put them together in all sorts of combinations because they no longer have ego problems, anything to prove or an image to define for their audience. For the younger musician, the first fifteen years is an endless task of defining his identity for the audience he's building, making sure they get the right image of what he's doing, and get

Any LUX amplifier or tuner that doesn't meet or exceed every rated specification won't ever reach you.

It's one thing to produce components with an impressive list of published specifications. It's quite another matter to ensure that every unit will meet or exceed each of those specifications. But this is precisely what LUX does with its entire line of power amplifiers, preamplifiers, integrated amplifiers and tuners.

LUX components were conceived and designed for that very special breed of audiophile whose critical requirements for accurate music reproduction are met only by separate amplifiers and tuners. And of those products, the very best that the state of the art can provide.

Hence, the following procedure takes place at our facilities in Syosset, New York.

Every unit received from the factory in Japan is removed from its carton and placed on a test bench where it is connected to an array of test equipment, which includes a Sound Technology 1700A Distortion Measurement System and 1000A FM Alignment Generator, McAdam 2000A Digital Audio Analyzer System, and Iwatsu Electric SS5100 and 5057Z Synchroscope.

Every control, switch, meter and indicator undergoes an operational check-out. There's nothing unusual about this. Any reputable manufacturer can be expected to do the same. Or at least spot check a shipment.

But LUX has only begun. Every specification is then measured against its published rating. That means 14 individual tests for a power amplifier, 14 for a preamplifier, 20 for an integrated amplifier and 7 for a tuner.

Each verified specification is entered by hand on a Performance Verification Certificate. Any unit that doesn't

match or exceed every published specification is given the appropriate remedy. When a unit passes, it is returned to its carton together with a copy of the Certificate for the information of its future owner. Another copy stays with us as a permanent record.

As for the specifications themselves, here are some examples. The Luxman M-4000 power amplifier has no more than 0.05% total harmonic distortion at any frequency from 20 to 20,000 Hz, even with both channels driven simultaneously to its rated output of 180 watts per channel minimum continuous average power into 8 ohms. Another M-4000 specification: signal-to-noise ratio beyond 100 dB.

Another example is the C-1000 preamplifier. Its phono-input circuits are virtually overload proof, accepting almost half a volt of audio signal at 1000 Hz. The distortion of its phono-preamplifier circuits is an astonishingly low 0.006%, and the rest of the preamplifier circuits add only 0.001% more.

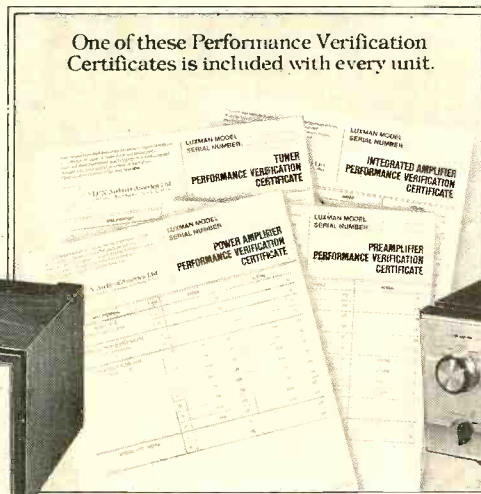
There's one more expression of our confidence in our products. If any of them malfunctions during the first three years, let us know. We'll not only fix it promptly, but will pay the freight both ways, as well as supply a shipping carton if needed.

Some day, all manufacturers may adopt these procedures. For LUX, it's the only way to go. From the very beginning.

With all this, we think that neither our specifications nor our procedures for verifying them is nearly so important as your satisfaction with the end result: the most accurate and musical reproduction you can hear.

The end result can be best appreciated at a select number of dealers whom we guarantee to be as dedicated to fine music reproduction as we are.

One of these Performance Verification Certificates is included with every unit.



Luxman M-4000 Power Amplifier—180 watts per channel minimum continuous power, both channels driven simultaneously into 8 ohms. Total harmonic distortion no more than 0.05% at any frequency from 20 to 20,000 Hz. Frequency response: 5-50,000 Hz, ± 1 dB. Signal to noise ratio: 108 dB. Features include: separate power supplies for each channel, including output and drive stages. Two-meter power-output display in combination with LED peak-output indicators reveal dynamic range of program material. Output level set by precision potentiometer with 1-dB click stops. Less than \$1,500.



Luxman C-1000 Preamplifier—Total harmonic and intermodulation distortion: 0.007% at 2.5 V, 20 Hz-20 kHz, all output signals. Frequency response: 2 Hz-80 kHz, +0, -0.5 dB. Signal-to-noise: >65 dB. Phono overload: 450 mV @ 1 kHz, 3.5 V @ 20 kHz. RIAA equalization: ± 0.2 dB. Features include: tape-monitoring and dubbing for two decks, six selectable tone control turnover frequencies, linear equalizer, twin high and low noise filters, variable phono-input impedance, variable input sensitivities, "touch-mute" attenuator, speaker selectors. Less than \$900.

LUX Audio of America, Ltd.

200 Aerial Way, Syosset, New York 11791

In Canada: AMX Sound Corp. Ltd., British Columbia; Gentronic Ltd., Quebec



MUSIC TO GET PREGNANT BY

By Mike Royko



BECAUSE of my interest in rock music, the following news item out of Tallahassee, Fla., caught my eye:

Damning rock music for its "appeal to the flesh," a Baptist church has begun a campaign to put the torch to records by Elton John, the Rolling Stones, and other rock stars. Some \$2,200 worth of records were tossed into a bonfire this week after church officials labeled the music immoral.

The Rev. Charles Boykin, associate pastor and youth director at the Lakewood Baptist Church, said he had seen statistics which showed that "of 1,000 girls who became pregnant out of wedlock, 986 committed fornication while rock music was being played."

It was the last part—the amazing statistic—that intrigued me. I considered getting a portable radio and blasting rock music at the first 1,000 women I met.

But first I decided to get further details from Mr. Boykin. I phoned him and we had the following interview:

Where did that statistic come from, the one about all those girls getting pregnant while listening to rock music?

"I want to be accurate, so let me correct you. They didn't all listen to it *during* the sex act. I was speaking of listening to it as a prelude to fornication, as well as during."

I see. But rock music was involved in all but 14 pregnancies out of 1,000 cases?

"That's right. It was sort of like a Gallup Poll of unwed mothers."

And who provided the statistics?

"This man. He's from West Virginia. Or maybe Virginia. He stopped in

our church one day and gave us the statistics."

He's a professional poll taker?

"Uh, no. He's an evangelist. He travels all the time."

And you believe his statistics?

"Oh, yes. There's a definite relationship between illicit sex and any music with a syncopated beat. That covers rock and country music and even some gospel music."

Goodness, a decent girl has got to walk around with earmuffs on. Tell me more.

"Well, the low bass tones of the bass drum and the bass guitar make people respond sexually."

(They make me put my fingers in my ears. Am I strange?)

But the syncopated beat has been around a lot longer than rock music, hasn't it?

"That's right. And the debauchery began when Benny Goodman introduced swing music."

Benny Goodman caused debauchery?

"That's right. His music had a syncopated beat."

Then why weren't lots of girls getting pregnant because of his music?

"They were, but it was covered up. When Goodman had a concert in Los Angeles in 1938, there was open sex."

In 1938?

"That's right. The syncopated beat did it."

How about Glenn Miller, Lawrence Welk?

"When they used the syncopated beat, yes."

Remarkable. I wouldn't have thought Lawrence Welk capable of such rascality. It makes me wonder

what really goes on in all those nursing homes.

"It doesn't matter whether a song is slow or fast. It is the syncopated beat. You can trace it all the way back to the jungle, where the beat was introduced. It is primitive, pulsating, hypnotic."

How alarming! Then what kind of music should a nice girl listen to if she doesn't want to be swept up by a jungle, animal instinct?

"Well, the syncopated beat is not predominant in patriotic songs or in most gospel music."

How about classical music?

"I'm not advocating all classical music. In his later music, Bach introduced some syncopated beats."

Aha! I suspected as much of Bach. The old hipster fathered twenty children.

HAVE you conducted any other scientific research, besides the Traveling Evangelist Poll?

"Well, we made some tests with plants. We played classical music for one group of plants, and rock music for another group, and we didn't play any music for a third group."

"The plants that were exposed to classical music grew in the direction of the speakers. The plants that weren't exposed to any music grew straight up."

And—let me guess—the plants that listened to rock music fornicated and all but 14 of the plants became pregnant, right?

"No, the plants that were exposed to rock music just grew away from the speakers. Then they died."

Well, that's better than breaking your daddy's heart. □

Reprinted by permission from the Chicago Daily News

QUALITY

A TRADITION FOR OVER 90 YEARS

It all started in 1883 in St. Croix, Switzerland where Herman Thorens began production of what was to become the world's renowned Thorens Music Boxes.

For almost a century Thorens has pioneered in many phases of sound reproduction. Thorens introduced a number of industry firsts, a direct drive turntable in 1929, and turntable standards, such as the famed Thorens TD-124.

Over its long history Thorens has learned that an excep-

tional turntable requires a blend of precision, refined strength, and sensitivity. Such qualities are abundantly present in all five Thorens Transcription Turntables. Speaking of quality, with Thorens it's the last thing you have to think about. At Thorens it's always been *their first* consideration. So if owning the ultimate in a manual turntable is important to you, then owning a Thorens, is inevitable.

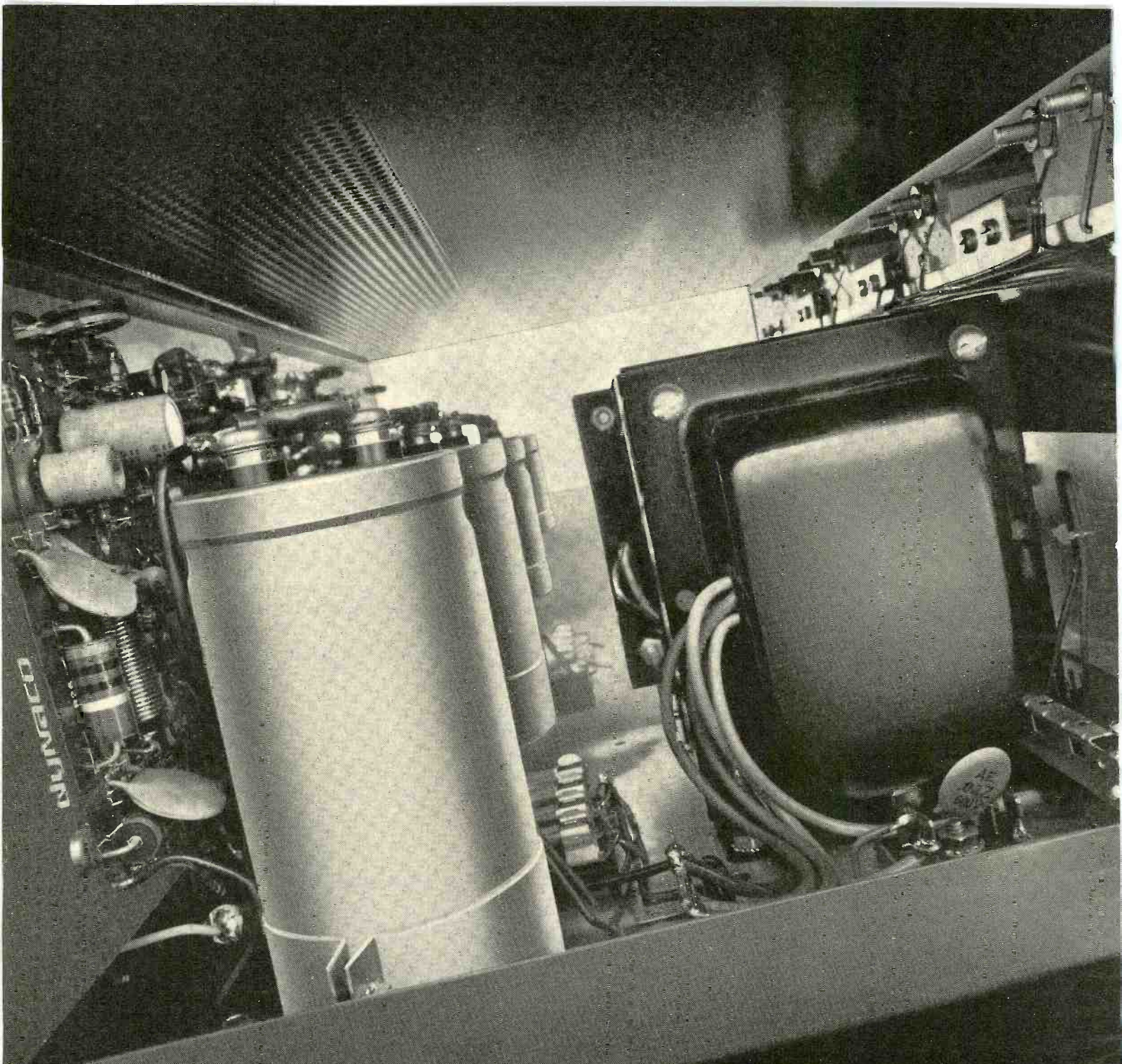
ELPA MARKETING INDUSTRIES, INC. EAST: New Hyde Park, N.Y. 11040
WEST: 7301 E. Evans Rd., Scottsdale, Arizona 85260

THORENS

The Accent is on Quality

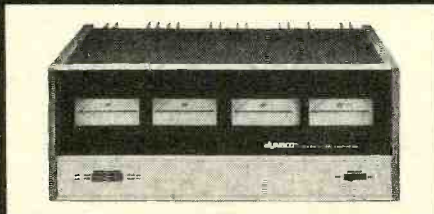


PICTURED ABOVE: lower left—TD-225 AB MARK II. (Also available without tonearm TD-125 B MARK II) • lower right—TD-145 C • top left—TD-160 C • top right—TD-165 C



300 watts your way

Dynaco's new 300 watt amplifiers, the Stereo 300 or QSA-300 are versatile (2, 3, or 4 channels) and powerful (150 watts \times 2 or 75 watts \times 4*). Both have multi-channel capability with meter options to give outstanding sound and dependable performance. Get traditional Dynaco value—kit or assembled. Save nearly \$200 doing it yourself in 3 or 4 evenings using preassembled, pretested circuit boards that save time and assure



accuracy. 300 pure watts from Dynaco. Have them *your way*.

*20-20kHz into 8 ohms, at less than 0.25% total harmonic distortion.

Free 24 page color catalog and names of nearest dealers. Write Dept. SR 5

Dynaco, Inc. Box 88
Blackwood, New Jersey 08012

dynaco
dynakit

STEREO REVIEW'S SELECTION OF RECORDINGS OF SPECIAL MERIT BEST OF THE MONTH



Ars Nova: the Music Of the Fourteenth Century Is Still Vividly Communicative

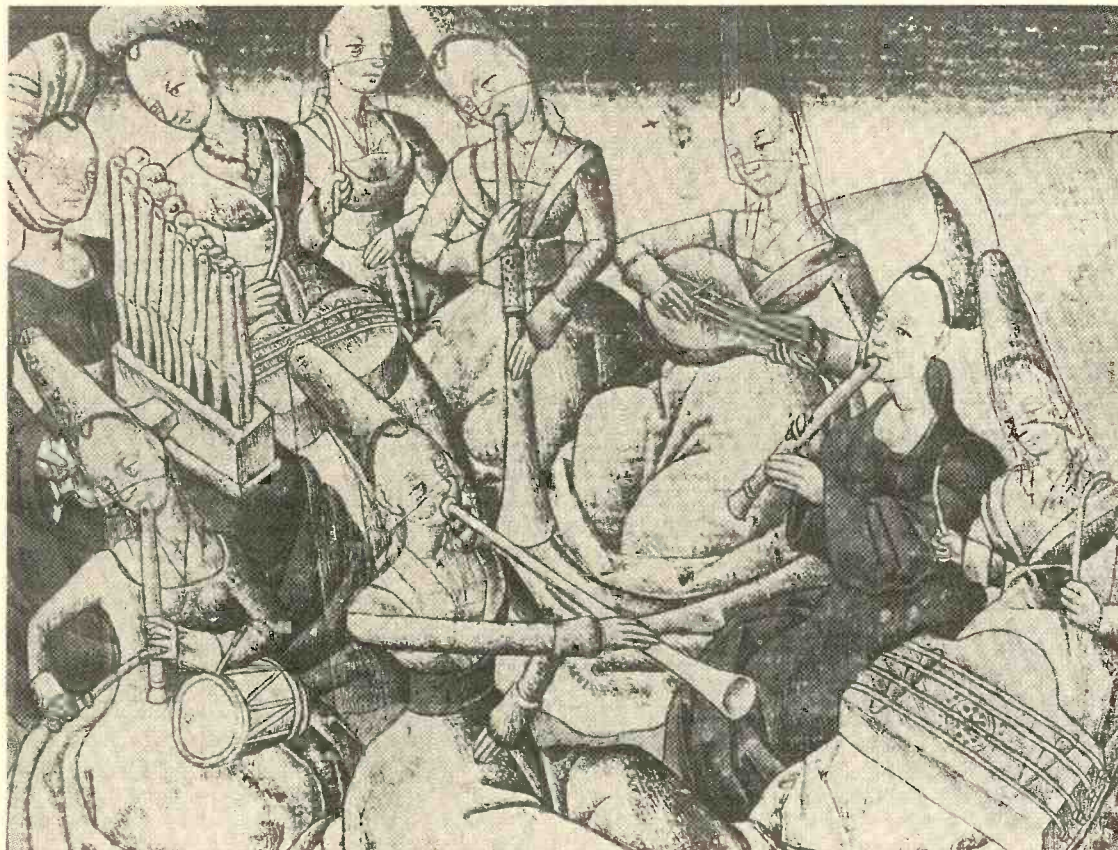
SO MANY groups performing works from the rich repertoire of the fourteenth century's Ars Nova ("New Art") style of composition and from the later Burgundian school manage to make all the music sound the same: reverently dull. The Early Music Consort of London, a group of four talented singers and ten versatile instrumentalists who command, under the direc-

tion of David Munrow, a staggering battery of ancient instruments, dispel this evil by demonstrating the remarkable variety and virility of this very special music in a splendid new three-disc set from Seraphim.

This performance miracle is accomplished in the main by careful programming that not only takes into consideration the musical worth of the individual selections, but also orders them in a sequence that quite dramatically illuminates the revolutionary change in musical style that differentiates the products of the Ars Nova and Burgundian schools. Variety of sound is achieved by imaginative use of the many instruments at hand. The extant scores from the period tell us nothing about in-

strumentation, leaving Munrow free to score each work for different combinations ranging from solo performance through the delicate sounds of strings, lutes, and harps and on to the lusty eruptions of sackbuts, cornetts, and shawms enlivened by the punctuation of percussion. The most important source of contrast in these works, however, lies in the musicians' attitude toward the texts. The mood of each poem is painstakingly reflected in the choice of tempo, timbre, and volume in the musical setting. Add to this the fact that the performers are in absolute command of their instruments—there is never any vagueness of pitch or rhythm—and one readily realizes that this anthology is the cream of its class. ▶

A mid-fifteenth-century representation of "the muses," from an illuminated manuscript in the Grenoble Library, portrays them as aristocratic ladies of the time, playing pipes, dulcimers, and other contemporary instruments.





Gérard Neugeballe/Connoisseur Society

Brahmsians Michel Beroff and Jean-Philippe Collard

Another attractive aspect of the collection is its handsome packaging: the box cover presents a lovely "Garden of Delight" miniature showing musicians and other amenities of fifteenth-century courtly life. The introductory essay with the set is superb, and all the texts (they are beautiful) are given both in the original and in graceful translations. In short, this release is a must for the understanding and appreciation of a brilliantly productive period in Western music. Scholars will be delighted to hear sound musicology realized in vital performance, and many music lovers will no doubt be astounded to discover that the art of so remote a past can still speak to us vividly today—Ars Nova indeed. *Stoddard Lincoln*

THE ART OF COURTLY LOVE: Volume I—Guillaume de Machaut and His Age. Machaut: *Hareu! hareu!—Hélas! ou sera pris confors; Amours me fait desirer; Se je soupier; Trop plus est belle—Biauté paree—Je ne sui; Dame se vous m'estes; Quant je sui mis; Mes esperis se combat; Ma fin est mon commencement; Douce dame jolie; De Bon Espoir—Puis que la douce; De toutes flours; Quant Theseus—Ne quier veoir; Quant j'ay l'espart; Phytton, le merveilleus serpent.* De Lescorel: *A vous, douce debonaire.* Andrieu: *Armes, amours—O flour des flours.* Des Molins: *Amis tous dous.* Anon.: *La Septime estampie Real.* **Volume II—Late Fourteenth Century Avant Garde.** Grimace: *A l'arme, a l'arme.* Francisus: *Phiton, Phiton.* Borlet: *Hé, très doulz roussignol; Ma tredol rosignol.* Solage: *Fumeux fume; Hélas! je voy mon cuer.* De Meruco: *De home vray.* Vailant: *Très doulz amis—Ma dame—Cent mille fois.* Pykini: *Plasanche or tost.* De Caserta: *Amour m'a le cuer mis.* De Perusio: *Andray soulet; Le greygnour bien.* Hasprois: *Ma douce amour.* Anon.: *Istampitta Tre fontane; Contre le temps; Tribum quem; Restoés, restoés.* **Volume III—The Court of Burgundy.** Dufay: *Ce moys de may; La belle se siet; Navré je suis; O très piteulz—Omnes*

amici; Par droit je puis; Donnés l'assault; Hélas mon dueil; Vergine bella. **Binchois:** *Je ne fai toujours; Files a marier; Amoureux suy; Jeloymors; Vostre très doulz regart; Bien puist.* **Anon.:** *Basse danse I La Spagna; Basse danse II La Spagna.* Early Music Consort of London, David Munrow cond. SERAPHIM SIC-6092 three discs \$11.94.

The Brahms Hungarian Dances Complete In Their Original Piano Versions

WHEN Johannes Brahms' publisher Simrock came out with the first ten of the composer's Hungarian Dances for piano four hands in 1869, he found himself with what in today's parlance would be called a chart-buster. The remainder of the series (there are twenty-one in all) followed eleven years later to the further delight of nineteenth-century devotees of *Hausmusik*, those fervid amateurs of music who might be compared in some ways with the record collectors of our own time.

The Hungarian Dances are, in essence, Brahms' evocations of the gypsy music he heard during his young touring days with the Hungarian violinist Eduard Reményi, and they are perhaps more familiar today in orchestrations by Brahms, Dvořák, and others than in the form in which they were originally written. Connoisseur Society's release of the complete set is there-

fore most welcome, particularly since the performers, French-born both, are two of the best young pianists in the business. Together they turn in performances of enormous verve and sensitivity, making us realize that the orchestral transcriptions have not taken the full measure of this music—the shimmering cimbalom effects in No. 4, for example, or the electrifying syncopated accents in the second strain of the familiar No. 6.

Perhaps taking my cue from the pronounced folk flavor of these delectable pieces, I found the readings by Michel Beroff and Jean-Philippe Collard as fresh as new-mown hay, as intoxicating as wine, and as irresistible as—well—temptation itself. They are beautifully recorded in pleasingly ambient SQ-matrix quadraphonics in the bargain. I had the Walter and Beatriz Klien Turnabout disc on hand for comparison; it is a neatly done run-through, nicely recorded, and a good value at \$3.98, but it is no match for this Connoisseur Society issue. *David Hall*

BRAHMS: Twenty-one Hungarian Dances (complete). Michel Beroff and Jean-Philippe Collard (piano four hands). CONNOISSEUR SOCIETY □ CSQ 2083 \$6.98.

A Fresh New Duo For Your "Must Hear" List: Kate and Anna McGarrigle

FEW new albums from new people actually sound *fresh*. But they can hardly be blamed for that: our modern means of exposing ourselves to influences are so efficient, and the concurrent pressure against eccentrics is so steady, that the influences are seldom really synthesized, really melted down and swirled around into a meaningful mix. Instead, influences are generally tape recorded, snipped, rejoined, and then played right back in an order that is only as good—or significant—as the new person's editing ability.

After listening to a lot of that—that being the norm these days—you can perhaps appreciate how charmed I was by the fresh sound of Kate and Anna McGarrigle in the new Warner Brothers album of the same name. Coming from the slightly exotic land of the French Canadians, they have soaked up at least as many influences as any

other new people I've heard in a long time, but these are all *sloshed together*, making one dare to hope that a rare thing may be happening: personality may be asserting itself over the how-to-do-it information coming in via the media. It is a good enough album, that is, to make me cross my fingers; they're clinched against how well the sisters can do this again, whether they can keep handling the nitty gritty of words and melodies with such easy energy (they didn't quite fill this one with their own pieces), whether they can keep from flying off in one of the stylized directions they now flirt with but haven't gotten trapped in.

Right now, they're on top of it all. Anna, whose *Heart Like a Wheel* (beautifully done here) was made famous by Linda Ronstadt, and Kate, who has been—how does one put this nowadays?—the Old Lady in Loudon Wainwright's household (or he's been the Old Man in hers; I don't want to start a fight), have perhaps the benefit of an unusual start in music: they took their first piano lessons from nuns in a convent in a tiny Laurentian village in Quebec. There's real French dressing in the harmonies, probably tracing back to those days, but there are strong-but-indirect Bessie Smith influences at the other pole, and there's a wonderfully jumbled structure of influences in between.

Anna, I think, is slightly the more instinctive songwriter (at least as represented here); a couple of her songs, *My Town* and *Heart Like a Wheel*, have a haunting quality you just can't pin down in the mind. Kate seems more conscious of styles; her *Kiss and Say*



Composer/performers Anna and Kate McGarrigle

Goodbye has a great sound for an album opener and goes especially well just before *My Town*. But then the whole thing seems to interlock like that—just as these new writing and singing voices do and just as the instrumentation and production show an understanding of all the parts. Now. Where'd I put that list of *Real People*?

Noel Coppage



A CIVILIZED, tactful person would, I suppose, refrain from jumping up and down and yelling "You Must Hear This Record!" But maybe that's why so many people fail to hear about brilliant new performers until it's too late. And so, You Must Hear Kate and Anna McGarrigle! They are sisters and individual singer/songwriters who have come together to create a debut album that is distinctive without being gimmicky and beautiful without being cloying or arch. Everything about the album is first-rate, starting with the songs, most of which were written by either Kate or Anna, in styles that complement without repeating each other. Kate's material is inclined to be a bit tougher and funnier lyrically, while Anna holds a slight edge in writing memorable melodies. Their voices, also, are similar enough to blend well (it doesn't hurt, of course, that they have been harmonizing together since childhood) without sounding like they have been double-tracked.

Most of their songs revolve around love, sometimes of the merely lost, sometimes of the lost-and-found variety. Anna's *Heart Like a Wheel* (first recorded by Linda Ronstadt) is given a performance so gorgeous it can raise goose bumps, and it's done solely with three voices (sister Jane is the third),

guitar, banjo, and organ. *Go, Leave* has an even more economical production—just composer Kate on vocals and guitar. Medals of Restraint should be pinned, then, on producers Joe Boyd and Greg Prestopino, who had the sense to keep the framework simple-to-sparse where that worked best and added extra instruments and voices only when they would improve matters. This album should be the beginning of great things.

Penelope Ross

KATE & ANNA MCGARRIGLE. Kate McGarrigle (vocals, piano, banjo, guitar); Anna McGarrigle (vocals, piano); Tony Levin (bass); Jay Ungar (fiddle); Joel Tepp (woodwinds, harmonica); other musicians. *Kiss and Say Goodbye; My Town; Blues in D; Heart Like a Wheel; Foolish You; (Talk to Me of) Mendocino; Complainte pour Ste. Catherine; Tell My Sister; Swimming Song; Jigsaw Puzzle of Life; Go Leave; Travelling on for Jesus.* WARNER BROS. BS 2862 \$6.98.

BETTE MIDLER: haughty hoity-toit



Bette Midler: Comedy Slightly to the Left and a Little Lower Down

"OUT OF THE TUBS and into the Limelight" would make a good subtitle for *Bette Midler, Her Story*, if she ever takes time out to set it down. But I'm afraid she's going to be too busy for a while: her new Atlantic release, "Songs for the New Depression," more than proves that she

wasn't just a campy comet destined to sputter out as the fad for nostalgia waned. No siree, this little—but ample—girl, who started her show-biz career providing the legit entertainment at a gay (aren't they all?) bath house (the Continental Baths in New York City), has shaken the steam out of her marcel, freed herself from the damp caresses of a cult following, and gone on to become a real star for fully dressed audiences.

Though it is true that the material in "Depression" could be better—a lot better—and that Midler still has a tendency to lapse now and then into the old kitschy-kute campiness (the waxily arch *Strangers in the Night*, for example), the greater part of the album is a superb showcase for a warm, funny woman who can sing like hell when she wants to (*I Don't Want the Night to End*), gently parody the singing style of another era (*Old Cape Cod*), noodle aimlessly but charmingly around (the nonsensical but endearing *Samedi et Vendredi*), and, most of all, win you over with the sheer power of her entertainment gifts.

By far the best band here is *Marahuana*, a song written in the Thirties (yes, Mary Elizabeth, they were smoking even then) for one of the idiot musicals of the period. Midler romps through its rank, decaying-gardenia atmosphere ("Marahuana . . . youhoo-alone-can-brringa-my-loavehr-bock-to-me") with all the haughty hoity-toit and flip self-confidence of a Beatrice Lillie ordering double-damask dinner napkins from a rashly uppity sales clerk. It is simply inspired kidding around on a level somewhat higher than mere camp and just slightly to the left of authentic high comedy. *Mr. Rockefeller*, which opens with Midler on the phone, is for that reason inescapably reminiscent of the classic Sophie Tucker recording of *Mr. Siegel* ("Mr. Siegel? I'm lookin' in the *spiegel*, and I'm not gettin' any thinner Mr. Siegel—ya betta make it legal. . . ."), and the performance leads one to hope that Midler will go through with her current plans to make a movie biography of that great lady. I somehow get the feeling that the whole album is very forward looking, a pleasant reminder that where you've been is infinitely less important than where you are and where you're going. If I read it aright, the destination in Bette Midler's case seems to be the stars.

Peter Reilly

BETTE MIDLER: *Songs for the New Depression*. Bette Midler (vocals); orchestra. *Strangers in the Night*; *I Don't Want the Night to End*; *Mr. Rockefeller*; *Old Cape Cod*; *Buckets of Rain*; *Love Says It's Waiting*; *Shiver Me Timbers*; *Samedi et Vendredi*;



Margot Chapman, Jon Carroll, Bill and Taffy Danoff

No Jesting; *Tragedy*; *Marahuana*; *Let Me Just Follow Behind*. ATLANTIC SD 18155 \$6.98, © TP 18155 \$7.98, © CS 18155 \$7.98.

The Starland Vocal Band: Is Close Harmony Coming Back?

UNDER its nondescript jacket art and unpromisingly opaque title, the Starland Vocal Band turns out to be one of the pleasantest musical surprises of the season. Four resourceful vocalists (Bill and Taffy Danoff, Jon Carroll, and Margot Chapman), accompanied by a raft of instrumentalists, team up for an eclectic program that reaches into a grab bag of assorted musical styles—folk, rock, blues, what have you—and out of it all somehow manage to come up with a style all their own.

Affable without being sentimental, amusing without being silly, harmonious without being barbershop corny, the band deals with familiar-enough subject matter: the lonesome traveler pining away on a plane for his girl

(*Boulder to Birmingham*), the truck-driver panting for the favors of a waitress at a roadside diner (*Baby, You Look Good to Me Tonight*), the joys of post-meridian dalliance (*Afternoon Delight*). And there's also a nostalgic hymn to rock-and-roll (*Hail! Hail! Rock and Roll!*), a salute to the weather of the West (*California Day*), the inevitable daydream of escape into the sky (*Starland*). Most of these items are the work of Bill Danoff, with or without various collaborators (Bill and Taffy wrote *Take Me Home, Country Roads* with John Denver, you may recall), and the group makes the most of their possibilities, managing to sound fresh and alive and eager in everything they do.

The Big Moment in the album, however, is Paul Simon's *American Tune*, that wry ballad in which Mr. Simon's dreaming soul catches sight of the Statue of Liberty "sailing away to sea." It's a disturbing image all right, a powerful song to boot, and the group do both total justice. Texts for all the songs are supplied, and for once they are well-enough written to be worth the bother of the printing. Paul Kresh

STARLAND VOCAL BAND. Bill and Taffy Danoff, Jon Carroll, Margot Chapman (vocals); instrumental accompaniment. *Boulder to Birmingham*; *Baby, You Look Good to Me Tonight*; *American Tune*; *Starland*; *California Day*; *War Surplus Baby*; *Starting All Over Again*; *Afternoon Delight*; *Hail! Hail! Rock and Roll!*; *Ain't It the Fall*. WINDSONG BHL1-1351 \$6.98, © BHS1-1351 \$7.98.

Advice from a professional recording engineer about blank tape



When I record a session, I can't take a chance on anything less than perfect tape.



I need perfect tape to deliver perfect performance.



That's why, in the recording studio so many engineers like me use Ampex professional mastering tape.



And at home, I use Ampex cassettes—



—8-track cartridges—and open reel tapes. These Ampex tapes for the home are made with—



the same tape formulation as the Ampex professional tapes I use in the studio.



Ampex tapes are used by the most demanding professional recording engineers worldwide.



Take a professional's advice—buy Ampex. I wouldn't record on any other tape—in my studio or in my home.



Discover for yourself the professional reliability built into every Ampex cassette, 8-track cartridge and open reel tape.

Discover what a difference this professional quality can make on your equipment.

Try Ampex blank tape in your home. Made with the same know-how that goes into Ampex studio mastering tape, acknowledged by recording engineers around the world as the finest professional mastering tape available. Get Ampex—the tape the professionals use.

Ampex is the #1 name in studio recording—make it the #1 name in your home recording.

AMPEX



POPULAR DISCS AND TAPES

Reviewed by CHRIS ALBERTSON • NOEL COPPAGE • PAUL KRESH • PETER REILLY • JOEL VANCE

BACHMAN-TURNER OVERDRIVE: *Head On*. Bachman-Turner Overdrive (vocals and instrumentals). *Find Out About Love; It's Over; Average Man; Woncha Take Me for Awhile; Wild Spirit*; and four others. MERCURY SRM-1-1067 \$6.98, Ⓞ MC8-1-1067 \$7.98, Ⓞ MCR4-1-1067 \$7.98, Ⓜ MQ8-1-1067 \$8.98.

Performance: **Same as always**
Recording: **Okay**

This is either the third or fourth time I've reviewed what seems like the same Bachman-Turner Overdrive album, so I have to say for the third or fourth time that the quartet is well-drilled, musically unimaginative, and forgettable. A good bar band, but that's it.

J.V.

RECORDING OF SPECIAL MERIT

ELVIN BISHOP: *Struttin' My Stuff*. Elvin Bishop (vocals, guitar); instrumental and vocal accompaniment. *Fooled Around and Fell in Love; Holler and Shout; Struttin' My Stuff; Joy; I Love the Life I Lead; Slick Titty Boom*; and four others. CAPRICORN CP 0165 \$6.98, Ⓞ M8 0165 \$7.98, Ⓞ M5 0165 \$7.98.

Performance: **Solid**
Recording: **Good**

Elvin Bishop's economy is unusual for rock guitarists. He doesn't play to excess, and his phrasing is hearty and uncomplicated, following a sure and simple direct line—his train of thought gives a smooth ride and arrives on time. Nearly all the material here is upbeat,

let's-holler stuff, but without the forced, manic gaiety that usually makes such material annoying and fraudulent. The high spot of the album is *Fooled Around and Fell in Love*, a fine masculine-sentimental ballad.

Bishop and his musicians display their skill and have a good time. They sound as though they've done service for years on one-nighters and weekend bar bookings, and that in the process they have gotten rid of all the frills and honed their music down to the sweet meat 'round the bone. Good show.

J.V.

BLACK OAK ARKANSAS: *Live! Mutha*. Black Oak Arkansas (vocals and instrumentals). *Jim Dandy; Fancy Nancy; Lord Have Mercy on My Soul; Cryin' Shame; Fever in My Mind*; and four others. ATCO SD 36-128 \$6.98, Ⓞ TP 36-128 \$7.98, Ⓞ CS 36-128 \$7.98.

Performance: **Poor**
Recording: **Okay**

Black Oak Arkansas is a so-what dance band. The lead vocalist imitates Captain Beefheart circa 1965. Their three guitarists don't even sound like one good one, and they're as dull on live albums, like this one, as they are on their studio albums. Next case.

J.V.

DAVID BOWIE: *Station to Station*. David Bowie (vocals); Carlos Salomar (guitar); Roy Bittan (piano); George Murray (bass); other musicians. *Station to Station; Golden Years; Word on a Wing; TVC 15; Stay; Wild Is the Wind*. RCA APL-1327 \$6.98, Ⓞ APS1-1327 \$7.98, Ⓞ APK1-1327 \$7.98.

Performance: **Typical Bowie**
Recording: **Good, but ping-pongy**

I wonder if Bowie didn't wind up with a more general audience than he at first wanted. He seemed for a while to be trying for the respect of (that is, to out-shock) the so-called avant-garde of rock (a contradiction in terms, I realize, but not as bad a one as "Army Intelligence"), the John Cale crowd with perhaps some acknowledgment from off to the side from the Yoko Ono types. Ha! He wound up being the cutest outrage of the year in the heart of some wholesome Des Moines teenager, soon replaced there by Alice Cooper. Now

he's into movies (*The Man Who Fell to Earth*) and such, and he still has no real context in which to speak musically; he is, in terms of music, the equivalent of cynical and drunk and boring someone in some café, to borrow Joni Mitchell's phrase. Bowie sold himself to the general audience he's now stuck with by striking a posture everyone knew was make-believe but some were willing to go along with for a while, and he made the mistake of letting it slip that music per se didn't interest him all that much (it was the totality of Bowie that was supposed to get you); now it's the trappings that have worn out from overexposure, and he's stuck with music as well as with an audience that really doesn't have a long-term commitment to esoterica. He's utterly boring in dealing with music alone. As if to demonstrate just how little sense he has of a vocal style, he even tries what you might call *crooning* here—and even in that he never homes in on any particular emotion. Is he angry, wistful, sardonic, frustrated? Just *how* is he dissatisfied when the lyric suggests all is not right with the world? I can't tell; Bowie seems to have about the same relation to a song that a TV weatherman has to the forecast. The specifics of it aren't as important as how impressed you're supposed to be with this guy predicting the future. Bowie has presented himself as Something Else, but he is only something else in the sense that he is not a musician.

N.C.

CARMEN: *The Gypsies*. Carmen (vocals and instrumentals). *Siren of the Sea; Margarita; Shady Lady; Joy; Daybreak*; and four others. MERCURY SRM-1-1047 \$6.98, Ⓞ MC8-1-1047 \$7.98, Ⓞ MCR4-1-1047 \$7.98.

Performance: **Incredible**
Recording: **Noisy**

Not content with being responsible, a year or so ago, for easily the worst debut album in recent memory, Carmen is back up at bat again with another stunner that defies description. The first one grandiosely promised to fuse flamenco and rock, with the result that it sounded like a cattle drive through a bar that was auditioning amateur groups. Undaunted by the tide of public indifference that greeted its first effort, the group is still whacking away

Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓞ = eight-track stereo cartridge
- Ⓞ = stereo cassette
- Ⓜ = quadraphonic disc
- Ⓜ = reel-to-reel quadraphonic tape
- Ⓜ = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

at such "Spanish" effects as castanets that clack away like those novelty wind-up false teeth and an occasional frantic guitar interlude that sounds like mood music for a massacre. "Gypsies" is disaster enough to strain Spanish-American relations. P.R.

DOBIE GRAY: *New Ray of Sunshine*. Dobie Gray (vocals); orchestra. *Easy Loving Lady*; *I'll Take You Down to Mexico*; *Comfort and Please You*; *Lover's Sweat*; and six others. CAPRICORN CP 0163 \$6.98, ® M 80163 \$7.98, © M 50163 \$7.98.

Performance: **Good**
Recording: **Good**

This is a good, loose-jointed album with Dobie Gray in fair-to-good form as he races through a collection of mild blues. His best efforts are *Lover's Sweat* and *Drive On, Ride On*, in which he swaggers the most, writhes the most, perspires the most, and in general comports himself like a friendly neighborhood stud who is as anxious to please as he is afraid of his wife. P.R.

HENRY GROSS: *Release*. Henry Gross (vocals and guitar); other musicians. *Juke Box Song*; *Lincoln Road*; *Overton Square*; *Moonshine Alley*; and six others. LIFESONG LS 6002 \$6.98.

Performance: **Tepid**
Recording: **Good**

Henry Gross writes some of the dullest songs ever recorded. Although he performs them with the urgency of a man on the rooftop of a burning building, it's all to no avail whatsoever, since by the third frantic track it will become obvious to even the most inattentive that, for all his huffing and puffing, he has almost nothing to say. P.R.

RECORDING OF SPECIAL MERIT

EMMYLOU HARRIS: *Elite Hotel*. Emmylou Harris (vocals, guitar); instrumental accompaniment. *Amarillo*; *Together Again*; *Feelin' Single—Seein' Double*; *Sin City*; *One of These Days*; *Till I Gain Control Again*; *Here, There and Everywhere*; *Wheels*; and four others. REPRISE MS 2236 \$6.98, ® M8 2236 \$7.98, © M5 2236 \$7.98.

Performance: **Very good**
Recording: **Very good**

Emmylou Harris' second album is good, a success, but it has to finesse its way out of what seems to me a lackadaisical approach to selecting songs. She just hasn't uncovered the kind of nuggets she did for the first album, although a couple that I would have peremptorily advised against—Buck Owens' familiar *Together Again* and Don Gibson's *Sweet Dreams*—go very well with her silky-resonant voice. But I still can't see the point of including *Here, There and Everywhere* or the done-to-death *Jambalaya*, or the dippy and lifeless *Ooh Las Vegas*. She sings them well enough, but they do take up space that could have gone to songs I know are out there. Some of these are heart decisions, as she included three songs (the other two of which are considerably more interesting than *Ooh Las Vegas*) co-written by the late Gram Parsons, her mentor and friend. The real find in the batch is *Till I Gain Control Again* by Rodney Crowell, not because it's that great a song but because it's the kind of straightforward thing Harris sings better than just about anyone

"a vital instrument of communication..."



Columbia Records

Phoebe Snow: as Cool as Her Name

BEING as hot, hot, hot in the music business as Phoebe Snow is right now must be a heady but also a slightly unnerving experience. All those cold shoulders turned warm, all those Old Acquaintances become New Friends—it's rather like coming up with the big number in the lottery and trying to figure out who you can really trust. Well, don't worry about Ms. Snow. She's as cool as her name, and she has the good sense to trust only her talent and enough experience to have learned that only suitors with certified checkbooks need apply. Her second album, "Second Childhood," amply demonstrates that she knows just what she's doing. It is slick, it is clever, it is vastly entertaining, proof that Phoebe Snow can gauge the public mood at least as accurately as the Harris Poll.

There is, first of all, the voice. It is by no means a particularly pretty or even startlingly memorable one, but with a neat bit of phrasing here, a dollop of carefully calculated soul there, and a conscientious clarity of articulation it becomes a strong and vital instrument of communication. Then there are the songs. She seems to write with astonishing ease and fluency, skillfully teaming the new pop sentimentalities of tough fatalism ("Things must have a price, play it as it lays/Lucky number pays, gamble till you win"—*Cash In*) and sex-

ual freedom ("Two-fisted love, two-fisted love/My baby's in my arms/Using chemistry to get the best of me"—*Two-Fisted Love*) with a matter-of-fact authority that assumes complicity and confers instant and automatic "with-it"-ness on the listener. The high point of this loss-of-innocence game would have to be the suavely Laingian (no reason why you need to know this, but Laing's the one who calls madness a form of sanity) *Inspired Insanity*: "Come visit me, inspired insanity/You're like my second childhood/Complete with all the mistakes I've made."

Dramatic structure and literal meaning are not Snow's forte, as you can see. Making sense out of her *All Over* is not easy (as far as I can gather, it is a song of sexual metaphors well mixed and bedded down somewhere in Phoebe's own psyche), and *Pre-Dawn Imagination* is as slippery as a dream, perhaps a fragmented reminiscence, but then again perhaps not. There is also a mildly irritating pseudo-literary pose in some of the lyrics ("We are wandering out in this desert plain/Oh, we have no canteen/Can the thirsty stay sane after what they've seen?") and, more seriously, the apparently brazen appropriation of Joan Didion's title *Play It As It Lays* for a throwaway line in *Cash In*.

UP until now not very much enthusiasm, right? Right. But wait. Phoebe Snow is one hell of a performer, and a communicator *extraordinaire*. Though she sounds most of the time like Della Reese with a new set of vocal cords, laying on jazz inflections with all the subtlety of a mason's trowel, she cannot be ignored, she is a Presence every second she's on mike. I sat riveted listening to *All Over*, criticizing something in every line, yet fascinated by what I was hearing. Yes, a great many of her songs don't make literal sense, but then they don't need to. She is a communicator of mood, and she does that quicker and less ambiguously than one of those little novelty rings (mine is always black; what does that mean, Doctor?), raising you up and down like a seesaw with the arc of a phrase, the drop of a note.

If you enjoy being toyed with as much as I do, you will love Phoebe Snow. I would not, if I were you, ponder too long about any possible deep meanings in these songs because, truth to tell, I don't think there are any. But Ms. Snow is absolutely dead-center in the commercial mainstream of the Seventies, she knows her audience with the kind of shrewdness that great entertainers seem to be born with. Not the greatest thing since Pepsi or the hand-held mike, perhaps, but certainly an almost hypnotic performing personality.

—Peter Reilly

PHOEBE SNOW: *Second Childhood*. Phoebe Snow (vocals and guitar); orchestra. *All Over*; *Isn't It a Shame*; *Goin' Down for the Third Time*; *Pre-Dawn Imagination*; *There's a Boat That's Leaving Soon for New York*; *Sweet Disposition*; *Inspired Insanity*; *Two-Fisted Love*; *No Regrets*; *Cash In*. COLUMBIA PC 33952 \$6.98, ® PCA 33952 \$7.98, © PCT 33952 \$7.98.

Sensible alternative.

The Uher CG 320 is unlike any other stereo cassette machine, even a Uher.

We built the CG 320 to be an exceptionally reliable two-motor machine with the performance and features to match the world's finest.

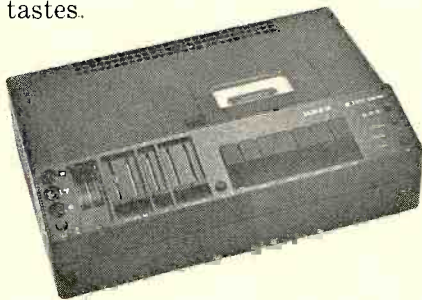
- Electronic tape flow indicator.
- Clutchless tape drive system.
- Self-contained stereo power stage.
- Internal loudspeakers—or use it as a deck.
- On-off automatic level control.
- Dynamic Noise Limiter (DNL).

Plus

- Automatic EQ switching for chrome tape.
- 3-digit counter with memory circuitry.
- End of tape switch off.
- Optional power cable for 12-volt power supply.
- Easy-to-read level meter with gauged dB scale.

Two separate sliders for independent record level control of the two channels, two sliders for independent replay level control of each channel and a slider tone level control to assure optimum operating conditions. Low distortion and top specifications are the hallmark of this quality product.

The Uher CG 320 offers the high technical quality, versatility and design to suit truly demanding tastes.



UHER

of America Inc.

621 S. Hindry Avenue
Inglewood, Calif. 90301

Please send me complete details on the CG 320, the sensible alternative to cassette tape recording and listening.

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____



JANIS IAN

The most glittering and luminescent of swans

(it's done in B-flat, which, for some reason, seems to be a good key for several female voices I've admired in my day). The thing that's special in her voice is subtle, having to do with there being just the right amount of nasality in it or something, and she simply doesn't need quirky songs or chestnuts everyone knows by heart, just a few that really say something she can wholeheartedly connect with . . . and there must be just enough of those here. I do keep listening to it. N.C.

RECORDING OF SPECIAL MERIT

JANIS IAN: *Aftertones*. Janis Ian (vocals and guitar); other musicians. *I Would Like to Dance; Love Is Blind; Roses; Belle of the Blues; This Must Be Wrong; Goodbye to Morning*; and four others. COLUMBIA PC 33919 \$6.98, © PCA-33919 \$7.98, © PCT-33919 \$7.98.

Performance: **Superb**

Recording: **Excellent**

Janis Ian has arrived. The ugly duckling of *Society's Child* has, all these years later, become the most glittering and luminescent of swans. This, her best album to date, is one of those joyous things that probably happen only once in an artist's lifetime: that particular moment when everything that has gone before finally coalesces into sustained, articulate, and controlled statement. The intelligence is remarkable, the craftsmanship superb, and the attack dazzling throughout. Stay tuned, because there is going to be a great deal more said about this album—and I hope to add my own strong feelings to what has become the happiest success story in current popular music. Buy it, of course, and while you are listening remember that old bromide about the hare and the tortoise. P.R.

SONNY JAMES: *200 Years of Country Music*. Sonny James (vocals); instrumental accompaniment. *The Prisoner's Song; Blue Moon of Kentucky; Great Speckled Bird; San Antonio Rose; I'm So Lonesome I Could Cry*; and six others. Spoken introduction by Sonny James.

COLUMBIA KC 34035 \$5.98, © CA 34035 \$7.98.

Performance: **Country retrospective**

Recording: **Very good**

Following one of those pompous introductions that numb the ear ever more brutally as the Bicentennial goes marching on ("When our country was a lusty, sprawling young baby," this one begins), singer Sonny James proceeds to offer what is billed as "200 Years of Country Music" in the course of a single record. Knowing how much a record company can get into the microgrooves of even one LP when it puts its mind to it, I cringed. Well, things turned out not to be so bad after all. The record apparently took more than a year to put together because many of the original band musicians were called in to help re-create the styles that made them famous, but it doesn't take that long to hear, and it all goes down easy as pie. Take away the rich, self-serving prose of the liner notes and what you have is a tuneful, innocent program tracing the evolution of country music out of Western swing, bluegrass, Southern folk country, Delta style, and other origins—not always too distinguishable, one from another, but who cares?

Songs like *The Prisoner's Song*, *Blue Moon of Kentucky*, *Great Speckled Bird*, and *San Antonio Rose* have an easy charm about them that has little to do with categories or history. In the course of the concert, James does try to phrase these songs in the styles of the singers who made them famous, but they all come out sounding pretty much like Sonny James anyhow. Later, he sings songs associated with Jimmie Rodgers, Bob Wills, Gene Autry, and even Elvis Presley with much the same result. The tunes are pretty, though, and if you don't expect to come away from this album a complete authority on the subject, it's not an unenjoyable interlude. The question of "how country music was born" is something else again; at this point, I'm not sure I really want to know. P.K.

(Continued on page 86)

The Sansui No. 1 Line

Models 221, 331, 551, 661, 771, and 881

771 — \$430.00*¹

551 — \$260.00*³

331 — \$200.00*²

221 — \$180.00*²

661 — \$350.00*¹

881 — \$530.00*¹

Each Number 1 in its class

You are looking up to the finest stereo receivers today's technology can produce.

Each a leader in its class. From the new economical Sansui 221 with 8 watts per channel, minimum RMS, into 8 ohms from 40Hz to 20kHz with no more than 1.0% total harmonic distortion, and the new 331, to the full feature Sansui 881 with 63 watts per channel, minimum RMS, into 8 ohms from 20Hz to 20kHz with no more than 0.3% total harmonic distortion. Every Sansui receiver delivers sophisticated electronics, flawless styling and superb convenience in every price class.

You can enjoy listening to them at your franchised Sansui dealer. For even more enjoyment, you can own One.

*The value shown is for informational purposes only. The actual resale price will be set by the individual Sansui dealer at his option. Cabinet finishes in ¹walnut veneer ²simulated walnut grain ³metal bonnet with simulated walnut grain.

SANSUI ELECTRONICS CORP.

Woodside, New York 11377 • Gardena, California 90247 • SANSUI ELECTRIC CO., LTD., Tokyo, Japan
SANSUI AUDIO EUROPE S.A. Antwerp, Belgium • ELECTRONIC DISTRIBUTORS (Canada) B.C.

Sansui

CIRCLE NO. 37 ON READER SERVICE CARD



RCA Records

CLEO LAINE:
a show-woman
down to her
bejeweled fingertips

TOM JONES: *Memories Don't Leave Like People Do.* Tom Jones (vocals); instrumental accompaniment. *Memories Don't Leave Like People Do*; *I Got'cha Number*; *The Pain of Love*; *Mr. Helping Hand*; *City Life*; and five others. LONDON PAS 71068 \$6.98, © O 871068 \$7.98, © O 571068 \$7.98.

Performance: **Passionate**
Recording: **Very good**

Mr. Jones stands bare-chested before the world on the back cover of this one, but his wrists and fingers are encased in solid-gold jewelry. In case you don't remember, he's the fellow who sings so ardently that he tends to sound sometimes as though he's on the edge of a fit. Jones' stock-in-trade, of course, is the sexuality of his style and his subject matter, and as long as he sticks to that territory he's on firm ground here—agonizing over the lingering memories of some vanished paramour, bellowing like a stuck pig in protest against the "pain of love." Jones is at his best when mourning the passing of a "lusty lady" ill-treated by life who hangs herself after struggling to make her way in a callous world—a song in which, for once, the subject matter seems to justify the passion of the singer's stentorian outcry. When he steps off the track, however, and starts using the same caterwauling approach to deal with a religious theme in *Son of a Fisherman*, the only emotion he succeeds in evoking from this listener is downright embarrassment. P.K.

CAROLE KING: *Thoroughbred.* Carole King (vocals, keyboards); instrumental accompaniment. *So Many Ways*; *Daughter of Light*; *High Out of Time*; *Only Love Is Real*; *There's a Space Between Us*; *Ambrosia*; and four others. ODE SP-77034 \$6.98, © 77034 \$7.98, © 77034 \$7.98.

Performance: **Good**
Recording: **Very good**

Dealing with Carole King's work, you wish the language hadn't been corrupted, specifically that *mediocre* hadn't come to mean bad,

as King is consistently mediocre in the old, conscientious, middling sense of the word. This new recording is a little more tuneful than the last couple I've heard, and the singing, arrangements, and production make the most of the talent at hand—the album demonstrates pretty well King's knack for writing melodies that make use of what her voice does best, such as the way it goes up on "love" in "Only love is real . . ." But her insight is the kind you'd get from eavesdropping on the chatter at the lunch counter at Woolworth's. *We All Have to Be Alone* (co-written with Gerry Goffin) purports to explore the irony behind the truth in its title, for example, but there are actually at least two layers of irony in that, and it "probes" only the first and obvious and least interesting one. What King does best, I think, is write bubblegum tunes for other singers (she has a better feel for bubblegum for black singers than any other white writer I can think of). She is probably right in trying for a different impression now that she's doing the singing, and she has a lot of dignity and a certain grace, but the bells, the bells, they do not ring. N.C.

KRAFTWERK: *Radio-Activity.* Kraftwerk (vocals, electronics, percussion). *Radioland*; *News*; *Antenna*; *Uranium*; *Geiger Counter*; and seven others. CAPITOL ST-11457 \$6.98, © 8XT-11457 \$7.98.

Performance: **Strange**
Recording: **Very strange**

Kraftwerk's album must be Germany's answer to the perpetual boredom machine. It starts off with several minutes of what seems to be the sound of a needle clacking over a scratch on a phonograph record. That's called *Geiger Counter*. *Radioactivity*, the next stunner, features a celestial electronic chorus as a background to someone intoning, "Radioactivity/Is in the air for you and me/Radioactivity/Discovered by Madame Curie/Radioactivity/Tune in to the melody," first in English and then in German. Just in case things threaten to get too lively (!) they throw in an overlay of

Morse code. Truth to tell, I didn't get much beyond that second band. Went to see *The Hindenburg* instead. I mean, if I have to witness German disasters they might as well have Anne Bancroft, *nicht wahr?* P.R.

CLEO LAINE: *Born on a Friday.* Cleo Laine (vocals); orchestra. *Come Back to Me*; *Living Is Easy*; *Streets of London*; *Sunday*; *Let Me Be the One*; and six others. RCA LPL1-5113 \$6.98, © LPS1-5113 \$7.98, © LPK1-5113 \$7.98.

Performance: **Circling over Byzantium**
Recording: **Elaborate**

Here's Cleo Laine, again in her pop Empress Theodora guise, making even more elaborately Byzantine curlicues than ever before. Looking appropriately sated and magnificently wicked in the cover photos, and with the assistance of her devoted consort John Dankworth on sax and clarinet, Ms. Laine laboriously circles around several very good songs (Mercer-Arlen's *Any Place I Hang My Hat Is Home*, Randy Newman's *I Think It's Gonna Rain Today*, and Lerner-Lane's *Come Back to Me*) in a precision bird-call drill that will, as usual, probably leave her fans breathless with wonder, but it leaves *me* as cool as a plate of day-old borscht would. There is no doubt at all that Cleo Laine is a fine musician, an earnest and well-trained actress, and a show-woman down to her bejeweled fingertips. Unfortunately, she's also something of an ostentatious bore here after a band or so. P.R.

LOGGINS & MESSINA: *Native Sons.* Kenny Loggins and Jim Messina (vocals, guitars); vocal and instrumental accompaniment. *Sweet Marie*; *Pretty Princess*; *My Lady My Love*; *When I Was a Child*; *Wasting Our Time*; *Peacemaker*; and four others. COLUMBIA PC 33578 \$6.98, © PCA 33578 \$7.98, © PCT 33578 \$7.98.

Performance: **Facile**
Recording: **Good**

Kenny Loggins and Jim Messina run a neofolk rock band with a little jazz (and lotsa sighing strings) thrown in. They play a nearly always pleasant, middle-of-the-road kind of music that is unlikely to offend or inflame anyone. It is almost, but not quite, the kind of music one hears piped through elevators in contemporary office buildings. Although this record is a marked improvement over their previous "back-to-the-roots" disaster, in all it is still eminently forgettable stuff. Still, I must admit that the album's cover, inner sleeve design, and photographs are sensational. Why is it that these days the album packaging often tends to be better than the music? J.V.

KATE & ANNA McGARRIGLE: (see Best of the Month, page 78)

BETTE MIDLER: *Songs for the New Depression* (see Best of the Month, page 79)

HARRY NILSSON: *Sandman.* Harry Nilsson (vocals); orchestra. *I'll Take a Tango*; *Will She Miss Me*; *The Ivy Covered Walls*; *Something True*; and five others. RCA APL1-1031 \$6.98, © APS1-1031 \$7.95, © APK1-1031 \$7.95, © APT1-1031 \$8.95.

Performance: **Good**
Recording: **Good**

"Sandman" is not one of Harry Nilsson's
(Continued on page 92)

The new Sansui



The Sansui 9090

Powerhouse.

Power, features and performance. That's what the new Sansui 9090 and 8080 stereo receivers are all about.

Listen to what the new Sansui 9090 at under \$750.00* has to offer: • A whopping 110 watts minimum RMS power per channel with both channels driven into 8 ohms over the 20 to 20,000 Hz range with no more than 0.2% total harmonic distortion. • Twin power meters to monitor the output for each channel • Advanced PLL IC Multiplex Demodulator for improved channel separation, eliminating distortion and reducing detuning noise • Twin signal meters for easy, accurate tuning • 7-position tape play switch for total creative versatility in dubbing and monitoring • and many other exciting features. Cabinet finished in walnut veneer.

All in all the Sansui 9090 represents what is probably the most advanced receiver available today. Watt for watt, feature for feature, dollar for dollar, an almost unbelievable value.

Also available is the Sansui 8080 at under \$650.00* with 80 watts of continuous RMS power under the same conditions with almost all the same features. Cabinet in simulated walnut grain.



Sansui 9090

Sansui 8080

Try, and then buy, one of the new Sansui receivers at your favorite Sansui franchised dealer today. You will be glad you did. For years to come.

*The value shown is for informational purposes only. The actual resale price will be set by the individual Sansui dealer at his option.

SANSUI ELECTRONICS CORP.

Woodside, NY 11377 • Gardena, California 90247
SANSUI ELECTRIC CO., LTD., Tokyo, Japan
SANSUI AUDIO EUROPE S.A., Antwerp, Belgium
In Canada: Electronic Distributors



CIRCLE NO. 42 ON READER SERVICE CARD



Rare taste. Ask for it by name.

Ask for J&B. And no matter where you may be, you identify yourself as a person of rare taste. Of course, you'll also be served the Scotch that has made these letters famous for nearly 100 years. You just can't get Rare Scotch by any other name.

J&B
RARE
SCOTCH

“...an ingenious and engaging work that has something to say”



Lion dancer Haruki Fujimoto: an improbable Commodore Perry

“Pacific Overtures”: a minimalist musical

PACIFIC OVERTURES is an extraordinary piece of work that almost defies analysis. It is a “musical” about the opening up and the transformation of Japan, in a little over a century, from an isolated island to a great Westernized power. It tells this story from a Western idea (John Weidman’s book, Stephen Sondheim’s music and lyrics, and Hal Prince’s direction and production) of a Japanese point of view about these events. This includes a Kabuki-like production populated by a large cast of Asians and Asian-Americans who are asked to sing, in Western style (which they mostly do not do very well), a rather thin, Haiku-like score that is nevertheless often engaging and sometimes remarkable, one in which there is virtually no plot and no characters, in which one of the principals (Commodore Perry) never opens his mouth at all but performs a fierce lion dance instead, in which all the female parts (played by men) are sometimes more drag show than Kabuki, in which the history of Japan between 1853 and the present is told as a kind of illustrated folk chronicle that avoids any mention whatsoever of such possibly confusing or certainly embarrassing events as World War II. A musical about modern Japanese history

and Japanese-American relations and no World War II—fancy that!

Nevertheless, if you would conclude that *Pacific Overtures* is empty or foolish or merely pretentious, you would be wrong. It is, in fact, an extremely ingenious and engaging work that really has something to say in a novel theatrical form. Furthermore, these qualities, although they are certainly stronger in the brilliant Broadway production itself, are successfully communicated through RCA’s original-cast recording. Sondheim’s verbal cleverness (he is apparently a longtime fan of the refined Japanese art of haiku) is endless, and even his almost legendary heartlessness (this show is long on dramatic irony and wit, short on character and human warmth) helps us to approach the moral of the story in an entertaining, somewhat Brechtian fashion.

Musically the matter is the same. Sondheim makes do with the simplest of ideas, repeating and building them, almost in the style of one of New York’s Soho-district minimalist painters, to very effective climaxes. It is astonishing with what easy assurance he creates words and music in new, essentially experimental, and provocatively discussible forms.

Perhaps it is all quirky and wrong-headed, but it is always provocatively so.

I don’t know quite what to say about the cast; none of them are outstanding, but they are all in some way astonishing, and they do help make things work. The musical direction is excellent and the numbers—I could spend a column dilating on the cleverness of each—make their point. Finally, it is hard to say just what it all would mean to someone who had not seen the show. In spite of mixed (or perhaps puzzled) reviews, *Pacific Overtures* has (as of this writing) demonstrated a surprisingly broad audience appeal and some staying power, so perhaps this recording will turn out to be something more than a souvenir of a brilliant, flawed attempt to grow something new under the fitful Broadway sun.

—Eric Salzman

PACIFIC OVERTURES (Stephen Sondheim). Original-cast recording. Mako, Soon-Teck Oh, Yuki Shimoda, Sab Shimono, Isao Sato, others (vocals); orchestra, Paul Gemignani cond. RCA ARL1-1367 \$6.98, © ARS1-1367 \$6.98, © ARK1-1367 \$6.98, □ ART1-1367 \$7.98.

“the enormous debt most country-rock outfits owe these boys”



Allan Clarke and the Hollies

THERE are an awful lot of good things you can say about the Hollies: their ensemble singing is one of the most striking and unmistakable sounds in all of rock; their drummer, Bobby Elliot, is perhaps the only English Invasion drummer whose style still sounds contemporary; they were the first musicians to discover Bruce Springsteen (collectors take note: lead singer Allan Clarke released a song of Bruce's that does not appear on any of Springsteen's records, and had the Hollies' gorgeous cover version of Bruce's *Sandy* been the hit it deserved, we might all have been spared Columbia's monumental hype). But the most important thing you can say about them is that they have survived (they've been a going concern for almost thirteen years now) against almost insurmountable odds.

Their first handicap was the lack of a clear-cut image. Despite their string of brilliant singles in the early Sixties, as individuals they were relatively colorless, and so they posed no threats to the Beatles or the Stones in the Larger-Than-Life stakes. That could have changed in 1969, when they were actually booked into the Fillmore East; the “hip” audiences probably would have adored them. But just then Graham Nash, who had been with them since the beginning, took off to join you know who, making nasty remarks to the press about the Hollies' bubblegum proclivities and claiming (not altogether truthfully)

that he had written most of their good songs anyway.

Nash's tenor sound was so distinctive that most people felt his departure would write finis to the band's career, but after an exhaustive search they replaced him with one Terry Sylvester, who sings so much like him that to this day no one can tell who is who on the album Sylvester completed with the group after Nash walked out halfway through the sessions. Meanwhile, they continued to turn out hits.

Then, in 1972, as they were riding high on the overwhelming American success of their great *Long Cool Woman*, Allan Clarke flew the coop, muttering essentially the same bad-mouth line Nash had previously. Again, people prepared to write the Hollies off, especially since this time the band recruited a Scandinavian gentleman named Mike Rickfors who (1) sounded nothing like Allan and (2) was hindered by the fact that his English was halting at best. The gamble payed off, however; the group released what is perhaps the best album they have ever made (“Romany”) and did an American tour that succeeded in knocking out just about everyone fortunate enough to catch it. Meanwhile, Clarke's solo career was going nowhere. His first album was underpromoted (at the Hollies' behest, so went the rumors), the second was shelved, and the third was never released in the States. By 1974 he had returned to the fold, and the

group had their largest world-wide hit ever with *The Air That I Breathe*. Last year, the reunited band put out the superb “Another Night” and did shows in New York and Los Angeles that drew raves from the pop press.

Now here we are in 1976, and the survivors have presented us with not one but three new releases—two by the group and one by Allan alone, the ego problem evidently having been ironed out to everyone's satisfaction. One is delightful, one is spotty, and the third is pretty much a stiff. Let's examine them in order of ascending quality.

Allan Clarke's “I've Got Time,” his debut on Asylum, has points in its favor, of course: the singing is perhaps the best he's ever done, and Steve Hunter (the Detroit guitarist who, along with Dick Wagner, succeeded in breathing some semblance of life into certain Lou Reed albums) plays with tremendous élan. Basically, though, the album is terribly ballad-heavy, for Allan has chosen to warble some of the direst material from the American School of Sensitive Songwriting, including tunes by the ever-execrable Melissa Manchester, Janis Ian, Dan Fogelberg, and Arista's latest turkey, David Pomeranz. Another mistake, I think, was the production decision to use female back-up singers where Allan's own multitracked harmonies would have more than sufficed. But there are two nice exceptions: a sprightly cover of Springsteen's *Blinded by the Light*, which opens the record, and *Living in Love*, which closes it. The latter is a Sutherland Brothers song that fits Clarke's style perfectly, since the Sutherlands are one of the many British bands who have been influenced by the Hollies. In all, though, “I've Got Time” is a run-of-the-mill piece of MOR work, and a disappointment.

Much better is “Write On,” the new group effort. The Hollies' signature harmonies are featured prominently, and the band—augmented by such notables as Rod Argent and Pete Wingfield (of *Eighteen with a Bullet* fame)—sounds terrific. The fly in the ointment is, again, the material, most of it self-penned and sub-par (the Hollies have never been particularly consistent songwriters).

THERE are a couple of absolutely dynamite tracks, however. The opener, *Star*, is classic Hollies. With the help of their catchiest tune in ages, Clarke recounts the hilarious tale of how he picked up a hitchhiking female in Los Angeles, expecting (hoping for) a typical groupie response. But, though he plays her a track from the latest Hollies album and points out that his face is plastered on billboards up and down Sunset Strip, the young lady refuses to come across. Our hero is understandably miffed—until he drops her off and discovers that she is a film star on her way to her own première. Delicious.

The other standouts are the concluding *There's Always Goodbye*, another in the group's long line of magnificent Big Production tear-jerkers, and, especially, *Sweet Country Calling*, which, quite apart from its intrinsic loveliness, serves to demonstrate again the enormous stylistic vocal debt most

American country-rock outfits owe these boys—and the Hollies are better at it anyway.

Finally, we have "Out on the Road." Its appearance at the same time as "Write On" is mysterious enough, but the mystery is compounded by the fact that it has been released only on a *German* label. It was recorded, obviously, at the same time as "Romany" (Rickfors is the lead singer), but the difference between the two records is that this one features songs by the band members whereas the other leaned heavily on outside writers. It may be that *all* of the songs were done at the same sessions, for one of the songwriters they used, Colin Horton-Jennings, was briefly under consideration for the lead singer slot, and, with so many tracks to choose from, the group may simply have decided to shelve their own stuff for a projected follow-up that never materialized. (Three of the tunes, in fact, were re-cut upon Clarke's return).

At any rate, it's a perfectly wonderful album. Rickfors was a guitarist as well as a singer, and his gritty rhythm work added a great deal of punch to their instrumental sound; the songs are almost all first-rate light English pop. My immediate favorites include the title cut (which rocks much harder than the later version), *Slow Down—Go Down*, and the utterly gorgeous *Born a Man*, which renders irrelevant practically every attempt by such latter-day copyists as Eric Carmen to work in this genre.

AND there we have it; the Hollies have survived, and it begins to look like they will continue to. Incidentally, because of an English label change, "Write On" may not be released here until summer, so for the time being you'll have to make do with the import. It's worth the investment, and I'd rate "Out on the Road" (which, of course, will be available here *only* as an import) as just about indispensable. —Steve Simels

ALLAN CLARKE: *I've Got Time*. Allan Clarke (vocals); Steve Hunter (guitar); other musicians. *Blinded by the Light*; *Light a Light*; *We've Got Time*; *Stand By Me*; *The Long Way*; *Hallelujah Freedom*; *If You Think You Know How to Love Me*; *If You Walked Away*; *Suntide*; *Living in Love*; *Finale*. ASYLUM 7E-1056 \$6.98.

THE HOLLIES: *Write On*. The Hollies (vocals and instrumentals); other musicians. *Star*; *Write On*; *Sweet Country Calling*; *Love Is the Thing*; *I Won't Move Over*; *Narida*; *Stranger*; *Crocodile Woman*; *My Island*; *There's Always Goodbye*. POLYDOR 2442 141 \$6.49.

THE HOLLIES: *Out on the Road*. The Hollies (vocals and instrumentals). *Out on the Road*; *A Better Place*; *They Don't Realize I'm Down*; *The Last Wind*; *Mr. Heartbreaker*; *I Was Born a Man*; *Slow Down—Go Down*; *Don't Leave the Child Alone*; *Nearer to You*; *Pick Up the Pieces*; *Trans-Atlantic West Bound Jet*. HANSA 87119 1T \$6.49.

(Hollies import albums are available from Jem Records, Import Record Service, Box 343, 3001 Hadley Road, South Plainfield, New Jersey 07080. Include a 35-cent-per-disc handling charge.)

We've been so busy selling speakers, we forgot to advertise



If you wonder why your Hi Fi salesman keeps recommending Acousti-phase speakers, let us explain.

Several years ago a group of us who had spent their careers in the audio industry got together to build speakers. No fancy frills, just the height of the art of speaker making done with infinite care and craftsmanship. We then placed them with a select group of dealers. We haven't been able to keep up with the demand since. Our speakers incorporate a bass port at the rear of a heavy unyielding enclosure and employ massive woofers, efficient midrange drivers and mylar dome tweeters. They list from \$279.95 to \$79.95.

But we can't adequately explain our speaker line here, so do stop in and ask your local dealer for literature, or write: Box 207, Proctorsville, Vt. 05153.

Acousti-phase

A Tribute to Sound

CIRCLE NO. 4 ON READER SERVICE CARD

Gold-plated connector cables for the perfectionist.

- Highest degree of electron transfer and longevity will never corrode or add resistance with age.
- Spring steel strain reliefs.
- Ultra-low capacitance cables.

\$8.00 per matched pair, 1 meter length. From the people who brought you Discwasher.

At audio specialists worldwide.

discwasher inc.
909 University • Columbia, Mo.

best albums, but it's still patchily enjoyable. Nilsson continues to be among the most instinctively creative forces in pop recording. His instincts seem to have led him astray here, however, with his insistence on using a large glee-club-type chorus on almost every track. The weightiness of the massed voices throws everything off balance—most seriously, it destroys the delicacy and the wit of such Nilsson songs as *Here Is Why I Did Not Go to Work Today* or *The Ivy Covered Walls*. The production, also by Nilsson, has an unaccustomed opacity that blurs even a very funny number titled *The Flying Saucer Song*, about one drunk's Special Report to another on his experience with a U.F.O. In all, then, "Sandman" is not a successful album, but anything by Nilsson is at least worth a listen. P.R.

OMEGA 6: *I Don't Know Your Name*. Omega 6 (vocals and instrumentals). *I Don't Know Your Name; Live Till Then!; Country for One Person; The Conjurer*; and three others. PEPITA SLPX 17483 \$6.98 (from Qualiton Records, 65-37 Austin Street, Rego Park, N.Y. 11374).

Performance: **Good**
Recording: **Very good**

Omega 6 is a rock group from Hungary(!). They are on a par with, or slightly better than, such Western bands as Uriah Heep and Deep Purple. Though they have a kid-stuff tendency to overplay the organ and synthesizer, there are some good moments on this album, especially *The Conjurer*, which, despite its hifalutin title, contains some gritty, bluesy vo-

cal. In all, though, Omega 6 sounds like a compromise between the noisy formulas of the Deep Purple school and the lifeless technocracy of such West German synthesizer groups as Triumvirat.

What makes the album especially notable is the excellence of the recorded sound. It is equal to studio standards in London, New York, and Los Angeles. The recording equipment, I am told, is of Hungarian manufacture (did the secret police have a clearance sale?), and the technical personnel for the date were Hungarian. The label, however, bears the ambiguous notation: "Processed in Czechoslovakia." The cover design is close to Western standards, although the way type faces are used would be considered graphically confusing here. The album should be available through retail stores that specialize in imports as well as from the source mentioned above.

J.V.

DAVID POMERANZ: *It's in Every One of Us*. David Pomeranz (vocals, piano, guitar); orchestra. *Greyhound Mary; Flying; High Together; Clarence; Home to Alaska*; and five others. ARISTA AL 4053 \$6.98.

Performance: **Good**
Recording: **Very good**

This is an intelligently written and exceptionally gracefully performed group of songs by David Pomeranz. The shape and polish of many of his performances almost camouflage the gooey, adolescent streak of sentimentality that trickles through his work. Thus, while *Greyhound Mary* is only another of those moist, "sensitive" speculations about one of those adorable old derelicts, a species without which I sometimes think pop poets could not survive, Pomeranz's performance of it has a stylish dryness that rescues it from bathos. *Flying* and *High Together* are, again, much more interesting as performed by Pomeranz than they are as songs. The production work by Vini Poncia is as subtly slick as Pomeranz's performances. In all, an okay time-killer of an album. P.R.

ELVIS PRESLEY: *A Legendary Performer, Volume 2*. Elvis Presley (vocals, guitar); instrumental accompaniment. *Harbor Lights; I*

DAVID POMERANZ
An exceptionally graceful performance



Arista Records

Anatomy of a 1/4" tape recorder

Automatic shut-off

Hysteresis three-motor drive

Electro-magnetic braking prevents tape spillage

Rugged

Neoprene head mount for good alignment

Heavy, 3/16" plate for good alignment

Pressure brush reduces wear, improves contact

Plug-in electronics

Remote record for no-thump recording

10" NAB reels (or 5" or 7" standard)

Only seven moving parts

One-piece, 4 1/2 pound flywheel-and-capstan

Computer logic permits any command sequence

Remotable



Two channel record/playback capability. (Other models with four, two or one channels; 1/4, 1/2 or full track; playback only. Extra performance options available.)

Compare all the features of the Crown CX-824 with any other reel-to-reel recorder you may be considering. And then compare the price. Crown represents the real value.

Fast playback coupon

Send directly to Crown for specifications on Crown tape recorders.

When listening becomes an art,

Name _____

Address _____

City _____

State _____ Zip _____



CROWN

Box 1000, Elkhart IN 46514

CIRCLE NO. 13 ON READER SERVICE CARD

Want You, I Need You, I Love You; Blue Suede Shoes; Blue Christmas; Jailhouse Rock; It's Now or Never; Blue Hawaii; and five others. Plus excerpts from a 1961 Honolulu press conference. RCA CPL1-1349 \$6.98, © CPS1-1349 \$7.98, © CPK1-1349 \$7.98.

Performance: **Documentary**
Recording: **Wildly variable**

All in all, Elvis has been a damned good singer. His is not a name commonly associated with musicianship, as there always were a lot of more obvious things to associate him with, but he usually connects with the song if it isn't too ridiculous (his taste, partly because he Went Hollywood at the earliest opportunity, never got beyond the early budding stage in public, and we have no way of knowing what it really is), and he does more with most songs than other singers could. All this was more difficult to see in the old days, when you had to listen cold through all the gimmickry he and others imposed on his style. His phrasing, for example, in some of the early songs seems much more clipped than is natural for him, the sharp cutoffs being coordinated with the bumps and grinds. And there was television to think about, at least as a way to get to the movies. But there was always something there. Here a lot of it comes flooding back, in this series of Elvis' own Memory Lane (more like the Yellow Brick Road than anyone else's memory lane I know about) milestones. The enigmatic, teasing guitar behind him in *Blue Christmas* is juxtaposed with the dopey woo-wahing vocal chorus repeating the motif Elvis himself projected—gimmickry, but with some good stuff down in there—which, in his voice, amounted to a swirl of emotions half out of control juxtaposed with a crowd-pleasing bit of phrasing hokiness here and there that was very much under control. Most of the selections here show this in a roughhewn way, being live, or out-takes, or "alternate" takes, or something less than he and his handlers chose at the time as ways to impress his public. It isn't the kind of album that's good or bad; it's the kind that documents some of what Elvis was all about.

N.C.

PURE PRAIRIE LEAGUE: *If the Shoe Fits.* Pure Prairie League (vocals and instrumentals). *That'll Be the Day; I Can Only Think of You; Sun Shone Lightly; Long Cold Winter; Lucille Crawford;* and five others. RCA APL1-1247 \$6.98, © APS1-1247 \$7.98, © APK1-1247 \$7.98, □ APT1-1247 \$8.98.

Performance: **Becalmed**
Recording: **Good**

If the vocals had a little zing to them, I might be moved to keep track of this band. It seems to have a broader sensibility than most country-rock groups (its steel-guitar fixation isn't quite as severe, among other things), and this album in its understated way offers some variety. The songs aren't exactly exciting, but they don't need to be as dull as the singing makes them. The instrumentals pick this up, most of the time, and the result seems to be wafting out at you across a great distance. I don't think the sensation has much to do with the engineering of the recording, although that doesn't have a lot of snap either. Mostly it's an emotional thing between the performers and their songs. An exception, *Out in the Street*, provides the contrast that lets you see this more clearly; in it pianist Michael Connor becomes involved for a few minutes and does some sensitive work. There is that potential;

what seems to be missing is the feeling that this is for real, that this counts.

N.C.

JIMMY REED: *Cold Chills.* Jimmy Reed (harmonica, vocals, guitar); instrumental accompaniment. *Cold Chills; Help Me at Dinner-time; Don't Cry; Jimmy's Hotpants; Don't Keep On Lyin'; Bright Lights, Big City;* and four others. ANTILLES AN-7007 \$6.98.

Performance: **Unsteady**
Recording: **Okay**

Jimmy Reed is a black urban blues singer whose most productive period was between, roughly, 1950 and 1965, during which time he recorded for the now-defunct Vee-Jay label in Chicago. He is a musician of limited but powerful talents which are best presented in short

performances running not much more than three minutes each. His best-known songs include *Honest I Do, Hush Hush, Bright Lights, Big City, Big Boss Man,* and *Take Out Some Insurance on Me Baby*, all of which are little nitroglycerine pills of Chicago small-club blues. Reed's artistic success lay in the contrast of his sloppy, wayward singing with his precise, even surgical, harp playing.

But a little Reed always went a long way; even a "greatest hits" album from the Vee-Jay period gets boring after a while. The monotony of his backing and the sameness of his material wear the listener down (this one, at least). Any Reed album, such as this present specimen, which attempts to stretch out his performances to six or seven minutes, shows all of his weaknesses and none of his

NOT TOO LONG AGO, CrO₂ WAS IT. TODAY, TDK SA IS IT.

TDK SA, the cassette proven to outsound chrome and the tapes that tried surpassing chrome.

Chrome was a big step forward. It provided the best S/N and superior high-end. But it had a few disadvantages.

Now TDK SA (Super Avilyn) has stepped past chrome. It offers better high-end with excellent low and mid range response, and greatly reduced abrasiveness. It's just about distortion-free.

How? For years the solution eluded chemical engineers. Until TDK developed the particle it called AVILYN.

TDK has provided the optimal density of the cobalt ion and combined it with pure gamma ferric oxide in a unique process that's different from other cobalt-treated tapes. *SA is the world's only non-chrome tape that can take full advantage of CrO₂'s bias/equalization settings.* That gives you the advantage of the high-end noise reduction

properties of chrome playback equalization. TDK Electronics Corp., 755 Eastgate Blvd., Garden City, N.Y. 11530. Also available in Canada.



TDK
Wait till you hear what you've been missing.

new
model 35^X 2
stereo music amplifier



10 x 35 Watts=350 Watts. But 10X the power of this amplifier sounds only 2X as loud. So why pay for that expensive big amplifier you may not need? Write for the whole story in our FREE CATALOG of kits and wired units.

ACE Audio Co.

- 35^X 2 power amp
- stereo preamps
- equalizers (see cover photo this issue)

**25 Aberdeen Drive
Huntington, N.Y. 11743**

coming soon - new X-over amplifier model 35^X 2-bi-amp
CIRCLE NO. 2 ON READER SERVICE CARD

PRICE WAR

AMERICA'S #1 VALUE LEADER

STEREO CORPORATION OF AMERICA



Mastercharge/BankAmericard
Phone For Immediate Shipments.



AR

SHURE



MARANTZ



PIONEER



DUAL

**AUDIO DISCOUNTING STARTED IN
NEW YORK & NOW WITH THE END OF
FAIR-TRADE WE ARE SURE THAT NO
ONE CAN BEAT OUR PRICES:**

- We Discount Over 70 Major Brands
- Over 10 Years Of Reliable Service In The Mail Order Field
- Largest Inventory/Lowest Prices!

We Get The Best Deals From The Manufacturers. You Get The Best Deal From Us!

SHOP BY PHONE!
For lowest of the
low quote
(212) 338-8555
9-5 Mon. thru Sat.

WRITE OR CALL!
FREE
Stereo Corporation
Catalogue

STEREO CORPORATION OF AMERICA

Dept. S-R 2122 Utica Avenue
Brooklyn, N.Y. 11234
Tel. (212) 338-8546

CIRCLE NO. 49 ON READER SERVICE CARD

strengths. On most of this album he plays harmonica in the middle register and doesn't try for the high-note shrieks that used to characterize his playing. Much of the material has been written by the producer, and it is mediocre. Even the re-creation of Reed's great *Bright Lights, Big City* is feeble. I suggest you locate a Reed album from the old days if you want to hear what he sounded like at his best. This one does him a disservice. J.V.

STARLAND VOCAL BAND (see *Best of the Month*, page 80)

B.W. STEVENSON: *We Be Sailin'*. B.W. Stevenson (vocals); orchestra. *East India Company; Dream Baby; Hold On; Kokomo; Wastin' Time*; and five others. WARNER BROS. BS 2901 \$6.98, © M 82901 \$7.98, © M 52901 \$7.98.

Performance: **Ho, ho, ho**

Recording: **Good**

B. W. Stevenson's the name and unending folksy jollity's the game. It's track after track of Stevenson making like Burl Ives and Pete Seeger at their years-ago hokiest, with a ho-ho here, a tambourine there, and a suspender-snap upbeat pace to just about everything. It's quite enough to make your plants wilt. There is some fair fun in one or two things, notably a free and easy *Way Down by the Ocean* and a zippy *Kokomo*, but the overall feeling is one of being handcuffed to a cracker barrel while the down-home philosophers strut their weary stuff. P.R.

GARY STEWART: *Steppin' Out*. Gary Stewart (vocals, slide guitar); Buddy Spicher (fiddle); Henry Strzelecki (bass); David Briggs (piano); other musicians. *Flat Natural Born Good-Timin' Man; Quits; Trudy; I Still Can't Believe You're Gone; Easy People; In Some Room Above the Street*; and five others. RCA APL1-1225 \$6.98, © APS1-1225 \$7.98, © APK1-1225 \$7.98.

Performance: **Oddly sterile**

Recording: **Good**

My expectations, based upon Gary Stewart's previous album, were perhaps unrealistically high. This one features songs that got me to

wondering whether it's difficult to find a good honky-tonk number nowadays and, further, whether the source of inspiration for them may be drying up. The whole sub-genre could slip into self-parody any minute, I'm afraid, and so might something in Stewart's quavering-voiced, beer-stained style. The source I'm talking about is dependent on old ways of thinking about the basic cause of the problems—marriage—and what are socially acceptable things to do about it, and the old ways of thinking are changing. The thematic behind the honky-tonk song have a dinosaur look about them—although in real life extinction will take some time, and the parody version, being almost an institution, could hang on as a sort of stylized abstraction (as Bob and Ray's *Mary Backstayge, Noble Wife* had a life of its own long after the demise of the soap-opera it spoofed). Anyway, the song selection quietly suggests the writers are having to prop up the Eternal Triangle, tavern-style, and Stewart's singing never seems to uncoil itself. There's one notable exception, a song that doesn't deal with this stuff at all but with a mountaineer's suspicion of outsiders, *Easy People*, written by Stewart and Bill Ethridge. I know that seems even more remote from modern life than the honky-tonk-as-sanctuary idea does, but it stirred up the songwriters. Perhaps that has to do with there being pockets back in the mountains where that source of inspiration can't be reamed out by new ways—while the honky-tonk is right in the middle of downtown. N.C.

RECORDING OF SPECIAL MERIT

10cc: *How Dare You!* 10cc (vocals and instrumentals). *How Dare You; Lazy Ways; I Wanna Rule the World; I'm Mandy, Fly Me; Iceberg*; and four others. MERCURY SRM-1-1061 \$6.98, © MC8-1-1061 \$7.98, © MCR4-1-1061 \$7.98.

Performance: **Excellent**

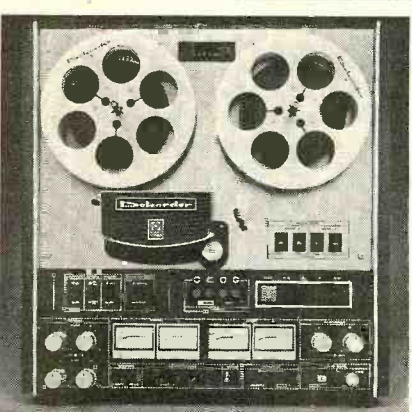
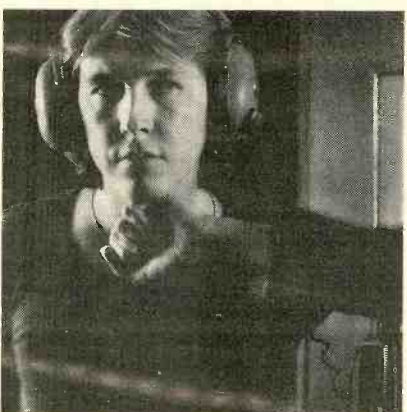
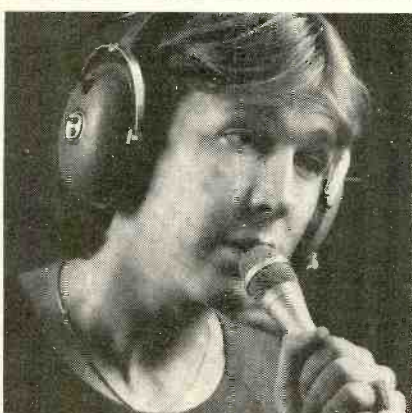
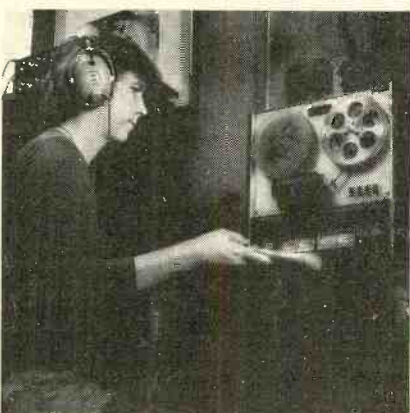
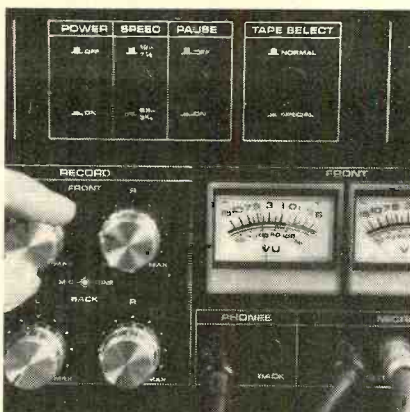
Recording: **Excellent**

I can't help but like a band that has a power-hungry teen character, in *I Wanna Rule the World*, suffer a physical reaction from his ambition and moan, "I get confused, so con-
(Continued on page 96)



10 cc:
a superb job
of dissecting
smarmy, horrific
dreams

Mercury Records



GO FOUR AND MULTIPLY. DOKORDER 8140

Four channel recording with overdub, sound-on-sound, electronic echo... everything you need to help translate what you feel into what others will feel.

5430 Rosecrans Avenue Lawndale, California 90260
CIRCLE NO. 16 ON READER SERVICE CARD

fused/I get a pain, I get a pain up here/In the Shirley Temples." My resistance to 10cc (which, as you may have gathered, was never very great) is further weakened by these lines from *Art for Art's Sake*: "Gimme a country/Where I can be free/Don't need the unions/Strangling me. . . . Art for Art's sake/Money for God's sake."

10cc does a superb job of dissecting the smarmy and horrific dreams of the bent characters they portray. They are to rock what Monty Python is to humor. As always, they take special care in their arrangements and the crispness of performance. They may or may not be playing rock; they may or may not even be a "band" in the accepted sense. But whatever they are, they're awfully good and very funny. J.V.

TANYA TUCKER: *Lovin' and Learnin'*. Tanya Tucker (vocals); Pig Robbins (piano); Jerry Carrigan (drums); Jack Williams (bass); Charlie McCoy (harmonica); Billy Sanford (guitar); other musicians. *Pride of Franklin County; Depend on You; Ain't That a Shame; Leave Him Alone; You've Got Me to Hold Onto; My Cowboy's Gettin' Old*; and four others. MCA MCA-2167 \$6.98, © MCAT-2167 \$7.98, © MCAC-2167 \$7.98.

Performance: **Routine**
Recording: **Average**

Never mind what this album means in the career of young Tanya Tucker (another day, another dollar is roughly what it means); it's a better example of the tail-wagging-the-dog situation involving so many "sidemen" and so

many "stars" these days, especially in the vicinity of Nashville, Tennessee. The only nearly-elegant communicating that gets done here comes from such persons as Charlie McCoy, Pig Robbins, Jerry Carrigan, Billy Sanford. . . . Their work is so much more poignantly in tune with the emotional potential of one song after another than is Tucker's fake-ripe singing that you might begin to wonder how the present system of priorities ever got such a grip on grown men and women. And it isn't fair to pick on Tucker particularly, as she is reasonably competent technically. She may have a slightly pinched-sounding quality, but her timing and intonation aren't that bad; she doesn't come close to any disasters here (although producer Jerry Crutchfield, or whoever picked out *Ain't That a Shame* for her to sing, managed to come up with one), and her fans will buy it right up and she will steadily become more famous. The sidemen, though, deserve more singers as special as they themselves can be when they let out a little shaft. This recording leaves me stuck with the guess that they will continue to astonish—and their unsung condition will continue to perplex—anyone who cares to listen to what's beyond fame. N.C.

SAMMY WALKER: *Song for Patty*. Sammy Walker (vocals, guitar, harmonica). *Song for Patty; Ragamuffin Minstrel Boy; My Old Yearbook; Little New Jersey; I Ain't Got No Home; Closin' Time*; and six others. FOLKWAYS BR 5310 \$6.98.

Performance: **Homegrown**
disgruntlement
Recording: **Good**

In its Broadside Ballad series, of which "Song for Patty" constitutes Volume Eight, the Folkways company seems to be trying to revive the spirit of the socially conscious "folksong" of the Thirties and the early Sixties to meet the conditions of the Seventies. The star of the current album, a twenty-two-year-old composer, singer, and guitarist named Sammy Walker who grew up in Norcross, Georgia, says he was "turned on" to topical songwriting after he heard Pete Seeger's *Where Have All the Flowers Gone?* By the time Mr. Walker is finished singing his own ballads, along with one about the revered Woody Guthrie and another by him, one begins to wish Walker had never heard of Pete Seeger, Guthrie, Bob Dylan, or any of them. There is no song in the entire album that comes anywhere near *Where Have All the Flowers Gone?* The title number, *Song for Patty*, was written before Patty Hearst was caught and is simply a cheer from the sidelines egging the girl on to give her all to the Symbionese Liberation Army and to hell with the folks at home in Hillsborough. A school yearbook inspires another dreary . . . lad. Then there's a song about lobotomies, one about a lad whose only friend, the dog that loves him, dies a hideous death; one concerning a lady dying of cancer who has to go to jail anyway for a harmless offense. Talk about your injustice collectors! If Mr. Walker were as expert at writing songs as he is in finding morbid topics to write them about, he'd be able to bring back the spirit of the Almanac Singers with no trouble at all. But he lacks their humor, and, like so many homemade "folk" tunes, his are totally uninspired. Someday, maybe, Sammy. P.K.

(Continued on page 100)

FROM CRITICS AND CONSUMERS:

D'STAT

WORKS



"D'Stat gave the best results"—of any mat tested. (Gramophone—January 1976)

To make a long story short, I have owned a D'Stat for less than one hour and I am sold. That favorite record hasn't sounded better in months.

Thank you for D'Stat and Discwasher. (J.A.M., Chicago, Ill.)

A scientific solution to audible static caused by electron "Hotspots" in phonograph discs.

EXCLUSIVELY DISTRIBUTED BY DISCWASHER, INC. 909 UNIVERSITY • COLUMBIA, MO. 65201



DISCWASHER, INC. 909 UNIVERSITY, COLUMBIA, MO.

JAZZ



BRECKER BROTHERS BAND: *Back to Back*. Brecker Brothers Band (vocals and instrumentals). *Keep It Steady (Brecker Bump)*; *If You Wanna Boogie . . . Forget It*; *Lovely Lady*; *Night Flight*; *Slick Stuff*; and four others. ARISTA AL 4061 \$6.98, Ⓢ 8301-4061 H \$7.98, © 5301-4061 H \$7.98.

Performance: **Compromise**
Recording: **Good**

Randy Brecker (trumpet) and his brother Michael (saxophone) are talented jazz musicians who've been active in New York for some time, appearing with such diverse organizations as Peter Duchin's cocktail orchestra and their own group, Dreams, one of the potentially valuable bands of the late Sixties that failed to keep its promises.

I suppose this album could be classified as "pop-jazz." A discotheque rhythm section provides the bumpety-bump (gotta get to the kids), while the soloists play jazz that has nothing to do with anything else that's going on. Randy plays some lovely stuff on *Lovely Lady* that sounds as though he wishes he were someplace else.

It's sad that the Breckers are victims of jazz's decision to meet pop more than halfway (in order to win a larger audience) at a time when pop music is almost exclusively, from a commercial viewpoint, confined to the monotonies of the discotheque formula. *J. V.*

DON CHERRY: *Organic Music Society*. Don Cherry (trumpet, keyboards, percussion, vocals); vocal and instrumental accompaniment. *Elixir*; *Relativity Suite (Parts 1 and 2)*; *Terry's Tune*; and nine others. CAPRICE RIKS DLP 1 two discs \$15.96.

Performance: **Homespun**
Recording: **Good to poor, mono and stereo**

Don Cherry will be forty this year, but I always remember him as the young man whose pocket trumpet produced unorthodox sounds alongside Ornette Coleman in the late Fifties when bop suddenly sounded as traditional as Bunk Johnson's band. For a week, in 1959, some of us who thought we were open-minded about music gathered nightly at the Showboat in Philadelphia to see what all the fuss was about. It must have been a trying time for Ornette and his young trumpeter, for their music was received with disbelief, scorn, and even some embarrassment, but at least we came, and some of us were won over before it became unhip not to be. One wondered, then, where all this was leading to. Well, Ornette is doing pretty much the same thing now—it just sounds more conventional—and Don Cherry, who has spent most of his time in Europe for the past ten years, has reversed his course to seek inspiration in a music that was ancient before the first jazz note was sounded.

This two-record Swedish import consists of

recordings made in Copenhagen and at various Swedish locations during 1971 and 1972. The technical quality—some mono, some stereo—is, as the album notes acknowledge, often a bit on the crude side, and the music, which has little or nothing to do with any Afro-American forms, is not unlike some of those esoteric items one used to find only on Folkways releases. With a lot of chanting and ethnic utterances from a variety of collaborators from Africa, Turkey, Scandinavia, and God-knows-where, we hear disappointingly little from the leader himself, and much of what is here was probably more interesting to those who were there. But at least we now know what Don Cherry has been up to. If that's what makes him happy. . . . C.A.

SONNY FORTUNE: *Awakening*. Sonny Fortune (flute, alto saxophone, percussion); Charles Sullivan (trumpet); Kenny Barron, John Hicks (piano); Reggie Workman, Wayne Dockery (bass); Billy Hart, Chip Lyles (drums); Angel Allende (congas). *Triple Threat*; *Nommo*; *For Duke and Cannon*; and two others. A&M/HORIZON SP-704 \$6.98.

Performance: **No nonsense**
Recording: **Very good**

Sonny Fortune has been playing music for about twenty years. For a while he dipped into rock-and-roll, but he found even the Mongo Santamaria band more satisfying than that. From Santamaria he graduated to McCoy Tyner, then went to Buddy Rich (a slight setback) and, in 1974, Miles Davis. The cover of this album claims it is Fortune's debut as a leader, but that isn't so: Fortune co-led a Prestige album with organist Stan Hunter ten years ago, and he has his own al-

bum on the Strata-East label ("Long Before Our Mothers Cried," 7423). Leader debut or not, this is a comfortably swinging album with good Coltrane-ish work by Fortune and ample blowing room for his collaborators, who include Kenny Barron, Reggie Workman, and Billy Hart, all giving excellent performances. Mention should also be made of bassist Wayne Dockery and trumpeter Charles Sullivan for their noteworthy input. C.A.

RECORDING OF SPECIAL MERIT

JIMMY GIUFFRE: *River Chant*. Jimmy Giuffre (flutes, clarinet, tenor saxophone); Kiyoshi Tokunaga (bass); Randy Kaye (percussion). *The Train and the River*; *The Listening*; *Elephant*; *River Chant*; and five others. CHOICE CRS 1011 \$6.98 (from Choice Records, 245 Tilley Place, Sea Cliff, N.Y. 11579).

Performance: **Excellent**
Recording: **Good**

This is another Choice record in more ways than one, if you know what I mean. As on his previous album for the label ("Music for People, Birds, Butterflies and Mosquitoes," 1001), Jimmy Giuffre is joined by bassist Kiyoshi Tokunaga and percussionist Randy Kaye, whose ideas are eminently compatible with those of their leader. Again, we are treated to delicate offerings from Mr. Giuffre's pen, including a new recording of his memorable *The Train and the River*, which almost twenty years ago provided a unique CBS television show (*The Sound of Jazz*) with its most individual moment. Like the rest of this album, it is a wonderful piece of musical im-

(Continued on page 104)

SONNY FORTUNE

Fine Coltrane-ish work on a comfortably swinging album



A&M/Horizon

READERS' BONANZA!



Get up to 50% off

on your choice of these outstanding publications.

Take a good look at these popular magazines. Then take a look at the prices below. Bonanza! You may select as many as four of these titles at our special introductory rates—up to 50% off! Use the attached card to order or write to: Magazines at Discount, P.O. Box 2703, Boulder, Colorado 80302.

HERE'S WHAT YOU SAVE:

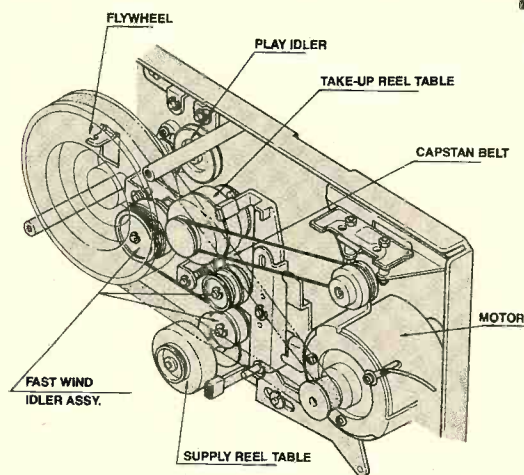
- APARTMENT LIFE - 9 ISSUES. YOU PAY ONLY \$4.97**
(Regular rate: \$6.77)
- BUSINESS WEEK - 1 YEAR. YOU PAY ONLY \$21.50**
(Newsstand rate: \$51.00)
- CAR & DRIVER - 1 YEAR. YOU PAY ONLY \$3.99**
(Regular rate: \$7.98)
- CYCLE - 1 YEAR. YOU PAY ONLY \$3.99**
(Regular rate: \$7.98)
- MECHANIX ILLUSTRATED - 15 ISSUES. YOU PAY ONLY \$4.97**
(Regular rate: \$7.44)
- MONEY - 9 ISSUES. YOU PAY ONLY \$6.95**
(Regular rate: \$9.00)
- NEWSWEEK - 26 ISSUES. YOU PAY ONLY \$9.75**
(Newsstand rate: \$19.50)
- PLAYBOY - 1 YEAR. YOU PAY ONLY \$10.00**
(Newsstand rate: \$16.00)
- POPULAR ELECTRONICS - 1 YEAR. YOU PAY ONLY \$5.99**
(Regular rate: \$6.98)
- POPULAR MECHANICS - 1 YEAR. YOU PAY ONLY \$3.50**
(Regular rate: \$7.00)
- POPULAR PHOTOGRAPHY - 1 YEAR. YOU PAY ONLY \$4.49**
(Regular rate: \$8.98)
- PSYCHOLOGY TODAY - 1 YEAR. YOU PAY ONLY \$6.00**
(Regular rate: \$12.00)
- SPORTS ILLUSTRATED - 24 ISSUES. YOU PAY ONLY \$5.99**
(Regular rate: \$7.53)
- STEREO REVIEW - 1 YEAR. YOU PAY ONLY \$3.99**
(Regular rate: \$7.98)
- TIME - 25 ISSUES. YOU PAY ONLY \$8.75**
(Regular rate: \$10.50)
- TV GUIDE - 32 ISSUES. YOU PAY ONLY \$5.85**
(Newsstand rate: \$8.00)



If card is missing, write to: Magazines at Discount, a division of Ziff-Davis Publishing Co., P.O. Box 2703, Boulder, Colorado 80302.

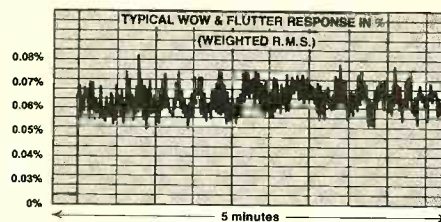


The component look.



Rather than adapt one transport design to fit another need, we produced a completely new, highly streamlined mechanism. From the inside out. It's called the A-400.

Since the cassette loads vertically, the adverse effect of gravity on the cassette itself is eliminated. Thus tape jams are prevented and smooth, even tape packs are predictable.



A completely new DC servo controlled motor has been designed to keep wow and flutter to a minimum. It operates

on a frequency generated feedback principle and is unaffected by line voltage fluctuations. The result is quiet, smooth and precise movement of tape.

Twin rotary levers control the transport functions with smooth, positive cam action. Which means unnecessary mechanical linkages have been eliminated. Fewer moving parts assure greater reliability and long term dependability.

If new design concepts, superbly executed, appeal to you, put an A-400 through its paces. Just call (800) 447-4700* toll free for the name and location of your nearest TEAC retailer. You'll find that the A-400 delivers definitive TEAC performance with the added convenience of a front load component. All by design.

*In Illinois, call (800) 322-4400.

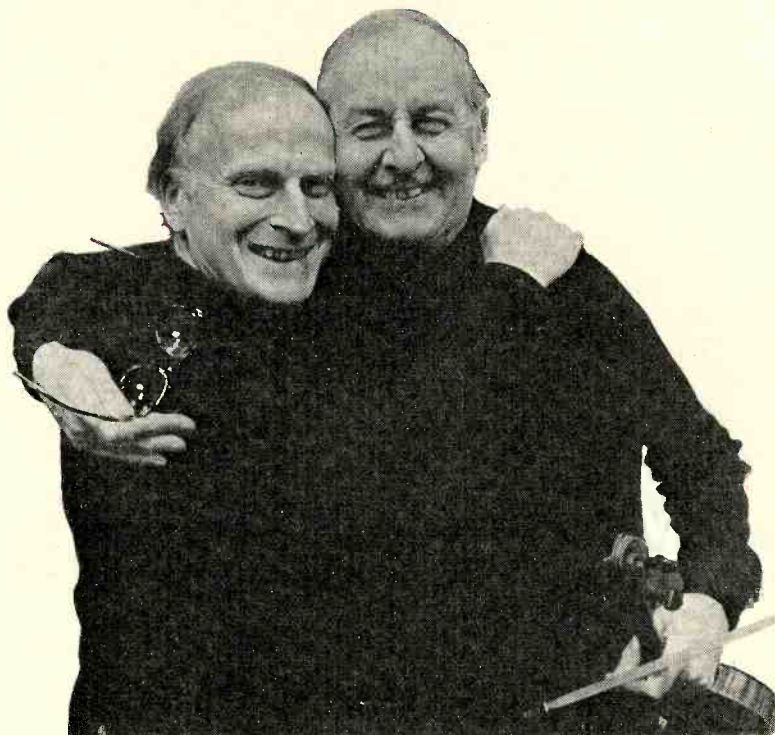
By design.

A-400

TEAC. The leader. Always has been.

TEAC Corporation of America
7733 Telegraph Road, Montebello, Calif. 90640
© TEAC 1976

“spirited, au courant Grappelli, at home with new material”



Embraceable you: Menuhin and Grappelli

Stéphane Grappelli, Violinist

SINCE 1917, when, in what may well have been the world's first jazz review, conductor Ernest Ansermet hipped readers of the *Revue Romande* to the marvelous playing of a very young Sidney Bechet, Europeans have been enraptured by Afro-American music. But, although good European imitators of jazz began to emerge in the Twenties, the next fifty years produced only one truly original European jazz group, the Hot Club Quintet of France. The principal player of the group—which turned out a series of remarkable recordings between 1934 and 1939—was, of course, the Belgian guitarist Django Reinhardt. However, even though his style lacked Reinhardt's uniqueness, much of the Hot Club Quintet's success was attributable to the fiery swing of violinist Stéphane Grappelli. Grappelli, who gave up serious study of the piano after hearing some Art Tatum records in the Thirties, occasionally still flirts with the keyboard as a *violon d'Ingres* (that's French for hobby).

Reinhardt died in 1953, by which time the two men had long since gone their separate ways. Grappelli led his own groups on the London and Paris club and hotel circuit and made records—mostly for English Decca and the French Barclay label—with sidemen who included American expatriate Kenny Clarke and the then little-known pianist George Shearing.

Like his American colleague Joe Venuti, Stéphane Grappelli has come to enjoy a new

popularity during the first half of the Seventies. It may have started with an Atlantic album (“Paris Encounter”—SD 1597) featuring the then sixty-two-year-old violinist with a group led by vibraphonist Gary Burton who, at twenty-seven, represented an era of jazz far removed from that usually associated with Grappelli. “At a Newport Festival the year before,” Burton recalls, “Grappelli had complained to George Wein that producers always put him with a bunch of old musicians. We were on stage at the time, and he said he'd enjoy playing with a young group like that.” The resulting album reveals a spirited, surprisingly *au courant* Grappelli, quite at home with new material and modern chord changes. If the four Grappelli albums I've recently received for review are any indication, however, the lesson to be learned from “Paris Encounter” has fallen on deaf ears.

Dated though the music in these four collections is, Grappelli still manages to sparkle, most notably on the BASF album “Violinspiration.” The Diz Disleytrio [sic] gives Hot Clubbish support with two guitars and a bass (the original Hot Club Quintet featured three guitars), more or less re-creating the overall sound that launched Grappelli toward fame forty years ago. There are also some pulsating reflections of the old Quintet in the Angel “Fascinating Rhythm” set, which teams Grappelli up with classical violinist Yehudi Menuhin (this is a follow-up to the two violinists' “Jalousie,” Angel SFO-36968). Al-

though much of the album borders on salon music, the veteran jazz man swings freely to Menuhin's arranged counterpoint. Menuhin also takes some solos, and the result is rather charming, though he understandably lacks Grappelli's flexibility. I would not recommend this album to jazz aficionados—as I would the BASF set—but the combination works in an odd sort of way. The Angel record is infinitely superior to a Pye release which has Grappelli playing with inexplicable gusto against an unidentified trio of bland-sounding musicians including a painfully plodding drummer. And unsatisfactory as that album is, even it is beyond comparison with “The Talk of the Town,” on Black Lion, a violin and piano program that conjures up visions of potted palms and tea-sipping dowagers on the town.

IN closing, let me say that whatever faults I have found with these albums, none can be blamed on Stéphane Grappelli. That he is capable of an outstanding performance even with the most awful, uninspired (and uninspiring) accompaniment says something about his talent. Let us hope that the producers of future Grappelli albums (and may there be many) don't misuse what he has to offer.

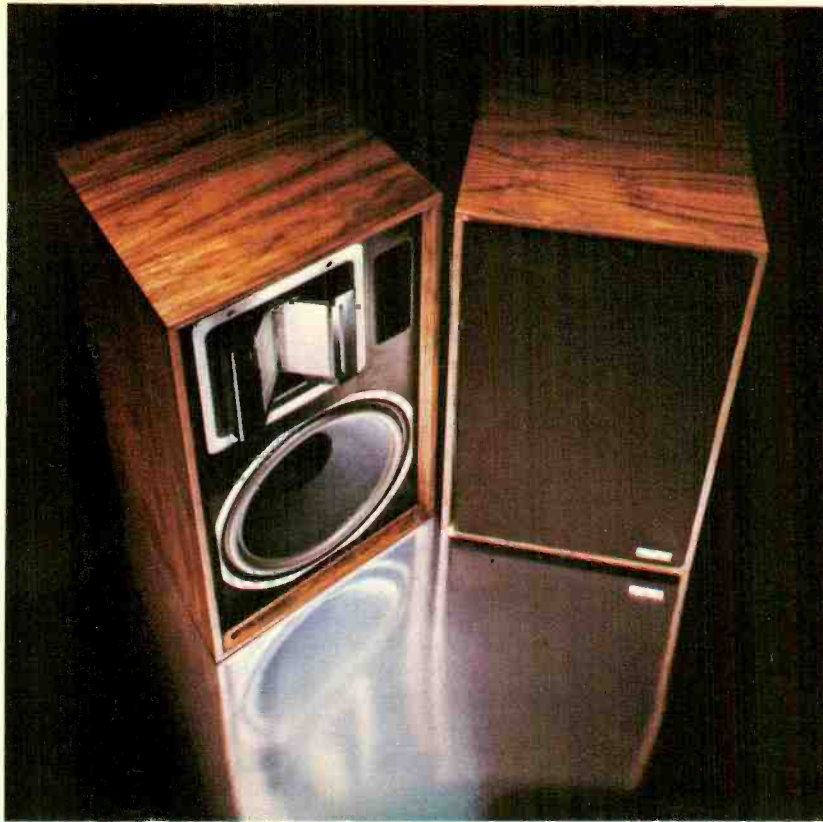
—Chris Albertson

STÉPHANE GRAPPELLI: *Violinspiration.* Stéphane Grappelli (violin, electric piano); Diz Disley, Ike Isaacs (guitar); Isla Eckinger (bass). *Lover Come Back to Me; Sweet Lorraine; Shine; Solitude; Ain't Misbehavin'; Souvenir de Villingen; Hot Lips; My Heart Stood Still; The Nearness of You; Joy; A Nightingale Sang in Berkeley Square; Cherokee; Lover Man.* BASF MC 22545 \$6.98.

YEHUDI MENUHIN/STÉPHANE GRAPPELLI: *Fascinating Rhythm.* Yehudi Menuhin, Stéphane Grappelli (violin); Alan Clare, Max Harris (piano); Ike Isaacs, Denny Wright (guitar); Lennie Bush (bass); Ronnie Verrell (drums). *Just One of Those Things; Soon; Summertime; Nice Work If You Can Get It; Johnny Aime; Looking at You; Embraceable You; Fascinating Rhythm; I Get a Kick Out of You; All the Things You Are; I Got Rhythm.* ANGEL □ SQ S-37156 \$6.98.

STÉPHANE GRAPPELLI. Stéphane Grappelli (violin, piano); rhythm section. *It Don't Mean a Thing (If It Ain't Got That Swing); I've Got the World on a String; What Are You Doing the Rest of Your Life; The Birth of the Blues; Opportunity; Just a Gigolo; Didn't We; Crazy Rhythm; It Might As Well Be Spring; Emotion; Three Little Words; Avalon.* PYE 12115 \$6.98.

STÉPHANE GRAPPELLI: *The Talk of the Town.* Stéphane Grappelli (violin); Alan Clare (piano, celeste). *The Talk of the Town; Amanda; Stardust; Can't Help Lovin' That Man of Mine; We'll Be Together Again; Nature Boy; The Nearness of You; Tournesol; Green-sleeves; You Go to My Head.* BLACK LION BL-313 \$6.98.



YOU DON'T NEED TO BE A PHYSICIST TO APPRECIATE THE DIFFERENCE

The difference between the amt-1a bookshelf speaker system and all the others. Take off the grille. You can see the difference. Listen to it. You can *hear* the difference. The difference is the Heil Air-Motion Transformer.

All other speakers merely push air. The Heil Air-Motion Transformer actually *accelerates* air by squeezing it: effecting the most efficient transfer of an electrical signal to air motion of any device known. Result: superior sound reproduction.



When you look for speakers, trust your ears as well as your eyes. Compare our new Heil Air-Motion Transformer system to any conventional speaker.

YOUR EARS WILL APPRECIATE THE DIFFERENCE.

Call toll free for the ESS dealer nearest you (800) 447-4700
In Illinois call (800) 322-4400



Sound as clear as light.
P.O. Box 26266 • Sacramento, California 95827

TOP RATED

AUDIO COMPONENTS AT
"LOWEST OF THE LOW" PRICES



'Top Rated' by a leading consumer magazine.

- EPI 100, Speakers
- B.I.C. 960, Base, Cover, Shure M91ED Cartridge.

NOW ONLY! \$250

COMPLETE YOUR SYSTEM WITH ONE OF THESE GREAT RECEIVERS...

SHERWOOD S7110	\$154
SHERWOOD S7010	\$129
SONY STR6046A	\$179
SONY STR7015	\$150
SONY STR7055	\$289
PIONEER SX-434	\$159
PIONEER SX-535	\$199
SANSUI 221	\$122
SANSUI 331	\$132
MARANTZ 2230	\$245
TECHNICS SA5150	\$165
SCOTT R31S	\$149

Above may be bought separately at prices shown.

WRITE OR CALL!

For lowest of the low quote
(212) 253-8888
9-5 Mon. thru Sat.

Mastercharge/BankAmericard



Accepted By Phone

TAKING THE HIGH PRICE OUT OF HI-FI!

STEREO WAREHOUSE

2122 UTICA AVE.,
BKLYN. N.Y. 11234

CIRCLE NO. 51 ON READER SERVICE CARD

DOUBLE SAVINGS

MAIL ORDER PRICES WITHOUT
EXTRA FREIGHT OR
INSURANCE CHARGES

FEATURING Technics by Panasonic



MODEL
SL-1500

Mail order shopping is made easy the

AUDI EXPO

way. Freight and insurance are already included in low Audio-Expo price.

WRITE FOR OUR FREE CATALOG

THE PRICE YOU SEE IS THE PRICE YOU PAY

AUDI EXPO

5509 Connecticut Ave.
Washington, D.C. 20015
202-966-1640

CIRCLE NO. 8 ON READER SERVICE CARD

pressionism, though a mite rough around the edges. My only real complaint is that the technical quality could be better. The sound is a bit dull, but not the music. So much awful music is exquisitely recorded, though, that I'll take this order of things any time. C.A.

RECORDING OF SPECIAL MERIT

EARL HINES: Quintessential 1974. Earl Hines (piano). *Look at Me; Jive Sugar; I Do It Better at Night; I'll Never Be Alone.* CHIAROSCURO CR-131 \$6.98.

Performance: **Sparkling**

Recording: **Good**

Earl Hines has been a sensational pianist for at least fifty years, and he was probably great before he made his first recordings. But the truly remarkable thing about him is not so much that he has kept his technique intact as that he continues to be so delightfully inventive. If anything, he gets better with age, and that is saying something if one considers the gems he was beginning to preserve on discs a half-century ago. This album, his seventh for the Chiaroscuro label, consists of four Hines originals in masterly, extended improvisational treatments. They are simply breathtaking. C.A.

MILT JACKSON: The Milt Jackson Big Four at the Montreux Festival 1975. Milt Jackson (vibraphone); Oscar Peterson (piano); Niels Pedersen (bass); Mickey Roker (drums). *Funji Mama; Speed Ball; Night Mist Blues; Mack the Knife;* and four others. PABLO 2310-753 \$7.98, © S 10753 \$7.98.

Performance: **Good set**

Recording: **Good remote**

As one might have predicted, Milt Jackson has become the most heard-from member of the Modern Jazz Quartet since its demise. This set, recorded at last year's Montreux Festival, teams him up with an excellent rhythm section headed by Oscar Peterson (for whom the Pablo label seems to have been created). Jackson and Peterson work well together, each having long ago settled into a style that continues to sound reasonably modern if not exciting. As festival sets go—and this is a rather typical festival set—this is a good one. C.A.

GENE KRUPA/ZIGGY ELMAN. Anita O'Day (vocals); Gene Krupa and His Orchestra. *Tuning up; Alreet; Full Dress Hop; A Fool Am I; Nothing Yet; Drum Boogie; Siren Serenade; Drummer's Band.* Virginia Maxey (vocals); Ziggy Elman and His Orchestra. *And the Angels Sing; I'll Get By; Once More; Just Going; There Is No Greater Love; Hub-Je-De-Bee; Please Mama.* MONMOUTH-EVERGREEN MES/7072 \$6.98.

Performance: **Stuff of legends**

Recording: **Very good**

Genealogists of the history of the big-band era and all that jazz will be only too glad to point out to you that the origins of the orchestras led in the Forties by men like Gene Krupa and Ziggy Elman can be traced to the bands of Benny Goodman, where Krupa was a drummer, Elman was a trumpeter, and all was right with the world. The trick is to be able to get away from these people (whose hearts are still waiting in line at the old New York Paramount) long enough to enjoy the music for itself without all that burdensome history. I

suggest you just sneak off alone with this one and enjoy some glorious period playing.

Listen to Krupa's band sail into action like a big, freshly painted ocean liner in *Tuning Up*; thrill to the buildup in *Nothing Yet*; hear for yourself why Krupa had no equal in the astonishing drum passage of *Siren Serenade*. On the other side, you'll find Elman on trumpet turning *And the Angels Sing* into his all-time hit; making a Yiddish wedding dance (which it was in the first place) out of *Please Mama*; reveling in the sheer exuberance of *Hub-Je-De-Bee* (whatever that means). On the other hand, the hallowed fame of the vocalists on this disc, I must confess, remains a mystery to me. The smooth, smart, icy, metronomical singing of Anita O'Day and the glib, sticky, honeyed style of Virginia Maxey represent to this listener just two vapid aspects of a shallow period in popular vocalizing. If this won't stop loyal nostalgists for a minute, it did stop me. The "electronic" stereo reprocessing, I am happy to report, is unobtrusive and inoffensive. P.K.

RECORDING OF SPECIAL MERIT

ART LANDE/JAN GARBAREK: Red Lanta. Jan Garbarek (flutes, soprano and bass saxophones); Art Lande (piano). *Quintennaisance; Velvet; Miss Fortune; Medley—Open Return/Cancion Del Momento/Meanwhile/Cherifen Dream of Renate;* and two others. ECM ECM-1038 ST \$6.98, © 8F-1038 \$7.98.

Performance: **Enduring**

Recording: **Excellent**

The term "jazz" has long been obsolete. That is to say, if it can correctly be applied to the music of the early New Orleans bands, there is little logic in applying it to, say, the music of Keith Jarrett (just as it has never made much sense to call a person black just because his or her great-great-grandfather was a black man). Afro-American music has progressed far beyond the structured polyphonic improvisations of New Orleans jazz; and European music, in its evolution, has little left in common with Mozart or Beethoven. Though the influence of Afro-American music is clear, we would not think of calling Ravel's Concerto in D for the Left Hand jazz.

The music of Art Lande and Jan Garbarek is neither "jazz" nor "classical," but rather a hybrid of what has evolved from both. Simply put, it is modern music influenced by the times in which we live. Introspective and melodic, it reflects a movement away from the neurotic period music has gone through in the recent past. Lande and Garbarek are excellent musicians whose ideas mesh beautifully, and "Red Lanta" is a superb album of music that cannot and should not be pigeonholed, even though certain necessities of magazine organization demand the pigeonholing of this review. C.A.

TOM SCOTT: New York Connection. Tom Scott (keyboards, flute sax phones, woodwinds); instrumental accompaniment. *Dirty Old Man; Uptown & Country; New York Connection; Garden;* and five others. ODE SP 77033 \$5.98.

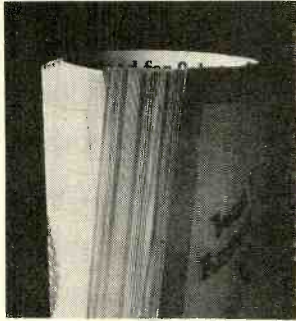
Performance: **Proficient**

Recording: **Good**

Tom Scott is a capable arranger, keyboardist, flutist, and saxophonist who will go almost three-quarters of the way to meet a melody.

(Continued on page 109)

ONCE AGAIN, THE EPI 100 HAS RECEIVED TOP RATINGS FROM THIS PRESTIGIOUS PUBLICATION.



In its February issue, the leading independent consumer testing magazine rated the EPI 100 the best speaker for the price among medium-priced speakers.

That's the good news.

The bad news is, because of its policy of strictly enforcing the copyright laws, we

can't name the magazine or quote it directly.

But we can tell you this: This is the third time running the EPI 100 has been so rated by the publication. And no wonder.

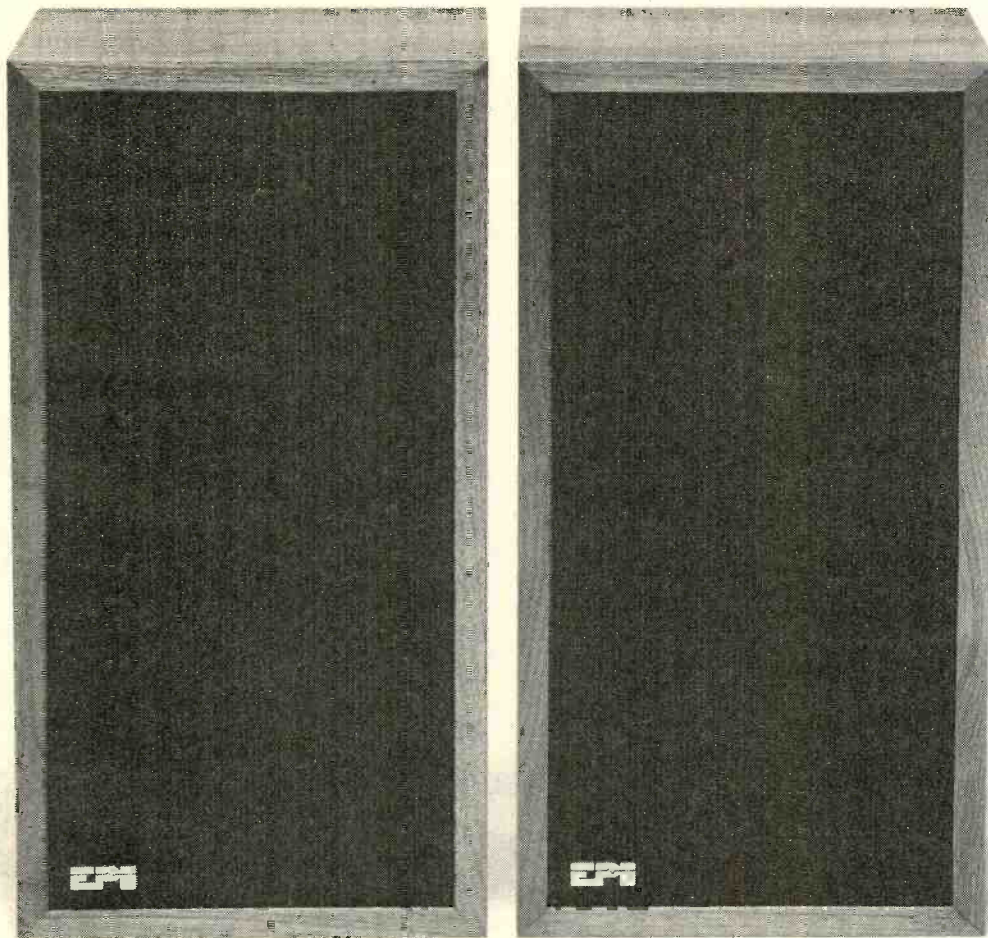
The EPI 100 offers EPI's celebrated Linear Sound: a pure, uncolored, natural sound from top to bottom. With no artificial boosting of the bass to impress the innocent. And all the nuances at the treble end that, on most speakers, just fade away.

The Model 100 doesn't just deliver the Linear Sound of EPI straight ahead, either. In fact, up to 15,000 Hz, the speaker's off-axis dispersion is down an average of only 3 db.

With its excellent dispersion and EPI's Linear Sound, we'd say the EPI 100 is clearly the finest speaker you can get for the money.

But don't take our word for it.

Take s.



The Model 100 is available in a hand-rubbed walnut veneer or a vinyl finish (Model 100v).

THE LINEAR SOUND OF EPI

EPI is a product line of Epicure Products Inc., Newburyport, Mass. 01950

If you listen to the experts, you'll listen to our speakers.

Ask any audio expert what makes a speaker good. If he's *Stereo Review's* Technical Editor, Larry Klein, he'll tell you, "A speaker should have no character or sound quality of its own . . . a speaker should be neutral." Or ask Julian Hirsch: ". . . uncolored sound is the only kind of speaker response that gives the listener a good chance of hearing a balanced sound."

If you listen to the experts, you'll look for neutrality in speakers. That's why you should listen to the T-200, Technics' 2-way speaker system. Hirsch-Houck Labs did: ". . . highs were virtually perfect . . . response of the woofer was notably smooth . . . difficult to believe that the sound is coming from an inexpensive compact system." *Popular Science* rated the T-200 "excellent . . . good tonal balance . . . very clean, accurate sound."

The experts are even more impressed with the T-400, Technics' 4-way speaker system. *High Fidelity*: ". . . the sound produced is well

balanced . . . neutral and uncolored with very good internal separation on complex instrumental textures . . . easily one of the better non-compact speaker systems." Martin Clifford of *FM Guide*: "Having a pair of super-tweeters angled to disperse sound . . . means not worrying about the directionality of the highs . . . bass response was good and clean."

For the complete reviews and other technical information, write: Mr. Jack Bloom, Panasonic, 1 Panasonic Way, Secaucus, N.J. 07094.

Technics also offers you the T-300 and T-500. The reviews aren't in yet, but since they share the neutrality and other important characteristics of the T-200 and T-400, we expect the experts to be equally enthusiastic.

The concept is simple. The execution is precise. The performance is outstanding. The name is Technics.

FOR YOUR TECHNICS DEALER, CALL FREE 800 447-4700.
IN ILLINOIS, 800 322-4400.

Technics

by Panasonic



T-400

T-500

T-200

T-300

CIRCLE NO. 54 ON READER SERVICE CARD

**WE'LL
SAVE YOU MONEY**
ON FAMOUS BRAND
NATIONALLY ADVERTISED
**STEREO COMPONENTS,
VIDEO & PROFESSIONAL
PRODUCTS EQUIPMENT**
WRITE TODAY FOR OUR QUOTE AND
OUR COMPLETE PRICE CATALOG.
FAST DELIVERY IN FACTORY SEALED CARTONS
**FOR IMMEDIATE QUOTE
CALL (202) 723-6060**
THE COST OF YOUR CALL WILL BE DEDUCTED
FROM ANY ORDER OVER \$200.00.

A.D.R. AUDIO VIDEO
6200 CHILLUM PLACE N.W.
WASHINGTON, D.C. 20011
Master Charge/BankAmericard Honored on Mail Orders

CIRCLE NO. 5 ON READER SERVICE CARD

But nearly all the material here, no matter how it starts out, winds up as variations on a riff with swaying bass lines and standardized sax solos. Still, for pop-jazz, it's not a bad album. In fact, Scott's music is the type Herbie Mann would play if Mann wasn't so mired in jive. One or two tracks are easy and pleasant to take; after that, things get repetitious. Scott is given excellent support by the New York Rhythm Section, a group of pro studio musicians which includes the gifted guitarist Hugh McCracken, who is heard on *Uptown & Country*. J.V.

RECORDING OF SPECIAL MERIT

CLIFFORD THORNTON: *The Gardens of Harlem*. Clifford Thornton (cornet, valve trombone, percussion instruments); Jazz Composer's Orchestra, including soloists Ted Daniel, Leo Smith, Michael Ridley, and Marvin Peterson (trumpets), Janice Robinson and Charles Stevens (trombones), Dewey Redman, Roland Alexander, and George Barrow (saxophones), and Carla Bley (piano). *Gospel Ballade; Sweet Oranges; Blues City*; and five others. JCOA LP 1008 \$6.98.

Performance: **Eloquent**
Recording: **Very good**

Clifford Thornton, a former assistant professor at Wesleyan University, has performed on and off records with such established avant-garders as Sun Ra, Archie Shepp, Pharoah Sanders, and Sam Rivers, but recordings under his own name have been few—this is his fifth album as a leader—and always on relatively obscure labels. Now, five albums may not seem a small enough output to place Thornton in the "neglected" category, but consider the fact that he has been receiving critical acclaim for ten years, and bear in mind the vast amounts of money spent recording and promoting people who have not an ounce of Mr. Thornton's talent (Bobbi Humphrey is one who immediately comes to mind).

This is Thornton's most ambitious work to date, having been conceived as far back as 1968 and—with the help of national and state grants—reaching its final recorded form in 1974. The work is in eight parts, the first five being based on African and Caribbean music. Thornton began to gain firsthand knowledge of African music in 1969, when he performed at the First Pan-African Cultural Festival in Algiers, and it found a place in his subsequent albums on the BYG and Third World labels. But never has he been as eloquent about it as he is here. *Ain Salah*, featuring Thornton on the shenai, an Indian double-reed instrument, moves from Africa to Harlem as Carla Bley's piano intones *Gospel Ballade*, a somber, funeral piece inspired by the Abyssinian Baptist Choir of New York; then there is a brief ensemble interpretation of a Columbia, South Carolina, street cry (*Sweet Oranges*); and the final piece, *Blues City*, returns home to Harlem with soloists George Barrow, Ted Daniel, and Dewey Redman playing against Caribbean rhythm and Gil Evans-ish brass.

A multitude of influences are evident in Thornton's music, from shades of Gillespie's band during his Afro-Cuban period to echoes of obscure Tunisian street musicians, and he brings it all together with wonderful perception and taste. The album is beautifully packaged with informative, well-written notes by the composer, but the music is so good that a brown paper bag would have sufficed. C.A.

SAVE!

MONEY • TIME • FREIGHT

- ♪ QUALITY STEREO EQUIPMENT AT LOWEST PRICES.
- ♪ YOUR REQUEST FOR QUOTATION RETURNED SAME DAY.
- ♪ FACTORY SEALED CARTONS—GUARANTEED AND INSURED.
- ♪ SAVE ON NAME BRANDS LIKE:
A.D.C. KLH
A.R. SHURE
DYNACO KOSS
SONY FISHER

**PIONEER
AND MORE THAN 50 OTHERS
BUY THE MODERN WAY
BY MAIL—FROM**

Department 217S
12 East Delaware
Chicago, Illinois 60611
312-664-0020

CIRCLE NO. 23 ON READER SERVICE CARD

TOP Discount AUDIO

Your NATIONAL HEADQUARTERS
For Famous Brand Electronics By Mail
333 N. Michigan Ave. • Suite 2025
Chicago, IL 60601 • (312) 293-1825
All Orders Shipped In
Factory-Sealed Cartons
Write Or Call For
The Lowest Prices
Anywhere!

MILLION \$\$\$ INVENTORY

LOWEST PRICES ON

RECEIVERS	TURNTABLES	TUNERS
SPEAKERS	CHANGERS	CARTRIDGES
TAPE DECKS	AMPLIFIERS	HEADPHONES
CALCULATORS	COMPACTS	CAR AUDIO

Top Discount Audio 333 N. Michigan Avenue
SR-5 Suite 2025, Chicago, IL 60601
(312) 293-1825
We honor Master Charge and Bank Americard. Date _____
Please send me a quote on: _____
 MR. (First) (Initial) (Last)
 MS. (Number And Street)
(City) (State) (Zip Code)

CIRCLE NO. 55 ON READER SERVICE CARD

DIXIE SAVE-ON

Brand Name Audio Components BY MAIL

Write Today for Our **FREE Audio Catalog**

DIXIE is one of the oldest and largest audio component mail order houses in the country. Our prices on brand name components are actually LOWER than "Discounters". See our new catalog or call us for a price quote. Everything shipped factory-sealed with full manufacturer's warranty.

Master Charge / BankAmericard honored on mail orders

DIXIE HI-FIDELITY SR-5
2040 Thaidro Street
Richmond, Virginia 23230
Phone: 1-804-257-4241

Please rush me your FREE Audio Catalog and complete information. I understand there is no obligation.

Name _____
Address _____
City _____
State _____ Zip _____

Choosing Sides

By Irving
Kolodin



RUBINSTEIN'S BEETHOVEN CONCERTOS (MARK III)

WILL pianistic wonders never cease? Not so long as Artur Rubinstein is of a mind and a will to spend time in the recording studio. The marvel of the moment is his brand-new edition of Beethoven's five piano concertos, an unprecedented feat for a man on the eve of his ninetieth birthday. Associated with him in the set is the London Philharmonic Orchestra under the direction of Daniel Barenboim. RCA is releasing the whole as an integral package in the disc format (stereo CRL5-1415, CD-4 quadraphonic ARD5-1415) and singly in tape (cassettes ARK1-1416/20, eight-track ARS1-1416/20).

The challenge to soloist Rubinstein in taking on this project—apart from the works themselves—is not so much the currently available versions by other pianists (including one by Vladimir Ashkenazy and Sir Georg Solti on London) as his own prior versions. Over a better than thirty-year span, beginning with a relatively modest way in 1944 with a live-performance recording of No. 3 in C Minor with Arturo Toscanini and the NBC Symphony, and continuing with a recording of No. 4 in G Major with Sir Thomas Beecham (both later transferred to LP), Rubinstein has been as individualist in the concertos of Beethoven as well as in the sonatas and trios. He is not given to the analytical approach, to a Germanic probing for deeper meanings and obscure profundities; he has rather rejoiced in the immediacy of his reactions to the music as they have accumulated in him, year after year, and his impulse to communicate those reactions to others.

His first venture with the full sequence came in the mid-Fifties, following the history-making concert series in which he played seventeen concertos in five appearances in Carnegie Hall, Alfred Wallenstein conducting. He said then (at age sixty-eight or -nine, according to which date of birth you accept), "After all, I cannot wait seventeen years more to play them one at a time with the Philharmonic." What cheek for a man to attempt to outguess Father Time! But twenty years later he is still concertizing and recording. He has, from time to time, indicated that he has

some reservations about that first set of the five concertos with Josef Krips conducting, as well as about the more recent product of the Beethoven year (1970) with Erich Leinsdorf and the Boston Symphony Orchestra.

The Boston set could very well have stood as the last word by Rubinstein on the piano concertos of Beethoven save for two things: his own durability and a fortuitous encounter with Daniel Barenboim. Recalling his reference to not being able to play his concerto repertoire "one at a time with the Philharmonic," it is all the more curious that it was at a New York Philharmonic Pension Fund concert in February 1975 that he formed his liaison with Barenboim for performances of the Beethoven G Major and the Brahms D Minor. The ties were strengthened at a second meet-



Artur Rubinstein
and Daniel
Barenboim: it
goes this way . . .

ing soon after in London, and these meetings gave rise, by common consent, to Rubinstein's Complete Beethoven Concertos, Mark III.

It is illuminating to note that, unlike the recordings with Krips in New York, which were spread over the period between December 6 and 16, 1956, the London series was confined

to two days in March (Concertos Nos. 4 and 5 on the tenth and eleventh) and three days in April (Nos. 1, 2, and 3). The presumption is that time was allocated on a concerto-per-day schedule. Perhaps this was the only way in which the series could have been set down, but it is oddly at variance with Rubinstein's usual style—and certainly with one of his favorite anecdotes about his late friend Pablo Picasso.

It concerned a period when he was seeing Picasso almost daily at work in his studio. Day after day he observed the artist sketching the same study materials: a guitar and a bottle. "Is it possible," he thought, "that Picasso has run out of inspiration?" One day he found the courage to question Picasso about this painstaking, tedious procedure. The answer was illuminating: "They are never the same twice. The light is different. I am different. They are always new." Such a point of view might perhaps have been helpful in the execution of this Beethoven project; as it is, the hasty procedures are all too evident in the recorded results, which tell us more about Rubinstein than they do about the concertos—the guitar and the bottle, so to speak.

HAVING cycled and recycled the information contained in all the prior issues (plus a fourth version—a ringer—of the C Minor made in Vienna in 1964 with Barenboim as pianist and Laszlo Somogyi conducting, Westminster XWN 19078), it is clear to me that all the Rubinstein performances bear the telltale brush strokes of the same artistic individuality, only modestly embellished or slightly restrained by whatever conductor the pianist happened at the moment to be associated with. In the case of Barenboim, I would say that Rubinstein has found not merely another collaborator but an artistic alter ego, a second self who sees the problems of the solo inter-

preter not from an impersonal, external point of view but from an intimate and personal one, for he is both a conductor and a pianist.

But the interaction between the two men does provide another flavor, a new spice to the mixture—they are, after all, separated by more than fifty years of musical (and other) experience. Is the outcome affected, then, by

"I cannot wait seventeen years to play them one at a time..."

an excess of deference on the part of the younger man? Hardly; Barenboim is much too conscious of his own role in the partnership. But the maximum of which he might be capable was clearly undercut by the timetable to which the work was bound. The five discs are as a consequence fascinating in detail and even in some whole movements, but disappointingly less as a totality.

THE winds of March must have been blowing most inhospitably on the days when the Fourth and Fifth Concertos were recorded; neither says as much on their separate subjects as Rubinstein has previously conveyed. The Fourth lacks the sparkle, the sense of pleasure in the subject matter, and the sheer beauty of sound that can be heard in the Forties collaboration with Beecham (issued in America on RCA LCT 1032). As for the new *Emperor*, it is the one work of the five in which some concession to age can be detected. The opening has, perhaps, just a tinge of the purple, but it is hardly imperial, and in some passages the octave playing is tentative rather than assured. There are, however, some glorious moments in Rubinstein's filigrees of sound against the solo in the two horns, as well as in the gradual transition of command from piano to orchestra as the slow movement fades into the finale.

April's weather was evidently more benevolent, for the performances of the first three concertos are marked by that equality of artistic input, a balance between soloist and conductor, of which musicians dream and which they so rarely experience. Does Rubinstein indulge an impulse in the Largo of No. 3 to loosen the bonds of bar measures and raise his contemplative mood to the near reaches of rhapsody? Barenboim is instantly responsive, waiting right there at the crossroads to assure the piano's beautiful juncture with the instrumental traffic. The finale of No. 3 does not have as much velocity as the version with Krips, but it does have more character.

The art of refinement practiced by Rubinstein reaches its zenith in the B-flat Concerto (it is No. 2 in the published sequence, though it is an earlier creation than the C Major, No. 1). This work is a challenge of a special kind. The time span ranges over more than the years between 1795 (when it was begun) and approximately 1798 (when it was finished with a new finale). The instrumentation predates some of Mozart's larger works of the 1780's (it lacks clarinets, trumpets, and timpani), and the lengthy cadenza for the first movement was written rather more than a decade after everything else in the score (it was added in Beethoven's *Hammerklavier* period, and shows it).

RUBINSTEIN's response to these temporal inequalities is a rare, soothing solution: refinement and repose enhanced by exquisite treatment of the embellishment in which the work abounds. His command of the rhythmic detail is such that it becomes a source of expressivity—as when, in a passage marked *con grand expression*, he slightly lengthens the time lapse between the long and the short notes in a double-dotted quarter- and thirty-second-note pattern with magical results.

In sum, I would call it a wonder that Rubinstein has done as well as he has in this venture, given the obstacles. To have done better would have taken a miracle, and even those who have spent less time in the world than Rubinstein know how rare *they* are.

FASTEN YOUR SEATBELT



SK 65 Two-way Speaker Kit

...and get ready to hear a fantastic HI-FI stereo component music system.
IN YOUR CAR.

The AudioMobile SA500 car stereo system reproduces music with astounding clarity and power, and is compatible with every car radio and tape player on the market.

THE COMPONENTS

- 50 Watt RMS *Stereo Power Amplifier
- Precision Preamplifier/Equalizer
- Two-way Monitor Speaker System

Buckle Up: experience a musical trip you'll never forget.

*Typically less than 0.3% THD @ 20 Watts RMS per channel into 3 ohms, over the entire frequency spectrum from 20Hz—20kHz.



AudioMobile, Inc.
3625 W. McArthur Blvd., Santa Ana, Calif., 92704 (714) 549-2730

I would like to hear the AudioMobile SA-500 Component Car Stereo System.
Please send me full information and names of dealers in my area.

NAME _____

ADDRESS _____

CITY _____

STATE _____ ZIP _____

Mail To: AudioMobile, Inc., 3625 W. McArthur Blvd., Santa Ana, Calif., 92704 (714) 549-2730

CIRCLE NO. 9 ON READER SERVICE CARD



CLASSICAL DISCS AND TAPES

Reviewed by RICHARD FREED • DAVID HALL • GEORGE STODDARD LINCOLN • ERIC SALZ

BECK • PAUL KRESH

ANDERSON: *Squares* (see WILSON)

RECORDING OF SPECIAL MERIT

BARTÓK: *String Quartet No. 4*. ROSENBERG: *String Quartet No. 4*. Fresk Quartet. CAPRICE CAP 1051 \$7.98 (from HNH Distributors, P. O. Box 222, Evanston, Ill. 60204).

Performance: **Superb**
Recording: **Very fine**

If the Fresk Quartet, the oldest member of which was born in 1936, is any indication of the quality of Sweden's young musicians, the country is certainly in good musical shape. This reading of the Bartók Fourth Quartet virtually sizzles with rhythmic verve and color, and the players are masters of the music's complex texture and structure. Not since the Juilliard Quartet was in its early prime in the 1950's have I heard such a vital Bartók quartet performance as this, and the recording is absolutely superb in its amalgam of presence and just acoustic ambience.

At least two Scandinavian composers have been vying with Bartók in terms of adding major works to the string quartet literature. Denmark's Vagn Holmboe (b. 1909) has written twelve string quartets (ten have been recorded, mostly on the Danish Fona label), and in Sweden there is Hilding Rosenberg (b. 1892), whose vast output ranges from huge choral symphonies through popular and accessible scores written for radio and theater. In gener-

al, Rosenberg's language in the quartets has been described as contemporary-cosmopolitan with a very personal and intense lyrical style and demonstrating a superb mastery of polyphonic texture. The polyphony, however, is essentially lyrical—verging on twelve-tone in the later works—rather than the motivic-demithian type. The opening movement of No. 4 is typical in this respect. The first movement is a kind of nocturne with emphatic quasi-recitative episodes by way of contrast. There is a brief march-like third movement, which leads to a finale of almost tótkian brilliance and color.

Certainly this sample of Rosenberg's quartet writing (this is the first recording of the Fourth Quartet) as recorded by the Fresks whets my appetite for more from the Swedish. **D**

BEETHOVEN: *Piano Concertos* (see *Chamber Sides*, page 110)

BEETHOVEN: *Seven Bagatelles, Op. 33; Eleven Bagatelles, Op. 119; Six Bagatelles, Op. 126*. Stephen Bishop (piano). PHILIPS 6500 \$7.98.

Performance: **Solid**
Recording: **Excellent**

In reviewing Glenn Gould's provocative Columbia recording of the Op. 33 and Op. 119 Bagatelles last August, I noted that some of his tempos "are conspicuously unorthodox but they are without exception irresistibly persuasive." The wit and imaginativeness that illumine Gould's performances are matched in these new ones by Stephen Bishop (or Bishop-Kovacevich, as he now calls himself), which are, however, solidly musical and more than satisfying in their own right. Bishop does respect the composer's indications without exception, and in his way—as Gould does in his—reminds us that these neglected pieces need not be regarded as trifles simply because of their title or their brevity. Those who find Gould merely eccentric can only be thoroughly delighted with Bishop, and will of course gain his splendidly performed Op. 119 set into the bargain; others (like the undersigned) may regard Bishop's Op. 119 as just

ification for acquiring both discs. The Philips engineers have captured the sound of the piano with exceptional realism, and Bishop contributes no vocal obbligation. **R.F.**

MAHMS: *Symphony No. 1, in C Minor, Op. 2*. (see *The Basic Repertoire*, page 51)

MAHMS: *Twenty-one Hungarian Dances* (see *Best of the Month*, page 78)

MAHMS: *Young Person's Guide to the Orchestra* (see *PROKOFIEV*)

RECORDING OF SPECIAL MERIT

GRUMIAUX: *Violin Concerto No. 1, in G Minor, Op. 26; Scottish Fantasy, Op. 46*. Arthur Grumiaux (violin); New Philharmonia Orchestra, Heinz Wallberg cond. PHILIPS 6500 780 \$7.98, 7300 291 \$7.98.

Performance: **Incredibly beautiful**
Recording: **Rich, well-balanced**

Grumiaux's remake of the well-worn Bruch First Concerto is perhaps the most stunning of all demonstrations of his extraordinary powers to infuse such a piece with freshness, vitality, and a very credible sort of grandeur without losing sight of its essential warmth of heart. With collaboration from conductor Heinz Wallberg and the New Philharmonia Orchestra that reaches a chamber-music level of integration, it is an incredibly beautiful performance, drawing attention not so much to Grumiaux's technical assurance and lustrous playing as to the not insubstantial glories of what after all a marvelous work. The overside performance of the *Scottish Fantasy* must be one Irving Kolodin referred to (in his article on Heifetz last February) as "the most Heifetz-like performance not by Heifetz of anything I have ever heard." This, too, is irrevocably vivified by Grumiaux's characteristically elegant—and characteristically joyous—touch, and the lambent quality of the music-making is reflected perfectly in the rich, bodied sonics. Comparisons are quite beside the point. Failure to pick up this record begins enjoying it at once would be an unconscionable self-deprivation. **R.F.**

Explanation of symbols:

- Ⓜ = reel-to-reel stereo tape
- Ⓢ = eight-track stereo cartridge
- Ⓒ = stereo cassette
- Ⓚ = quadraphonic disc
- Ⓡ = reel-to-reel quadraphonic tape
- Ⓛ = eight-track quadraphonic tape

Monophonic recordings are indicated by the symbol Ⓜ

The first listing is the one reviewed; other formats, if available, follow it.

DALLAPICCOLA: *Il Prigioniero*. Maurizio Mazzieri (bass-baritone), Prisoner; Giulia Barrera (soprano), Mother; Romano Emili (tenor), Jailer, Grand Inquisitor; Gabor Carelli (tenor), Ray Harrell (baritone), Priests. University of Maryland Chorus; National Symphony Orchestra, Washington, D.C., Antal Dorati cond. LONDON OSA 1166 \$6.98.

Performance: **Unexciting**
Recording: **Orchestra and soloists good**

The late Luigi Dallapiccola (1904-1975) was the first European composer—certainly the first Latin one—outside the direct orbit of Schoenberg and the Viennese to write twelve-tone music. For many reasons—personal (his wife was Jewish), artistic (his modernistic style), and ideological (although not political)—he was an opponent of fascism and was for years virtually blackballed from Italian musical life. Recognition at home followed his successes in Germany and the U.S.

Dallapiccola treated the theme of prisoners and imprisonment several times, most notably in his opera *Il Prigioniero*, written in 1948. The libretto, by the composer himself, is distantly based on a famous (and rather gimmicky) story by the French writer Villiers de l'Isle-Adam about a prisoner of the Inquisition who is allowed to think he has escaped only to find himself in the arms of the Grand Inquisitor himself. The opera is pure expressionism, its atonal, Bergian music strewn across its agonizing libretto like the debris of a war-blasted landscape. It is not a very likable work—in fact, it is distinctly depressing—but it is nonetheless a powerful document. It is often played in European theaters, and it is surprising to realize that it has never been on disc before.

This is a good but not a great recording with an adequate but not exciting cast. Dorati's direction and the effective (but not always well-enough-heard) choral singing are the biggest

assets. An Italian-English libretto and an interesting page of notes by the composer himself accompany the recording, which was made less than a year before the composer's death and now appears *in memoriam*. E.S.

ELGAR: *Chanson de Matin; Chanson de Nuit; Elegy for Strings; Serenade in E Minor for Strings; Salut d'Amour; Romance for Bassoon and Orchestra; Rosemary; Carissima; Sospiri*. English Chamber Orchestra, Daniel Barenboim cond. COLUMBIA M 33584 \$6.98.

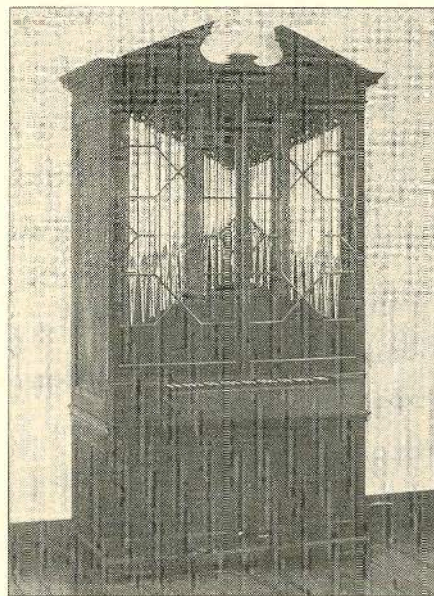
Performance: **Good**
Recording: **Excellent**

Sir Edward Elgar was once the musical hero of all England. His marches, oratorios, and orchestral suites resounding with the glory of the Empire suited Victorian audiences in London down to a tee. But he had, in his music, another, more subdued, more sentimental side. In his miniatures, his serenades, his ele-

The Bicentennial Corner

THE Smithsonian Institution's Division of Performing Arts has been making itself felt as an increasingly important entity in Washington's musical life, and it is having an impact nationally through recordings either made at the Smithsonian, sponsored by the Division, or re-creating performances given there. Outstanding examples of both the first and last of these three categories are the Nonesuch discs of Stephen Foster songs with Jan DeGaetani and Leslie Guinn (H-71268), Henry Clay Work's Civil War songs ("Who Shall Rule This American Nation?"—H-71317), and "Nineteenth-century American Ballroom Music" (H-71313). The Smithsonian has also been producing records on its own label, until now mostly in the realm of historic jazz reissues (Martin Williams' six-record "Smithsonian Collection of Classic Jazz," two-disc sets by King Oliver's band and by Louis Armstrong and Earl Hines). The newly produced items are a collection of "Classic Rags and Ragtime Songs," conducted by T. J. Anderson, which must be the most attractive presentation of orchestrated rags from any source, and an intriguing Jeffersonian miscellany, "Music from the Age of Jefferson," made with the help of two record companies (financed with a grant from the BASF Wyandotte Corporation and recorded by Charles Fisher of Cambridge Records).

James Weaver, who conducted the Nonesuch "Nineteenth-century Ballroom Music" and, together with his keyboard collaborator Albert Fuller, researched the material for the Jefferson package, observes that the music on the latter disc was well known to musical amateurs of Jefferson's time and is typical of what might have been found in American libraries in 1776. The program, he says, "is not the definitive collection of music of the eighteenth century, but rather the part that was reflected in Jefferson's library." Jefferson, of course, was one of the most serious musical amateurs of his time, and he acquired music and instruments for Monticello with both en-



Washington's doctor's organ

Music from the Age of Jefferson

thusiasm and taste; his musical life is described in some detail in the comprehensive and beautifully illustrated annotation provided with the record.

It would be impossible to describe all the music offered here, or to identify the unfamiliar composers, without taking up whole

pages. Suffice it to say, then, that the material ranges from interesting to downright enchanting, and that it is laid out in a sequence that makes the most of the variety and contrasts in the eleven pieces. Edward Light's *Guardian Angels*, sung by Carole Bogard with guitar accompaniment, is perhaps the most endearing item, but all four of the instrumental pieces are quite fascinating. (One begins to wonder, by the way, how many Opus 18's Christian Bach produced: two different sets of symphonies, published respectively in London and Amsterdam, and a set of duo sonatas published in Berlin under the same opus number—and perhaps still more?) A 1794 Broadwood grand piano, a Stainer violin owned by George Washington's nephew, a chamber organ made for his physician, and other period instruments from the Smithsonian collection add to the authenticity of the affectionate and expert performances. Except for an obtrusive pre-echo in *The Caledonian Laddy*, the recording is splendid. A uniquely valuable Bicentennial release. —Richard Freed

MUSIC FROM THE AGE OF JEFFERSON. Schobert: *Sinfonia in E-flat Major, Op. 10, No. 1.* Linley: *Othello: Air. M. Martini: Plaire à celui que j'aime.* Daniel Purcell: *Psalm 100.* Clementi: *Sonata in G Major for Flute and Piano, Op. 2, No. 3.* Wodizka: *Sonata in D Minor for Violin and Continuo, Op. 1, No. 3.* Arne: *Artaxerxes: Water Parted from the Sea.* Piccini: *Didon: Ah! que je fus bien inspirée.* Light: *Guardian Angels.* Hook: *The Caledonian Laddy.* J.C. Bach: *Sonata in A Major for Harpsichord, Four Hands, Op. 18, No. 2.* Carole Bogard (soprano); John Solum (one-keyed flute); Sonya Monosoff (violin); Robert Sheldon, Thomas Murray (horns); John Hsu (cello); Howard Bass (English guitar); Albert Fuller (harpsichord, piano); James Weaver (harpsichord, piano, organ). SMITHSONIAN COLLECTION N 002 \$6.50 (from the Smithsonian Collection, P.O. Box 5734, Terre Haute, Ind. 47802).

SAVE

TOP QUALITY GEAR
LOWEST PRICES
PROMPT DELIVERY
SAVE ON FREIGHT
SELECTION

ROYCE CB PANASONIC
KENWOOD DYNACO
PIONEER SANSUI
DUAL BIC
and more than 50 others

PLEASE REQUEST PRICE QUOTATIONS ON YOUR CHOICE OF QUALITY STEREO GEAR

Component Discounters

DEPT. 517SR
24020 ONEIDA
OAK PARK, MICH. 48237
313-559-1270

BIG DISCOUNTS

STEREO COMPONENTS

Largest selection of top name brands... try us and see...

It's worth a call
(301) 488-9600

INTERNATIONAL
WIRE
DISTRIBUTORS

6330 Frankford Ave.
Baltimore, Md. 21206

All mail answered within 24 hours

Phone Daily 9 AM to 9 PM
Saturday 9 AM to 4 PM
Phone (301) 488-9600

CIRCLE NO. 24 ON READER SERVICE CARD

gies for small orchestra, he seems to be appealing more to the Britisher who, in the words of Bill Zakariassen's notes, "wanted music to clear the head without causing an undue strain on the brain." That is certainly an accurate description of the program under consideration. Here is the slight and fragile *Chanson de Matin* with its Borodin-like melody; the *Chanson de Nuit* to make up a matching set; the perfumed *Salut d'Amour*—the "pretty trifle" that first brought its composer fame in the 1890's; sentimental sketches with names like *Rosemary* and *Carissima* and *Sospiri*—waltzy, clingy little pieces best suited for the salon. More substantial are the Romance for Bassoon and Orchestra, the still-popular Elegy for Strings, and the sturdy Serenade in E Minor for Strings which was among the composer's own favorites. Mr. Barenboim has a great affinity for the style of Elgar and seems to be determined to put every note of his music onto records. This latest addition to the series is in large part rather innocuous, but the little pieces do add up to a pleasant musical meal with just enough solid nourishment to warrant serious attention. P.K.

RECORDING OF SPECIAL MERIT

ENESCO: *Seven Songs, Op. 15*. ROUSSEL: *Songs. Sarabande; Sur un sonnet; Le Bachelier de Salamanque; Des Fleurs font une broderie; Réponse d'une épouse sage; Amoureux séparés; Adieux; Odelette; Jazz dans la nuit*; and five others. Yolanda Marcoulescu (soprano); Katja Phillabaum (piano). ORION ORS 75184 \$6.98.

Performance: **Very good**
Recording: **Fairly good**

At first glance, the ingredients of this recording seem not quite auspicious: songs by two composers of eminence (but eminence attained in musical forms other than songs) performed by an artist of distinction (albeit distinction enjoyed in countries other than the United States). And yet this is a very successful disc, a real "sleeper."

Yolanda Marcoulescu, described in the liner as the leading soprano of the Bucharest Opera from 1948 to 1968, is now professor of music at the University of Wisconsin. Her voice is warm, steady, well-schooled, and expressive. It is used with sensitive control and high musical intelligence. She is obviously a seasoned interpreter of French songs and has completely mastered the material at hand.

When not writing in his ethnic idiom, Enesco was French-influenced; hence the natural charm and period flavor of his *Seven Songs*, set to texts by the sixteenth-century court poet Clement Marot, is not surprising. The thirteen Roussel songs, embracing texts from ancient Chinese to James Joyce, cover a wider range. While to some extent influenced by Fauré and Debussy, Roussel managed to retain an individual profile in his songs (as he did in his orchestral music).

Both music and performance deserve more than this somewhat amateurishly produced disc (only passable recorded sound, no original texts, no identification of poets). Still, Orion must be complimented at least for its enterprise, and those looking for the unusual or for this repertoire in particular will be pleased by the record. G.J.

FINZI: *Intimations of Immortality* (see *Going on Record*, page 44)



YOLANDA MARCOULESCU
Sensitive control, high musical intelligence

RECORDING OF SPECIAL MERIT

GLUCK: *Iphigenie in Aulis*. Anna Moffo (soprano), Iphigenia; Dietrich Fischer-Dieskau (baritone), Agamemnon; Truus van der Schoot (mezzo-soprano), Clytemnestra; Ludovic Spiess (tenor), Achilles; Thomas Stewart (baritone), Calchas; Arleen Auger (soprano), Artemis; Bernd Weikl (baritone), Archas. Munich Radio Orchestra; Bavarian Radio Chorus, Kurt Eichhorn cond. RCA ARL2-1104 two discs \$13.96.

Performance: **Excellent**
Recording: **Very good**

This is a domestic release of a German Eurodisc set I reviewed and praised in these pages in May 1973. Renewed acquaintance prompts renewed endorsement.

Iphigenie in Aulis was Gluck's first opera for the Paris stage (1774), paving the way for *Armide* and *Iphigénie en Tauride*. It was, accordingly, a French opera, whereas what we get here (and what is generally better known) is Richard Wagner's 1847 revision. It should be understood that the Wagnerian changes left few stones unturned in terms of harmony, orchestration, text, even philosophy. In short, this is *Iphigenie in Aulis* by Gluck-Wagner.

Still, it is a fine opera, full of dramatic crises and confrontations, strong arias, splendid choruses, and intense recitatives. The cast of this recording is distinguished, and all singers perform at their best level. In the case of the tenor, the best is not really very impressive, but even he deserves praise for making the heroic sounds one associates with Achilles. Chorus and orchestra are excellent. The recording favors the voices—all singers sound bigger than they come across in the theater—but orchestra and chorus are not slighted. The set is highly recommended. G.J.

HAKIM: *Visions of Ishwara* (see WILSON)

HOLST: *The Wandering Scholar, Op. 50*. Michael Rippon (bass), Louis; Norma Burrowes (soprano), Alison; Michael Langdon (bass), (Continued on page 118)

JVC has changed the face of high fidelity. Inside and out.



Despite the advancements in high fidelity, stereo receivers have become pretty much look-alikes and perform-alikes. Until now.

When you look at JVC's new S300 receiver you can see what we mean. JVC has eliminated conventional rotary controls completely and replaced them with direct-action push-buttons for all program sources, and precision slide controls for volume, balance and tone selection. This clean, uncluttered styling achieves a distinctively professional look. But it's more than a look. The S300 is quality all the way—sound, performance, engineering.

Even though the S300 is the middle model in JVC's new series of five professional receivers, it shares much of the advanced circuitry and many of the features of the top professional—the S600.

For instance, unheard of in a

moderate priced receiver, the S300 offers individual tone adjustment over the entire musical range with JVC's exclusive five-zone control SEA graphic equalizer system. And where conventional receivers include center-channel and signal strength meters only, the S300 also gives instantaneous power output readings with twin wattage meters. Recording fans will especially appreciate the dual tape monitor recording/dubbing feature.

The JVC S300 has a power handling capability of 50 watts per channel, minimum continuous power into 8 ohms, from 20 to 20,000 Hz, with no more than 0.3% total harmonic distortion.

Thanks to an FM tuner section with a dual-gate MOS FET and 3-gang tuning capacitor, plus phase lock loop IC and quadrature detector circuitry,

stations come in cleanly and effortlessly with incredibly low distortion and extraordinary channel separation. And you can select stations precisely with the unique gyro-bias tuning knob.

Call toll-free 800-221-7502 for the name of your nearest JVC dealer. Then visit him and see the professional JVC S300. You'll recognize it instantly. It's the one face that stands out in the crowd.

JVC America, Inc., 58-75 Queens Midtown Expressway, Maspeth, N.Y. 11378 (212) 476-8300

Approximate retail value of the S300 is \$400.

JVC

CIRCLE NO. 27 ON READER SERVICE CARD

“...such a breathtaking lilt that it brings tears to my eyes...”



“... the Real Slow Drag that serves as the finale is, simply, a masterpiece”

At Last, Scott Joplin's "Treemonisha"

TREEMONISHA was Scott Joplin's second opera—the first, alas, is lost—and the obsession of his final years. She was a love-child, and the circumstances surrounding her birth are obscure. From the time of Joplin's arrival in New York in 1907 until his death ten years later he never ceased to promote the opera; he had no success. Scott Joplin was a famous man in 1907, but no one then, or for two-thirds of a century after, was going to take seriously a grand opera by a black composer of ragtime!

The score was eventually published at Joplin's own expense, probably preserving it from the fate of its predecessor, and there was a single reading of the music in Harlem in 1915, also financed by the composer. Exit *Treemonisha*—until the Joplin revival of the late 1960's, when word filtered out about a legendary, unproduceable opera. Why unproduceable? Because, from the point of view of 1968, a story about Black Mammy and the Pickaninnies Down on the Old Plantation seemed quite absolutely unplayable even if written by a black genius. Nevertheless, the work was published in 1971 by Vera Brodsky Lawrence in her famous complete Joplin edition, and in 1972 a production (orchestrated by William Bolcom, one of the key figures in the then-burgeoning Joplin revival) was mounted at Morehouse College in Atlanta and later at Wolftrap Farm near Washington, D.C.

In 1975, a new version was presented by the Houston Grand Opera employing some heavy guns: Gunther Schuller to orchestrate and conduct, Frank Corsaro as stage director,

Louis Johnson as choreographer, and Vera Lawrence as artistic supervisor. This production then moved east to the Kennedy Center and, after being delayed by a musicians' strike, reached the Palace Theater on Broadway where it played to very respectable audiences. And now the original-cast recording has been released in its entirety by—that's right—Deutsche Grammophon. Nothing like a little Bicentennial for celebrating American culture, I always say.

Ironically, this recording appears almost simultaneously with another European recording of the other opera in this genre: George Gershwin's *Porgy and Bess* on London. The similarities between the works are notable. Whereas Gershwin used DuBose Heyward's account of the life of Gullah blacks in Charleston, Joplin drew on his own childhood in Texarkana, Texas. Zodzetrick, the "Goof-er dus' man," peddler of conjuring tricks and superstitious mumbo-jumbo, is a perfect anticipation of Sportin' Life. Unfortunately Joplin did not unbend enough to give him anything really outstanding to sing—anything comparable, that is, to Sportin' Life's *It Ain't Necessarily So*. And Joplin's heroine (unlike Bess, she is a paragon of all virtues) does not go along willingly and has to be kidnapped. Sex is kept out completely. Joplin's high moral aim was to create a parable of the progress of black people through education, whereas Gershwin and his collaborators adhered much more closely to the tell-it-like-it-is *verismo* school. Both works are true operas and both suffered for it: *Treemonisha* by total neglect,

Porgy by being cut back to the dimensions of a musical. It is remarkable therefore that both should have reappeared within a few days of each other, in their original operatic guise, under expert "classical" care and guidance, and on high-classical European labels! The recordings even have a singer in common: Willard White, who sings the part of Porgy in *Porgy and Bess*, plays the role of Ned in *Treemonisha*.

IN spite of a generally good reception in the various places it played, *Treemonisha* in this production was not universally admired, and, frankly, I share some of the doubts. For many people, the weakness of the libretto, the cultured quality of the operatic voices, and, most of all, the sentimental *seriousness* of much of the music were a surprise and, possibly a disappointment. These objections certainly have some merit. The libretto, by Joplin, is a real problem. Himself a cultured man, the composer labored mightily to produce some painfully quaint memories of the black jargon of his youth, adapting them, quite awkwardly, to an uncongenial grammatical and rhyming scheme. It all sounds rather like the libretto to *The Bohemian Girl* translated into Serbo-Croatian and then back into English again. The moral-uplift theme is saved from rampant Mammyism (in this show it's the women who know where it's at) only by the heroic intervention of Women's Lib; thus do the 1970's rescue the 1900's. Still, it's *only* a libretto; there have been worse.

The most important thing to realize about

Treemonisha is that it is not a ragtime opera at all. It is a *grand* opera with only three rag-type numbers (all of them terrific, it must be said) plus a good barbershop quartet, an effective revival hymn, and some very operatic and classical writing. These include three instrumental numbers (one of them a Dance of the Wild Bears!), three lengthy arias basically in the sentimental style of nineteenth-century parlor music, a little conjuring music, some extraordinary choruses, and more diminished-seventh chords than you can shake a conjuring stick at. Except for those arias (which do go on and on), most of it is an attractive period piece. The choral writing is especially remarkable, but, of course, the ragtime numbers are still the highlights. *Aunt Dinah Has Blowed de Horn* is on the same subject as the old barbershop tune—the dinner horn that signals the end of a day's hard work. Joplin's version has such a breathtaking lilt that it actually brings tears to my eyes. The ring dance *We're Going Around* is a Joplin winner, and the *Real Slow Drag* that serves as the finale is, simply, a masterpiece (interestingly, Joplin's libretto gives complete performance instructions for this; the steps include dragging, marching, sliding, prancing, dancing, hopping, and skipping as well as my favorite, "the dude walk"). For that music, everything—but *everything*—is forgiven.

THE performance problems were, I think, more serious in the theater than on the recording. I did not like Frank Corsaro's direction or Franco Colavecchia's sets and costumes very much; they seemed pseudo-childlike, campy, and even patronizing. (Louis Johnson's choreography, however, was a delight.) More to the point in a record review is the fact that Gunther Schuller's arrangements and musical direction are excellent. Schuller has orchestrated the work using the *Red Back Book* and a turn-of-the-century theater-orchestra style as models, and he has managed the blend to perfection. As for the operatic quality of the singing, the problem is essentially the same as with *Porgy*; this is operatic music written for trained voices, and, until a more suitable contemporary English theater style is developed, it is bound to be sung operatically. In fact, with the partial exception of Betty Allen (who, alas, has developed vocal problems), most of these singers manage to keep a nice balance between that old cultural Italianate sound and the simpler requirements suggested by the subject, the language, and the musical materials.

The other aspects of the recording—Schuller's direction, the orchestral playing, the recording, and the production (including libretto and articles on various aspects of the work and production by the key people involved)—are all exemplary. It took only seventy years and a German record company to get this far-from-perfect black American opera onto records; now let's have the good sense to accept it and enjoy it for what it is. —Eric Saltzman

JOPLIN: *Treemonisha*. Carmen Balthrop (soprano), *Treemonisha*; Betty Allen (mezzo-soprano), *Monisha*; Curtis Rayam (tenor), *Remus*; Willard White (bass), *Ned*; others; chorus and orchestra, Gunther Schuller cond. DEUTSCHE GRAMMOPHON 2707 083 two discs \$15.96.

The Lightweight Headphone for the Heavyweight Sound

BEYER DT440

THE NEW HIGH VELOCITY
HEADPHONE DESIGNED
FOR TODAY'S SOUND.
WITH LOW DISTORTION
AND LIGHTWEIGHT
WEARABILITY!

BEYER DYNAMIC

THE PROFESSIONALS IN SOUND.

155 Michael Dr., Syosset, N.Y. 11791
Telephone: (516) 364-1900

CIRCLE NO. 56 ON READER SERVICE CARD

Everything you need to know
about CB is in this new book
by Radio Shack!

Reg. ~~1.25~~

25¢

WITH THIS AD*



Special Introductory Offer!

Our just-published 116-page CB pocket-size book is *available now* at Radio Shack stores at a "give-away" price of just 25¢, prior to its listing in our catalog at \$1.25. If you're into CB 2-way radio or getting in (as who isn't!) you'll want this book to avoid costly errors.

Edited by the folks who started our famous Realistic® CB line in 1959, it's authoritative and very easy to read. 9 chapters. Over 100 pictures. Written for laymen. *None sent by mail.* *Get your copy for 25¢ by bringing this ad to any nearby participating Radio Shack store or dealer TODAY!

- Contents Include**
- Types of radios • Antenna facts
 - Methods of installing equipment
 - How it works • Distance • Rules
 - CB slang • Glossary • More!

Radio Shack® LEADING THE WAY IN
CB SINCE 1959

A TANDY COMPANY

714

CIRCLE NO. 36 ON READER SERVICE CARD

Father Philippe; Robert Tear (tenor), Pierre; English Chamber Orchestra, Stuart Bedford cond. **The Perfect Fool, Op. 39; Egdon Heath, Op. 47.** London Symphony Orchestra, André Previn cond. ANGEL S-37152 \$6.98.

Performance: **The opera's delectable**
Recording: **Generally good**

Except for the *Planets* and the *St. Paul* and band suites, the Gustav Holst repertoire has always been somewhat precarious in its availability on discs, as witness the unfortunate deletion of the Boult London disc of *The Hymn of Jesus, Egdon Heath, and The Perfect Fool*. Thus it gives me no great pleasure to say that these Previn readings of *Egdon Heath* and *The Perfect Fool* do not replace the excellent 1962 Boult performances. Boult's

Perfect Fool music has far more vitality and color and is by no means inferior in sound to the Angel effort.

It is the terse Chaucerian chamber opera *The Wandering Scholar* that makes this disc worth the investment. The one-act opera is based on a vignette from Helen Waddell's goliard tales *The Wandering Scholars*, and Holst's handling of music, dialogue, and action over a twenty-five-minute time span makes for delectable listening and a good chuckle. The work is a wonderful mix of the populist and the intellectual. Holst did not live to make certain revisions he had in mind for the score; daughter Imogen Holst and Benjamin Britten took over this task prior to the music's publication in 1968, nearly thirty-five years after the composer's death.

Stuart Bedford conducts a suitably taut and spirited performance, and the four singers play their roles to the hilt, especially Michael Langdon as the lecherous priest and Robert Tear as the appealingly opportunistic wandering scholar, who today would be a hitchhiker! If you don't mind a rather resonant ambience, the sound is excellent, although for a chamber opera of this type I would have preferred a more intimate microphone focus. D.H.

HOWELLS: *Three Chamber Works* (see Going on Record, page 44)

MAHLER: *Das Lied von der Erde; Five Rückert Songs.* Christa Ludwig (alto); René Kollo (tenor in *Das Lied*); Berlin Philharmonic Orchestra. Herbert von Karajan cond. DEUTSCHE GRAMMOPHON 2707 082 two discs \$15.96.

Performance: **Impressive**
Recording: **Outstanding**

Toscanini is said to have begun a rehearsal of the *Eroica* by remarking: "To some people this music is Napoleon, to some it is Bismarck; to me, it is *Allegro con brio!*" Few conductors, I'm sure, would think of approaching Mahler's music as simply "*Allegro con brio*" (Toscanini of course chose not to approach it at all); it is either a mystical commitment or it is nothing. Karajan seems to have made the commitment. His beautiful performance of *Das Lied von der Erde*, in which meticulous respect for the score is accompanied by an astonishing sympathy for the spirit of the work, offers more than a few moments of exaltation. The Berlin Philharmonic's claim to being the finest orchestra on earth is tellingly registered here, and the sound is outstandingly good (though I fail to hear the mandolin at the end of the *Abschied*).

Ludwig and Kollo have recorded *Das Lied* together before (with Bernstein), and each has made an earlier recording of the work with other associates. Both are at least as impressive as before, but there's the rub: to my ear, both are more "impressive" than truly moving. Kollo's *Von der Jugend* tends to be (as before) rather static, and such lines as "*Der Vogel singt und lacht*" (in the fifth song) and "*Dunkel ist das Leben, ist der Tod*" (in the first) seem to be thrown away, compared with what Julius Patzak, Ernst Haefliger, and Fritz Wunderlich made of them. Similarly, while Ludwig's singing is on a more exalted level, her "*Mild aufzutrocknen*" (at the end of the second song) and the final "*Ewig*" are without the heart-piercing magic Kathleen Ferrier, Maureen Forrester, and Nan Merriman brought to these moments—and which Ludwig herself, I think, came nearer to capturing in her recording with Klemperer (Angel SB-3704). On side four of the Angel set Ludwig and Klemperer do three of the five Rückert songs and two from *Des Knaben Wunderhorn*. The full Rückert sequence in the new DG set is probably more attractive, and it is magnificently done.

Beautiful as the new set is, I would recommend it only to those who place orchestral and sonic considerations uppermost, or to Mahler fanatics who want a very expensive supplementary version to alternate with the two or three others they may already own. R.F.

MEKEEL: *Planh; Corridors of Dream* (see SEEGER)



The Stax Legend for \$85!

Stax, the company that invented electrostatic headphones, has perfected the electret principal.

Sound articulation—spatial depth—frequency response—all exceed competitive headphones costing twice as much as the SR-44.

The Stax legend is yours for \$85 as the SR-44.

At franchised American Audioport dealers.

Ⓒ American Audioport 909 University • Columbia, Mo. 65201

MOERAN: *Symphony in G Minor; Cello Concerto* (see *Going on Record*, page 44)

MONTEVERDI: *Madrigali Guerrieri et Amorousi*. Prague Madrigal Singers, Miroslav Venhoda cond. SUPRAPHON 1 12 1306 \$6.98.

Performance: **Passionate**
Recording: **Fine**

MONTEVERDI: *Duets and Trios from the Ninth Book of Madrigals*. Accademia Monteverdiana, Dennis Stevens cond. MUSICAL HERITAGE SOCIETY MHS 3104 \$2.95 (plus 95¢ handling charge from the Musical Heritage Society Inc., 1991 Broadway, New York, N.Y. 10023).

Performance: **Arched**
Recording: **Good**

Miroslav Venhoda is to be congratulated for his daring concept of the madrigals from Monteverdi's Eighth Book. Employing a modest ensemble of instruments and singers, he has deployed his forces in such a way that Monteverdi's vivid portrayals of war and love turn into an exciting cycle resembling a unified cantata with contrasts of mood and judicious use of solo, instrumental, and ensemble music. Although the singers are not fine soloists, they sing with passionately full voices rather than the frustrating restraint so frequently applied to "old" music. They also have a fine rhythmic drive that sets off the war-like passages, and their voices meld into velvety sonorities in their portrayals of love. Certainly one may quibble at a few interpretive points here and there and take issue now and then with some musicological problems, but this performance overrides objections in its sheer drive and exuberance. It is all the more a pity, then, that for music which draws its strength from bold word portrayal we are given the texts in Italian without an English translation.

Turning to the duets and trios from Monteverdi's posthumous Ninth Book of Madrigals, we find ourselves in a completely different world. On first hearing, these rarely heard works seem to lack the bold and vivid strokes of word-painting found in the Eighth Book, but a closer familiarity with them reveals a subtlety of musical language and maturity that only a master like Monteverdi could achieve. Although the performances are good and enable us to hear the music, they are rather on the lifeless side, and the singers seem to be struggling with the supple coloratura that Monteverdi demands. Nonetheless, the record is well worth acquiring because of the beauty of the music. The album credits Denis Stevens as editor, director, translator, and annotator, but only three of the at least five singers are casually mentioned. It would also be nice to know who realized the excellent harpsichord accompaniments and who executed them so well. S.L.

MUSGRAVE: *Chamber Concerto No. 2* (see SEEGER)

NIELSEN: *Wind Quintet, Op. 43; Three Pieces from "The Mother"; Serenata in Vano; At the Bier of a Young Artist—Andante Lamentoso*. West Jutland Chamber Ensemble. DEUTSCHE GRAMMOPHON 2530 515 \$7.98.

Performance: **Pungent**
Recording: **Good**

Beginning with a 1936 Danish recording that included some of the players for which the

work was written, Carl Nielsen's now classic Wind Quintet has been recorded well over a dozen times here and abroad. If the West Jutland players are not as refined in their approach to the music as, say, the Philadelphia or Lark woodwind quintets, they do come forth with what impresses me as the most pungent and zestful treatment of the work that I have heard thus far. The first movement, which tends to sound a bit bland in most performances, is especially good here, as is the hymn-tune-variations last movement, in which Nielsen illustrates with sometimes comic results the characteristics of the players for whom he was composing the music in 1922.

The delectable *Serenata in Vano* (for clarinet, bassoon, horn, cello, and double-bass),

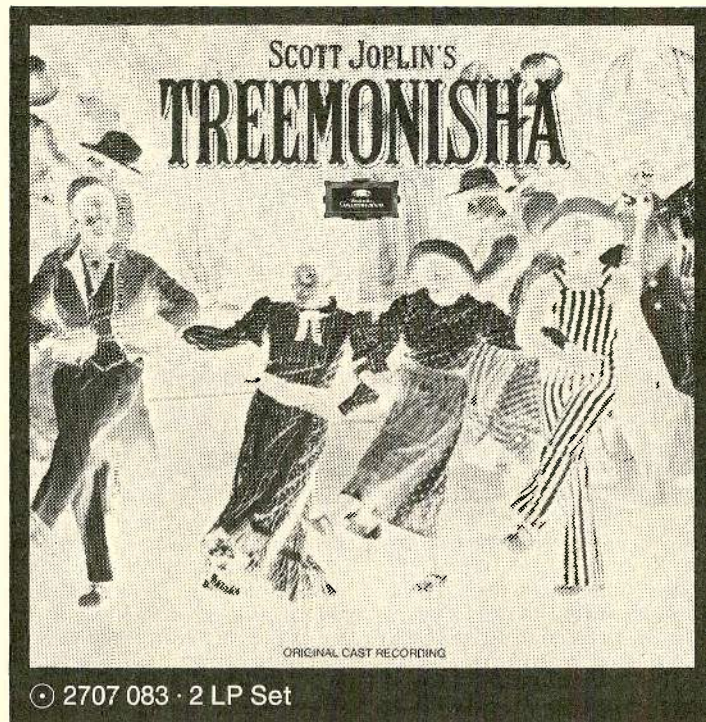
by turns idyllic and humorous, has had relatively few recordings, so this new one is most welcome. Of less consequence are the three unpretentious pieces, for flute and harp, solo flute, and flute and viola, extracted from incidental music for a patriotic play. The brief threnody for strings, *At the Bier of a Young Artist*, is endowed with a quietly piercing poignance that in my opinion would have been enhanced by somewhat more resonant recorded sound—though the *sec* sonics of the Deutsche Grammophon disc are just fine for the woodwinds. D.H.

ORNSTEIN: *Three Moods*. William Westney (piano). *Quintette for Piano and Strings, Op. 92*. Daniel Stepner, Michael Strauss (violins); Peter John Sacco (viola); Thomas Mansbach-



The Sound of Music

TREEMONISHA



Available at last
The original cast recording

Marketed in the USA by Polydor Incorporated, 810 Seventh Avenue, New York, N.Y. 10019

er (cello); William Westney (piano). COMPOSERS RECORDINGS, INC. CRI SD 339 \$6.95.

Performance: **Excellent**
Recording: **Very good**

Leo Ornstein, born in Russia in 1892, was a major figure in American musical life after World War I. He was an exceptional pianist as well as the composer of some far-out music, notably for the piano. Along with Cowell and Antheil, Ornstein was one of the early wild men of modern music, specializing in beating the devil out of a concert grand. His experimental period was early, and by the late Twenties he had settled down in Philadelphia to a life as a teacher and a considerably less outrageous and largely forgotten composer. Remarkably enough, Ornstein, who had an

find Walter Piston in his seventies expanding his musical vocabulary in the Symphony No. 8 beyond a comfortable neo-Classical idiom to encompass even dodecaphonic procedure. I have played through this recording twice so far, and I have the distinct feeling that I am eventually going to rank Piston's No. 8 as his finest symphonic achievement. The first movement is brooding, challenging, and tough-fibered, recalling for me something of the quality of the slow movement of Vaughan Williams' F Minor Symphony. The ultrachromatic textures are still much in evidence throughout the middle movement, but in a much more luminescent sonic atmosphere. Only the last movement is fast—a kind of relentless *moto perpetuo* with liberal harp and percussion spicing and brilliant woodwind

classical music for children. It is possible for the very young to pass the "wriggle test" through the two acts of *The Nutcracker*, perhaps, but the music Prokofiev wrote for *Cinderella* seems a safer bet for adult ears than for undeveloped ones. In any case, there are few moments in any ballet score to equal in magic that "Midnight Apotheosis" when our heroine rushes from the ballroom to the sounds of striking clocks and disappears into the fairy-tale night to some of the loveliest music ever composed.

As for Britten's *Young Person's Guide to the Orchestra*, it might not have turned all the young of England into instant converts of the concert hall, but it has served both Jerome Robbins and Frederick Ashton as the inspiration for delightful ballets and been recorded more times than perhaps strictly necessary (both with and without tutelary narrators), and it seems to hold up well through innumerable hearings. But even under the composer's own knowing direction the piece has never sparkled more than it does in this album—an ideal one for the recording debut of Toronto-born, thirty-two-year-old conductor Andrew Davis. Mr. Davis coaxes perfectly spectacular performances of both works out of the LSO, which has never sounded more alive, and the recorded sound is ravishing. Too good for kids!
P.K.

RACHMANINOFF: *Symphony No. 3, in A Minor, Op. 44; Vocalise, Op. 34, No. 14.* National Philharmonic Orchestra, Leopold Stokowski cond. DESMAR DSM-1007 \$6.98.

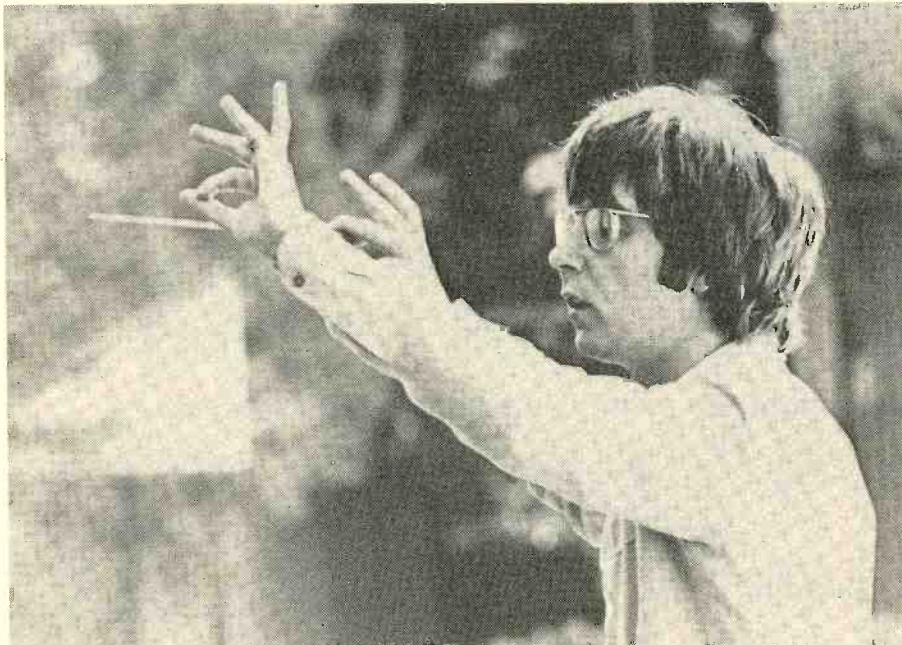
Performance: **Brilliant**
Recording: **Likewise**

Stokowski at ninety-three continues to astonish us all. Thirty-eight and a half years after conducting the world premiere of the Rachmaninoff Third Symphony with the Philadelphia Orchestra, he has chosen to pick up the score again (for the first time since then) and to turn out a cracklingly brilliant performance for the new but clearly up-and-coming Desmar label.

Where Eugene Ormandy (who also had the benefit of studying the score with the composer) has stressed the music's dramatic urgency and lush harmonic and instrumental texture, Stokowski adopts a cooler, more linear and rhythmically incisive approach. True, Stokowski's tempos and dynamics appear to hew less closely than Ormandy's to those of Rachmaninoff's own 1939 recording with the Philadelphians, but this does not, in my opinion, invalidate Stokowski's conception of the work; he offers us a different perspective.

To begin with, Stokowski chooses a more deliberate basic tempo for the main body of the first movement and includes the exposition repeat, omitted by both Ormandy and Rachmaninoff. His exquisitely graded phrasing of the first movement's lyrical theme does much to relieve its somewhat banal quality. In the splendid slow movement, Stokowski takes the outer sections at a decidedly faster tempo, and the scherzo section comes off brilliantly, with just a tiny ensemble smudge here and there. But it is in the finale, with its wild contrasts between satanic fugal textures and languorous nostalgic episodes, that Stokowski scores most tellingly, for the ferocious momentum and iron control of his reading do much to create a sense of unity and coherence lacking in all the other recorded performances I have heard.

(Continued on page 122)



Columbia Masterworks

ANDREW DAVIS: a brilliant recording debut with Prokofiev and Britten

Ampico exclusive recording contract (presumably for piano rolls), never made a commercial disc recording of his own music; these are the first recordings of his works to be available. That they were recorded at all is the result of an award from the National Institute of Arts and Letters and a grant from the Rothko Foundation.

The *Three Moods* dates from 1914 and was often played by Ornstein but was apparently only written down thirty years later. It well represents the highly dissonant and imaginative early Ornstein. One can understand the furor; the music is biting, and it has real energy and character in this excellent performance by William Westney. The *Quintette*, written in 1927, was an Elizabeth Sprague Coolidge commission and is a much more traditional work in a sort of Eastern European romantic/modern style very reminiscent of Ernest Bloch.
E.S.

PISTON: *Symphony No. 7; Symphony No. 8.* Louisville Orchestra, Jorge Mester cond. LOUISVILLE FIRST EDITIONS LS 746 \$5.95.

Performance: **Adequate to excellent**
Recording: **Good**

"Old men ought to be explorers . . ." goes the line in T.S. Eliot's *East Coker*, and so we

writing. As if to let us know where his heart really lies, Piston drives the music hard down the home stretch into a resounding G Major chord for the full orchestra.

The Seventh Symphony, which won a 1961 Pulitzer Prize (the composer's second), hews more closely to the familiar Piston line and is distinguished by a superb slow movement as centerpiece. The finale is a delightful piece of Pisonian exuberance with lots of witty percussive interplay. The Louisville Orchestra performance is outstanding in No. 8 and, though it is somewhat tentative in the opening movement of No. 7, hits a good stride in the slow movement and achieves genuine brilliance in the finale.
D.H.

RECORDING OF SPECIAL MERIT

PROKOFIEV: *Cinderella (excerpts from the ballet).* **BRITTEN: *Young Person's Guide to the Orchestra.*** London Symphony Orchestra, Andrew Davis cond. COLUMBIA M 33891 \$6.98.

Performance: **Spectacular**
Recording: **Superb**

Ogden Nash was of the opinion that catnaps are too good for cats, and I have long harbored a similar suspicion on the subject of

PART TWO: THE END OF THE DOUBLE STANDARD.

In the frequency range where you find most music, our least expensive speaker offers virtually the same flat frequency response and freedom from distortion as our most expensive speaker.

Until recently, you could consider the selection of speakers an act of faith.

Because of the lack of industry standards and the resulting confusion in the marketplace, the speaker buyer had to depend almost totally on personal taste and subjective evaluation.

But no longer.

At Yamaha, before we designed a new line of speakers that would equal the revolutionary standard of our electronic components, we first defined our goal:

High accuracy across the musical spectrum. One of the few objective criteria for rating speaker performance.

Then we proceeded to make all Yamaha speakers to a single revolutionary standard of accuracy:

A frequency response curve that varies by no more than ± 3 dB from 100 Hz to 15,000 Hz. With typically no more than 1% harmonic distortion.

But since the frequency range of all our speakers extends well below 100 Hz to beyond 15,000 Hz, why do we even bother mentioning this figure?

Because, with the exception of the very deepest rumblings of a pipe organ, all music is produced within this range. In fact, few if any commercially available stereo pressings have frequencies below 100 Hz and above 15,000 Hz.

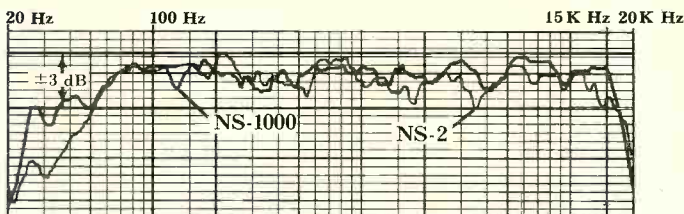
Yamaha's success in achieving a single standard of accuracy in all our speakers is confirmed in the chart above.

Unlike the frequency response curves of other speaker manufacturers which indicate unnatural booming in the bass, added sparkie in the treble, and extreme loudness level variations of as much as 10 dB, Yamaha's frequency response curves show a relatively straight line, which indicates uncolored, natural sound.

While many manufacturers offer accurate reproduction only in their top-end speakers, Yamaha brings you an extremely high degree of accuracy in all models throughout the line.

Yamaha's musical heritage.

Yet, in spite of Yamaha's objectivity in design, the perception of sound remains subjective.



While many manufacturers offer accurate reproduction only in their top-end speakers, Yamaha brings you an extremely high degree of accuracy in all models throughout the line. The above curves, comparing the NS-1000 with the NS-2, were recorded under the following conditions:
1. **Equipment used** — Bruell & Kjaer (B&K) 4133 microphone, 1022 oscillator, 2113 spectrometer, and 2305 recorder.
2. **Input** — A "pink" noise source was used with an input level of 9 watts (significantly higher, more rigorous, and more closely corresponding to actual home listening levels than the commonly used industry standard of 1 watt).
3. **Measurement** — Each loudspeaker was placed in a "free field" (off the floor and no closer than 5 feet to any wall boundary in an average size listening room). A multiplicity of curves were taken at various points in the listening room and averaged, to produce the total energy curves pictured.

That's why Yamaha speakers aren't designed to meet objective standards alone, but to meet a higher standard: the ears of the people who make Yamaha's world-famous musical instruments.

Since 1887, Yamaha has been making some of the finest musical instruments in the world. Pianos, organs, woodwinds, guitars, and brass.

With our musical instruments, we've defined the standard in the production of fine sound. And now, with our entire line of speakers and electronic components, we've utilized not only our studio engineers, but also our musical instrument designers to define the standard of music reproduction.

It's called Natural Sound. And it's totally unique to Yamaha.

Five different speakers, built to one standard.

Yamaha offers five different speaker models, ranging in price from \$1,350 a pair down to \$200 a pair.

At the top, the revolution-

ary beryllium dome NS-1000 Series, offering the ultimate in state-of-the-art performance. Following the NS-1000 are our other three-way types: the NS-690, NS-670, and NS-3. Our least expensive, but still highly accurate, is the two-way NS-2.

Since each is built to the same high quality standard, you're probably wondering what those extra dollars are buying.

It's very simple.

To satisfy the most demanding audiophiles, those extra dollars buy extended response at the frequency extremes. Higher sound levels with equal or lower distortion. More power handling capacity. More tone controls to contour the tonal balance of the speakers with the characteristics of the room.

More specifically, on our model NS-670 and above, Yamaha offers die-cast speaker frame baskets to eliminate potential resonance. Luxurious wood enclosures (even rare ebony wood!).

Tangential-edge

suspension for midrange and tweeter domes to provide smooth response. Acoustic equalizers on tweeters to flatten frequency response and enhance dispersion. Diagonally edge-wound voice coils for greater diaphragm control and increased transient response. Plus thick felt lining inside the cabinetry to isolate rear sound waves for distortion-free bass response.

But regardless of how much you pay, every Yamaha speaker is built to the same essential construction criteria and tonal accuracy.

Proven acoustic suspension design. Dome drivers for better high frequency dispersion. Carefully matched crossover networks. And heavily reinforced, extremely rigid enclosures.

The End of the Double Standard.

The single standard of performance found throughout the entire line of Yamaha speakers is a demonstration of product integrity that no other manufacturer can claim.

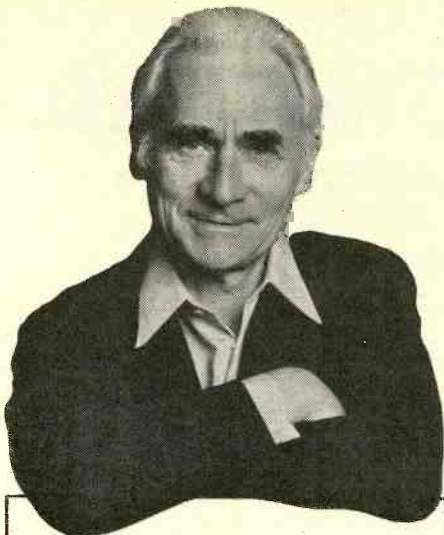
But in the final analysis, only your ears can be the judge.

That's why we invite you to visit your Yamaha audio dealer soon. His knowledgeable salesmen and extensive demonstration facilities can save you time and trouble in selecting the speaker that's right for your budget. And right for your ears.



 **YAMAHA**

International Corp., P.O. Box 6600, Buena Park, Calif. 90620



Angel's Martinon Ravel Series

The Complete Orchestral Music Available On 5 Separate Albums

In the French repertoire, conductor Jean Martinon is most brilliantly distinguished. His just issued Debussy and Saint-Saëns cycles are of championship caliber. Confirmation, indeed, that he is "one of the really important conductors of our time." **Stereo Review**

These Ravel recordings are equally revealing. On five separate Angel LPs, he again creates new standards of performance. And again, all are superlatively and spectacularly captured in EMI/Angel's highly praised, compatible SQ/Stereo sound.















LP, Cartridge and Cassette

S-37151

CIRCLE NO. 7 ON READER SERVICE CARD

Engineer Bob Auger has come up with a recorded sound in which the woodwind section of crack London players is rather much in the foreground, the percussion and brass brilliantly highlighted, and the violins and string basses somewhat "off mike" by comparison. Unquestionably, details of inner texture are illuminated in Auger's production style, but I am inclined to question whether this is really in tune with the basic aesthetic of the music. Whether one agrees with the balances or not, the sonics of the Desmar disc are crystal clear and the dynamic range ample. If you want a new and often revealing view of a sometimes controversial work, here it is, with a loving rendition of the *Vocalise* as a filler. **D.H.**

RAUTEVAARA: *Pelimannit* (see SIBELIUS)

RAVEL: *Daphnis et Chloé*. Paris Opera Chorus; Orchestre de Paris, Jean Martinon cond. ANGEL □ S-37148 \$6.98, © 4XS-37148 \$7.98, © 8XS-37148 \$7.98.

Performance: **Idiomatic**
Recording: **Good**

RAVEL: *Daphnis et Chloé*. Tanglewood Festival Chorus; Boston Symphony Orchestra, Seiji Ozawa cond. DEUTSCHE GRAMMOPHON 2530 563 \$7.98.

Performance: **Stunning**
Recording: **Outstanding**

Together with RCA's recent reissue of the second of Charles Munch's two Boston recordings of *Daphnis et Chloé* in its new Gold Seal series (AGL1-1270), these two brand-new releases bring the number of current discs of the complete score to a total of nine, and these newest ones are clearly among the very best. Martinon's is powerfully and poetically shaped in the straightforwardly idiomatic manner of Monteux, and Angel has given him a generally good, bright recording, equally handsome played back in two channels or in four. Ozawa's approach, with his more brilliant orchestra at the top of its form, is more individualized—if a good deal less so than Pierre Boulez's in his recent recording—and Deutsche Grammophon's sound is in an altogether special class, utterly transparent in its revelation of the stunning performance.

Both performances, actually, are more than satisfying—the somewhat greater subtlety and excitement of Ozawa's emphasized by DG's exceptional sonics. Both, too, fine as they are, ultimately miss the sheer magic distilled by Monteux and Boulez. **R.F.**

ROSENBERG: *String Quartet No. 4* (see BARTOK)

ROUSSEL: *Songs* (see ENESCO)

RECORDING OF SPECIAL MERIT

SCHUBERT: *Lieder*. *Im Abendrot*; *Die Sterne*; *Nacht und Träume*; *Der liebliche Stern*; *Romance*, from "Rosamunde"; *Der Einsame*; *Schlummerlied*; *An Silvia*; *Das Mädchen*; *Minnelied*; *Die Liebe hat gelogen*; *Du liebst mich nicht*; *An die Laute*; *Der Blumenbrief*; *Die Männer sind méchant*; *Seligkeit*. Elly Ameling (soprano); Dalton Baldwin (piano). PHILIPS 6500 704 \$7.98.

Performance: **Excellent**
Recording: **Excellent**

A consistently pleasing singer, Elly Ameling can be unsurpassably enchanting in a congen-



Sheldon Soffer Management

ELLY AMELING

Unsurpassably enchanting Schubert lieder

ial repertoire. Such is the case in this program of sixteen Schubert songs, all intimately scaled and sensibly grouped according to their common poetic themes. The first seven are nocturnal in nature, ranging from the fervent and hymn-like *Im Abendrot* to the tender lullaby *Schlummerlied*. In a haunting sequence, *Nacht und Träume* must be singled out for its sustained mood of otherworldly serenity.

The reverse side offers nine songs commenting on amorous attitudes, moving through ardor, tenderness, uncertainty, and disillusionment, with a touch of sardonic humor in *Die Männer sind méchant*. In all, the mood is projected convincingly but without ever a trace of overstatement. The tone is sweet and pure, the musicality is unflinching, and everything the singer does is solidly supported and complemented by the outstanding Mr. Baldwin. Some of the songs are quite unfamiliar, and even the better-known ones are relatively minor Schubert, but served up in this manner they add up to a royal treat. **G.J.**

RECORDING OF SPECIAL MERIT

SCHUBERT: *Mass No. 6, in E-flat (D. 950)*. Pilar Lorengar (soprano); Betty Allen (contralto); Fritz Wunderlich, Manfred Schmidt (tenors); Josef Greindl (bass); St. Hedwig's Cathedral Choir; Berlin Philharmonic Orchestra, Erich Leinsdorf cond. SERAPHIM S-60243 \$3.98.

Performance: **Highly dramatic**
Recording: **Excellent**

SCHUBERT: *Mass No. 6, in E-flat (D. 950)*. Felicity Palmer (soprano); Helen Watts (contralto); Kenneth Bowen, Wynford Evans (tenors); Christopher Keyte (bass); Choir of St. John's College, Cambridge; Academy of St. Martin-in-the-Fields, George Guest cond. ARGO ZRG 825 \$6.98.

Performance: **Lyrical**
Recording: **Good**

It would be hard to imagine more violently contrasted treatments of Schubert's late E-flat Mass than these two. The Leinsdorf performance, issued originally by Capitol in 1962, impressed me then—and still does—as one of the finest things Leinsdorf has ever

done on records. He makes the work one of a piece with the last piano sonatas, the great C Major Symphony, and the *Schwanengesang* songs. In short, his treatment is fiercely and convincingly dramatic, and the recorded sound is most impressive in its near-Brucknerian massiveness.

The George Guest reading is at the opposite end of the interpretive spectrum—lyrical, intimate in feeling, as though scaled for a parish church rather than an immense cathedral. The recording here sounds as though great effort had to be expended in achieving proper separation and presence of the choral and orchestral bodies to meet the challenge posed by the very spacious recording locale. By and large, the Haydn Mass recordings by the same forces strike me as somewhat more successful in this respect.

In any event, this E-flat Mass is a major masterpiece in the Schubert canon, and it is good to have not one but two stereo recordings available now after the absence of this music from the Schwann catalog for some five years. *D.H.*

R. C. SEEGER: Two Movements for Chamber Orchestra. **MUSGRAVE: Chamber Concerto No. 2.** **MEKEEL: Planh; Corridors of Dream.** Boston Musica Viva, Richard Pittman cond. DELOS DEL-25405 \$6.98.

Performance: **First-rate**
Recording: **On the dull side**

The Boston Musica Viva, founded by Richard Pittman in 1969 for the performance of new music, is still one of the best groups of its kind in the country. Its recorded debut here comprises the work of three women composers. Of particular note is the music by Ruth Crawford Seeger, one of the major figures in American music between the two world wars. Ruth Crawford (her husband, Charles Seeger, was a major figure in avant-garde music and, later, in ethnomusicology; he was also, by another wife, Pete Seeger's father) followed a path that took her from avant-gardism to folk music. Her work in the folk literature was important, but lately interest has centered on her experimental music of the Twenties. The Two Movements for Chamber Orchestra, written in 1926 and possibly unperformed until 1975, are typical. They are a pair of excellent studies in sonority, most effectively performed here.

But the Seeger is far from the only item of interest here. The big surprise is Thea Musgrave's Chamber Concerto. This starts out as a regulation, well-written, dutiful piece of modern music. Suddenly who should appear but Charles Ives' Rollo. Rollo, impersonated by a viola, has all kinds of silly musical ditties to offer and wreaks a bit of havoc before the sudden calm of the ending. The piece is very well done, and it is refreshing to find such a neat homage to Ives composed by a Scottish woman composer in 1966!

Joyce Mekeel was, like Thea Musgrave, a student of Nadia Boulanger; she also studied at Yale and currently teaches at Boston University. *Planh* is a modern-style, thirteen-minute piece for solo violin, which statement by itself ought to be fair warning. *Corridors of Dream* has more appeal. It is a setting—for mezzo-soprano (Jan Curtis is the capable singer), five instruments, and a conductor who speaks and plays percussion—of a jumble of German texts and a few translations. The setting is itself a jumble of singing, speak-

(Continued on page 125)

There's music

on your records you've probably never heard before, because of compression and other compromises made by the record manufacturer (for reasons we explain in our literature).

The dbx 117 expands the listening experience to restore the gritty steel of guitar, the incisive bite of brasses and the percussive impact of drums and cymbals as you've never heard them before except in live performance. As a bonus, the 117 dramatically reduces record surface noise and tape hiss, and adds a new dimension to FM listening.

To hear all the music you paid for, take your favorite record or tape to your dbx dealer and ask him to play it through the dbx 117 dynamic range enhancer. You'll hear music you didn't know you owned.

For complete information and list of demonstrating dbx dealers, contact:

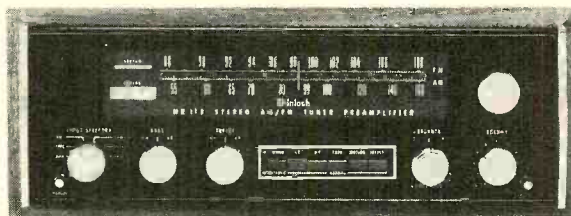


dbx dbx, Incorporated
296 Newton Street
Waltham, Massachusetts 02154

CIRCLE NO. 14 ON READER SERVICE CARD

FREE McIntosh CATALOG and FM DIRECTORY

Get all the newest and latest information on the new McIntosh Solid State equipment in the McIntosh catalog. In addition you will receive an FM station directory that covers all of North America.



MX 113

FM/FM STEREO - AM TUNER AND PREAMPLIFIER

SEND TODAY!

McIntosh Laboratory, Inc.
East Side Station P.O. Box 96
Binghamton, N.Y. 13904
Dept. SR

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____

If you are in a hurry for your catalog please send the coupon to McIntosh.

For non rush service send the Reader Service Card to the magazine.

CIRCLE NO. 29 ON READER SERVICE CARD

“the archives are bulging with creditable scores by women...”

ROBERT AND CLARA SCHUMANN:
“Are you musical too,
Mr. Schumann?”

Ladies' Day at the Turntable



GEMINI HALL Records is a new classical label launched with the stated purpose of “giving needed recognition to women composers” through the ages. For those of us brought up under the impression that the only woman composer was Cécile Chaminade, and that the only piece she ever wrote was the *Scarf Dance*, the venture would certainly seem to be a useful one. And in its first release, “Woman’s Work,” the company has already gone far to prove its premise that the archives are bulging with creditable scores by women, most of them long neglected. The two-record set furnishes works by eighteen female European composers from 1587 through the second decade of the present century.

Given the conscientious nature of the notes by Marnie Hall—who is also president of the record company and a violinist with the Vieuxtemps String Quartet which plays much of the music on these discs—it is almost inevitable that in some ways the stories of these women are more interesting than the music they composed. Here are, for example, Elisabeth Jacquet de la Guerre (referred to as *Ms. De la Guerre*), a “wonder child” in the court of Louis XIV who wrote some of the earliest French cantatas; Clara Schumann, at one time so much better known than her husband Robert that somebody once asked him, “Are you musical too?”; Francesca Caccini, whose 1625 opera, *La Liberazione di Ruggiero*, was the first to be written by a woman; Fanny Mendelssohn, the granddaughter of scholar Moses and sister of Felix; Anna Amalia, who was Princess of Prussia and once wrote the music for a royal masquerade attended by everybody at court dressed up as apes; and, not to be left out, *Ms.* (as Hall would call her) Chaminade, represented by something a mite more substantial than the *Scarf Dance* (her

Caprice Espagnole, still of the salon, but rather less sticky).

And what of the music? Is there a common denominator among these works by women? Perhaps there is, if a delicacy of texture, a precision and polish, and a certain kind of musical sensibility can be said to be feminine characteristics in this area of endeavor. At the same time, there seems to have been a general contentment to write within the established musical framework of the age, evident even in the output of so daring and adventurous a composer of her day as Germaine Tailleferre (when electronic music came in, Tailleferre, who is still alive and going on eighty-five, quietly put down her pen).

THE selections from the operas by Caccini and De la Guerre are elegant examples of sixteenth- and seventeenth-century musical craftsmanship, yet scarcely memorable. The songs by Mendelssohn’s sister are cheerful efforts and a credit to the family talent, but they don’t exactly dig deep. It’s impressive to know that Maria Theresia von Paradis found a way to set down her music despite her blindness, yet the music she did set down never breaks through the characteristic eighteenth-century conventions. Often, as in the case of Anna Amalia, the Duchess of Saxe-Weimar (two Anna Amalias are represented in the album) and in the songs of Josephine Lang and Clara Schumann, the music is handicapped by sentimental texts which are in turn drowned in the heavy seas of their nineteenth-century settings. One therefore comes with relief upon the work of Poldowski, who chose to set Verlaine and set him brilliantly; to the songs of Lili Boulanger, written in a bitter-sweet idiom somewhat redolent of Chausson’s; to the exquisite serenade from a string quartet by

Louise Hérítte-Viardot; to the vigorous Gallic beauty of Tailleferre’s *Quatuor* of 1918.

With a couple of the original orchestrations touched up by composer Charles Morrow, the assembled forces offer a good deal of variety and scope in the course of their presentation. There aren’t any landmark performances here—as there are few watershed compositions in the evolution of music itself on this program—but it all sounds well rehearsed and handsomely set down.

Meanwhile, another company, Avant Records, has been busy putting together a single disc, called “Première,” devoted to piano works by women. Once more we hear compositions by De la Guerre (a charming suite originally for the harpsichord) and Lili Boulanger (a couple of pastel-pale and pretty piano pieces, not as winsomely appealing as some of her songs). The other composers and works represented are Maria Szymanowska, whose nocturnes and études stand in style somewhere between those of Field and Chopin, a rather sturdy if somewhat bleak sonata by the Polish composer Grazyna Bacewicz, and an *Alleluja in Form of Toccata* of considerable tonal allure from the prolific pen of Louise Talma. The playing, by Nancy Fierro, who is described as having taken up “the cause of women’s music,” sounds rather too businesslike at times for the largely romantic material, but it is always energetic and stubbornly engrossing. But what of Mrs. Beach?

—Paul Kresh

WOMAN’S WORK. F. Caccini: *La Liberazione di Ruggiero dall’Isola d’Alcina* (selections). De la Guerre: *Air*, from *Jacob et Rachel*; *Recitative and Air*, from *Susanne*. Anna Amalia, Princess of Prussia: *Three Regimental Marches*. Anna Amalia, Duchess of Saxe-Weimar: *Erwin und Elmire* (selection). Paradis: *Sicilienne*. Farrenc: *Scherzo*, from *Quintet*. Mendelssohn-Hensel: *Italien*; *Bergeslust*. Malibran: *Le Reveil d’un Beau Jour*. Lang: *Sie Liebt Mich*. C. Schumann: *Das ist ein Tag*; *Liebst du um Schoenheit*; *Impromptu*. Viardot-García: *Dites, Que Faut-il Faire?*; *Fluestern athemscheues Lauschen*; *Die Sterne*. Hérítte-Viardot: *Serenada*, from *Quartet*. Bronsart: *Lied and Duet*, from *Jery und Bätely*. André: *Allegro molto vivace*, from *Quintet in E Major*. Chaminade: *Caprice Espagnole*. Poldowski: *Impression Fausse*. L. Boulanger: *Clairières dans le Ciel* (selections); *Nocturne*. Tailleferre: *Quatuor*. Berenice Branson (soprano); Mertine Johns (mezzo-soprano); Michael May (piano and harpsichord); Vieuxtemps String Quartet; Roger Rundle (piano); Yvonne Cable (cello); Thomas Theis (bass). GEMINI HALL RAP 1010 two discs \$10 (from The Bookers, 200 West 51st Street, New York, N.Y. 10019).

PREMIÈRE: Recorded Performances of Keyboard Works by Women. Talma: *Alleluja in Form of Toccata*. De la Guerre: *Suite in D Minor*. Szymanowska: *Étude in F Major*; *Étude in C Major*; *Étude in E Major*; *Nocturne in B-flat Major*. L. Boulanger: *Cortège*; *D’un Vieux Jardin*. Bacewicz: *Sonata No. 2 for Piano*. Nancy Fierro (piano). AVANT AV-1012 \$6.98.

ing, and playing in all sorts of manners ranging from a Noh version of *Pierrot Lunaire* accompanied by whispering into a flute, to a marching song accompanied by the mezzo whispering to herself, to a curious sing-song ending. I'm not sure what it all adds up to, but I liked it. It is excellently performed (everything on the record is) and adequately if not particularly brilliantly recorded. E. S.

SEGERSTAM: Divertimento (see SIBELIUS)

SIBELIUS: Suite Mignonne, Op. 98; Canzonetta, Op. 62a; Rakastava, Op. 14. RAUTA-VAARA: Pelimannit, Op. 1. SEGERSTAM: Divertimento. Helsinki Chamber Orchestra, Leif Segerstam cond. BIS LP-19 \$7.98.

Performance: **Warmhearted**
Recording: **Good**

A statement in the liner tells us this record was "produced in co-operation with the Foundation for Promotion of Finnish Music." It is an interesting assortment—little-known Sibelius and virtually *unknown* contemporary material. *Rakastava* is the only work on the disc that is available elsewhere at present, the *Canzonetta* has not been around since the two versions on 78's were retired, and none of the other three titles appears to have been recorded before. Sibelius composed his three-movement *Suite Mignonne* in 1921; it is a slight work, but it has some of the flavor of his best theater music and is noteworthy for being the only Sibelius composition to include a polka (with a delightful flute duet) as its centerpiece. The *Canzonetta*, written ten years earlier for the revised version of Arvid Järnefelt's *Kuolema* (for which Sibelius had already written his *Valse Triste* in 1903), is an exquisite and expressive piece; Stravinsky was moved to arrange it for horns, clarinets, harp, and double bass, but Sibelius' original setting for strings seems ideal in the warmhearted performance by the polished Helsinki ensemble.

This version of Rautavaara's *Pelimannit* ("Fiddlers") is his 1972 arrangement for strings of a miniature five-movement suite he composed for piano twenty years earlier, at the age of twenty-four: folk dances from East Bothnia and fragments of Bach are used with great skill and imagination to conjure up these enchanting peasant scenes, each flashing by in a minute or so but leaving a solid impression. Segerstam was active as a composer long before he became known as a conductor at the Met; Heather Harper and Walter Susskind have recorded his song settings of Whitman verses. His *Divertimento* is an arrangement of material originally composed for string trio and quartet before he was twenty. There is perhaps more skill than imagination apparent in these three Bartók- and Blomdahl-flavored movements, but the music is easy to listen to and certainly authoritatively performed. The sound is rich and generally well balanced; the pressing is flawless. R. F.

STOCKHAUSEN: Stop; Ylem. London Sinfonietta, Karlheinz Stockhausen cond. DEUTSCHE GRAMMOPHON 2530 442 \$7.98.

STOCKHAUSEN: Short Wave; Set Sail for the Sun. The Negative Band. FINNADAR SR 9009 \$6.98.

Performance: **Far-out**
Recording: **Excellent**

All of these works are based on a kind of improvisation in which the performers receive

In any hi-fi system, the one component most likely to wear out is the phono cartridge. Or more specifically, the phono stylus.

While you're relaxing to your favorite music, the stylus is riding miles of groove, withstanding accelerations that would black out an astronaut.

Which is why the Shibata stylus, used on the top models of Audio-Technica



cartridges, is so important. Its shape reduces tracking pressure at any given tracking force. Even with a setting as high as 2 grams it will outlast an elliptical stylus tracking at a *fraction* of a gram. Which means the good sound of Audio-Technica lasts longer. And so do your records.

Audio-Technica with a Shibata stylus: lower cost per record/mile and better sound in the bargain!

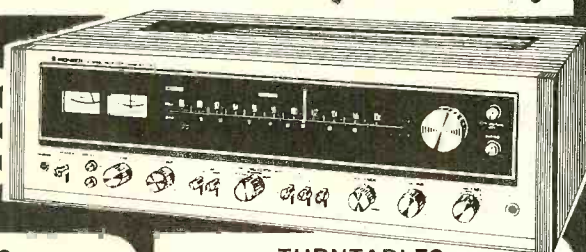
audio-technica 
INNOVATION / PRECISION / INTEGRITY

When you shop for better sound ask about good mileage!

AUDIO-TECHNICA U.S., INC., Dept. 56F, 33 Shiawassee Ave., Fairlawn, Ohio 44313
Available in Canada from Superior Electronics, Inc.

Great PIONEER Values!

SX-737 AM/FM Stereo Receiver
List \$399.95
S.R. Price **\$259**



RECEIVERS

Model No.	List	S.R. Price
SX-1250	\$900.00	\$594.00
SX-1050	700.00	478.00
SX-950	600.00	410.00
SX-636	350.00	239.00
SX-535	300.00	205.00
SX-434	250.00	164.00
OX-949A Quad	750.00	495.00
SPEC 1 Pre-Amp	500.00	330.00
SPEC 2 Amp	900.00	594.00
SA-9900 Inf. Amp.	750.00	495.00
SA-8500 Inf. Amp.	500.00	330.00

TURNTABLES

Model No.	List	S.R. Price
PL-71	\$300.00	\$198.00
PL-55X	250.00	165.00
PL-510	200.00	137.00
PL-117D	175.00	119.00
PL-115D	125.00	91.00
PL-112D	100.00	74.00

CASSETTE DECKS

Model No.	List	S.R. Price
CT-F9191	\$450.00	\$307.00
CT-F7171	370.00	253.00
CT-F6161	300.00	205.00
CT-5151	270.00	185.00
CT-4141A	250.00	164.00
CT-2121	200.00	150.00



Order Now By Mail From..

SOUND REPRODUCTION

460 CENTRAL AVE., EAST ORANGE, N.J. 07018

Send For Catalog On Pioneer And 40 Other Brands

(201) 673-0600

CIRCLE NO. 47 ON READER SERVICE CARD

instructions of one kind or another which limit their action, prescribe their interaction, or otherwise control their activity. *Ylem* is for musicians playing with their eyes closed and presumably in telepathic communication with one another. Described as a representation of the theory of the oscillating universe, it starts with a self-induced big bang that disperses the musicians throughout the hall and it ends in an even bigger bang which (in the live version but reproduced sonically here) explodes them right out of the hall. The film version ought to outdo *Earthquake*. *Stop* is based on a somewhat less (pardon) earthshaking idea, being built around interruptions of noise and fragments of melody.

Like the London Sinfonietta, the Negative Band is an ensemble devoted to new music. Unlike the somewhat more traditionally constituted (and named) Sinfonietta, this group has a very American make-up: percussion, alto saxophone, keyboards, and synthesizers. This instrumentation is the argument put forth for a new recording of *Short Wave* (which, as *Kurzwellen*, appears in two different versions in a DG set). Since AM and FM radios are used as musical instruments (with predictably random results) and since the saxophone and synthesizer replace the viola and electronium used by the composer in his versions (though these replacements are, apparently, within the range of specified possibility), the sound of the work is indeed quite different. Whether even a dedicated Stockhausen fancier will want *three* versions, however various, is another question. If you want one only, you will have to take this one; the Germans offer double or nothing. The Negative Band's ver-

sion is probably a little more grateful than its competitors, and the rather mystical and (for once, thank God) unaggressive *Set Sail for the Sun* is a bonus. *E.S.*

STRAVINSKY: *Le Sacre du Printemps*. London Philharmonic Orchestra, Erich Leinsdorf cond. LONDON SPC 21114 \$6.98.

Performance: **Clean and crisp**
Recording: **Emphasizes detail**

Erich Leinsdorf might seem an unlikely choice to record Stravinsky's epochal *Le Sacre du Printemps*, but, even if he doesn't sweep Solti, Boulez, and Bernstein off the boards, he has produced a remarkably crisp and clean account of this classic, and his version of the celebrated Sacrificial Dance comes off as well as any I have ever heard.

The opportunity to use London's Phase-4 recording techniques on *Le Sacre* is probably the reason this record was made, but the technical results, to my ears, are somewhat variable. The general stereo perspective is wide in lateral disposition and rather flat in depth perspective. The inner woodwind parts, notably the bass clarinet, are sharply highlighted, as is the percussion section, particularly the rasping *guiro*, which I have never before heard so much in evidence. Some elements in the recording production are highly effective—for example, the "ping-pong" trumpet-horn dialogue in the Procession of the Sage. Other elements are either exaggerated in terms of their place in the general texture—the aforementioned bass clarinet and *guiro*—or covered, as toward the end of the Glorification of the Chosen One, where the pounding timpani to-

tally obliterate the string pizzicato accents. The violins generally are weak in relation to the sonic texture as a whole. I wouldn't call this a downright bad recording—it does have its good points—but there are moments where the production verges on the perverse. *D.H.*

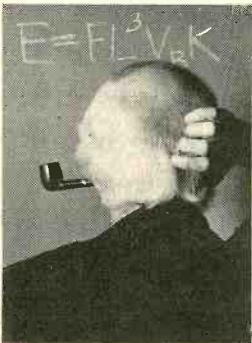
RECORDING OF SPECIAL MERIT

WAGNER: *Die Meistersinger von Nurnberg*. Karl Ridderbusch (bass-baritone), Hans Sachs; Hans Sotin (bass), Veit Pogner; Hannelore Bode (soprano), Eva; Klaus Hirte (baritone), Beckmesser; Gerd Nienstedt (bass), Kothner; Frieder Stricker (tenor), David; Anna Reynolds (mezzo-soprano), Magdalene; Jean Cox (tenor), Walther von Stolzing; Bernd Weikl (baritone), Night Watchman; others. Chorus and Orchestra of the Bayreuth Festival, Silvio Varviso cond. PHILIPS 6747 167 five discs \$39.90.

Performance: **Good**
Recording: **Good, but . . .**

This authentic Bayreuth Festival performance, recorded in 1974, offers a strikingly different *Meistersinger* from that recorded under Karajan in Dresden and released in 1972. Not only was the latter a studio product, it was a Karajan-led studio product—nothing was left to chance, and every aspect of the production was refined to the point where, in the opinion of some critics, spontaneity was lost. In contrast, the Bayreuth Festival performance conveys the feeling of an actual live performance, bearing the pulsating earmarks of action but also the distractions that go with the benefits. The intrusions from the well-disci-

If a vented, equalized speaker system is so great, how come everyone isn't building them?



Frankly, everyone doesn't know how. It took E-V 2 years to apply the Thiele methodology to achieve a sixth-order Butterworth Class 1 response.

Today, we're the only people with a vented, equalized speaker system using these elaborate concepts.

So the Interface:A comes to you with a great deal of thought behind it, but with one single goal in mind. Measurably accurate reproduction.

The Interface:A delivers more accuracy than classic acoustic suspension systems twice our size costing lots more.

Our Interface:A gives you $\frac{1}{3}$ octave more bass (3dB down at 32 Hz) with remarkably low distortion (around 1% at 32 Hz) at



full power; increased efficiency 2-3dB; and uniform total acoustic power output at all frequencies.

Can you hear a difference? You bet. Which is all we ask you to do at a nearby Electro-Voice dealer.

Interface:A[™]

Electro-Voice[®]

a gulton company

616 Cecil St., Dept. 574 F, Buchanan, Mich. 49107

CIRCLE NO. 18 ON READER SERVICE CARD



SILVIO VARVISO

Unfazed by Wagner's monumentalism

plined Bayreuth audience (coughing, shuffling, act-end applause) are few, but the prompter is at times too audible. More important, the recorded sound cannot compare with the achievement of the Karajan set. The Philips engineers have undoubtedly done the best they could with the complex stage setup, but the tonal perspectives are variable and the finales of the first two acts are not defined with sufficient clarity.

Spontaneity and naturalness, however, are

very desirable qualities. This is a good performance, and, though it is hard to single out elements of true excellence, the totality is somehow more impressive than the sum of the component parts. It is clear to me that Silvio Varviso (an insufficiently appreciated conductor, in my view) must be credited with the pleasing end result. Seemingly unfazed by the monumentalism of Wagner's most human music drama, Varviso guides it with a light hand, favoring sensible tempos and light textures and allowing the drama to develop convincingly through the actions of believable *people*. Thus wisely guided, Karl Ridderbusch brings Hans Sachs to life in warmly human accents in which only a stronger sense of poetry is missing. The part lies a bit high for him, yet he manages the vocal requirements with good sonority, utter naturalness in the conversational writing, and proper strength in the monologues. (Ridderbusch is the first Sachs in my listening experience who reveals a North German origin in his pronunciation of the "sp" and "st" sounds.)

The Walther, American-born Jean Cox, sounds effortful above the staff, but he sings with musicianly phrasing and pure intonation throughout; his voice lacks sensuous beauty but not the required strength and flexibility. Both he and soprano Hannelore Bode create believable and involved personalities, but vocally the soprano is less satisfying: shrillness and tonal unsteadiness mar her characterization. Frieder Strecker uses his very light voice gracefully to create a youthful and intelligently drawn David. As Magdalene, Anna Reynolds makes a rather modest but positive impression.

I like Klaus Hirte's Beckmesser: not a caricature but an earnest pedant who takes his wooing seriously, he is nastily competitive and a bad loser. Hans Sotin offers a Pogner of dignity and smooth, firmly focused sound, but Gerd Nienstedt makes little of Kothner's colorful possibilities. The assorted master singers are adequate, and Bernd Weikl is a Night Watchman in the best Bayreuth tradition.

Comparing the set against its only stereo competitor, the values are closely matched. The orchestral magic of Karajan—spontaneous or otherwise—is hard to ignore. I prefer his Eva (Helen Donath) but not his Sachs (Theo Adam), while the two Walthers in their different ways come out about even. If you have not yet acquired a stereo *Meistersinger*, I suggest you wait yet a while longer because another version under Solti is promised by London. *G.J.*

WILSON: *Akwan*. **ANDERSON:** *Squares*. **HAKIM:** *Visions of Ishwara*. Richard Bunger (piano, electronic piano); Baltimore Symphony Orchestra. Paul Freeman cond. COLUMBIA M 33434 \$6.98.

Performance: **Good**
Recording: **Excellent**

Side one of this disc, which is Volume 8 in Columbia's Black Composers series, consists entirely of an exceptional performance of Olly Wilson's *Akwan* for piano, electric piano, amplified strings, and orchestra. The work, commissioned and performed by Richard Bunger, is in a big, gutsy expressionist style—full of color, contrast, and a tremendous immediacy. *(Continued overleaf)*

CREATIVE PLAYBACK.

The amount of creative participation in playback has always been rather limited. The theory went something like this: If you wanted it louder, you could always turn it up. Anything beyond that was labeled as tampering.

But times have changed. Listeners have become more sophisticated. And MXR Innovations has just introduced the stereo, ten octave-band equalizer.

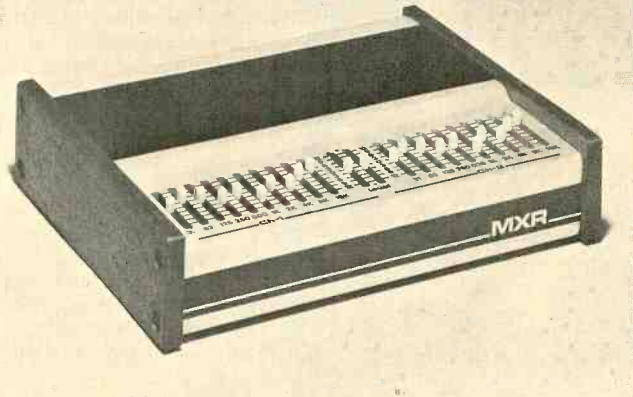
A gliding touch of a slide control effortlessly tailors your playback to suit many variables. Give the music more "mood." Adjust for speaker coloration or room acoustics. Emphasize a particular instrumentation in a passage. Compensate for poorly engineered or damaged recordings. You can finally be creative in what you hear.

The process is simple. Each channel is divided up into ten single octave frequency bands. Each band is capable of being boosted or cut by 12 dB. Tailoring frequency response is as easy as moving a slide control up or down.

Add a tape deck and you've multiplied your capabilities—because now you can *record* creatively, as well. And the price allows for creative budgeting: \$199.95. If you don't see it on your dealer's shelf, ask for it; or write and we'll send you a dealer list.

MXR
Innovations

277 North Goodman Street Rochester, New York 14607





The New Basic Repertoire

STEREO REVIEW again presents the annual revision of the Basic Repertoire. In pamphlet form, it includes 1976 disc and tape recommendations for 175 standard musical works. For your copy, send 25¢ in coin, plus a stamped, self-addressed No. 10 envelope (9½ x 4½ in.), to Esther Maldonado, STEREO REVIEW, 1 Park Avenue, New York, N.Y. 10016.

PLUG IN



TO QUALITY HI FI EQUIPMENT
AT DISCOUNT PRICES!

IT'S EASY AT THESE PRICES! OUR HIGH
VOLUME BUYING POWER ALLOWS US
TO PASS THE SAVINGS ON TO YOU.
SEND FOR OUR FREE CATALOG:

Name _____
Address _____
City _____
State _____ Zip _____

AUDIO CATALOG

"OUR NAME TELLS THE STORY"
SR-5

STEREO DISCOUNTERS

7A AYLESBURY RD. □ TIMONIUM, MD. 21093
(301) 252-6880

CIRCLE NO 52 ON READER SERVICE CARD

Talib Rasul Hakim, formerly known as Stephen Chambers, is a composer who began his career in the atmosphere of progressive jazz and the avant-garde. The *Visions of Ishwara*, written in 1970, is his first orchestral work and a strong attempt to find a new voice. From its effective alto-flute/bass-drum opening to its climax and return, it maintains a static, mystical quality that is striking because it is achieved in a personal way and with a considerable economy of means. It is not a fully realized work, but it is on the way to something important and distinctive.

Squares, by Thomas Jefferson Anderson, Jr., is abstract atonal music in a less personally defined style. All three of these works are extremely effective here in what sound like excellent performances and recordings. E.S.

WORDSWORTH: Piano Sonata (see Going on Record, page 44)

COLLECTIONS

THE ART OF COURTLY LOVE: Volume I—Guillaume de Machaut and His Age (see Best of the Month, page 77)

CLASSIC FAVORITES FOR STRINGS. Albinoni: Adagio in G Minor for Strings and Organ. Handel: Solomon: Entrance of the Queen of Sheba. Pachelbel: Canon in D Major. Borodin: Nocturne, from String Quartet No. 2, in D Major. Britten: Simple Symphony. English Chamber Orchestra, Johannes Somary cond. VANGUARD SRV 344 SD \$3.98.

Performance: **Rich**
Recording: **Excellent**

Some of the loveliest passages ever written for strings can be heard in this astutely assembled program which shows off the English Chamber Orchestra at its glossy best. What more sure-fire opening could there be than the supposed Albinoni fragment "discovered" by Remo Giazotto in the Dresden State Library following World War II, which he scored so exquisitely for violins, viola, and organ? The Handel *Sinfonia* that follows, the Pachelbel Canon, the popular Nocturne from the Borodin String Quartet No. 2, all sustain the mood of sweet melody and singing sound until it is almost too much to bear. Then, just in time, the mood switches to the witty one of the young Benjamin Britten, who drew on music he wrote in his childhood to put together his irresistible and justly popular Simple Symphony for strings, with its "Boisterous Bourrée," "Playful Pizzicato," "Sentimental Saraband," and "Frolicsome Finale." If it is

possible for playing by a string orchestra to sound *too* glorious, that is about the only complaint conceivably to be registered. Mr. Somary *might* have tautened matters a bit here and there to counteract the general richness of the fare, and José García's solo violin *might* have benefited by just a jot of that celebrated English restraint. But, otherwise, Vanguard certainly has put a high-class bargain on the counter in this one. P.K.

PAUL ESSWOOD: Countertenor Recital. J. C. Bach: Ach, dass ich Wassers genug hätte. Buxtehude: Jubilate Domino. Bernhard: Was betrübst du dich, meine Seele. Ziani: Alma Redemptoris Mater. Telemann: Ach Herr, strafe mich nicht. Paul Esswood (countertenor); Concentus Musicus Wien, Nikolaus Harnoncourt cond. TELEFUNKEN 6.41929 \$6.98.

Performance: **Devout**
Recording: **Excellent**

Paul Esswood is widely known for his fine ensemble and occasional solo work in recordings by the Concentus Musicus of Vienna. Here, still working with that group, he has finally been given a record for himself. In this group of mostly German religious works, he provides us the opportunity to judge him as a solo artist in his own right.

Esswood's voice is of that rich contralto type that only a countertenor can produce. It is best displayed in sustained work, which abounds on this disc, but such passages are apt to go out of focus and become a bit yelpy. Nonetheless, he is a fine musician who commands excellent diction and a sensitive understanding of phrasing. His voice is perfect for this music, and it is rewarding to hear the rich timbres produced by the combination of his voice with old instruments.

The repertoire here is subdued, with a deliberately pietistic air about it. The performances are appropriate, and, like all recordings by the Concentus Musicus, projection and drama are studiously avoided. However beautiful and unworldly the results may be, one wonders if the Baroque musician did not occasionally let loose and belt out a passage just for the joy of it. Religious music certainly has a mystical side, but it also has many moments of exultation, and there are none of those moments in this collection. S.L.

BIDÚ SAYÃO: Recital (see The Opera File, page 48)

MARTIAL SINGER: Opus 70: A Recital of French Songs. Tiersot: Chants de la Vieille France. Lully: Alceste: Air de Caron. Fauré:

ENGLISH CHAMBER ORCHESTRA: can string playing sound too glorious?



Photo by Reg Wilson

Poème d'un Jour; Nocturne; L'Horizon Chimérique. Poulenc: Sérénade; L'Anguille; "C"; La Belle Jeunesse; Priez pour Paix. Martial Singher (baritone); Alden Gilchrist (harp-sichord and piano). 1750 ARCH 1754 \$6.98 (from 1750 Arch Records, Box 9444, Berkeley, Calif. 94709).

Performance: **Stylish**
Recording: **Excellent**

The title "Opus 70" refers to Martial Singher's return to recording at age seventy after an absence of many years. He has not been inactive, though: long a very successful teacher, he now heads the vocal department of the Music Academy of the West in Santa Barbara, California.

Even at the height of his distinguished career, Mr. Singher was not noted for sumptuous tone or virtuosic vocal feats but for exceptional versatility and special mastery of the French repertoire. Except for the unavoidable limitations at both extremes of his range, he has preserved his vocal equipment remarkably well. While the repertoire chosen for the present recital is highly specialized, it displays the artist's strength and may still be regarded as a model of taste, clarity, and musicianship. The exquisite Fauré and Poulenc songs are certainly welcome in any case. The disc is tastefully packaged, well annotated by Charles C. Cushing, and has been recorded in clear and realistic sonics. *G.J.*

SOVIET ARMY CHORUS AND BAND: Celebration. Sacred War; Nightingales; Vasya-Vasilyok; In the Bryansk Forest; Rostov-Town; Ballad About a Soldier; The Guardsmen in Berlin; Evening at the Pier; Soviet Army Song. Soviet Army Chorus and Band, Boris Alexandrov cond. COLUMBIA/MELODIYA M33592 \$6.98.

Performance: **Resounding**
Recording: **Excellent**

Music by World War II veterans of the Soviet Army dominates this vigorous concert by the Soviet Army Chorus and Band, a program put together to mark the thirtieth anniversary of the end of that war. Those surging choruses and lusty baritone solos we've come to associate with Soviet choral music are well in evidence here, better recorded than ever before, pulse-stirring and at times overpowering in sheer energy and enthusiasm. The proceedings open with a piece by the late Alexander V. Alexandrov called *Sacred War*, a thundering, patriotic military item if ever there was one. It was Alexandrov who founded this group in 1928 and built it into the remarkable ensemble it is, and his son Boris is its present conductor. He, too, is a composer, represented on the record by *The Guardsmen in Berlin*, which contains the ominously truculent line, "Peace is not signed on a piece of paper but with a guardsman's bayonet. . . ." To wind things up, there's another and apparently highly popular patriotic rouser commemorating the Battle of Stalingrad: "Valiant and legendary/In battle having tasted the joy of victory,/To you, admired army,/Our Motherland sends a greeting in song." That sort of thing. In between numbers extolling the bravery of Russian troops and the vastness of Russian forests, however, come a few welcome interludes on gentler topics—notably Solov'yev-Sedoi's *Nightingales* and the same composer's *Evening at the Pier*, just to prove that the pianissimos of the Soviet Army Chorus can be as spectacular as its fortissimos. *P.K.*

Build your own speakers and save up to 50%

When you buy a Speakerlab kit, you get about twice as much for your money as you do with ready-built models. Suddenly you can afford exponential horn/drivers, 12" butyl woofers, sturdy 1 1/4" walnut veneer enclosures, high-grade acoustic fiberglass, L-pads and all the other goodies you only find on speakers costing \$500-\$1000 each.

For a free, 32-page catalog and speaker-building manual, send in the coupon below. Please print clearly because it's actually your return mailing label in disguise.

Speakerlab®
MAIL TO Dept. SR6, 5500 35th N.E., Seattle, 98105

SR6 NAME _____ ADDRESS _____ CITY _____ STATE _____ ZIP _____

PLANNING TO MOVE?

Let us know 8 weeks in advance so that you won't miss a single issue of **STEREO REVIEW**. Attach old label where indicated and print new address in space provided. Also include your mailing label whenever you write concerning your subscription. It helps us serve you promptly.

Write to: P.O. Box 2771, Boulder, CO 80302, giving the following information:

Change address only Extend my subscription

ENTER NEW SUBSCRIPTION

1 year \$7.98 Allow 30-60 days for delivery. Payment enclosed (1 extra BONUS issue) Bill me later

AFFIX OLD LABEL →
If you have no label handy, print OLD address here.
Name _____ please print
Address _____
City _____
State _____ Zip _____
NEW ADDRESS HERE _____ 0283

Name _____ please print
Address _____
City _____
State _____ Zip _____
Add'l postage per year: Add \$1 for Canada; \$2 for all other countries outside the U.S.



Realistic STA-225 Stereo Receiver. About \$400.

Realistic? Pioneer? Marantz?

Which one has Auto-Magic tuning?

Of the top three hi-fi receiver brands, only Realistic* makes perfect tuning an instant electronic reality on the FM band. We call our creation Auto-Magic* because "like magic" is how it works. Now you only need a tuning meter to show relative station strength, not for fishing around for optimum reception.

Realistic is also the audio brand that helped knock out the \$20 to \$30 extra charge for wood receiver cabinets. By not charging extra! Now you see why Radio Shack sold over 3,000,000 Realistic equipments in 1975 and merits your next "good music" purchase.

Radio Shack® A Tandy Company
Great sound since 1923

Over 4600 Stores - Dealers — USA, Canada, England, Australia, Belgium, Germany, Holland, France, Japan
*Registered Trademark.

CIRCLE NO. 40 ON READER SERVICE CARD

STEREO REVIEW MARKET PLACE

NON-DISPLAY CLASSIFIED: COMMERCIAL RATES: For firms or individuals offering commercial products or services, \$1.90 per word (including name and address). Minimum order \$28.50. Payment must accompany copy except when ads are placed by accredited advertising agencies. Frequency discount: 5% for 6 months; 10% for 12 months paid in advance.

READER RATE: For individuals with a personal item to buy or sell, \$.20 per word (including name and address). No minimum! Payment must accompany copy. **DISPLAY CLASSIFIED:** One inch by one column, \$240.00. Two inches by one column, \$480.00. Column width 2-1/4". Advertiser to supply film positives. Please write or phone for frequency rates.


GENERAL INFORMATION: First word in all ads set in caps at no extra charge. All copy subject to publisher's approval. All advertisers using Post Office Boxes in their addresses MUST supply publisher with permanent address and telephone number before ad can be run. Ads are not acknowledged. They will appear in the first issue to go to press after closing date. Closing Date: 5th of the 2nd month preceding cover date (for example, March issue closes January 5th). Send order and remittance to: Classified Advertising, STEREO REVIEW, One Park Avenue, New York, New York 10016, Attn. Hal Cymes.

EQUIPMENT

WRITE for quotation on any Hi-Fi components: Sound Reproduction Inc., 460 Central Avenue, East Orange, N.J. 07018, 201-673-0600.

NO fair trade laws in D.C. Write for discount prices on your choice of components. District Sound, Inc., 2316 R.I. Ave., N.E., Wash., D.C. 20018. (202) 832-1900.

Listen to TELEVISION IN STEREO



The **TE-200 TELEDAPTER** EASILY CONNECTS TO ANY TV & STEREO SYSTEM. Using our coupling and matrix circuit, teledapter takes a low impedance output from the television and delivers two HIGH IMPEDANCE CHANNELS OF SIMULATED STEREO to drive any amplifier. Frequency response is maintained so you can hear the trinkle of bells or booming bass sounds as it happens on TV. With service warranty and hookup instructions \$16.95 ppd. Guaranteed to make your TV 100% more enjoyable.

OUR NEW **TE-300 VHF-UHF HI-FI TUNER** IS NOW AVAILABLE. A complete and self contained 110 volt tuner, VHF/UHF antenna connections. Recording and amp output jacks. Five year service warranty \$149.95 ppd. From our factory.

SEND CHECK MASTER CHARGE NO. for TE-200 TE-300 or \$5.00 for C.O.D. TO: RHODES NATIONAL CO. DEPT SR P.O. BOX 817 HENDERSONVILLE, TENNESSEE 37075

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

© 1980 Rhodes National Co.

DIAMOND NEEDLES and STEREO CARTRIDGES at DISCOUNT PRICES for SHURE, PICKERING, STANTON, EMPIRE, GRADO and ADC. Send for free catalog. LYLE CARTRIDGES, Dept. S, Box 69, Kensington Station, Brooklyn, New York 11218.

ABSOLUTELY THE LOWEST PRICES on name brand stereo components. Send for our free catalog to BOSTON AUDIO EXCHANGE, 1589 Commonwealth Avenue, Brighton, Massachusetts 02135.

DON'T PAY the high mail order prices. Thieves Warehouse of Tampa, 1531 South Dale Mabry, Tampa, Florida 33609.

CANADIAN Discount Catalog. Name brand stereo and 4-channel gear. Etc-3, 521 5th Ave, NYC 10017.

DON'T PAY the high mail order prices. Thieves Warehouse of Sarasota, 6564 Gateway Avenue, Sarasota, Florida 33581.

BUILD YOUR OWN SPEAKERS AND SAVE UP TO 50%



You can assemble your own high quality, multi-element stereo speakers in a few hours and save up to half the cost of comparable speakers. Send for our free 32-page catalogue of speaker kits, raw speakers and accessories.

SPEAKERLAB
Dept. SR-7, 5500-35th N.E., Seattle, Washington 98105

DON'T PAY the high mail order prices. Thieves Warehouse of Ft. Walton Beach, 652-D Beal Parkway, N.W., Ft. Walton Beach, Florida 32548.

CROSSOVERS—Custom designed; fully tested; guaranteed quality. Free Brochure. Write: Crossovers, Box 458, Placentia, CA 92670.

LOWEST PRICES on many brands of stereo components — 4 day delivery, write for same day quotes. University Stereo Cooperative, 57 E. Ridgewood Avenue, Ridgewood, N.J. 07450.

DON'T PAY the high mail order prices. Thieves Warehouse of Mobile, 1770 Bellline Highway, Mobile, Alabama 36609.

STEREO NEEDLES and CARTRIDGES—ADC, Audio Technica, B&O, Empire, Grado, Micro Acoustics, Pickering, Ortofon, Shure, Sonus, Stanton, Supex, BSR, G.E., RCA, Sony, Panasonic and others. For FREE CATALOG, write: NEEDLE IN A HAYSTACK, INC., P.O. Box 17436, Washington, D.C. 20041.

DON'T PAY the high mail order prices. Thieves Warehouse of Pensacola, 3731 Navy Boulevard, Pensacola, Florida 32507.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta, 3164 Peachtree Road, N.E., Atlanta, Georgia 30303.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta, 1030-3 Cherokee Road, Smyrna, Georgia 30080.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta, 4166 Buford Highway, N.E., Atlanta, Georgia 30345.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta, 4162 Jonesboro Road, Zayre Center, Forest Park, Georgia 30050.

DON'T PAY the high mail order prices. Thieves Warehouse of North Tampa, 1441 East Fletcher Avenue, Tampa, Florida 33612.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta, 2769 Lakewood Avenue, S.W., Atlanta, Georgia 30315.

DON'T PAY the high mail order prices. Thieves Warehouse of Montgomery, 3386 Norman Bridge Road, Montgomery, Alabama 36105.

DON'T PAY THE HIGH MAIL ORDER PRICES. Thieves Warehouse of St. Petersburg, 9151 Park Boulevard, North Largo, Florida.

SAVE ON SACRED COWS—Bose, SAE, JBL, Thorens, Philips. Over 50 top brands. Write for quotes. SOUTHBOUND SOUND, P.O. Box 52508, Atlanta, Georgia 30305.

DON'T PAY the high mail order prices. Thieves Warehouse of Panama City, 5220 West Highway 98, Suite D, Panama City, Florida 32401.

DON'T PAY the high mail order prices. Thieves Warehouse of Atlanta No. 6, Belvedere Plaza Shopping Center, 1203 Columbia Drive, Decatur, Georgia 30032.

DON'T PAY the high mail order prices. Thieves Warehouse of Knoxville, 5710 Kingston Pike, Knoxville, Tennessee 37919.

DON'T PAY the high mail order prices. Thieves Warehouse of Birmingham, 123 Roebuck Plaza Drive, Birmingham, Alabama 35206.

DON'T PAY the high mail order prices. Thieves Warehouse of Orlando, 1915 East Colonial Drive, Orlando, Florida 32803.

DON'T PAY the high mail order prices. Thieves Warehouse of Miami, 1756 S. W. 8th Street, No. 201, Miami, Florida 33135.

FORMULA 4 PROFESSIONAL LABORATORY TONE ARM viscous silicone pivot damping with low effective mass enables all cartridges to reach their "Linear Region" of optimum performance. Literature \$1. Airmail delivery \$89. Formula 4, 15 Heather Walk, Edgware, Middlesex HA8 9TS England.

DON'T PAY the high mail order prices. Thieves Warehouse of Jacksonville, 1239 Arlington Road & Lone Star, Jacksonville, Florida 32211.

DUBIE CD-5 RECORDING SYSTEM IS A MUST FOR THE SERIOUS HOBBYIST or anyone owning two or more recorders. Dubie CD-5 allows you to be more creative in multiple taping, mixing, dubbing and editing. Available at Olsen and Team Electronics stores for only \$59.95. Or write Dubie, Rt. 4, Box 98, Stigler, Okla. 74462.

DON'T PAY the high mail order prices. Thieves Warehouse of Jacksonville, 6078 Old St. Augustine Road, Jacksonville, Florida 32217.

DYNACO Stereo 120 walnut cabinets, with VU meters. Literature? Geometrics, Box 612, Mexico, MO 65265.

DON'T PAY the high mail order prices. Thieves Warehouse of Clearwater, 1502 A Gulf To Bay Boulevard, Clearwater, Florida 33515.

DON'T PAY the high mail order prices. Thieves Warehouse of Birmingham, 103 South 18th Street, Birmingham, Alabama 35233.

DON'T PAY the high mail order prices. Thieves Warehouse of Mobile/Village Square, 301 South Craft Highway, Mobile, Alabama 36610.

DYNAKITS, DYNASPEAKERS—lowest prices, fastest service, large inventory. Underground HiFi Sales, 324a Broadwater Road, Arnold, MD 21012. (301) 647-0919.

WIRE your own Speaker Systems and save cash. Send \$5.00 for explicit diagrams and data to: Factual Detail, 5245 Hawthorne St., Fl. 3, Phila., PA 19124.

YOUR WOOFERS REBUILT. 8", \$12.00; 10" \$16.00; 12" \$20.00; 15" \$27.00. Remit With Order for postpaid return. Remove Enclosures. SRS, 2409-1/2 Colorado, Colorado Springs, CO 80904.

AUDIO COMPONENTS at guaranteed lowest prices. Specializing in PIONEER, SANSUI, DUAL, MARANTZ, and BIC. Write for catalog on over 60 brands, including color televisions. Discount Sound, 1616 Rockville Pike, Rockville, MD 20852 (301) 770-6550.

SAVE UP TO 60% on over 100 top brand audio components from Carston Studios, New England's Audio Supermarket, one of the oldest mail order firms (Est. 1952) and certainly one of the most reliable. All orders shipped from stocked warehouse. Send for price quote and price list. Carston Studios, Old Brookfield Rd., Danbury, Conn. 06810.

FRIED LOUDSPEAKERS (formerly IMF)—including the incredible Model H. Hear from at Underground HiFi Sales, 324a Broadwater Road, Arnold, MD 21012. (301) 647-0919.

IMPROVE your phono-cartridge with Shibata-style. Send needle-holder with \$20 to Durob, Grotestr. 18, Beers, N.Br. Holland.

PROFESSIONAL HI-FI COURSE—Instructors include Len Feldman, Julian Hirsch, Larry Klein, and Larry Zide. Home study course also available. Send \$1.00 for audio primer and full information on joining Society Audio Consultants (SAC), 393 5th Ave., New York City 10016.

PERFECTIONISTS' DYNAKITS. Before Purchase You Own Yourself Our Quote. Mainline IIr, 971 Fronheiser, Johnstown, PA 15902.

FOR SALE

DON'T LET VOLTAGE TRANSIENTS ZAP YOUR HI-FI. Solid state equipment protector plugs into outlet protects any transistorized equipment. \$6.95. Kopp Electronics, 1650 William St., Buffalo, N.Y. 14206. Free Brochure.

NEW DC-300A, \$639.00. John, (201) 447-1588, 121 N. Van Dien Ave., Ridgewood, N.J. 07450.

TAPE AND RECORDERS

RENT 4-track open reel tapes—free brochure. Stereo-Parti, P.O. Box 7, Fulton, California 95401.

THRIFTIEST "Live!"—Operatic, Symphonic—Tapes & Cassettes, P.O. Box 1101, Woodhaven, New York 11421.

OPERA TAPES—Open Reel and Cassettes—Historical performances of past 40 years. Unbelievable treasures and rarities. Also LP records. Ed Rosen, 66-33 Saunders St., Rego Park, N.Y. 11374.

SCOTCH new low noise tape 10-1/2" metal 3600', 5 for \$35.00. Reels, POB 88338, Dunwoody, GA 30338.

GOLDEN AGE RADIO—Your best source for old time radio tapes. Box 25215, Portland, Oregon 97225.

OLD RADIO PROGRAMS on tape. Thousands available. Six hours, \$8.00. Catalogue, 50 cents. Nostalgic Radio, Box 29-B, Peoria, IL 61601.

1930-1962 RADIO PROGRAMS. Reels, \$1.00 hour! Cassettes, \$1.00 show! Mammoth Catalog, \$1.25. AM Treasures, Box 192J, Babylon, New York 11702.

RARE OPERA, symphonic music on open reel tape. American, European broadcasts. Live Tapes. Historic performances. Free catalogue. Underhill, Bellport, N.Y. 11713.

YESTERDAY'S RADIO PROGRAMS on Tape. Catalog \$1.00 refundable first order. Reel-Cassette. ADVENTURES, Box 4822-S, Inglewood, California 90302.

SYMPHONIC, Choral, Chamber Music, Rare Operas from European broadcasts on tape. Excellent Sound. Catalog. Kerne, 5674 Linda Rosa, LaJolla, Calif. 92037.

RADIO MEMORIES. Free Tape Catalog. Box 714, Nekoma, ND 58355.

BASF TAPE: Studio Series or CrO2 C-60 — \$33/20; C-90 — \$48/20; C-120 — \$64/20. Low Noise/High Output C-60 — \$26/20; C-90 — \$38/20; C-120 — \$50/20. Add shipping — 5 lbs/20 tapes. INTERGALACTIC ENTERPRISES, 1047 Kirts, No. 134, Troy, Michigan 48084.

OPERA CLASSICAL MUSIC Open Reels. Rare mostly live free catalogue. K. Lohan Tapes, P.O. 298, Mastic Beach, N.Y. 11951.

RECORDING tape discounts. M.A.D. Reprographics Inc., Audio Dept., Box 532, Southfield, MI 48075. (313) 559-6913.

CASSETTES / LABELS

Plain white cassette labels, Norelco cassette cleaners, famous brand cassettes. Send for open reel and cassette discount catalog. 1-9 10-99 100 100010M
 Cassette Labels .02 .015 .01 006
 Norelco Cassette Cleaner .65 .60 .55 .50 .45
 Plus Postage by Weight and Zone Minimum Order \$5.00

OPEN REEL STEREO TAPE BUYERS!

At Last! An open reel catalog, including titles, songs, etc. of 95 long play, 2-3 hour albums by American Airlines or Ampex 4-track stereo tapes. Send \$1.00 — and we will also mail you a 140-page Harrison Stereo Tape Guide — so you'll get both for \$1.00 — and this \$1.00 is refundable on your first \$10.00 purchase of open reel stereo tapes at our 20% discount.

WE'VE GOT THE "SPIRIT", THE PRICES AND THE ADDRESS TO PROVE IT

Saxitone's Bicentennial Tape Shoppe
 1776 Columbia Road, N.W., Washington, D.C. 20009



MAX STEINER'S Private Collection on tape. Reel or Cassette. Over 130 different scores represented on over 70 different tapes. Demo Tape \$3.50 postpaid. Max Steiner Music Society Library, Dept. SR, Box 1274, Kankakee, Illinois 60901.

TAPES Classical singers, conductors, instrumentalists in live performance, opera. Emphasis on Superior sound. Open Reel only. Good Sound Associates, P.O. Box 489, Planetarium Station, New York, N.Y. 10024.

RECORDS

SHOW ALBUMS, Rare, Out-of-Print LP's. 52 pg. list. 50 cents. Broadway/Hollywood Recordings, Georgetown, Conn. 06829.

PROTECT your LP's—Poly sleeves for jackets 8 cents; Round Bottom Poly Inner sleeves 7 cents; Poly lined paper 15 cents; white jackets 35 cents Postage \$1.50. Record House, Hillburn, N.Y. 10931.

THOUSANDS like new LP's and prerecorded tapes. Catalogue \$1.50. Records, Hillburn, New York 10931.

COLLECTORS' Soundtracks. Mint. List 25 cents. Jemm's, P.O. Box 157, Glenview, Ill. 60025.

SOUNDTRACK RECORD ALBUMS—Mail Auction—Free List. Whalon, 2321D Hill, Redondo Beach, Calif. 90278.

OLDIES. 45rpm. Free Catalog. Corny's Record Shop, Box 166HX, Mason, Ohio 45040.

SOUNDTRACKS/OC. personalities—Free Newsletter. RTSR, 3700 Plaza Drive, Bldg. F/211, Santa Ana, California 92704.

SOUNDTRACK collection—Lowest Prices. List: 50 cents. Box 715, Florissant, Mo. 63033.

QUADRAPHONIC RECORDS AND TAPES—World's largest selection — all labels, over 1000 titles — at discount prices! For your free illustrated quad catalog, write: SOUND CONCEPTS, 8510 N. Mt. Hawley, Dept. A-5, Peoria, Illinois 61614.

FREE! AMERICA'S LARGEST CLASSICAL CATALOG Over 2,000 New Stereo Recordings Renaissance, Medieval, Baroque, Classical, Romantic, Modern Music Highest quality! Budget Label prices! Available only by mail. MUSICAL HERITAGE SOCIETY, Box 932ST, New York, N.Y. 10023.

CASH for unwanted LP's and pre-recorded reel-to-reel tapes. TAPES, Hillburn P.O., New York 10931.

OPERA, TAPES, RECORDS, BROADCASTS, "live" performances, free list. SPECIAL MET BROADCAST HISTORY \$2.00. Hathaway, 49R Merbrook, Merion, Penna. 19066.

CLASSICAL LP rarities. Lists, S.A.S.E. Rotman, 8134 Cadwalader, Elkins Park, PA 19117.

"ECLIPSE" New jazz album by John and Jerry Case \$6.00. Priority Records, Box 4049, Ft. Worth, TX 76106.

O.P. Soundtracks, Personalities, Miscellaneous LP's. Many rarities. Free list. Richard Besant, 15 West 9th Street, New York, N.Y. 10011.

OPERAS, Operettas, Operatic Recitals, Lieder, Chansons Scandinavian, Spanish vocals, piano, etc. Many rare items from private collection. SIERLE, 155 W. 95 St., NYC 10025.

SEARCHING?LP's! DISContinued Records, 216 North Rose, Burbank, California 91505.

"DIRECT DISCO"—A new, superb quality Direct To Disk Recording featuring the latest Disco Rock Hits. \$12.00 each (\$12.72 California). Sound Advice Magazine, 225 Kearny No. 200DD, San Francisco, California 94108.

RECORD RATERS WANTED! Anyone qualifies. We ship you nationally released LP's to rate. We pay postage and handling. You pay nothing for LP's. All you pay is small membership fee. Applicants accepted "first come basis." Write: E.A.R.S., Inc., Dept. SR, 6162 Washington Circle, Milwaukee, Wisconsin 53213.

2,000 RECORDS 25 pages—Blues, Bluegrass, Cajun, Fiddle. \$1.00 gets catalog. Mailorder only. KANAWHA, P.O. Box 2378, Dayton, Ohio 45429.

TUBES

TV and Radio Tubes 36 cents. Free 48 page color catalog. Cornell, 4215-H University, San Diego, California 92105.

PLANS AND KITS

EXCLUSIVE U.S. Made, CBS Licensed SQ Decoder Kit. Full logic, wave matching and/or variable blend. SQ-1 (fixed blend), \$40.00. SQ-3 (variable blend), \$55.00. Kroobs, cases not supplied. Regulated power supply available only with the decoder, \$5.00. Postpaid U.S.A., Canada. Information available. Photolum Corporation, Dept. S-56, 118 East 28 Street, New York, N.Y. 10016.

INSTRUCTION

LEARN Electronics Organ Servicing at home. All makes, including transistors. Experimental kit—trouble-shooting. Accredited NHSC. Free Booklet. Niles Bryant School, 3631 Stockton, Dept. A, Sacramento, Calif. 95820.

Ph.DS. MASTER'S BACHELOR'S — official nonresident College Degrees easily acquired through mailorder Universities. Complete Revealing Directory — \$2. Counseling Connection, 5495 Claremont, No. BSR, Oakland, CA 94618.

MUSICAL INSTRUMENTS

UP TO 60% DISCOUNT. Name brand instruments Catalog Freeport Music, 114Q Mahan St. W. Babylon, N.Y. 11704

WANTED

GOLD, silver, platinum, mercury wanted. Highest prices paid by refinery. Oras assayed. Free circular. Mercury Terminal, Norwood, MA 02062.

HYPNOTISM

FREE Hypnotism, Self-Hypnosis, Sleep Learning Catalog! Drawer H400, Ruidoso, New Mexico 88345.

SLEEP LEARNING. Hypnotic Method. 92% effective. Details free. ASR Foundation, Box 23429 EG, Fort Lauderdale, Florida 33307.

AMAZING self-hypnosis record releases fantastic mental power. Instant results! Free trial. Write: Forum (AA5), 333 North Michigan, Chicago 60601.

RUBBER STAMPS

RUBBER address stamps. Free catalog. 45 type styles. Jackson's, Dept. K, Brownsville Rd., Mt. Vernon, Ill. 62864.

TRADES

SWAP PHOTO EQUIPMENT FOR STEREO COMPONENTS! Established dealer trades your photo equipment for top brands stereo components. What is your need? What have you to trade? We also buy for cash. Dexter's, 484 E. Main St., Ventura, CA 93001.

EMPLOYMENT INFORMATION

AUSTRALIA—NEW ZEALAND WANT YOU!!! 50,000 Jobs! Paid Transportation! Latest Information and Forms. \$1.00. Austco, Box 3623-SR, Long Beach, California 90803.

OVERSEAS JOBS—Now Hiring, 103 Countries. All Occupations, High Pay, Free Transportation, Tax Benefits. Latest Computerized Reports—\$2.00. TRANSWORLD, International Airport, Box 90802-SR, Los Angeles, California 90009.

MOVIE FILMS

16mm SOUND Features, Shorts, New, Used for Sale. Free Catalog. National Cinema, 333 W. 57th St., N.Y., N.Y. 10019.

EDUCATIONAL OPPORTUNITIES

LEARN WHILE ASLEEP. Hypnotize! Astonishing details. strange catalog free! Autosuggestion, Box 24-ZD, Olympia, Washington 98597.

BUSINESS OPPORTUNITIES

I MADE \$40,000.00 Year by mailorder! Helped others make money! Free Proof. Torrey, Box 318-NN, Ypsilanti, Michigan 48197.

MAILORDER MILLIONAIRE helps beginners make \$500 weekly. Free report reveals secret plan! Executive (1K5), 333 North Michigan, Chicago 60601.

HI-FI ENTHUSIASTS WANTED!! Earn more than just spare money in your spare time. We need campus representatives to sell name brand stereo components at discount prices in your area. High commission, no investment required. Serious inquiries only, please. Contact: Alan Weisberg, K&L Sound Services Co., 75 No. Beacon St., Watertown, Mass. 02172. (617) 787-4073.

GET RICH with Secret Law that smashes debts and brings you \$500 to \$5 Million cash. Free report! Credit 4K5, 333 North Michigan, Chicago 60601.

STEREO REPRESENTATIVES NEEDED!!! Sell 100 brands!! Lowest Possible Prices!! Krasco, 623 Campbell Ave., West Haven, Conn. 06516.

DISCOTHEQUES! INDEPTH FREELANCE REPORT. Photos, Do's & Don'ts, Books, Personality Musts, Equipment, etc. \$5.00. "Dynamic Uno," Box 8116, Corpus Christi, Texas 78412.

FREE SECRET BOOK "2042 UNIQUE. Proven Enterprises" Fabulous "Little Knowns. Work Home!" Haylings-R. Carlsbad Calif. 92008.

SERVICES

PREWRITTEN RESEARCH, \$1.00 per page. Computerized Catalog, \$1.00. Academic/Business Writing, Professional, Confidential, Information Clearinghouse, Box 4391, Washington, D. C. 20012 (202) 723-1715.

PUBLICATIONS

THE AUDIO AMATEUR—A quarterly publication for the serious audio constructor. Free prospectus. The Audio Amateur, Box 176Z, Peterborough, N.H. 03458.

PERSONALS


MAKE FRIENDS WORLDWIDE through international correspondence. Illustrated brochure free. Hermes, Berlin 11, Box 110660/ZD, Germany.

MEET your ideal mate, computerized matching, inexpensive, nationwide. Girls—no charge. TEAM, 1270 Broadway, NYC 10001.

MISCELLANEOUS

WINEMAKERS. Free illustrated catalog of yeasts, equipment. Semplex, Box 12276Q, Minneapolis, Minn. 55412.

VISITING WASHINGTON? Money-saving tips on lodging & eating; time-saving traffic tips to points of cultural interest. Send \$1.00 to Box 19508, Wash., D.C. 20036.



1976 STEREO DIRECTORY & BUYING GUIDE

All the latest information on stereo and quadraphonic systems and components for your home. A complete guide to more than 1500 products in all —with complete specifications, descriptions and prices. PLUS bonus feature articles. A must for anyone concerned with good sound.

Order your copy from Ziff-Davis Publishing Company, Consumer Service Division, 595 Broadway, New York, N.Y. 10012. Enclose \$2.25 (\$1.95 plus 30c for postage and handling). Outside U.S.A. \$3.00, postpaid.

Residents of Calif., Colo., Fla., Ill., Mich., Mo., N.Y. State, D.C. and Tex. add applicable sales tax (postage and handling charges are non-taxable).

FREE! CONSUMER SERVICE DIVISION CATALOG

Includes a wide variety of products associated with the special interests of readers of Ziff-Davis magazines—Psychology Today, Popular Photography, Stereo Review, Popular Electronics, Boating, Flying, Car and Driver, Cycle, Skiing.

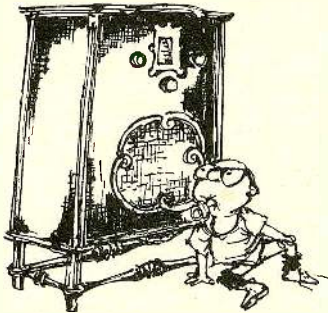
Send for your free catalog today.
 Consumer Service Div., 595 Broadway, N.Y. N.Y. 10012

Introducing the Staff . . .

Since readers from time to time understandably display a natural human curiosity about the backgrounds of the writers and editors who bend their ears each month, we are offering a series of capsule biographies and autobiographies designed to satisfy that expressed need and at the same time to circumvent some of the hazards of mere speculation. —Ed.

Contributing Editor

Charles Rodrigues



LISTENING TO 'THAT TONE'-1927½

CAN the son of a father from the Portuguese island of Madeira and a mother from the Portuguese islands of the Azores find happiness and success in a land discovered by another Portuguese, Miguel Corte Real, long before the Italian upstart, Cristoforo Columbus? Hell, yes!

Arriving 9/29/26 on this earth, I crawled over to the big console radio in the living room and was fascinated by the tone of the eight-inch speaker. I was an infant-audiophile! In grammar school I experienced my first live concert. A WPA orchestra was playing *Deep Purple* and just as the deep purple fell over the sleepy garden wall, word came that the United States Supreme Court had struck down the New Deal as unconstitutional. The WPA orchestra went silent. So I was relegated to music appreciation with a two-tube regenerative short-wave receiver. *Swan Lake* from Radio Australia, *Ein Heldenleben* from *The Big Story*, and *Somebody I'll Find You* from *Mr. Keen, Tracer of Lost Persons*.

But my first real introduction to the Romantic classics came about during World War Two. In a California naval hospital there was this Red Cross broad with a Radcliffe bearing playing *Ride of the Valkyries* on the recreation-room phonograph. Putting down my pinochle hand, I ambled over to the phonograph. (It's the only time in my life that I've ambled; never done it before or since.) I wanted to know the composition and conductor. To my relief it was not Seiji Ozawa! I was not about to forget Pearl Harbor so soon.



Which brings me to 1946. Having decided that I wanted to be a cartoonist, I took advantage of the G.I. Bill. A young lady at the Veterans Administration pointed out that I should not be hesitant about receiving government aid for my art education because I would in effect be an investment for Uncle Sam. The day would come, she said, when I would repay him in taxes.

The lady was right. I not only paid him back; he keeps reminding me to keep on paying him; he charges me interest and he's even forced me to pay cash penalties. It's like being tied up to a loan shark.

BUT what of my career in cartooning? I've appeared (as cartoonist, of course) in a few fleshly publications from time to time, and I've been drawing for *STEREO REVIEW* since its first issue in 1958. Just think, when the managing editor was still a bagboy at Gristede's supermarket, buying and playing rhythm-'n'-blues, I was doing rollicking good cartoons for ol' *STEREO REVIEW*!

Strangers often stop me on the street and ask, "Say, where do you get all your ideas?" The truth is I get my ideas from Theresa, the Audio Trade Muse. My previous Muse, Thalia, didn't know from decibels, IC's, or MOSFET front ends.

Which brings me to the present. I'm living out here in suburbia near Cape Cod and slowly assimilating into the New England Yankee milieu. I'm married to a former Portuguese girl (that is, she and me used to be, but we're Yankees now) and have two daughters, a one-eyed Beagle, and an arrogant cat. And you know, thirty-three years later I still don't have *Ride of the Valkyries* in my music library!

—Charles Rodrigues



STEREO REVIEW ADVERTISERS' INDEX MAY 1976

READER SERVICE NO.	ADVERTISER	PAGE NUMBER
	Accuphase, Division of Teac	5
2	Ace Audio Company	94
4	Acousti-Phase	91
5	ADR Audio	109
6	Ampex Corporation	81
7	Angel Records	122
8	Audio Expo	104
9	Audio Mobile	111
	Audio Technica, US, Inc.	125
10	Bang & Olufsen of America	61
	BASF Systems	21
11	BGW Systems	22
	Bose Corporation	11
12	Boish Industries Company, BIC Venturi	2
	Component Discounters	114
13	Crown International	92
14	dbx, Inc.	123
15	Discount Music Club	6
	Discwasher	91, 96, 118
	Dixie HiFidelity	109
16	Dokorder	95
50	Dual	38, 39
	Dynaco	76
18	Electro-Voice, Inc.	126
	Elpa Marketing, Thorens Division	75
21	Empire Scientific Corporation	23
19	Epicure Products	105
	ESS	103
17	Fuji Photo Film, USA	50
20	Garrard	19
	Harman Kardon	16, 17
25	Health Company	26
23	Illinois Audio	109
24	International Hi Fi Distributors	114
	J & B Scotch	88
26	Jensen Sound Lab	8
27	JVC America	115
3	Kenwood Electronics	35
22	Koss Electronics	Cover 4
	Lux Audio	73
	Marantz, Inc.	Cover 3
28	Maxell Corporation	10
29	McIntosh Laboratory	123
31	Memorex	7
	Micro-Acoustics Corporation	15
32	Motorola	45
33	MXR Innovations, Inc.	127
34	Onkyo	37
30	Phase Linear	40
41	Pickering & Company	31
	Polydor	119
36, 40	Radio Shack	117, 129
56	Revox	117
	R. J. Reynolds, Winston	49
38	RTR Industries	25
39	S.A.E.	27
37, 42	Sansui Electronics Corporation	85, 87
43	Sennheiser	51
44	Sherwood	9
45	Shure Brothers	43
46	Sony Corporation of America	12, 13
47	Sound Reproduction	125
48	Soundcraftsmen	47
	Speakerlab	129
49	Stereo Corporation of America	94
51	Stereo Warehouse	104
52	Stereo Wholesalers	128
	Superscope	52, 53
53	Tandberg of America	24
	TDK Electronics	93
	Teac Corporation	33, 101
54	Technics by Panasonic	106
55	Top Discount Audio	109
50	Uher of America	84
	United Audio	38, 39
1	U.S. Pioneer	Cover 2, 1
57	Yamaha International Corporation	121

"The Marantz 1070 integrated amp is close to optimum in performance and the low price makes it an even better value."



The 1070 Stereo Amp

"As far as good basic features are concerned, it's comparable to units costing twice as much."

"It maintains all the features of the Marantz 1060, plus it adds a number of features of its own. For instance, it now has graphic slide-type tone controls, two tape monitors and a versatile mode selector switch."

"With the 1070 you have a full range of tone controls like bass, mid range and treble slide controls plus preamp out and main in jacks."

"I feel strongly about the preamp out jacks. You can re-equalize tape recordings, insert equalizers or even add electronic cross-overs into the chain."

"One major feature that I like in the 1070 is its ambience circuitry. Essentially it's a speaker matrix or pseudo 4-channel. This means you can get into simulated 4-channel sound by just adding a second pair of speakers."

"In addition to the step up in power to 35 watts minimum continuous power per channel with no more than 0.3% total harmonic distortion, 20 Hz to 20 kHz both channels driven into an 8 ohm load, the circuitry is direct coupled"

In December, 1974, sound engineers and audiophiles were invited to examine and discuss the new Marantz Stereo Console Amplifiers featuring models 1040 and 1070 and the new Marantz 112 AM/FM Stereo Tuner. The following comments were taken from that taped discussion.

"The circuitry is now full-complementary direct coupled to the speaker terminals. As a result, the damping factor is much improved at low frequencies where it counts."

"The output circuitry now includes a speaker protection relay circuit and turn on delay."

"There's improved thermal stability. This buys long term reliability as well as improved performance."

The 1040 Stereo Amp

"The new 1040 integrated amp is rated at 20 watts minimum continuous power per channel with no more than 0.3% total harmonic distortion, 20 Hz to 20 kHz, both channels driven into an 8 ohm load."

"It also has the ambience circuitry for simulated 4-channel. Most all of the features of the 1070 are on the 1040."

"It's an excellent performance component for a modest price."

The 112 Tuner

"It's got phase lock loop, a Dolby®* de-emphasis switch and a number of other high-performance features. There're no gimmicks in it. Every feature is practical!"

"A complete system including the 112 tuner plus either the 1070 integrated amp or the 1040 integrated amp gives performance you couldn't get in most receivers and still costs less than \$500!"

The Marantz 1070 Amp, 1040 Amp and 112 Tuner are just part of the exciting new Marantz component line starting as low as \$199.95. Each of them reflects the kind of technical expertise and engineering excellence that has made Marantz the choice of professionals world-wide. Stop by your local dealer and see the entire Marantz line. Or send for a free catalog.

Marantz. Ask an expert.



"Get it on together."

"You know, I've always thought of music as a universal language. In fact, that's probably the reason my daughter Nancy and I get along so well together. So when it's time for some easy listening, we get it on together with Koss Stereophones. Because nothing brings back the excitement of a live performance like the sound of Koss."

"This year the engineers at Koss have made that sound better than ever, with an all new Decilite™ driver assembly. It's the first High Velocity driver element to deliver all 10 audible octaves, and it's featured in the new HV/1a and the HV/TLC Stereophones. Take it from old 'Doc', the new Koss High Velocity Stereophones deliver a fidelity and wide

range frequency response unmatched by any other lightweight stereophone.

"So if you'd like to hear some lightweight, rear-through Stereophones that'll curl your toes, slip into the new HV/1a or the HV/TLC with volume-balance controls at your Audio Specialist. Or write for the free Koss full-color catalog, c/o 'Doc and Nancy'. With a pair of the new Koss

High Velocity Stereophones and any of the Koss Listening Stations, you can really get it on together." ©Koss Corporation



Doc Severinsen & Daughter Nancy

 **KOSS**® stereophones
from the people who invented Stereophones.

KOSS CORPORATION, 4129 N. Port Washington Ave., Milwaukee, Wisconsin 53212 • Koss S.r.l., Milan, Italy • Koss Limited, Ontario
CIRCLE NO. 22 ON READER SERVICE CARD