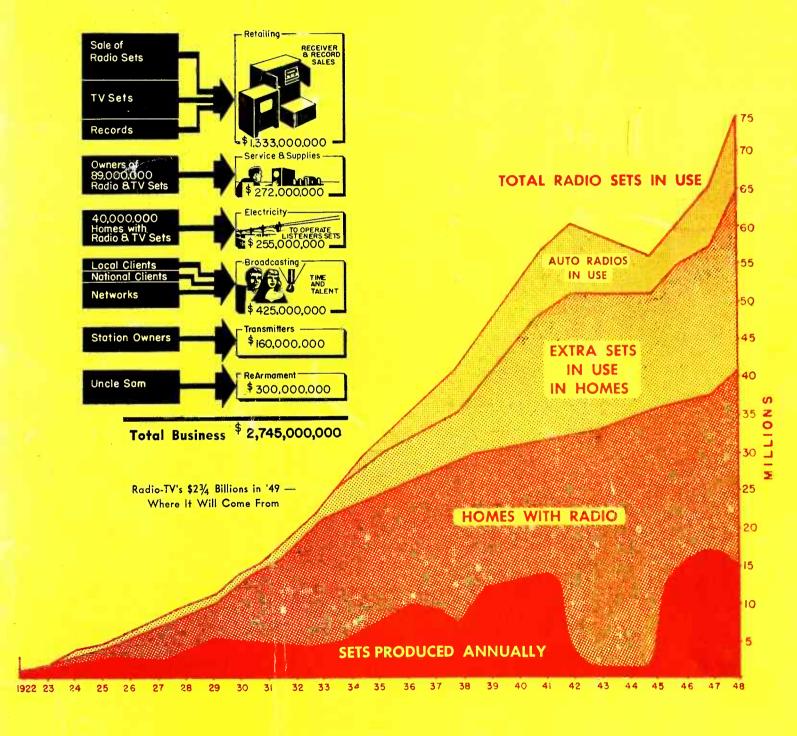
RADIO & TELEVISION

PRETITALLING





"Phenomenal!"—that's the only word to describe the lightning-like acceptance of Mallory's revolutionary new standard in volume controls. But its success was a foregone conclusion when you realize what the Mallory Midgetrol offers:

WIDER APPLICATION—The small size lets you service portables, auto radios and small AC-DC receivers requiring $^{15}\!/_{6}$ " controls.

SIMPLER INSTALLATION—The new and unique flat shaft design of the Mallory Midgetrol saves installation time with *all* types of knobs.

LESS INVENTORY—Electrical characteristics allow you to use the Mallory Midgetrol to replace 1½" as well as ½" controls. Since no special shafts are required, you carry fewer controls in stock.

Quietest and Smoothest by Actual Tests

And Mallory Midgetrol stays quiet, too. Creative research that has made Mallory the standard in carbon controls has seen to that. In addition, the Mallory Midgetrol offers nine big features all NEW:

NEW SIZE
NEW SHAFT
NEW SWITCH
NEW CONTACT
NEW DESIGN
NEW EXTENSION
NEW ELEMENT
NEW TWO-POINT SUSPENSION

See your Mallory Distributor for this new standard in carbon controls



RADIO & TELEVISION-RETAILING

Including "Radio & Television" and "Radio & Television Today"

IN THIS ISSUE

JANUARY, 1949

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January 1949, Vol. 49, No. 1, 35 cents a copy, Published monthly by Caldwell-Clements, Inc., 480 Lexington Ave., New York 17, N. Y. M. Clements, President; Orestes H. Caldwell, Treasurer. Subscription rates United States and U. S. Possessions \$2.00 for one year, \$3.00 for two years, and \$4.00 for three years. Canda \$3.00 for one year, \$5.00 for two years, \$6.00 for three years. Canda \$3.00 for one year, \$5.00 for two years, \$5.00 for three years. Canda \$3.00 for one year, \$7.50 for two years, \$5.00 for one year, \$7.50 for two years, \$10.00 for three years. Printed in U.S.A. Entered as second class matter April 9, 1948 at the Post Office, at New York, N. Y., under the act of March 3, 1879. Member of Audit Bureau of Circulation.
**Trade-Mark Reg. U.S. Pat Off. Copyright 1948 by

CALDWELL-CLEMENTS, Inc.
Publishers also of TELE-TECH.

* AM, FM, Television

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Member of
AUDIT BUREAU
OF CIRCULATIONS

CALDWELL-CLEMENTS, INC.

480 Lexington Ave., New York, N. Y.

Advertisers of home furnishings, housing equipment, electrical appliances, and radio and television sets, during the first ten months of 1948 placed

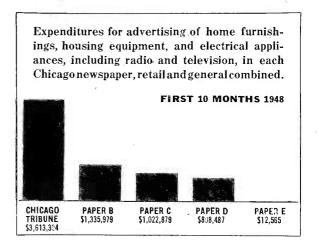
\$3,613,304 in the Tribune

This was 170% more than they placed in any other Chicago newspaper and 13% more than they placed in all other Chicago newspapers combined

HEN manufacturers, distributors and retailers give such notable preference to the Chicago Tribune you can be sure it is because they know from experience that the Tribune reaches most effectively the families who do the bulk of the buying in this market.

Daily and Sunday in Chicago and suburbs, the Tribune delivers hundreds of thousands more circulation than other Chicago newspapers. Alone it delivers the full market circulation needed to take maximum advantage of metropolitan Chicago's broader distribution of spendable income.

In addition, the Tribune gives your promotion the regional circulation which builds consumer favor and dealer support thruout the multi-billion dollar greater Chicago market. In this market there are 756 cities and towns of 1,000 or more population. On weekdays the Tribune is read by better than one out of every three of all the fami-



lies in these 756 communities. On Sundays, close to three out of five read the Tribune.

The Tribune rates first with salesmen because it rates first with retailers. From experience, dealers know that hardlines move faster when they are backed with adequate schedules in the Chicago Tribune. Ask a Tribune representative to help you build a Chicago program that will sell more in 1949 and build solidly for the future.

Chicago Tribune

THE WORLD'S GREATEST NEWSPAPER

CHICAGO TRIBUNE REPRESENTATIVES: A. W. Dreier, 810 Tribune Tower, Chicago 11; E. P. Struhsacker, 220 East 42nd St., New York City 17; W. E. Bates, Penobscot Bldg., Detroit 26; Fitzpatrick and Chamberlin, 155 Montgomery St., San Francisco 4; also, 448 S. Hill St., Los Angeles 13.

MEMBER: AMERICAN NEWSPAPER ADVERTISING NETWORK, INC., FIRST 3 MARKETS GROUP, AND METROPOLITAN SUNDAY NEWSPAPERS, INC.

NOVEMBER AVERAGE NET PAID TOTAL CIRCULATION: DAILY, OVER 970,000—SUNDAY, OVER 1,625,000

for 49 has the profit line!

Here are four sensational Wilcox-Gay models—all profit-makers—and all available for immediate delivery.

There is a demand right now for every one of these units. Get yours in stock—to make sure of getting your share of the profits. Call or write your Wilcox-Gay distributor today!



RECORDETTE—Recording radio-phonograph, ideal for business or pleasure. Records from microphone or radio. Plays all records up to 12 inches. Complete with airplane luggage type carrying case.



DUAL-SPEED DISC RECORDER—Newest addition to the famous Wilcox-Gay line! Makes recordings from microphone or radio at either 78 or 33½ RPM. Incorporates quiet FM in addition to standard AM reception. A compact and efficient instrument featuring ease of operation.



MAGNETIC TAPE RECORDIO—A compact, precision-built instrument that can be carried anywhere. Makes full half-hour of continuous recording on one tape. Records from microphone or radio connection. Weighs only 25 pounds. Auxiliary speaker, for group listening, available as an accessory.



wireless record Player—Plays new long-playing records through any radio. No connections of any kind are required. Featherweight pickup saves record wear, gives amazing high-fidelity response. Weighs less than six pounds!





additional arrays as required when more stations get

Here is the most successful ... the best engineered antenna line in the field! The Radiart line of antennas is GUARANTEED to produce the ultimate in television and FM reception . . . covering all 12 channels! Radiart Simpli-Flex antennas get the picture — where others fail . . . so install RADIART . . . for TROUBLE FREE . . . SPEEDY . . . AND LESS COSTLY INSTALLATION!

on the air.



High strength, well engineered design of more than ample safety factor, with simple, sturdy all aluminum castings, elements, and heat-treated support masts for PERMANENT installations.



"WEATHER - SHIELD" polystyrene terminal black encloses lead-in connections and protects from all weather conditions! Keeps electrical performance at maximum.



IT'S RIGHT WHEN IT'S RADIART

THE RADIART CORPORATION

CLEVELAND 2, OHIO

MANUFACTURERS OF THE FAMOUS RED SEAL VIBRATORS

EXPORT... SCHEEL INTERNATIONAL... CHICAGO 18, ILLINOIS



YES, it's big news . . . sensational news . . . revolutionary new developments of Philco Advanced Design that make history in refrigeration.

Philco distributors all over America are telling the story to Philco dealers now. Watch for the announcement of your meeting and be sure to attend. It's the big profit story in refrigeration for 1949!

hallicrafters

selects PROTELGRAM

Perfected Picture Projection



The Hallicrafters Model No. T-68 incorporates the Protectam system with 16"x12" viewing screen in a classic mahogany Chippendale cabinet measuring 40"x26"x22½".

Freferred by MANUFACTURERS OF QUALITY TELEVISION RECEIVERS

Now, with Norelco Protelcram supplying perfected picture projection, Hallicrafters—another leading producer of quality television receivers—is bringing to the discriminating user large-screen, clear-view television entertainment.

The large distortion-free 16" x 12" picture—a full 192 square inches—is free from discoloration. Norelco Protelgram reproduces picture tones in true black, gray and white without glare or eyestrain. And, because Norelco Protelgram large-screen projection permits normal viewing at less than 5 feet and upwards, it is ideal for either small or large groups.

More and more of America's leading producers of quality television receivers are making dependable large-screen, clear-view projection an actuality with Norelco Protelgram.



The Proteloram projection system consists of a specially developed 2½" projection tube, an optical box with focus and deflection coils, and a 25 kv regulated power supply unit. Compactness and flexibility make possible large-picture television in average size radio-phonograph consoles, consolettes and table model television receivers.



IS PICTURE PERFECTION IN PROJECTION

JORTH AMERICAN PULL 3 COMPANY, INC.

DEPT. TR-1, 100 EAST 42nd STREET, NEW YORK 17, N. Y

IN CANADA: PHILIPS INDUSTRIES LTD., 1203 PHILIPS SQUARE, MONTREAL * EXPORT REPRESENTATIVE: PHILIPS EXPORT CORPORATION, 100 EAST 42ND STREET, NEW YORK 17, N. Y.

MAKES FRIENDS...AND KEEPS THEM!



GENERAL



ELECTRIC

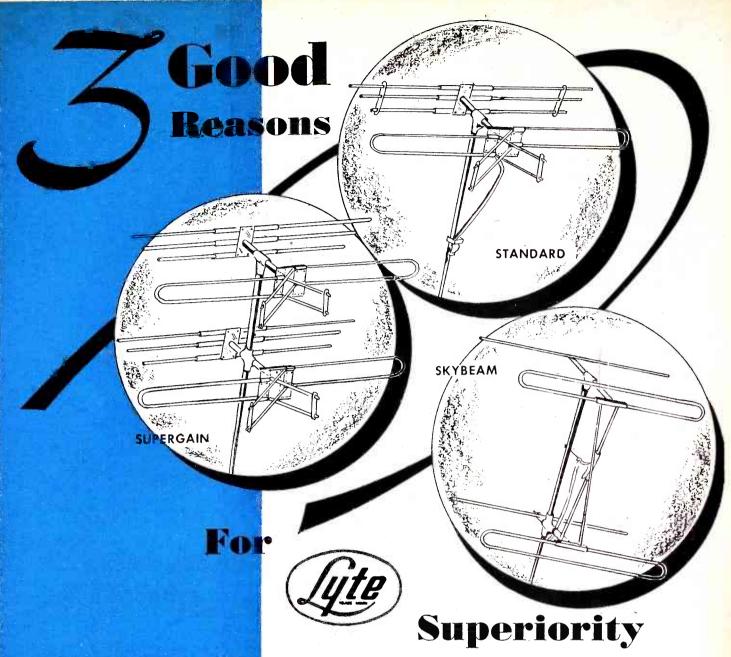
FIRST AND GREATEST NAME IN ELECTRONICS



FOR A MORE PROFITABLE PARTS BUSINESS IN 1949

Your customers own more Philco radios by far, than any other make. Yes, they have been buying more Philcos for 18 straight years—creating for you the biggest replacement market for parts and accessories—a market you *know* prefers Philco. Take advantage of this preference by selling genuine Philco replacements. Streamline your stock, speed-up turnover, increase your profits by concentrating on Philco parts and accessories in 1949.

SEE YOUR PHILCO DISTRIBUTOR



- SKYBEAM MODEL LHF— The only high fidelity high frequency antenna in the field. This amazing high frequency channel antenna, includes all the proven fine features of Lyte products, precision, rigidity and proven scientific construction. "SKYBEAM" is guaranteed to produce outstanding results on all high frequency channels 7 to 13.
- SUPERGAIN MODEL LTD The revolutionary Lyte Supergain antenna, especially designed for maximum signal strength, gives amazing reception for longer distances. This laboratory and field proven Lyte antenna covers channels 2 to 13. Supergain boasts the tops in television reception, for an all tound antenna.
- STANDARD MODEL LTCR The most widely and successfully used all round television antenna.

 Designed for 72 to 300 OFM service, this remarkable antenna serves TV channels 2 to 13 and all FM bands, as proven by housands of delighted users. LTCR boasts maximum signal strength and highest gain on all frequencies.

BEST BY TEST

DEALERS: Increased production facilities allow the addition of a limited number of **Lyte dealerships**, prompt action is necessary if you wish to secure part of this lucrative market, contact Lyte parts at addresses below.

LYTE PARTS CO.

11 Washington Ave. Plainfield, New Jersey 195 Main Street

<u>Dub</u>uque, lowa

Here's that Triplett F.M.-A.M.

Frequency Ranges: Fundamentals—from 100 K.C. to 120 M.C. in ten bands. Added Frequency—(provided by built-in fixed 50 M.C. oscillator) from 120 M.C. to 170 M.C. Second harmonics can also be used to double the A.M. fundamental ranges. Dealer Net . . . \$173.25





MODEL 3433

F.M. SWEEP FROM 0 TO 300 K.C. MODULATION FREQUENCY 60 OR 400 CYCLES PER SECOND

Stable frequency modulated signals give undistorted wave form. This permits easy and more precise alignment over all frequency ranges thus insuring maximum performance in a radio set that can in every way be comparable with original factory adjustments.

Other features include: constant deviation by using a fixed frequency reactance modulated oscillator, 116 Volt A.C. line filter to prevent leakage thru power supply, horizontal synchronized sweep voltage available thru jack on front panel.

For Ranges from 165 K.C. to 120 M.C. Select the Signal Generator with the Illuminated Dial

• Seven long scaled 330° arc.

• A big open, illuminated scale—easily read.

• 5 Fundamental Ranges 165 K.C. to 40 M.C.

• 2 Harmonic Ranges directly calibrated 36 M.C. to 120 M.C.

• 10 to 1 vernier tuning.

RANGES

A-165-525 KC

E-18-40 MC

B-500-1750 KC

Harmonics to 120 MC

C-1700-6200 KC D-6-18.5 MC

E2-36-80 MC E3-54-120 MC

Here is a very popular unit since everyone needs a stand by signal generator.

MODEL 3432 with its uniformly illuminated dial is the top value in signal generators for ranges to 120 MC. All R.F. and audio circuits are double shielded with copper plated steel... transformer is electrostatically shielded... the circuit selector provides for internally modulated signal (variable 0 to 100% at 400 cycles). Variable amplitude of external modulation 40 to 15,000

cycles, unmodulated signal or variable audio 0-10 volts at 400 cycles. The output attenuator provides fine control of R.F. Output to Coaxial output cable connector... Housed in Metal case, tan enamel finish. Leather strap lluminated by carrying handle for carrying.

MODEL 3432 Illuminated Dial

\$69.50 Dealer Net

SEE AT YOUR RADIO PARTS DISTRIBUTOR OR FOR MORE INFORMATION ... WRITE

TRIPLETT ELECTRICAL INSTRUMENT COMPANY · BLUFFTON, OHIO, U.S.A.

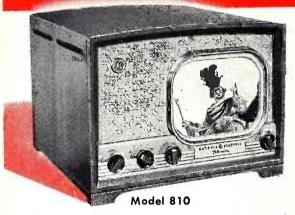
In Canada: Triplett Instruments of Canada, Georgetown, Ontario



DAYLIEHT DAYLIEUT SELEVISION

selling

- the greatest feature in all television!



★ Your customers can enjoy the daylight bright, daylight clear, daylight sharp pictures of G-E Daylight Television—at an amazingly low price. Model 810. 10" direct-view tube. Mahogany veneered cabinet.
\$325.00*

(plus installation)

Complete home entertainment center. Everything your customers want—in one exquisite mahogany cabinet. Daylight Television—12½" direct-view tube the "best picture in sight—day or night"... FM-AM—short-wave radio... dual phonograph plays both type records automatically! Model 840. \$995.00*



Model 814

in normally lighted rooms. Your customers don't have to sit in darkness (a G-E selling point that rings the bell—on your cash register). Push G-E Daylight Television. You'll find it sells itself on sight! For complete information about the entire TV line, call your nearest G-E television distributor or write today to General Electric Company, Electronics Park, Syracuse, New York.

EASIER TO SELL—that's G-E Daylight Television! It's extra bright, extra clear for extra enjoyment even in broad daylight or

New! Large screen table television! 12½" direct-view tube—largest daylight picture yet! G-E Automatic Clarifier for sharp, clear pictures. Mahogany veneered cabinet. Model 814. \$389.50*

*Prices slightly higher West and South, subject to change without notice.



Performance-Engineered at Electronics Park

With its renowned scientists, electronic engineers and highly skilled technicians, plus all the facilities of the most modern laboratories and production lines, Electronics Park is truly the world center for electronic progress! Performance-engineered means your customers get utmost value in G-E television sets.

Jou can put your confidence in_

GENERAL



Model 840

STROMBERG-CARLSON

STARTS RIGHT

with new 120 square-inch super-clear TELEVISION

"You'll SEE it Better . . . HEAR it Better" is a bigger selling appeal than ever with Stromberg-Carlson television! The great new tube gives prospects a 120 square-inch picture that is wonderfully spacious and delightfully clear even across a large, lighted room. And only one knob makes all normal picture adjustments! Superlative Stromberg-Carlson tonal fidelity gives dramatic realism to all services. Smart decorator-designed cabinets, in ribbon-striped mahogany veneers, reflect the modern spirit of television and complement even the finest traditional room plan.



New! The MONMOUTH Television-Radio-Phonograph. Exceptionally clear, sharp, bright 120 square-inch directive picture. Superb sound reproduction of TV, AM, FM and records. New single-arm duo-speed changer plays standard and long-playing records, 10 and 12 inch intermixed, with automatic stop. Door opens fully. **T5-16-M1**.



New! The YARMOUTH Television and FM-AM Radio. Exceptionally clear, sharp, bright 120 square-inch directview picture, same as Monmouth model. Magnificent tonal reproduction of TV, FM, and AM radio-also of records, through phonograph connection. **TS-16-L1**.

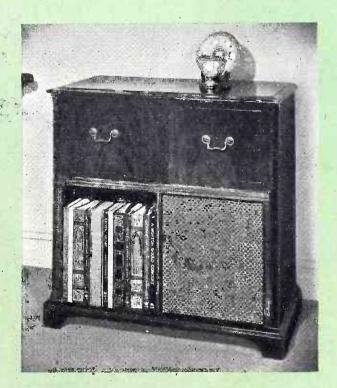
STOP!_LOOK!_ and LISTEN!... THERE IS NOTHING FINER THAN A

NOW TO MAKE

NEWS for '49!

with smart new popular-priced, long-playing RADIO-PHONOGRAPHS

Stromberg-Carlson does it again . . . gives you what every customer wants in fine, popular-priced instruments, backed by a name that has stood for highest quality since the beginnings of radio. The new WINDEMERE FM-AM Radio-Phonograph is an example of the splendid models and values that will be offered in '49. At a reasonable price, it gives prospects magnificent tonal quality . . . no-drift FM tuning . . . unique treble and bass tone control . . . and new single-arm duo-speed changer for standard and longplaying records, 10 and 12 inch.



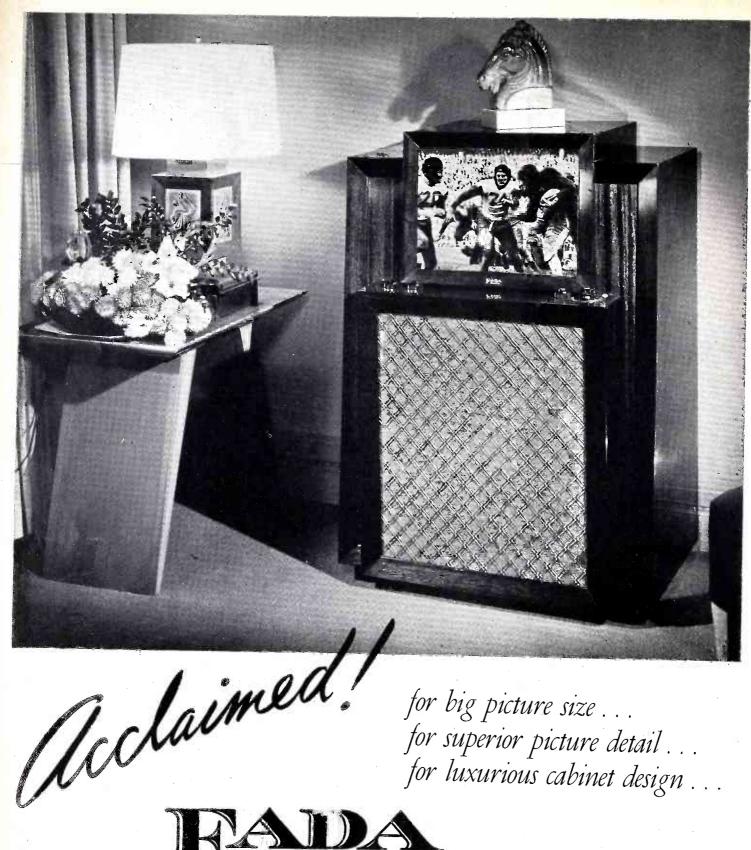
New! The WINDEMERE. In exquisite cabinet of matched mahogany veneers, hand-rubbed to a satin finish. #1406-PLM.



New! The WINDEMERE. In smart cabinet of rare blonde avodiré veneers, hand-rubbed to a lasting satin finish. #1406-PLA.

STROMBERG-CARLSON

Stromberg-Carlson Company, Rochester 3, N. Y.—In Canada, Stromberg-Carlson Company, Ltd., Toronto



for big picture size . . . for superior picture detail ...
for luxurious cabinet design ...

PROJECTION TELEVISION CONSOLE MODEL 880

Big Screen 12 Inches by 16 Inches . . . 192 Square Inches in Area. 36 Tubes including Kinescope Tube and 6 Rectifiers. Incomparable chassis details following closely our Model 899 Television Receiver. Unique optical system makes for brillance and picture detail unsurpassed. Gorgeous Console Cabinets in Genuine Mahogany or Genuine Blonde Mahogany Veneer.

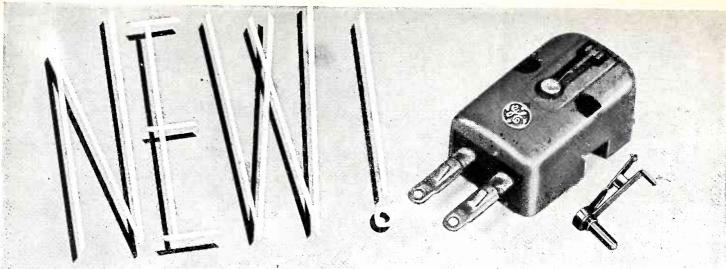
"The Television of to-morrow . . . TO-DAY! . . . Pioneers in Radio and Electronics since 1920"

& ELECTRIC COMPANY, **RADIO** BELLEVILLE, NEW JERSEY



TUNG-SOL LAMP WORKS INC:, NEWARK 4, NEW JERSEY
Manufacturers of Electron Tubes and Radio Dial Lamps

SALES OFFICES: ATLANTA . CHICAGO . DALLAS . DENVER . DETROIT . LOS ANGELES . NEWARK



G-E VARIABLE RELUCTANCE CARTRIDGE

with the replaceable stylus for Conventional and Long Playing Records

NOW-in one small unit-all the sales and performance advantages of the G-E Variable Reluctance Cartridge plus this additional consumer economy feature—the Replaceable Stylus.

Negligible needle scratch and needle talk, minimum record wear, wide frequency response, freedom from resonance peaks, realistic reproduction -these are maintained at all times, simply, easily, economically with the Replaceable Stylus.

No more changing of the entire cartridge means more frequent replacement of stylus by the consumer because he can do it himself so easily.

Four simple steps—and presto! The worn stylus is replaced and maximum high quality performance is restored for the critical listener.

Note, too, these additional features:

- New notched design . . . one-third smaller . . . improved shape . . . more generally adaptable to various tone arms.
- More clearance for record changers.
- Higher lateral compliance for more faithful tracking.
- More economical for the customer—more sales for the dealer.
- Cartridges available for LP records with 1 mil stylus; for conventional records with 3 mil stylus.

For complete information on the new Variable Reluctance Cartridge write: General Electric Company, Electronics Park, Syracuse, New York.



Simply remove cartridge from tone arm.





3 Insert new stylus into cartridge with fingers.

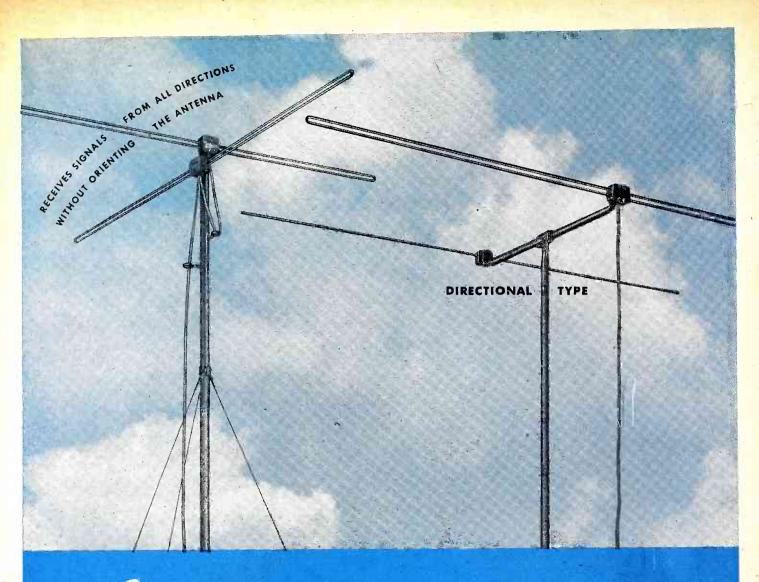


1 Press firmly into position with

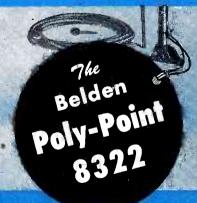
You can put your confidence in_

GENERAL E ELECTRIC





Pusure FM Performance with a GOOD FM ANTENNA



- Belden FM Antennas are engineered for finest FM reception.
- Use Belden 8322 Poly-Point Antenna to receive signals from all directions without turning!
- Use Belden 8320 Dipole Antenna for installations requiring directional characteristics.
- Sturdy aluminum construction withstands severe ice loading and high wind.
- COMMON-SENSE PRICES.
 ASK your Belden Jobber



Bellen Radio WIRE

Bendix Radio



Model 69M9—AM-FM radio, single-speed record changer, decorator-styled mahogany cabinet.

\$169⁹⁵

Model 69M8—AM-FM radio with dual-speed standard and LP microgroove record changer, decorator-styled mahogany cabinet.

\$179<u>95</u>

TELL THE BIGGEST VALUE STORY IN RADIO!

With these richly beautiful, brand new 1949 models on your floor, you'll offer bargain-hungry buyers exactly what they want. Most models are equipped with the latest type dual-speed record changer that plays both standard and LP microgroove records automatically. Long-range "Front Row" AM-

FM performance is brilliantly better even to untrained ears. Aviation Quality and big-name backing add the glamour that eases selling. Yet the "no middleman" prices are on a level with quality-shy, cut rate merchandise! Judge like a customer and you'll agree—here's the best line for '49.



Model 69B8—AM-FM radio, blonde mahogony cabinet, dual-speed standard and LP microgroove record changer.

\$189⁹⁵

Model 79M7 — AM-FM radio, dual-speed standard and LP microgroove record changer, a period-piece mahogany cabinet.

\$18995



HOW CAN YOU MISS WITH A PROGRAM LIKE THIS! The appointment of only one dealer in each community • Direct factory-to-dealer freight prepaid to destination • Low consumer prices competitive with national chains and mail order houses • Liberal dealer nationally advertised retail prices protected by your exclusive franchise • Radio and television built to Bendix Aviation Quality by the acknowledged leaders in radar and radio engineering • Consistent national advertising that builds store traffic for you • Compelling point-of-sale promotion helps • Special promotion models to meet competitors' "off-season" distress sales • Many other profit-building features.

Success Line for 49

DEFEATS COMPETITION:

Bendix Radio and Television

DIRECT-TO-DEALER PROGRAM

ARMS THE INDEPENDENT RETAILER TO FIGHT SUCCESSFULLY FOR THE 85% OF THIS BILLION DOLLAR BUSINESS OTHERWISE OUT OF HIS REACH

That's right . . . under normal competitive conditions—now rapidly returning—85% of all radio and television business goes to such operators as chain stores, discount houses, cutthroat competitors, and the like. But you, personally, can reverse this trend. You can meet this competition on better than equal terms. You can sidestep ruinous price-cutting and dumping by fellow retailers handling the same line. You can win a

full and genuinely profitable share of this great and growing market beginning right now.

Thousands of retailers are today reaping the benefits of the power-packed Bendix Radio Direct-to-Dealer plan. Get the facts and see for yourself how Bendix Radio protects your profits and your future. But do it now—remember, this franchise is open to only select dealers in each community.

BENDIX Trust Row TELEVISION—No antenna needed in most locations!

Only Bendix Television dealers can say "just plug it in and press a button . . . no antenna needed in most locations"—because only Bendix Television combines a built-in antenna, push-button tun-

ing and automatic picture control. For the first time you can utilize the sure-fire selling of a home demonstration because you can move in a set—just plug it in and show a picture right away!



You Be the Judge and Jury!

Visit Space 545D at the American Furniture Mart or write for booklet.

Compact cabinet in dark or blonde mahogany with brass door pulls. 52" screen, builf-in antenna, push-button tuning, automatic picture control. Matching mahogany table. \$14.95.

\$349⁹⁵

BENDIX RADIO DIVISION of BALTIMORE 4, MARYLAND

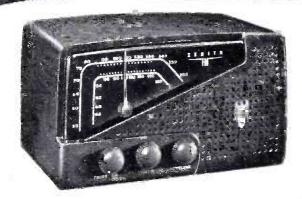




There's nothing finer than this period console with AM-FM radio, dual-speed standard and LP microgroove record changer, 52" screen, built-in antenna, push-button tuning, automatic picture control.

\$629<u>50</u>

ZENITH gives you an FM-AM Radio in every price range



THE "TRUMPH"

Radio sensation of the year. Not imitation, but genuine Zenith-Armstrong FM even at this low price. Glorious-toned, static-free FM with exclusive patented

\$5095*

White Plastic \$62.95*

"Power Line" Antenna—just plug in and play. Long-range AM reception, improved Wavemagnet.† Zenith-built Alnico "5" speaker. New "Cut-Away" Dial—so easy to see and tune. Swirl walnut, or black plastic cabinet. Plays on AC, DC.



THE "SYMPHONY"

Widely used by FM stations for demonstrations and monitoring broadcasts, the Zenith "Symphony" is famous for its rich, big console tone . . . tone that will

\$ 7 0 95*

White Plastic \$82.50*

make sales for you. Powerful 7½-inch speaker is made possible by Zenith's patented DialSpeaker design. New Type Tone Control provides greater fidelity. Genuine Zenith-Armstrong FM with Zenith's patented "Power Line" Antenna gives glorious, static-free reception. Improved Wavemagnet. Rich swirl plastic cabinet. Plays on AC or DC.

Keep an eye on

†Reg. U. S. Pat. Off. *West Coast prices slightly higher. Prices subject to change without notice.

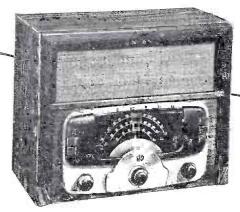


A COMPLETE LINE YOU CAN MERCHANDISE EFFECTIVELY

Now, Zenith[†] gives you the first complete line of FM-AM radios. These three outstanding new table models are destined for the same dominating leadership that Zenith console and chairside FM-AM radio-phonographs already enjoy. Yes, Zenith's superb FM line includes a radio priced to suit every customer—each one packed with quality and features that make him stop for a second look—and a second listen.

Each of these table models offers genuine Zenith-Armstrong static-free FM...Zenith's famous Long-Distance AM...FM-AM aerials built-in... Tone that surpasses many consoles... Stunning new cabinets. Ever hear of so many demonstrable features... with so much customer appeal? Yes, Zenith FM-AM table models mean sales and profits aplenty for you.

ZENITH RADIO CORPORATION
6001 Dickens Avenue, Chicago 39, Illinois

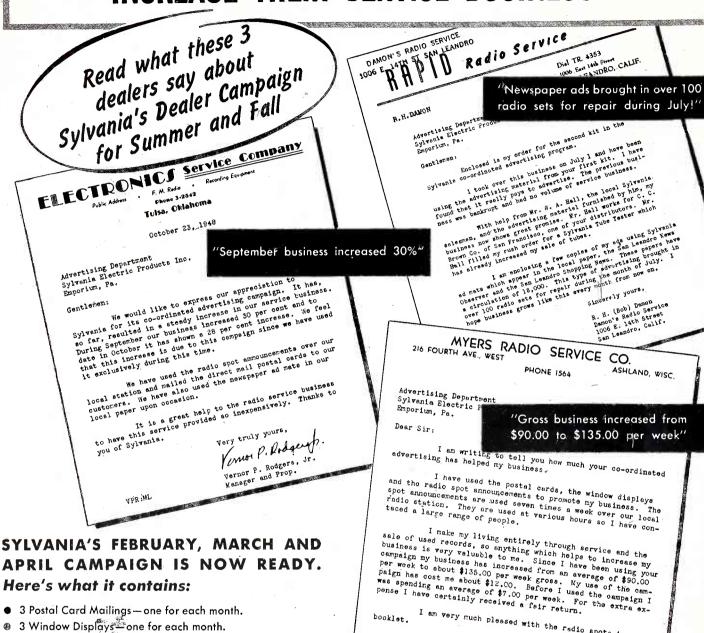


THE "VICEROY"

Just look at the sales features that make this set tops among FM-AM table radios. Powerful New Twin

Speakers for a rich, full tone never heard before in a table radio. Exclusive Zenith Radiorgan† Tone Control—like that featured on big consoles. Same Extra-Power, supersensitive AC chassis as famous 9-H series Zenith Consoles. Genuine Zenith-Armstrong FM with patented "Power Line" Antenna, plus world-famous Zenith long-distance AM reception with improved Wavemagnet. American walnut veneer cabinet.

SYLVANIA ADVERTISING HELPS SERVICE DEALERS INCREASE THEIR SERVICE BUSINESS!



APRIL CAMPAIGN IS NOW READY. Here's what it contains:

- 3 Postal Card Mailings—one for each month.
- @ 3 Window Displays one for each month.
- 3 Window Streamers—one for each month.
- 6 Newspaper Ad Mats two sizes for each month.
- Radio Spot Announcements—several for each month.

SEND FOR FULL INFORMATION NOW!

Remember, this campaign designed for your use ties up directly with Sylvania's ad campaigns on a national scale. You pay only the postage on the government postal cards you mail. Sylvania supplies everything else free! Mail coupon today!

ELECTRI

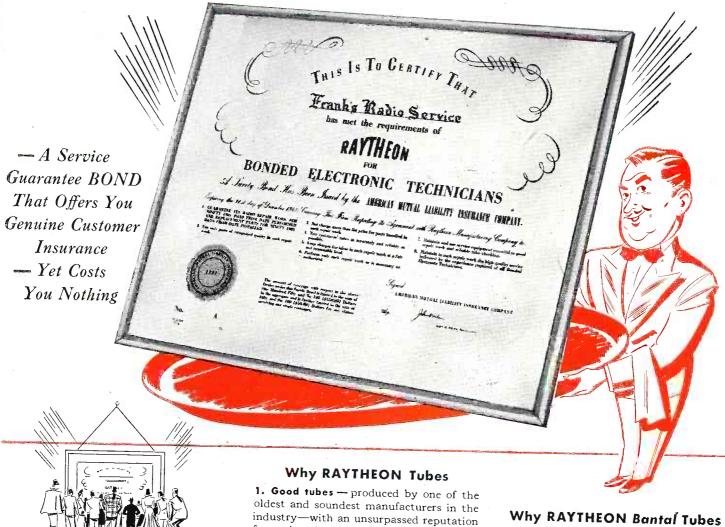
RADIO TUBES; CATHODE RAY TUBES; ELECTRONIC DEVICES; FLUORESCENT LAMPS, FIXTURES, WIRING DEVICES; LIGHT BULBS; PHOTOLAMPS

Advertisir		lment			
Room R-2	101				
Emporium	, Pa.				
		nd me full deta	ils on your	February,	March and
April Service	Dealer Co	ampaigns,			
•		ampaigns.			
Name		• •			
Name					

booklet. I am very much pleased with the radio apots in your

Myers Radio Service Co,

Your Raytheon Tube Distributor Hands Prestige to You on a Platter



This RAYTHEON SURETY BOND is the best evidence you can give your customers that you stand out from the crowd when it comes to the quality and reliability of radio service. It's an ironclad 90-day BONDED guarantee on your labor and parts backed by a nationally known insurance company with assets of close to a hundred million dollars!

Raytheon pays for this Bond

The Raytheon Tube Distributor in your area has it ready for you—if you can qualify. Get in touch with him at once and start getting the cream of the business in your locality.

- industry—with an unsurpassed reputation for engineering achievement in electronics, and with the most advanced methods and equipment for quality control.
- 2. Best Distributors Raytheon Tube distributors are carefully chosen. You'll recognize the one nearest you as one of the best parts distributors in town. He has to be, as sponsor of the Raytheon Bonded Dealer Program.
- 3. Consistently advertised Raytheon national advertising and point-of-sale display material constantly reminds your customers and prospects of the value of the Raytheon name on every tube.
- 4. Universally accepted From the biggest Magnetrons to the tiniest hearing aid tubes Raytheon stands for quality. Raytheon tubes are instantly accepted as the finest that can be had.



The new Raytheon Bantal Tube simplifies your tube stock while it gives you a better tube to sell - rugged eight pillar construction, completely shielded internally means superiority in performance.

Eight fast-moving Bantals replace sixteen equivalent GT and metal types.

Always ask for Raytheon Bantals



Excellence in Electronics

RAYTHEON MANUFACTURING COMPANY

RADIO RECEIVING TUBE DIVISION NEWTON, MASSACHUSETTS - CHICAGO, ILLINOIS - LOS ANGELES, CALIFORNIA

RADIO RECEIVING TUBES . SUBMINIATURE TUBES . SPECIAL PURPOSE TUBES . MICROWAVE TUBES



/wo ways to tell genuine MAHOGANY

- it's important to know!



This is genuine Mahogany. Other woods may take its name. But none can match its ageless charm . . . its variety of pattern... its warmth... its strength . . . its workability. No, after all, there is nothing like Mahogany.

These two labels are two sure ways to tell genuine Mahogany furniture. Issued by the Mahogany Association, they protect you and your customers against substitutions. That's important these days, when several so-called "Mahoganies" have been offered the market.

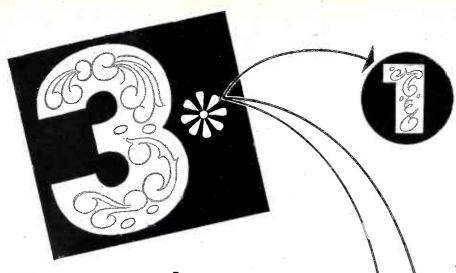
Dealers: look for these labels! Manufacturers: watch the lumber you buy. If it's American Mahogany, it must be Swietenia; if it's African Mahogany, it must be Khaya.

And if it comes from anywhere else, it is NOT genuine Mahogany!

Why accept less than the very best? There is no longer any need—supplies of genuine Mahogany are growing day by day.

MAHOGANY	MAHOGANY ASSOCIATION, Suite 803-C, 75 East Wacker Drive Chicago 1, Illinois Please send new 7th edition of the 74-page Mahogany Book.
i	Name
8	Address
i ·	City and Zone No
i	State

"AFTER ALL . . . THERE'S NOTHING LIKE MAHOGANY"



more good reasons

Sparton dealers

will be out front in '49

Two beautiful AM-FM radio-phonograph consoles with SPARTON'S NEW MICRO-GROOVE REPRODUCTION AT ITS BEST...enticingly priced

That's right—these two top models in the Sparton 1949 line have Sparton's new, single-arm, long-playing record-changer. One arm does the work of two! And that makes these outstanding Spartons greater-than-ever values for your customers... faster sellers for you.

How can Sparton give dealers such values at these money-saving prices? Here's the answer: Under its famous, time-tested SCMP—Sparton Cooperative Merchandising Plan—Sparton eliminates "middleman costs", cuts distribution costs, sells *direct* to one dealer in a community. That means you can offer more radio for less money.

It's the best deal in the business—for you and your customers. If you're not a Sparton dealer, better see if the exclusive Sparton franchise in your area is still available.

See these two beautiful Spartons and other sparkling models at the Chicago Show. Ask about SCMP.

EXHIBIT ROOM 509-B—5TH FLOOR
AMERICAN FURNITURE MART
JANUARY 3 TO 15 CHICAGO

*All prices slightly higher West of Rockies

RADIO-TELEVISION'S RICHEST FRANCHISE

SPARTON RADIO-TELEVISION

DIVISION OF

THE SPARKS-WITHINGTON CO., JACKSON, MICHIGAN



Look at this stunning model!

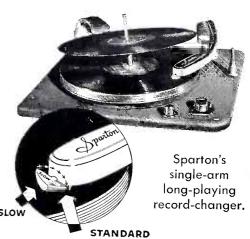
Modern as tomorrow, with plenty of eye appeal and buy appeal built in. FM reception as well as standard AM. Gorgeous blonde finish. Best of all it has Sparton's new, single-arm, long-playing record-changer. Think of it! You sell this modern beauty for only \$219.95*, yet make a handsome profit. Model 1072.



A tested sales leader!

This lovely AM-FM radio-phonograph console—companion to Sparton TV—is every inch a value. Has loads of wanted features. AND—it comes with Sparton's sensational single-arm, long-playing record-changer. Customers have choice of two lustrous, hand-rubbed veneer finishes. Model 1040, mahogany; Model 1041, blonde. At \$219.95*, you'll find plenty of takers.





Cuts you in on radios newest advance!

And what features! A single tone arm does the work of two! A flip of a switch on the tone arm changes from fast to slow speed, brings the proper needle into position. Plays both standard and long-playing records, changes records automatically, smoothly, quietly.

Established in 1922 as ELECTRICAL RETAILING

RADIO & TELEVISION RETAILING

Including Radio and Television Today

O. H. CALDWELL, Editorial Director

*

M. CLEMENTS, Publisher

Trusted New Electrical Advisor to the American Family

The television retailer has suddenly acquired new importance to the home-circles of his community.

Housewives in sweetest tones telephone him entreatingly—"Please, can't you come right over, tonight!"

Busy business men stand about in respectful awe as Mr. Television Retailer applies his magic touch to restore the video picture—then invite him to sit down for a drink and a chat about TV reception.

Meanwhile the family ask his opinion on the best refrigerator, washer or cleaner to buy. Confidently and unhesitatingly they put their electrical problems up to Mr. TV Retailer. They inquire too about table appliances, electrical heaters and special devices.

For Mr. TV Retailer has become a sought-after and warmly-regarded guest in every TV home. Probably next to the family doctor, no outsider has corresponding importance to such family groups—groups which face hours of awful blankness if for any reason television is not working that evening! So the television man is a friend indeed, of the whole family, old and young.

Other electrical dealers and salesmen may be stopped short at the front or back door. But the television man never! Instead he is welcomed day or night and given the run of the home from roof to basement, to install his antenna leads. And he is recognized as the man who can answer all electrical and radio questions authoritatively and completely,—even to the point of having any electrical appliance inquired about delivered promptly next day!

Any member of a television family will quickly confirm the foregoing statements about the new status of Mr. TV Retailer—the family's trusted confidant—as well as supplier—concerning anything electrical!

What's Ahead!-in Radio,

- BIG BUSINESS—With radio-television now approaching the three-billion dollar mark (see front cover), it is interesting to compare the annual business done by some other major U. S. industries, such as: Paper \$5 billions; beverages \$4 billions; mining \$4 billions; dairying \$2½ billions; tobacco \$2 billions; chemicals \$4 billions; tires \$3 billions; films \$1½ billions; cotton \$3 billions; telephones \$2 billions; oil \$10 billions.
- NICKEL AND ALUMINUM HAVE JOINED STEEL as scarce materials. It appears certain that manufacturers will continue to be plagued with short supplies during the entire twelve months ahead.
- WE MAY BE STICKING OUR necks out in forecasting that there will not be any great increase in trade-ins during 1949. Even in the large cities where high-pressure advertising is being used, there is hardly ever an offer to accept a trade-in.
- AUTO RADIOS ARE BEING INSTALLED in about 70 per cent of new cars before delivery. With motor production steadily increasing, sales of car radios are expected to reach new heights in 1949.
- YALE & TOWNE STOPS MAKING Tip Toe electric iron, an announcement to its 338 distributors discloses. An official of the company states that the manufacture of Yale electric heating units will be continued at Buffalo, and that the suspension of the Tip Toe iron will have no effect upon the operation of the 9 other company divisions.
- FINAL DEVELOPMENT OF "anastigmatic direct-view television" has been announced by Paul V. Galvin, president of Motorola, Inc. The system utilizes a special coil device with the latest 16-inch tube to obtain full-surface clarity. Production of sets with the new device is expected sometime next Spring, according to Walter H. Stellner, vice-president in charge of home radios and TV receivers.
- PHILCO IN ELECTRIC RANGE BUSINESS with the signing of an agreement to acquire the net assets of Electromaster, Inc., Mt. Clemens, Mich. The announcement was made by William Balderston, Philco president. A special meeting of Electromaster stockholders will be held this month to approve the agreements between the two companies. At present, output of ranges will be marketed under the Electromaster brand name.
- NEW VACUUM CLEANER BLOWS DUST DOWN THE sink drain. The device consists of a suction unit driven by a one-half HP motor. Two four-foot sections of Multi-Flex hose are attached to the suction unit. One end of the hose is attached to a disposal unit placed over the drain. The unit is also connected to the water faucet. Dirt and dust picked up by the cleaner go down the drain. Hydroway, Inc., Philadelphia, is now producing the cleaner on a small scale.

- LOOK FOR A GOOD VOLUME OF business in portable radios for 1949 as more and more dealers are realizing that the carry-about sets, once considered as being chiefly for the juvenile buyer, can be sold to those in all age brackets.
- IF CONDITIONS STAY ABOUT AS THEY are at this time, it does not seem likely that dealer discount rates will experience any significant change during the next twelve months. However, operating expenses will probably continue to climb, and merchants will need to do more volume in order to show satisfactory profits.
- "BY 1953, THE TOTAL SETS IN USE (TV) may be more than twelve million, with some 50 million persons in television's day-to-day audience. By 1958—in ten years—the number of sets can be at least forty million, with the total regular audience at 100 millions."—Raymond C. Cosgrove, executive vice-president, Avco Manufacturing Corporation.
- "THE RADIO TECHNICIAN WHO CALLS AT A HOME to install or service a television or a radio set is the liaison man between the set manufacturer and the buyer. He is in a position to do an excellent public relations job. . ."—Max F. Balcom, RMA president and vice-president Sylvania Electric Products, Inc.
- 70 PER CENT OF GENERAL ELECTRIC'S radio-television dollar volume business will come from television, estimates Walter M. Skillman, manager of sales for the company's Receiver Division.
- "TELEVISION IS THE FASTEST-GROWING INDUSTRY in America," points out James H. Carmine, vice-president distribution, Philco Corp., who predicts that in 1949 the industry "can provide the American people with 2,000,000 television receivers, and perhaps 3,000,000 more in 1950."



- 1949—RMA's 25th YEAR . . . TELEVISION's 10th YEAR . . . CALDWELL-CLEMENTS' 28th YEAR IN RADIO-TV PUBLISHING!
- "AMERICAN STANDARD PRACTICE FOR SCHOOL LIGHTING" is the title of a new manual brought out by the Illuminating Engineering Society. First four copies sell at 50 cents each; all over 24 copies, 15 cents each.

Appliances, Records and Television

ADDITION OF A NEW NAME TO THE LIST of fullline major appliance makers is revealed in the news that the Coolerator Company, 40 year old manufacturer of refrigeration equipment, will introduce a new line of electric ranges as well as refrigerators and freezers.

"A THIRD OF THE NATION'S POPULATION already lives within service range of television. By the end of the year (1948), about half the population should be within reach of at least one television station."—Joseph B. Elliott, vice-president in charge of the RCA Victor Home Instrument Department.

ONE OF THE LARGER LAUNDRY EQUIPMENT manufacturers said to be readying a new electric dishwasher of entirely new design.

"OUR PLANS FOR 1949 INCLUDE the marketing of \$40,000,000 of television sets. The volume of home radios, in our estimation, will be affected by television; therefore we are planning a smaller volume for 1949. However, with increases in television and car radio production, we look for a very definite over-all increase in 1949. . . ."—Paul V. Galvin, president of Motorola, Inc.

COMMENTING ON THE SUPPLY-DEMAND situation, Howard E. Blood, Norge president says: "... Militating strongly against rapidly increased supply is that the labor force is now fully employed. There would not be enough employees to man greatly expanded industry, and the national defense program is going to still further shorten the supply of labor and facilities to produce manufactured goods which are still in short supply."

A NEW PHONO RECORD DEMONSTRATOR which will not operate unless unit is closed is being marketed by St. Joes Machines, Inc., St. Joseph, Michigan. Called "Phono-Gard," the device comes in an attractive cabinet.

HOTPOINT HAS ESTABLISHED A 40 per cent increase in dealer sales of major electric appliances for kitchens and home laundries as its sales goal for 1949, according to Leonard C. Treusdell, vice-president in charge of marketing.

PRICE-CONTROLS—RATIONING? One of the most important considerations for those in this field to weigh in planning for '49 is the possibility that price-controls and rationing of materials may once again be imposed by the government.

OVER EIGHTY PER CENT OF TELEVISION receiver sales are being made to the nation's middle and lower income groups, according to H. Leslie Hoffman, president of the Hoffman Radio Corporation.



RUMORS OF NEW RECORDS AND more rumors being bandied about in the platter industry, with almost everyone in a dither. Makers of changers, phono motors, pickups, etc., facing a real problem in trying to figure out what and how much to make.

"THERE ARE NOT ENOUGH GOOD SALESMEN to go around. The majority of young, energetic and ambitious men of today are not too enthusiastic about breaking into the sales profession to make it a life's work... these young people must be sold the importance, the dignity, and the financial reward there is in a successful selling career. ..."—Gerald Hulett, vice-president, Electromaster, Inc., Mount Clemens, Michigan.

In This Annual Statistical Issue of

RADIO & TELEVISION RETAILING and ONLY in RADIO & TELEVISION RETAILING!!

Statistics and Forecasts of the ENTIRE BIG FOUR FIELD

RADIO!

RECORDS!

APPLIANCES!

SERVICING!

Exclusive Sales and Production Data on:

TV-AM-FM Auto Radio Radio Supplies Servicing

Parts

Sets in Use Broadcasting Eletrical Appliances Electric Light Bulbs Phonograph Records
Phonograph Needles
Phonograph Accessories
Record Players
Recorders



ONLY RCA VICTOR HAS THE "GOLDEN THROAT"

At the Winter Furniture Market in Chicago, January 3rd to 15th, 1949 -See the latest RCA Victor instruments . . . Space 69 and 70, 17th floor . . .

The 8T241..."The Bystander" -greatest "Eye Witness" value in the entire thrill-packed history of television.

The 8T241, like all RCA Victor instruments, has fast turnover. Your customers want highest possible quality at a fair price . . . they get just that with RCAVictor.

ONLY RCA VICTOR MAKES THE VICTROLA

"Victrola"—T. M. Reg. U. S. Pat. Off,

RCA VICTOR RG



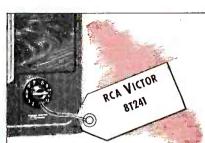


DIVISION OF RADIO CORPORATION OF AMERICA

there's why your profits are greater with this RCAVICTOR

Higher quality and outstanding selling points of ALL RCA VICTOR instruments keep turnover high!

LOOK at these 5 talking points on The Bystander"-87241



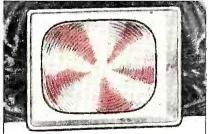
Amazing Price..."The Bystander" bears the lowest price tag for "Eye Witness" Television. Your customers will be thrilled.



Steady Pictures, Increased Sensitivity. Improved Picture Synchronizer "locks" pictures in tune with sending station . . . strengthens noise immunity.



Easy, Sure Tuning...RCA Victor Multi-Channel Station Selector makes program selection effortless, and completely automatic.



Foolproof Warning... A "Power On" Circuit makes the picture tube glow when the transmitter has gone off the air and the set has been left "on".



Stunning Cabinet... The speaker is on top of the cabinet. The front is a smooth panel of "fine wood". Available in walnut, mahogany or blond finish.

"The Bystander" is easy to demonstrate . . . easier to sell. The 10-inch picture, amazingly low price and outstanding quality make this instrument a fast seller.

Consistent, dynamic RCA Victor advertising builds up a powerful demand. You turn this demand into profits when you display, advertise and demonstrate RCA Victor instruments.

RCA VICTOR-World Leader in Radio . . . First in Television

Radio and Television

THE RADIO-TELEVISION INDUSTRY

Data Covers Year Ended December 31, 1948	Total	Annual	Number of	Annual
Radio and TV manufacturers (1200) Radio and TV distributors, dealers, etc. Broadcasting stations (2694) including talent costs Commercial communication stations Listeners' radio and TV sets in use (75,000,000)	325,000,000 150,000,000	Cross Revenue \$ 600,000,000 1,500,000,000 400,000,000	Employes 100,000 125,000 *23,000 15,000	Payroll \$190,000,000 275,000,000 170,000,000 10,000,000 †550,000,000

Regular staff-not including part-time employes, artists, etc., who number at least 30,000 more.

PRODUCTION OF CIVILIAN RADIO SETS - 1922 TO 1948

	Total Civilian Radio Sets Manufactured			ilian Tubes factured		nobile Sets ufactured	Total Radio Reception Equipment	Auto Sets in Use	Homes with Radio Sets	Total Radio Sets in Use in U.S.	At Close of
4000	Number	Retail Value	Number	Retail Value	Number	Retail Value	Value	Number			
1922	,	\$ 5,000,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$ 6,000,000			\$ 60,000,000	Number	Number	Number	
1923	550,000	30,000,000	4,500,000	12,000,000			151,000,000		260,000	400,000	1922
1924	1,500,000	100,000,000	12,000,000	36,000,000			358,000,000		1,000,000	1,100,000	1923
1925	2,000,000	165,000,000	20,000,000	48,000,000			430,000,000	• • • • • • • • • • • • • • • • • • • •	2,500,000	3,000,000	1924
1926	1,750,000	200,000,000	30,000,000	58,000,000			506,000,000	• · · · · · · · ·	3,500,000	4,000,000	1925
1927 1928	1,350,000	168,000,000	41,200,000	67,300,000			425,600,000	• • • • • • • • • • • • • • • • • • • •	5,000,000	5,700,000	1926
1928	3,281,000	400,000,000	50,200,000	110,250,000			690,550,000		6,500,000	7,000,000	1927
1929	4,428,000	600,000,000	69,000,000	172,500,000		• • • • • • •	842,548,000	• • • • • • • •	7,500,000	8,500,000	1928
1931	3,827,800	300,000,000	52,000,000	119,600,000	34,000	\$ 3,000,000	496,432,000		9,000,000	10,500,000	1929
1931	3,420,000	225,000,000	53,000,000	69,550,000	108,000	5,940,000	300,000,000	100,000	12,048,762	13,000,000	1930
1933	3,000,000	140,000,000	44,300,000	48,730,000	143,000	7,150,000	200,000,000	250,000	14,000,000	15,000,000	1931
1934	4,084,000	180,500,000	59,000,000	49,000,000	724,000	28,598,000	300,000,000	500,000	16,809,562	18,000,000	1932
1935	6,026,800	214,500,000	58,000,000	36,600,000	780,000	28,000,000	350,000,000	1,250,000	20,402,369	22,000,000	1933
1936	8,248,000	330,192,480	71,000,000	50,000,000	1,125,000	54,562,500	370,000,000	2,000,000	21,456,000	26,000,000	1934
1937	8,064,780	450,000,000	98,000,000	69,000,000	1,412,000	69,188,000	500,000,000	3,500,000	22,869,000	30,500,000	1935
1938	6,000,000	450,000,000	91,000,000	85,000,000	1,750,000	87,500,000	537,000,000	5,000,000	24,600,000	33,000,000	1936
1939	10,500,000	210,000,000	75,000,000	93,000,000	800,000	32,000,000	350,000,000	6,000,000	26,666,500	37,600,000	1937
1940	11,800,000	354,000,000	91,000,000	114,000,000	1,200,000	48,000,000	375,000,000	6,500,000	28,000,000	40,800,000	1938
1941	13,000,000	450,000,000	115,000,000	115,000,000	1,700,000	60,000,000	584,000,000	7,500,000	28,700,000	45,300,000	1939
1942	4,400,000	460,000,000	130,000,000	143,000,000	2,000,000	70,000,000	610,000,000	8,750,000	29,200,000	51,000,000	1940
1943	1 ' '	154,000,000	87,700,000	94,000,000	350,000	12,250,000	360,000,000	9,000,000	29,700,000	56,000,000	1941
1944	• • • • • • • •		17,000,000	19,000,000	•		75,000,000	8,000,000	30,800,000	59,340,000	1942
1945	500,000	00.000.000	22,000,000	25,000,000	••••••		85,000,000	7,000,000	32,000,000	58,000,000	1943
1946	14,000,000	20,000,000	30,000,000	35,000,000			105,000,000	6,000,000	33,000,000	57,000,000	1944
1947	17,000,000	700,000,000	190,000,000	200,000,000	1,200,000	72,000,000	900,000,000	7,000,000	34,000,000	56,000,000	1945
1948	14,000,000	800,000,000	220,000,000	260,000,000		150,000,000	1,100,000,000	9,000,000	35,000,000	60,000,000	1946
1070	17,000,000	600,000,000	200,000,000	230,000,000	2,800,000	200,000,000	950,000,000	11,000,000	37,000,000	66,000,000	1947
F	igures for se	ets give value	with tube	in koosiyaya	1	The state of the s	,0,000	. 1,000,000	40,000,000	74,000,000	1948

r sets give value with tubes in receivers. In normal years, replacement tubes have run 25% to 40% of total tube production. All figures are at retail values. (Statistics Copyrighted by Caldwell-Clements, Inc.)

APPLIANCES and PHONO RECORD production estimates for 1948, prepared exclusively by RADIO & TELEVISION RETAIL-ING, appear in other sections of this issue.

AS OF JAN. 1, '49, THERE WERE -

Total AM Broadcast Stations Authorize AM Broadcast Stations Operating	d 2,200 1,900
Total FM Stations Authorized FM Stations Operating	1,100 750
Total Television Stations Authorized Television Stations Operating	124
Total Special Service Stations: marine, aeronautic, railroad, industrial, public safety, etc.	
Radio operators licensed	135,000
Amateur stations	550,000
_	85,000
FM sets made during 1948	1,600,000
Record-player units of all types	21,000,000
Population Served by TV Progra	,,
Jan. 1, '49 65 million people (42 cities in	
mail of people (42 cities in	78 states

Dec. 31, '49 95 million people

[†] Annual operating expense for listeners' sets, for tube replacements, electricity, servicing, etc.

Statistics

ANNUAL BILL OF U. S. FOR RADIO-TV

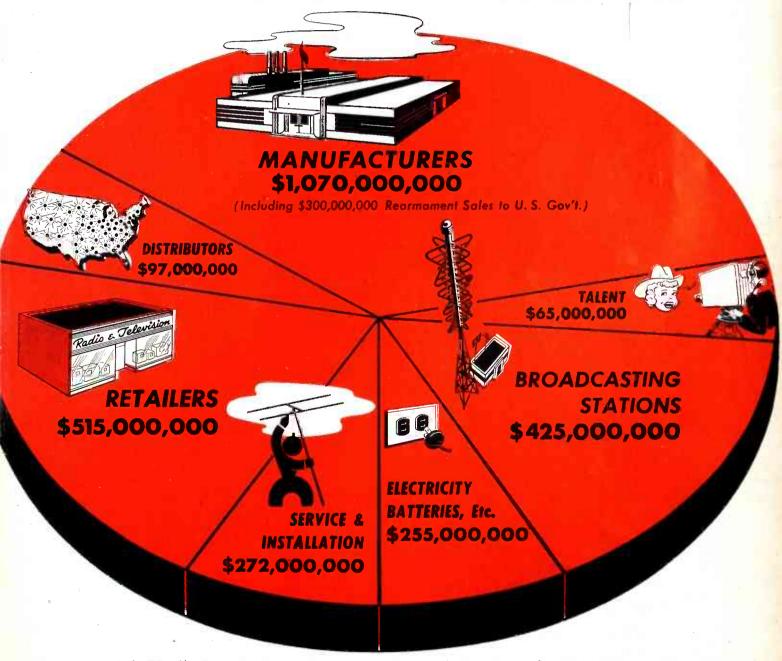
Sales of time by broadcasters, 1948	\$385,000,000
Talent costs	70,000,000
Electricity, batteries, etc., to operate 75,000,000	,
radio and TV receivers	250,000,000
14,000,000 home radio receivers, at retail value	600,000,000
850,000 television receivers, at retail value	300,000,000
Phonograph records, 250,000,000	233,000,000
Radio repairs and supplies:	
70,000,000 replacement tubes	95,000,000
Radio-TV parts, accessories, etc	1,25,000,000
Labor	100,000,000
TOTAL	\$2,158,000,000

RADIO SETS IN U. S.; WORLD

Janu	ary 1, 1949
United States homes with radios	40,000,000
Secondary sets in above homes	19,000,000
Sets in business places, institutions, etc	5,000,000
Automobile radios	11,000,000
TOTAL sets in United States Total radio sets in rest of world:	75,000,000
North America, 5,500,000; South America, 5,500,000; Europe, 48,500,000;	
Asia, 7,000,000; Australia, 3,000,000;	
Africa, 1,500,000	71,000,000
TOTAL sets in world	146,000,000

The Radio-Television Business in 1949

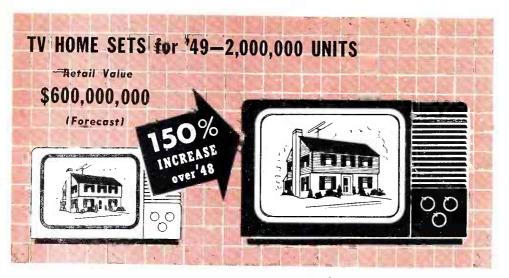
How It Will Be Divided Among the Principal Industry Groups and Services

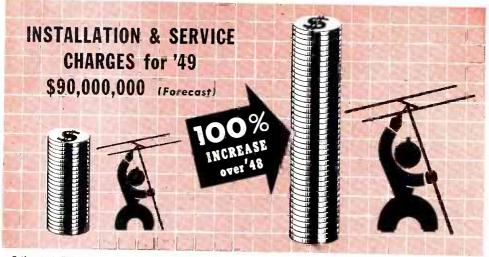


Radio-TV's 23/4 Billion Dollar pie in which nearly 300,000 radio people will share during the year to come

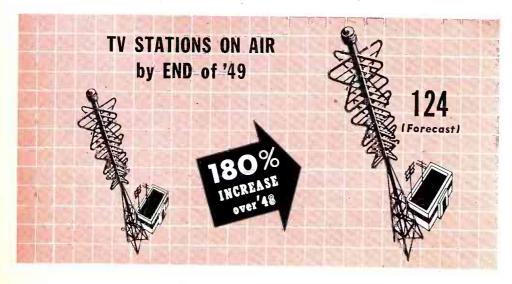
TV Sales Will

Profit-Promising Record-Breaking Year Is Forecast





Estimated figure for 1949 includes service, etc. on sets made during 1949 as well as on all others manufactured previously.



As 1948 is considered the year in which television came of age, so 1949 will be considered the year in which it became a major U.S. industry. This past year saw phenomenal increases in the number of sets in use, stations in operation, percentage of population reached, hours of broadcasting, and number of sponsors—as well as great improvement in the quality and diversity of programming. The fact that in some areas AM broadcasters are already weighing the inroads of TV upon their audience indicates that the new medium is out of the experimental stage. Now it is just a problem of production-how quickly, rather than if, TV will become universal.

All this adds up to dollars for the radio-appliance dealer, as the accompanying charts of projected estimates show. TV sales, where they have not already done so, will become a major portion of overall sales in 1949. Installation and service alone will be a sizeable business. The sale of accessories (mirrors, lenses, magnifiers and the like) will afford important extra revenue.

Prices Will Hold

Although increased competition among the swelling number of set manufacturers will provoke the introduction of smaller, lower-priced models, it appears likely that prices on current types will hold up, and in some cases be increased.

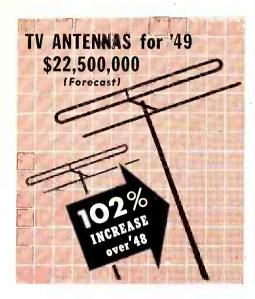
Of course, any consideration of future price trends must be viewed in the light of the possibility of the imposition of government price controls.

Two forces are at work which will influence set development. These are the desire for lower priced sets, and the demand for larger pictures. To satisfy the former, we will see increasing numbers of small models with fewer than 20 tubes, in the "transformerless" category. In the big picture emphasis, the development of larger tubes with metal envelopes will be closely paced by the appearance of increasing numbers of projection models, particularly in the vicinity of the 12x16 inch picture.

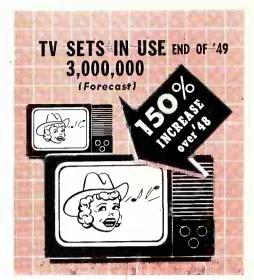
The simultaneous desire for television, FM, and LP record playing will make many customers open to buy console combinations, a rosy indication for dealers.

All in all, the merchant who exploits TV to the full in '49 can look forward to his greatest year in dollar volume sales.

Soar in 1949!

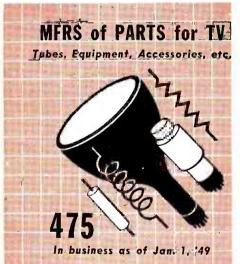


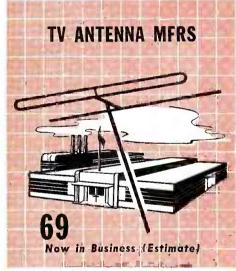




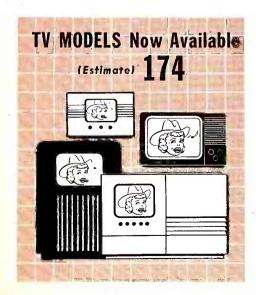
*Accessories include magnifiers, picture filters, boosters, etc. to be purchased by consumers. Total is retail value.







The above total is for those associated with the radio industry. It does not include the vast number of those in other fields who are making and selling equipment used by TV manufacturers.









New Products with New Sales-Appeal—Important Trends Analyzed for the New Year—How the Market Shapes Up

1948 saw a decrease in "straight radio" production over the previous year which will be continued in 1949, and which is a significant indicator of future trends. It does not mean that radio is falling off, but rather that it reached a peak

in a phenomenal sprint to make up for the lost war years.

The decrease was more than offset by increases in new fields which were insignificant or non-existent in prewar years. These new developments, with their higher average unit price, will actually result in greater dollar volume in the overall radio picture for several years to come. Television alone, in 1948, with less than 1/18 as many units, accounted for 1/3 as much dollar volume as radio. And this is only one of the new forces at work.

FM made great strides in '48 to the point where there were over 3 million receivers in use, served by almost 800 broadcasting stations. Reaching the home in four different forms (tuners, straight FM sets, AM-FM sets, and TV sets with FM receivers incorporated). FM reception equipment will be in the hands of over 10 million users by the end of '49. Sales potential to the dealer hardly needs underscoring. Even today, no expensive radio console is without FM, and very few expensive TV consoles are without it. In addition, an ever increasing number of table radios will include FM. To the dealer, FM reception is a closing factor which will tip more and more sales into a higher bracket.

The American public, by their growing awareness of the merits of FM, will prevent this from becoming merely a sales-catching gimmick, like a rearwindshield wiper on an automobile. Particularly glowing reports have come in from areas that had long suffered

from poor AM reception due to natural static, fading, interference between broadcast stations (especially at night), weakness and poor tone quality.

FM broadcasts cut right through these troubles to provide a listening experience hitherto unknown. Duplication of popular AM network programs, as it is utilized by more and more FM broadcasters, is a powerful sales stimulant.

Portable radios, due to improvements in reception, tone, weight, appearance and versatility, are becoming a yearround item which will account for increased sales in '49.

Portables are no longer seen only on beaches; and an upsurge in winter sports is but one factor in their growth. People carry them to sports events to hear the description of the events they are watching . . . carry them on trains and airplanes while traveling . . . carry them around in the home because they don't even have to be plugged in . . . bring them to offices to hear a world series or an election. Dealers will be wise to cash in on this movement by promoting portables in every season.

Auto radios are now considered so essential to the car owner that increase forecasts in this field can safely be predicated on car production alone. This industry, which is not expected to reach the saturation point for several years, can be looked to for tremendous increases percentage-wise in '49. Trends in this field point to more auxiliary

speakers, and to the eventual inclusion of FM in the car radio.

Home recording equipment, a rare luxury in pre-war years, has been sparked to new heights by the developments in the wire tape and disc field.

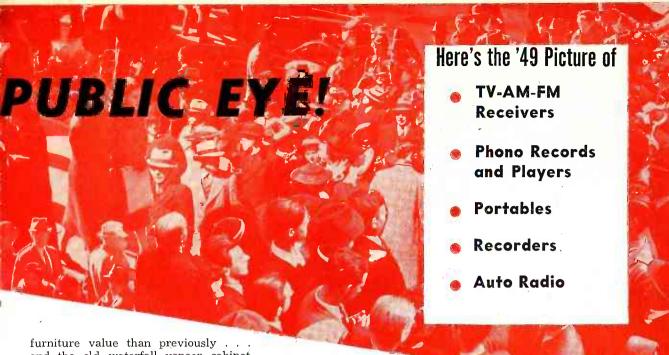
The number of homes so equipped in '49 will double '48. The new recorders are easier to operate, provide recorded material which is easily stored, produce good results cheaply. The availability of this equipment either as complete separate units, as part of console models, or as separate mechanisms for addition to existing equipment lends great diversity in its merchandising by the dealer.

Sales Appeal for Consoles

One of the most significant trends in '48 which will be of increasing greater importance to the radio-appliance store in '49 is the trend toward the "complete home entertainment unit." Despite the giant steps taken by the industry since the war, the huge potential for sales can be seen in the following figures: only 3% of U. S. families have television, about 9% have FM, and about 35% have record players. Over 90% have a radio of some sort, but lacking the new features, are increasingly interested in a set which "has everything."

A marked improvement in the styling and construction of console cabinets, together a more ready availability of woods, has been an important factor in this movement. Trends in the furniture industry toward Modern, French Provincial, and Early American, all with light woods, have been felt in the radio field. Traditional styles, too, have more

ELECTRICAL APPLIANCE production estimates for 1948, prepared exclusively by RADIO & TELEVISION RETAILING, appear in the Electrical Appliance Section of this issue.



furniture value than previously . . . and the old waterfall veneer cabinet with rounded corners is almost a thing of the past.

There is also a growing trend toward "built-in" equipment, since the cabinet which "has everything" tends to grow larger and larger. This trend will probably be confined in the near future to higher priced equipment, since, in the moderate-price field, custom building cannot match the value of mass-produced radios.

In 1949, hardly a single brand of better quality consoles which claim to have everything will be without facilities for LP records. This new technique, which was born in the middle of 1948, will see great growth this year.

With equipment beginning to roll off the lines in quantity by the end of '48, the possibility of making every record buyer a customer for a record which plays 45 minutes depends only on the extent to which the dealer promotes the idea.

It goes without saying that LP will be a significant hook for console sales, and that the dealer should have means of demonstrating the new record in order to take advantage of this hook.

New Technical Advances

On the technical side, the development of the noise suppressor principle for phonograph reproduction is being adapted by many manufacturers of consoles. Previously, needle scratch was masked by cutting off the treble with a tone control. This seriously affected the brilliance of the music, and opposed the growing desire for high fidelity.

Noise suppressors work on the principle that surface noise is only objectionable during soft passages, is masked during loud passages. Therefore the suppressor cuts in out and automatically to provide cutoff of noise only when it is objectionable, allowing full brilliance to come through the rest of the time

Another development which will be seen more and more in better sets is a special tuning eye for FM sets which have more than one "peak" on the dial for each station. The new tuning eye makes it possible to tune for the correct peak, with resultant absence of distortion.

In the consoles containing many units, provisions are made by some manufacturers to turn off the tubes not in use, resulting in power savings for the consumer, as well as longer life for the components. In addition, many phonographs have an automatic switch cutting off the tone arm from the amplifier while the changer is dropping a new record, so that mechanical noises in the changer mechanism will not be transmitted. Important to mention, although too complicated to go into here,

are developments which are making possible FM sets and television sets with fewer tubes than was originally thought necessary. Also contributing to this end are the selenium rectifier (eliminating the rectifier tube) and the crystal diode (eliminating some types of detector tubes).

Summing up all these trends and developments, we see the dealer in 1949 with more merchandise to sell that has real selling features, less "borax" merchandise and duplication of models, resulting in less distressed merchandise. All this points to the dealer realizing a higher average price per unit sale, and considerably greater dollar volume than '48.

TV SETS IN USE REACH MILLION MARK as of the first of the year, more than doubling the number in use six months ago. 44 stations in 22 cities now blanket 44% of the population of the country. January 1 sets in use for the 15 top ranking cities are as follows:

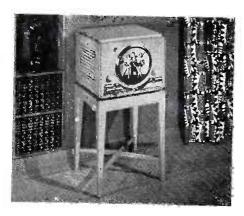
CITY	NO. STATIONS	SETS IN US
Metropolitan New York Philadelphia	6 3	446,000 116,000
Los Angeles Chicago	4	59,000 57,200
Boston Baltimore	2 3	42,400 35,400
Washington, D. C. Detroit	2 3 3 3	29,600 28,700
Cleveland St. Louis Schenectady	1	23,100 18,100 14,800
New Haven Milwaukee		13,800 12,900
MinnSt. Paul Cincinnati		11,600 11,100
Others	8	80,300
TOTAL	44	1,000,000

New Radios, TV, FM

Zenith TELEVISION SETS

Television receivers in line feature luminized "Giant Circle" screen in three different sizes for different models. "Bulls Eye" automatic tuner another feature which automatically locks into proper position tuning factors for both audio and video circuits. Volume control and contrast control may be set for individual preference. Sets also provide for automatic tuning of thirteen different television stations, whether in present wave band or in new ultra high band. Also sets have plug-in for "Phonevision" connection, in communities where service becomes available.

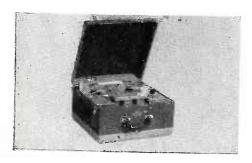
Shown is model 28T9624, FM-television con-



sole. Set has 24 tubes plus three rectifiers and "Giant Circle" "B" sized screen. Cabinet of mahogany veneer. Dimensions of receiver: 35 inches high, 23 1/16 inches wide, 19 5/16 inches deep. Priced at \$479.95. Sets are available in nine different models: two table, four console, and three console combinations that include television, FM and AM radio, and silent speed record changer with twin Cobra tone arms for playing regular and long playing records. Models include both modern and period styles in mahogany and blonde finishes. Prices range from \$389.95 to \$1150, not including installation. Zenith Radio Corp., 6001 W. Dickens Ave., Chicago 39, Ill.—RADIO & TELEVISION RETAILING

Wilcox-Gay RECORDIO

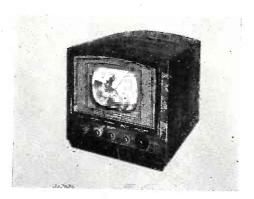
Recording radio-phonograph magnetic tape "Recordio," model 8U12. Features: lightweight of 25 lbs. Auxiliary speaker, model AS82, recommended for group listening, available as



accessory item. Covered in luggage type case; recorder comes complete with crystal microphone and a spare tape reel. Priced at \$229.50. Unit gives full half-hour of continuous recording; records from microphone, radio or telephone. Case dimensions: 15x15x6% inches. Wilcox-Gay Corp., Charlotte, Mich.—RADIO & TELEVISION RETAILING

Westinghouse TABLE TV RECEIVER

Model 196, table model television set features automatic frequency control of horizontal synchronization to maintain clear, steady picture. Unit housed in mahogany cabinet in functional modern style; 10-inch tube



provides 52-square inch picture. Protective glass over tube face treated to eliminate glare. Set is available in dark or blonde mahogany. It is 19½ inches high, 19 inches wide, 20½ inches deep. Westinghouse Electric Corp., Sunbury, Pa.—RADIO & TELEVISION RETAILING.

Tele-tone RECEIVERS

AM-FM table model, 198 shown. Set is AC, has 8 tubes, built-in antenna for AM and FM. Cabinet dimensions: 8 inches high, 12 inches



long, 7¼ inches wide. Priced at \$44.95. Hand-rubbed mahogany veneer cabinet.

A portable, model 190, 5-tube three-way set that operates on AC-DC or self-contained batteries has been added to the line. Set has built-in loop antenna, comes in maroon plastic cabinet with slide rule dial and is light-weight. Set retails for \$24.95. Tele-tone Radio Corp., 609 W. 51 St., New York, N. Y.—RADIO & TELEVISION RETAILING

Multiple Televison SETS

Model 1500 shown, direct view 15-inch tube, gives picture approximately 1234x10 inches. Features: 30 tubes, automatic frequency control; FM sound; cabinets specially designed for commercial installation with easy viewing from all angles. Dimensions: 2534 inches wide, x 24 inches high, x 23 inches deep.

20-inch model, No. 2000, has 31 tubes, picture size approximately 17½ inches x 13 inches. Cabinet dimensions: 24½ inches wide, 32 inches high, 31 inches deep. Multiple Television Mfg. Co., 987 Hegeman Ave., Brooklyn 8, N. Y.—RADIO & TELEVISION RETAILING

Magnavox TELEVISION CONSOLE

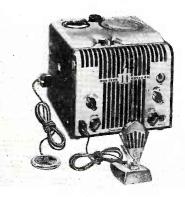
"Provincial" model AM-FM radio, phonograph with dual record changer, and televi-



sion. Set has power output of 10 watts, 12-inch high fidelity speaker, Magnascope television tube. Cabinet of fruitwood. List price for the complete unit is \$695.00. Magnavox Co., Ft. Wayne, Ind.—RADIO & TELEVISION RETAILING

Webster-Chicago WIRE RECORDER

"Electronic Memory" wire recorder, "model 7." Instrument is designed for use by "busy men" in factories, stores, offices. Unit is foot controlled, is semi-portable, and can be car-



ried home for work or entertainment. Foot control requires very little pressure. Ideal for inter-office and business correspondence, or for any spoken material of which permanent record is desired. Available with or without foot control. Webster-Chicago Corp., Chicago, Ill.—RADIO & TELEVISION RETAILING

Wiremaster RECORDERS

Portable model P, priced at \$169.50 features: sturdy carrying case covered in alligator leatherette; weighs 37 lbs., tone control; 8-inch Jensen high fidelity speaker separately housed in cover to avoid vibration and acoustical feedback. Storage space for wire, microphone and cable. 7 tubes, automatic shut-off; may be played through self-contained speaker or through radio; built-in phonograph with lightweight tone arm, plays up to 12-inch records for direct recording on wire; volume level indicator; complete with hand held microphone, mike cable, recording wire and phonograph needles.

Cabinet model H, has the features described above, utilizing built-in Jensen 4-inch speaker, plus compact, hand-rubbed mahogany, walnut or bleached cabinet. Sells for \$142.50. Precision Audio Products, Inc., 1183 Broadway, New York 10, N. Y.—RADIO & TELEVISION RETALLING

Combos and Recorders

RCA Victor TELEVISION RECEIVERS

"Sightseer" model shown, 8-T-244. Set features slideaway doors that cover controls and screen. Suggested Eastern list price is \$395.00.



"Bystander," television set model 8-T-241 features speaker located in top of set. Suggested Eastern list price is \$325. in walnut or mahogany finish, \$345, in blond, "Onlooker" television receiver, model 8-T-243, features contemporary styling by combining gun metal color and walnut or mahogany finishes. Louvered front panel is wood of gun metal color.

All three models utilize advanced circuit with 22 tubes plus two rectifiers; new tuner; extensive shielding to minimize interference; "power-on" circuit which causes tube face to glow when instrument is left on after transmitter to which it was turned goes off the air.

Capehart CONSOLE (TELEVISION OPTIONAL)

Three new receivers introduced permit dealer to merchandise AM-FM-Phonograph combination completely equipped for television installation either at time of purchase or at any time the customer desires up to January 1, 1950. Space and mounting shelf are provided for television chassis, and the viewing tube panel, front safety glass and metal screen backing are all installed at time of delivery to dealer. Television space in two of the models can be converted to record storage space if desired. Model 504PR is shown, as a complete



AM-FM-Phonograph unit with standard record storage facilities. List prices, without television are: Models 501PR, 592PR and 504PR \$895.00, \$795.00 and \$595.00 respectively. With television installed the three list at \$1295.00, \$1195.00 and \$945.00. Farnsworth Television & Radio Corp., 3702 E. Pontiac Ave., Ft. Wayne 1, Ind.—RADIO & TELEVISION RETAILING

Ansley PORTABLE RECORD PLAYER

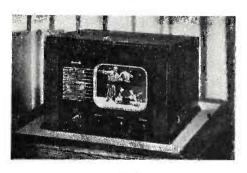
Portable record player with amplifier for use with Long Playing records. Instrument features 33 1/3 rpm turntable, 3-tube amplifier



with volume and tone controls, 5-inch speaker. Player is housed in leatherette covered carrying case with leather handle. Priced at \$41.95. Ansley Radio & Television, Inc., 41 St. Joe's Ave., Trenton, N. J.—RADIO & TELEVISION RETAILING

Sonora TELEVISION SET

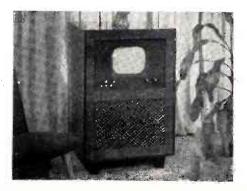
"The Contemporary," model 700-A television set has 10-inch direct view tube, 52 square inch picture. Features: automatic image lock-



in, "clear as a bell tone." "micro-sharp" image for high definition and faithful reproduction. Mahogany cabinet. Lists for \$325.00. Sonora Radio & Television Corp., 325 N. Hoyne Ave., Chicago 12, Ill.—RADIO & TELEVISION RETAILING

IT I TELEVISION CONSOLE

Model 221 D, dark mahogany period styling; model 221 L, bleached mahogany, modern styling. Set has 18 tubes plus 2 rectifiers and



picture tube; employs 12-inch permanent magnet speaker; Features advanced circuit design. Overall cabinet dimensions are: 25½ inches wide, 23 inches deep, 28 inches high. 12-inch direct view picture tube gives 72 square inch picture Industrial Television Inc., 359 Lexington Ave., Clifton, N. J.—RADIO & TELE-VISION RETAILING

Starrett TV CONSOLE

"The Gotham," television set has 15-inch direct-view tube, AM-FM radio, Webster phonochanger. Cabinet available in mahogany or walnut is 39 inches high, 46 inches wide, 24



inches deep. Features include: dialite tuning, gold plated dials and knobs. Circuit has 40 tubes plus 2 rectifiers. Priced at \$1575.00. Starrett Television Corp., 601 W. 26 St., New York, N. Y.—RADIO & TELEVISION RETAILING

Air King CONSOLE

Model A-800, AM-FM, record changer console combination, built for exacting tonal reproduction and high fidelity reception. Record player plays 10 and 12-inch records intermixed.



Low pressure tone arm and permanent needle featured. Set has 8 tubes with built-in loop and folded dipole antenna. Cabinet in mahogany, walnut or blond. Priced at approximately \$219.50. Air King Products Co., 170 53 St., Brooklyn 32, N. Y.—RADIO & TELEVISION RETAILING

More New Products
Elsewhere
In this Issue



Promotion-minded Ward merchandisers use window displays as silent salesmen. The large signs attract attention of passers-by on both streets.

Fast Service, Installation, Brings More TV Sales

THE PROBLEM a suburban retailer has in meeting competition from the stores in an adjacent large city is nothing unusual. But when a suburban dealer in radios and electrical appliances turns the tables on the large downtown stores by not only keeping a large share of his community's patronage at home

but drawing at least half of his volume from the buyers living in the metropolis next door, the method he employs is worthy of careful attention.

Ward Radio and Electrical Appliances at 8535 Georgia Avenue, Silver Spring, Md., fast-growing development adjacent to Washington, D. C., uses every angle of modern merchandising technique to build up trade.

The firm's chief ace in the hole is a service department which insures television installation 24 hours after the order is taken, with equally prompt maintenance attention.

A crew of four is employed full time with truck and car service for fast calls to any part of Montgomery County or the District of Columbia. As a result of this innovation, Ward's has been

able to boost its volume of television sales about 25 percent in four months.

Robert Miller, owner of Ward's, is an enthusiastic advocate of a self-owned and operated television installation service section by the dealer. Says Mr. Miller: "The future of the dealer lies mainly in his television sales. At least 75 percent of our business total in the next two years will come from this fast-moving and popular item and we must be prepared not only to sell it, but to step up our installation and repair service.

"The expense for such a service easily repays itself. The average television installation costs somewhere between \$55 and \$65. The average store already has its service department with bench

and mechanics on hand. If it takes in television service the extra payroll of a helper and installer means an expense of from \$100 to \$120 per week. Aerial costs run from \$8 to \$10. Now if you only sell four sets a week, your income amounts to about \$225 on the installation alone. A weekly sale of four sets would therefore meet the fixed charges, leaving about \$80 for a maintenance man as well as mechanics available for other service work."

Other Values

But in addition to its monetary advantage, self-conducted television installation service has brought Ward's other highly satisfactory results. It enables the store to keep control of this work and it enables the store to give its patrons a personalized service and direct contact. This benefit is highly

(Continued on page 40)

Consumer advertisements like

Consumer advertisements with

Du Mont dealers with

this help Du Mont of meeting

the present problem of Du Mont

the terrific demand for Du Mont

the terrific demand for receivers.

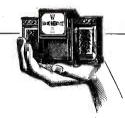
television receivers.

IT'S

YOUR SET...

BUT OUR

REPUTATION



Here's why your Du Mont dealer may tell you you'll have to wait a week, or two, or even three, for delivery of your Du Mont television receiver.

THAT DU MONT RECEIVER you are eagerly waiting for is in the factory right now. Perhaps at this very moment a skilled craftsman is soldering one of its thousands of tiny connections. He is taking time to do it right.

Do you want him to hurry? It's your set.

Or perhaps your set is now on the

That test line is really rough!

They put a set through all its normal paces; and then they abuse it. They deliberately try to bring out flaws and weaknesses. They torture its most delicate nerve centers and watch the screen to see if the picture flinches.

Let's say there's a capacitor in there that doesn't act quite right when the overload goes up to three times its rated capacity. Probably wouldn't make any trouble — not for years anyway. But then again, it might.

What do you want that inspector

Shall he stamp it "OK" and ship it out to you?

Or shall he mark it "Reject. Replace Capacitor C-21-E and re-test"?

It's your set, mister! Will you wait another day or two to have it right? You don't have to make that decision. We made it. The set goes back. It's your set — but it's our reputation!

The reason your dealer must keep you waiting is that so many people want Du Monts. And the reason they all want Du Monts is that Du Mont has a fine reputation. A reputation for delivering the brightest, clearest, steadiest picture even where conditions are poor. A reputation for trouble-free performance. A reputation for long life.

Maybe you hadn't thought about long life; but you know Du Mont

built the first home receivers clear back in 1939 and those old-timers are still running fine.

That Du Mont receiver you are waiting for is going to bring a lot of enjoyment into your home. It's going to play a very important role in your life from now on.

We're sorry we can't promise you immediate delivery. But we do promise that when you get your Du Mont receiver, it will be as nearly perfect as human skill, and patience, and seventeen years of television experience can make it.

You'll soon forget the short wait; but ten years from now we hope you'll be telling the boys, "That old Du Mont of mine still pulls in such a swell picture I wouldn't swap it for a new one."

You won't be sorry then you waited for a Du Mont.

First with the Finest in Television

Fast TV Service, Installation

(Continued from page 38)

valuable in the smaller communities where in most cases the store's employees are personally known to the customer.

Ward's fast installation service is most effective too at peak buying seasons when an outstanding sporting or political event, or some other affair In line with their alert merchandising procedure, Ward's employs a triplebarreled promotion campaign to bring its message home to prospective customers, devoting at least 5 percent of the annual volume for this purpose.

Use of return coupon by
Ward brings inquiries; indicates
how successfully an ad is pulling.

high in news value impels many customers who are on the fence regarding their choice to make an immediate selection with the hope that their set will be in their home in time for them to tune in on the dramatic affairs about to take place.

The climax in volume for this store came during the few days preceding the Louis-Walcott fight and the national political conventions when the establishment was crowded with customers and the telephone busy ringing with orders. Because Ward's had the foresight to have its installation service already in operation, they put over sales which would not have resulted otherwise.

Mediums used include newspaper advertising, radio and television advertising and direct mail, each concentrating on a particular segment of the population.

The Washington newspapers are utilized at least once a week, the ad taking up 400 to 600 lines. The copy plays up immediate television service. Although dealer mats are used for the bulk of the copy, they are adapted and modified by the store's professional advertising assistant to fit the requirements of their own particular trading area.

Television time itself, as well as radio spot commercials, are used extensively to further step up this advertising campaign. At periodic intervals

Ward's participates in shows put on by Philco and other manufacturers for their retail outlets. The store prefers to take to the air consistently. This is in order to refresh the public's memory constantly on the name of the establishment and what it stands for.

In this respect Ward's agrees with old Bill Shakespeare that "consistency thou art a jewel" can be applied to radio as well as other forms of promotion media since they hammer away at them consistently. That policy confirms a fact known by other advertisers, that the sales effectiveness of long-range, regular, cumulative, persistent advertising increases from month to month and from year to year. If intelligently planned and wisely executed, advertising should be more effective during the second six months than the first; even higher during the second year.

The third promotion medium, direct mail, is used extensively also. A reprint of the newspaper ad is sent out after each insertion to a select list of 5,000 names taken from the directories, store accounts or to newcomers.

Consultation Service

Tieing in with all of this is personalized, word-of-mouth advertising that comes straight from the store itself with the inside salesmen constantly playing up the advantages of prompt television installation service to persons coming in. A personal consultation service is afforded which in some cases even embraces advice on interior decorations and furnishings to go with the set purchased.

From the physical standpoint the location and architectural features of Ward's has contributed heavily toward building up store traffic. Situated at the corner of Colesville Road and Georgia Avenue, which is the Times Square of this bustling community, second in population only to Baltimore throughout the state, the store draws immediate interest from passers-by. This focal attention is accentuated further by plenty of neon signs indicating national brands available, and a lot of parking space close by.

It is this type of alert merchandising and aggressive promotion which draws a mixed trade from Federal government workers, city dwellers and suburban residents as well as rural buyers that has enabled Ward's to demonstrate phenomenal growth in its 12 years.

Personnel of this store besides Mr. Miller include: Armor Friend, sales manager; and Robert Lenet and Richard Graf, salesmen.

ELECTRICAL APPLIANCE production estimates for 1948, prepared exclusively by RADIO & TELEVISION RETAILING, appear in the Electrical Appliance Section of this issue.

Television is the

Toast of the Industry— But Radio is Still the Bread and Butter

When the miracle of radio burst upon the market, back in the early 1920's, there were skeptics who, with more vigor than vision, predicted the end of the phonograph and record industries. But they were wrong. Far from killing the record business, radio opened for it vast and lucrative markets.

Today, the magic word in the industry is television—and there is no denying the impact and potential of this new entertainment service. But it would certainly be a mistake to sell radio short. Television, which some economists predict will be in the multi-billion dollar sales bracket before long, naturally fires the imagination, and dealers are eagerly awaiting opening of markets in their areas. But the consequences may be dire for those dealers who just sit and wait, forgetting that radio is still the bread and butter of the industry.

Every new advance is accompanied by dire predictions concerning existing industries. You may have heard such predictions; radio would kill the phonograph, talking pictures would kill the stage, radio would kill talking pictures, and radio advertising would kill newspaper and magazines. Today, however, we find more advertising in more magazines than ever before, movies are going strong, phonographs are selling as well as ever, and tickets to a top Broadway show are hard to get.

Radio and TV Partners

Judging from the pattern, advances seem to expand existing markets, rather than kill them off, and there is no reason to believe that radio and television will not remain partners for a long time, each continuing to bring its own particular entertainment services to the public.

Let's take a look at the radio market. There are those who point out that the radio business in 1948 is not as good as it was in 1947, and that it may be even further off in 1949. Their figures are right—but their reasoning is wrong. Television alone is not responsible for the drop in radio volume. The plain and simple fact is that the industry has

to a great extent satisfied the abnormal demand pent up during the war years, and sales are slowly leveling to normal.

What is normal? The five year period preceding the war, from 1935 through 1939, is generally accepted as a normal business period. During that period, the radio industry sold a yearly average of seven and a half million radio units. During the war years there were no radios, but there was a constantly increasing demand, so no one was sur-



This interesting, timely article was written especially for RADIO & TELE-VISION RETAILING by Frank M. Folsom, newly-elected president, Radio Corporation of America.

prised when the sales figures shot past the 14 million mark in '46. Last year, still riding the crest of the pent-up demand, the industry hit the all-time high of 18 million units. Certainly no one expected the abnormal to continue indefinitely. Just as we knew the sales figures would soar, we knew they would start leveling off once we had satisfied the major portion of the war-induced shortage.

This year the industry expects to sell some 13,000,000 radio units, and those who see television as knotting a noose around radio's neck will point out the drop from last year's 18,000,000 mark. But actually that represents a normal leveling off from abnormal business conditions, and despite the drop from last year, the industry will still be sell-

ing nearly double the volume established as normal in the pre-war period. There's hardly an industry in this country today whose current sales figures will match those of the lush 1945-46-47 period, and there are not too many that are still doubling their prewar sales volume.

But the dealer who forgets that and writes off radio, and hopes only that he can stay open until television brings a chunk of its multi-billion dollar potential into his area, stands a good chance of not being around on bonanza day unless he stops wringing his hands and goes out digging for the lucrative radio business that is still all around him. The nation's radio dealers will sell this year about twice as many radios as they sold in 1938, with the dollar volume for this year up around the 650 million mark. Estimates for 1949 see a market in excess of ten million radio units, still well above the normal. The dealers' share of that business will be in direct proportion to their alertness, aggressiveness, and know-how in promoting, merchandising, and selling ra-

Business Stimulants

Today's radio dealer is better equipped than he was in 1938. He has new business stimulants in FM, portable radios, and radically improved styling, together with a tremendous replacement business. True, television will undoubtedly divert a considerable amount of radio money-but for every established family buying a television set, there will be a young married couple just starting out and economically limited to a table model radio or a low-priced radio-phonograph. Every family that buys a table model television set is a prospect for a radio-phonograph or a table radio or phonograph for other locations in the house. And even the family purchasing a television-radiophonograph combination is still a prospect for radio merchandise—a table model for Junior's room, a radio-phonograph for the playrooom, a table radio for the kitchen.

Radio is certain to be the bread and butter of the industry for some time to come, but only for those dealers who, instead of idling until television comes, go out aggressively for the still lucrative radio business. The postwar days of fighting off customers in the stores are gone. But the customers are still around, buying twice as many radios as they did before the war. The smart, aggressive radio dealer knows where and how to find them.

The Picture the Whole Family Can See!



Stewart-Warner TELEVISION

Wonder Window "NEW YORKER"

(AVC-1)-(pictured above) style-proportioned for today's home. Fits easily into modern room arrangements. Styled in beautiful, hand-rubbed mahogany. Matches Stewart-Warner "Manhattan" AM-FM-phonograph,



Wonder Window Television CONSOLETTE

WASHINGTON—(AVT-1) -same wider picture as in the console models, yet it's a remarkably compact direct-view set. Styled in mahogany in harmony with the "Monticello" radiophonograph. Includes all console features.

Wonder Window "WAKEFIELD"

(AVC-2)—same television receiver as the "New Yorker," styled in the 18th Century tradition in dark mahogany. Over 58 square inches of viewing screen Instant tuning. Matches "Mt. Vernon"

More people enjoy the show when they see it on the Stewart-Warner Photo-Mirror Screen . . . because the picture's up where everyone can see it. For an even bigger picture, an enlarging glass slips easily into the cabinet top-out of sight.

Once more it's Stewart-Warner for the best entertainment for the whole family!

Stewart-Warner

TELEVISION • AM RADIOS FM • RADIO-PHONOGRAPHS

Stewart-Warner Electric, Division of Stewart-Warner Corp.

CHICAGO 14 TILLINOIS



RECORDS

Section of RADIO ETELEVISION RETAILING

The Record Sales Picture for '48-'49

The year just completed was an important one to the entire record industry. Retailers who weathered the storm of the sales slump, the recently-ended Petrillo ban, appearance of television in their locality, et al, did so by means of hard work in a sturdy boat. The start of a New Year is as good a time as any to reflect on the mistakes and mishaps that have plagued the industry during the past year, as well as viewing the new developments that will prove to be a revitalizing force.

A clear indication of a widening range of public taste shows up in this year's sales figures. In proportion to total sales, a larger percentage of serious music albums and children's records were sold during '48 than at any time before.

In the popular field, such categories as hill-billy, modern jazz, race, and platters with a "foreign flavor" have been released in great varieties, and have been gaining greater acceptance. Dealers find that although the public taste is broadening, it is at the same time becoming more selective.

The advent of television in many areas of the country undoubtedly has had an immediate effect on record purchasers in such sections. However, the entertainment industry sincerely believes that there is plenty of room for everybody. As more people get used to the idea of seeking entertainment at home, the better it will be for the recording industy.

Sales of record needles have continued at a slow, but steady pace. Even those dealers who reported diminishing record sales some months, found that needles were still selling. Although the public was cautious about buying, they were listening to and enjoying their collections at home.

The introduction of Long Playing records and equipment added a new note to the proceedings. Consumer interest in the unbreakable microgroove, 33 1/3 rpm recordings remains very high. The public is definitely interested.

However, rumors of the imminent appearance on the market of other discs which play at a still different speed, and which require additional playing equipment have been disturbing all facets of the industry. Equipment manufacturers have been holding back; dealers are confused.

A number of industry leaders have been shown RCA Victor's new record and record player. A 45 rpm job, the "doughnut" disc is made of Vinylite, and is said to be planned for the market some time this coming Spring. It is rumored that it may sell for as little as 50 cents. (For further information, see page 48, this issue of RADIO & TELEVISION.)

Some manufacturers have privately stated that they intend to sit it out on the sidelines, continuing to release records that play at 78 rpm—for the time being, anyway.

Dealers should make all efforts to assure their cus-

1948 Sales Estimates of Records and Needles Compiled by RADIO & TELEVISION RETAILING

RECORDS	Total No. of Units	Total Retail Value	Total No. of Unit PLAYING NEEDLES	Total s Retail Value
Popular Classical Children	62,500,000	\$233,125,000	Steel (Including those manufactured in foreign countries) 100,000,000 Precious metal-tipped	Ō
			115,500,00	9 \$ 25,000,000

Columbia's LP Records and the Future

More than 250,000 lines of enthusiastically favorable publicity reaching approximately 100,000,000 potential customers and a virtually unanimous approval of the product by those consumers who have heard it demonstrated, has quickly and definitely established Columbia's sensational new Long Playing Microgroove Record as the greatest development in the record industry since electrical recording.

With player attachments and two-speed, dual-purpose radio-phonograph combinations now available and a growing list of LP records offering the consumer an ever widening choice of music, we will have completed by January 1 the initial phase of LP distribution.

By the end of this year there will be well over 100,000 owners of LP Player attachments and uncounted thousands who will own new dual-purpose phonographs, designed to play both conventional shellac records and the new LP. Millions of dollars in announcement advertising will have been spent by Columbia and the radio-phonograph manufacturers. By the beginning of 1949, there will be close to three million LP records in the hands of consumers.

Gradual Transition

Now, let's take a look at 1949 and see what is likely to happen. I am firmly convinced that ultimately the conventional shellac record will be replaced by LP. I can't see how it can be otherwise in the face of the multiple consumer and dealer advantages offered by LP such as savings in money and space, superior quality, nonbreakable Vinylite, ease in handling, etc. However, I am equally convinced that the transition from conventional shellac records to LP will be a relatively gradual and a completely orderly one.

I think that the present is proof sufficient of what to expect from the future for while LP has met with an enthusiastic consumer reaction, there has been no indication that the change-over from shellac to LP has been so rapid as to cause any inventory obsolescence. Nor will that change be accelerated to the point where inventory obsolesence (provided, of course, inventories are controlled with reasonable intelligence) is probable in the future.

In 1949, I forecast a great increase in the mail order business in phonograph records. With the presence of a light, nonbreakable record in the form of



A forecast for 1949, written especially for RADIO & TELEVISION RETAILING by Paul E. Southard, vice-president in charge of merchandising, Columbia Records, Inc.

LP, consumer objections to ordering and shipping records by mail will disappear and a marked increase in ordering records and sending them as gifts by mail will result.

During 1949 almost every major radio manufacturer will have a dual-purpose turntable incorporated in his new combinations. Many manufacturers have already announced such phonographs as the feature of their 1949 lines and are now delivering such combinations. The difference in cost between an ordinary phonograph which plays only conventional records and one which plays both conventional records and the new 45-minute LP record is so small that it is altogether inconceivable that the purchaser of a new combination or straight phonograph will buy anything but a dual-purpose model. It means also that there will be an added incentive to purchase a new phonograph, a fact which adds up to a sizeable increase in instrument sales during 1949.

But, you will argue there are thousands of owners of relatively new phonographs who are not going to buy

new combinations just because of LP. That contention is entirely correct and for these people the simple, inexpensive and easily installed player attachment marketed by Columbia and many instrument manufacturers modernizes these phonographs. In 1949 the sale of Columbia Player attachments and other similar instruments will be at a peak providing further profit opportunities to the dealer.

In the last quarter of 1948 our advertising, primarily announcement advertising, has been breaking the news of the sensational new 45-minute record. In 1949, that tremendous barrage of advertising will be continued and its accumulative effect will grow continuously.

The rapid expansion of our LP catalog will be another factor influencing increasing consumer interest and resultant increasing consumer purchases of LP through 1949.

On January 1, 1949 our LP catalog will consist of 157 records, 635 selections. We will, of course, continue to issue new LP releases each month during 1949 and the increasing breadth of catalog resulting from this practice will mean an increasing amount of interest on the part of an ever growing number of consumers.

I further flatly predict that for the first time in many years many new record buyers—people who have never before purchased a phonograph and records—will begin to enjoy recorded music for the first time. The absence of interruptions, the low cost and superior quality, the removal of the storage space problem and the fact that a low priced attachment can be connected even to an ordinary table model radio, will combine to arouse the interest and prompt buying action on the part of the new record buyer.

Public Approves

The biggest single factor behind the expansion of LP during 1949, however, will come through word of mouth advertising by satisfied LP owners. Already thousands of unsolicited letters from the buying public and reviewers have attested to the success of LP. "Greatest invention since the wheel"; "Oh, that quality. Beautiful, beautiful!"; "... am really listening 'in the clouds'"; "the future is with us"; "a new listening experience"—are some of the comments which we are getting every day.

During the introductory phase of this campaign we were unable to keep up with the demand for Columbia Player Attachments. In one sense, this was good, for it reflected the enthusiastic public reception of LP. On the other hand, however, it meant many interested consumers weren't able to buy Columbia Players when they wanted them. We have increased our Columbia Player production as rapidly as possible and throughout 1949 we have every reason to believe that we will be able to service dealer orders for Play-

(Continued on page 49)

Sandwick PHONOGRAPH

"Balladier" phonograph, with dual speed motor, to sell for \$149.50 shown. Unit has a 6-tube triode amplifier, 8-inch speaker, motor



mounted on springs, two cartridges for use with standard and Long Playing records. Attractively finished cabinet. Sandwick-Bowen Corp., 4712 Bethesda Ave., Bethesda, Md.-RADIO & TELEVISION RETAILING

Ultratone TAPE RECORDER

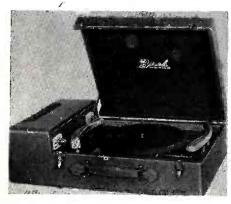
Tape recorder, radio-phono combination features: 7-tubes; one full hour of tape recording; recording on two tracks; unit records directly from its self-contained radio receiver, or from phonograph pick-up arm; set has all controls and calibrations on a metal sloping



front panel. Recorder may be played through the amplifier system of a console radio or other amplifying system. Plywood carrying case covered with fabricoid. Size: 18% inches deep, 1634 inches wide, 978 inches high. Audio Industries, Michigan City, Ind.—RADIO & TELEVISION RETAILING

Birch TWO-SPEED RECORD PLAYER

Portable dual speed record player, model DS 63 plays 33-1/3 and 78 RPM records through its own amplifier. Features: two matched output pick-ups, synchronized with dual speed



motor, featherweight pick-ups; two tubes plus selenium rectifier. Leatherette covered case is 20 x 6 x 13 inches. Retails for \$39.95. Boetsch Brothers, 221 E. 144 St., New York 51, N. Y.—RADIO & TELEVISION RETAILING

Pickering ANNOUNCES...

RECORD REPRODUCER JUST FOR MUSIC LOVERS

...and in addition

YOU CAN REPLACE THE STYLUS FOR GREATER ECONOMY!

The Pickering R-150 Cartridge is designed and manufactured for the discerning person who wants the optimum quality of record response with standard record playing phonographs. The R-150 Cartridge is not for professional use not for transcription use - not for laboratory use-but is especially manufactured by Pickering for home use with conventional phonographs.



OUTSTANDING AMONG THE FEATURES OF THE R-150 ARE:

Stylus is replaceable for greater 👔 Negligible acoustical radiation and economy. No longer is it necessary to discard cartridges or return them to factory for stylus replacement. A low-cost stylus can be installed by hand in a matter of seconds. A sapphire stylus is good for several hundred playings—a diamond stylus is good for several thousand playings. Both are readily available at leading dealers.

the R-150.

- needle talk.
- No appreciable response below 30 or above 10,000 cycles - no frequency discrimination between these limits.
- No extraneous sounds due to warped or imperfect records.
- Of all commercial cartridges, the R-150 produces the lowest record
- Stylus will not work loose but will Both sapphire and diamond styli, 2 to 3 mil radius are available for actually tighten due to playing forces.

THE R-150 IS NOT TO BE USED WITH MICROGROOVE RECORDS, LONG PLAYING MICROGROOVE RECORDS REQUIRE THE PICKERING D-140S WITH DIAMOND STYLUS OR THE S-140S WITH SAPPHIRE STYLUS.



PICKERING REPRODUCING EQUIPMENT: Cartridges for standard and microgroove records, Transcription Pickups, Pre-Ampli-

> fiers, Equalizers, Equalizer-Amplifiers are sold by leading distributors . . . write for the names of the ones nearest you.

Oceanside, New York



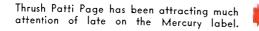
Lovely Jane Pickens was recently added to the RCA Victor roster of stars. Her "Galaway Bay" waxing was an impressive debut disc.

New Profit-Making Prosonalities Personalities for 49

artists to bring in bigger and better sales during the coming year. Some of the faces are new to the recording scene, others have been around for quite a while. A few of the names have already created places for themselves on the best-seller lists, and on personal appearance tours. Others show great promise of having that indefinable something that "sells." Retailers who want to stay on the beam during the coming year, will want to keep up with waxings released by these artists.



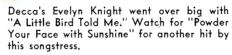
Among the initial list of releases issued on the Coral label, was the Ames Brothers' "You, You, Are the One" and "More Beer."











New duet sensation, Doris Day and Buddy Clark started something with their "Love Somebody" disc success for Columbia. The label is following through with more of the same.

Jerry Sellers, MGM recording star's version of "Heart and Soul," won him many new admirers. His next, "Play the Playera," looks equally good.







Scotty MacGregor's pleasant voice and personality shine right through his kiddie records for Continental.



Ray Whitley, folk singer makes his Apollo disc debut with "I Wish That I'd Been Satisfied with Mary."

Dean Martin and Jerry Lewis, who have been packin' 'em into nightclubs across the country, have waxed "The Money Song" and "That Certain Party" for their initial Capitol release.

Record Speeds—331/3, 78 and Now 45 RPM!

The New RCA Victor Madame X Record—Dealer's Picture
—Effect on Market—Reactions of Parts and Set Makers

• Radically differing from present discs, a new 45-RPM Vinylite record, and a corresponding record-player have been developed by RCA Victor, and during December were exhibited privately to a number of industry leaders for comment, and to give them time to prepare their plans for '49 marketing.

As reported by engineers who have examined this "Madame X" equipment, the discs, seven inches in diameter, have a two-inch central hole, surrounding which is a thickened ring or "doughnut" from which extends the disc itself. Thus when stacked, the playing surfaces of the records do not come into contact so that there can be no injury through scratching. High fidelity is claimed for the record.

This "doughnut" construction of the record greatly facilitates operation of a simplified mechanical record changer which can be manufactured at a cost said to be about one half that of present changers. The records also promise a production cost less than that of the present 78 or 33 1/3 RPM discs. It is rumored that the "Madame X" record may sell for as little as 50 cents.

Reaction is Mixed

Reaction of set manufacturers is varied. Some are vigorously protesting that the launching of records and equipment of still another speed added to the 78 and 33 1/3 RPM picture will result in the utmost confusion at the retail level. Some other manufacturers say they will go along with RCA Victor, and plan to bring out equipment to play the "doughnut" discs on sets this coming Spring.

In the meantime, the dealer is viewing the situation with considerable

anxiety, as are manufacturers of recordplaying parts and units, many of whom have been working at top-speed getting geared up to produce equipment to handle Columbia's Long Playing discs.

How Merchant Fits In

The way the whole thing looks at this time, instruments made to play all three speeds—78, 33 1/3 and 45 RPM, will be on the market late this Spring. It is likely that some such players will have two separate compartments, one to play both the conventional and the LP discs, and the second to play the Madame X or RCA Victor's "doughnut" type.

One large set manufacturer asserts that if his firm does go along with the Madame X set-up, it will manufacture a single unit designed to play all of the three speed discs in one compartment. However, this maker said that such equipment could not possibly be ready before middle or late summer.

It is reported that some Middle West firms are already in production on 45 RPM equipment, and that some of them are making units to adapt existing instruments to play the new "Madame X" discs.

Though the situation is widely viewed with irritation and alarm, it may, after all, prove to be the shot in the arm the record business needs.

Certainly, the dealer is in the driver's seat for the first time in five years. Having been the goat in all sorts of "deals", stagnant inventory-loading practices, and, for the past year struggling in a slowed-up market, he is now the man who is going to have the final say in this phonograph record business.

Advice to Retailers

Believing as he does in free enterprise, the retail merchant has no gripe against the practice of bringing out innovations. He knows that the manufacturer has a perfect right to make what he pleases.

But the alert retailer doesn't want to get caught in the middle of any situation such as is now facing him in this industry.

The editors of RADIO & TELEVISION RETAILING urge their readers to watch inventories of instrument and discs with an eagle-eye; to sell harder, and to advertise more. Turn-over rates must be increased; present stocks must be reduced. Too, in meeting the new conditions, merchants need to forget practices and habits of the past, taking whatever new comes along offering additional profits—dropping those which do not appeal to them on a dollars and cents basis.

Named by Times-Columbia

George A. Hayes has been appointed as sales manager of Times-Columbia distributors, exclusive Columbia Records distributor in New York City, Westchester, Nassau and Suffolk counties.



Record Forecast for '49

(Continued from page 43)

tomers that records and players of the 78 rpm variety in popular use today will not be obsolete. On the other hand, they should make plans to actually merchandise the new equipment to bring in additional revenue.

A request made by a record manufacturer to the Department of Commerce to intervene in an attempt to obtain some standardization of playing speeds, brought forth the comment that the government had no right to do so, unless some evidence of "unfair competition" could be found.

Undoubtedly, cooperation and standardization among the manufacturers would be of inestimable help to retailers. In the event that there is none, the burden of deciding what to recommend to his customers falls upon the dealer. The increased competition may finally result in producing better products, having increased sales appeal.

And, as in many other industries in which there is little or no standardization, business will continue.

Southard Foresees Bright LP Future

(Continued from page 44)

ers with reasonable speed. Now, the dealer is able to get them and his 1949 sales will increase consistently as a result.

Many dealers were quick to recognize the sales and profit opportunities inherent in LP. These aggressive dealers have already done and are continuing to do a thorough and productive exploitation job with the result that they enjoyed the profit both from their conventional shellac record business and from LP.

There were other dealers, fearful that the introduction of LP would obsolete their present inventories, who withheld aggressive promotion and sales activity on LP. These latter dealers have already passed up sizeable profit.

There can be no question about the sales and profit opportunities in LP for 1949. There can be a question about how much of this profit will be yours. No matter how much advertising, no matter how much promotion, no matter how much consumer enthusiasm and demand for LP is created during 1949, what proportion of the sizeable LP business becomes yours rests in the final analysis with you and you alone.

On what you do to identify your store as an outlet for the sensational new 45-minute record, on the consistency and productivity of your promotion and advertising, on the selling knowledge of the people behind your counter will depend what share of the LP business will be yours in 1949.

Recording Ban Ends

Recent proposals and terms agreed upon by the phonograph recording industry and James C. Petrillo's American Federation of Musicians brought to an end the recording ban, which started Dec. 31, 1947. The union welfare fund is to receive royalties of from 1½c to 2¼c on each record. Money thus received will be spent on musical performances where no admission fee is to be charged, and no profit made.

Coral Distributors

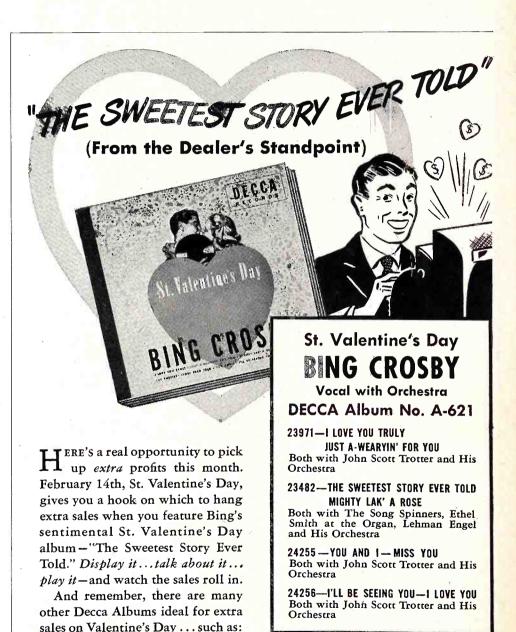
Coral Records, Inc., New York, a subsidiary of Decca Records, Inc., announced

the appointment of the following additional distributors: S. R. Ross, Inc., Salt Lake City, Utah; Mountain Electronics Co., Inc., Charleston, W. Va.; Modern Records, Inc., Hollywood, Calif.

Announcement was also made of the appointment of Joe Delaney as assistant general sales manager for Coral.

Signed by RCA Victor

RCA Victor records has pacted bandleader Lucky Millinder and his orchestra and saxaphonist Charlie Ventura and his instrumental combo to recording contracts.



A-678 STARDUST—A group of sentimental songs . . . BING CROSBY
A-654 DICK HAYMES SINGS—CARMEN CAVALLARO at the piano

A-624 I'LL SEE YOU IN MY DREAMS

IRVING BERLIN SONGS CARMEN CAVALLARO

Rush your order Now!

DECCA RECORDS APPLIANCE DEPARTMENT

HOW TO MAKE 49 YOUR BEST YEAR YET!

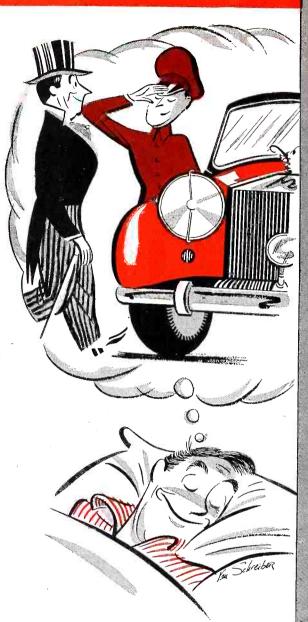
1949 can be the biggest year in the history of your store, but it will require plenty of aggressive selling. Yes, the honeymoon's over. The Buyer's Market has returned. Most appliances are available in good supply. Now you'll have to "ring doorbells," "beat the bushes," and really sell to get customers.

You can make '49 your most profitable year by following this basic formula:
(1) Offer your customers established,
quality lines. (2) Organize a hardhitting merchandising campaign that
includes co-operative advertising, product
promotions, direct mail, personnel
training, good displays, outside salesmen.
(3) Carry out this program month
after month.

after month.

That looks like a large order, but the job will be a lot easier if your local Graybar Appliance Specialist is working with you. He offers you quality appliances and radios that will sell—plus the merchandising know-how to put the program over.

Call our nearest office now and get the help you need to make '49 your best year yet. Graybar Electric Company. Executive offices: Graybar Building, New York 17, N. Y.





ELECTRICAL APPLIANCES

Section of RADIO ETELEVISION RETAILING

TV Trend Seen as Boon to Appliance Business

Three Important Factors Insure Bright Outlook for '49. Forecast for New Year

In viewing the various factors which promise a healthy electrical appliance sales volume for 1949 we see *television* standing out in front as a great something new.

Television is just what the doctor ordered to help keep the appliance market fit as a fiddle during the New Year. Video's quick-acting prescription, now being filled, is a magic open sesame to the front doors of American homes. It brings the TV merchant and his men in such homes where they are in a most advantageous position to recommend electrical appliances. (See editorial in this issue.)

All authorities agree that outside selling is a most effective sales method, and now that the TV retailer has acquired such vast importance—such all-out entree to the home, it gives him a great opportunity to increase his appliance volume in addition to his income from TV.

Along with the TV factor, it is encouraging to note that at least two other trends can be interpreted as extremely favorable and significant in viewing the '49 electrical appliance



The TV man can sell more appliances.



All new homes need appliances.

market. One of such trends is the slow but sure improvement in salesmanship; the other the slow, but definite increase in housing facilities.

While it is certainly true that competition will stiffen, and that sales will not come as easy as they did in the push-over days, the future looks promising nonetheless. Salesmen are learning what it is to sell the hard way—but they are learning. Numbers of dealers are working outside crews, with the majority of others planning to do so. '48 sales records will be broken, but the appliance business will not be obtained by taking, but by asking. Asking the customer to buy the right way will be the only way satisfactory volume can be maintained.

No one knows how many new dwellings will be built in 1949, but from all indications the number will be considerable. More and more appliances will be sold as more and more families get settled in homes of their own. Though the housing situation is still far from satisfactory, it is some better, and appears likely to improve to a great extent.

Production-wise the electrical appliance situation isn't easy to forecast on a long-range basis. Many materials are still very scarce, with numbers of manufacturers filling orders directly from their production lines. As previously reported in this magazine, one large appliance factory has no inven-

tory storage facilities whatsoever. How long this condition will last is anyone's guess, but we do know what the effects have been thus far. Some electrical appliances are still in short supply, particularly so far as certain models are concerned. On the other hand, some products have been produced in such large quantities that temporary manufacture shut-downs have been put into effect.

However, it does seem certain that



Salesmen are learning the hard way.

over the whole picture '49 production will be considerably ahead of '48, and for this reason the general sales tempo will have to be increased accordingly. American ingenuity is solving many of the problems in manufacturing—eliminating numbers of bottlenecks.

Manufacturers of electrical appliances are extremely interested in the foreign market. It may seem paradoxical to say that even makers who cannot fill present domestic demands are eyeing out of country business, and that some such manufacturers are presently exporting products. But there's a method in this scanning with interest

(Continued on page 78)

Electrical Appliance Forecasts

Proctor Official on '49 Iron-Toaster Market

In an exclusive interview with RADIO & TELEVISION RETAILING, Robert M. Oliver, vice-president in charge of sales and advertising, Proctor Electric Co., Philadelphia, makes a number of interesting predictions concerning the 1949 outlook for electric hand irons and toasters. Mr. Oliver, one of the foremost merchandising authorities in the electrical appliance field, said:

"The iron business has undergone its most trying period in 1948. During this year the industry has experienced a complete change from a sellers' to a buyers' market. At the beginning of '48 manufacturers were producing at the rate of more than ten million units per year.

"During the first quarter of 1948 retail buying slowed down to a very slow walk, and inventories of dealers, distributors and manufacturers climbed to their highest levels. Contributing to these large inventories were a number of newcomers, and an accumulation of stocks of relative-

over from previous years.

"The job of the industry was to work off this large inventory, and to help the dealers and distributors clean house. Importantly, too, it was necessary for the industry to change its mental attitude

ly unknown brands, some of the latter left



Robert M. Oliver

from one of allocation to one of merchandising.

"In my humble opinion, the industry has succeeded to a very great extent in achieving its goals during the first ten months. We at Proctor think the situation has adjusted itself.

"In terms of next year, it appears likely that the industry will start off with a fairly clean inventory condition and with a major portion of the aftermath of the abnormal postwar market behind it. For this reason we think 1949 will be better than last year, though narrowed down to a battle of brands. We believe we can confidently predict for 1949 a ten per cent increase in the unit sales of automatic flatirons through distributor-retailer channels.

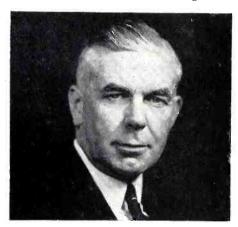
"In 1949 it will be necessary for dealers to actually do a merchandising job. As a manufacturer, Proctor is going all out to help them do this, providing merchants

Andrews Sees Good Appliance Year Ahead

H. L. Andrews, vice-president in charge of General Electric's Appliance & Merchandise Department, predicts healthy market ahead, but stresses the necessity for all-out sales effort. Says Mr. Andrews:

"Production and sale of General Electric household appliances rose steadily in 1948, and barring a serious change in the materials supply, it is expected that they will continue at their present pace into 1949.

"Most appliances are now readily available in retail stores across the country. But there are indications that refrigerators



H. L. Andrews

and ranges — particularly the deluxe models—toasters and mixers will continue to be in demand.

"The outlook for the appliance business, in other words, is good. But an all-out sales effort on all appliances will be necessary if 1949 is to wind up as successfully as 1948."

with a wide variety of effective sales and promotional material.

"With respect to toasters, we look for a transition from a seller's to a buyer's market during the first quarter of '49. This will come immediately after a peak retail selling season. Normally, there will be a tremendous drop in consumer demand after Christmas.

"Instead of duplicating the iron situation when inventories at all levels (manufacturer, distributor and dealer) were glutted, toasters will enter 1949 with a relatively clean inventory. If manufacturers continue 1949 toaster production at a 1949 rate, pipe lines will begin to fill up. But, because there will be no big inventories in the beginning of '49 the industry will be able to take it.

"Eventually we feel certain that the industry will find a level of consumption that will considerably exceed that of any prewar year. We look for the demand for automatic toasters to continue to rise. At the present time this demand is two or three times greater than it was in 1941."

Great Opportunity in 1949 Lamp Bulb Sales

The following interesting statement on the great new profit possibilities in the lamp business, together with forecasts on production for 1949, was prepared especially for RADIO & TELEVISION RETAILING by Russell E. Ebersole, general manager, Lamp Sales Department, Westinghouse Electric Corp., Bloomfield, N. J.

"Radio and television retailers have their greatest opportunity in history to cash in on the lamp bulb market which now is at an all-time peak.

"During 1948, for example, the estimated shipments by all manufacturers will approximate 850 million large incandescent lamps and 85 million fluorescent lamps. During 1949, we expect this record lamp output to continue with fluorescent lamp production increasing to 90 million units and large incandescent lamp production holding at about the 1948 level.

"Our market surveys show that when lamp bulbs are properly displayed they require very little additional sales effort, being a replacement and reminder item. On top of that, they swell store traffic



Russell E. Ebersole

and consequently increase the number of prospects for radio and television sets and electrical appliances.

"Electric lamp bulbs are sold through the retailer on the agency plan of selling, protecting the dealer against price decline or obsolescence of stock and assuring him of a good margin of profit. The list price of electric lamps, unlike almost everything else he carries, is actually lower than in prewar days.

"Electric lamp profit possibilities no longer are restricted to 12 cent lamps. Many retailers are being rewarded by selling "big ticket" lamps like sunlamps and infrared (heat) lamps, which incidentally have their highest appeal in these cold-weather months. Sunlamps list for \$8.50 and ruby-red infrared Heat Ray lamps list for \$2.95."

THE INDUSTRY'S BIGGEST SALES CAMPAIGN CONSOLE HEATERS

Cold Weather Keeps Volume Hot on Consoles ... Cash In Now!

YOMING off the production lines HEATS A ROOM of A HOUSE." with machine gun speed are the handsomest, best engineered gas and oil console heaters in America.

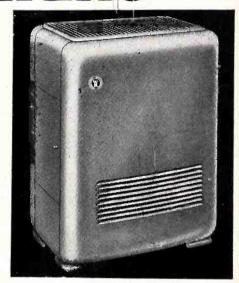
And Rheem isn't pussyfooting about it . . .

At the peak of the season, Rheem shot the gun to TEN MILLION readers of Life, Saturday Evening Post, Better Homes and Gardens, American Home, Country Gentleman and other magazines about the appliance that "LOOKS LIKE A RADIO,

In addition, the Rheem "Design For Better Business" is providing a wide choice of tested selling helps, including displays, direct mail campaigns and newspaper ads, to nail down prospects in your community.

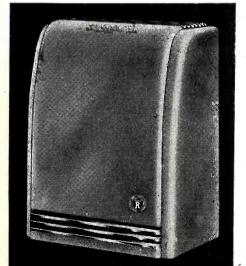
Call your distributor NOW for immediate delivery. It's not too late. You can still harvest heating profits with the fastest-moving, easiest-tohandle line of PROFIT MAKERS ... Rheem consoles!

Gas Console-die-formed heavy steel with baked walnut finish. Seam-welded heating element. Cast iron burner adaptable for any kind of gas. Equipped with pilot, automatic controls optional at slight extra cost. Can be installed with or without vent. 3 sizes for 25,000, 35,000, and 50,000 B. T. U. input. Largest size is 26" wide, 34" high, 20" deep. A. G. A. approved, Good Housekeeping Guaranty. Shipped completely assembled for easy installation.



Oil Console -welded aluminum cabinet finished in neutral baked enamel. Lights easily as a candle. Produces 50,000 to 65,000 B. T. U. Radiant flame, high-low, vaporizing type burner. Combustion chamber of high tensile steel, seam-welded. Two sizes, largest 31" wide, 39" high, 23" deep. Burns light fuels up to No. 2. Shipped completely assembled. Available as extras are pan-type humidifier, rear-mount fan with switch, 51/2-gallon attachable fuel tank. Approved by Commercial Standards and U. L.

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1			

Address

State____

Electrical Appliance Production

	LARGE APPLIANCES	Total No. of Units	Total Retail Value '48
	REFRIGERATORS (HOUSEHOLD ELECTRIC) SIZES FROM LESS THAN 5 CU. FT. TO 13 CU. FT. AND OVER	4,500,000	\$1,080,000,000
	FOOD FREEZERS (HOME, FARM, COMMERCIAL)	750,000	262,500,000
	ROOM COOLERS (COMRESSOR TYPES)	180,000	45,000,000
Ā	LAUNDRY EQUIPMENT WASHERS, AUTOMATIC WASHERS, NON-AUTO- MATIC (WRINGER, SPINNER) WASHERS, MIDGET TOTAL 1,700,000 \$323,000,000 2,750,000 467,500,000 550,000 30,250,000	5,000,000	800,750,000
	IRONERS (ROTARY)	500,000	70,000,000
	CLOTHES DRYERS	100,000	24,000,000
	RANGES, ELECTRIC (HOUSEHOLD NON-PORTABLE)	1,500,000	322,500,000
<u>A</u>	YACUUM CLEANERS (HAND, AND UPRIGHTS, TANKS)	3,200,000	208,000,000
	DISHWASHERS	300,000	90,000,000
	DISPOSAL UNITS	200,000	25,000,000
	WATER HEATERS, DOMESTIC (ALL SIZES)	1,000,000	119,000,000
	SMALL APPLIANCES		
	BLANKETS, ELECTRIC	490,000	24,500,000
٩	BROILERS, ELECTRIC	425,000	5,100,000
	CLOCKS, ALL TYPES	10,000,000	70,000,000
	COFFEE-MAKERS, ELECTRIC (METAL GLASS)	3,500,000	21,000,000
Q	FANS (ALL TYPES)	4,500,000	67,500,000
	HEATERS, SPACE, ELECTRIC (WITH AND WITHOUT FANS)	1,600,000	16,000,000

Statistics

Estimated by RADIO & TELEVISION RETAILING for 12 Months, Ending December 31, 1948. Figures are Totals for Industry.

	SMALL APPLIANCES (Cont.)	Total No. of Units	Total Retail Value '48
Pa	HEATING PADS	3,300,000	\$16,500,000
	HOT PLATES	2,000,000	6,000,000
	IRONS, HAND (AUTOMATIC, NON-AUTOMATIC, STEAM AND TRAVEL	6,000,000	72,000,000
	MIXERS, FOOD	2,000,000	70,000,000
	ROASTERS	500,000	20,000,000
	TOASTERS AUTOMATIC 4,100,000 \$77,900,000 NON-AUTOMATIC 1,400,000 5,600,000 TOTAL	5,500,000	83,500,000
	WAFFLE IRONS, SANDWICH GRILLS (INCLUDING "COMBINATIONS")	3,500,000	42,000,000

Roster of Appliance Makers

Refrigerators	
Food Freezers	
Vacuum Cleaners(Including private brands)	
Ironing Machines	25
Ranges, Electric(Includes non-portable types only)	26

(Number in business as of Jan. 1, 1747)	
Washing machines4	16
Disposal units	7
Dishwashers1	
Irons, hand)5
Fans, electric	75
Toasters	41

Clocks, electric	21
Broilers	
Food mixers	21
Blankets	9
Coffee makers	34
Space heaters	64

Refrigerator Sales by States

STATES	UNITS
Alabama	37,739
Arizona	15,396
Arkansas	26,249
California	202,087
Colorado	25,561
Connecticut	42,065
Delaware	5,416
District of Columbia	33,323
Florida	54,324
Georgia	55,338
Idaho	10,846
Illinois	170,108
Indiana	80,776
lowa	53,117
Kansas	28,437
Kentucky	36,436
Louisiana	38,063
Maine	17,287
Maryland	42,267
Massachusetts	81,821
Michigan	122,726
Minnesota	59,233
Mississippi	22,235
Missouri	86,636
Montana	10,079

STATES	UNITS
Nebraska	27,642
Nevada	5,167
New Hampshire	11,489
New Jersey	98,410
New Mexico	7,522
New York	281,317
North Carolina	51,984
North Dakota	10,560
Ohio	161,853
Oklahoma	35,373
Oregon	34,367
Pennsylvania	196,802
Rhode Island	24,203
South Carolina	23,677
South Dakota	12,316
Tennessee	59,380
Texas	138,883
Utah	13,647
Vermont	6,325
Virginia	43,835
Washington	49,520
West Virginia	36,050
Wisconsin	60,645
Wyoming	3,641
TOTAL UNITED STATES	2,752,173

Electric refrigerators only. Figures furnished by National Electrical Manufacturers Association are not factory sales but are those of distributors and dealers. Figures do not reflect the sales of all manufacturers, but are based on reports received from 20 companies.

New Electrical Appliances

Hotpoint DISHWASHER

Automatic electric dishwasher features simplified drain system located at the front to reduce installation costs; dial control which permits greater flexibility of operation; self-sealing aluminum door requiring no gaskets or door springs; one-piece wrap-around cab-



inet. Dishwashers available in the 27-inch MC4 under-the-counter model; MC5 free standing unit, equipped with counter-height top and backsplasher; MC6 which is incorporated with 48-inch sink and Disposall is desired. All models have work surface area, top spray, front opening and electric drying. Hotpoint, Inc., 5600 W. Taylor St., Chicago 44, Ill.—RADIO & TELEVISION RETAILING

Bennett WASTE RECEPTACLES

Receptacles available in standard line of six sizes, and in olive and white finish. Receptacles have non-rusting stainless steel feet, inside springs and hinges protected against climatic conditions, all-welded construction, baked enamel finish; full size or galvanized liner fit inside for easy removing. The Bennett Mfg. Co., Alden, N. Y.—RADIO & TELEVISION RETAILING

GE PILOT LAMP

Model 10C7DC, 10-watt pilot lamp designed to withstand shock and vibration. Lamp has special filament and double contact bayonet base. List price is 16c. General Electric Co., Nela Park, Cleveland, O.—RADIO & TELE-VISION RETAILING

Bay State TOY WASHER

Electric toy washer, carries approval of Underwriters Laboratories. De luxe model is 10 inches high, has a 7½ inch tub and retails for \$7.95. Bay State Products Corp., 79 Hano St., Allston, Mass.—RADIO & TELE-VISION RETAILING

Proctor TOASTER

Model 1468, automatic toaster with Color Guard, replaces model No. 1467. New model features simple design; base and handles of



brown bakelite; body of shiny chromium with ridged design. Consumer instructions clearly defined, with marking reading "Use this side for one slice." Retail price is \$18.95. Proctor Electric Co., Inc., Philadelphia, Pa,—RADIO & TELEVISION RETAILING

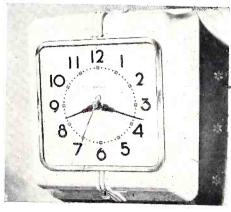
Philco REFRIGERATORS

Model 893 moist-cold refrigerator features "summer-winter" control, featuring balanced humidity. Model has full-width freezer locker, crisper drawers, easy-out ice trays, unrefrigerated vegetable bin, trigger door latch, super power system. Storage capacity is 8.1 cu. ft., 16.2 sq. ft. of shelf space. Retail price is \$329.50.

Model 892 features modern styled cabinet with self-closing door latch, finger-tip plastic and chrome handle. Zero-zone freezer locker, crisper drawers, covered meat storage drawer, automatic interior light. Storage capacity is 8.1 cu. ft., with a shelf area of 16 sq. ft. Priced at \$299.50. Philoc Corp., Philadelphia—RADIO & TELEVISION RETAILING

Sentinel ELECTRIC CLOCKS

"Kitchenette" model, self-starting kitchen clock. Case is gleaming white or red "Lustron"



plastic, forward tilted for easy reading. Clock is 7½ inches high, retails for \$4.95. "Signal" alarm model in plastic case retails at \$4.50. E. Ingraham Co., Bristol, Conn.—RADIO & TELEVISION RETAILING

Gibson ELECTRIC RANGE

Model "H" electric range is equipped with Ups-A-Daisy two-in-one, 7-speed heating unit; three standard 7-speed surface units, 6-quart



Kookall with flavor-seal lid; convenience outlet; full width lamp; automatic timer for two ovens, surface units, or for convenience outlet. One oven is 16 x 16 x 20 inches, has two shelves, top and bottom heating units. Convenience 9 x 16 x 20 inch oven has sliding shelf. Broiler is waist-high. Two storage drawers. Gibson Refrigerator Co., Greenville, Mich.—RADIO & TELEVISION RETAILING

Ripley BURGLAR ALARM

Burglar alarm utilizes modulated light beam, invisible to the naked eye. Alarm is caused to operate by a change in light level of pre-



set modulated frequency. Light beam is effective over more than 250 feet. Easy to install, no electrical adjustments required for installation. Ripley Co., Inc., Middletown, Conn.—RADIO & TELEVISION RETAILING

More New Products
Elsewhere
In this Issue

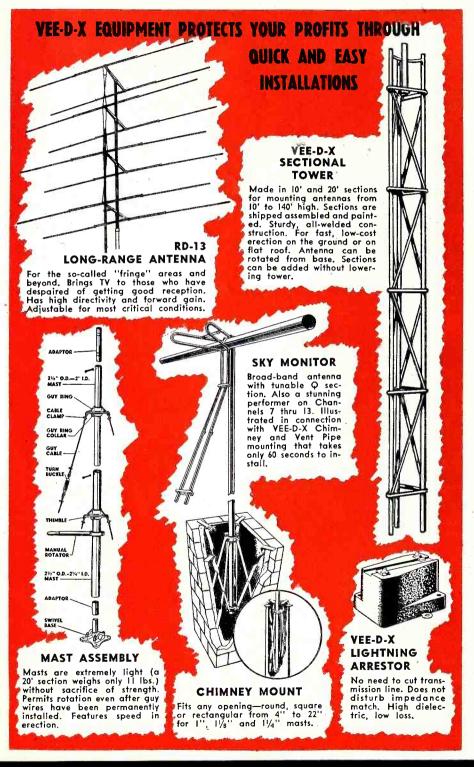
VEE DAX

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NOTE: The Mallory Radio Service Encyclopedia, 6th edition, makes reference to only one source of radio receiver schematics—Rider Manuals. ANOTHER NOTE: The C-D Capacitor Manual for Radio Servicing, 1948 edition No. 4, makes reference to only one source of receiver schematics—Rider Manuals.

SERVICE & SOUND

Section of RADIO ETELEVISION RETAILING

The Reactance Tube in Noise Suppressors

RCA 8V151, 8V112, Philco 49-1613, Scott 110A

The use of a tube so that it functions as an effective capacitive or inductive reactance (that is, the plate current lead or lags the plate voltage) is becoming increasingly common in today's circuits, although its introduction dates back to before the war. We find it in the sweep generator, where (modulated by a sine wave voltage) it acts as the variable element in the tank circuit of an FM oscillator; we find it in TV horizontal AFC, where the DC output of a discriminator proportional to the phase difference between the local oscillator and the incoming sync signal is used to change the reactance (tube) in the horizontal oscillator tank; and we find it in the noise suppressor for phonograph reproduction, where a DC voltage proportional to the amplitude of a certain band of (audio) frequencies is used as a bias on the reactance tube to control the extent to which that reactance shunts the frequencies to ground.

The axioms which are utilized in audio work are: 1) Inductive reactance increases with frequency. Therefore an inductance in series with the current supply to the load will offer a relatively high impedance to high frequencies. Conversely, decreasing the value of the inductance will permit it to pass higher frequencies. 2) Capacitive reactance decreases with frequency. Therefore a capacitor in series with the current supply to the load will offer a relatively high impedance to low frequencies. Conversely, increasing the value of the capacitor permits it to pass lower frequencies.

Noise in phonograph reproduction (sometimes called surface noise, needle scratch, record hiss, etc.) is generally given to be in the medium-high and high frequency range. The familiar tone control uses a capacitor shunt to bypass the high frequencies to ground, noise and signal as well, all the time it is in use, therefore sacrificing fidelity to eliminate the noise.

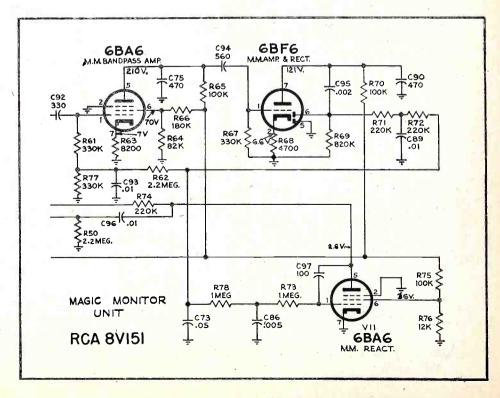
The noise suppressor theory is a new compromise between noise and fidelity which aims at permitting higher fidelity while at the same time limiting noise. The theory is: 1) Noise is of a relatively constant level; 2) Noise is masked by the signal when the high frequency component of the signal is at a high level; 3) It would be desirable to eliminate the noise frequency range only when the high frequency component of the signal is at a low level.

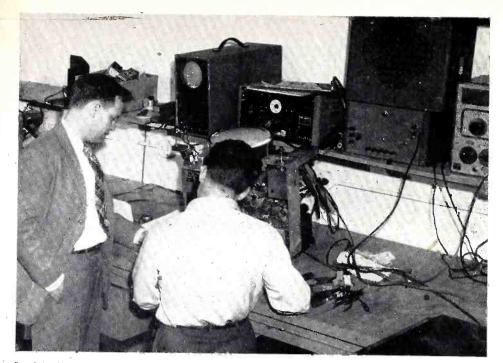
Automatic Gating

By rectifying the signal, passing it through a filter to extract only that band of frequencies with which we wish to concern ourselves, and using the resulting voltage (which varies as the strength of that component of the signal varies) as a bias on a reactance tube, we have in effect a gate which opens when the control voltage is high, closes as the control voltage drops.

This theory, developed by H. H. Scott, is subject to many refinements. We can adjust the point of cutoff, change the speed of the gating action, add additional stages to make the cutoffs steeper, and add a bass cutoff stage so that tonal balance between high cutoff and low cutoff is constantly adjusted as the gate operates. This latter point is based on the theory that music reproduction is most pleasing when the product of the bass cutoff frequency and the treble cutoff frequency approach a constant, sometimes said to be about 500,000-600,000 (40x15,000, 75x 8000; 200x3000, etc.). These additional

(Continued on page 73)





Bench-testing a 10" TV set. Technician is checking information in service notes which are not visible in the picture. Shown are scope, marker generator, audio oscillator-amplifier and speaker, and signal generator.

—courtesy RCA

THE general requirements for test equipment in TV servicing have been outlined to technicians for some time, but in a majority of cases these requirements have not been given specific application by the servicer for several reasons: Television

Percent of

32.9%

stations were not yet on the air in his locality; such TV servicing as was done had been handled by manufacturers or their representatives; he had not yet decided to go into TV servicing; or, test equipment was not yet available.

1949, however, will see great changes in this picture, and a large majority of those now servicing radios will find TV

Type of Test Instrument

on their doorsteps. The dealer who decides the time is ripe will have to evaluate his existing test equipment, start shopping for replacements and additions to it.

The kernel of the matter is the oscilloscope and the equipment used with it for visual servicing. The servicer first

ran across the need for this technique in high fidelity audio equipment, on which it was found that a broad, flat-topped response could not accurately be obtained "by ear." Comparing the maximum 15kc audio response with almost 6 mc RF bandwidth of TV receivers, we find the problem multiplied 400 times! Furthermore, in order to obtain sufficient IF bandpass in three and four stage strips while avoiding oscillation and too-critical tuning, most of the sets employ stagger tuning. While it is possible to peak each stage with a signal generator and a VTVM or output meter, the only way one can check the overall response and "touch up" the IF's is by the visual method.

Thus we find the visual technique virtually mandatory in RF and IF alignment. In many other instances it is,

VOLTMETER	Servicers Owning 93.6%
VTVM	63.7%
RF-IF OSCILLATOR	83%
FM OSCILLATOR	28%
100	

Statistics copyright 1947 by John F. Rider, Publisher, Inc., 404 Fourth Avenue, New York City.

OSCILLOSCOPE

TV Test

Evaluating the Necessity

though not essential, decidedly advantageous . . . such as checking the action of a horizontal oscillator, the synch integrator network, etc.

A complete IF alignment is not as frequent an occurrence, of course, as are high-voltage or bandswitch failures. But the fact remains that if the servicer is to be equipped for any trouble that may arise, he must be able to handle alignment. If he decides he will leave alignment to somebody else (for instance a distributor) he may spend hours just trying to determine that alignment is what is needed . . . for example, in a case of poor resolution due to inadequate high frequency response.

Analyze Available Tools

Having decided that our hypothetical servicer is going to handle visual alignment, we can get down to his requirements. First of all, what does he have on hand? A backward glance at the Rider Survey of test equipment published in Radio & Television Retaliing shows that at that time most servicers had some sort of voltmeter and a signal generator, but only about 60% had a VTVM, and very small percentages had a sweep generator and a 'scope. (see chart). The chances are, too, that if he did have any of the socalled "super-duper" items, they were for audio work and did not cover the video ranges. Before going into the video requirements, a word about the VTVM is in order.

Most service notes on TV and FM sets state that if a VTVM is not available, a 20,000 ohms/volt meter can be used. It is presumed that the limitations of nonelectronic meters will be taken into consideration if used. Figure 2 shows an actual circuit from an RCA-TV receiver in which we desire to read the bias on the 6AU6, which should be 2.35 volts. In the equivalent circuit shown along side of it we see that due to the shunting effect of the meter, a 1000 ohms/volt meter would be only 2% accurate (reading .05 volts) and a 20K ohms/volt meter would be 24% accurate (reading .7 volts). Whether either of these meters would even give an indication would depend on the inherent accuracy of the instruments and scales. The advantages of the high input impedance of VTVM's where measurements are being made in rf circuits, or actually reading rf voltages, should also be considered.

Instruments

for and Specification of Additional Bench Equipment

Visual alignment of the TV set, of course, requires a 'scope. In addition, it requires an FM or "sweep" oscillator capable of sweeping the spectrum we wish to examine (therefore the sweep width must be variable) about a center frequency appropriate to the circuit in question (this, therefore, must also be variable), with provisions for AF modulation, calibrated attenuation and calibrated sweep width, and also provision for the insertion of accurately calibrated marker "pips" or absorption "dips" on the observed wave form. Such functions might be performed by three items of equipment: a sweep oscillator, an AM (RF) signal generator, and a calibrated marker generator or heterodyne frequency meter. On the other hand, manufacturers of test equipment are continually simplifying the servicer's problem by combining these functions in one piece of equipment. The important point is to make sure that the piece or pieces of equipment satisfy the requirements.

Need Capable Instruments

Figure 3 shows a typical overall IF response, and will serve to demonstrate our needs. The sweep width is 10 mc, and the center frequency is 24 mc. Marker pips have been inserted to accurately determine that the flat top occurs with a sharp cutoff to the point where it approaches the associated sound, and that the picture carrier occurs at the 60% point on the upper slope, with the adjacent sound and picture properly attenuated by traps. If the picture carrier operates too low on the response curve, loss of low frequency video response, of picture brilliance, of blanking, and of synch may occur. If the picture carrier operates too high on the response curve, the picture definition is impaired by loss of high frequency video response.

If figure 3 were RF response, the center frequency of the sweep might be any of the TV channel carrier frequencies, while the markers inserted would be the sound and picture carriers for that channel.

Thus we see that our generators, for both FM and TV alignment, should cover all IF (10-30 mc) and RF (54-216 mc) frequencies, variable deviation (1 mc for FM, 10 mc or more for TV), preferably separate outputs for AF, RF and FM, provisions for external synch to the 'scope, calibrated attenuation and sweep width, and sufficient output to

obtain proper indications on the 'scope.

The scope would preferably have a wide band vertical amplifier (up to 5 mc or more) in order to reproduce the sweep width we are injecting into it, variable time base sweep frequencies up to at least 200kc (in order that we may observe a wave form of very short duration), vertical input sensitivity down to about 30 millivolts (in order that tiny signal voltages can deflect the electron beam on the screen), and preferably a large enough screen (at least 5 inch) so that the position of markers on a response curve can accurately be determined by eye.

Careful scrutiny of the specifications of much of the equipment on hand or available for sale will find this equipment wanting in capabilities for doing a complete job. Some equipment described as "for FM, TV" will serve some purposes in these categories, but cannot be used for IF alignment of TV.

No outline of the equipment needed for TV servicing would be complete without mentioning the necessity for a spare TV receiver on the bench for comparison purposes, and to check transmission over a particular channel when a customer complaint comes in

(Continued on page 75)

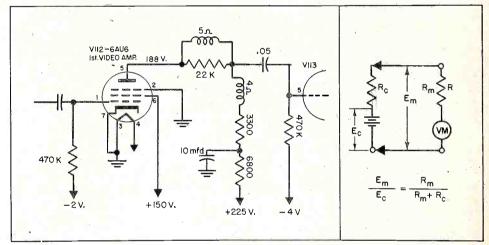
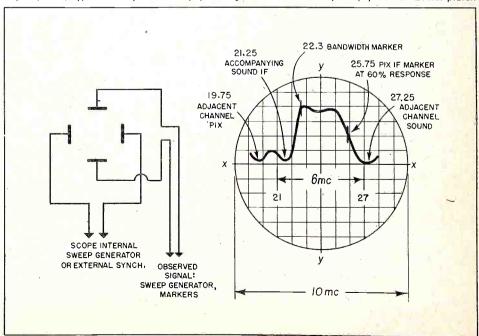


Fig 2. (Above) \mathbf{E}_{c} is 2 volts, \mathbf{R}_{m} is the meter multiplier on the scale used, at 1000 or 20,000 ohms per volt, \mathbf{R}_{c} is 470,000 ohms. \mathbf{E}_{m} is what the meter would read.

Fig. 3 (Below) Typical IF response on scope, with signal fed into vertical plates, sync on horizontal plates.



New Equipment for TV, FM, PA

RCA LOUDSPEAKERS

The new 8" PM speakers RCA-308S2 and 408S2 have 34" voice coils and a power handling



capability of 6 watts. They are designed for use in television receivers, large table radios and small consoles. Tube Dept., RCA, Harrison, N. J.—RADIO & TELEVISION RETAILING

Cinaudograph SPEAKERS

The complete line of PA, replacement field and PM, extended range, and coaxial loud-speakers, as well as output transformers is illustrated with pertinent data in a new catalog available from Cinaudograph Speakers Div., Aireon Mfg. Corp., 1401 Fairfax Trafficway, Kansas City 15, Kansas.—RADIO & TELE-VISION RETAILING

Langevin AMPLIFIER

Equipped to operate a radio tuner and a phonograph pickup, either crystal or variable reluctance type, the Type 127-A amplifier is



rated by the maker at 4 watts with less than 5% harmonic distortion over the range from 50-15,000 cps. Independent bass, treble and volume controls are provided. Langevin Mfg. Corp., 37 W. 65th St., New York 23, N. Y.—RADIO & TELEVISION RETAILING

Altec Lansing TUNER AND AMPLIFIER

The ALC-101 AM-FM tuner features TRF for AM and a ratio detector for FM, with separate tuning eyes for each section. Provision is also made for TV sound and phono inputs, incorporating a pre-amplifier, built-in equalizer, and a four-step scratch filter control. The A-323C amplifier is rated at 18 watts with less than 2% harmonic distortion over 20-20,000 cps. The two units are on separate chassis' with an interconnecting cable provided. Altec Lansing Corp., 161 Sixth Ave., New York 13, N. Y.—RADIO & TELEVISION RETAILING

Belden FM ANTENNA

Model 8322 is a double folded dipole antenna which provides reception from all directions over the entire FM band. Price complete with



adjustable mounting base, 65 feet of transmission line and four standoffs is \$13.75. Belden Mfg. Co., P. O. Box 5070A, Chicago 80, Illinois.

—RADIO & TELEVISION RETAILING

Anchor TV BOOSTER

This preamplifier utilizes a 6AK5 with continuous tuning over all 12 channels to provide added selectivity, improved impedance match, and a signal voltage boost averaging 2½ times over all channels, the maker states. The unit features a self-contained power supply, bandwidth of 4 mc, and separate pilot lights for the low and high bands. Anchor Radio Corp., 15 S. St. Louis Ave., Chicago 23, Illinois.—RADIO & TELEVISION RETAILING

Masonry BOLT DRIVER

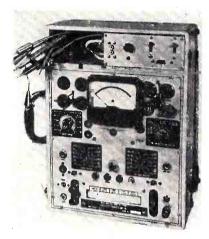
A powder-actuated gun actually shoots plain or threaded studs into concrete floors and walls, steel I-beams and columns in a matter of seconds. The gun can be used to simplify the fastening of fixtures, conduit boxes and the like to metal or concrete by electricians, and can also be used by TV installers for mounting antennas, guys, etc. The tool weighs only five pounds and can be operated with one hand. Mine Safety Appliances Co., Pittsburgh, Penna. — RADIO & TELEVISION RETAILING

Televue ANTENNA ROTATOR

The Televue Rotor is a motor driven TV antenna rotator which is controlled remotely from the location of the TV set, and permits instant and continuous repositioning of the antenna for best reception. Antenna crossarm is attached to movable part of rotor, while stationary part is attached to the mast. List price is \$32.50. Televue Corp. of America, Lakewood, N. J.—RADIO & TELEVISION RETAILING

RCP TUBE AND SET TESTER

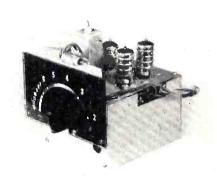
Six instruments are combined in one in the Model 8573: tube tester with rollindex chart, multimeter, condenser tester, AM signal generator, FM signal generator and audio oscil-



lator. Sockets are included for all the latest type tubes, including noval base, acorns and subminiatures, while battery testing is also provided for. List price is \$99.95. Radio City Products Co., Inc., 152 West 25th St., N. Y. 1, N. Y.—RADIO & TELEVISION RETAILING

Vision TV TUNER

Model TF 701 is a television front end which tunes continuously over all 12 channels. Containing RF amplifier, oscillator and mixer cir-



cuits, the tuner comes complete with lighted lucite dial and planetary reduction drive, and is available to both manufacturers and dealers. Vision Research Labs, Inc., 87-50 Lefferts Blvd., Richmond Hill 18, N. Y.—RADIO & TELEVISION RETAILING

Telechron CLOCK SWITCH

A new automatic time switch that turns the radio off at the end of a predetermined playing period, and automatically turns it on again at any selected time, has been announced for incorporation into radio receivers. In appearance, the switch resembles an electric clock, with two pre-set controls provided. Telechron, Inc., Ashland, Mass.—RADIO & TELEVISION RETAILING



the battery that's made for the Radio Trade ...

The selective distribution of RCA Batteries primarily through radio dealers and servicemen adds up to more repeat business for you.

Remember, too, that RCA Batteries are radio engineered for extra listening hours... that this completely rounded line covers virtually all renewal requirements.

Because they're backed by "the greatest name in radio," RCA Batteries are your assurance of *immediate customer* acceptance.

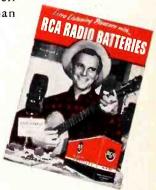
Eightwarehouses assure you quick delivery on fresh stocks of RCA Batteries through your local RCA Distributor.

You can sell more RCA Batteries

RCA provides you with the greatest array of selling aids in battery history . . . all geared to the radio trade! They'll help you sell

more RCA Batteries than ever before!

ALWAYS
KEEP IN TOUCH
WITH YOUR
RCA DISTRIBUTOR





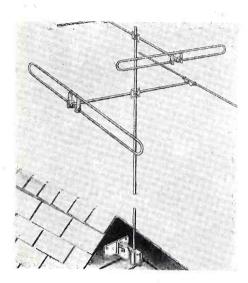
RADIO CORPORATION of AMERICA

HARRISON, N. J.

New Helps for TV Servicers

Brach TV ANTENNA KITS

Flexi-kit bulk-packaged antenna equipment provide a variety of matched components so that antenna installation may be adapted to the local situation without the necessity of stocking many different individual antennas.



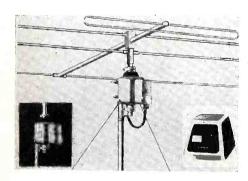
Complete individual antenna kits are also available, such as the Hi-Lo Rotatable TV antenna illustrated, which provides for reception on all channels. Complete catalog may be had by writing L. S. Brach Mfg. Corp., 200 Central Ave., Newark 4, N. J.—RADIO & TELEVISION RETAILING

Trio ANTENNAS

A complete line of antennas for FM and TV, including single folded dipoles, all-channel arrays, stacked arrays, and attic antennas is described in the new catalog available from Trio Mfg. Co., Griggsville, Ill.—RADIO & TELEVISION RETAILING

Alliance TV ANTENNA ROTOR

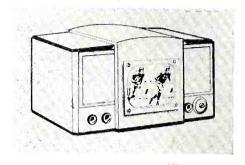
Tenna-Rotor permits 360 degree rotation of TV, FM or other high frequency directional antennas by means of an electric motor. Ro-



tation is controlled at the receiver by a remote control box. List price is \$39.95 for both rotator and control box. Alliance Mfg. Co., Alliance, Ohio.—RADIO & TELEVISION RETAILING

Industrial TV FILTERS

"Gla-Reducer" attaches to the front of TV sets with suction cups, and is said to improve



image, reduce glare and increase brilliance. For illustrated brochure write Industrial Products Suppliers, 434 Broadway, New York 13, N. Y.—RADIO & TELEVISION RETAILING

Carter DC-AC CONVERTERS

Specially designed for operation of TV sets from 110-135 volt DC lines, model D1010CT delivers 125 watts of steady voltage and frequency despite DC line voltage fluctuations. "Picture Control" is said to eliminate frequency waves and picture flutter. Carter Motor Co., 2644 N. Maplewood Ave., Chicago 47, Illinois.—RADIO & TELEVISION RETAILING

Jerrold TV-FM BOOSTER

Claimed to amplify signals 20-30 times over the entire FM and TV bands, the new Jerrold booster utilizes a selector switch plus a fine tuning control, and has self-contained power



supply. List price is \$37.50, and a special extra attachment is available which will enable a dealer to use for multi-set demonstration. Jerrold Electronics Corp., 121 N. Broad St., Philadelphia 7, Penna.—RADIO & TELE-VISION RETAILING

UST SWEEP GENERATOR

Sweep generator for TV and FM has sweep width variable from 5 kc to 10 mc over a range from 500 kc to 110 mc. Fixed markers are provided, and continuously variable output is available. New price on this generator is \$195. United States Television Mfg. Corp., 3 W. 61 St., N. Y. C.—RADIO & TELE-VISION RETAILING

Teirex ANTENNAS

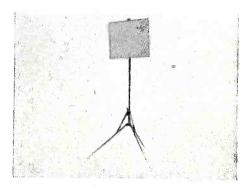
The conical V-beam antennas present the appearance of an "X" laying on its side, with the broad band and high gain characteristics of a conical antenna, the maker states. The 150 ohm nominal center impedance is said to be non-varying, making the antenna effective at all frequencies and with any transmission line (75, 90, 150 or 300 ohm). The model 4X-TV is a stacked version of the 2X-TV. Telrex, Inc., 26 Neptune Highway, Asbury Park, N. J.—RADIO & TELEVISION RETAILING

Andrew TV ANTENNA

The Di-Fan antenna is constructed of fanned elements for which maker claims a broad band response with a constant 300 ohm impedance over all channels. Ease of installation is featured, and antenna kit includes 5-foot mast and 60-feet of 300-ohm transmission line. Andrew Corp., 421 Seventh Ave., New York 1, N. Y.—RADIO & TELEVISION RETAILING

Windsor TV MIRROR

Miro-pix is a light-weight, 12 x 10" mirror complete with stand suitable for TV servicers who wish to observe picture on front of set



while adjusting rear apron controls from behind the set. Telescoping stand makes it adaptable to different types of TV receivers. List price is \$5.95. Windsor Electronics, 4919 W. Irving Park Rd., Chicago 41, Ill.—RADIO & TELEVISION RETAILING

Oak Ridge TV ANTENNA

The new Rig-Fast Injector line of antennas features a construction which permits speedy assembly without tools. Antenna elements fit into a tube on the mast and are fastened into place by turning a wing-nut. No loose hardware is necessary. The new feature is available in a variety of antennas for different requirements. Oak Ridge Antennas, 239 E. 127th St., New York 35, N. Y.—RADIO & TELEVISION RETAILING

Bud ANTENNA BRACKETS

Four styles of antenna mounting brackets have been announced which permit mounting of antenna masts to any type of wall, roof, or chimney. The brackets are of the vise-type, and are adjustable for masts from 1" to 1-5/16" in diameter. Address inquiries for circular to Bud Radio, Inc., 2118 E. 55th St., Cleveland, Ohio.—RADIO & TELEVISION RETAILING

Hytron Prize Winner



Casimir F. Woods, left, of Newark, N. J., receives first prize in the September Hytron Servicemen's Contest. He was awarded a Jackson model 641 Universal signal generator. Shown with the winner are Stanley Dudek, radio parts division manager of the Variety Electric Co., Hytron distributor, and Herbert H. Friedman, Hytron representative who made the presentation.

Sprague Expansion

Robert C. Sprague, president, Sprague Electric Co., North Adams, Mass., has announced the acquisition of the Herlec Corp., Milwaukee, Wis., manufacturers of ceramic capacitors and "Bulplate" printed circuits. A Sprague plant for manufacturing ceramic assemblies is already established as Nashua, N. H., and operations have been expanded at the Milwaukee plant.

IRC Issues Booklet

International Resistance Co., Philadelphia 8, Pa., has issued a booklet for radio technicians entitled "Keep Your Iron in the Fire." It covers eight ways more time can be devoted to actual soldering, based on the concept that the more irons the serviceman keeps in operation the more sets he repairs with a consequent increase in sales volume.

ITI Shows New TV Line

Industrial Television, Inc., Clifton, N. J., has introduced its "Century" line of "Teleceivers," in leading cities across the country. Edwin B. Hinck, sales director said dealers and servicemen in Philadelphia, Boston, Cleveland and St. Louis have been shown the four new models. Arrangements were made by Mr. Hinck and Robert J. Harrington, ad director.

Robert W. Galvin



Paul V. Galvin, president of Motorola, Inc., announced the appointment of his son, Robert W. Galvin, above, to the post of executive vice-president of the firm.

Flexibility makes BRACH

"the Service Man's Line"

Brach antennas . . . long known for dependability . . . maximum reception . . . trouble-free operation . . . durability and ease of installation . . . now feature an added extra . . . Flexibility. Unique construction features aid the service man in making a more rapid installation to which future additions or modifications can be easily made.

I. FLEXIBILITY A complete line designed with basic antenna parts which are convertible to more complex arrays as required by location and reception problems.

2. COMPLETE KITS Each antenna model is independently designed and furnished in a completely packaged kit containing all necessary hardware, downlead (when desired) and the Universal Base Mount . . . ready for installation.

3. PRE-ASSEMBLY Each antenna is factory pre-assembled as far as possible, ready to erect. Complete and simple installation instructions. Saves valuable man-hours on the roof.

4. MECHANICAL STRENGTH Weather - tested for durability, Brach Antennas feature a husky steel mast, rigid connections, sturdy base mount, neat appearance. All parts corrosion resistant.

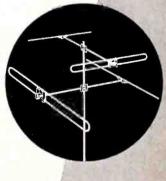
5. SUPERIOR RECEPTION Designed with engineering "know-how". All Brach antennas are factory pre-tuned, matched for 300 ohm transmission line with large diameter aluminum elements for better signal pick-up. Directivity patterns and standing wave ratios available upon request.

New! Tops in TV! HI-LO ROTATABLE Antenna

Here it is! A rotatable antenna to provide peak performance with any station at any time. Brach introduces the new "Superview" Rotatable, covering both high (174 MC to 216 MC) and low (88 MC to 108 MC) TV bands. High band extension available for easy addition to standard dipole array for separate orientation. No more multiple images. No more "weak" stations. Brach's Superview HI-LO assures television reception that's tops. Make sure and investigate the new Superview line today.

Write for Free Brach catalog showing complete line of TV and FM antennas and accessories.

Send for Catalog No. RR304



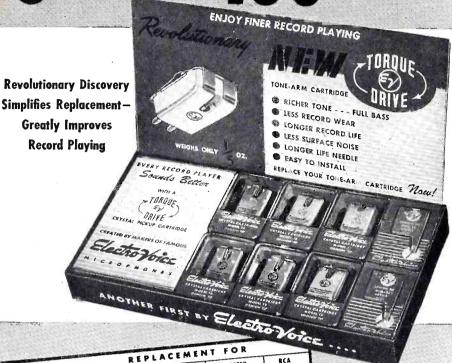


L. S. BRACH MFG. CORP.

200 CENTRAL AVENUE NEWARK N. .

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF RADIO ANTENNAS AND ACCESSORIES





1000	The second second			REF	LAC		-		RCA	
			ASTATIC		SHURE		MEBSTER		31050*	
EFE	MODEL M12 Medium Voltage (Red)	L-25 L-26 L-27 L-3: L-7 L-7 L-7 L-7 L-1: L-1: L-1: L-1: L-1: L-1: L-1: L-1:	L-22A L-76S L-25A L-76AS L-26A LT-M L-27A LT-MA L-32A LT1-M L-70A LT2-M L-70S LT2-M L-70AS LT3-M L-71 1-J L-71A 1-M L-71S 401-A L-71AS L-76 L-76A		P30 P93C P30B P93D P30C P93E P30D P93S P30E P94 P30S P94B P87 P94E P87B W42A P87S W57A P90D W58A P90D W60A P90S W60B P93 W60HS P93B W61B		N3 WEBSTER		31156* 32632* 33122* 33212* 33905* 34225* 34307* 34710* 35171* 37158 39686 AMERIC	CAM AN
	EFECTEO-AOICE		ASTATIC L-24A L-72S		P88 W56			C-2† C-3†	CR1/ CR2/ 52	
	MODEL H12 High Voltage		L-36A L-46A L-50A	L-72AS L-82 L-82A L-82V	P89	99-1	в0	C-6† N-10 N-10P N-10P-1		
	(Blue)		L-72 L-824 L-72A M-23		W41A			WEBSTER	-	CA
	MODEL L12 Low Voltage				QT-J QT 3 QT-M QT 1 QT-2J 1 QT-2M		-3JA	C5†		173
			L-40A L-41A L-75 L-75A L-75S				-3M -3MA	F3 F7P N3 N5		0338
	(Yello		L-75#			T-3J	and the state of the			1.

Use "A" mounting plate furnished with cartridges ($\frac{1}{2}$ " hole centers) for all replacements except those marked with an * or \uparrow . *Use "B" mounting plate furnished (3/s" to 13/6" hole centers). †Use "C" mounting plate furnished (Webster Side Flange). All Model 12 Cartridges equivalent to ASTATIC "A" type except
Tone Arm Rest Button is not supplied.

It is recommended that the lower voltage cartridge consistent with volume level be installed.

NOTE: Models M12, H12 and L12 have Osmium-tip Needle, NOTE: Models M12, H12 and L12 have Osmium-tip Needle, NOTE: Model M12-S, For Cartridge with Sapphire-tip Needle, specify Model M12-S, For Cartridge with H12-S, or L12-S.

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New Torque Drive

Crystal Pickup Car-

tridge achieves clean, clear tone definition

and fidelity that are

truly amazingl You

can hear the differ-

ence! Gives new life

to every record

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Bulletin No. 146

New Model L-14 Microgroove

Crystal Car:

tridge, and New Model 20 Mag-

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for Regular or Microgroove

records also available.

Write for Replacement Chart

library.

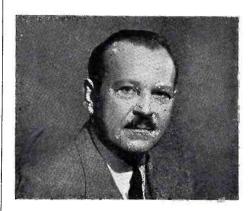
ELECTRO-VOICE, INC. BUCHANAN, MICH.

Export: 13 East 40th St., New York 16, U.S.A. Cables: Arlab

IT PAYS TO REPLACE WITH

Folsom RCA President: **Board Advances Wilson**

The board of directors of the Radio Corporation of America, upon the recommendation of Brigadier General David Sarnoff, chairman of the board, elected Frank M. Folsom as president of the



John G. Wilson, above. For feature article by Frank M. Folsom, with picture of the author, see page 41.

Radio Corporation of America. John G. Wilson was elected executive vice-president in charge of the RCA Victor Division succeeding to the post filled by Mr. Folsom.

General Sarnoff continues as chairman of the board and will remain chief executive officer of the RCA, as well as chairman of the board of the National Broadcasting Co. and RCA Communications, Inc., both wholly owned subsidiaries of RCA

Altec Service Sales Head

H. M. Bessey, executive vice-president Altec Service Corp., New York City, has named H. S. Morris as products sales manager for Altec Lansing audio equipment sales.

Opens Retail Store

Michael Stahl has opened a retail establishment, Leader Electronics & Television Corp., 215 Fulton St., New York City.

Crosley Sales Manager



William A. Blees, above, has been named general sales manager of the Crosley Div., Avco Mfg. Corp., Cincinnati, O.

James M. Toney



Shown is James M. Toney, who has been appointed advertising manager of the RCA Victor Home Instrument Department. H. G. Baker, general sales manager of the department, made the

Rider PA Manual

John F. Rider has announced the new "Rider Public Address Equipment Manual, Vol. 1." The new manual is available at all Rider jobbers, and contains the servicing data of 147 PA equipment manufacturers. The sturdy volume is bound in standard Rider durable looseleaf binder for easy handling, and is compiled alphabetically for quick reference. It is priced at \$18.00.

Philco Selling Aid

Philco Corp., Philadelphia, has designed a dispenser for use by dealers, designed to encourage customers to reach in and pick up a consumer folder describing Philco television receivers. The unit can be hung on the wall or placed on a

New Nat'l Union Plant

Kenneth C. Meinken, president of National Union Radio Corp., Orange, N. J., has announced the purchase of a plant in Hatboro, Pa., for the production of all types of cathode ray tubes up to and including 20" in diameter. The company will expend a million and a half dollars for the installation of machinery and equipment for the production of these tubes, Mr. Meinken said.

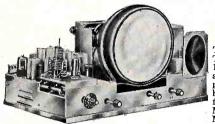
Colen-Gruhn Named



Murray Gruhn, shown, of Colen-Gruhn, Inc., New York City, announces the appointment of his firm as distributors for the Raytheon-Belmont line of felevision sets in the Metropolitan New York area.

NEW Television Kits, and Equipment

Important Advances in TV Reception and Servicing!



MODEL INA TV KIT



ALL-CHANNEL BOOSTER



REMOTE CONTROL UNIT KIT



SWEEP SIGNAL GENERATOR

NEW 10" TV KIT at amazingly LOW PRICE!

The new Transvision Model 10A electromagnetic TV Kit gives a bright, stable 52 sq. in. picture. Has 10" picture tube, and CONTINUOUS TUNING on all 12 channels. Its high sensitivity makes for improved long-distance reception; especially good on high channels. Complete with all-channel double-folded dipole antenna and 60 ft. of lead-in wire. MODEL 10A TV KIT, less cubinet....Net \$199.00 MODEL 12A TV KIT, same as above, but has a 12"picture tube.......Net \$263.00

NEW STREAMLINED CABINETS

for Transvision Model 10A or 12A TV Kit. Made of select grain walnut with beautifully rubbed finish. Fully drilled, ready for installation of assembled receiver.

Walnut Cabinet for 10A or 12A

TRANSVISION ALL-CHANNEL TELEVISION BOOSTER ...

To assure television reception in weak signal areas, or areas which are out of range of certain broadcast stations, Transvision engineers have designed this new booster. It increases signal strength on all television channels. Tunes all television channels continuously. Can be used with any type of television receiver. Unusually high gain in upper television channels.

TRANSVISION REMOTE CONTROL UNIT KIT...

Will operate any TV receiver from a distance. Turns set on, tunes in stations, controls contrast and brightness, turns set off. Ideal for installations where the television receiver is inaccessible. Tuner unit is a high gaim all-channel unit with about 50 micro-volt sensitivity. Easy to assemble in about

an hour.

Model TRCU, with 25 feet of cable...Net \$69.00

Without cabinetNet \$65.00

NEW...TRANSVISION SWEEP SIGNAL GENERATOR

Radiomen . . . You Can Get into the TELEVISION BUSINESS In a BIG WAY with the TRANSVISION DEALER PLAN

Write for Folder D-1

NEW 8-PAGE CATALOG of Transvision line available at your distributor, or write to:

TRANSVISION Inc. Dept. RR

New Rochelle, N. Y.

In Calif: Transvision of California, 8572 Santa Monica Blvd., Hollywood 46 All prices 5% higher west of Mississippi; all prices fair traded. All Prices Subject to Change.





IN CANADA: STROMBERG-CARLSON CO., LTD., TORONTO 4, ONT.

Philco Promotes Dr. Pitt

Dr. Courtnay Pitt has been elected to the newly-created office of vice-president, Finance, of Philco Corp., and in this capacity will serve as the chief financial officer of the company, it was announced by William Balderston, president.

Starrett Vice-President

Starrett Television Corp., New York City, announced the appointment of Allan Harvey as vice-president in charge of sales and advertising. Harvey will supervise the development and operation of the company's merchandising program.

Remington Expands Plant

The Remington Radio Corp., White Plains, N. Y., has expanded its factory at 80 Main St. Robert G. Kramer, president, explained that the expansion will supply additional video sets to new sales territories opened in the South and Southwest.

Chicago Transformer Reps

Arthur E. Akeroyd, with offices in Boston, and James J. Backer of Seattle, Washington, have been named as representatives for the new replacement line of transformers recently introduced by Chicago Transformer Division, Essex Wire Corporation. For some months previously, both men had represented the concern in other stock transformer lines.

Appointed by Thurow

J. A. Mook, Jr., general sales manager, Thurow Distributors, Inc., Tampa, Jacksonville, Miami, West Palm Beach, Orlando, Tallahassee and Pensacola has announced the appointment of A. L. Gottesman as Pensacola branch manager.

Sylvania Distributor

The appointment of William B. Allen Supply Co., New Orleans, La., as distributors for products of the Radio Tube Division of Sylvania Electric Products Inc. is announced by H. H. Rainier, manager of distributor sales. He said they would distribute radio and television tubes, test equipment and electronic products.

Distant TV Reception

Editor

RADIO & TELEVISION RETAILING

Recently we installed a television set atop the summit of Whiteface Mountain, Lake Placid, N. Y. We were successful in picking up programs from WRGB, Schenectady, 120 airline miles away. . . . Incidentally, in addition to receiving programs from Schenectady, we were amazed to find we could get programs from New York City and Buffalo! The quality of the reception, however, from these unbelievable distances wasn't too good. . . .

Milton A. Klarsfield

Albany Television Headquarters 67 Hudson Ave., Albany, N. Y.

Lyte Aerosweep Head



Stuart S. Drier, L.L.B., has been elected president of Lyte Aerosweep Corp., Plainfield, N. J.

Zenith Buys TV Tube Plant

Following within a few days of the introduction to the public of their new television receivers, Zenith Radio Corporation announced the outright purchase of the Rauland Corporation, manufacturer of TV cathode ray tubes. The Rauland corporation will continue to do business as a wholly owned subsidiary of Zenith, with the same officers and personnel, except that expansion of production facilities is planned.

Polaroid Filter Jobbers

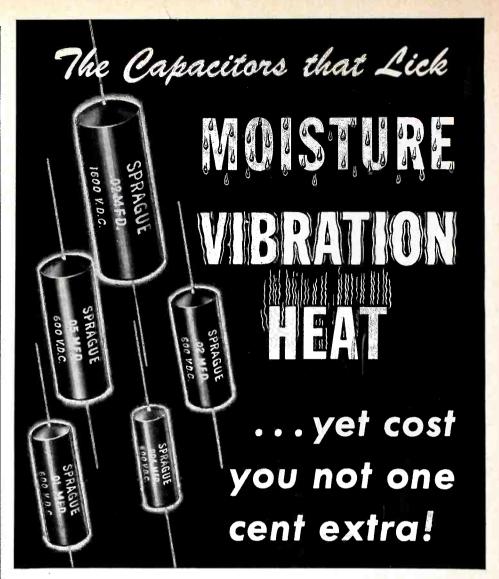
Hunter Delatour, advertising manager, Pioneer Scientific Corp., New York City, has announced the following additional distributors for the Polaroid television filter: Taylor Electric Co., Milwaukee; Hayer Co., North Minneapolis, Minn.; Main Line Distributors, Toledo.

Technicians' Federation

Representatives of service technicians' organizations of New York State met in Binghamton on October 31 to form the Empire State Federation of Electronic Technicians Associations (ESFETA). The federation was formed with the objects of furthering the welfare of the radio technician in N. Y. state, to work toward raising his technical standards, and to promote among the public a better understanding of the problems of radio service technicians. Officers elected included T. Lawrence Raymo of Rochester, President; Max Leibowitz of N. Y. C., Vice President; Wayne Shaw of Binghamton, Secretary; Ben de Young of Central, Treasurer; and Evart M. Howland of Hudson Valley, Sgt.-at-Arms.

Webster-Chicago Display

The Webster-Chicago Corp., is offering distributors and dealers an eye-catching counter card, designed to stimulate repeat sales of recording wire. Pointing out features of Webster-Chicago's pre-tested recording wire the 12 x 16-inch card is in three colors and contains an envelope pocket for hand-out material on wire spools.



SPRAGUE PHENOLIC MOLDED TUBULAR CAPACITORS

Types TM and MB

(600 Volts)

(1600 Volts)

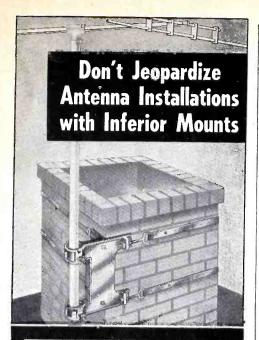
Take a look at Sprague Type TM and MB Phenolic Molded Tubular Capacitors! See how their sturdy phenolic jackets offer complete protection against moisture, vibration and heat—the three factors that cause 9 out of 10 failures in ordinary wax tubulars. Then try Sprague TM's and MB's on your toughest jobs—and you'll quickly understand why these little units represent the greatest capacitor development in modern radio servicing history! Sprague TM's and MB's are a "must" for auto radio, aircraft radio and television applications. And because they cost exactly the same as ordinary wax cardboard tubulars, wise servicemen use them exclusively for all service replacements. There are no service complaints, no dissatisfied customers when you use Sprague TM's and MB's.

Get the genuine article! Be sure and ask for Sprague TM's and MB's by name!

SPRAGUE PRODUCTS COMPANY

North Adams • Massachusetts

JOBBING DISTRIBUTING ORGANIZATION FOR PRODUCTS OF THE SPRAGUE ELECTRIC COMPANY



Specify and Insist on Getting The Original and Still Acknowledged Finest

CHIMNEY MOUNT

South River

Briefly, here are the reasons why the original South River Chimney Mount Antenna Base is the most superior product of its type in the field today-and the most popular.

CONTINUOUS IMPROVEMENTS

- 1. Addition of vertical fin between the two sockets for extra rigidity.
- 2. Adding of two eye bolts (making total of four) to facilitate tightening straps evenly from both sides.
- 3. Enlarging socket to accommodate 11/2" O. D. tube.
- 4. Addition of reinforcing fins on socket and lug.
- 5. Increased wall thickness throughout. (Amazingly long life)

EXCLUSIVE FEATURES

- 1. Strong, aircraft-type aluminum casting. (Cannot rust and stain building)
- 2. Welded eye bolts.
- 3. Bands pull up on <u>two</u> sides.
- 4. Sockets accommodate any size pipe or tube up to 11/2" O. D.
- 5. Chimney Mount is one piece, but can be sawed in half in 90 seconds, or can be furnished in two sections if requested.
- 6. Set screws keep mast from twisting in high winds.

COMPARE! South River Chimney Mount Antenna Base for TELEVISION • FM • AMATEURS

Installed in 10 Minutes

List Price: \$7.50

Available Through All Leading Jobbers and Dealers or Write to:

South River Metal Products Co., Inc. South River, New Jersey

Philips Dry Shaver

The North American Philips Co., 100 E. 42nd St., New York City has introduced a new light-weight electric dry shaver in various test markets. The Norelco dry shaver features a rotary-action round head of six finely ground selfsharpening steel cutters.

New TV Antenna Rotator

Lyte Aerosweep Corp., Plainfield, N. J., announces a new television antenna rotator. "Aerosweep" is a motor which is magnetic in design. The motorized unit fits any conventional antenna array, and is easy to install. It will rotate a full 370 degrees, eliminating dead-spots, and will withstand antenna weights up to 160 pounds.

Pray Opens in New England

W. B. Pray, 18 Brewster Rd., Wellesley Hills, Mass., announces the reopening of W. B. Pray Sales Co., as manufacturer's rep in six New England states. Mr. Pray specializes in electronic and sound equipment and radio components.

Fada TV Price Correction

Through a typographical error in an advertisement in the November issue of RADIO & TELEVISION RETAIL-ING, the list price of Fada television model 899 in mahogany or walnut veneer was given as \$395, whereas the correct list price was \$375, plus tax and installation. Model 899 has a 10-inch tube giving 52 square inches of picture area.

NARDA Annual Meeting

The National Appliance & Radio Dealers Association will hold its annual meeting at the Hotel Sheraton, Chicago, January 9, 10, 11.

Garnich Admiral Jobber

Appointment of E. Garnich & Sons Hardware Co., Ashland, Wis., as exclusive distributors of Admiral electric ranges, refrigerators, radios, radio-phonographs and television sets for eleven counties in northern Wisconsin has been announced by W. C. Johnson, general sales manager of Admiral Corp., Chicago.

Arvin Display Popular

Gordon T. Ritter, director of sales, Arvin division, Noblitt-Sparks Industries, Inc., reports that the "Arvin Salesmaker" island floor display holding up to 48 table model radios or electrical appliances, have been distributed to over a thousand dealers. The units are issued at the distributor's discretion, but in most cases are merchandised in package deals involving the purchase of 12, 24 or 48 radios.

Burgess Dealer Help

Burgess Battery Co., Freeport, Ill., has made available a "Square Foot" display of fourteen best-selling flashlights in five different models. The display requires less than a square foot of counter space; and holds a small stock of a variety assortment of models.



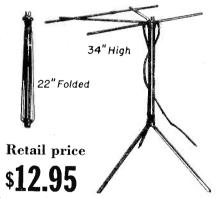
It's collapsible . . .

and can be tucked away

This new sensational indoor antenna fulfills all the requirements for FM and all-channel television coverage. The 'Tuck-A-Way' responds to ultra high frequency bands as well as the broader band of frequencies. The 'Tuck-A-Way' is also directionally adjustable to receive or reject reflected signals.

Check these features . . .

- ROTATABLE FOR BEST DIRECTIV. ITY OF SIGNALS.
- ADJUSTABLE LENGTHS FOR FM AND ALL TV CHANNELS.
- EQUIPPED WITH REFLECTORS AND DIRECTORS.
- DIRECTIONALLY TUNES ANY EX-
- ISTING ANTENNA.
 STURDILY CONSTRUCTED OF STEEL ALUMINUM AND BAKELITE.
- COLLAPSIBLE AND PORTABLE—WEIGHS LESS THAN 3 LBS.
- EASILY SET UP WITHIN ONE MIN-UTE.



In many locations where an outside antenna has been installed, directive effects can be obtained by connecting the TUCK-A-WAY antenna across the terminals of the present antenna and rotating for best results.

The TUCK-A-WAY can be used for quick store and home demonstrations of FM and Television Receivers.

We invite inquiries from jobbers and distributors.

PHONE . . . WRITE . . . WIRE

RADIO-ART-DIVISION COLEN-GRUHN COMPANY, INC.

387 FOURTH AVE., NEW YORK 16, N. Y. Phone: MUrray Hill 9-6363

New Products

Du Mont TELEVISION SET

"Winthrop" television small-space console is finished in select knotty pine. Large screen size, $7\frac{1}{2} \times 10$ inches with FM and direct-view television on all channels. Standard and FM radio reception; automatic record changer. Set has 33 tubes plus rectifiers. Cabinet is $37\frac{1}{2}$ inches high, 31 inches wide, $22\frac{1}{4}$ inches deep. Approximately \$825 plus installation. Du Mont Television, Receiver Sales Division, 515 Madison Ave., N. Y., N. Y.—RADIO & TELEVISION RETAILING

Phono-Gard RECORD DEMONSTRATOR

Demonstrator styled in natural finish cabinet, on-off and tone control knobs securely attached from inside. Working parts are out of sight and out of reach. Once machine has been started automatic slide panel completes cycle. Patented opening and closing feature protects mechanism. Helps cut down on demonstration breakdowns. St. Joe Machines, Inc., St. Joseph, Mich.—RADIO & TELEVISION RETAILING

Westinghouse TABLE RADIO

Model 210 miniature table model radio receiver is housed in "Lustrex" cabinet; carrying handle, made of elastic plastic, lies flat on top when not in use. Measures 9¾ inches



high, 6 inches wide, 4¾ inches deep. Styled in maroon, retails for \$19.95. Deluxe version in gray with gold trim, retails for \$22.95. Set has four tubes plus rectifier. Westinghouse Electric Corp., Home Radio Division, Sunbury, Pa.—RADIO & TELEVISION RETAILING

RCA Victor BATTERY RADIO

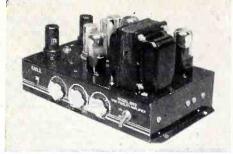
Table model farm battery radio, model 8-F-43, designed for rapid conversion without cost from battery to power operation. Includes as standard equipment an RCA Victor electrifier unit. Powered by an RCA farm battery



pack, receiver is housed in modern cabinet, tuning dial angled and recessed at the top of cabinet. On-off indicator included to avoid waste of battery power. Measures 9% inches high, 18 inches wide, 9½ inches deep. Eastern retail price is \$45, less batteries. RCA Victor Division, Radio Corporation of America, Camden, N. J.—RADIO & TELEVISION RETAILING

BELL RADIO-PHONO AMPLIFIER

with built-in compensated pre-amps



Front View

Four Separate Inputs Individual Equalization Bass and Treble Boost New high fidelity from all types of pickups



Rear View

Sound out more profits with this advanced BELL Model 2122 High-Fidelity Amplifier. It provides one input each for radio tuner and any crystal pickup, plus two special inputs for the various new magnetic pickups (ideal for the new Micro-Groove recordings). Built-in pre-amplifiers and individual equalization ossure proper match and response from magnetic pickups. Bass and treble boost, plus attenuation, gives full tone control. Adjustable output impedance matches most speakers.

And this medium-priced unit matches the market for the finest in Radio-Phono Amplifiers. Write for details.



BELL SOUND SYSTEMS, INC.

552 MARION RD., COLUMBUS 7, OHIO EXPORT OFFICE: 4900 EUCLID AVE., CLEVELAND 3, OHIO

. . . for

INCREASED SALES

and

PROFITS...



RADIO and TELEVISION

for SOMETHING BETTER, it's

DEWALD



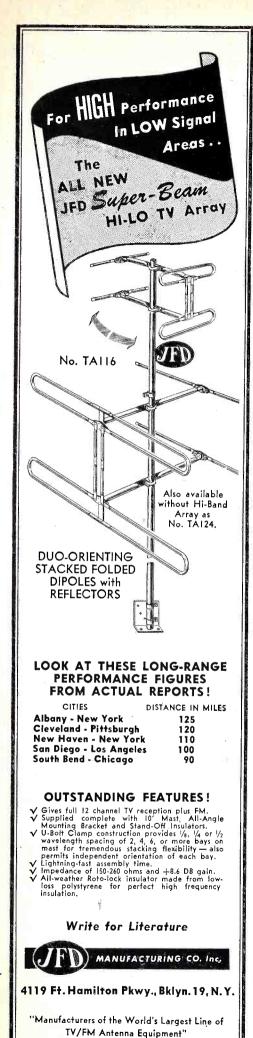
For more than a quarter-century DeWALD's proven quality and outstanding performance have been creating satisfied customers and building good-will.

Write today for full information

JOBBERS - REPRESENTATIVES

Some choice territories still available.

DEWALD RADIO MFG. Corp. 35-15 37th Ave., Long Island City 1, N. Y



New Jensen Home Entertainment Center

The requirements of home entertainment centers and ham shacks are forever expanding, points out Jensen Manufacturing Co., 6601 S. Laramie Ave., Chicago. Today there's a short wave receiver, an amplifier, a loudspeaker and a transmitter. Tomorrow we may be adding an oscillator and a recorder. Families will demand television sets and microgroove record-changers. Meanwhile more storage room will be needed, and there will always be the problem of equipment in cabinets of various sizes and designs.

The Jensen firm meets this problem with Customode, providing matching enclosures for radio and electronic equipment. It enables the owner to house all rario, audio and video components in uniform, attractive cabinets. It coordinates our various pieces of equipment into one pleasingly neat and orderly functional unit.

Recognizing that the heart of any entertainment center is a high quality loud-speaker, Jensen commissioned leading furniture stylists and acoustic engineers to develop a line of enclosures around the reproducer, a Bass reflex housing a fine 15-inch Jensen speaker, preferably a co-axial.



Customode line by Jensen provides means for a home or "Ham" Entertainment Center,

Besides the reproducer cabinet, the Customode line includes three other basic units and a console. Dimensioned to a common module, Customode units may be combined in hundreds of different ensemble arrangements for entertainment center or ham shack. The units are sturdily constructed of heavy acoustical plywood. Veneer is selected imported mahogany, Vee-matched; exposed trim is solid mahogany. Satin-finish brass door pulls and controls add an attractive color note. Finishes available are muted blonde and Cordovan, to harmonize with almost any decorative scheme.

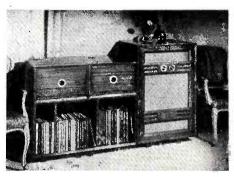
The console includes a Bass reflex speaker compartment for a 15-inch loud-speaker and a three-compartment section for other equipment. The top and bottom compartments have side-hinged doors; the center compartment has a slide-out drawer for record-changer installation.

The Bass reflex reproducer cabinet is designed to house a 15-inch speaker and a Jensen coaxial is recommended for finest results. Equipped with four cutouts, any two of which may be used for

speaker controls, the cabinet may be placed either on end or side, as desired.

A second basic unit is a small utility cabinet which is suitable for housing tuner, amplifier, or other equipment. A motorboard and slide assembly, available extra, may be installed in the cabinet to provide for record-changer.

Another basic unit is a medium-size utility cabinet with drop-front door. This enclosure is designed for communication equipment, small television sets and other components.



Matching enclosures are attractive.

The fourth basic unit is a general purpose cabinet with two shelves and open front. This unit was designed specially for record storage and there is ample space for more than 200 records in standard albums. The top shelf is convenient for art objects or for the record album in use. This cabinet, too, may be placed either on end or side, as desired.

Basic units are finished on five sides to permit placement on sides or ends and to make possible right—or left-side door opening and corner turning. Interior surfaces are free from obstructions and the utility cabinets have ventilated backs to carry off heat generated by equipment and subpanels for mounting dials and knobs. Single feet and two sizes of foot assemblies are available for supporting the cabinet ensemble in any position.

Merchandising Counselor

Harry Boyd Brown, formerly national merchandising manager at Philco, has opened offices at 18 W. Chelten Ave., Philadelphia, as a merchandising counselor to manufacturers.

Times Square Official

The appointment of Milton D. Blauner to the board of directors of Times Square Stores Corp., New York, has been announced by George J. Seedman, president.

Boston Town Meeting

The second of a series five Town Meetings of Radio Technicians was held in Boston November 15, 16, and 17. Radiomen from Maine, Massachusetts, Rhode Island and New Hampshire were invited to the three-day meeting, designed to assure satisfactory installation and repair of New England television sets. The Town Meeting was sponsored by the Radio Parts Industry Coordinating Committee, and followed the pattern set in New York in September, and an experimental meeting in Philadelphia last January (1947).

Reactance Tubes

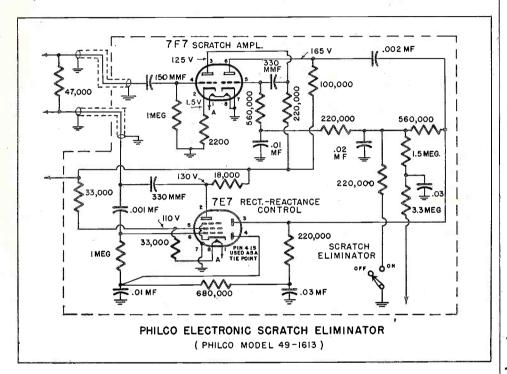
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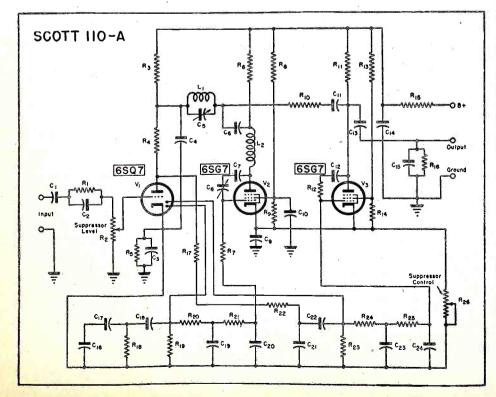
refinements would be complemented by additional operative controls on the front panel.

Simplification of the theory is possible by making the response characteristics fixed, by eliminating the bass section (since the response of the system may be such as to render this section useless), and by having only an "on-off" switch for the operator.

Three circuits are shown. The Scott model is for attachment to existing apparatus. The RCA "Magic Monitor" and Philco "Electronic Scratch Eliminator" are incorporated in stock models as indicated, and probably indicate

a trend in better console manufacture. In servicing the RCA and Philco circuits, an audio signal generator is connected to the phono jack and an output meter across the output transformer. It will be observed that when the output of the oscillator (at 5000 cycles for Philco, 3000 cycles for RCA) is reduced to a certain point, output of the system is reduced if the noise suppressor is on. Exact values for tests are given in manufacturer's service notes. At lower frequencies or higher levels no effect is observed, allowing music to be reproduced at the maximum fidelity attainable by the system.





IRC Power Wire Wounds are better built every step of the way



Starting right from the winding form IRC Power Wire Wounds combine the best of materials, workmanship and resistor "know-how".

Highest grade alloy wire uniformly wound on sturdy ceramic tubes. Terminals spot welded for security; heavily tin dipped for easy soldering.





Climate-proof cement coating provides dark, rough surface—best for rapid heat dissipation, moisture protection and ability to withstand reasonable overloads.

Resistors cured at LOW temperature prevents damage to resistance windings, and loss of temper in terminals. Bands for adjustable types feature stainless steel springs and silver contacts. Cannot corrode to cause high resistance.



For exacting, heavy-duty requirements you can rely on IRC Power Wire Wounds for balanced performance in every characteristic. Being full-sized, they can operate continuously at full rating. Derating in high ranges is unnecessary.

IRC Power Wire Wounds are available in a full range of ratings, sizes and terminal types. 91 new ranges have just been added. Next time you step up to your distributor's counter stock up on IRC Power Wire Wounds.



401 N. Broad Street, Phila. 8, Pa.

In Canada: International Resistance Co., Ltd.,



YES! We're listed in the RED BOOK

IRC replacement controls for any receiver manufactured from 1938 to 1948? Just refer to the Radio Industry RED BOOK!

Sparton Merchandiser News Available to Retailers

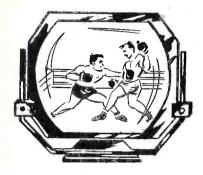
Copies of "Sales Talk," containing digests of articles on selling, may be had by addressing requests for same to Earl L. Hadley, manager advertising and sales promotion, the Sparks-Withington Co., radio and appliance division, Jackson, Mich.

Prize of Universal Range

The Universal Bantam range, manufactured by Landers, Frary & Clark, was demonstrated during the open house held by the Patton Electric Co., Silver Creek, N. Y., in connection with the town's centennial celebration.

Muter Buys Jensen Stock: No Changes Contemplated

Leslie F. Muter, president of The Muter Co., and Thos. A. White, president of the Jensen Manufacturing Co., both of Chicago, have released a joint statement saying that The Muter Company has just acquired all of the common stock of the Jensen Manufacturing Company. The amount of consideration was not disclosed but the acquisition was made by cash and Muter common stock. Both principals said that no consolidation of operations was currently anticipated and no changes in management were contemplated.



BETTER LENSES BETTER PICTURES LOWER PRICES

DOUBLES IMAGE SIZE

PHABEST

TABLE MODEL or CONSOLE With simple, foolproof, adjustable bracket or floor stand.

REASONABLE PRICES AND ... a good discount for you.

IMMEDIATE DELIVERY

7" List \$14.95 (table model) 10" " 22.95 (table model) 12" " 39.95 (floor model) No additional charge for a blue tint.

Representatives

Some choice territories still open **DEALERS**—Write for further details and Brought to you by an oldestablished manufacturer with a reputation for engineered plastic products.

Now you can give your customers a top quality liquid-filled lens, optically correct, clearer, sharper pictures without distortion, clear or blue tint at the same price.

ALPHABEST PRODUCTS CORP.

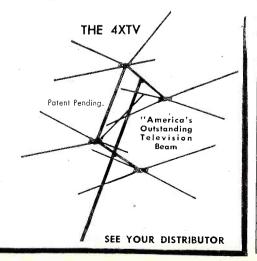
181 NAVY STREET BROOKLYN 1, N. Y. MAin 4-1844



- Bi-Directonal Stacked Conical "V" Beam
- Channels 2 to 13 Plus FM
- Low Inception Angle

price lists.

- Extremely High Signal to Noise Ratio
- 150 Ohm Non-varying Impedance
- Use 72, 150 or 300 Ohm Transmission Lines
- Universal Mounting Clamps



TELEVISION CHASSIS

FACTORY ASSEMBLED ALIGNED - TESTED

These top-quality television chassis open new markets for you in the field of custom built television. Saves hours of labor. No testing required.
OUT OF THE CARTON—INTO YOUR CABINET

#T-100

10" **TELEVISION** CHASSIS



A television receiver you will be proud to feature under your private label. Adaptable for 12" or 15" cathode ray tubes. All 12 channels. Complete FM audio circuit, 20 tubes, magnetic focus and deflection. 300 ohm input impedance ... Sync guide, 6" PM speaker. All tubes mounted in sockets. . . . NET \$16440

#T-70 7" TELEVISION CHASSIS



A portable, light-weight electrostatic chassis designed to fill your need for low-cost custom built telecost custom built tele-vision installation. Compact; will fit in-to many types of standard furniture such as console ra-dios, credenzas, etc. All 12 channels. . . . All Speaker. . . All Speaker. . . . All Tubes. . . .

NET \$11825

#TD-150 --- 10", 12" or 15" **DUPLICATOR CHASSIS**



Multiply your television sales with this II tube duplicator chassis for multiple installations. Complete with plug-in adaptor and extension cables. Made to operate off any type of master set. Magnetic deflection...synchro-lock circuits...speaker...CR tube support. Suitable for 10", 12" or 15" tubes.

NET \$10440

DEALERS - SERVICEMEN

ACT NOW. Investigate the possibilities of added business with completely wired chassis. Send for catalog T for full information or inquire at your local jobber or distributor.

DISCOUNT OF 5% ON ORDERS OF 5 OR MORE

ORDER INSTRUCTIONS

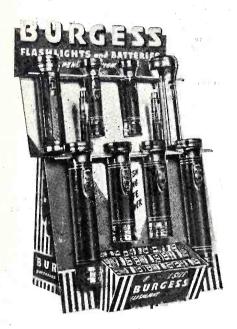
All prices f.o.b. New York (Less CR Tube) 20% deposit required with order for all C.O.D. shipments. Orders marked "RUSH" will be shipped via air freight...all others sent express collect. Approximately one week delivery.



TELEVISION UTILITIES CORPORATION

1261 Broadway, New York 1, N. Y. MUrray Hill 4-2532-3

BURGESS Gives You a Gives You a Higher Return Higher Return From a Square Foot From a Square Foot of Your Counter



Want Greater Turnover, Migher Returns, and Nore Profit?

Then here's how to use valuable counter space. Set aside one square foot for this bright, quick-sale Burgess display assortment and watch sales and profit soar.

Here's a whole profit department in one compact, sturdy unit. In less than a square foot of space (actually $9'' \times 13''$) it displays and sells 48 Eurgess flashlight batteries and a complete assortment of Burgess flashlights in 5 best-selling models. This new money-making display is FREE with the minimum stock of batteries and select flashlight cases.

Don't wait to step up profits. Your Burgess distributor has the No. 134 assortment in stock now. Order it by number today!

BATTERY COMPANY Freeport, Illinois

Du Mont "Colony" Console



Small-space console, Georgian style cabinet, gives 116 square inch direct-view picture. Set has 37 tubes plus rectifiers; se'ls for \$1095.00 plus installation.

TV Test Equipment

(Continued from page 61)

over the phone that the set has gone dead, the sound has disappeared, etc.

The multitude of equipment needed for installation and for antenna service work will not be examined in detail here, since the necessity for ladders, drills, sound-powered phones, attenuator pads, etc. has been covered in another article.

It goes without saving that once the servicer acquires this equipment, he must become proficient in its use. A final suggestion in this connection: if TV is just starting in your area and opportunities for servicing are rare, build your own set from a kit (but preferably one where alignment is not locked in at the factory) and cut your teeth on it. Later on this can be your monitor set in the shop.

RCA Victor TABLE RADIO

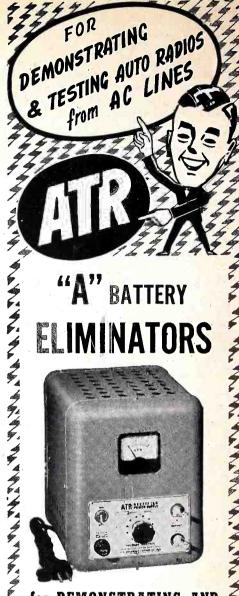
Oriental-styled table model radio, one of the 75-X-1 series. Standard broadcast receiver features authentic painted Chinese scenes. Available in black, red, and white backgrounds. Features soft-glow tuning dial, which lights up individually the station numerals and tuning pointer. Instrument has four tubes one rectifier. Measures 73/4 inches high, 10 inches wide, 71/2 inches deep. Eastern retail price, \$49.95. RCA Victor Division, Radio Corporation of America, Camden, N. J.-RADIO & TELEVISION RETAILING

ITI TELEVISON RECEIVER

"Century" 226, television set, features chair-side remote control unit containing television tuner and AM-FM tuner, dual-speed record player, and is connected by wires to the picture unit which is a separate cabinet. The picture unit cabinet contains a metalsided cathode ray tube and storage space. Several picture units may be operated from single chair-side control unit by means of this system. Industrial Television Inc., 359 Lexington Ave., Clifton, N. J .- RADIO & TELEVISION RETAILING

Thall MAGNIFIER

Magnifiers available in 32 models, starting at \$9.95 retail. Available in conventional or table stand brackets, floor stands, in round edge or rectangular models. Sizes range from 3-inch model to a 15-inch model. Thall Plastics Engineering Co., 155 Chambers St., New York 7, N. Y .- RADIO & TELEVISION RETAIL-



"A" BATTERY LIMINATORS



for DEMONSTRATING AND TESTING AUTO RADIOS

New Models . . . Designed for testing D. C. Electrical Apparatus on Regular A. C. Lines. Equipped with Full-Wave Dry Disc Type Rectifier, Assuring Noise-less, Interference-Free Operation and Exfreme Long Life and Reliability.



Þ



AUTO RADIO VIBRATORS

A Complete Line of Vibrators . . .

Designed for Use in Standard Vibrator-Operated Auto Radio Receivers. Built with Pre-cision Construction, featuring Ceramic Stack Spacers for Longer Lasting Life.

NEW MODELS NEW LITERATURE "A" Battery Eliminator, A C~D C Inverters
Auto Radio Vibrators See your jobber or write factory

AMERICAN TELEVISION & RADIO CO. Quality Products Since 1931 SAINT PAUL 1, MINNESOTA-U.S.A

Arvin Tele Receivers

Glen W. Thompson, president Noblitt-Sparks Industries, Inc., has announced the development of new television sets carrying the "Arvin" trade name. Facilities in Columbus, Ind., are rapidly being put into shape for engineering, testing and manufacture of television receivers.

Stromberg Sales Help

A pocket-size reference guide, listing the main selling features of the Stromberg Carlson radio and television line and especially designed for the use of floor salesmen, has been released through the company's distributors and branch offices to all authorized dealers.

It consists of a two-color, four-page jacket with stapled inside cuff containing several removable cards with reference to different radio and television series. Each card, illustrated with line drawings of individual models, lists in capsule form the cabinet, radio, television, and phono features of that series.

Proctor Trade-In Plan

The Proctor Electric Co., Philadelphia, Pa., has announced a new merchandising campaign for the first quarter of 1949, featuring a \$2.00 trade-in on its \$12.95 Champion iron and a \$3.00 trade-in on its \$18.95 Color-Guard toaster.

Missouri Valley "Reps" Sponsor Conference



Shown at the Radio & Electronic Manufacturer-Jobber Conference held in Kansas City are officers and committee chairmen of Missouri Valley Chapter, r. to l. seated: Jim Kay, president; Courtney Roes, vice-president and chairman registration committee; A. R. Thibau, secretary-treasurer. R. to l., standing: R. W. Farris, chairman entertainment committee; Zell S. Myers, chairman publicity committee; Herbert A. Roes, chairman cocktail supper greeters; G. L. Koenig, chairman luncheon greeters; Fred Somers, Sr., treasurer of conference funds.

Emerson Ad Manager

Edward Lane has been appointed advertising manager for Emerson Radio & Phonograph Corp., according to an announcement by Stanley M. Abrams, sales promotion manager. Mr. Lane had held executive positions with Columbia Records and the Muzak Corp.

RMA Campaigns Successful

Salt Lake City, 128 per cent sales increase; New Orleans, 21 per cent sales increase; Indianapolis, 50 per cent; Trenton, N. J., 110 per cent. These are final

figures in Radio in Every Room campaigns conducted in these cities by the Radio Manufacturers Assn., and just released by the Fred Eldean Organization. New York.

New Stromberg Sets

C. J. Hunt, radio and television sales manager, Stromberg-Carlson Co., Rochester 3, New York, announces the addition of two new television models, the Lanchester, model TV 12 PM, and the Manchester, model TV 12 L2M, to the company's line.



MODEL SSD-180 (illustrated). Steps up weak signals greatly. A well de-signed antenna electrically and me-chanically. For 72 ohm line.

MODEL SFD-190. Stacked dipoles and reflectors for 300 ohm line.

Quality throughout. All aluminum construction with $1\frac{1}{4}$ " uprights and crossbars; sealed ends of tubes. $\frac{5}{8}$ " thick lucite insulation. Inserted reinforcements on antenna and reflector ends. Antennas packed semiassembled for ease in setting up. All hardware in place—no loose screws or nuts.

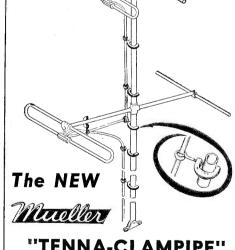
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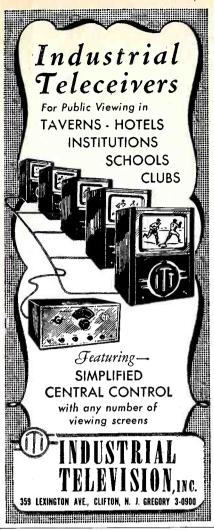
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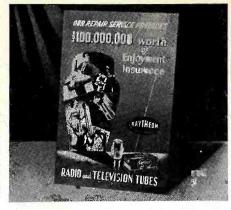
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Dates Ahead

Future Events of Interest to Readers

Jan. 3-15: Chicago Winter Market, Merchandise Mart, Chicago

Jan. 9-11: NARDA Annual Meeting, Sheraton Hotel, Chicago

Jan. 19-20: NAMM Regional Conference, Hotel Biltmore, Los Angeles

Jan. 26-27: Northwest Pacific States, NAMM Regional Conference, Seattle, Wash.

Feb. 21-22: Southwestern States, NAMM Regional Conference, Dallas, Tex.

Mar. 13-18: National Electrical Manufacturers Assn., Winter Convention, Edgewater Beach Hotel, Chicago

Mar. 14-15: Central States, NAMM Regional Conference, Cincinnati

Mar. 21-22: Southern States, NAMM Regional Conference, Atlanta, Ga.

Mar. 28-Apr. 1: Third International Lighting Exposition, Hotel Stevens, Chicago

Apr. 4-5: West Central States, NAMM Regional Conference, Minneapolis

Apr. 5-7: Edison Electric Institute, 15th Annual Sales Conference, Edgewater Beach Hotel, Chicago

May 1-6: National Electric Wholesalers Assn., 41st Annual Convention, Netherland Plaza Hotel, Cincinnati

May 7: Eastern Electrical Wholesalers Assn., Dinner & Dance, Hotel Astor, N. Y.

May 15: Radio Manufacturers Assn., 25th Silver Anniversary Banquet, Stevens Hotel, Chicago

May 17-20: Annual Radio Parts Manufacturers Industry Trade Show, Stevens Hotel, Chicago

July 25-28: National Association of Music Merchants, Trade Show & Convention, Hotel New Yorker, New York City





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DC Amps: 0, 10, 50, 250, 1000, 5000

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Complete with tubes, batteries and test leads, output leads, etc., housed in natural finish oak case; hammertone gray panel. See this outstanding buy at your jobber today—or write for new catalogue I C.

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The ACTION Display-Way To Boost Your Sales!

M ODEL "712" ROTO-SHO's two-way, built-in electric outlet permits novel, self-contained lighting effects as well as operation of electrical devices while the turntable revolves three times a minute! (Lights turn with table.)

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GENERAL DIE AND STAMPING CO.

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TV Trend Seen as Appliance Boon

(Continued from page \$1)

the markets in other lands. First, there's the desire to keep brand-names in the limelight, and second, foreign markets may well be the balance one day between overproduction here and a ready market if and when full-scale manufacture is attained.

There is one outstanding unknown quantity to any forecast having to do with the price situation for 1949, and this is the possibility of price controls being instituted by the government. Other factors too, such as wages, add to the complexity of the price picture. However, if production can be set up at a high enough level, it is believed that the competitive element in electrical appliances will prevent any widescale increases, even if no controls were to be imposed. A few experts are predicting price drops on some prod-

Good Year Ahead

The appliance market held up well in 1948, with very little price-cutting. Here and there some products were slashed, but, by and large, supplies of such merchandise were comparatively short. Most of the "distressed" appliances met their fate through having been priced too high in the beginning.

The long-awaited flood of trade-ins hasn't materialized up to the present time, but it seems certain that many more traded-in products will be handled in '49 than in any of the other postwar years, though the volume will be lower than pre-war.

It seems likely that most dealer discounts will remain unchanged during the New Year.

Looking ahead we see clearly the necessity for genuine sales effort in order to rack up profitable sales volumes. To stimulate this effort we can take a look back too . . . back to the days when the going was really tough. Let us realize that if we put the same energy back of the sales of vacuum cleaners and electric irons, to mention a couple of products now in adequate supply, and hence, needing selling, that we did during the Depression we'd clean out our entire stocks in jig-time.

High Profit Potential

Electrical appliances and radio products are outstanding for their value in these days of high prices. Dollar for dollar, they represent great value, and smart dealers are selling such products by comparing them with other merchandise in other fields.

The appliance market looks wonderful for the twelve months ahead. While it's true that it is fraught with problems, those who are willing to face them with a realistic and determined viewpoint will reap their reward in increased volume and upped profits.

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TRANSMISSION LINE CABLES!

Designed to Provide Definite Electrical Characteristics



Insulated to insure maximum operating efficiency, resistance to ultra violet and weathering—especially adaptable to applications requiring high, very high and ultra high frequencies.

300 OHM PARALLEL TWIN CONSTRUCTION

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Best impedance match for rM receivers. Efficient over broad band television operations. 500 or 1000 ft. spools.

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75 OHM Parallel Twin line—For amateur operation in narrow frequency bands or individual frequencies. 500 or 1000 ft. spools.

Catalog No. 22006

150 OHM Parallel Twin line—for special applications and experiments. 500 or 1000 ft. spools.

100 OHM LINE



Catalog No. 22008

Two flexible stranded bare copper conductors, parallel twin-lead construction; low-loss polyethylene insulation; tinned copper braid shield; vinyl plastic jacket,

COAXIAL CABLE



Also 72 OHM coaxial cable, nominal attenuation, stranded conductor (Inner conductor #22-7/30 B.G.) and 73 OHM coaxial cable, solid copperweld conductor (Inner conductor #22 solid conductor copperweld)

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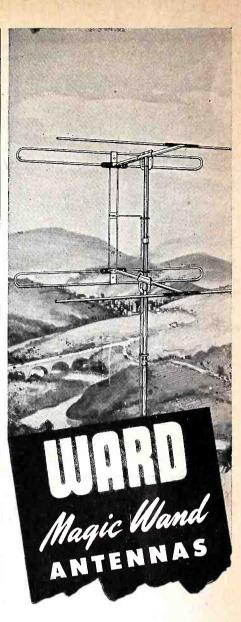
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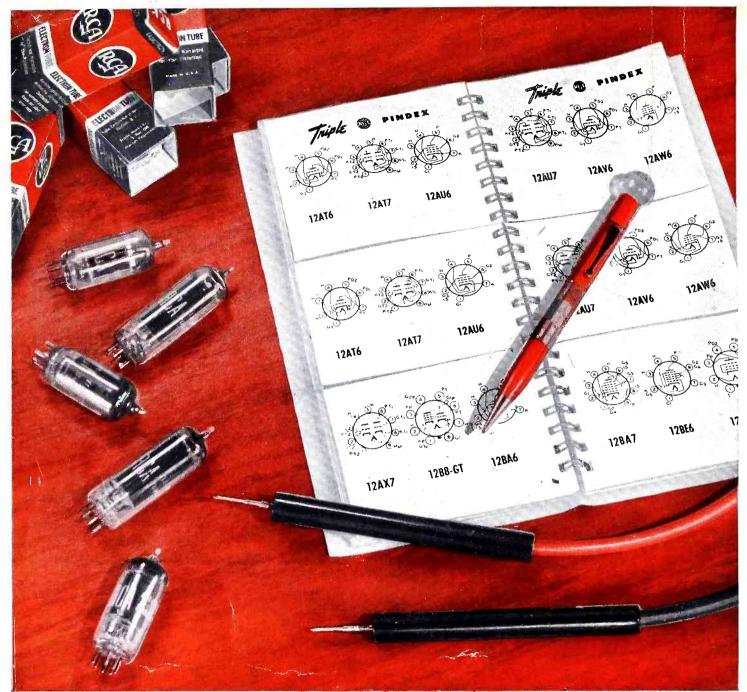
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