

RADIO & TELEVISION RAETALLING



An open letter to

TV DISTRIBUTORS and DEALERS

lumbia

Gormerly AIR KING PRODUCTS CO., INC.)
170 53rd STREET, BROOKLYN 32, N.Y.

August First

It's here! It's big! It's important! CBS-Columbia Inc. ... in tele-It's here! It's big! It's important! CBS-Columbia Inc. ...
the most exciting ... the most talked about new name in telethe most exciting ... the most front page publicity than any
vision! It has inspired more front page publicity. the most exciting ... the most talked about new name in tele vision! It has inspired more front page publicity than any other name in the industry! Gentlemen:

other name in the industry!

It can be big and important to you, too, profit-wise and need to be America's are the can be big and important is destined to be America's needingerwise. It can be big and important to you, too, profit-wise and prestige-wise. CBS-Columbia is destined to be America's leading line in television.

Here's why! First, it's a great new name! Second, it will be supported by a powerful consumer advertising campaign which Here's why! First, it's a great new name! Second, it will supported by a powerful consumer advertising with force and supported by a powerful and continue with force and will break early in Sentember and continue supported by a powerful consumer advertising campaign whic with force and continue throughout the year in TIFE. SATURDAY RUENTED throughout the year in TIFE. WILL Dreak early in September and continue with force and FVENING POST, In LIFE, SATURDAY EVENING POST, IN LIFE, EVENING frequency throughout the year in LIFE, SATUKDAY Supplemented supplemented national magazines, advertising.

THIS WEEK and other leading national newspaper advertising. THIS WEEK and other leading national magazines, supplemented advertising. by strong local television, radio and newspaper

You can expect to see CBS-Columbia chalk up healthy sales

rou can expect to see CBS-Columbia chalk up healthy sales
records in your territory this fall and winter! Never before,
has there heen such a complete
in the history of television has there records in your territory this rail and winter; Never perore in the history of television, has there been such a complete in the history of television, white and color television in the Think of it! Black and white and color television in the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television, has there been such a complete the history of television and white and color television. line: Think of it: plack and white and color celevision for the great CBS-Columbia receivers with precision built chassis, powerful cabinets all hearing the great CBS-Columbia hearing the great CBS-Columbia receivers with precision bullt chassis, powerful circuits, powerful circuits, all bearing the great CBS-Columbia name.

Distributors and dealers from all sections of the country are

pistriputors and dealers from all sections of the country are to get a case what they must do to get a case indicate franchise for their territories and towns. pnoning to ask what they must do to get a UBS-COLUMDIA inc.

Present indications and towns. Present indications are that the entire country will be accioned by Outober let rranchise for their country will be assigned by Outober 1st. If you are interested in profits and prestige, inquire now the most talks about CRS-Columbia If you are interested in profits and prestige. inquire now talked about CBS-Columbia ... the most exciting ... the most about new name in television!

about new name in television!

CBS-COLUMBIA INC.

D. H. Cogan President

DHC/eg

AIRWKING 185-Columbia Inc.

slumbia

(formerly AIR KING PRODUCTS CO., INC.) 170 53rd STREET, BROOKLYN 32, N. Y.

First with Color Television Receivers

RADIOLTELEVISION

Including "RADIO & TELEVISIÔN" "RADIO & TELEVISION TODAY and "ELECTRICAL RETAILING"

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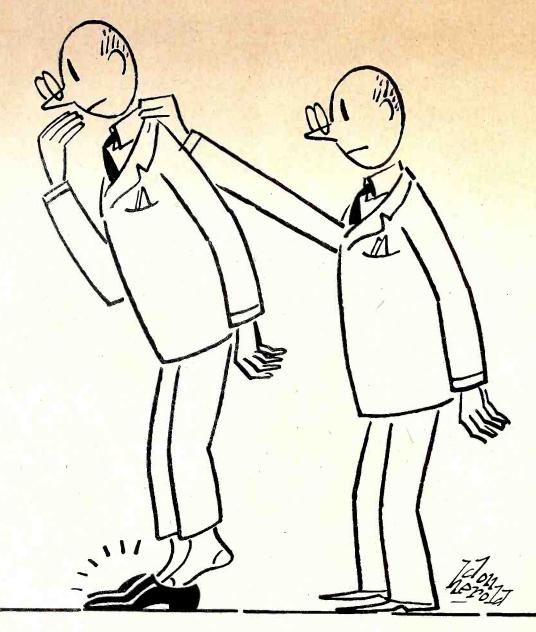
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Caldwell-Clements, Inc., 480 Lexington Ave., New York 17, N. Y.



Put yourself in your prospects shoes...

As a shopper in your community, how do you go about finding all the products and services you need?

If you do what 9 out of 10 shoppers do—you probably go right to the 'yellow pages' of your local telephone directory.

That is a buying habit that has been going on for over 60 years. We know...because we've checked

with folks in communities throughout the nation again and again.

That's why so many Radio and TV dealers consider it smart advertising to have their name and sales message in the 'yellow pages.'

Check the headings in your local Classified . . . make sure your name is under the products you sell and services you render.

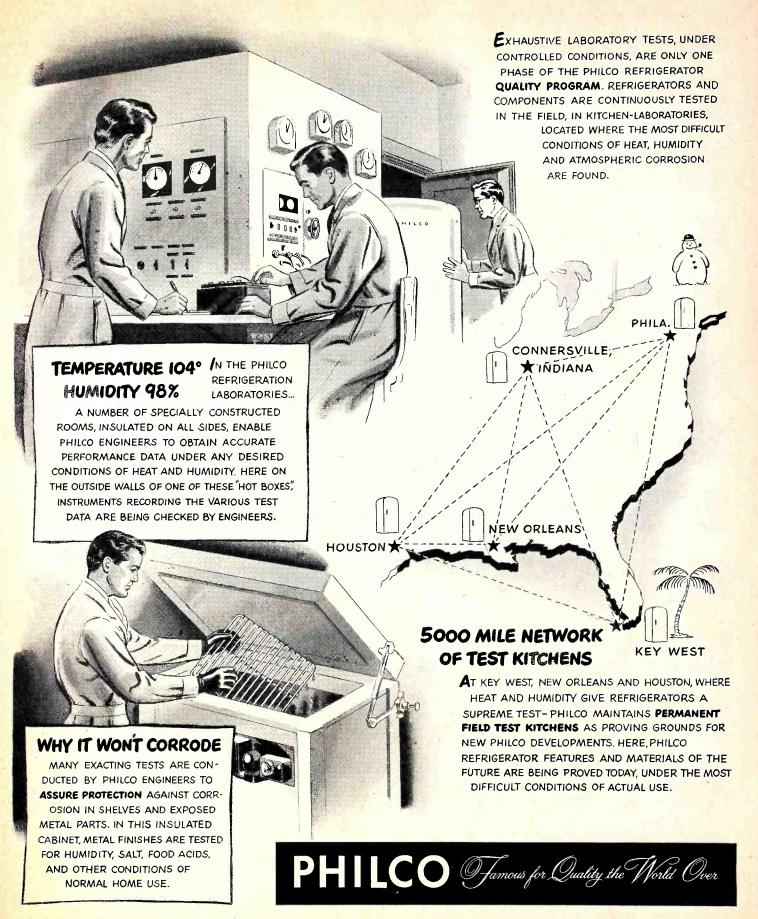
FOR OVER 60 YEARS

AMERICA'S BUYING GUIDE

FOR FURTHER INFORMATION, CALL YOUR LOCAL TELEPHONE BUSINESS OFFICE



QUALITY FIRST... A PHILCO POLICY



IF YOU BUY, SELL OR INSTALL TV ANTENNAS

YOU KNOW THE COST OF A DISSATISFIED

CUSTOMER. ONE CALL-BACK TO REPAIR OR

REPLACE A FAULTY ANTENNA IMMEDIATELY

REDUCES OR ELIMINATES YOUR PROFIT.

MORE THAN 1 MILLION TROUBLE-FREE

WALSCO ANTENNAS ARE INSTALLED.

THROUGHOUT THE NATION. JOBBERS,

DEALERS, SERVICEMEN TRUST THE QUALITY

OF WALSCO ANTENNAS TO GIVE CUSTOMERS

LASTING SERVICE AND OUTSTANDING PER-

FORMANCE AT A FAIR PRICE. USE ANY ONE

OF THE FAMOUS WALSCO MODELS...IT'S

THE PRODUCT OF THE LEADER. TO BE SURE,

SPECIFY WALSCO.

WALTER L. SCHOTT CO. • 3225 Exposition Place, Los Angeles 18, Calif.

Letters to the Editors

FM's Important Future

Editors Radio & Television Retailing:
The radio-television industry will be
making a big mistake if it becomes so
dazzled by the glamor of TV that it
sells FM short.

Now that television has been in wide-spread use for a number of years and TV-equipped homes have passed 50 per cent of the total in many of the biggest metropolitan centers, it is possible to get an idea of what the ultimate pattern of broadcasting in this country will be like. All the evidence indicates that radio, and particularly FM radio, will have an important and permanent place in the pattern of the future.

John S. Meck

President Scott Radio Laboratories, Chicago

Performance of FM Receivers

Editors Radio & Television Retailing:

A most important factor in the public's acceptance of FM is the availability of well-performing receivers that have adequate sensitivity and selectivity but, most important of all, are practically free from drift. We find that these are the vital performance factors and that the matter of superior fidelity, which FM is capable of providing, is not of particular and fundamental interest to the average purchaser. It is true that certain listeners are interested in fine fidelity but our twenty years experience in radio has proven that this is a very small segment of the buying public.

Ernest H. Vogel

Manager of Marketing Electronics Dept., General Electric Co., Syracuse, N. Y.

FM Absolutely Essential

Editors Radio & Television Retailing:
I recently returned from Florida, having driven to and from Miami. In my car I have a special radio and two antennas, which gives me good reception on FM as well as AM.

Until I took this trip I have not realized why FM has persistently shown such lush vitality in markets some distance removed from high-powered AM transmitters. Through hundreds of miles of the highway route between Chicago and Miami, AM reception ranged sporadically from excellent to zero.

Through most of this drive, and particularly at times when AM reception was at its worst, I enjoyed excellent FM reception. Sometimes there were only two or three stations available; on other occasions I could hear fifteen or twenty with little or no static interference. I heard many network programs on FM at times when I could not get them on AM; also local programs.

There is no question at all but what FM is absolutely essential to give an acceptable radio service to large areas of the country. This is a fact which should be brought home to radio advertisers who, living under the shadow of AM transmitters in large metropolitan areas, have no idea of how little coverage many of their network programs receive in rural areas and small cities.

E. F. McDonald, Jr. Radio

President, Zenith Radio Corporation, Chicago.



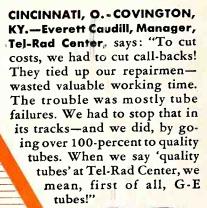
CHICAGO, ILL.—Harold W. Chambers, Chambers Radio and Appliance Co., says: "We had to lick call-backs before they licked us. So we made quality tubes a 'must' at Chambers-principally G-E tubes, the brand every serviceman respects. Now TV service shows a steady profit on our books. Consequently, all of us here are strong for General Electric tubesboost them every chance we get."

BROOKLYN, N. Y.—Joseph F. Lauinger, President, Conlon Electric Company, says: "Call-backs can wipe out profits. Quality tubes mean fewer call-backs-protect income. That's why, with 40,000 owners on our contract list, we feature G-E tubes. We know that when one of our men installs a G-E picture tube or receiving type, chances are that customer will stay satisfied!"



HERE'S PROOF THAT G-E TUBES CUT CALL-BACKS!

WASHINGTON, D. C.-Mike Filderman, Vice-president, Phillips Radio Company, says: "Our call-back expense scared us, for customers' sets kept giving trouble. That was before we standardized on quality tubes-G-E tubes. They've done away with our most common cause of receiver trouble, tube failures. Believe me, that saves plenty, when you're servicing about 15,000 TV sets on yearly contract!"







Thousands of dealers, the country over, echo what these leading servicemen say about G-E tubes . , . For quality tubes to cut down YOUR call-backs, see your General Electric tube distributor today!

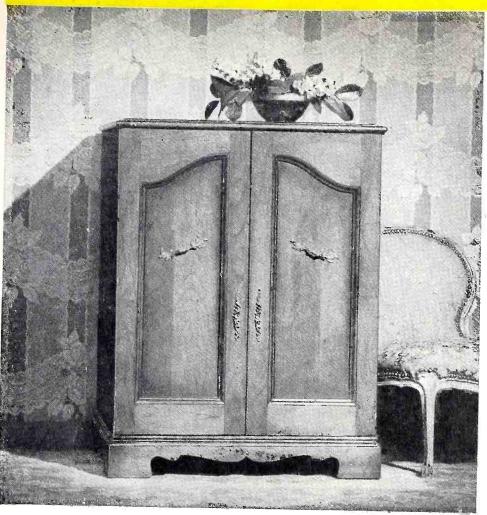




ELECTRIC



Announcing America's



For your customers who want the absolute finest, in cabinet beauty as well as in performance—here is the magnificent new Arvin French Provincial Console! Genuine cherry with full doors, big 21-inch Perma-Focus picture and all the famous features of Arvin's mighty Dual Power Custom Chassis. Moves easily on oversize casters. It's the finest in furniture, the finest in TV. Model 5212CFP.....\$499.95



Outstanding cabinet beauty in blond or mahogany with two-thirds doors and 17-inch Perma-Focus picture. Lucite controls, touch-o'-gold trim. Model 5172CB, limed oak, \$349.95. 5172CM, mahogany...\$329.95



Absolute tops in table models, with Arvin's 21-inch Perma-Focus picture; in blond or mahogany. Matching table (extra) with "Lazy Susan" swivel top. Model 5211TB, blond, \$379.95; 5211TM, mahogany, \$369.95

ArvinTV

Visible Value Vy You can SELL the difference!

Arvin's greatest TV

There never has been a TV line to match the all-new-for-'52 Arvin Line—in powerful performance—in beautiful cabinetry—in complete range of big-picture models and prices.

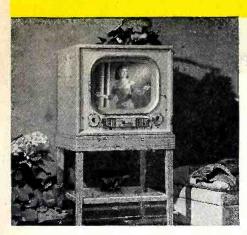
Arvin's big 17, 20, and 21-inch pictures are exactly what today's customers want. Shown above are 9 models in Arvin's complete line of 15 beautiful sets. Arvin's mighty Dual Power Custom Chassis is far and away the finest ever to be offered in any complete TV line—with 26 tubes including rectifiers and picture tube. In fact, this chassis is so powerful that a special control is provided to reduce signals from nearby stations for maximum picture clarity!

Arvin's controls automatically hold brightness-contrast setting from station to station, check "airplane flutter" and other types of electronic interference.

Arvin's new cabinets are unmatched in beauty and fine crafts-manship—in styles and finishes to meet every taste.

Top TV Line..

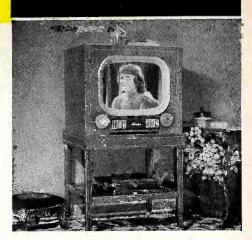
with the mighty Dual Power Custom Chassis!



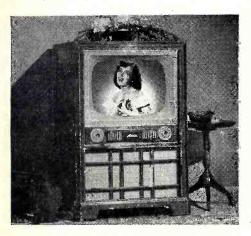
There's no finer 17-inch table model built at any price! Available in either limed oak or genuine mahogany veneer. Table to match at moderate extra cost. Model 5171TB, blond, \$279.95; 5171TM, mahogany, \$269.95



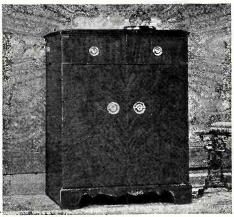
Modern American styling in mahogany or limed oak. 17-inch Perma-Focus picture. Moderately priced console with all Arvin's Dual Power features. Model 5170CB, blond, \$319.95; 5170CM, mahogany....\$299.95



A 17-inch table model for your customers who wants all the picture quality he can get, in a cabinet of simple design and compact dimensions. All Arvin features. Mahogany veneer only. Model 5173TM...\$249.95



Open face console with 21-inch Perma-Focus picture, in either imported mahogany or wheat blond limed oak. Oversize casters. Model 5210CB, blond, \$419.95; Model 5210CM, mahogany......\$399.95



Full doors make this superb mahogany console look like a fine 18th century Highboy when closed; 20-inch Perma-Focus picture; Dual Power Chassis; oversize casters for easy moving. Model 5204CM.....\$449.95



All the modern beauty of limed oak with full doors! 20-inch Perma-Focus picture; mighty Dual Power Chassis. Rolls easily on oversize casters. Packed with Arvin performance features. Model 5206CB. \$449.95

Don't wait! Get aboard now, and ride the Arvin Line to more sales, more profits, more customer satisfaction! Phone, wire or write for name of nearest distributor. Arvin Industries, Inc., Columbus, Indiana. (Formerly Noblitt-Sparks Industries, Inc.)

Arvin's greatest advertising campaign

Arvin's great new fall TV Advertising Campaign is going all-out to reach every potential customer in your community. 24 ads this Fall in 6 top magazines (Post, Life, Colliers, Better Homes and Gardens, Sunset, Successful Farming) — most ads in color, many of them full pages! And these TV ads are backed up by 53 other ads on Arvin Radio and other Arvin products. Seventy-seven ads in all—in just 16 weeks—the greatest concentration of Arvin advertising in the history of the company!

"Brings every station closer—makes every picture clearer"—that's the theme of the Arvin TV campaign. That's what today's TV viewers want—the people who own inferior sets—who are tired of little, wavering, snow-filled pictures. They're ready to advance to Arvin—now!

To get the most out of Arvin's national advertising, you'll want to use your own newspapers and local TV and radio stations to tell people you're Arvin headquarters. To help you there, too, Arvin has newspaper mats, radio spots, TV spots on film, and strong point-of-sale displays ready for your use! Arvin hasn't overlooked a bet to help you make this your biggest TV year! Start planning now! Call your Arvin distributor!

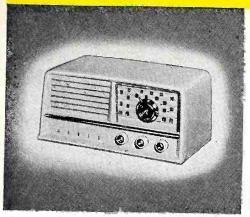
EXTRA!

Arvin will have UHF built in! No strips, no converter, no servicing needed!

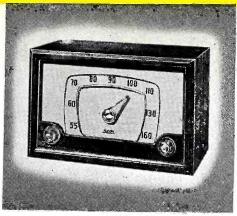
All sets in the new Arvin line will soon be available with UHF Tuner built in! Arvin is first to take this big forward step! Every Arvin Dual Power TV will be available two ways—either with straight VHF or, at moderate extra cost, complete with VHF-UHF tuners included as an integral part of the chassis. Get the complete story from your Arvin distributor NOW.

Prices listed are suggested retail prices in Zone 1, including federal tax and subject to change in accordance with OPS regulations.

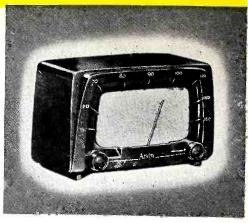
Announcing America's Top



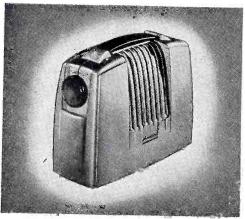
Static-free, tone-true FM and extra-powered AM reception make this superb Arvin a standout. Ivory, Willow Green, Sandalwood or Rosewood plastic. 8 tubes including rectifier. Unmatched value at the price. Model 580TFM......\$59.95

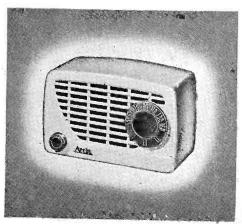


Arvin Stradivara—the finest table radio ever built. All-new straight AC circuit; such distance and tone as you've never known before! Stunningly styled in imported mahogany veneer with lucite dial and pointer. Model 551T......\$49.95

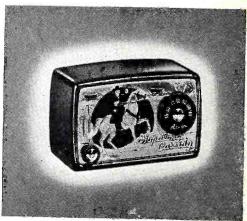


Smartest new styling in rosewood finish plastic gives Arvin Screnade instant appeal to customers who are looking for "something different." Velvet Voice tone system, with Magna-Bass amplifier, gives beautiful tone quality. Model 553T...\$24.95





Arvin Rainbow—the famous compact, shatter-proof AC/DC superhet in 6 colors: Cherry, Flame, Citron, Avocado, Pebble, Ivory. Makes a wonderful leader and a traffic-stopping display. The perfect personal radio. Model 540T.....\$18.95



Arvin Hopalong Cassidy Radio — red or black kid-proof cabinet with Hoppy and his horse — the ideal gift for young hero-worshippers! The radio that made sales history! Ask about special displays and sales helps. Model 441T....\$17.95

Arvin Radio

Velvet Voice Vy You can SELL the difference!

Priced for every purse! Styled for every taste!

Arvin Radio sales are up, and still climbing! Take full advantage of that fact! Give your customers what they want! Climb aboard the great new Arvin 1952 Radio Line and ride to bigger sales, bigger profits, happier customers!

Cash in on the brilliant new styling, the glamorous new colors, the amazing new power of these record-breaking Arvin Velvet Voice Radios! Even experienced radio authorities will be surprised at the performance of Arvin's new straight AC Model 551. We think you'll acknowledge that you have never before heard such reception from any table-model radio!

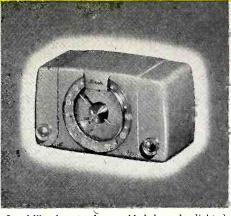
Nine table-models and four radio-phonograph consoles

Line of Radios ...

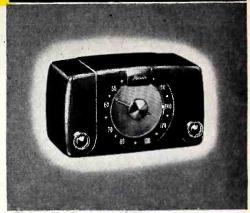
new styling! new colors! new power!



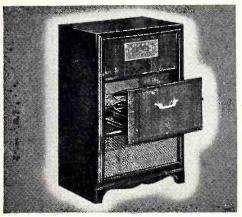
Ivory, Willow Green, or Sandalwood finish plastic provide outstanding beauty with long, alluring lines, for customers who want nothing less than 6 tubes including rectifier. 3-gang condenser; high audio output. Model 460T............\$37.95



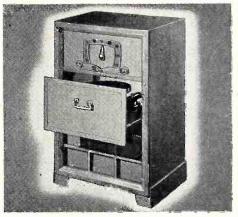
Jewel-like beauty is provided by edge-lighted lucite dial and lucite controls with finish-o' gold trim. Outstanding range and tone. Choice of colors that delight gift shoppers! Ivory, Willow Green, Sandalwood or Ebony. Model 451T....\$27.95



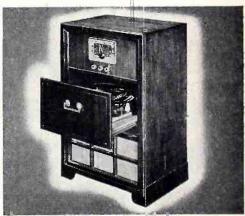
New sleek styling and Arvin's Velvet Voice tone make the Arvin Stylist a fast seller in any market. 5 tubes including rectifier; Magna-Bass amplifier An outstanding value! Magna-Bass amplifier (\$24.95, in walnut finish plastic...\$22.95



Mahogany console combination, FM/AM radio (8 tubes including rectifier) and 3-speed record changer playing 10 and 12-inch sizes intermixed; Model 482CFM, \$159.95* Model 462CM, 6 tubes including rectifier, AM only.....\$139.95*



Mahogany or limed oak cabinet, AM radio (5 tubes including rectifier) and 3-speed record player —33 1/4, 45, or 78 rpm; plays 10 and 12-inch sizes intermixed; shuts itself off. Model 554CCB, blond, \$169.95*; 554CCM, mahogany.........\$159.95*



Arvin Symphonette—FM/AM radio with 8 tubes including rectifier, plus 3-speed record changer. Stunning new styling. Plays all popular record speeds; intermix 10 and 12-inch. Model 582CFB, blond, \$179.95*; 582CFM, mahogany..\$169.95*

go to make up the sensational 30-model Arvin line—with a style, a color and a price to please every customer who comes into your store! Phone, wire, or write for the name of your Arvin distributor! Arvin Industries, Inc., Columbus, Indiana. (Formerly Noblitt-Sparks Industries, Inc.)

Advertised to every prospect!

20 Arvin Radio Ads in 7 Magazines this Fall! Millions of readers will see Arvin Radio's greatest advertising campaign this Fall—in the Saturday Evening Post, Collier's, Better Homes & Gardens, Pathfinder, Country Gentleman, Successful Farming and Progressive Farmer! Arvin aims to reach every good radio prospect in your community!

What's more, they'll be seeing the Arvin name in many



more ads—in many more magazines

-77 ads on all Arvin products in
16 magazines in 16 weeks! And every
time they see the Arvin name, an
extra impression of Arvin quality is
registered for your benefit!

Make the most of that national advertising impact! Use Arvin displays, mats, radio spots—a complete selling program—to help you get maximum sales and profits out of this great selling season! There isn't a day to lose. Contact us now and be ready for the big demand that's coming—for Arvin Radios!

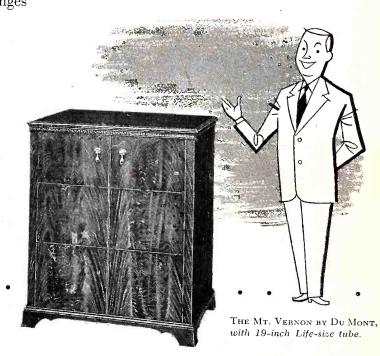
*Slightly higher in Zone 2. Prices subject to change in accordance with OPS regulations.

Look to Dullont

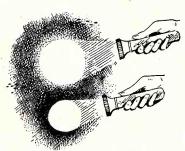
for greater line stability

It has always been Du Mont's policy to build only the finest in television receivers. Earliest models are still giving good service. And though many new developments have gradually been incorporated into the line of the li

incorporated into the line, no radical changes have been needed to support the story of Du Mont quality. No "fad" models are ever introduced to become outdated before they can be sold. The TV retailer who features the Du Mont line knows he is offering a product that will not deteriorate in value or reputation. He knows that his investment in current inventory is sound.



Point up these Du Mont sales advantages



True Focus Pictures. The focus of a television picture depends upon the spot size of the electron beam which scans the face of the picture tube. If this spot is too large or poorly focused a blurred or diffused picture is produced. Through better voltage control, extra tubes, more complete circuitry, and the use of more expensive components, the spot that "paints" the Du Mont picture is kept small and sharply focused. Picture details register accurately, do not overlay each other. When properly explained to customers, this and many other features make the Du Mont line easier to sell.

TELEVISION'S MOST COVETED FRANCHISE



first with the finest in Television

Copyright, 1951, Allen B. Du Mont Laboratories, Inc. • Television Receiver Division, East Paterson, N. J. and the Du Mont Television Network • 515 Madison Ave., N. Y. 22, N. Y.



month -

every month is

with WEBSTER-CHICAGO "profit-products"

Carry the complete Webster-Chicago profit-products line and have "hot" items, all year 'round—even in normally slow seasons. Why? Because every Webster-Chicago product is consumer merchandised and promoted the year 'round. Naturally, it's easier for you to capitalize on the Webster-Chicago national promo-

tions when you use the industry's most powerful cooperative advertising program—the one campaign designed to bring customers in and move merchandise out. Call your Webster-Chicago distributor today and start year 'round profits with the complete line of Webster-Chicago profit-products.



The famed Webster-Chicago portable automatic Fonograf—a natural gift item. This profit-product knows no seasons. (Model 621)

The new portable Manual Fonograf a traffic item. A profit-product with consumer acceptance. (Model 130) The Webcor Tape Recorder—one of the hottest items in the profit-product line. (Model 210)



In June or January Diskchangers mean profit-products to alert dealers. (Model 106) A wonderful profit-product for tie-in sales, this Fonograf plays through TV or radio set. (Model 551)

An all-time great profit-product—the Electronic Memory Wire recorder. Profits unlimited with this versatile unit. (Model 288)

WEBSTER CHICAGO

5610 West Bloomingdale Avenue, Chicago 39, Illinois
Distributed in Canada by Canadian Marconi Co.

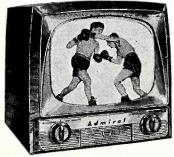


"Here's why Admiral is my No. 1 TV line!"

Says Joe Berman of Berman Appliances, Chicago, Ill.

From month to month, Joe Berman has seen a tenfold increase over the \$40,000 he grossed in 1949. In place of the 13 TV lines he used to carry, he now sells 5, and of those five, Admiral accounts for more than 50% of his total volume. "I'll tell you why Admiral is my most profitable line," says Joe. "It's because Admiral has consistently kept up with market conditions to give dealers the kind of backing they need. Admiral backs me up with outstanding TV performance . . . a terrific "wide choice" line that includes cabinetry for every taste and budget . . . prices that are consistently lower than the five leading, nationally advertised brands . . . established Admiral brand preference, thanks to powerful national advertising . , . and above all, dealer promotions so spectacular they often "scoop" the industry in sheer sensationalism."





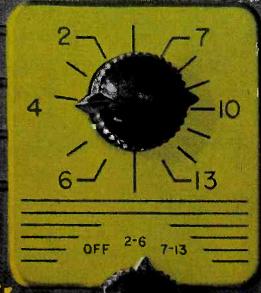
How Joe Berman profits from Admiral's better backing in his home demonstration program

As Joe Berman will tell you. "Today's television buyer knows exactly what he wants . . . he has "shopped" enough to recognize a bargain, and he's definitely brand conscious. That's why when I send out a direct mailing with a "pitch" on Admiral TV value, I know it makes an impression. Once in the home, I can demonstrate Admiral superiority in performance and I can offer cabinets for any taste and budget. Certainly, home demonstrations sell, if the product is Admiral."

For More Action! Sales! Profits! Look to Admiral

Largest Selling Booster

AT ANY PRICE



Regency

SIGNAL BOOSTER

BURTON BROWNE ADVERTISING



Commercial Credit Offers Two-Way Insurance Protection—Property Insurance protects your customers against damage to, or loss of, the merchandise they buy under the plan, as defined in the policy. Life Insurance Protection cancels the unpaid balance in case of purchaser's death.



Fast Credit Approval Through Nationwide Facilities — COMMERCIAL CREDIT maintains offices throughout the United States and Canada to speed credit checks; to aid in completing payments when customers move; to offer prompt service on wholesale financing and other features.

Commercial Credit's customer benefits help dealers close more sales



Commercial Credit Creates Good Will—Dealers everywhere are cashing in on the repeat business they get through COMMERCIAL CREDIT financing. That's why more dealers finance more home appliances through COMMERCIAL CREDIT than through any other national financing plan!

COMMERCIAL CREDIT

A subsidiary of Commercial Credit Company, Baltimore ... Capital and Surplus over \$100,000,000 ... offices in principal cities of the United States and Canada.

The broad customer protection and benefits featured by the Commercial Credit financing plan provide an additional incentive to customers to buy . . . bring them back to the same dealer again and again to get the same benefits in financing future purchases.

Commercial Credit offers dealers many direct benefits, too... furnishing them with a *complete* financing package that follows through from wholesale and floor stock plans to customer financing, property insurance, credit investigation, collection, adjustment and prospect follow-up.

Getting full details on how Commercial Credit can serve your financing needs better is as easy as picking up your phone. Just call the Commercial Credit office nearest you and one of our representatives will be glad to call at your convenience.







TELEVISION

Wullike many big-screen receivers with "soupedup" versions of low-powered chassis-this G-E has a new chassis engineered to drive sets 20-inches and larger! It has more tubes, more power—an advantage every customer can understand. It gives the crystal clear, big-screen performance your customers want! AND-here's something that will ring a bell with you. ALL SERVICE ADJUSTMENTS ARE IN FRONT BEHIND THE TUNING KNOB ES-CUTCHEON! In a luxurious mahogany veneered cabinet...with half-doors. Concealed swivel casters. Call your G-E TV distributor, today! \$575,00*

General Electric Co., Receiver Division, Syracuse, N.Y.

Fincludes Federal excise tax. Installation and picture tube protection plan extra. Price subject to change without notice. Slightly higher West and South.

You can put your confidence in_

GENERAL

Model 20C150



ELECTRIC

Stewart-Warner BIG NEW Television and Radio PLANT

Diversey Parkway Plant

New Kostner Avenue Plant

READY AND ROLLING. To keep pace with the constantly increasing demand for STEWART-WARNER television and radio we have added a big new plant to our manufacturing operations. Incorporating the very latest techniques in quality control and time and material savings methods—this new plant will enable STEWART-WARNER to greatly accelerate its long established policy

of....top quality merchandise—competitively priced. Be ready for the fall upswing—SEE the handsome new STEWART-WARNER television line...ADAPTABLE TO COLOR TV...READY FOR U.H.F. SEE the sparkling new STEWART-WARNER radio line of table models...portables and console combinations. Call your STEWART-WARNER Distributor TODAY.

STEWARTEWARNER

STEWART-WARNER ELECTRIC · Division of Stewart-Warner Corporation · 1300 North Kostner Avenue · Chicago 51, Illinois

To Servicemen... Who want to protect their future in Television Servicing

MEN who are interested in continuing their careers as TV service technicians and desire to increase their earnings, will find the information in this page calls for serious thought—and for action.

Your future, the future of your business in television servicing depends on what you do about it.

LICENSING OF SERVICEMEN IS A GOOD REASON WHY YOU SHOULD ACQUIRE TECHNICAL KNOWLEDGE NOW

In New York City, it is proposed that licenses and permits be required of TV contractors, subcontractors, service shops, technicians and apprentices. Once licensing becomes law in New York City this requirement is sure to spread to other municipalities. Licensing and permits mean passing a technical examination. Stiff penalties are cited in the licensing bill upon conviction of a violation. The required technical knowledge can easily and quickly be learned through study of the RCA Institutes Course in Television Servicing. One of the advantages of the RCA Institutes Course, to you as a working serviceman, is that you can study this course at home, in your spare time, and still keep working on your regular job. Now is the time to prepare for license examinations and protect your future in TV servicing.

TELEVISION SERVICING IS SPREADING TO NON-TV AREAS

The Federal Communications Commission recently announced plans for setting up 1,807 new TV broadcasting stations, most of them in the new UHF channels. This will open up areas that have never been touched by television. Radio servicemen in those locales should take a

lesson from servicemen in areas now served by television. In these areas, TV servicing has substantially replaced radio servicing as a means of income. Practical experience in radio servicing is not the important qualification for a successful and profitable career in TV servicing. Practical radio experience plus the technical training of the RCA Institutes Home Study Course in Television Servicing, will put you on the right track to be successful in TV servicing.

PRACTICAL, PRE-TESTED DATA MAKES TV SERVICING EASY

The RCA Institutes Home Study Course in Television Servicing is a "down-to-earth" course in the underlying principles of television. It is printed and illustrated in easy-to-understand, non-mathematical language. You learn pre-tested "How-to-do-it" techniques interwoven with "How-it-works" information. The course is based on the actual experience of the RCA Service Company in servicing thousands of home television receivers. You learn the "short-cuts" in TV trouble-shooting that enable you to do a good job in less time, saving you many hours of on-the-job labor. This up-to-the-minute course contains material on the latest developments in color TV and UHF.

APPROVED BY

Such well-known associations as—National Appliance & Radio Dealers Association; Television Contractors Association; National Alliance of Television & Electronic Service Associations—are already using the RCA Institutes course for upgrading the standing of their members. Tell the Secretary of your local or State association to write us for low rates for group enrollment.

RCA Institutes conducts a resident school in New York City offering day and evening courses in Radio and TV Servicing, Radio Code and Radio Operating, Radio Broadcasting, Advanced Technology. Write for free catalog on resident courses.



RCA INSTITUTES, INC.

A SERVICE OF RADIO CORPORATION of AMERICA 350 WEST FOURTH STREET, NEW YORK 14, N.Y.

Send for FREE BOOKLET

Mail the coupon—today. Get complete information on the RCA INSTITUTES Home Study Course in Television Servicing, Booklet gives you a general outline of the course by units. See how this practical home study course trains you quickly, easily. Mail coupon in envelope or paste on postal card.

MAIL COUPON NOW!

RCA INSTITUTES, INC. Home Study Department, RT-851 350 West Fourth Street, New York 14, N.Y.

Without obligation on my part, please send me copy of booklet "RCA INSTITUTES Home Study Course in TELEVISION SERVICING." (No salesman will call.)

Name		
ivame	(Please Print)	
Address		
City	ZoneState	

Full color pages

month after month in

Hive great magazines

to convince your customers

There is nothing finer than a Stromberg-Carlson

HERE'S THE KICK-OFF—first of a series of full-color pages in Life, Post, Time, Newsweek, and New Yorker, starting in September.

SUPPORTED BY A FULL SCHEDULE of black and white ads in National Geographic, House & Garden, Better Homes, House Beautiful and American Home.

FEATURING THE FAMOUS ADVANTAGES OF STROMBERG-CARLSON: Outstanding performance plus outstanding cabinetry.

magazines are read by the people in your city and your neighborhood.

THIS IS POWERFUL SUPPORT for every Stromberg-Carlson franchised dealer. Make the most of it. Ask your distributor for suggestions about window displays, floor displays and complete merchandising aids.



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

Including "RADIO & TELEVISION," "RADIO & TELEVISION TODAY," and "ELECTRICAL RETAILING"

O. H. CALDWELL, Editorial Director

M. CLEMENTS, Publisher

Help to Make Sales RISE in the FALL!

Smart merchants, while presently worried over financial matters, and saddled with top-heavy inventories, believe that a brisk sales period is almost at hand.

But they are not sitting around waiting for miracles to happen. They are working now, and looking ahead.

Smart merchants know that so long as employment keeps at a high level, and people have plenty of ready cash on hand, business can be had by the man who has gumption enough to go after it. And that's just what they are doing! They are not waiting for good times. They are speeding them on.

And in spite of the gloomy things we hear about business these days, numbers of merchants are enjoying profitable, and healthy sales volumes.

The Success Formula Is Fundamental

Let's look at some of the things progressive merchants are doing in order to corral those hard-to-get-sales now—to get set for the easier ones on the way.

First, they are weeding out all unnecessary expense. Second, they are selling actively, promoting sales through consistent advertising, attractive displays, and solicitation. They are asking people to buy—in the store, on outside calls, over the telephone, and through use of direct-mail pieces.

They are promoting sales of service, too, and supervising their service departments carefully. They do not consider this end of their business to be a sort of necessary nuisance. On the contrary, they aim to make it a profitable operation.

Let's Forget the Past as We Face the Future

In spite of the muddled situation existing at the retail level, farsighted dealers are planning to stay in business.

They believe that business will come back, and they are not attempting to analyze the puzzling picture of the past months wherein an early Spring slump spilled over into the usual Summer one. Instead, they are looking ahead with faith in themselves and in the industry . . . and working like beavers in the meantime!

What's Ahead! — in Radio,

SOME REASONS WHY BUSINESS SHOULD PICK UP this Fall. Korean armistice, rather than slowing up retail sales, could have just the opposite effect, since consumers will feel more "settled" in their minds. . . . Widespread wage increases will give hundreds of thousands of consumers some "extra" money to buy the consumer durables they've wanted. . . Returning vacationers will be giving more serious thought to home improvements for in-home living. . . If high employment and good wages continue, many will adjust their budgets to the high cost of living (chiefly food), and will buy the utility and entertainment products they need.

SHORTAGES OF SOME PRODUCTS in our field likely to crop up before the year's end, particularly so if a brisk buying wave digs a big enough hole in the existing inventories, which are not being replenished by merchants who have just about stopped buying. With civilian manufacturing output severely cut back, watch for a wild scramble to increase production when the market commences to firm up.

OUT OF THE HAND-TO-HAND BATTLE OVER CONTROLS, some experts predict that a relaxed Regulation W will finally emerge. Retailers, especially those in the time-payment belts, say that more liberal terms would have an immediate effect in hypoing sales.

"WE DO NOT FEEL THAT THE PUBLIC, with whom the final decision rests, will be completely satisfied with anything short of high-definition, compatible, electronic color."—W. J. Halligan, president, The Hallicrafters Company.

SO THEY CAN SEE OVER TV!



Here's Red Barber at Ebbets Field, Brooklyn, for WOR-TV, and this picture should remind dealers to capitalize on the interest in baseball, growing by leaps and bounds every day. Merchants should keep the baseball angle out front in advertising, displays, and in direct-mail campaigns. Incidentally, the control panel, seen in photo, permits Barber to ask camera director to pick up action at any place on the field. The panel is laid out as a miniature diamond, permitting the commentator to follow plays and to know just where camera coverage is being maintained. The control board was designed by WOR engineers. A TV screen, not shown, is at right of panel.

SHORTAGES BEFORE CHRISTMAS looked for by many makers of electric housewares. Talks with manufacturing executives at the Housewares Show in Atlantic City revealed that a number of firms are selling directly from production lines, with no inventories on hand. Manufacturers also expect a very tight labor market between now and the end of the year.

RCA LOOKING INTO THE MAJOR APPLI-ANCE field. A spokesman for the company said that future developments depend on availability of materials.

INTERSTATION TV INTERFERENCE has been observed this summer more than ever before. Horizontal bars and shimmers appear across the picture, run up, stand still or scamper down. At the same time TV sound is spoiled as the interfering signal tries to take control of the FM signal. These effects were seen in New York, 10 to 20 miles from stations, with interfering signals identified from Miami, Norfolk, and Oklahoma City, among others. Engineers say it will not last long, being worst at twilight. Trouble is expected to cease at the end of the hot weather.

LONG DISTANCE TV RECEPTION has been observed coincident with long distance co-channel interference. The cause is technically described as tropospheric propagation, and has brought Havana, Cuba to Middle Atlantic and Middle West areas, with mid-US stations being picked up down in Cuba!

TO SEE CBS COLOR—Many TV old-timers will recall that the prewar TV sets, because of their wide range of controls, could bring in CBS color broadcasts as four "quarter-screen" black-white pictures. Many of the postwar sets of one principal maker can still accomplish this, by recourse to the back-chassis adjustments. So if you want to see, in black-white, what's going on during CBS color programs, try twiddling the front and back controls of your receiver. You'll get at least some amazing futuristic design motifs, and you may be able to stretch your adjustments to bring in some cute miniatures!

SALES OF "NEW" APPLIANCES for 1951, estimated by C. W. Theleen, sales head of GE's major appliance department: Dryers—250,000 units; disposers—250,000; dishwashers—200,000; automatic washers—1,250,000; ironers—300,000, and freezers—700,000.

UNUSUAL INCREASE IN THE SALE of room air conditioners for home use is attributed by Hal Wheeler, president of Temperature Equipment Corporation, to the desire of TV-viewers for greater comfort while watching programs. Wheeler's company is Chicago area wholesaler for Carrier Corporation.

HIGHLIGHTS FROM NARDA's cost-of-doing business survey: Dealer inventories up 45% at the end of 1950 over those at the start of the year and sales volume of dealers in this field increased 23% over 1949's. 19% of the dealers responding failed to show any dollar increase. Net operating profit was reported by 92% of the dealers as compared to only 87% in '49. The net profit ratio to net sales amounted to 6% in 1950 as compared with a ratio of 5.2% in 1949. Operating cost ratio declined to a five-year low. This was 24.8% of net sales, compared to 27.6% in 1949.

Appliances, Records and Television

BUSINESS COMMENCING TO PERK UP. Dealers in many parts of the country are noticing increased activity on sales floors. The heavily-inventoried TV merchants are slowly but surely whittling down their stocks.

... The hot weather has boosted sales of refrigerators.

... Many retailers are moving washing machines, mostly automatics in urban and suburban areas; mostly wringer types in farm and rural communities.

... Small radios have been in good demand, as have portables.

Many room air conditioners being sold by aggressive dealers.

ALL-OUT PRICE WARS PETERING OUT, as predicted in last month's issue of this magazine, though price-cutting continues. Many New York consumers who brought home "bargains" found that they'd paid list, or got but very small discounts on the merchandise. Some appliances, bought "as is" were defective, and had to be returned to the store, or put in operation by the handy man of the house.

MANY DEPARTMENT STORE EXECUTIVES see price wars threatening security of the small retailer. Said Louis Broido, executive VP of Gimbel's: "If we don't protect middle class business, the country will wind up with a couple of big monopolies and 150,000,000 proletarian workers." Said Major Benjamin F. Namm, of Namm's, Brooklyn, N. Y.: "If the New York City price war continues for long, the result will spell bankruptcy for many small merchants..." Fred Lazarus, Jr., president, Federated Dept. Stores, Inc., sees loss-leader selling as a "destructive kind of merchandising, hitting tens of thousands of small retailers who perform a real service to their communities..."

NEW LOW-COST "SELF-TRAINER" KIT for salesmen, part of an over-all merchandising program to revitalize dealer selling practices, being introduced to retailers by Hotpoint. Package consists of 5 long-playing records, and 5 illustrated booklets covering all selling points of Hotpoint products for complete kitchens and home laundries. Kit sells for \$5.95.

WHILE INVENTORIES OF FURNITURE RETAILERS are higher than they were a year earlier, points out F. S. Whiting, American Furniture Mart vice-president, "most of the over supply is in merchandise of 'War shortage' class, metal beds, coil spring, chrome dinettes, refrigerators and television sets."

"AS RETAILERS, WE ARE TRADITIONALLY the "middle man" between the consumer of goods and the supplier of goods. We daily face the public in the market place, and there are brought to account to explain why prices are higher, why supply is short, why quality is above or below standard. Many of these factors, if not most of them, we have no control over, yet we must equip ourselves with the proper answers to satisfy an inquiring public."—Ray S. Erlandson, National Association of Music Merchants.

DISTRIBUTORS FROM ALL OVER THE COUNTRY planning to attend the big NEDA show and convention at the Cleveland Auditorium, September 11-13.

BECAUSE OF MATERIAL RESTRICTIONS, Thor Corporation, large appliance manufacturer of Chicago, has stopped making dishwashers.

J. ANDREW WHITE, contributing editor to Radio Retailing back in 1925 and 1926, and leter organizer of the original Columbia Broadcasting System, has come out of a 20-year retirement to be one of radio's new and scintillating personalities. He is heard Tuesday nights at midnight on comedian Hawthorne's "Encore Night" on KNX, Los Angeles.

A TINY LAMP THAT DISSOLVES ODORS with a triple dash of ozone, replacing unpleasant smells with clean, mountaintop air, announced by Westinghouse. Rated at 3½ watts, the lamp is the size of a walnut. Bulb alone sells at \$1.30, lasts 6 months at 24 hours a day. It requires special fixtures, ranging in price from \$6.95 to \$18.95, including lamp or lamps.

DEALERS WHO REJECT NEW PICTURE TUBES because they have necks which show resealing are doing so needlessly. It has been standard practice since the beginning of TV to reuse the "bottle" when it was not scratched or chipped. The fluorescent coating and electron gun assembly must be new else a resealed tube would not give normal brightness, so dealers who observe what they believe are sealing marks at the neck of tubes are entirely safe in treating these tubes just like any other new tubes. There is absolutely no difference. It's like using a Coke bottle over again, and just as much standard procedure.

FUTURE EVENTS OF INTEREST TO READERS

- Aug, 19-22: 3rd Western Housewares Show, Biltmore Hotel, Los Angeles, Cal.
- Aug. 20-24: New York Gift Show, Hotels Statler and New Yorker, N. Y.
- Aug. 22-24: Pacific Electronic Exhibit,
 Civic Auditorium, San Francisco,
 Calif.
- Aug. 26-31: Rural Electrification Week.
- Sept. 3-7: Boston Gift Show, Hotel Statler, Boston, Mass.
- Sept. 11-13: Radio Parts Distributors' Convention (NEDA), Cleveland Auditorium, Cleveland, Ohio.
- Sept. 16-20: Philadelphia Gift Show, Hotel Benjamin Franklin, Philadelphia, Pa.
- Sept. 23-27: Washington Gift Show, Hotel Willard, Wash., D. C.
- Oct. 8-12: National Hardware Show. Grand Central Palace, N. Y.
- Oct. 31-Nov. 1: Fifth National Home Laundry Conference, Commodore Hotel, N. Y.
- Nov. 5-8: 7th All-Industry Refrigeration and Air Conditioning Exposition, Navy Pier, Chicago, 111.



Your Customers

And They Will Buy These Interference-Free

 Where does FM stand today? That's what a lot of retailers, distributors, manufacturers and broadcast stations want to know.

They watched FM's early vigorous growth, despite AM disparagement and FCC waveband changes. In 1950 they saw FM "level off," as the new charmer, TV, came into prominence on the merchandising horizon. And since then, some FM licensees, it is true, have surrendered their operating papers and taken their stations off the air.

But FM receiver sales still mount higher and higher. Already, in 1951, FM production and sales have passed all previous records and give promise of comprising a constantly larger share of future radio-set purchases by the public.

Tops for Quality

And, of course, FM is "tops" for reception quality and listening pleasure. Its freedom from electrical noise and natural static make it the ideal listening medium for summer. And FM's wider frequency range of music reproduction insures that the full tones of orchestra and voice will be transmitted—transmitted with that perfection which only FM can achieve!

People want FM and its advantages. But they need to have these advantages clearly explained to them. And they want to have the miracle of interferenceless radio demonstrated to them.

As fast as customers get acquainted with FM and learn to enjoy its superiority, they become discriminating and will willingly listen to no other type of radio. In individual homes this means that the next radio set bought in that household is also an FM—a process which goes on until all the regular listening posts of the home circle have become FM-equipped.

So FM merely needs to be experienced and enjoyed, and a new prospect is soon turned into a purchaser, a delighted user, and an FM booster who'll "sell" his friends.

This all means that right now (when TV sales are limping a bit) dealers and distributors can profitably turn their selling efforts into FM, and use every merchandising aid to inform customers about FM merits and to clinch FM sales.

The whole radio industry is now getting behind this FM effort, so that the dealer today has behind him a united industry-front of manufacturers and broadcasters all working for FM development.

As this issue went to press, at Washington, D. C., plans for cooperation between broadcasters and manufacturers in channeling the distribution of FM-equipped radio receivers into shortage areas, and for promotion of the benefits of frequency - modulation reception, were being evolved from a tripartite meeting held at the head-quarters of the National Association of Radio and Television Broadcasters. (FM stations authorized now number 670, with 11 new FM-station applications pending.)

Real FM Means Perfect Listening—

- Silencing of all natural static
- Elimination of electrical interference
- Complete absence of background noise
- Greater fidelity of tones and music
- Uniform reception day and night
- Absence of fading and distortion
- Ability to get clear distinct reception by "reaching up" with adequate antenna

Want



High Fidelity Sets If You Make Clear the Unique Advantages

The broadcasters were represented by Harold E. Fellows, NARTB president; members of the NARTB FM committee, headed by Chairman Ben Strouse, WWDC-FM, Washington, D. C.; and the FM Industry Committee, headed by M. S. Novik, chairman.

Glen McDaniel and Robert C. Sprague, president and board chairman of the Radio-Television Manufacturers Association, and the RTMA FM Policy Committee, led by chairman John W. Craig, vice president, Crosley Division, AVCO Manufacturing Co., spoke for the manufacturers.

Will Avoid Shortages

To insure that FM receivers will be plentifully available for dealers, it was unanimously agreed that broadcasters will report future shortages of FM sets in their respective areas to the manufacturers. When shortages exist, the broadcasters will forward this information to NARTB; it will then be given to RTMA which, in turn, will transmit it to the manufacturers weekly.

The representatives present were in unanimity in agreeing to attack the FM shortage problem on a market-by-market basis as the shortages occur.

It was also decided that the presidents of the two trade associations will immediately form a joint committee to explore the feasibility of cooperative effort in publicizing and promoting the advantages of FM listening. Tentative plans call for the issuance of transcriptions on which "name" personalities in the fields of entertainment, music and sports pay tribute to FM reception; the broadcasters, both FM and AM, are to include these promotional transcriptions in their programming. This plan is in accordance with a resolution passed by the NARTB FM members in the Association's national convention in Chicago earlier in this year.

Leaders in this great cooperative effort to boost FM are Ben Strouse, WWDS-FM, Washington, D. C.; Josh L. Horne, WFMA, Rocky Mount, N. C.; Everett L. Dillard, WASH, Washington, D. C.; FM Industry Committeemen: Morris Novik, New York radio consultant; Raymond S. Green, WFLN, Philadelphia, Pa.; Leonard Marks, attorney; RTMA FM Policy Committeemen: John W. Craig, Crosley division, AVCO; L. M. Clement, Crosley Division, AVCO; Ernest

Sell FM to Your Customers

By window displays, store demonstrations,

Mail circulars, newspaper ads,

Home visits, demonstrations,

Making every employe an FM booster

H. Vogel, General Electric; A. B. Mills, RCA; Leonard Cramer, Du Mont Laboratories.

Representing RTMA: Glen Mc-Daniel, president; Robert C. Sprague, Board chairman; James D. Secrest, general manager.

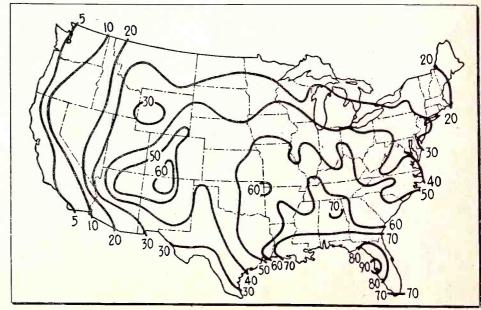
Frequency modulation's high fidelity, tonal range, brilliance and freedom from interference, all agree, make FM "radio at its best."

FM's substantial and growing market is reflected in RTMA's monthly production figures. During 1950, FM sets were produced at a monthly average rate in excess of 100,000 units, plus an additional 55,000 TV-FM combination sets each month. For the first months of 1951 the figures were substantially higher. Dollar-wise the showing is even more impressive, since more than half of the non-TV units with FM were radio-phonograph combinations.

To reach its present position, FM has had to overcome obstacles that would have destroyed a less vital medium. Economic opposition from established AM broadcasters, programming difficulties, the FCC-enforced shift to higher frequencies,

(Continued on page 54)

Average number of thunderstorm days per year. (U. S. Weather Bureau)



Live Leads From

How to "Use the User" in a Friendly Way—How to Enlist

The satisfied user is the best source of leads for any dealer. And the very best way to start such leads rolling in is to make immediate after-sale calls. The merchant who sends a salesman to the home of a recent purchaser accomplishes three very important things at once. First, he fulfills an obligation he owes the customer; second, he can often obtain immediate leads, and can certainly set himself up for future leads. Third, calls on users build up the salesman's morale.

Some short-sighted dealers woo a customer with every wile at their command only to divorce the purchaser immediately after the sale has been made. Such practice leads many a customer to believe that the only thing the dealer wanted was the customer's money. "One-shot selling" is a sure way to lose goodwill, and to cut off an important source of repeat business.

In addition to incurring the dan-

ger of losing the customer's future business, the dealer who takes the customer's money and kisses the later goodbye, puts himself out of the running when it comes to obtaining leads (friends and relatives) every satisfied user is willing to give him if he will make after-sale calls.

Thousands of pepole have bought TV sets and other products that have proven to be unsatisfactory simply because they do not know how to operate them properly. Such folk will not only be unwilling to recommend the store, but they may forthrightly condemn it in talking with others.

Since one of the most discouraging things the outside salesman can run into is the disgruntled customer, and since a great deal of such grief may be traced directly to failure to make after-sale calls, the smart merchant will make a visit soon after the product has been delivered. And, in cases where

the customer isn't entirely satisfied, he will make every effort to clear up any unpleasant situation.

Cold canvassing is expensive, since it's a more or less long-range proposition, and, in addition, this technique isn't relished by too many men today. Hence, most dealers feel that the furnishing of liveleads produces the quickest results for the outside salesman. A cordial welcome by a prospect or a user is a great morale builder for the man in the outside field, and this is why every effort should be made to furnish the sort of leads that are fairly well "pre-conditioned," and certainly, the customer-recommended ones are high up on the list.

A great many salesmen take it for granted that the satisfied user will supply leads "automatically" to the store as they come to his attention. This is not the case. The majority of users will not even think of getting in touch with the salesman when some friend or relative expresses interest in the product. Because of this fact, the salesman calling on a user should make it a point to stress the fact that he will welcome any leads the customer runs across.

They Remain as Prospects

Earlier, we emphasized the importance of making immediate after-sale calls as a means of getting leads. Calls made at any time, even years after the sale, can be just as productive as the more recent ones, however. The chief reason for making the initial call promptly is to let the customer realize that the dealer appreciates his business, and to make sure that everything is working out satisfactorily.

There are a great many reasons why calls on users who purchased some time ago can be of benefit to both salesman and customer. In the first place, almost every satisfied user is flattered and pleased to think that a firm continues to take an interest so long after the sale has been made. In the second place, the customer may well have some leads for the salesman, and third, in the case of equipment

TIPS ON USING USERS

Use tact in asking for leads

Remember the "volunteer" lead-furnisher with some small gift

Pay commissions promptly to those you have made agreements with

Make immediate after-sale calls, as well as revisiting those who purchased some time ago

Strive to build up a following of genuine friends among your customers

After-Sale Calls

"User-Salespeople," and How to Reward Them for Their Services

purchased many years ago, the salesman may get an order for a replacement unit.

"Using the user" is an old-time merchandising phrase pertaining to an old-time selling method, still effective today, as all merchants will agree. The phrase, however, has a sort of harsh connotation to it. Some time ago RADIO & TELEVISION RETAILING ran an article in which it urged the dealer to "use the user," but not for 'a good thing.'" We repeat this advice here. Salesmen must use a lot of tact in asking users for leads.

The Friendship Way Is Best

The very best way to get customers to provide names of prospective purchasers, and even to recommend that such prospects purchase from a certain firm, is for the salesman to become a genuine friend of the user. He can do this by seeing that all of the products he sells are performing efficiently. He can do this by going out of his way to help settle amicably any disputes between firm and customer. He can do this by taking an interest in the customer's hobbies, and in the members of the customer's family, etc.

A "hungry" approach by a salesman seeking leads from a user puts the affair in the light of being solely mercenary, and will never obtain sincere cooperation from the customer.

Some dealers compensate users for leads resulting in sales, and swear by this technique. Numbers of very active "user-salespeople" have been enlisted throughout the country. The cooperative selling effort between a smart housewife and an alert salesman can result in plenty of sales.

Mrs. X permits the salesman to bring a prospect into her living room to see the TV set perform, and what Mrs. X has to say about that receiver usually rings a bell with the prospective purchaser.

Or, as the case may be, the salesman drops around with a prospect at Mrs. M's home on washday to see that new automatic run through a batch of clothes, and often closes a sale without even having to meet



Some salesmen make compensation arrangements with customers who provide live leads.

the purchaser in the store.

One of the musts in compensating users for leads is the necessity for paying promptly where sales are closed, and in paying the agreed amount without question. All dealers should be familiar with compensation plans offered by their salesmen, and should see that such agreements are lived up to.

For those customers who refuse to accept money for leads—and most of them fall into this category—the considerate salesman drops in with some small gift, such as an electric clock, thus showing his appreciation for the lead which resulted in a sale.

Great care needs to be exercised in asking folk whether they would

be willing to accept compensation for furnishing leads. Unless skilfully approached, the user may be offended at the suggestion. One TV salesman we know who uses the before-described compensation technique tells each new customer how another user furnishes him leads and earns commissions. If the new customer is interested in such plan she will usually volunteer to act as a "user-salesperson."

The dealer who makes a specialty of getting leads from his customers by making after-sale calls will set up a pipeline for the feeding in of more and more sales into his store, and will build up a large following of loyal, friendly and cooperative users in his community.

Good TV Service, Good-Will,

Dealer Read Brings Fine Pictures to His Customers in



Illinois Valley TV Co. crew all set to give a free home demonstration.

 Although there are quite a number of television outlets in Peoria, Ill., the development of TV in that city has been comparatively slow. This is due more than anything else to the fact that the city is somewhat handicapped in that it has no TV stations nearer than Rock Island and Davenport at 90 miles, and Chicago at 160 miles.

However, the situation hasn't discouraged the Illinois Valley Television Co., 2300 Prospect Road, of which Herbert Read is proprietor. This firm entered the dealer field last Jan. 1. Since that time, it has installed hundreds of television sets.

For some years Mr. Read was a salesman with a local furniture store. This store was one of the first TV dealer outlets in the city.

After much study, he decided to start in an exclusive television business for himself and opened a store at 3311 Farmington Road. By March his business had outgrown the space available there, and he moved to his present location.

In a Choice Location

His present store is in one of the best locations in the city, with plenty of parking space and in close proximity to a lot of better homes -homes whose occupants are able to buy TV sets. The store has a large picture window from which the entire floor display can be seen from the street. On the same premises is another building used for shop and storage facilities.

At present, Read stocks Fada. Hallicrafters, GE, Admiral, Motorola, Zenith, RCA Victor, Jackson and National. In addition to TV sets, he also stocks Fada and Jackson radios.

Leads for sales are secured through a program of newspaper ads and radio. Many of his ads stress good reception in words similar to these: "Clear, Sharp, Glareproof reception depends upon a factory engineered installation, installed by experts. Illinois Valley's trained force meets these requirements and we guarantee reception with our complete installation."

The ads also stress convenient



Poster ads on these waste paper receptacles are placed at busy street corners.

local bank financing with complete installation of TV set, tower, booster, and antenna on terms of 25% down and balance in 15 months. They also emphasize a complete service department with all calls answered within 24 hours by factory-trained men. (See accompanying illustrations.)

The newspaper ads appear in the two city newspapers practically every week-four or five times a month. In addition to the city papers, they also appear in two village papers in Peoria county, the Glasford Gazette and the Chillicothe Bulletin. These ads produce a lot of

prospects.

How Illinois Valley TV Company Keeps Sales Rolling in-

Follows up prospects immediately Specializes in deluxe sets Uses radio time and newspaper advertising Stresses good service in advertising copy

Stays open every evening until 10 PM

Good installations build chain of sales

Ads Pay Off in Peoria

Fringe Area—Gets Plenty of Leads From Satisfied Users

At right: a typical home installation made by Dealer Read's crew.

Radio also furnishes many leads for sales. Spot announcements are made daily five days a week over stations WIRL and WWXL. In addition to the spot announcements, the store sponsors the Raymond Swing news program at 5:30 PM on WWXL five days a week. On Saturday at the same hour a local news program is sponsored over the same station. One special item is usually featured in each announcement.

Uses Satisfied Customers

"Although both newspaper ads and radio produce many leads," says Mr. Read, "We sell more sets from the recommendations of satisfied customers than from any other one source, as these people are able to see for themselves the sets in actual operation in their friends' homes."

All leads, no matter what the source, are immediately followed up by salesmen. These salesmen work on the floor when not out in the



field contacting prospective customers. They bring in the prospects and show them the various makes and models on the floor and what they will do. In order to accommodate prospects who work during the day, the store is open until 10 PM each day.

Much of the service work is done in the home but if it is found necessary to take the set to the shop, another is installed for use while the owner's receiver is out of service.

Before a receiver is delivered to the customer, it is set up in the store and operated for at least an hour before going out. After this test, the receiver is installed immediately from the ground up, including a portable tower which can be raised 100 feet.

Installation Is the Secret

"After all," says Mr. Read, "proper installation is the secret of good television. Our corps of installers is expert in this regard and no pains are spared to do everything right the first time. The type of set also has much to do with good television performance. De luxe sets give better pictures than the cheaper types. In television, the same as in any other line of merchandise, one gets just what he pays for."



TV Just Starting

 During the height of the seasonal slump in TV sales, with its attendant wave of price cutting, some pessimists said that television had shot its bolt; was not longer in its infancy, but instead, had reached the senile stage of its life. They pointed to the acute drop in demand, customer-resistance to sales, and to the old bogey, "saturation," to back up their claims.

Nothing can be farther from the truth than the thinking of a few crepe-hangers regarding television. For television hasn't even started

to roll yet.

There exists today—right now a greater potential for television than can be foreseen for any industry in the world! Great things are on the way for TV. Great new heights will be achieved in manufacturing, sales and programming.

At the manufacturing level, there will be a continual improvement in receivers which will result in lower prices, better pictures and sound, and decreased servicing requirements.

Color television, the excitingly new companion of black-and-white broadcasting, will be here one day full-scale, too. And it will open an entirely new market, bringing additional profits to the industry, new enjoyment to the consumer.

Ahead also is UHF, which will bring millions of new viewers into

the TV fold.

Today, a great many homes have more than one TV set, and in a few years, multi-ownership will be the order of the day, just as it became with radio. (There were 24,000,000 secondary radio sets in American homes at the start of this year.)

The replacement market for TV will always be brisk, just as it is and was with radio. Those who point to the "high" TV saturation figure should realize that for a great many years dealers have continued to sell products to "saturated" homes.

High saturation figures have prevailed for years on such products as radio sets, electric irons and refrigerators. Yet, year by year, sales gains have been made.

Smart manufacturers, distributors and dealers like to view "saturation" as a replacement sales potential. So far as television is concerned, there should be a huge market for sets even when the saturation has reached 95%!

Trade-Ins and Second Sets

Right now there are a great many small-screen receivers in use. (See accompanying panel.) In addition to trading-in these small units to obtain larger-screen sets, many people turn in receivers they've had trouble with, while still others trade to obtain different cabinet styles, phono-combinations and improved models. And an increasingly large number will, as pointed out previously, buy a second set.

Looking ahead, let's be willing to predict that when there are 60,000,000 television receivers in use, annual sales can reach 15,000,-000 units! So let's not permit this "saturation" proposition to get us down! All of the products in our field today which are high up in the sales brackets are also high up in the saturation averages!

Advances in programming will

go along with increased television receiver ownership. Tremendous strides have already been made in bringing top-flight entertainment and educational features to the TV viewers. But here again, we haven't even scratched the surface in programming.

Tomorrow's broadcasting will be something no man, woman or child in the country will be willing to do

To begin with, TV hours on the air will be greatly increased. Second, a greater variety of better shows will be brought to the public. And this intensified broadcasting will help, rather than hinder, such industries as the movies, because TV will call upon the movie people for a great many more programs on

Some TV Crystal Gazing

One day, there will be a great many sets in cars . . . on boats . . . on RR trains . . . in planes.

And in offices, plants and factories, where employes will be given time off to "see."

And battery-operated portable television receivers.

film, made especially for TV broadcasting. The phonograph record industry will benefit from this increased television broadcasting, as it is even now, where we see platter sales better in TV areas than in non-TV localities.

With the steady increase of sets in use, television servicing will continue to expand, and the television technician will gain new prestige and importance in his community. With the coming of color and UHF for instance, the technician will have added responsibilities. The service department's investment in parts, test instruments and equipment, already large, will have to be upped year by year. In order to keep abreast of new technical developments, servicers will be called upon to devote a great deal of their time to study.

But the increase in demand for service will bring greater profits to the well-run, well-equipped department, staffed by men with the know-how. And, fortunately, a great many gyps and screw-driver

What's Ahead in Television - -

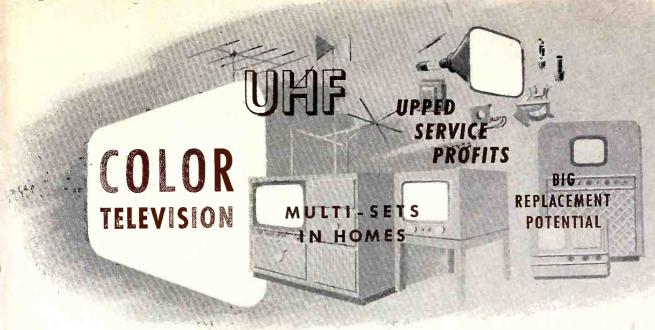
Color-TV. Watch for the industry to be "standardized" like the phono record business finally was.

UHF. Will open great new markets for dealers; bring TV to millions of new listeners.

Multi-Set Ownership. Increasing number of homes will have more than one TV set.

Projection TV. Don't count this out for home sets. Projection TV may come in strong when TV pix tubes have reached this size!

to Roll!



mechanics, unable to stand the pace, will fall by the wayside, leaving the bulk of the service business to the stores which TV set owners know are set up to take care of them efficiently and economically.

Right now, the best thing all of those in the TV industry can do is to sell television, believe in television now, and in television's tremendous future possibilities.

A great deal of money has been and will be made in TV by manu-

facturers, wholesalers and retailers. And for those with business acumen, imagination, and determination to stick with TV, the best is yet to come.

We haven't seen anything yet!

In 1946, there were 10,000 sets in use, and the average price of a television receiver was \$708.80. In December, 1946, only six cities had TV stations in operation!

December, 1950, wound up with more than 11,000,000 sets in use;

with 107 TV stations on the air! No industry in the world ever set up a record like that, and remember this: Television will continue to set records from here on.

TV, like radio, has its ups and downs. Something good or bad is always happening. There's never a dull moment; never a moment in which to relax. But for those who can stand the gaff of a business like this, there are always profits to be made—always new worlds to conquer!

TV SETS SOLD BY TUBE SIZES, BY YEARS

Year	7-8′′	10′′	12-14"	15-17"	19-20′′	Total Made
1946	6,000	4,000				10,000
1947	50,000	175,000	24,000	1,000		250,000
1948	150,000	597,000	250,000	2,000	1,000	1,000,000
1949	48,000	1,000,000	1,340,000	610,000	2,000	3,000,000
1950	10,000	100,000	1,190,000	5,500,000	700,000	7,500,000
Totals	264,000	1,876,000	2,804,000	6,113,000	703,000	11,760,000
1951 (est)		350,000	3,650,000	1,000,000	5,000,000

Figures show sale of receivers by tube sizes in last 5 years, with an estimate for 1951. The figures do not take into consideration the fact that a certain percentage of the total (estimated to be 5%) may have been removed from use due to being damaged beyond repair, or due to having been traded in by the customer and not resold by the dealer.

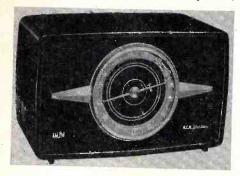
The two million families who purchased 7 and 10" sets, and a considerable portion of the almost 3 million who bought 12" receivers may be considered as prospects for trade-in on a larger size or as prospects for a second (larger screen) set, if they have not already made the transaction.

New Radio and TV Sets

This and tollowing pages describing manufacturers' new merchandise are compiled by our editors. This information is presented as a news service to our readers entirely without any advertising consideration whatsoever.

RCA FM-AM RADIO

New model FM-AM table radio is the model 1R81, the Livingston. Includes the RCA Victor "Golden Throat" tone system, and an eight-inch speaker. Circular grille escutcheon is clear plastic,



cabinet is maroon plastic. Has two-built-in antennas, one for FM and one for AM. Includes phono jack. RCA Victor Div., Radio Corp. of America, Front & Cooper Sts., Camden, N. J.—RADIO & TELEVISION RETAILING.

Stromberg CLOCK-RADIO

A brand new addition to the line is the "MusiClock," a clock-radio in black plastic cabinet with ivory and red trim. This model featuring a Telechron clock, built-in antenna, AM radio, appliance plug outlet, buzzer alarm, slumber and music switches will retail for \$38.95 in Zone 1. Stromberg-Carlson Co., Rochester 3, N. Y.—RADIO & TELEVISION RETAILING.

Emerson FM RADIO

In the new 1952 Emerson line is the model 659, FM-AM table radio. Uses eight tubes and a selenium rectifier. Mottled walnut or ivory plastic cabinet.

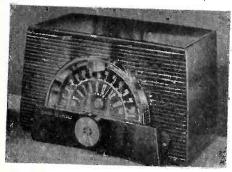


Built-in FM and AM antennas. List price in walnut cabinet is \$59.95, in ivory cabinet, \$64.95. Emerson Radio & Phonograph Corp., 111 8th Ave., New York 11, N. Y.—RADIO & TELEVISION RE-TAILING.

Additional New Models
and New Lines
on Page 86

GE FM-AM RADIO

The new model 409, 7-tube FM-AM table radio, has been announced. Contains two built-in antennas, and also has terminals for an external FM dipole antenna, for use in remote locations. Controls include on-off switch and volume, tuning control, band selector, and



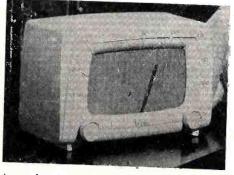
tone control. List price on this set is \$54.95. General Electric Co., Electronics Park, Syracuse, N. Y.—RADIO & TELE-VISION RETAILING.

Scott 1952 TV LINE

The new Scott line includes the "Linfield," a new FM-AM radio-phonocombo listing at \$495 (mahogany cabinet); the "Wellington," new 24-inch television console in mahogany cabinet with doors, listing at \$645; and a new version of the "Chippendale," television-radio-phono combination. Also in the new line, for custom installations, are the "Silver Anniversary," chassis: model 720A, with 17-inch rectangular tube, lists at \$279 and model 920A, with 20-inch rectangular tube, lists at \$375. Scott Radio Labs., Inc., 4541 Ravenswood, Chicago, Ill.—RADIO & TELE-VISION RETAILING.

Arvin RADIO LINE

Thirty models comprise the new Arvin radio line. They include the model 580, FM set in a choice of four colors; six other models in a wide choice of colors; (the set shown here is the 553T,



in walnut); four new FM/AM sets; and four new radio-phono combinations. Prices on the radio line range from \$17.95 to \$179.95. Arvin Industries, Inc., Columbus, Ind.—RADIO & TELEVISION RETAILING.

Bendix FM-AM COMBO

The model 951, an FM-AM radio phonograph, is offered in the Bendix line. This console model, shown here,



uses seven tubes. Bendix Radio, Div. of Bendix Aviation Corp., Baltimore 4, Md.—RADIO & TELEVISION RETAIL-ING,

Raytheon "STARLIGHT"

Leading the twelve television models recently exhibited by Raytheon was the "Starlight" model shown here. Called model RC-1720, this set has a 17-inch



tube, three-speed phonograph and AM radio. Cabinet is mahogany. Raytheon Mig. Co., 55 Chapel St., Newton, Mass.—RADIO & TELEVISION RETAILING.

Meck TV SET

A new television receiver, the model MM-614-TL, is a 14-inch rectangular tube table model in leatherette cabinet. List price on the new set is \$139.95. John Meck Industries, Inc., Liberty St., Plymouth, Ind.—RADIO & TELEVISION RETAILING.



AUTOMATIC SELF-TUNING

ne-0-Malic BOOSTER

Connect it . . . and forget it! Anyone . . . even a child . . . can get his favorite programs with a clarity of picture and sound like never before ... on any channel ... automatically ... without any booster tuning! Exclusive E-V all-electronic circuit gives superb low-noise performance... provides higher effective gain on all channels ... works where others have failed, even in tough fringe areas. Furthermore, the booster can be easily concealed. Installation is quick and easy. Plugs into 60 cycle a.c. outlet. Thousands of installations have proved it completely trouble-free. For more TV pleasure in fringe and primary areas, there is nothing like the E-V Booster! Users prefer it! Dealers say it wins customers!

Model 3000 Tune-o-Matic Booster. List Price...\$59.50

SEND FOR FULL DETAILS!



Export: 13 E. 40th St., New York 16, U.S.A. Cables: Arlab TV BOOSTERS . MICROPHONES . HI-FI SPEAKERS . PHONO-PICKUPS

Patent Pending

NO SEPARATE BOOSTER TUNING—automatically

boosts signal on any channel UNIFORMLY HIGH USABLE GAIN-across entire band width—with lowest noise factor

LESS "SNOW," BETTER PICTURES—extremely low internal noise increases visibility

EXCLUSIVE BROADBAND CIRCUIT—4-stage amplification - 2 on high bands, 2 on low

ALL-ELECTRONIC OPERATION—no moving parts to wear out and cause trouble

EASILY CONCEALED—in or behind TV set, or in any other unobtrusive place

HIGHLY STABLE-DRIFT-FREE-EASY TO INSTALL



First and only all-channel, low-noise, antenna-mounted, self-tuning TV Booster! Easily mounts right at the antenna top, ahead of the lead-in. Automatically boosts the signal, not any local noise interference picked up by the lead-in. Increases signal-to-noise ratio, clearly brings in telecasts you could never get before. Ideal for tough fringe areas or noisy locations in primary areas.

Model 3010 Tenna-Top Booster. List Price.....\$89.50

Plan Now for More

Map Out a Complete Activity Schedule for the Coming Peak Season.

• With the Fall season rapidly drawing near, the time is ripe for some down to earth plans for the disc department. The dealer who is on his toes won't just say, "Yes, I really should do some planning," and let it go at that; he'll actually map out a whole series of Fall activities. He'll review his entire operation, recalling whatever was not up to par in the past and arranging a remedy for it.

This article mentions some of the general subjects to be considered in such a planning session. In each individual case there will probably be special problems, special objectives, etc. You can adapt this general plan easily to suit your particular circumstances.

Let's start with the store itself. Does the floor plan permit good aisle space for store traffic? Do customers have difficulty finding certain counters and racks? The store layout should be inviting and easily navigated. If it's properly done, it will not only save time and inconvenience in directing customers, but will help with those timid customers who will walk out rather than ask, if they can't find what they're looking for.

Consider the Possibilities

Try redesigning your store (on paper). Move the counters, listening booths, and record racks. Is there more floor space? Are the racks shown off to better advantage? Can you add another listening booth? If you actually sit down and try this idea, you'll be surprised at the possible improvements you'll uncover.

This stage of the planning would also be a good time to consider the new demonstrators and racks which many of the manufacturers are bringing out for the Fall.

Now how about your stock? From the consumer's point of view the popularity of a dealer frequently depends on how often he's able to come up with the disc they're looking for. Have you lost any sales because you didn't have the records in stock? Of course there's a limit to how much stock each dealer can finance, but no

Ask Yourself These Questions In Preparing for Autumn Business

Can my floor lay-out be improved?

Do I need some new display racks?

Is my stock in keeping with customer requests?

Are my show window displays pulling as they should?

Have my sales meetings been frequent and effective?

Are my mailing lists and promotion plans sufficient?

dealer can afford not to carry a disc, or album, or line for which he has repeated requests. There's no future in reducing stock by not buying; the only profitable stock reduction is that caused by an increase of sales.

List Customer Requests

From your past selling experience, make a list of all the types of requests you've had from your customers. Does it compare favorably with what you're now carrying in stock? By making up such a checklist you'll also recognize the trends in your area. Are you selling more classical records now than you were a year or two ago? Has the demand for show albums been steadily increasing? You'll learn a lot about your stock by making up such a list.

A revamping of your stock and customer wants will also give you some information for planning a series of promotions. Consider some promotions based on record content, such as show albums, light classics, operas, blues, etc. Vary these with campaigns aimed at specific groups of customers. You can appeal to various civic and social groups, movie tie-ins, schools, parent-teacher groups (for kiddie records), etc. Make up complete campaigns for each promotion you plan. List all the approaches you will use (newspapers, direct mail, contests, meetings, etc.) and figure just how and when you will use each.

Setting your objectives and plan-

ning your entire campaigns now will also give you better distribution of your advertising and promotion budget.

Also in line with promotion planning is the planning of your window displays. How often have you changed your window display in the past? Has this been often enough? If you've watched the people who walk past your store you know whether your window has attracted their attention or not. Has it received just a casual look, or has it made people stop to take a longer look? If your windows haven't been "pulling" as they should, it means either that your display wasn't very good to start with or that you've kept it there too long. The majority of the people who pass most stores walk by those same stores again and again. They'll look at your window each time they pass, but they won't bother to stop for a better look if it's something they've already seen. You know best how often people pass your store. If you don't know, a few subtle questions of your customers will help you to find out. Figure out the habits of the street traffic in front of your store and you'll know whether you're changing your window often enough or not. Try an increased number of window displays for this Fall. Don't be afraid of changing it too often.

If you're using an assortment of merchandise in your window, you can get the effect of more frequent display changes by simply moving the items around in the window. Just rearrange the products, and it

Disc Sales this Fall

Right Now Is the Time to Start Getting Your Store Ready

will strike the passerby's eye as being different from the last time he saw it.

Keep in mind that your show window presents to the passerby a sample of what's inside your store. Keep it clean, neat and attractive. It's your calling card to the public outside. Beware that dusty, sunbleached, melted-disc look which suggests that inside is an ill-kept store with a very old stock.

Make up a schedule of show window changes now. You probably won't know just yet what the merchandise in those windows will be, but resolve to change the display at definite intervals. And jot down a few of the display ideas you've been mulling over in your mind. You may be glad to have those ideas when the time comes to change your window.

Ready Your Sales Staff

Back inside the store again, let's take a look at your sales staff. How often have you been having sales meetings to discuss problems, objectives and progress? Based on the volume of business and the size of your sales staff, plan now on having organized sales meetings at regular intervals. Unless you set aside a definite time for it, you'll find that you just don't seem to get around to it. Past experience has probably taught you that this is true

Jot down the proceedings of these meetings, especially the problems discussed, solutions proposed, and objectives which are set. At each meeting, look back at the events of the previous meeting and you'll get a good idea whether you're progressing, standing still, or slipping. It's surprising how many of your problems can be eliminated by this systematic attack.

And last, but very important, look over your customers and prospect files. Is your mailing list upto-date? It's foolhardy to waste good money on mailing pieces and then send them to an out-dated mailing list. Keep a log book handy for collecting names and addresses of customers. They'll gladly sign

up if you tell them you want to send them information and announcements on new records. This will assure you of keeping an upto-date list of actual "buying" prospects. If you haven't been making such a collection in the past, start doing it now. It will be paying off for you long before you start your Christmas promotion.

A look at the customers themselves will also tell you whether or not they're the group you've been making your appeal to. Have your past promotions been successful in building up new groups of

customers? Perhaps they weren't strong enough. Or perhaps you failed to follow them up and keep these new customers interested. If the latter is true, then you've recognized your problem, and now is the time to decide on what you're going to do about it.

The coming Fall season promises to be a very good one for disc sales. A higher than usual amount of promotion helped to save what might otherwise have been another "Summer slump." Possible shortages this Fall and Winter in some lines of

(Continued on page 60)

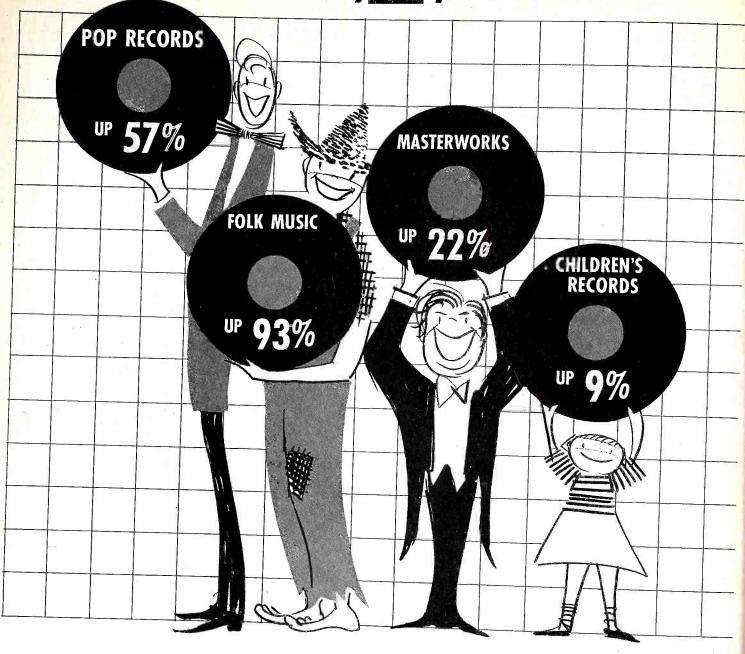


Showing faith in the future of the disc industry, Haynes-Griffin, one of New York's pioneer radio-TV-record stores, has moved to new and larger quarters. The record department, managed by capable Alma Kay and her staff (above), is divided into three sections, according to record speed. The radio and television department, managed by John Zitis (below), has ample display room and demonstration areas. Record listening booths are large, well lighted, and comfortable.



LOOK WHAT'S HAPPENING TO COLUMBIA'S SALES

... and your profits!



Last spring we made you a great big promise!

We said Columbia was going to turn out the best records in the business, back 'em up with hard hitting promotions, and boost sales right across the board!

Did we keep that promise? Just look at the figures! (They compare Columbia's 1951 second quarter sales against the same quarter of 1950.)

In fact, Columbia's total sales for the second quarter were up 40%!

No two ways about it, Columbia is the hottest label in the business today. AND—

Mere's what we promise you for fall:

- The GREATEST list of merchandise ever released!
- The GREATEST Ad and Promotion ever scheduled!
- The GREATEST Dealer Aid Program ever offered!

Your Columbia salesman will call on you with complete details—Watch for him!

COLUMBIA O RECORDS

Trade Marks "Columbia," "Masterworks," (1) (4) Reg. U. S. Pat. Off. Marcas Registradas

How the Profit-Minded Dealer Can

Sell More Clock Radios

• Clock radios can bring extra profits to any dealer. This product is not seasonal, and it can be readily sold to people in all income brackets since it is reasonably priced. Clock radios perform a combination of services in one unit, hence they have plenty of sales appeal.

The dealer who wants to do a big job with clock radios has an efficient demonstration set-up in his store. He displays clock radios in his show-windows, and advertises them consistently all the year

round.

Demonstrate the Sets

To many a store visitor, the clock radio looks just like any other table model set, so it's a good idea to require salespeople to demonstrate them, explaining the features. As with other products, the salesperson needs to be thoroughly familiar with the operation of the set. If the unit is equipped with an outlet for appliances, this feature should be stressed as well.

The low price of the clock radio

should be emphasized, and it should be pointed out, for instance, that for a sum below \$40, the customer gets a fine radio, an alarm clock, an accurate timekeeper, and an "automatic" outlet. Unless the salesman tells the prospective customer these things, he will not be getting across the genuinely effective sales message. It is certainly not enough to say that this is a "clock radio" and let it go at that.

Set Up a Special Display

It will pay any dealer to set up a special "corner" in his store for the demonstration of clock radios, and to invite each and every customer to sit down and listen to this remarkable unit which not only entertains but acts as a day-and-night servant at a cost to operate that's figured in pennies.

It will pay any dealer to keep clock radios in his show-windows at all times, and to use the easels, cards, etc., provided by the manufacturer in order to furnish the passerby with means for rapid

identification of the clock radio.

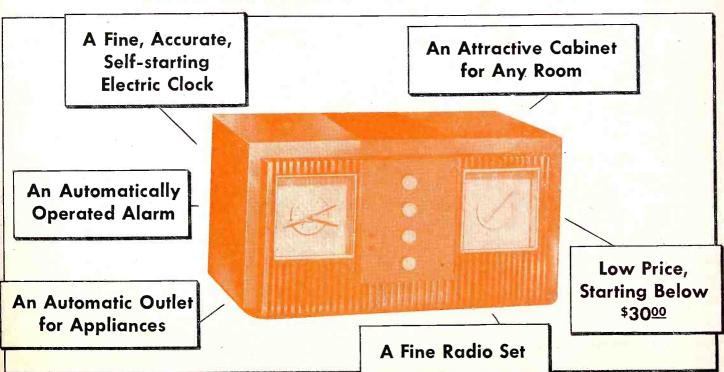
It will pay the dealer to devote some newspaper advertising space to clock radios exclusively. Ads should describe the product, stress the reasonable price, and should contain an invitation to drop in at the store for a demonstration. Although the unit price is small, some dealers will feel that an offer of a free home demonstration may be justified, since other products can be sold as a result of such home trial, or because new customers may be added to the store's list.

A Direct Mail Campaign

There seems to be no reason why a well-planned direct-mail campaign on clock radios shouldn't pull results, since this free trial technique capitalizes on a practice widely accepted by the public. Clock radios are "natural" demonstration units, and a large percentage of home trials should "stick." For the well-established retailer, who circularizes his own list of customers, a return postal card mailing

(Continued on page 56)

Sell These Features to Your Customers



THIA-LA

start your day with a song!



enjoy a clock radio...timed by Telechron®





A TELECHRON TIMER on your clock radio automatically wakes you up to music, sings you to sleep at night. Three simple knobs control radio, alarm, and "Sleep Switch."



YOU CET THE FAMOUS ACCURACY of Telechron electric clocks in your Telechron timer. Synchro-Sealed Motor is synchronized with electric power plants. It can't run wrong!



THESE FAMOUS TRADE NAMES appear on handsome clock radios that use Telechron timers. Look for them before you buy. They're quality brands ...at leading stores everywhere.

GRAND BACK-TO-SCHOOL GIFT and inexpensive, too! Ideal for her room ... or his. A clock radio timed by a Telechron timer is fun to own. It even turns on favorite radio programs automatically! Telechron is a trade-mark of Telechron Department, General Electric Company, Ashland, Mass.



FIRST OF A SERIES of 4-color advertisements on clock radios, timed by Telechron timers, to appear in national magazines beginning Monday, August 20th.



Clock Radios Given Dig Push in Power-Packed Campaign Reaching More Than 86 Million Readers

Striking 4-color, full-page ads scheduled for



It's terrific!

It's colossal!

It's very, very good!

Beginning with the August 20th issue, a dranatic campaign on clock radios, timed by Telechron timers, will be launched in LIFE Magzine . . . followed by insertions in THE SAT-URDAY EVENING POST, BETTER HOMES AND GARDENS. Swiftly paced and alive with human interest, the campaign features famous brands of clock radios, urges more than 86 milion readers to look for the Telechron trade-mark pefore they buy.

You get the benefit of increased public interest n clock radios, increased sales, increased profits. People will be asking about these marvelous automatic servants that wake them to music, ull them to sleep.

Plan now to tie in with this sales-promoting campaign. Feature clock radios timed by

Telechron timers in your newspaper advertising. Build window displays around them, using copies of the advertisements as window cards. Give clock radios good display within the store.

Remember -

You back a famous name when you back Telechron timers. 4-color, full-page or 2-page spread advertising on either Telechron timers or Telechron electric clocks appears every single week in national magazines from now through the pre-Christmas selling peak ... a tremendous impact on the national mass market.

Steer the local part of this mass market your way! Telechron is a trade-mark of Telechron Department, General Electric Company, Ashland, Massachusetts.



New Electrical Appliances

This and following pages describing manufacturers' new merchandise are compiled by our editors. This information is presented as a news service to our readers entirely without any advertising consideration whatsoever.

Telechron CLOCKS

New clocks announced include the Personality, which can be changed to suit the personality of the owner. Border of the clock face is designed as a picture frame. Clock has an alarm, and is suitable for any room in the house. Approximate list price is under \$10. Another new model is the Tiara, selling between 7 and 8 dollars. This



luminous alarm clock has a clear dial framed by jewel-like beads. Model with high gift-appeal is the Swarthmore, with mahogany finished case on jet black base and gold colored grill. Retails for over \$20. Telechron Dept., General Electric Co., Ashland, Mass.—RADIO & TELEVISION RETAILING.

Westinghouse SHEETS

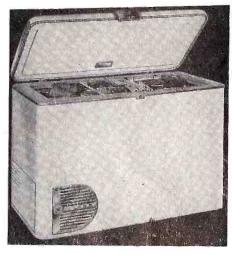
A completely new electric sheet, available in white and decorator shades of maize, blue and pink with single or dual controls, has been announced. Made of lustrous mercerized broadcloth, the sheet is 70 inches wide and 84 inches long; and has a warmed area 54 by 70 inches. Can be used equally as well on double or single beds. Single control model is ES-511, dual control model is ES-512. Control box is in the form of a powder box. Neon signal light glows when switch is turned on and the control dial is index marked for a wide range of warmth selection. Westinghouse Electric Corp., Appliance Division, Mansfield, Ohio—RADIO & TELEVISION RETAILING.

Dominion POPPER CHEF

The model 1703 is called the Jumbo Popper Chef. In addition to popping corn, it may be used to heat canned soups, etc., making frostings, candies, boiling potatoes, recrisping, heating baby bottles, etc. Made of heavy polished aluminum. Retails at \$9.95. Also included is a set of 4 15-oz. glasses and 4 bowls. Dominion Electric Corp., Mansfield, Ohio.—RADIO & TELEVISION RETAILING.

Gibson FREEZER

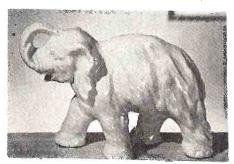
Average family sized unit in the new freezer line is the model HF-1391. This model provides 13 cu. ft. of storage space. Has a separate quick-freeze compartment. Stores up to 354 pounds of food. In addition to the five-year warranty, owners are protected by the



Gibson five-year \$150 food protection plan. Gibson Refrigerator Co., Greenville, Mich.—RADIO & TELEVISION RETAILING.

Rite-Lite TV Lamps

A line of television lamps has been announced. Made of high-fired ceramics, the lamps feature sculptured forms: Native King or Queen, Persian Prince or Princess, Elephant (shown here), and



Panther. All feature a concealed light socket and 6-foot cord. Give a diffused, indirect light. Weigh approximately 31/4 pounds each. Rite-Lite Mfg. Co., 3858 W. Roosevelt Rd., Chicago 24, Ill.—RADIO & TELEVISION RETAILING.

Eskimo HAIR DRYER

A new hair dryer is offered. Model 780, professional type of dryer, hangs on wall, has its own stand, or may be used in the hand. Heating element is supported by porcelain blocks. Centrifugal blower in the center drives air past the element. Retails for about \$14.00. Bersted Mfg. Co., Div. of McGraw Electric Co., Fostoria, Ohio.—RADIO & TELEVISION RETAILING.

Seth Thomas CLOCKS

New model in the line is the Belwyn, adaptable, easy to read, bell alarm. One piece case is available in maple, blond or mahogany finish. Dial face is available in plain or luminous style. Decorated to fit traditional or modern settings. With order of one each of the six available styles a permanent type display is included free of extra charge. Clocks retail for \$8.95 in the plain faced model and \$9.95 in the luminous dial model. Seth Thomas Clocks, Div. of General Time Corp., Main & Trott, Thomaston, Conn.—RADIO & TELEVISION RETAILING.

Nutone HEAT-A-LITE

New fixture incorporates a heater and lighting unit in a combination ceiling fixture. Lighting section uses a prismatic lens over 100 watt bulb, giving overall diffused light. Utilizes all heat, from element, bulb, motor and room heat. Guaranteed for one year. Fan driven heat distributed by fluted louvres. Model 900, white enamel finish, \$49.95. Model 901, chrome finish, \$54.95. Nutone, Inc., Madison and Red Bank Roads, Cincinnati 27, Ohio.—RADIO & TELEVISION RETAILING.

Rival STEAM IRON

The stainless steel Steam-O-Matic, fully automatic steam and dry iron, is offered. Iron alone retails for \$19.95. Luggage type carrying case is included for \$22.95. Prices include Federal tax. Fiberglas insert protects case when iron is still warm. Iron weighs only 3 pounds. Case measures $11^{1}/_{4}$ x $6^{1}/_{2}$ x 7 inches. Rival Mfg. Co., Kansas City, Mo.—RADIO & TELEVISION RETAILING

Artra ROOM COOLER

A new window exhaust fan, designed to fit any window 24 to 32 inches wide, has been announced. Fan is 16-inch size, has four blades. Has 8 ft. cord. Comes in silver gray Hammertone and ivory finish. Features two speed operation. List price is \$45. Also available is a similar model with 20-inch fan blade. This model lists for \$59.95. Artra Aluminum Foundry & Mfg. Co., 16 E. Madison St., St. Charles, Mo.—RADIO & TELEVISION RETAILING.

RADIO & TELEVISION RETAILING

CALDWELL-CLEMENTS, Inc. 480 Lexington Ave., New York 17, N. Y.

480 Lexington Ave., New York (17) N. Y. M. CLEMENTS, Publisher O. H. CALDWELL, Editorial Director

UHF means more TV STATIONS ... more TV PROGRAMS

... more TV SALES for you!



With the Federal Communications Commission's recent proposal for 1,807 new TV stations—the majority in the Ultra High Frequency band comes a revolution in television that affects every single member of the television industry. There'll be new stations on the way! Instead of the present 107 now operating in 64 cities, 1,807 new stations will spring up in 1,250 cities and towns throughout the United States.

There'll be new programs on the way! Instead of being limited to the new channels now available, new shows will blossom forth with a maze of new entertainment and educational features undreamed of now. Shows of local interest which have been crowded out by network schedules will start appearing. Colleges and churches will present their activities in telecasts which can be enjoyed by audiences numbering millions instead of hundreds.

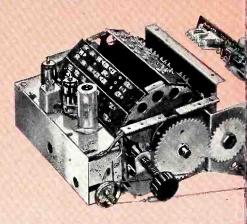
Remember, the goodwill of your customers is at stake...the sets you sell today they'll expect to use tomorrow!

New sales on the way! This tremendous television expansion in stations and programs opens up a new, untapped market of television prospects for you. But it also materially effects the sets you sell today and the customers to whom you sell them. They must be capable of receiving these new UHF stations and programs without a costly converter or you'll destroy in a short time the reputation you have been building for years.



every television set built and sold to the public has built-in provision for tuner strips to receive the proposed new ultra high frequency channels without a converter

this is the famous to



change to UHF means

New Ultra High Frequency television will not on advantages of hundreds of new stations, but in a tests in comparison with present-type telecasts of com show that it has far greater freedom from electric such as that caused by sewing machine motors, vapower tools, diathermy and other electrical equipments.

In one specific experiment under normal operatic excellent pictures were received from a new type miles distant from the set, while pictures received for type Very High Frequency transmitter only 3 miles a in quality because of electrical interference.

most other television sets were with **UHF** in mind...<u>they requi</u>

Because most television sets on the market today do r vision for the new Ultra High Frequency channels as do require a converter to receive these coming new-type

A converter is an unsightly device. It not only detract the set with its complicated wires and tuning attachm inconvenience will make installation undesirable.

Actually, a converter is a complete tuning device with and parts. It requires its own power supply separate fr And, because of its extra switches and tuning knobs, one-a practical impossibility. Most converters require frequirefrir causes picture and sound to fade out. But one of

problems caused by many present coof poorer quality as a result of el

It is vital to you as a television of that you remember the true facts on sell Zenith—the set with built-in prodoes not require a converter or adapt



ret tuner built into every Zenith television set



Every Zenith ever built has this amazing Turret Tuner. Nothing extra to buy—it's built right in where it belongs! And it was designed and built with UHF in mind.

To receive the new UHF stations, UHF tuner strips similar to the one shown can be added in a matter of minutes and the Zenith Turret Tuner adjusted for one-knob tuning of both VHF and UHF stations

etter pictures with less interference

rovide the ton, actual able power terference a cleaners,

conditions, smitter 17 a presentwere poor In one test, an ordinary electric drill creating the type of electrical interference found in many locations, was operated at equal distances from two sets... one tuned to a new-type Ultra High Frequency transmitter, the other to a present-type station. The interference had no apparent effect on the new-type, but the picture on the other set was made unsatisfactory for normal viewing.

New-Type Television







not built <u>a converter!</u>

ave built-in pro-Zenith sets, they

om the beauty of but its cost and

wn tubes, circuits he television set. In tuning becomes e-tuning because er most annoying reers is a picture cal interference. In or serviceman of converters and on for UHF that

Zenith's ability to receive new type UHF stations is being proved every day

In January, 1950, an Ultra High Frequency experimental station was set-up in Bridgeport, Connecticut to test transmission and reception of UHF telecasts. In this experiment, tuner strips to receive the UHF stations were placed in the turret tuners of Zenith receivers owned by the people of Bridgeport. And persons owning television sets not having a turret tuner were furnished with converters of virtually every type available. These people were then able to receive telecasts from the Bridgeport UHF station.

At the conclusion of the test, persons owning Zenith receivers were the envy of their neighbors, for this experiment proved beyond a shadow of a doubt the performance superiority of Zenith's Miracle Turret Tuner.

These important features have been dramatically proven in the Bridgeport tests

- Zenith Television sets gave excellent reception of the new-type Ultra High Frequency station.
- One-knob automatic tuning of both present and new-type stations was provided by the Zenith turret tuner.
- Zenith's built-in provision for Ultra High Fre-3 quencies eliminated all unsightly converters, additional dials, wires, knobs.
- No extra "warm-up" period was necessary to 4 receive the new-type stations with Zenith television receivers.
- The Zenith turret tuner "locked in" either the present or new-type stations. There was no fading due to drift, and no need for repeated re-tuning.
- Zenith television sets with built-in provision for Ultra High Frequency "tuner strips" in the turret tuner are ready now for these new-type stations.



The KEATS featuring complete FM-AM radio coverage, the famous Cobra-Matic Record Player and 17-inch "Black" Tube television. Model H2868R



The ADDISON with big 20-inch rectangular "Black" Tube television in a Mahogany-veneered cabinet. Model H2242R



The GOLDSMITH in a beautiful Gold Coast Afara cabinet with 146 sq. in. rectangular picture. Model H2053E

with UHF on the way REMEMBER all Zenith Television Receivers Are Built with UHF in Mind

Ultra-High Frequency television is nothing new. From the very beginning it was recognized as a positive necessity once television won the recognition of the American public. Zenith knew it . . . and every other television manufacturer knew it. Only Zenith did something about it! And that "something"—the now famous Turret Tuner—is yours to sell in Zenith—the manufacturer that offers you and your customers a written guarantee to receive the new Ultra-High Frequency channels without a converter.



The ALDRICH with Zenith's 165 sq. in. 2-in-1 "Selecto-Screen", Reflection-Proof pictures. Model H2438R



The BURKE in genuine Striped Mahogany veneers with 146 sq. in. rectangular "Black" tube. Model H2052R



ZENITH RADIO CORPORATION
6001 WEST DICKENS AVENUE
CHICAGO 39, ILLINOIS



The MARLOWE in its Modern cabinet of durable Mahogany Pyroxylin with 17-inch rectongular tube, Model H2029R

Attend Raytheon Dinner

Over 200 Chicago TV sales and ervice men attended a Raytheon Bonded Dealer dinner recently at the Hotel Stevens, Chicago. This meeting, sponsored by the dealer division of Allied Radio Corporation, Chicago, listributor of Raytheon tubes in the Chicago area, was the first in a current series of meetings to promote the Raytheon Bonded Electronic Technician Program.

Walsco Builds New Plant

Walsco opened the doors to its new cos Angeles Plant, 3225 Exposition Place, Los Angeles, while hundreds of ocal jobbers and dealers accepted the nvitation to enjoy "open house" festivities and witness the expanded accilities of the new company's modern headquarters.

Hotpoint Survey Results

A slight decline in refrigerator rade-ins during the last half of 1950, accompanied by an increase in the number of consumers keeping old oxes, may indicate a new trend to two refrigerator" families, Edward to two refrigerator families, a consumer refrigerator survey confucted by the company during 1950. If such a new trend materializes, a consumer families as the families of the famili

Jerrold Names Two

The appointment of Sydney J. Mass s sales manager and Edmund D. ucas, Jr. as manager of advertising nd public relations was announced y Milton J. Shapp, president of Jerold Electronics Corporation.

Take Aerovox Plans



or over a quarter century, Charley Golenpaul ho heads up Aerovox capacitor jobber sales, and Austin C. Lescarboura who heads up his own dvertising agency, have worked together in romoting the radio-parts distributing trade. hey are responsible for that Aerovox "merhandising-mindedness" so well known in jobing circles. More recently they have been bined by Fred P. Donati, advertising manager f Aerovox. So here they are: Dr. Lescarboura D. Litt.), Fred Donati and Charley Golenpaul, iscussing current advertising and merchanising plans.

I.D.E.A. Names Morris

I.D.E.A. of Indianapolis, manufacturers of the Regency Booster, has announced that its new chief engineer is Ray A. Morris, who has been with the organization as assistant sales manager since December, 1950.

Turner Sales Manager

Hobert M. Murdock has been appointed sales manager of The Turner Company, 910 17th St., N.E., Cedar Rapids, Iowa, manufacturers of microphones, television boosters and electronic equipment. Mr. Murdock, popularly known as Hoby, comes to the Turner Company with an extensive sales and administration background.

Centralab Sales Office

Earl T. Champion, jobber sales representative in the Chicago metropolitan area for Centralab division of Globe-Union, Inc., announces that he has established an office in Chicago at 6459 N. Sheridan Road, Chicago 26, Ill.

GE District Manager

Robert E. Noth has been appointed district manager of the St. Louis office of the General Electric Company's Receiver Division, it was announced by A. A. Brandt, general sales manager for the division, at Electronics Park.

Nash-Kelvinator TV Show



J. C. Bonning (right), advertising and sales promotion manager of the Kelvinator Division of the Nash-Kelvinator Corporation, visits Paul Whiteman and Junie Keegan, 13 year-old singing star, on stage before start of the company's new television show.

Haydu Names Finkelstein

George K. Haydu, president of Haydu Bros., manufacturers of cathode ray tubes, receiving tubes, and precision parts, announced that they had appointed Harry Finkelstein, owner of the Hy-Art Company, as their national sales representative. His offices are located at 136 Liberty Street, New York City.

Rider Chicago Rep

William J. Slawson, general sales manager of John F. Rider Publisher, Inc., 480 Canal St., New York 13, N.Y., has announced the appointment of Wesley L. Wilson, 2750 W. North Avenue, Chicago 47, as the metropolitan Chicago and northern Illinois representative for the sale of Rider manuals and textbooks.

JFD Appoints Zimmerman

The JFD Manufacturing Co., Brooklyn, N. Y., has announced the appointment of Solomon Zimmerman to the development engineering staff. Zimmerman will work on the development of new JFD electronic equipment, under the direction of Israel Pollack, chief electronics engineer.

Printed Circuit Guide

Printed Electronic Circuit Guide No. I, has been published by Centralab, Division of Globe-Union Inc., 900 E. Keefe Ave., Milwaukee 1, Wis. It lists 269 printed circuit plates as used by 69 manufacturers.

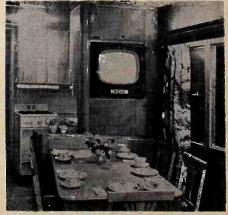
Precision Expansion

Precision Electronics, Inc. 641 N. Milwaukee Ave., Chicago, has announced that it is increasing its factory facilities by 50%. The company is now able to service customers with little or no delay, although a good portion of its business at the present time is in defense work.

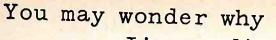
Mallory Production Plans

In a six day series of sales meetings between division managers and branch managers, P. R. Mallory & Company, Inc., Indianapolis, Ind., has further integrated plans for production in both the military and civilian fields. The key of the planning lies in flexibility of operation to anticipate mobilization needs as they develop and, at the same time, provide the requirements of the civilian economy.

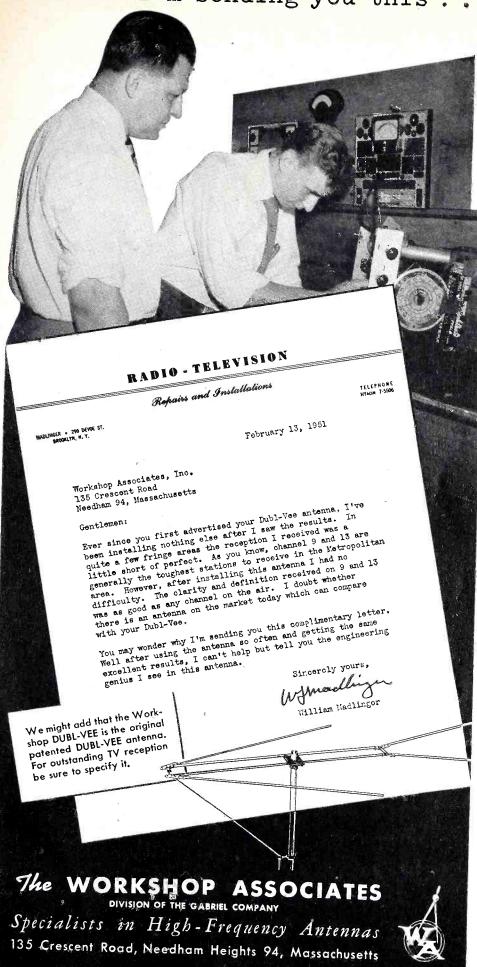
TV Set In Trailer



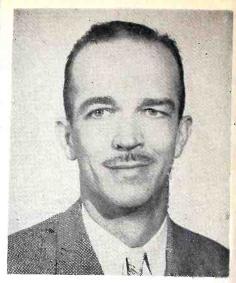
Interior of Five Star DeLuxe General trailer built by General Coach Works, Inc., completely equipped, even to the installation of an Emerson 17-inch rectangular television table model.



I'm sending you this .



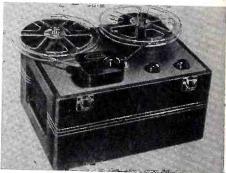
Alprodco Sales Manager



Fred Gossard, above, has been named to the position of sales manager of Alprodco, Ind., of Kempton, Indiana. Before joining Alprodco, Gossard was credit manager of General Electric Credit Corp. in Denver.

Pentron TAPE PLAYER

A new portable tape player has been introduced. Plays back tape recorded on any standard tape recorder. Model PB-1, with pre-amplifier, plugs into any existing amplifier. Weight 4½ lbs. List



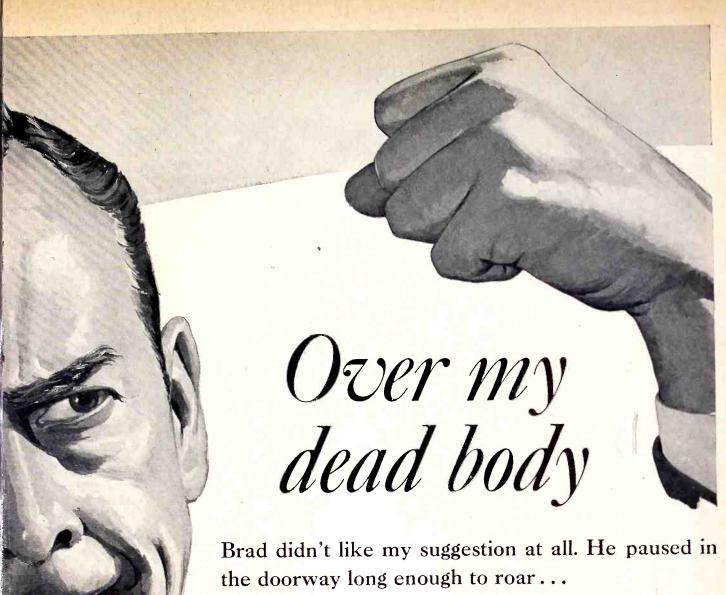
price \$69.50. Model PB-A1, complete with self-contained 5 watt amplifier and 51/4 inch speaker, weighs 7 lbs. List price is \$89.50. Pentron Corp., 221 E. Cullerton St., Chicago 16, III.—RADIO & TELEVISION RETAILING.

Electron PORTABLE

Called the Mellotone Duo, this new set incorporates a portable radio and overnight case. Measuring 16x12x7 inches, the case is covered in DuPont Fabricoid alligator-grained leatherette,



in a choice of green tan or red. 7x10 inch mirror is mounted inside the lid. Set is a 4-tube receiver with 4-inch speaker. List price less batteries: \$39.95. Electron Enterprises, 6917 W. Stanley Ave., Berwyn, Ill.—RADIO & TELEVISION RETAILING.



"... Over my dead body." And then he stomped out of our store.

I guess I just stood there with my mouth wide open. Brad Stevens was a television holdout all right, but I hadn't expected him to blow his top.

Later that same day Mary Stevens, Brad's wife, dropped in to buy a few records. She looked as pert and pretty as could be.

Mary stood there admiring a new RCA Victor television set. "Could we try this set in our home for a few days?"

> "I can arrange it right away, but Brad

Mary gave a confident laugh. "You leave him to me.'

Well, we sent out an RCA Victor Hillsdale on a twoday trial and I sat back waiting for Brad to raise the roof.

Yesterday the two days were up, so I dropped by the Stevens' house. I wondered how Brad had taken it.

Mary and the kids answered the door together.

"Well, I've come to take the television set back."

"Over my dead body!" Mary smiled. "Why, we never dreamed that watching television would be so much fun or that we'd learn so much. This family is sold on RCA Victor . . . and that includes Brad!"

Brad dropped by that afternoon to make the down payment. When he said that he didn't like television-except for the baseball games -I knew he, too, was 100% sold.

RCA Victor home demonstrations certainly pay off in big profits. Once folks see RCA Victor television in their homesthey're sold: RCA Victor sells itself . . . plenty of features and exclusives . . . it's America's most wanted television.

Here's another television
sales idea for you!

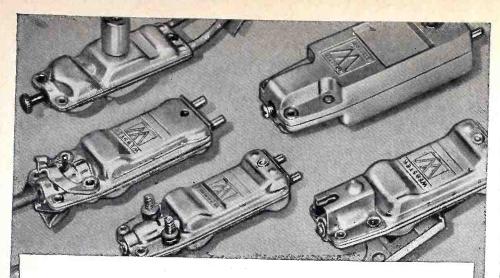
RCA VICTOR

Granden My

Man at Box 10 Camden My

Man at Box 10 Camden My

This is one of a series of advertisements published in the interest of television merchandisers by RCA Victor—World Leader in Radio . . . First in Television . . . First in Recorded Music.



WEBSTER ELECTRIC one of the original manufacturers of crystal cartridges

FOR OVER 20 YEARS

a complete line of cartridges

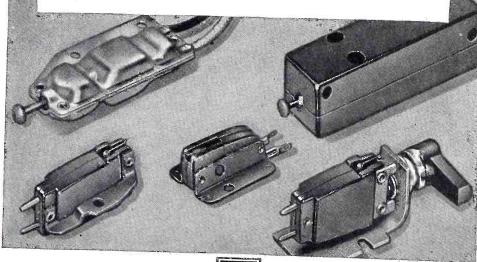
Engineered to meet your requirements

Webster Electric has been making cartridges for years and years...starting way back when cartridges were nearly as big as baseballs. The line of cartridges has constantly changed and improved to meet current requirements. Each year has brought improvements until cartridges are now available in thumb-nail size and versatile enough to meet the requirements of 78, 331/3 and 45 RPM.

Webster Electric has the experienced engineers, manufacturing know-how and long-range experience to make cartridges to meet all of the industry's requirements.

When you need a new cartridge submit your problem to Webster Electric. When your record players or changers are equipped with Webster Electric cartridges, you can be assured of the best in dependable performance.

Webster Electric Company, Racine, Wis., Established 1909



RACINE + WISCONSIN

"Where Quality is a Responsibility and Fair Dealing an Obligation"

Jensen Needle Guide

With phonograph and record player manufacturers using about 100 types of needles—most of them the so-called permanent types—trying to determine the right replacement needles for any given piece of reproducing equipment without knowing the exact specifications in each case was almost an impossible job.

Karl Jensen and his Jensen Industries, Inc., have a new answer to this problem. It's called the "Jenselector," and resembles a graphic calculator type of slide rule. Designed to fit either pocket or service kit, as well as for counter use, the guide quickly prescribes the proper replacement for every make of phonograph and cartridge. It embodies all the necessary variables and characteristics that a serviceman or clerk needs to know in the absence of the exact model or replacement numbers. One side of the "Jenselector" lists all the phono cartridges of each manufacturer. With the aid of the sliding element, the user of the guide can determine the correct Jensen replacement needle from the cartridge number, needle silhouette, or original equipment needle number. And he can tell whether the needle is alloy or jewel and whether it is standard or microgroove, all-purpose, or transcription.

The other side of the "Jenselector" features all of the recognized phonograph or record player manufacturers alphabetically. Each is fully charted as to whether the record player is one, two or three speed. Correct needle replacement numbers are given in each case, properly keyed to a simplified code that graphically describes methods of switching needles (six methods in all) and methods of mounting these needles (also six methods).

Information on the "Jenselector" and the Jensen line of replacement needles may be obtained by writing Jensen Industries, Inc., 329 S. Wood St., Chicago 12, Ill.

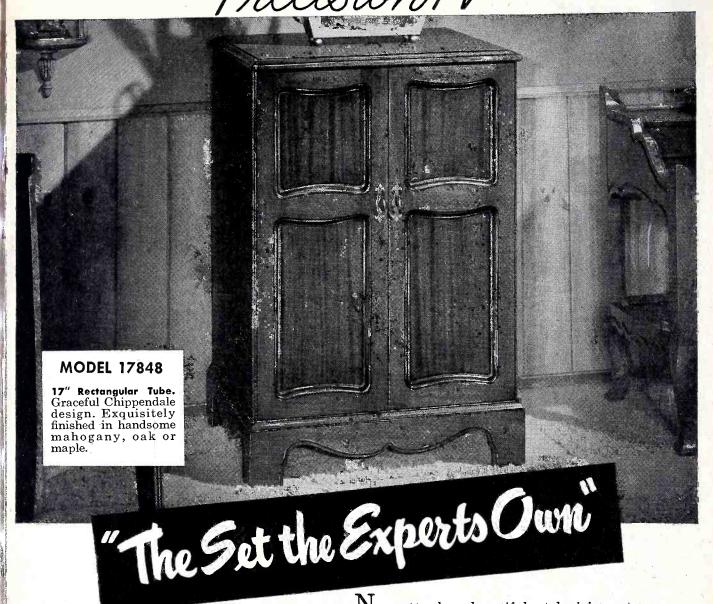
New Fretco Reps

Fretco Television Co., Inc., 1041 Forbes St., Pittsburgh, Pa., has announced the following reps: Barry Smith, 3317 W. 81st St., Kansas City 5, Mo.; Media Inc., 4224 Normandy, Dallas, Texas; M. K. Widdikend, 9004 W. Shorewood Dr., Mercer Island, Washington; and Holliday-Hathaway Co., 238 Main St., Cambridge 42, Mass.

CBS-Columbia TV SETS

CBS-Columbia Inc., formerly Air King Products Co., Inc., has announced two new television receiver models. One, a mahogany table model, model 20T1, lists for \$299.95. The other, a French Provincial console in maple, model 20C3, lists for \$469.95. Both are twenty inch receivers. CBS-Columbia Inc., 170 53rd St., Brooklyn 32, N. Y.—RADIO & TELEVISION RETAILING.

hallicrafters Precision TV



No matter how beautiful a television set may be . . . its performance sells it! Hallicrafters PRECISION performance . . . even far out in the unscratched "fringe markets" . . . gives your customers the proof you need to clinch that sale!

Hallicrafters world-famous precision electronic equipment has been sold in 89 different countries, used by 33 governments. Remembered by veterans . . . prized by experts . . . preferred by radio men the world over!

hallicrafters
FIRST in Precision TV!

WORLD'S LEADING MANUFACTURER OF PRECISION RADIO & TELEVISION . CHICAGO 24, ILL.



big national magazines and newspaper supplements with national circulationreminds customers to buy fresh Burgess portable radio batteries for summer fun. Colorful red, black, yellow on durable stock.

ATTENTION-GETTING COUNTER CARD REMINDS TO BUY!

Folks just browsing through your store, and customers for other purchases, are reminded to buy Burgess when they spot this colorful red, black, yellow counter card. Printed on heavy cardboard stock with sturdy easel.

COUNTER MERCHANDISER SELLS THE PRODUCT!

This handsome little counter display takes up little space and displays portable radio battery XX45. This model is most used in the popular smaller portable radios. Consumer benefit printed at top prompts sales. Red, yellow and black.

Contact your jobber now for this material.



(1 + x x 1) BURGESS BATTERY COMPANY . FREEPORT . ILLINOIS

Your Customers Want FM

(Continued from page 35)

the war-time production hiatus, and finally the impact of television, have all combined to delay and restrict its development. But FM has survived and grown. And its future as a medium and as a source of profitable volume for manufacturers, distributors and retailers is bright indeed.

FM is not only the finest form of radio transmission; under some weather and interference conditions and in some areas it offers the only medium to which the public can turn. And in many localities FM today is catering to the musical, educational and other specialized local needs and tastes as can no other medium. It needs only the energetic and persistent sales efforts of smart retailers to make a profitable opportunity for

Three New CBS Divisions

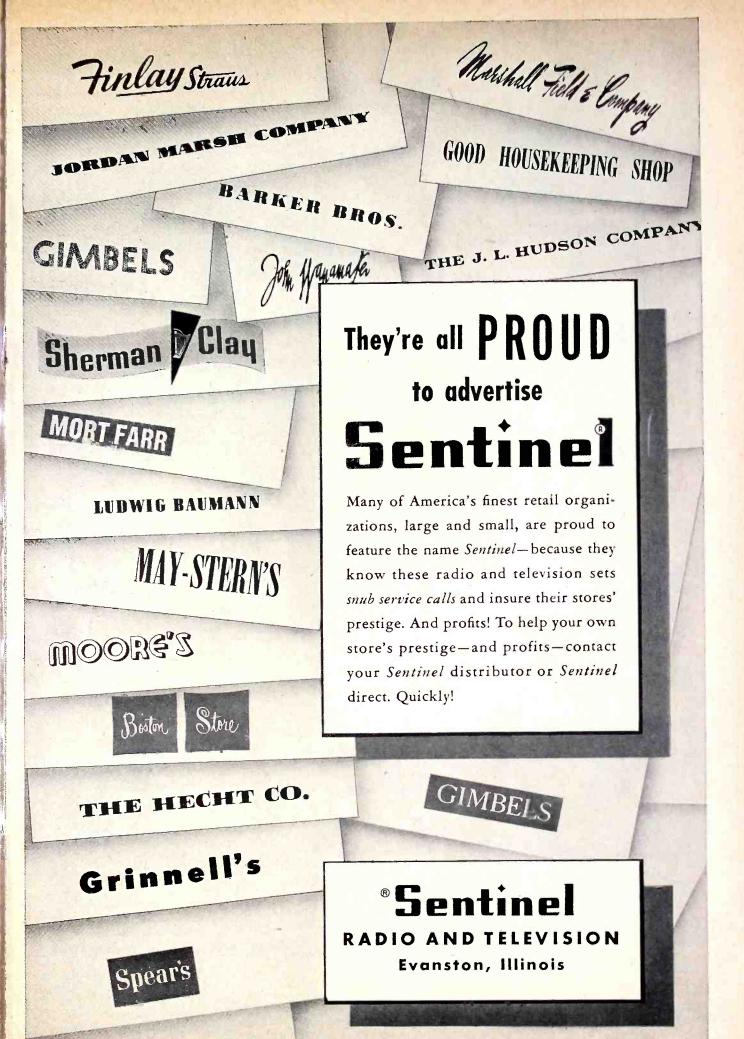
The creation by the Columbia Broadcasting System of three new divisions was announced by Frank Stanton, CBS president. Howard S. Meighan has been named president of the CBS Radio Division, and J. L. Van Volkenburg has been named president of the CBS Television Division. Each Division will have its own departments. Adrian Murphy has been named president of the CBS Laboratories Division, which will coordinate the company's electronic development work, including color television in its various applications.

Pacific Electronic Exhibit

Over 9000 persons connected with electronics and nucleonics are expected to register as visitors-mostly from 11 western states—at the 7th Annual Pacific Electronic Exhibit and 1951 Western IRE Convention to be held in the Civic Auditorium, San Francisco, August 22-23-24, according to Al W. Fry, chairman of the exhibit committee.

Reps Membership Rost<mark>er</mark>

"The Representatives" of Radio Parts Manufacturers, Inc. announced publication of its new 1951 National Membership Roster. Copies are available without charge to any manufacturer, distributor or other industry person by request, on his business letterhead, from "The Representations" of the control tives" at 600 S. Michigan Ave., Chicago 5, Ill.



Faye Emerson Visits GE



Faye Emerson, honored by many as the "first lady of television," and W. H. Sahloff, manager of the GE Receiving Division, photographed at Electronics Park.

Named General Manager

John B. Langley has been named general manager of Motorola-Detroit Company. E. A. Holstein, whom Langley succeeds, is leaving to become special merchandising manager of Motorola Inc., at its Chicago head-quarters.

Cogan Names Fisher

M. H. Cogan, president of Symphonic Radio and Electronic Corporation of Boston, announces the appointment of Dave Fisher as national sales manager. Fisher was associated with General Electric Supply Corporation for the past six years.

Clock-Radios

(Continued from page 37)

should pay. Suggested copy follows;

Dear Customer:

We want to send you, for free home-trial, A Remarkable

SERVANT and ENTERTAINER

Our Clock-Radiol
It automatically wakes you up to music;
puts you to sleep with music, shutting itself
off . . . Is a fine radio 24 hours a day . . .
an accurate electric clock, and this isn't
all, because it will turn your coffee on
in the morning, or operate other appliances!

Because of the low price of this fine Clock-Radio we can't afford to send them out on free trial to just about everyone, so we have carefully selected a list of our best customers, and you are one of them, of course. Just tear off the attached postage-paid card, fill in your name and address, and send to us, and we'll deliver the Clock-Radio promptly. If you prefer, call us at Main 3456.

(Store signature)

The foregoing copy is, of course, just one example of the sort of message the dealer can send to his list of good customers. A first-class mailing should always include a circular.

A few days after the mailing has been made, the dealer should make a telephone follow-up drive, provided he has the facilities to do so. The large organization can assign a certain number of names to each salesman, and the latter can call, asking whether the card bearing the offer was received, and suggesting that the customer try out one of the clock radios. Smaller organizations can often assign the telephone follow-up to clerical help.

Smart promotion of clock radios starts with making sure that all of one's customers know the features of this product, and continues with store demonstration, and advertising. The clock radio is one of the few products that isn't seasonal, that seldom involves a trade-in.

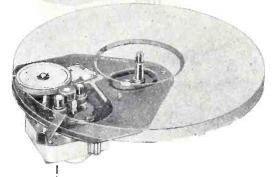
Sylvania Names Pritchard

P. M. Pritchard, formerly director of sales for Victor Electric Products, Inc., has been appointed general sales manager for the parts division, Sylvania Electric Products Inc. according to an announcement by R. J. Hartung, division manager.

TOPS

IN DEPENDABILITY
IN QUIETNESS
IN FIDELITY
IN LONG LIFE

... in the 3-speed field



GENERAL INDUSTRIES MODEL TR

Compact... foolproof... dependable... by every standard of comparison, the leader among all popularly-priced turntable units. It's General Industries' turret-type 3-speed phonomotor, available in manual type, as illustrated, and also to record-changer manufacturers.

Write today for complete information about this and General Industries' complete line of three-speed, dual-speed and single speed phonomotors, and the popular new GI Tape-Disc Recorder Assembly. Quantity price quotations furnished promptly upon request.



The GENERAL INDUSTRIES Co.

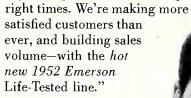
DEPARTMENT I . ELYRIA, OHIO

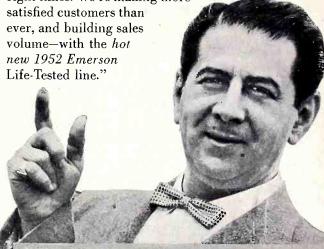
"I'm glad I Sell LIFE-TESTED Emerson!"

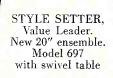
says Mr. Jack M. Winer,

President, Dynamic Stores, Inc., **Prominent New York Appliance Chain**

"For many years we've featured Emerson radio and TV values. Emerson has the touch for producing the right models at the right prices and at the



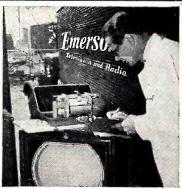




EMERSON LIFE-TESTED TELEVISION MEANS LONGER LIFE, BETTER PERFORMANCE!



DEADLY "DEAD-SPOT" TEST In every area where television reception is toughest Emerson's "laboratory-on-wheels" field-tests new models to ensure that Emerson performs where others fail.



TAKEN FOR A RIDE across country with ride-recording "Impactograph" attached, Emerson test models must perform perfectly no matter how many brutal jolts and jars are recorded on the tape.







Model 695



3-Speed

Phonoradio Model 703

17-Inch TV-Phono Console Model 699

17-Inch Model 696



nerson alle-Tested Television and Radio

Emerson Names Abrams

The appointment of Fred Abrams to head the national parts sales-service division has been announced by Benjamin Abrams, president of Emerson Radio and Phonograph Corporation.

Washer Prices Reduced

The Appliance Manufacturing Co., Alliance, Ohio, has reduced prices on all models of Duchess Washers, it was announced by F. W. McGrath, vice-president in charge of sales. The reductions are five dollars from the prevailing list, but discounts are improved.

To Universal Post

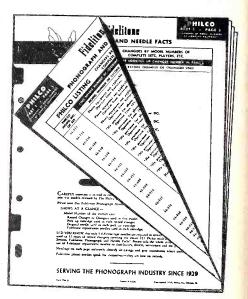
Landers, Frary & Clark, New Britain, Conn., has announced the appointment of E. J. Eckert as district manager for the home laundry equipment division, with headquarters in Pittsburgh.

Packard-Bell Contest

A total of \$4,400 in U.S. Savings Bonds will be given away by Packard-Bell this fall at the conclusion of the company's Silver Anniversary Appreciation Awards Contest now in effect in the eleven Western states, according to executive vice-president Robert S. Bell.

Permo Issues "Facts" Charts

Permo, Incorporated, manufacturer of Fidelitone conventional and special type phonograph needles, has issued "Fidelitone Phonograph and Needle Facts" covering sets made by Philco, Columbia and Admiral. The "Facts" list each set by model number and give the proper needle replacement type. The sections list five models by Columbia, 320 sets by Admiral and another 131 Admiral models listed in a supplement section, and 227 Philco models. It is planned to cover the sets of other manufacturers in future releases. Each section will also be kept up to date by the issuing of supplements. In a recent statement of the problems of selling needles, Gail S. Carter, vice-president in charge of sales for Permo, said, "The radical change from a standard open chuck for one conventional type of needle to



special sizes and types of chucks for special type needles, imposes new problems for the trade and public. We, therefore, supply tools, nuts, washers, and other accessories (when and as required) and instructions for easy home installation of Fidelitone special type needles. Fidelitone dealers and distributors are supplied with "Fidelitone Phonograph and Needle Facts" that give complete information about record players used as initial equipment or attachments. These outlets are prepared to properly supply and service consumer requirements for Fidelitone phonograph needles."

New JFD Plant Started

Julius Finkel, president of the JFD Manufacturing Company, Brooklyn, announced the purchase of a Brooklyn site for the construction of a new 120,000 square foot plant. The additional manufacturing space will be used to double the present rate of production of JFD television antennas, mounts, lightning arresters, screw eyes and accessories.

Music Merchants! Dealers!

Here is your new source of revenue ... an item with volume sales appeal that brings repeat orders . . .

Music... Pre-Recorded on Magnetic Tape

It's A-V TAPE LIBRARIES . . . music on magnetic tape, the modern recording method that brings you the most lifelike reproduction of sound with none of the disturbing needle-scratch and crackling noises of disc recordings. It's the recording technique that has excited the lovers of high fidelity sound and that will make them your customers.

A-V TAPE LIBRARIES introduced and demonstrated its initial catalog at the NAMM Show this July. It consists of a selection of 14 program-reels, each reel containing a half-hour of one of the various music classifications.

THESE 14 REELS include approximately 150 separate music titles, from the classics through cathedral organ, light dansante, and western-square dance . . . good music in good taste.

BEGINNING WITH THIS DIVERSIFIED GROUP of selections, the catalog will grow at the rate of about 2 new reels a month. In this way your customers can begin to build their own tape library now, and keep up with the new releases.

THE INDIVIDUAL PROGRAM-REELS are available on reels which fit all home model tape recorders and most professional tape recorders. The program-reels are recorded in two different speeds: 3.75" and 7.5" per second; single track and double track. All home model tape recorders operate at one or both of these speeds.

A-V TAPE LIBRARIES, INC., is in production and making deliveries now! Distribution is nation-wide through music and record shops, as well as dealers handling tape machines. Dealer discounts are quite attractive.

Rush!

THERE'S STILL TIME TO BE THE FIRST in your area with the A-V TAPE LIBRARY. . . . still time to establish yourself in this new market. Fill in the coupon or write the words "A-V Tape Libraries" on your letterhead and address it to us. You'll get complete details and a sample of our three-color printed catalog which is being supplied to appointed dealers.

PLEASE TELL ME HOW I CAN BECOME AN A-Y TAPE LIBRARIES DEALER:—
My name is
My address
CityState=
My business is
Under the name of



Tape Libraries, inc.

730 Fifth Avenue, New York 19, N. Y.

The Low-Price Quality Line For Fall, 1951

17" TV
RADIO-PHONO
COMBINATION
Raytheon's
STARLIGHT
MODEL RC-1720
New Low Price

\$3**69**95

Fed. Tax and Warranty Extra



BIG 20" TV

Raytheon's CONSTELLATION

MODEL C-2006

New Low Price \$

\$34995

Fed. Tax and Warranty Extra

Raytheontv

NOW Raytheon announces new low prices on its entire line... all the way from a 17" deluxe table model at \$229.95 to a 20" deluxe console combination at \$650! Back of this is Raytheon's consistent advertising and down-to-earth mer-

chandising. Here's a TV merchandising program every Raytheon dealer can really tell, sell and profit on! For full information on the low-price quality line for fall, 1951, contact your Raytheon distributor or write us. Hurry!

BELMONT RADIO CORPORATION • 5921 W. Dickens Ave. • Chicago 39, Illinois
Subsidiary of RAYTHEON MANUFACTURING COMPANY

Raytheon TV presents JOHN CAMERON SWAYZE Sundays on NBC. See local paper for time and station.







Disc Selling

(Continued from page 35)

radio, television and appliances will give added importance to the record department. So with good disc volume to start off, and better than average prospects for the usually good season ahead, a thorough revamping of your whole setup now may very well help to make this an all-time peak season. But you've got to do it now. Putting it off will lead to further putting it off, and

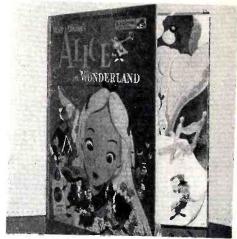
by next January you'll be saying, "Well, one thing led to another, and I never did actually get around to it." The "profit-train" is waiting at the station. Climb aboard and get yourself a seat now. It's much easier than catching up with it after it has left the station.

Crosley Names Three

The appointments of M. R. Rodger, T. H. Mason and E. W. Gaughan as divisional sales managers of the Crosley Division, Avco Mfg. Corp., were announced by W. A. Blees, general sales manager.

RCA Victor Album "Alice in Wonderland"

What RCA Victor terms the most comprehensive promotion campaign ever built around a single kiddie album has been scheduled for the new RCA Victor original cast "Alice in Wonderland" story-book album. Measuring 134 x 10½ inches, the



largest kiddie album ever introduced and the first in a "Little Nipper Giant Series," the Alice album is also a 24-page story book. Containing the complete text, brilliantly illustrated with authentic Disney art, the album is available in all speeds.

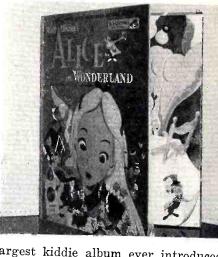
The songs include: "In a World of My Own," "The Caucus Race," "The Walrus and the Carpenter," "I'm Late," "All in the Golden Afternoon," "The Unbirthday Song," "Painting the Roses Red," "Very Good Advice," "Twas Brillig," and "Alice in Wonderland."

The original cast includes Kathryn Beaumont as Alice, Ed Wynn as the Mad Hatter, Jerry Colonna as the March Hare, Sterling Holloway as the Cheshire Cat, and Pat O'Malley as Tweedle-Dee. In addition to the giant album, there are three 2-record show pieces which feature Kathryn: "Alice and the Mad Tea Party," "Alice on Trial," and "Alice and the White Rabbit." These are available in 45 and 78 RPM only.

Promotion, which will include just about every channel RCA Victor can use, will be kicked off in September with a full page color ad in Life Magazine.

Hotpoint Changes

A number of changes in Hotpoint's district sales organization have been announced by J. F. McDaniel, sales manager. F. L. Cashman, district manager, Boston, has resigned, and is being replaced by W. R. Hall, formerly zone manager in that district. J. H. Kidd, zone manager in Denver, became zone manager in Dallas. V. P. Owen leaves the Dallas zone to become zone manager in Philadelphia. L. W. Hitchcock, former zone manager, Atlanta, is taking over as zone manager at Cleveland.





TO BLACK AND WHITE **BROADCASTS**

GIVES AMAZING CLARITY PLUS THREE DIMENSIONAL EFFECT

IMPROVES DETAIL MAKES PICTURE EASIER ON THE VIEWERS EYES

ANYONE CAN INSTALL KOLOR-VISION ON ANY TV RECEIVER - IN SECONDS

of television itself! Now, anyone who owns a TV receiver can enjoy beautifully colored pictures on all black and white broadcasts! No complicated installation is involved -a child can install KOLOR-VISION in a few seconds - no focusing, adjusting, tuning or synchronizing is necessary. Be first to demonstrate KOLOR-VISION in your sales area and profit accordingly. Just demonstrate it in show window or sales room - and watch the crowds gather -AND BUY!

KOLOR-VISION SELLS ON SIGHT-will move your new sets—order now to avoid delays—see your regular jobber today or contact us direct!

Discs, an

Keyport, New Jersey

Canadian Representative: CHARLES W. POINTÓN, TORONTO. Export Division: AD. AURIEMA, INC., NEW YORK, N.Y.



KEEP YOUR EYES ON

Tele Roman

FOR 1952

RESERVE SPACE ON YOUR SALES MOOR NOW
FOR THE DEALERS' TV LINE OF THE YEAR!

Tele King . . . the Great TV hadependent Serving the Independent TV bealer

TELE KING CORPORATION 601 WEST 26th STREET, NEW YORK 1, N. Y.

Zenith Demonstrates UHF Reception for FCC



Part of Zenith's demonstration for the FCC of UHF television reception on Zenith receivers, was to show how simple it is to slip a UHF tuning strip into the turret tuner in every Zenith TV set. G. E. Gustafson, left, Zenith's vice-president in charge of engineering, holds one of the turret tuners. H. C. Bonfig, vice-president and director of sales, has one of the UHF

Meck Color TV Unit

John Meck Industries will begin deliveries in August of an accessory color television unit, for use with present black-and-white sets, it was disclosed by John S. Meck, president. The new "Add-a-Color" unit will have a 14-inch picture tube, Meck said. Price of the unit has not yet been set, but it is expected to retail at less than

Waters Conley Showing

Marking thirty-five years in the phonograph field Waters Conley Company, Rochester, Minnesota, featured its "35th Anniversary" line of Phonola and Melodier portables at the 1951 Music Show. Phonola Portables, a competitive line priced for volume selling, includes three-speed players and automatic changers as well as hand wound models.

RCA Tri-Color Tube



E. W. Engstrom, vice-president in charge of research for RCA Laboratories, explains the RCA tri-color television picture tube to a group of television manufacturers. He is holding a cut-away model of the 16 inch tube, which RCA is turning over to its licensees with complete manufacturing details. Below is RCA's newest 21-inch tri-color tube, which will afford the largest direct-view color television pictures ever seen. vision pictures ever seen.

New Zetka Department

Zetka Television Tubes, Inc., 131 Getty Ave., Clifton, N. J., has set up a special department to rebuild used TV picture tubes. Each tube is set-tested before leaving the factory.

A STYLE RANGE FOR ALL . . . A PRICE RANGE FOR ALL!



modorn

The DEL MAR, Model 5178



The Rochelle, Model 5175

provincial





The RUTLEDGE, Model 5158

Sparton TV the profit line for fall!

Here's just a hint of what's ahead for Sparton dealers. Cabinet styles to grace any modern or traditional setting. Chassis that are quality-engineered and qualitybuilt (to eliminate costly service calls). Big-tube models at popular prices (with the best profit structure in the industry). And they're backed by an aggressive national magazine and newspaper advertising program.

More, Sparton dealers will be protected from price cutting, dumping, over-franchising and other profit killers by SCMP—Sparton Cooperative Merchandising Plan —and by Sparton's guaranteed price-protection policy.

Perhaps the exclusive Sparton franchise is available in your community now. Write or wire today.



Brightest selling feature in radio today!





IT'S G.E.'S FINEST AM TABLE RADIO

Actually gets more stations than big consoles selling as high as \$250. Special tuned RF stage helps separate stations close together on the dial with knife-sharp accuracy. Special oval speaker. Illuminated slide rule dial. Striking cabinet design. Congo \$34.95* brown, alabaster ivory.



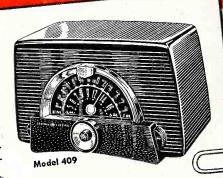
CASH IN on this great sales-closing idea! A traveling beam of light actually "spots" each station as you dial. Makes tuning quick and easy, even in the dark. Customers love it! ONLY GENERAL ELECTRIC HAS IT! And what tone-what all-round performance for a low cost radio. This new G-E beauty is a natural for every room. A great gift item! AND—you can offer a choice of alabaster ivory, Persian red or Congo brown—all at one low price. Call your General Electric radio \$24.95* distributor, today!

General Electric Co., Receiver Division, Schenectady, N.Y.



AM-FM TABLE RADIO

Entirely new chassis. Two tuning systems, one for AM, one for FM. 7 tubes plus rectifier for real "pull-in" power. Two cold are power. Two self-contained antennas, new tone control, easy-to-read "sunburst" dial. Deluxe mahogany plastic cabinet. \$59.95*



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

You can put your confidence in...

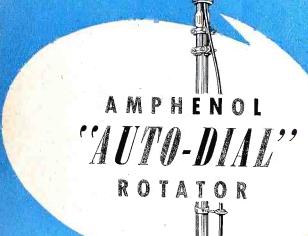
GENERAL



ELECTRIC







*Reissue Pat. No. 23,273

There's nothing equal to it . . . for perfect picture reception . . . the performance-proven design of Amphenol's patented "Inline" Antenna and the Amphenol "Auto-Dial" Rotator. The proved combination for the ultimate in television reception.

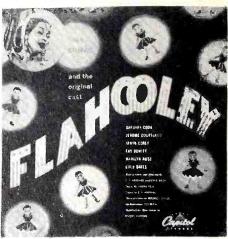
BUT—don't wait until the Fall rush. Check your future needs now to insure the best equipment for Fine TV Reception. Specify Amphenol "Inline" Antenna and "Auto-Dial" Rotator . . . a proved picture quality combination.

AMERICAN PHENOLIC CORPORATION
1830 SOUTH 54th AVENUE . CHICAGO 50, ILLINOIS



New Capitol Album

Capitol Records' new show album, "Flahooley," with the original cast of the show, featuring Yma Sumac, has been released. Topped by the four octave voice of Yma Sumac, the cast



includes Barbara Cook, Irwin Corey and Jerome Courtland. All the life of the play, with its mixture of toys, dolls, puppets and an Arabian genie, has been captured in this recording.

New Packages for Astron Capacitors

Astron Corporation, 255 Grant Avenue, East Newark, N. J., manufacturer of capacitors and noise suppressors, is now packing its products in the distinctive red-and-black cartons shown here. "Metalites", the famous metallized paper capacitors



which have earned such a great reputation for self-healing efficiency and amazing light weight, are now being packed in these new cartons; also many of Astron's varied line of dry electrolytics, as well as other popular Astron products. Latest Astron catalog may be had by writing the company.

To Represent EP&EM

Charles A. Hansen, of Jensen Mfg. Co., Chicago, was reelected by the Association of Electronic Parts & Equipment Manufacturers for a second term as EP&EM's representative on the board of directors of the Radio Parts & Electronic Equipment Shows: EP&EM's other representative on the board is John H. Cashman, of The Radio Craftsmen, Inc., Chicago, whose term expires in 1952.

 \mathbf{T}

YES, TWICE THE PROFIT OPPORTUNITY

Only SYLVANIA Gives You Both

NEW-Complete Line

GOLDEN JUBLIAB IV

The Greatest Sales Feature in Television

HALOLIGHT

The Frame of Light for Viewing Comfort THE GREAT IMPROVEMENT IN TELEVISION

Backed by the Most Powerful National Advertising and Merchandising Campaign in SYLVANIA History in National Magazines, Sunday Supplements, Newspapers, 2 Big Radio Shows and on Television. *Sylvania Trademark

STIVALIA PROSERVIS CELEBRATING 50 YEARS A NEW... COMPLETE LINE

Features that Sell
in Sets that Stay Sold
Because They Are
Sylvania Engineered Throughout

- Movie-Clear* Pictures
- Studio-Clear* Sound
- "Triple-Lock" locks out Interference
- Black Tube
- Wide-Angle Viewing
- Perfect Interlace
- Simplified Tuning
- Wider Band Width
- Slanted Picture Window
- Big Cool Long-Life Chassis
- Clear "Fringe Area" Reception



THE WASHINGTON—First in Television, Radio and Phonograph Combinations, first in complete home entertainment. Life-size 20" Movie-Clear* TV with HALOLIGHT. AM-FM Radio, 3-Speed Record Player. DeLuxe Traditional Mahogany Cabinet.



Styled to Sell
CABINETS BY LEADING DESIGNERS
Luxury Hand-Rubbed Finish
Traditional Woods and Modern Blonds

TV TABLE MODELS . CONSOLES . COMBINATIONS . RADIO



THE MADISON. Model 23B. 20° Deluxe Console. Featuring HALOLIGHT. Striking modern design by Sundberg-Ferar. Also available in blond woods.



THE LINCOLN. Model 75M. 17" Mahogany Combination. A smart, modern Movie-Clear* TV—FM-AM radio. Handrubbed mahogany cabinet illustrated. Also available in Blond.



THE McKINLEY, Model 74B. 17" Console with Doors. All the famous TV features of the Golden Jubilce line. Available in Mahogany.



THE ADAMS. Model 73M. 17" Open Console. An exceptional value in a big life-size console. Mahogany and selected fine woods. Also available in Blond.



MODEL 7111M. 17" Mahogany Table Model. Modern mahogany table model with matching front panel. Gold knobs and trim.

Golden Judice 1 of Engineering Progress! A COMPLETELY NEW FEATURE

HALOLIGHT

The Frame of Light for Viewing Comfort

THE GREATEST SALES FEATURE IN TELEVISION ONLY SYLVANIA HAS IT:

A Great Forward Step in Viewing Comfort and Your Great Profit Opportunity



Till now, TV screens have been surrounded with a dark border.



Now HALOLIGHT brings you a lighted frame to relieve the sharp contrast.

HALOLICHT is television's great new sales feature. This application of what scientists call "Surround Lighting," the modern method of illumination, to the television screen is a Sylvania Exclusive.

HALOLIGHT is a soft, cool border of light that surrounds the screen. It reduces the contrast between the brilliant screen and the darker surroundings for great viewing comfort. Your customers will tell you HALO-LIGHT makes the picture look larger, seem clearer.

And HALOLICHT is its own best salesman; a shining display day and night in your windows and on your floor selling television's newest great feature and greatest profit opportunity. HALOLIGHT sells HALOLIGHT.

THE JEFFERSON. Model 24M. 20" Deluxe Console with Doors. Featuring HALOLIGHT.

OCK . THIS YEAR'S BIGGEST NEWS FOR EVERY TELEVISION DEALER



IODEL 1210X. 16" Maogany Table Model. An outanding value in Movielear* TV. All 12-channel ception. Two-control tunog.



THE COOLIDGE. Model 2221M. 20" Life-Size TV Mahogany Table Model. For those who want the finest in a Table Model, this giant 20" TV brings clear reception in "fringe areas."



MODEL 72B. 17" Mahogany Table Model. Handrubbed mahogany cabinet with gold trim. Also available in Blond.



THE MONROE. Model 7150. 17" Movie-Clear* TV. AM-FM radio. Three-speed record player, hand-rubbed period cabinet.



RADIO-CLOCK. Model 541. AC-DC. Alarm Clock-timer. Plastic cabinet in Ebony, Mahogany. Ivory and 5 Guild colors.



TABLE RADIO.
Model 511. AC-DC
Radio. Available in
same colors as RadioClock.

SYLVANIA SELLS FOR YOU

ITS GREATEST ADVERTISING AND MERCHANDISING CAMPAIGNS
TO BACK THE GREATEST FEATURES IN TELEVISION

COMPLETE - COMPELLING - UNCEASING ALL SEASON

FULL COLOR-FULL SCHEDULES



OVER

4 BILLION
IMPRESSIONS

This Week
This Week

NATIONAL MAGAZINES

SUNDAY SUPPLEMENTS

SELLING SYLVANIA



SAMMY KAYE

SHUANIA SUNDAY

SERENADE

SERENADE

TWO GREAT RADIO SHOWS

ABC

GRANTLAND RICE SYLVANIA FOOTBALL BROADCAST

Hear Sammy Kaye's SYLVANIA SUNDAY SERENADE Sunday afternoon over your local ABC radio station starting Oct. 7th. and BEAT THE CLOCK
ON TELEVISION—CBS-TV

SELLING SYLVANIA

Hear Grantland Rice SYLVANIA FOOTBALL FORECAST over CBS radio stations starting September 28th...

AND STORE MERCHANDISING PROMOTIONS THAT TIE IN TO EVERY NATIONAL CAMPAIGN

ı	Full Color	Counter	Window	Date 1	1 4	1				
				Retail Promotions	Car Cards	Outdoor	Retail	TV	Radio	Ì
į						Posters	Adv.	Spots Sp	Spots	-

YOU'LL SELL SYLVANIA

Established 1901 - Great Name in Electronics

Television Sets; Radio Tubes; Television Picture Tubes; Electronic Products; Electronic Test Equipment; Fluorescent Lamps, Fixtures, Sign Tubing, Wiring Devices, Light Bulbs; Photolamps; Radios. Sylvania Electric Products Inc., Radio and Television Division, 254 Rano Street, Buffalo 7, New York.

Arvin Distributor

A distributing branch to service Arvin dealers in metropolitan New York and portions of New Jersey has been announced. Known as Arvin Distributors, Inc., the branch is a wholly-owned subsidiary of Arvin Industries. Officers of the new corporation are Harlan B. Foulke, Pres.; M. F. Blakeslee, vice-pres.; Gordon T. Ritter, vice-pres.; T. Earl Robinson, sec.; and William Berg, treas.

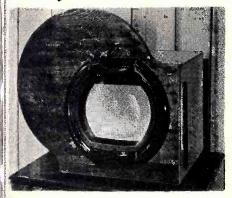
New Astron Reps

Astron Corporation, 255 Grant Ave., East Newark, N. J., manufacturers of the "Metalite" (metallized paper) capacitors and a complete line of dry electrolytics and other types for industrial and electronic applications, announced the following appointments of sales representatives: Jas. J. Backer, 2321 Second Ave., Seattle, Wash.; Kay Sales Co., 3760 Broadway, Kansas City, Mo.; and V. Avis McCorvey Co., 212 Mimosa Dr., Decatur, Ga.

Stromberg Holds Prices

The Stromberg-Carlson Company is guaranteeing its distributor net prices on all models in the current line until December 1st, 1951, according to C. J. Hunt, general sales manager radio-television division.

Crosley Color Converter



Pictured here is the Crosley color converter. A mahogany cabinet houses the color wheel. While the converter is tuned through the standard receiver, separate dials on the right control color brightness, focus hold and contrast. The unit uses a 10-inch screen with a magnifier, which brings the color picture up to 121/2-inch size.

Capitol Move to N. Y.

First stage in a "strengthening the Eastern markets" move by Capitol Records, Inc., is the recent transferring of key executive personnel to the company's offices at 250 W. 57 St., New York. Heading the new program is William H. Fowler, vice-president of Capitol and general sales manager of the distribution organization, who will also head the N. Y. office. Others assigned to the N. Y. office to further carry out the strengthening program are Paul Featherstone, vice-president of Capitol Distributing Corp., and William Wardlow.

Turner Appointment

The Turner Company, Cedar Rapids, Iowa, manufacturers of microphones and electronic equipment, announces the appointment of Les A. Morrow Company, 3123 West 117th St., Cleveland, as sales representative in Ohio, Kentucky, western Pennsylvania and West Virginia.

Circle-X Western Reps

W. F. Hickson, president of Circle-X Antenna Corp., announces that the Burt C. Porter Company, 729 Securities Bldg., Seattle, Washington, and The Herbert Sierk Company, 2705 Canton St., Dallas, Texas, have been appointed as manufacturer's representatives.

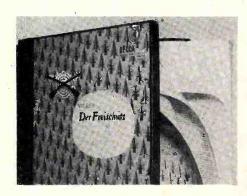
Honored for Serving 25 Years in Triplett Sales



Twenty-five years of service as Triplett sales reps was the milestone reached by three men honored at a company sales meeting in Chicago. Receiving 25-year watches from R. L. Triplett, president, were: (left to right) H. C. Sanderson, Pittsburgh; B. W. Heuvelman, Chicago; R. L. Triplett and H. M. Saul, Los Angeles.

Decca Releases New Opera Album

Decca Records' new Gold Label release, "Der Freischutz," three act opera by Carl Maria von Weber. Recorded in Europe by the Deutsche Grammophon Co., the album features the orchestra of the City of Berlin and the Berlin State Opera Chorus.



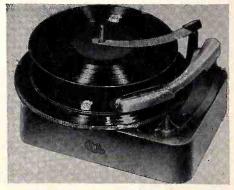
Four 12-inch long playing sides contain the entire opera, with a few minor abridgements. Also in the boxtype album is a complete German-English libretto. This "most German of all operas," with its store of huntsmen and supernatural things, should find high acceptance among opera lovers. List price on the album is

New Majestic TV Set

A new 20-inch table model TV set, model 20X, has been announced. The set features "Coloramic" filtering, which adds color to plack and white broadcasts. "Coloramic" is said to have stereo qualities, producing a three dimensional effect on the screen. Majestic Radio & Television, 385 Fourth Ave., New York, N. Y.—RADIO & TELEVISION RETAILING.

V-M RECORD CHANGER

Known as the V-M Tri-O-Matic model 920, this new three-speed record changer is mounted in a mottled mahogany plastic case. Features auto-



matic intermix on 10 and 12-inch records, and automatic shutoff. List price is \$39.95. Operates only as a plug-in attachment, is equipped with a six foot cord. V-M Corp., Benton Harbor, Mich.—RADIO & TELEVISION RETAILING.

Bringing in Those Fringe TV Signals

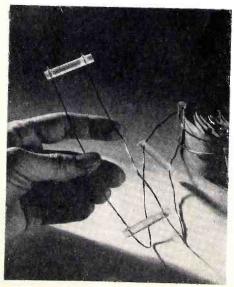
• A dealer recently visited by RADIO & TELEVISION RETAILING told us that a year ago the FCC had sent an engineering crew out to his town, which is 75 miles from the nearest TV station. The engineers took field strength measurements right in front of the dealer's store and told him, "This is not a TV area. You can't get station XYZ." But inside the store customers were watching station XYZ-TV!

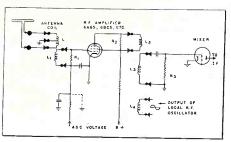
How did he do it? How do the dealers get stations out of the hash 70 to 130 miles, and in some cases, even further, from the transmitters?

First of all, these dealers have had to make usable pictures out of signals so weak that the signal-to-noise ratio was estimated by RADIO & TELE-VISION RETAILING at between 4 to 1 and 3 to 1. This is not a difficult job with a signal like CW, or even narrow-band FM phone operation. But people's eyes are much more responsive to interference with a complex signal such as a picture, than are their ears, with a simple, one dimension signal. Technicians and dealers in these true fringe areas have educated themselves in the use of highly efficient antennas.

In the area being spoken of above the yagi or the double yagi was employed in about 90 to 95% of all installations. There are usually only one or two stations to reach for in these locations of real fringe reception. Therefore the problem of getting high gain over several channels is eliminated. A very high gain antenna, such as a pair of folded dipoles with reflectors and directors, or a yagi, is not likely to be used successfully for long-distance TV on more than two

Open wire lead uses separators made by Plax Corp. to get extremely low loss transmission.





 $R_{1},R_{2},R_{3},$ loading resistors, may be changed in some cases to increase gain. AGC voltage may be removed from tuner by grounding AGC lead.

adjacent channels. And it is also unlikely that in such a situation there would be stations on adjacent channels in the same direction. (Due to the allocation plan.)

To obtain maximum gain a double stacked yagi is used. There is even a slight increase in signal strength obtained from the use of a four-stacked yagi array. Unfortunately, such an array becomes so heavy and cumbersome that it usually cuts down on the height to which the array can safely and securely be raised. Therefore most installers find that it is cheaper and about as effective to use no more than two yagis in one array, and to raise this array as high as possible.

Among the variations in yagi design is the number of elements used as directors. There is some small advantage to be had from the use of three rather than only two directors, and so it is not unusual to use three directors when trying to squeeze out that last db of gain.

Yagi Impedance Match

The most popular dipole design for the yagi is that which uses elements of different sizes to get a correct impedance match. In the case of a single yagi the top element of the folded dipole driven element would be about four times as large as the bottom (feed) element. For a stack of yagis, the diameter of the larger element might be about twice the size of the smaller.

So the antenna is usually one of those mentioned above, has fairly high gain (7-10 db over a folded dipole), and is quite directional. The antenna must be raised very high, of course. Guyed single masts up to 35 or 40 feet are not unusual, and triangular sectionalized towers are employed up to 80 and even 100 feet.

Use of a field strength meter to measure the amount of signal from the one or two stations involved will aid considerably in determining how

far to go in "souping up" the TV set. It must be remembered that readings taken on a relative field strength meter can be very misleading in extreme fringe areas, because anywhere from 20 to 40% of the signal input to the meter may be unusable noise.

Boosters can help reception under long distance conditions, especially if they are of the type which attempt to amplify only a single channel at a time. Best results are obtained with a booster tuned (peaked) to a specific channel in the shop and then mounted right at the top of the antenna. This will improve the signalto-noise ratio considerably at times, whereas using the same booster at the set often will bring no apparent improvement. In true fringe areas the local conditions change so much from day to day, and even from hour to hour that provision must be made for switching the booster on or off at any time. The wise technician or dealer will field test several boosters before selecting one. Many dealers have said that boosters didn't do much good, and further that there was no difference between one booster and another, except type of switching or cabinet finish employed. This would not be their reaction if the boosters had been tried under conditions allowing them to really go to work-at the top of the antenna.

Electronic Modifications

Having pulled in as many millivolts of signal as possible, the next step is to make the most of it. Here the tuner is the best place to attack the problem. All TV tuners today have RF amplifier stages. These are usually pentode stages employing a 6AG5, 6BC5, or 6CD6. Engineers rate these as hot, hotter, and hottest, when it comes to pulling in weak signals. These tubes all get low on amplification after many months of use, so replacement is the answer here. Also, the quality of these tubes varies considerably from one tube to the next, so far as this sort of application goes. Therefore it is wise to have a number of new tubes on hand when replacing tuner (especially RF amp or oscillator) tubes.

Modification of the bias setup is recommended in very weak signal areas. Most technicians remove the AGC entirely from the grids of the tuner tubes and run the AGC tuner lead to ground direct. This cannot be done if there is one station fairly close within normal reception dis-

(Continued on page 80)

3 Important Rauland Policies

...Are they paying off for you?

Did you know that Rauland's Replacement Picture Tube Warranty and Adjustment Policy provides a 6 months warranty from the date of purchase by the consumer? And that all Rauland replacement tubes now carry a triple registration card providing protection for jobber, dealer and consumer?

Did you know that Rauland provides a full 120-day price protection on distributor inventory of replacement picture tubes? That Rauland distributors can carry a stock adequate for their territories without risk of loss through price adjustment? Did you know that Rauland offers valuable premium points for the prompt return of warranty registration cards? Each card returned promptly entitles dealer and distributor to premium points redeemable in valuable merchandise prizes.

If you have not received full details on all of the above, write, phone or wire your distributing contact on Rauland tubes. If you have not received your prize merchandise catalog, use the coupon below today.

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Improving the Sound

These Modifications Can Better the Response

Part I of a Series

• For most American homeowners present-day FM-AM combinations are satisfactory, else people would not continue to buy them. But for a continually increasing number of consumers, many sets in the middle price range do not produce sound quality as good as these consumers would like. Yet new high-fidelity combinations are expensive, costing \$400-500, or more.

The wide-awake service department can step in and do a job on existing instruments that is highly profitable, and still save money for the customer. Modernizing his old set may mean only an hour's labor installing a high quality "tweeter" or loudspeaker. Or it may involve replacing everything except the cabinet (in the case of some inexpensive chassis installed in an impressive cabinet). Usually, though, the changer and tuner section of the set at least, and most of the time even the audio section, can be made use of. It is in such cases that the greatest advantages to both the service shop and the set owner are to be had from the improvements discussed in this article.

The first step to take in improving a set with inadequate or distorted response is to examine it carefully. If a small output transformer is noted, it may be that a larger, better quality transformer is all that is needed. But if the transformer looks OK, is working into a good loudspeaker, and has a pair of tubes driving it, then the circuit details must be checked.

Simple Repair May Do Job

The set may sound bad because of a change in value of almost any component, or perhaps because of a combination of values each just a few percent out of the way from the design centers originally engineered. Therefore a voltage check should be run on the audio stages with the manufacturer's voltage chart. Often changing one or two resistors to give proper voltage readings will improve the linearity and undistorted (5%) output enormously.

Assuming that the voltages are in line with manufacturer's specifications, the first improvements will be the addition of a good output transformer or of inverse feedback from the present transformer. If inverse feedback is presently employed, but the transformer has a small core, take note of the secondary tap which the feedback comes from. Then em-

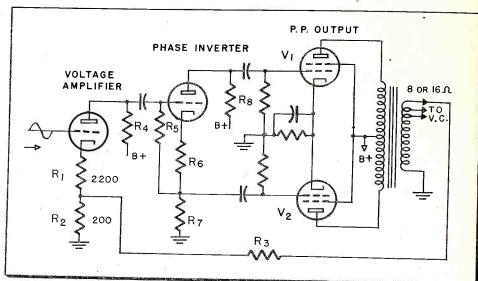


Fig. 1. In adjusting inverse feedback R_3 is a variable potentiometer. R_1 and R_2 may vary. Some designers recommend omitting R_2 and connecting R_3 to cathode. R_7 equals R_8 .

ploy the same tap on the new transformer, if the feedback is of the type which uses the transformer secondary.

The output transformer is most often the weak link in the set. Cheap transformers fail both at the low and high end of the band. They have a tendency to distort and attenuate frequencies over 5 KC. They also attenuate the transfer below 150 cycles very sharply.

Also, the speaker often has a pronounced rise in the near-bass region, between 180 and 200 cycles. This rise produces a thump, or "one-note" boominess, an effect which is often made use of to supply the impression of good bass. In fact, a great portion of the public has become so accustomed to this false bass that it sounds good to them!

If the installation is one in which a very high quality loudspeaker is to be used, then one of the top grade transformers, of broadcast quality, should be employed. However, in most situations a good medium grade (usually called "standard", or "commercial," which are better than "replacement" grade) output will do, being flat to over 10 KC and good within 4 or 5 db to 50 cycles. This is more than adequate for all but the very best loudspeakers. There is little point in paying for response of 1 or 2 db flat from 20 cycles to 20 or or 30 KC when it can't be used! Appended is a table showing the impedance and approximate price of output transformers for various pushpull output stages.

If a medium grade output transformer, correctly rated at 20-25 watts,

is run at 10 or so watts and less, it will usually display good power transfer characteristics.

If the output tubes are running wide open, that is, if no inverse feedback loop is applied around them, feedback can be added with the assurance that it will materially improve the performance of the receiver. Inverse feedback is one of the most powerful tools known for the reduction of the many types of distortion that arise in audio circuits.

There are many ways of adding this feedback, but the safest method, and the method which is employed today in all conventional top grade amplifiers will be outlined here.

Applying Inverse Feedback

In one of these methods a very small portion of the output signal is taken from the secondary of the output transformer and applied back to the cathode of the first voltage amplifier (or the stage just before the phase inverter). The procedure for determining how much feedback to use, and exactly how to apply it, is much easier than it may sound at first.

Referring to fig. 1, it will be seen that a 200 K potentiometer is connected from one side of the secondary to the un-bypassed cathode of the voltage amplifier. (Use the 8 or 16 ohm tap.) An oscilloscope (AC voltmeter will do—need not be VTVM; this is a low impedance circuit) is connected across the voice coil and a tone injected at the first grid, either from a phono test record or an audio generator. The potentiometer is va-

of FM-AM Combinations

and Performance of Any Amplifier

ried to reduce the resistance between the cathode and the secondary of the transformer to as small a value as is possible without setting up oscillation, and without reducing the gain of the amplifier too much. When the proper setting has been found the resistance of the pot is measured and a fixed resistor is soldered in place. Care must be taken before settling definitely on a value for the gain left for proper maximum output from the amplifier with the usual program materials, both radio and phonograph.

Alternate Feedback Method

Another method, safer where any but the very highest quality output transformer is employed, takes the feedback voltage off one of the pushpull output plates. In this case again, the feedback voltage is taken back to the un-bypassed cathode of the nearest (to the inverter) single-ended voltage amplifier stage. The pot used here should be larger, since the source of feedback voltage is much greater. Also, a blocking condenser of .1 to .5, 600 V. should be placed between the resistor and the plate.

Oscillation will be shown by any sudden large increase in the output at the secondary terminals. If the circuit oscillates at almost all settings with no signal going in at the input either the primary or the secondary connections must be reversed. This will reverse the phase of the feedback. (Or use plate of other p.p. tube.)

e.*)*

A more serious defect in some power output stages is the limitation placed on the low frequency output by an inadequate power supply. If this is due to a power transformer having insufficient voltage output, one having proper power and voltage rating may be put in. Such a deficiency may readily be determined by comparing the screen, cathode and plate voltages with the values shown in the tube manual.

Power Supply Changes

If the filter of the power supply uses one or two heavy resistors instead of chokes, the regulation and the efficiency of the power supply can be increased by substituting one or two iron core chokes for the resistors. This is a good modification if the applied voltage to the output tubes is not raised too much thereby. Most of the time this will not happen and the change can be made safely, but

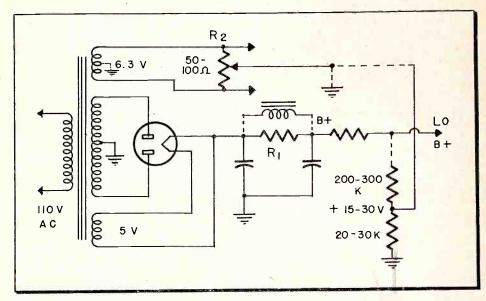


Fig. 2. Dotted lines show various methods for reducing hum due to design (not for hum due to component failures). 15-30 V may be applied to 6.3 winding centertap.

check the tube manual to be sure, before making the change. In raising the voltages applied to the screen and plate, be particularly careful to keep the screen voltages no higher than specified.

Another even easier way of getting a little better efficiency, cooler running, and more current out of the transformer without lowering the voltage output is to substitute a rectifier which draws less current for its heater supply. Where 5U4s have been used, usually a 5V4 will help. (This method should not be employed in the power supply section of television or other receivers, where the current drain on the original 5U4 approaches its nominal limit of 225 ma. The 5V4, being rated at 175 ma, is more than adequate for most audio amplifiers, but will become low on emission if made to supply most TV sets.)

Also, the slow heating properties of the 5V4 (and 5T4—a higher currentoutput tube) allow the other tubes in the set to warm up first, and thus keep from possibly straining the filter condensers. Furthermore, the 5V4 and 5T4 have lower internal impedance. Usually, simply plugging one in in place of the 5U4 will give from 5 to 15 volts more on the plates of the output tubes simply because of the lower voltage drop across the rectifier. This is a very easy and frequently effective way of getting a little better operation (check that tube manual) from the output stage.

Many economically designed combinations have condensers running from the plates of voltage or power amplifier stages to reduce oscillations which would otherwise be encountered. And it is frequently found that there are condensers or R-C combinations off the output tube plates. These measures are taken to reduce the operation of the amplifier at the extreme higher frequencies which can often result in distortion or singing. When a new output transformer has been installed all such counter measures should be removed. (Continued on page 80)

P. P. Output	Load (ohms)	Approx. Cost Medium Grade (20-25 watt)	Approx. Cost Top Grade Transformer
6L6 2A3, 6B4	6,600 3,000]	6.00	17.00
6A5, etc.	5,000	8.00	18.00
6V6	8,000	5.00	16.00
6K6	12,000	5.00	16.00
6F6	10,000	5.00	16.00

Theoretical Analysis of

Seventh in a Series of Articles.

By Solomon Heller

 In preceding articles, we took up the operation of the Foster-Seely discriminator. In this piece, we are going to discuss the ratio detector.

Some readers with inquiring minds may ask at this point: Why weren't engineers satisfied with the Foster-Seely discriminator? Why did they have to add another complicated circuit to the radioman's already large, involuntary collection of complicated circuits? Why, in short, didn't they let the status remain quo?

Well, the discriminator responded to amplitude variations like a woman does to flattery—not wisely, but too well (see fig. 1). The use of one or two limiter stages was therefore necessary to remove these undesired variations in the signal. Now, the presence of one or more limiters makes necessary a large amount of i-f gain, so that incoming signals will be boosted to the level required to saturate the limiter. (Only when the limiter is saturated will perform its job adequately.) It costs a bit of extra cash to provide the requisite limiting and i-f gain. If a circuit was present that didn't require so much champagne and caviar, the manufacturer might be able to put a little more of his gross intake into his piggy bank. The ratio detector provides such a circuit.

The ratio detector is considerably less sensitive to amplitude variations in the signal applied to it, than the discriminator. It therefore requires much less or no preliminary limiting of the signal, and less i-f gain.

Most explanations of the ratio detector tend to leave (some) readers with the feeling that they were AWOL when Nature's Radio Service Division distributed IQs. We hope that our explanation will not lower morale quite as much.

A typical ratio detector circuit is shown in fig 2. Note the small coil winding, L_T. L_T has the same func-

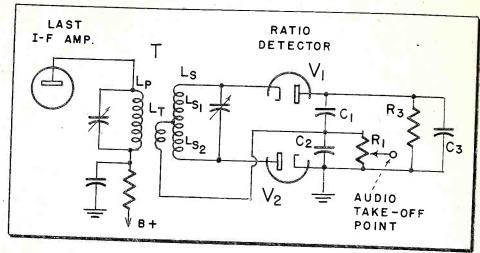


Fig. 2—Ratio detector circuit.

tion as the coupling condenser between primary and secondary of a discriminator transformer. It introduces a signal voltage across each half of Ls, differing in phase from the signal voltage transferred to $\boldsymbol{L}_{\!s}$ from L_P by inductive action. The operation of transformer T is, in other respects, practically the same as that of the discriminator transformer.

The output of the ratio detector is taken off across R1. The voltages developed across R₁ vary in amplitude in accordance with the frequency deviations of the incoming signal, and therefore correspond to the amplitude variations of the original audio signal. In the paragraphs to come, we will see how this desirable effect is made to occur.

Let us suppose that the signal applied to the input of the ratio detector at some given instant is an i-f carrier of 10.7 mc. No audio intelligence is associated with the carrier. No current will flow through R1 when the carrier is coming in, no audio voltage will be developed across it, and the usually garrulous speaker will be speechless at this time. Let's examine, in detail, what the circuit action would be in such a case.

At the carrier or center i-f, the sum of the voltages present across one-half of Ls would be to the sum of the voltages existing across the other half, just as in the discriminator. Let's say the signal is going through the portion of its cycle labeled A-B-C in fig. 3, making the cathode of V₁ positive with respect to the plate, and the V2 plate negative with respect to its cathode. No current will flow through either tube at such a time. When the signal reverses its polarity on the next half of the cycle (C-D-E), however, the cathode of V₁ becomes negative with respect to its plate, and the plate of V₂ becomes positive with respect to the cathode. Current will now flow through both tubes.

The ratio detector, thus, acts as a half-wave rectifier. This is desired, because the detector's audio output should, like the original audio signal it is duplicating, be uni-directional, as we explained in a preceding article.

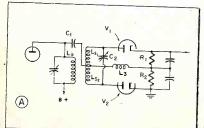
For the reader who may have lost his bearings a few sentences ago, we offer a St. Bernard and some brandy, in the form of the simplified sketches given in fig. 4. Note that when the signal makes the top of L_{s_1} negative

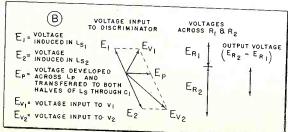
Fig. 1—Why the discriminator is sensitive to amplitude variations.

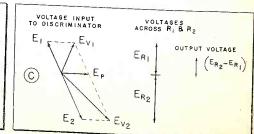
A—Discriminator circuit.

B—Voltage input and output of discriminator when no noise affects the amplitude of the signal applied to the discriminator.

C—Voltage input and output of the discriminator when a noise pulse has increased the amplitude of the incoming signal shown in B, causing E, to increase. Note that the output voltage is changed. This change is proportional to the amplitude of the noise pulse, and thus causes the pulse to be reproduced in the discriminator output, along with the audio information.







the Ratio Detector

How a Widely Used FM Demodulator Operates

(with respect to ground), the bottom is made positive. The induced signal current in this case flows from the top of L_{s_1} to ground, or from — to +). The plate, which is attached to junction of L_T and C₂ through C₁, therefore becomes positive to cathode. friendly relations now established between cathode and plate permit a current to flow between them. Ditto for the plate and cathode of V₂, which have the polarities indicated in fig. 4B during the same instant of time. In the unfriendly half of the signal cycle, the Iron Curtain descends between plate and cathode of each tube, as we indicated earlier, and an embargo on current exists. Let's consider, in greater detail, the action that takes place when current does flow through V_1 and V_2 .

One path of the diode plate currents is as follows: From the cathode of V₁ (refer to fig. 2) to the V₁ plate, through R₈, to the cathode of V₂, to the plate of V2, through Ls, back to

cathode of V₁.

Other diode plate current paths are: From V₁ cathode to V₁ plate,

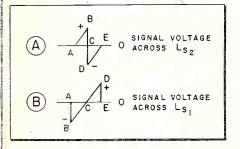


Fig. 3—The signal shown in B is actually the same as the one shown in A, except for the fact that it is upside down, due the phase version effect of the transformer.

through R_3 , R_1 , L_T , L_{S1} and back to V_1 cathode. Also: from V_2 cathode, to V_2 plate, through L_{s_2} , $L_{\scriptscriptstyle T}$, $R_{\scriptscriptstyle 1}$ and back to V₂ cathode.

Note that the two currents just described both flow through L_T and R₁. Note further that the direction of the two currents is such that they will oppose each other in L_T and R₁. If the opposing currents are equal, they will cancel, and no diode current at all will flow through R1 and LT.

This is the situation that prevails when the i-f carrier is coming in. The currents are equal in such a case because: a) the plate-to-cathode voltages that cause them to flow are equal; b) the diodes that supply the currents have equal emissions, and c) the impedances in the paths of the two currents are equal (the plate resistance of V_1 = the plate resistance

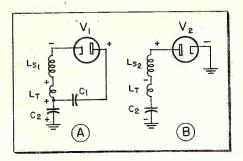


Fig. 4—When the signal voltages makes the top of $L_{\rm S1}$ positive, the $V_{\rm 1}$ cathode becomes negative with respect to the plate. B) When the signal voltage makes the bottom of $L_{\rm S1}$ negative, the $V_{\rm 2}$ plate becomes positive with respect to the cathode.

of V_2 , $L_{s_1} = L_{s_2}$, and L_T and R_1 are common to both current paths).

No voltage, then, appears across R1 in these circumstances, and there is no input to the audio stages.

When side frequencies, or frequencies above and below the i-f carrier, come in, the situation changes. The two currents that flow through R1 are no longer equal, and therefore do not completely cancel. A residual or left-over current will now flow

through R1.

When V₁'s plate-to-cathode voltage is greater than that of V2, V1's current will cancel that of V2 in R1, and there will be some V₁ current left over. This V1 residual current will cause a positive voltage to be developed across R₁ (fig. 5). When V₂'s plate-to-cathode voltage is greater that that of V₁, the V₂ current will cancel that of V1, and V2 current will be left over, causing a negative voltage to appear across R₁.

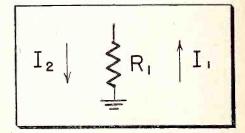
These positive and negative voltages are proportional to the amount of residual current flowing through R₁. The amplitude of the residual current is, in turn, proportional to the frequency deviation of the i-f signal (just as the amplitude of the residual or difference voltage in the discriminator output circuit is proportional to the frequency deviation of the i-f signal). The amplitude characteristic of the audio signal is therefore reproduced. The frequency characteristic of the audio signal is reproduced as well, because the ratio detector's output signal varies in frequency at the same rate as the i-f input signal—in other words, at an audio frequency rate.

For readers who remain curious as to why the amplitude of the residual current through R₁ is proportional to the frequency deviations of the incoming signal, we offer the following explanation: 1—The frequency deviations of the incoming signal cause proportional changes in the voltages applied to diodes V1 and V₂. That is, the plate-to-cathode voltage of one diode will rise a certain amount, while that of the other diode goes down the same amount, in proportion to the frequency deviation of the signal. 2—The greater—or smaller—the plate-to-cathode voltage of each diode, the greater-or smaller -will be its plate current. 3-The greater the difference in the plateto-cathode voltages of the diodes, the greater will be difference in the currents flowing through both, and the greater will be the residual or difference current flowing through R1. 4-Therefore, the current flowing through R1 is proportional to the frequency deviation of the incoming signal.

We now come to an important, basic characteristic of the ratio detector. This is the fact that, although the voltage across R, is constantly changing, the voltage across R3 remains the same (provided the carrier amplitude is not changed by tuning in another channel). It remains the same because of the long time constant of R3 C3. First we'll discuss why this phenomenon is important. Next, we'll analyze how it takes place.

In the course of our discussion, we have more than once inferred that amplitude variations in the FM sig-

Fig. 5—Two currents, l_1 and l_2 , flow through R_1 in opposite directions. l_1 tends to make the top of R_1 positive, while l_2 tends to make the top of R_1 negative.



nal were villains that had to be liquidated. This is so because amplitude variations are not part of the original FM signal, which is constant in output. The amplitude variations are imposed on the FM signal by good-fornothing troublemakers like noise, fading, etc.

The ratio detector may suffer these amplitude variations to appear at its input. At its output, however, they are swallowed up, so to speak, in the yawning cavern of C₃, and permitted to affect neither the voltage across Rs, nor that across R1.

Let's get a little more scientific, (Continued on page 92)

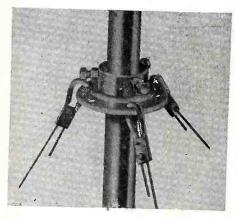
New Aids for Servicers

Smith ANODE EXTENSION

An extension cord for bringing the high voltage lead from the TV cabinet or for servicing the chassis outside the cabinet with the tube still in place is being marketed now. 30 inches long, with a receptacle for the anode cap of the set at one end and the extended anode cap at the other end, it is made by the Herman H. Smith Co., Inc., 405 44th St., Brooklyn, N. Y.—RADIO & TELEVISION RETAILING.

Easy-Up POLE RING

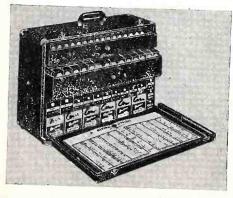
A new heavy duty rotating pole ring, Model E-Z10, has been added to the line of E-Z pole hardware. This device mounts on the antenna pole as an an-



chor for guy wires, and is adjustable to fit from 1" to 2" poles. The inner ring mounts to the pole with heavy bolts and the outer ring is free to rotate. Dealer cost for this all-steel, zinccoated ring is \$1.95 from Easy-Up Tower Co., Racine, Wisc.—RADIO & TELEVISION RETAILING.

RMS TUBE CARRIER

A new carrier for TV service tubes for outside calls is being made of plywood, finished in leatherette with metal corners. It holds over 200 tubes. Available with or without a mirror in the lid



for use in adjustment of the picture in the home, the model TC-1 and TC-2 (mirror) are available from Radio Merchandise Sales, Inc., 1165 Southern Blvd., New York 59.—RADIO & TELE-VISION RETAILING.

Hy-Lite FM YAGI

Designed for reception on specific channels, the Hy-Lite TV yagi line has now been supplemented with another type "Y" yagi antenna which is for the FM band. Pre-assembled construction allows these four element antennas to be quickly locked together for use. Model "Y2" 8 element yagi includes a matching Q section. Due to design of the two parts of the driven element, these antennas are stated to be a very close match to 300 ohm lead-in. Model "Y" FM yagi lists for \$14.20 and model "Y" FM yagi lists for \$14.20 Hy-Lite Antennae, Inc., 528 Tiffany St., Bronx, N. Y.—RADIO & TELEVISION RETAIL-ING.

Triplett LOAD-CHEK

Servicing by power-consumption is possible with this watt-volt meter. Previously auto radios have been serviced by this method, but the maker claims that this new meter makes the use of this method fast and easy in both radio and TV servicing. A bulletin describing the use of the meter in detail, as well as its characteristics, is available from the manufacturer, Triplett Electrical Inst. Co., Bluffton, Ohio.—RADIO & TELEVISION RETAILING.

Mallory VIBRATOR TESTER

Adding to its filtered rectifier power supplies another aid for auto radio service, Mallory announces a direct test (without adaptors) vibrator tester which, the company says, will test most vibrators for cars or radios made since 1940. By plugging the rectifier tube



into the front panel of the instrument, the suspected vibrator may be checked with the same rectifier used in the radio. Operates from any 6 V DC source. P. R. Mallory & Co., Inc., Indianapolis 6, Ind.—RADIO & TELEVISION RETAILING.

NU PIX TUBE CHECKER

A new portable picture tube checker has just been introduced. Designed for testing tubes either in the set or in the carton without removal, this tester makes all the usual tests, including one which checks the light output capability. All types of picture tubes are covered. Claimed to be so rugged that it will not be damaged by dropping, it costs \$28.75 net to dealers from National Union Radio Corp., Orange, New Jersey.—RADIO & TELEVISION RETAILING.

Superior BAR GENERATOR

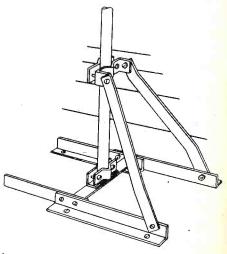
Providing a sweep generator for servicing and checking linearity faults of TV sets, this new instrument generates a pattern of bars either vertically or horizontally across the screen of any TV receiver. Thus work can be done on sets which otherwise would require the



use of a station signal off the air. The generator is connected to the set at the antenna terminals and may be tuned in by using the regular channel selector. Sold through jobbers for \$39.95 by Superior Inst. Co., 227 Fulton St., N. Y. 7.—RADIO & TELEVISION RETAILING.

Phoenix MOUNT

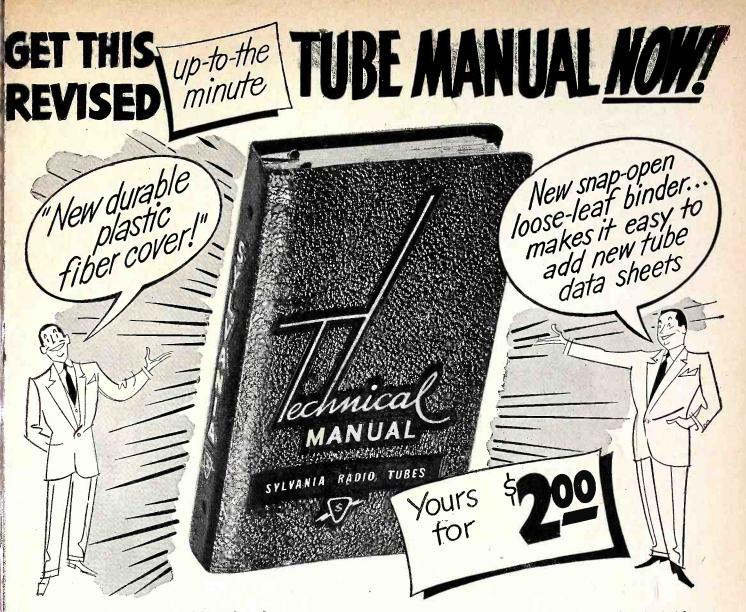
A new universal antenna mount, model PAM-3, is made of heavily plated steel. This mount is designed for use on flat or peaked roofs, or sloping roofs



of any pitch. It is braced especially to withstand damage from sleet and storms. Assembled with all hardware, and built to accept masts from 1" to 1½" dia. Phoenix Electronics, Inc., Lawrence, Mass.—RADIO & TELEVISION RETAILING.

Taco ISOLATION BOX

For use with antenna distribution systems for TV, this box will isolate the TV set connected to it by an isolation factor stated to be at least 30 db. Mounting holes are provided for either baseboard or wall concealed mounting. It is made of bakelite, and is the same size as the standard outlet box. Technical Appliance Corp., Sherburne, N. Y.—RADIO & TELEVISION RETAILING.



Offers complete reliable tube data . . . required by radio and television technicians and electronics engineers.

In these days of television, new tube types are introduced nearly every week. Here at last is a tube manual that will keep you always up-to-date.

It's the 8th edition of Sylvania's famous "Technical Manual" in the same convenient 5½" x 9½" size BUT WITH A BRAND NEW PLASTIC FIBER COVER AND SNAP-OPEN LOOSE-LEAF BINDING.

More than 80 new tube types have already been added to this new 8th edition, including all current TV picture tubes.

Typical pages show tube base diagrams, give physical specifications, ratings, typical operation data and curves, application and design details. Tubes listed in numerical order for quick, easy reference.

Bound in durable plastic

New, convenient loose-leaf plastic binder enables this

manual to open easily and lie flat on your bench. Quick, snap-open feature permits insertion of additional data sheets. These sheets...already punched for your book...are periodically mailed to you FREE as inserts in "Sylvania News," Sylvania's free monthly magazine.

Your Sylvania Distributor has these Manuals NOW.

Your Sylvania Distributor has these Manuals NOW. Get your copy from him today or mail the coupon with \$2.00 for each copy ordered.

Here are just a few of the New Tube Types added to the 1951 Manual

AS6	6BG7	25W4
6AX6	12AU7	1274
6BA5	12BN6	5642
6BF7	19BG6	5692
6BQ7	25AU5	5719
	6AX6 6BA5 6BF7	6AX6 12AU7 6BA5 12BN6 6BF7 19BG6



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Enclosed blea	ase find \$2.00 for a copy of ania Technical Manual.
Name	

RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; FLUORESCENT TUBES, FIXTURES, SIGN TUBING, WIRING DEVICES LIGHT BULBS; PHOTOLAMPS; TELEVISION SETS

FM Sound

(Continued from page 75)

The most commonly employed method for 60 cycle hum is the use of a wire-wound pot across the heater winding of the power transformer and the adjustment of the center tap connection to ground for minimum hum level. See fig. 2. This is usually effective, but in high-gain preamplifiers additional steps may be called for. Instead of grounding the adjustable tap of the 50 or 100 ohm pot, it may be connected to a point of 15 to 25 volts positive. This potential is easily obtained by bridging two 14 or 1/2 watt resistors across the B supply. Typical values are 20 to 30 K and 200 to 300 K. Fig. 3 shows this connection clearly. The placing of a positive voltage on the heaters ensures that there will be no heater to cathode emission. Since the heater is made positive in relation to the cathode, current can flow, if at all, only from the cathode.

(To be continued in a future issue)

Fringe TV

(Continued from page 72)

tance, because the set would overload badly. A switch could be installed if desired, however. In extreme cases it will be helpful to remove or at least reduce by 50 to 75% the amount of AGC applied to the video IF stages.

Slight reduction of the bandpass of the IF stages can be made to increase the gain of the TV receiver. This is not nearly as effective with the big screen sets as with the smaller ones because of the loss of definition which results with less than 3 mc bandwith. The tuner bandpass can almost always safely be altered by removing (or increasing) the loading resistors across the coils. The bandwidth acceptance of most tuners is presently somewhat wider than that of the rest of the set. so careful changes here will not ordinarily affect the quality of the picture.

Most manufacturers are very helpful in answering questions as to the specific steps to take in modifying their tuners. A combination of the above tried and tested methods will frequently prove effective in bringing in usable pictures in areas where "they said it couldn't be done!"

Same Hytron Policy

Hytron Radio & Electronics Co., a Division of Columbia Broadcasting System, Inc., will continue management and general policies the same as before the recent acquisition by CBS, according to Bruce A. Coffin, president.

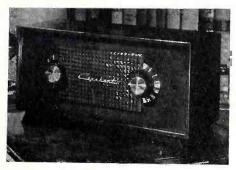
New Radio, TV Sets

GE TABLE RADIOS

Five new General Electric table radios have been introduced. Model 414, in brown, model 415 in ivory, and model 416 in red, list at \$24.95. Model 422 in brown, and model 423 in ivory, list for \$34.95. All cases are plastic. General Electric Co., Electronics Park, Syracuse, N. Y.—RADIO & TELEVISION RETAILING.

Capehart TABLE RADIO

Recently announced table radio, model T-30, has a cabinet of moulded thermoplastic in dark green, with a luster



finish. Chassis uses four tubes and a rectifier. Suggested list price is \$32.95. Capehart-Farnsworth Corp., Ft. Wayne, Ind.—RADIO & TELEVISION RETAILING.

Meck COLOR TV UNIT

A new "Add-a-Color" unit has been announced. Price of the unit has not yet been set, but it is expected to sell for less than \$150. All Meck TV sets made since Jan. 1, 1951 are equipped



for plug-in connection of the unit. It is adaptable to other makes of black and white sets after a connector socket has been installed and certain wiring changes made in the receiver. John Meck Industries, Inc., Liberty St., Plymouth, Ind.—RADIO & TELEVISION RETAILING.

Stratford CORNER TV

Kitchen corner TV cabinets designed and manufactured by Frank C. Doyle & Associates, Merchandise Mart, Chicago, are being used by Stratford Television Co. Sets are being built in 14 and 17-inch screen sizes. The 14-inch size will list at \$195 and the 17-inch at \$249.95. The corner cabinets will also be made in fine woods for the living room, etc. Stratford Television Co., Merchandise Mart, Chicago.—RADIO & TELEVISION RETALING.

Arvin 1952 TV LINE

The new TV line features 17, 20 and 21-inch rectangular tube sets. The 17-inch sets include: model 5170, console, and model 5171, table model, both available in mahogany or blond; model 5172CM, mahogany console, and 5172CB, blond console with doors; and model 5173TM, table model in mahogany. The 20-inch models are the 5204CM, mahogany console model with doors, and the model 5206CB, blond console. The 21-inch models are the 5210, console in mahogany or blond, 5211, table model in mahogany or blond, and the 5212CFP, console with doors in cherry. List prices on the line start at \$129.95, plus tax and warranty. Arvin Industries Inc., Columbus, Ind.—RADIO & TELE-VISION RETAILING.

Emerson TV RECEIVERS

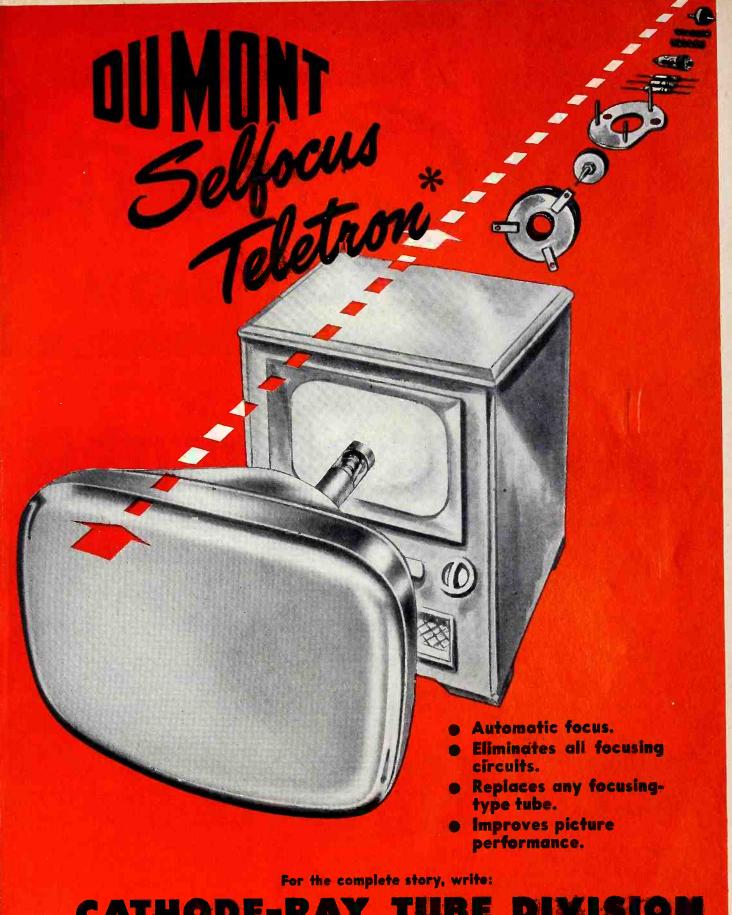
The new Emerson 1952 TV line includes model 696, a 17-inch mahogany table model at \$249.95; model 697, a 20-inch console, listing at \$349.95 in mahogany and \$359.95 in blond; model 686, 17-inch console, \$299.95 in mahogany and \$309.95 in blond; model 687, 17-inch console with doors, \$329.95 in mahogany and \$349.95 in blond; model



692, 20-inch mahogany console at \$399.95; model 693, 20-inch console with doors, \$429.95 in mahogany and \$449.95 in blond; model 694, also a 20-inch console with doors, at \$459.95 in mahogany and \$489.95 in blond; model 666, a 4-way combination, with 16-inch TV, FM and AM radio, and 3-speed phono, listing at \$429.95; and model 699, 17-inch console with 3-speed phono, \$349.95 in mahogany and \$359.95 in blond. Emerson Radio & Phonograph Corp., 111 8th Ave., New York 11, N. Y.—RADIO & TELEVISION RETAILING.

Magnavox TV SETS

Two new additions have been made to the Magnavox TV line. The Westover, a 20-inch console model with 12-inch speaker. Cabinet is mahogany. List price is \$359.50. The other new model is the Embassy, three-way combination, with 20-inch TV, FM-AM radio, and 3-speed phono. List price on the Embassy, in mahogany cabinet, is \$895. Magnavox Co., Ft. Wayne, Ind.—RADIO & TELEVISION RETAILING.



CATHODE-RAY TUBE DIVISION

ALLEN B. DU MONT LABORATORIES, INC. CLIFTON, N. J.

DALLEN B. BU MONT LABORATORIES. INC.

*Trade-Mark



The Name to Remember for

PRESTIGE and PROFITS!

It takes a top name to be a top drawing card. For hundreds of successful dealers that means the incomparable Capehart. This traditional symbol of quality can be depended on to bring in those of all income groups who want the finest.

Why? Because only Capehart has the Capehart reputation. Only Capehart offers the CX-33 chassis that provides the famed Crystal-Clear picture. Only Capehart has developed the world-renowned Symphonic-Tone System . . . set such high standards for superb cabinetry.

There may be a place waiting for you on the list of profit-making Capehart dealers. A few choice spots are still open. See your local distributor or write E. Patrick Toal, Director of Sales at Fort Wayne.



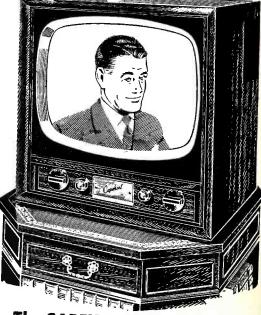
The best looking CLOCK-RADIO on the market—The Capehart Clock-Radio is not only an accurate timepiece, it serves as a timeless servant . . . reminds of appointments, turns on appliances. Really beauti-\$

fully styled in a circle of colors. A sure sales slightly higher in West.



The CAPEHART table model RADIO-True Capehart quality in miniature. Handsomely designed in dark green plastic ... unbelievably beautiful tone. It's set to make a big splash in the table-radio market . . . boost profits for you!

Slightly higher in West.



The CAPEHART "Bostonian"

Luxury television at a realistic price. 20-inch Crystal-Clear picture. Mahogany veneer cabinet. Capehart Symphonic-Tone. The set of the year for sales and \$ profits!

*Includes Federal Excise Tax, Warranty and installation extra. All prices for Zone 1.



CAPEHART-FARNSWORTH CORPORATION, Fort Wayne 1, Indiana

An Associate of International Telephone and Telegraph Corporation

2 New Trio Products

TRIO TV ROTATOR AND DIRECTION INDICATOR

TWO HEAVY DUTY MOTORS For Trouble-free . Two Direction Rotation

Here's the rotator that provides the ultimate in trouble-free dependable operation. Designed to support the heaviest TV arrays — even in 80 M.P.H. winds! This outstanding rotator has undergone extensive tests for three years, standing up under every abuse and temperature

Here, indeed, is the rotator that abolishes TV callback problems!

Two Heavy Duty Motors

Two 24 volt motors are used — one for clockwise and one for counterclockwise rotation. Even if children play with the unit and leave it on continuously, a motor cannot burn out since load on a single motor is never on more than 50% of the time!

Positive acting electrical stops at both ends of 360° turn eliminates lead damage.

Indicator always shows exact antenna position.

Compare These Features

- Cast TENSALLOY aluminum mast holder withstands 4500 lbs. bending movement.
- 11/16 steel shaft withstands 4500 lbs. bending move-
- Automatic Electro-Mechanical Brake reduces coasting to minimum
- Can be fastened to any pipe up to 2" OD
- Two direction rotation
- All-aluminum case -- no cast zinc!
- Numbered terminal boards on rotator and indicator
- Turns 1 RPM, lifetime lubricated
- Ball-bearing end thrusts on shafts
- Ideal for 10, 6 and 2 meter amateur use

NEW TRIO All Aluminum TOWER

Weighing less than a pound per foot, this sturdy, extremely handsome, all weather-proof triangular tower represents a great refinement in streamlined appearance and installation ease over all others. Its allaluminum components permit the most flexible arrangements for construction of the exact tower needed for any installation.

Tower may be raised from horizontal position in heights up to 40 feet. For additional height, sections may be added from bottom.

Comes in 5 foot sections, a bottom section, a top section and as many center sections as desired.

FEATURES

- Sturdy, Yet Light In Weight Less Than A Pound Per Foot
- Forever Rust Proof
- High Quality Extruded Aluminum
- · Interchangeable Sections
- Preferred Riveted Construction . . . No Welded
- Dual Swivel Base 180° and 360° permits vertical or horizontal plane mounting
- Low Installation Cost
- Completely Cartoned For Protection In Shipping
 Compact Storage

Dual Swivel Base 180° and 360°

CORPORATION THOMPSON

AFFILIATED WITH TRIO MANUFACTURING CO. GRIGGSVILLE, ILLINOIS

TRIO YAGIS Lead the Field...

TRIO DOUBLE FOLDED DIPOLE

(Model 304)

- Exact Impedance Match To 300 ohm Linel Sturdy Construction Light Weight!
- Partially Assembled!

TRIO 2-CHANNEL YAGIS

(Models 445 & 479)

Rapidly becoming the most popular — most wanted TV antenna in America. Available for channels 4 and 5, and channels 7 and 9. Provides gain on two channels equal to any two conventional 4-element yagit

- Full 10 db Gain On 2 Channels!
 Less Weight Per Gain Than Any Other TV Antenna!

TRIO PHASITRON Now available separately

Pattern TV Antenna
System, is now available separately for TV
set owners who want to get the very best results from their sets and antennas, or to hams and other experimenters.

PHASITRON acts as a continuously variable tuning stub and will provide an exact impedance match between line and booster and helpful in matching output impedance of booster to set input impedance. Due to exact matching, losses in line become negligible and set performance greatly improved.

May also be used to coordinate input from two or more antennas to provide added balanced output to set. Write for full details.

NEW TRIO TV ACCESSORY CONTROL UNIT

(Model No. RY-1)

A handy control unit that hides away in-side or in back of the





Pierce Leaves Sparton

The recent resignation of Henry L. Pierce, general sales manager of Sparton Radio-Television, division of The Sparks-Withington Company in Jackson, Michigan was announced by John J. Smith, Sparks-Withington Company president. Mr. Pierce has been Sparton sales manager since 1948, and prior to that was with Sparton as a district merchandiser.

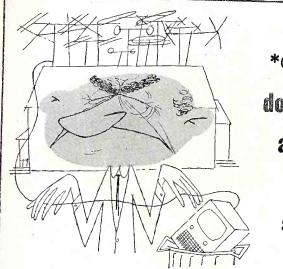
Andrews Retires From GE

Hardage L. Andrews, an executive vice-president of the General Electric Company, prominent in the home ap-

pliance industry, has retired from the company after 41 years of service, Ralph J. Cordiner, GE president, an-nounced. He will be succeeded by Robert Paxton, GE vice-president in charge of manufacturing policy, who has been elected an executive vicepresident by the board of directors.

Earl H. Kirk, former manager for Van Sickel Radio Supply Co., Radio-TV parts jobber in Indianapolis, has been appointed assistant sales manager for the Regency Division of I.D.E.A. (Industrial Development Engineering Associates), Indianapolis.





@!\$ hundreds of dollars for antennas and lost all the signal in the \$*!%! cad-in!

Don't nullify the advantages of costly antenna-receiver installations by loss of signal in the line. Specify the lead-in that's acclaimed everywhere; the line that guarantees lowest loss . . . holds the signal stronger on short or long runs ($\frac{1}{2}$ mile to mile with minimum loss) ... resists disastrous atmospheric conditions indefinitely!

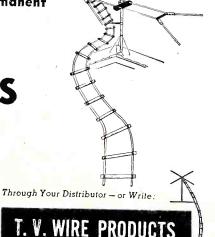
Next Time play safe with Permanent

and be assured of only

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NOW AT A NEW LOW PRICE:

Since its introduction, Open Line has taken the country by storm! Now, as the nation's lowest loss Open Line TV Wire, the tremendously increased production and demand has enabled us to reduce the list price substantially. Ask your rep to give you the good news!



V. WIRE PRODUCTS THE PERFECT FINAL TOUCH

TO QUALITY INSTALLATIONS

Now in Our New Home: 102 PROSPECT AVE., BURBANK, CALIF., RO 9-2562

FM Conversions

(Continued from page 71)

price of a new AM-FM table set.

Typical FM tuners have an RF amplifier, oscillator and mixer or converter, two or three IFs, one or two limiters, and a second detector. As shown in the diagram, a deluxe tuner may have twice as many stages as a simple one. The audio quality of a properly aligned tuner of whatever cost is about equal to the audio quality of most others, however. The expensive tuners will limit (give completely noise-free reception) on much weaker signals than the cheaper ones. The better tuners have special provisions for completely driftfree operation, or may have automatic frequency control, which provides an ease of tuning unheard of with any AM set. These are refinements which add much to the user's convenience, but they do not affect the actual sound quality when the set is properly tuned.

Typical Tuner Prices

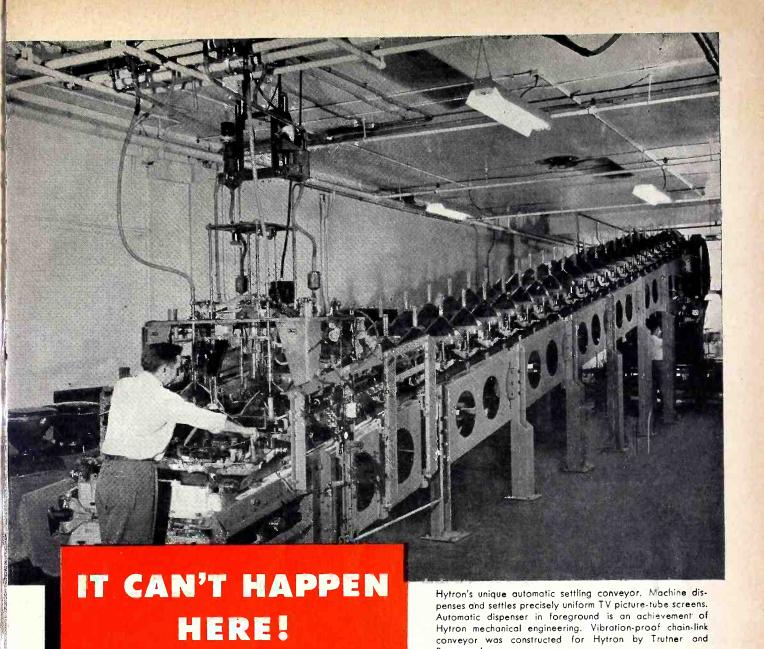
Typical cost of such tuners is from 40 to over 300 dollars. The sensitivity (amount of signal required to produce limiting) may range from about 10 microvolts to 150 microvolts.

The lower priced tuners give complete limiting with input signals of from 30 to 150 microvolts. The medium-priced tuners can bring in stations better (that is, with less static and interference) than can a great many present AM-FM combinations.

Which tuner to use for an FM conversion depends both on the customer and on his distance from the stations. In selecting an antenna it will also be necessary to consider the power output of the station and the sensitivity of the tuner.

People who have an FM set in the house are not apt to use it unless they know where the specific stations are on the dial. It is wise to have a list of local FM stations made up with the dial markings (which are universally in megacycles) shown, for handy reference until the customer learns the numbers. One enterprising dealer we know printed a log of ten FM stations on a flyer he sent out advertising FM conversions. He received 26 inquiries from 1500 flyers sent in three weeks. Some of these inquiries resulted in FM conversions, he told us, but, he pointed out, several of them even brought in sales of big combination FM-AM phonographs.

The dealer who is ready and able to supply any sort of conversion service, and who suggests it to the customer, is the dealer who will get those extra profits when they are needed



NO LIGHT SCREENS...NO HEAVY SCREENS... NO HOLES...NO UNEVENNESS

Another engineering first for you! Hytron's unique, automatic machine for dispensing and settling the screens of TV picture tubes.

What does it mean to you? A guarantee of the most uniform and finest-textured TV screens in the business. No light screens. No heavy screens. No specks from foreign particles. No unevenness.

Automatic dispenser pours exactly the right amount of chemicals into the big bottles as they travel slowly up the ramp. Conveyor's motion is so smooth a nickel standing on edge can ride it! Phosphors fall uniformly out of suspending solution . . . undisturbed — a "must" for perfect screens. Decanting or pouring off of chemical residue, loading, and unloading are equally shock-free. And there's precise electro-mechanical control throughout . . . with human errors barred!

That is why you can pick any Hytron picture tube. Depend on it. Any one will give you the finest screen money can buy. Yes, it pays to buy from Hytron . . . the most modern picture-tube plant in the world.





MAIN OFFICE: SALEM, MASSACHUSETTS

HYTRON EASY BUDGET PLAN

Boumans, Inc.



The easy way to sell picture tubes. No need to miss that profitable picture tube sale — just because your customer doesn't have the cash. Get the details on this original Hytron service for you.

Fill out and mail this coupon today!

	ase rush me dget Plan.	details	on the	Hytron	Easy
Na	me	(please	print)		
Str	eel				
Cit	y		St	ale	

New Manuals, Catalogs, Pamphlets & Booklets

RCA Victor Service Data volume VI provides in a single hard-cover book service and technical data on all 1950 RCA radio, TV, and combination sets. Containing 472 pages, priced at \$5.50, this permanent reference volume is available, as are the previous 5 volumes, covering sets back to 1923, from RCA distributors.

Standard Transformer's new TV catalog and replacement guide is now ready for distribution. Listing more than 1500 models under 79 brand names, this guide has the proper manufacturer's part number and the Stancor replacement number for the

8 to 10 major transformers and reactors in each set. Also out now is Stancor's mid-year catalog, listing and describing 441 Stancor transformers and related components.

Littelfuse, Inc., 4757 N. Ravenswood Ave., Chicago 40, now has an "Official TV Fuse Guide." This handy reference chart can be hung on the wall or carried in the tool kit. It lists most of the TV sets which have been marketed and indicates exactly which Littelfuse is the proper one for each.

The Electronic Parts Div., Allen B. Du Mont Labs., Inc., East Paterson, N. J. is now offering instruction for converting small-screen TV receivers

to the larger popular sizes of today. Step-by-step, easy-to-follow procedures have been so compiled as to make possible these conversions. Popular makes and models of TV receivers have been covered in these instructions that are available through Du Mont jobbers. The instructions give the procedures for installing the Du Mont Imputuner, deflection yoke, horizontal output and H.V. transformer and linearity and width controls.

Sprague Products Co., N. Adams, Mass. is now offering free of charge to servicemen the 3rd edition of its



TV Capacitor Replacement Manual. Stating correct Sprague condenser replacements for 964 TV sets, along with the manufacturer's original parts numbers, this manual also has a listing of handy TV replacement

capacitor service packages for the most widely used brands of receivers.

The BEST BOOSTER you can SELL!

SEC SIGNAL BOOSTER

Specifications

- Tube complement: Single 6J6
- Coverage: Channels 2-13, incl.
- In-put: 75-300 OHMS
- Out-put: 75-300 OHMS
- Current: 110-120V, 60 cycles
- Size: Height 41/4", Width 6", Depth 4"



AT LAST!

Here is a New Booster you can really get out and sell—a booster superior on all channels with a PLUS in high channel performance that opens new markets! Look at these exclusive SEC features:

1 UNEQUALLED HIGH CHANNEL PERFORMANCE!

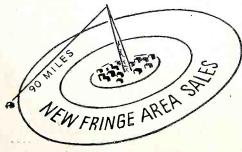
New techniques of tuned circuit design minimize loss of signal voltage on higher channels.

2 HIGH AMPLIFICATION with Low Noise and "Snow" Level.

3 UNQUALIFIED SUPERIOR PERFORMANCE!

Every SEC Booster is given Final Inspection by qualified engineers. Actual records show less than 1 return for every 1000 boosters shipped.

The extremely high efficiency of the tuned circuits provides the ultimate in gain, with the maximum of picture clarity. This feature is most noticeable on the high channels which have previously presented the greatest technical problems in the design of television boosters. The 16B is installed in a shielded metal cabinet and is finished in a manner to harmonize with all home furnishings.



Give Your Sales A BOOST-er!

Sell your biggest new market—the fringe area—with the SEC Signal Booster! Write or wire your sample order TODAY!

List Price \$34.95 (standard discounts apply)
Representation open in some areas

STANLEY SALES

OWENSBORO, KENTUCKY
600 West Third Street • Phone 3-6389

"Salesman of the Year"



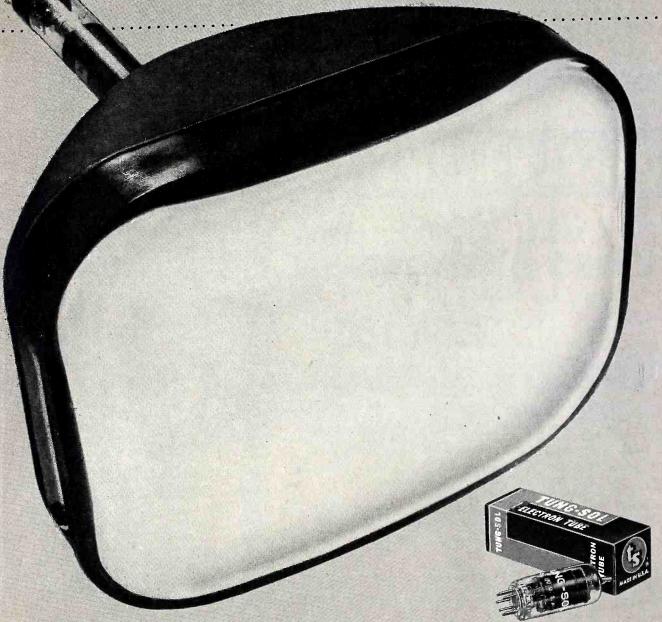
Shown at presentation of "Salesman of the Year" award to Sol Verter, salesman for Burlingame Associates, manufacturers reps, are (left to right): Henry Vitarelli, sales manager, Burlingame Distributor Division; Ira Kamen, director of sales, Brach Mfg. Corp.; Sol Verter, and Jack Grand, partner in Burlingame Associates.

Sealing GE's 24-Inch Tube



Watching the glass to metal cone sealing operation of General Electric's 24-inch cathode ray tube are Dr. W. R. G. Baker, right, vice-president and general manager of the Electronics Department, and J. M. Lang, left, manager of the Tube Divisions.

It's Tung-Sol for radio and tv



Quality -that keeps pace with the growth of the electronic industry

-that meets fully the performance requirements of all radio and tv set manufacturers

-that safeguards dealer service work

TUNG-SOL LAMP. WORKS INC., Newark 4, N. 1.—Sales Offices: Atlanta · Chicago · Dallas · Denver · Detroit · Los Angeles · Newark

Hotpoint Dealer Films

A new series of dealer film announcements for television and moving picture screens has been developed by Hotpoint, Inc. featuring allelectric kitchens and planned home laundries, John F. McDaniel, sales manager announced.

To Video Corp. Board

Edmund Callis Berkeley has been elected to serve for one year on the board of directors of the Video Corp. of America, New York. Announcement was made by George Kronengold, vice-president and director of sales for the firm.

New Jewel Reps

Jewel Radio Corporation announces the recent appointments of Charles E. Pheasant as sales representative in the State of Indiana and Murray D. Williams as sales representative for Georgia, Alabama, Mississippi and Florida.

Name Sales Manager

Electronic Creations Co., Inc., New York City, manufacturers of portable phonographs and tape-disc recorders appointed Milton C. Perlmutter to the post of sales manager, it was announced by I. Rothman, secretary-treasurer.



CBS-Columbia, Inc., showed its new combination color and black-and-white receiver, model 12C2 at the Music Show in Chicago. More than 3,000 people attended the demonstrations.

No Plans to Cut FM Band

In a letter to Josh L. Horne, WFMA, Rocky Mount, N. C., FCC Chairman Wayne Coy emphatically denied that the FCC is considering the deletion of the FM band or any part of it. He also said that the Commission is not considering allocating the FM band or any part of it to any other service. Coy said that "The approximately seven hundred stations now operating in the FM band is real testimony to the strength of the service," and he also pointed out that in almost every area of the country there is an unfilled demand for FM receivers.

May End Freeze Soon

FCC Chairman Coy stated before a Senate committee that he had hope of an end to the 3-year freeze on new TV stations by the last of September, 1951. Such action would allow hearings on the present 1200 station applications to be held.

Philson Enlarges Plant

The Philson Mfg. Co., Inc. of Brooklyn, New York has announced plans to enlarge its plant located at 60-66 Sackett Street in Brooklyn. A spokesman for the firm, predicts that the added space of 600 square feet will enable the firm to increase its output by as much as 20". Work on the expansion of the building has already been started.

New Bendix Distributor

Charles Freshmand and Co., 4019 Prospect Ave., Cleveland, has been appointed the Bendix TV and radio distributor for the Cleveland-Youngstown-Akron area, it was announced by R. W. Fordyce, general sales manager, Bendix Television and Broadcast Receiver Division, Bendix Aviation Corp.

New Meck Distributors

L. M. Sandwick, general sales manager of John Meck Industries, has announced the appointment of the following distributors to handle the Meck TV line: Carpenter Electric Co., 1825 N.E. 23rd St., Oklahoma City, Okla.; Circle Equipment Co., 233 Circle Tower Bldg., Indianapolis, Ind., Hedrick Electric Co., 207 7th St., Rockford, Ill.; Printers Supply House, 67-69 Mill St., Rochester, N.Y.; Refrigeration Sales Co., 1127 Carnegie St., Cleveland, Ohio; and Television Sales & Distributing Co., 209 S. Kentucky St., Evansville, Ind.





You're Out, Pop!

The New RAYTHEON TV Picture Tube Warranty Policy Fans Father Time for Distributors and Service Dealers

RAYTHEON TELEVISION PICTURE TUBES are warranted for 6 months from the date they are installed in the customer's Television set!

This means that a Raytheon Tube Distributor or Service Dealer can stock Raytheon Picture Tubes now without fear that the warranty will expire while the tube is in stock.



HERE'S HOW THIS EASY TO USE RAYTHEON **TUBE WARRANTY POLICY WORKS!**

Upon installation, a Tube Warranty Registration card (see picture) is filled out and mailed to RAYTHEON. That's all the Dealer has to do. RAYTHEON records the necessary data and mails a Tube Registration Certificate to the user. Tubes in use less than 6 months failing to give satisfactory service are returned to RAYTHEON with the warranty certificate and receive immediate adjustment.

Add this simple, easily operated Tube Warranty Policy to the superior quality of Raytheon Television Picture Tubes and you'll readily realize why the combination means no more tube

warranty trouble for you.





RAYTHEON MANUFACTURING COMPANY

Receiving Tube Division

Newton, Mass:, Chicago, III., Atlanta, Ga., Los Angeles, Calif.

RADIO AND TELEVISION RECEIVING TUBES, CATHODE RAY TUBES, SPECIAL PURPOSE TUBES, SUBMINIATURE TUBES, MICROWAVE TUBES

Excellence in Electronics

Money in Fringe TV Market Selling

By Ernest Keller, vice-president & sales manager, Anchor Radio Corporation

All of us in the television industry have been feeling to a greater or lesser extent the tremendous television sales slump which has plagued us since early this summer. Everyone in the industry is groping around in the dark for an answer as to who is to blame and what can be done about the situation. Before we make any suggestions as to new and profitable

TV markets, let us look at the reasons which have contributed to the current slump.

- (1) The Korean War which started over a year ago immediately brought on scare buying by the public.
- (2) Congress passed the 10% Excise Tax which added to the cost of TV sets. This further increased the abnormal demand on the part of those who bought ahead of the tax.
- (3) Congress also passed the tightened Regulation W. The people therefore were again stimu-

lated to buy sets before W went into effect.

- (4) The result of the before-mentioned, brought about a tremendous stampede of television sales which hit an unprecedented peak all within a few months. Those people, especially in the lower income brackets, who caused the stampede are now off the market as they have already bought their sets.
- (5) Another contributing factor which is responsible for the present slump was the manufacturer's decision to make large TV screen sets. Up to a year ago the great volume of set sales were those with 7", 10", and 12" screens. Last summer the manufacturers created markets for 16", 17", 19" and 20" sets. This naturally increased the price of TV and cut the market down for those buyers in the lower income groups.
- (6) Peak buying and the increased cost of television sets put a tremendous burden on the financing companies as well as on the banks themselves. A television financing company is allowed so many thousands of dollars to finance time payment buyers. Today, the banks will not increase the amounts of money to these television financing companies because the money, they, the banks, have invested is still out. The result is that the television dealers cannot take on additional down payment buyers which in turn again cuts down their market.

There is no question about it, TV sales in the large metropolitan sections of the country are at an all time low for the moment. A lot of people in the industry hold to the fact that there is a reluctance among the public to buy present television sets because they are afraid that they will be outmoded in the future by new color television sets or by the advent of the ultra high frequency stations. If anything, this should encourage dealers to continue to sell their present large inventory as color and UHF converters will be a very profitable item for them to sell in the future.

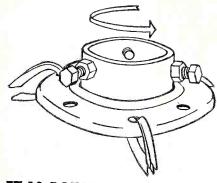
Metropolitan area television sales are not going to be down forever. But right now while there is a slump your most profitable market is in the rich vast TV fringe area from 25 to 100 miles outside of the primary receiving area. Almost half of America's people live in this great fringe area. Towns under 10,000 population and their trade areas represent 62.8% of all the families in the United States with a tremendous buy-everything market and money to buy. In fact,

(Continued on page 96)

When Installing TV Antennas



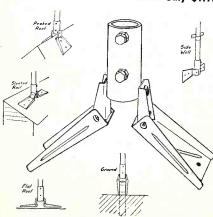
POLE FITTINGS OR TOWERS



EZ-10 ROTATING POLE RING

Stronger, neater, more versatile. Inner ring clamps on any pole up to 2" dia. and is free to rotate within outer ring to orient antenna. Choice of six locations for guy-wires. Allsteel, heavily zinc coated.

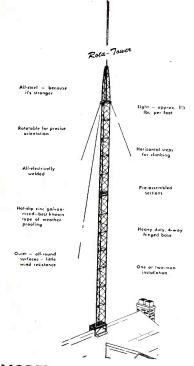
Dealer Price Only \$1.95



EZ-9 UNIVERSAL MOUNT

Mounts at any angle, tips up from any angle. Easiest, neatest way to mount antenna poles any place. Anchors poles up to 11/2" dia. If larger pole is used, up to 2", specify EZ-9A (slightly higher). All-steel, extra-heavy dùty, zinc coated.

Degler Price Only \$1.95



MODEL 300 ROTA-TOWER

Favorite tower of experienced TV installers be-cause it's built right in all respects. Combines high strength with light weight. Many features for quick, easy installation. Complete details on request.

Easy-Up Products are sold only through authorized jobbers and distributors

Easy-Up Tower Co. RACINE . WISCONSIN

RCA VICTOR

proudly presents the Aristocrat

of table-model radios

the "Livingston"



AM with 8-inch speaker

Now is the time to cash in on the swing to AM-FM table radios. Feature the RCA Victor "Livingston." When your customers turn on this attractive table radio, they're in for an amazing and pleasant surprise. For here is the finest tone we've ever offered in any table-model radio. The RCA Victor "Livingston" combines a superior FM circuit with the famous "Golden Throat" tone system to produce the year's outstanding table radio. Three-

gang condenser with tuned RF stage for greater selectivity and sensitivity.

Your customers will hear AM and FM stations through a powerful 8-inch speaker . . . and if they wish to play records, this RCA Victor (Model IR81) has phono-jack for plugging in the "Victrola" 45 attachment.

The RCA Victor "Livingston" is the AM-FM radio you and your customers have been waiting for . . . pleasure and profit a'plenty.

Has the Golden Wood tone system . . . the finest in RCA Victor History.

"Victrola"— T.M. Reg. U.S. Pat. Off.

RCA VICTOR RCA CONTROLL OF AMERICA

RCAVICTOR-World Leader in Radio . . . First in Recorded Music . . . First in Television

Save Time Save Money with these...

Mew STANCOR REFERENCES

The big new Stancor 1951 Mid-Year Catalog lists 441 Stancor transformers ... the most complete catalog line in the industry. All transformers, including television components, are classified and indexed so you can easily locate the unit you need. Each listing includes electrical specifications, dimensions, weight and list price. Clear illustrations show each mounting type in detail.

G 70

The 8th Edition of the Stancor Television Catalog and Replacement Guide provides you with quick, easy-to-read replacement information on 1511 TV models and chassis made under 79 brand names. All manufacturers are listed alphabetically and the models and chassis are listed in numerical order. A separate section lists all Stancor TV transformers and related components by part number.

Both of these up-to-date references are now stocked by your Stancor distributor, or write Stancor directly for your free copies.

AUDIOPHILES — Use Stancor transformers to build the famous Williamson High Fidelity Amplifier. Circuit diagrams and complete parts lists are available in Stancor Bulletin 382 at your Stancor distributor.



STANCOR Most Complete Line
in the Industry

STANDARD TRANSFORMER CORPORATION

3586 ELSTON AVENUE, CHICAGO 18, ILLINOIS



Ratio Dectector

(Continued from page 77)

before some engineer writes in to ask about our credentials. Now it is, or should be, fairly simple to see why the voltage across R_3 would remain the same when a constant-amplitude, noise-free, FM signal was coming in. The plate and cathode of each diode practically short-circuit when conduction takes place (due to the very low plate-to-cathode resistance, compared to the large load resistance) and a voltage pretty nearly the same as the input signal voltage that produced conduction, would be developed across R_3 .

Suppose now that this FM signal becomes noise-modulated, and C_3 is absent (fig. 2). The changing amplitude of the FM input signal would cause the amplitude of the voltage developed across R_3 to vary accordingly. The current through R_3 would change in consequence.

Now, the current through R_3 determines the current through R_1 (current through R_3 = the sum of the diode currents, or $I_1 + I_2$, while the current through R_1 = the difference in the diode currents, or $I_1 - I_2$. If the sum $I_1 + I_2$ changes, the difference $I_1 - I_2$ will also change). Therefore a change in the current through R_1 , proportional to the noise signal, will occur, and noise will be heard in the audio output.

By adding C3 in parallel with R3, the voltage across R_3 (and therefore the voltage across R_1) is not permitted to change. The voltage across R₃ cannot change any faster than C3 can charge and discharge. If the time constant of R₃ and C₃ is relatively large (as it is), it will take C3 a relatively long time to charge and discharge. Therefore, if a noise pulse momentarily changes the amplitude of the incoming FM signal, the shortduration variation in amplitude will not affect the voltage across R3, because this voltage cannot change quickly enough to reproduce the shortduration pulse. Only when a longduration change in carrier amplitude, such as occurs when a stronger or weaker channel is tuned in, will the charge on C3 change appreciably, and cause a change in the voltage across

R₃ and R₁. One final point remains to be explained, namely, why the ratio detector was given its name. In other words, why is the circuit called a ratio detector, rather than the Gwendolyn T. Vanderplush detector. The answer lies in the fact that the detector output varies in accordance with a ratio. This is the ratio of the voltage across R₁ to the voltage across $R_{\scriptscriptstyle 3}$. The voltage across $R_{\scriptscriptstyle 3}$ remains substantially constant, whereas the voltage across R₁ constantly changes. Therefore the ratio of the two is constantly changing.



Biggest Improvement To Single Channel TV Reception Since The VEE-D-X "J" Series Yagi

Here is the booster that the entire TV industry has been waiting for. The VEE-D-X Outboard is a single channel booster — delivers powerful 18 db gain with full 5 megacycle band width — yet it costs much less than any tuned booster on the market. Pre-set for any desired channel the VEE-D-X Outboard Booster fits snugly against back of any TV set — out of the way... out of sight... with no knobs or wires exposed to TV viewers. The unique RF assembly, heart of the booster, is precision engineered into a single unit. Compare the gain stability and other features! Compare the price! You will quickly see the tremendous market and sales potential of this sensational booster.

The LaPOINTE-PLASCOMOLD CORP., Windsor Locks, Conn.

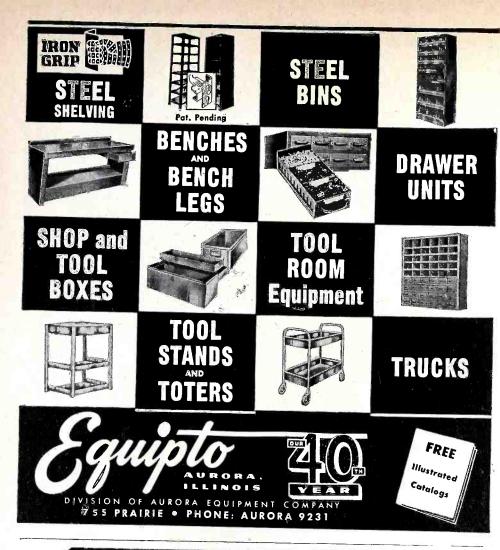


MAKERS OF THE WORLD'S MOST POWERFUL ANTENNA SYSTEMS

OUTSTANDING FEATURES

- ₱ 18 db gain with full 5 * megacycle band width
- © Costs less than any tuned booster
- Turns on and off with set automatically
- © Cannot oscillate has 6J6 push-pull cross-neutralized amplifier
- Out of sight no wires or gadgets showing
- Easily and quickly installed
- **® Unique RF assembly**
- Excellent signal-to-noise ratio
- Maximum gain on desired channel because individual plate and grid adjustments assure perfect alignment
- All metal case has beautiful Hammertone finish
- Fool-proof construction Install it! Forget it!
- Performance proven

*TV channel transmission 4.5 mc wide





For in the manufacture of capacitors—in the etching, slitting, and forming of aluminum foil; in compounding and handling electrolytic pastes; and in assembly, aging, and testing of an electrolytic product—nothing can supplant the expertness which comes from experience alone. This is the reason that the Planet employees shown above total more than 36 years of practical experience—the reason that Planet's key employees alone total more than 100 years.

This is the reason Planet electrolytics are acclaimed by engineers as "... Superior" — because they're made right!

Write today for complete information. Ask for our latest catalog, C-2.

PLANET MANUFACTURING CORPORATION 225 Belleville Avenue, Bloomfield, N. J.



RCA Color-TV Advances

Over a million TV set owners in the New York area during the week of July 9-14 were able to compare FCC-CBS non-compatible color TV on Channel 2 with the RCA-NBC compatible test broadcasts on Channel 4. On the NBC channel they received clean, sharp, contrasty black-white pictures; on the CBS channel they received a meaningless kaleidoscope of dancing dots and lines.

Hundreds of enthusiastic phone calls came to NBC, many saying the black-white reception of the color program was even better than standard

black-white transmissions.

Meanwhile, at Radio City, the press and interested industry representatives were viewing the programs in full color on RCA's new 21-inch color tube (12½ x 16½-inch picture, in color), as well as on the 16-inch color tubes previously seen. Simultaneously, standard black-white sets reproduced the color program as excellent black-white pictures. The new RCA colors showed additional improvement in life-like tints, and were declared to be equal or superior to any other color-TV system.

"Compatible color can be logically introduced into television broadcasting with advantage to exeryone and loss to none," said RCA president, Frank M. Folsom. "Proper introduction will assure a fertile base for a healthy growth of the entire television industry. During the coming months, the public will have an opportunity to see the RCA color system and judge its many advantages through our field tests. We also plan to send the color programs to other cities in network operation, linked with New York via radio relay stations or the coaxial cable."

Hytron Easy Budget Plan

Hytron Radio and Electronics Co., Salem, Mass., has come out with a financing plan to allow TV customers who need picture tube replacements, but who have no cash, to get the tube right away. Plan will also pay for service charges. The dealer or serviceman will get his entire bill paid in full, at once, and the customer does not have to make any down payment, Hytron states, under present government regulations. A national advertising campaign is being planned to promote the plan. Further details may be had by writing to Advertising Department, Hytron. Inquire about the Hytron Easy Budget Plan.

Admiral Service Branch

A service branch of Admiral Corporation's Boston Distributing Division has opened in Worcester, Mass., Clarence S. Tay, president of distributing branches, announces. Television technicians trained in factory methods of repair and handling Admiral TV products will join the new operation.

NEW PARA-CON ANTENNA COMBINES PARABOLIC & CONICAL PRINCIPLES



Sight Sells It

After all, people buy TV sets to enjoy the picture. It just makes sense that the antenna bringing in the best picture brings in the best picture brings in the best entertainment and the most customer satisfaction. Hook a Para-Con onto any set and you'll agree—it sells on sight.

Any TV Set Performs Better With a Para-Con Antenna

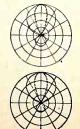
Every set performs better when conditions are better. Install Para-Con when older sets are starving for a stronger signal. Install a Para-Con when any set is being drowned in a sea of local interference. In the majority of set installations, Para-Con makes both old and new sets perform at their peak. To be on the safe side every time, install the sensationally performing new Para-Con antenna and forestall TV troubles at both the reception and the service end.

Proved in Thousands Of Installations

Spectacular success has been achieved in practically every installation. Even in locations far removed and in difficult terrain where other more elaborate arrays were tried and failed, PARA-CON aerials not only bring in brighter, clearer pictures but seize and channel in stations where dependable reception has not been possible with an ordinary antenna. Ward's new PARA-CON Antenna has been field tested in thousands of installations . . . proved far and away better.

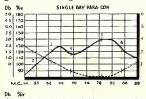
Singles Out The Stations High Front to Back Ratio

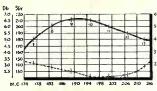
The new Para-Con design achieves an unusual capacity to obtain sharp directivity over all the television spectrum. Para-Con principles afford greater power and less interfering noise on each channel.



One Antenna Covers All Channels

The Para-Con antenna reaches out and grasps all channels. The Ward Para-Con has an exceptionally low standing wave ratio combined with a spectacular high gain advantage on all channels.





No Ghost Hunts

No more skeletons in your customer's TV closets. Scientifically determined direct impedance matching characteristics eliminate many ghosts. Para-Con's revolutionary design transfers the maximum power from the antenna to the receiver with a minimum of reflections.

Profit-Wise Dealers Prefer Para-Con*

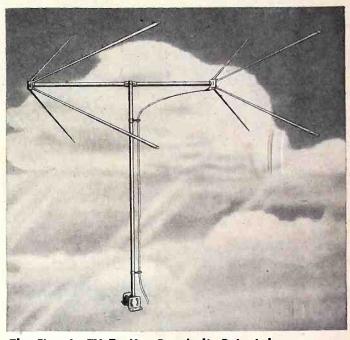
The antenna is one of the most important and critical components of a TV receiver. Nearly 20% of all TV service calls result from faulty antennas. The general all-around, high performance of Ward's Para-Con antenna gives customer satisfaction right from the initial installation. Expensive call-backs due to antennas are slashed. Ruggedly built for long lasting trouble-free service Para-Con withstands winds and weather. Easy to handle and quick to install ... saves time and expense.

See your distributor for Ward's answer to your antenna problems.

*Trade Mark

Solves 9 out of 10 Installation Problems—Challenges Comparison

Two best features are incorporated into one BEST antenna. The praiseworthy features conical type aerials possess for supplying full audio and full video bandwidth reception are used with a parabolic design that gives the Para-Con a concentration of signals. Para-Con is engineered to concentrate the maximum wave energy on the antenna by providing all-around, unmatched performance... perfect picture clarity . . . long customer satisfaction.

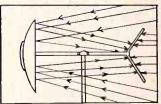


The First In TV To Use Parabolic Principle

Parabolic antennas have long been used in special applications for concentrating weak signals onto driven elements. The brilliant results of Ward Para-Con are now setting new performance standards on all channels and in most every area. Ward's Para-Con Antenna is different. It's new. Now it is possible for one antenna to meet and solve many of the local problems of installation and reception.

Ideal For All Band Fringe Areas

In fringe areas where selection of a number of channels is available, Ward's stacked Para-Con models provide the ideal compromise antenna for maximum results on all bands. Stacked in either two or four bay arrays, the Parabolic design reflectors reach out, gather and concentrate maximum energy on the antenna elements.



Diagramatic sketch showing how parabolic reflectors gather in and concentrate energy on conical elements.

PARA-CON (Combining Parabolic and Conical Principles) ANTENNAS

THE WARD PRODUCTS CORPORATION, Division of The Gabriel Co.
1523 E. 45th Street, Cleveland 3, Ohio
IN CANADA: ATLAS RADIO CORP., LTD., TORONTO, ONT.

Fringe Selling

(Continued from page 90)

in 1947 fringe area residents spent 40 billion on clothing, radios, washing machines, vacuum cleaners, toasters, cosmetics, tools, plumbing supplies, furniture, carpets, automobiles, tires, etc. These people are crying for TV sets and they'll buy receivers at regular prices providing they can receive good reception. It's up to you, Mr. Retailer, and to you, Mr. Serviceman, to see that they can get good reception. There are many good antennas and boosters on the market that your jobbers can supply you, which will cinch a TV sale in this fat profit fringe area.

The job must be approached intelligently however. It will certainly be worth your while to carefully select several outside salesmen. These men would be hired on the basis of native selling ability (know-how); they should be well dressed and alert appearing and above all, they should be completely familiar with television, boosters, antennas, and how to make a demonstration. Untrained salesmen not only lose time but they lose sales. A pay plan should spur incentive, The compensation arrangement should be profitable both to the dealer and the salesman.

By the same token servicemen and

retail dealers operating service departments should hire technicians who have sales ability. Since the technician who goes into the home is looked upon as an unprejudiced expert, must not only look the part but act the part and he should make the customer feel that any suggestions



Ernest Keller, vice-president and sales manager, Anchor Radio Corporation.

he makes are for the customer's own good and will actually give him the best television reception.

There are approximately at the present time 63 cities in the U.S. operating over 107 television transmitting stations. Your richest and best television markets are in the subur-

ban and fringe areas that surround these 107 stations. The members of our own organization alone can cite thousands upon thousands of cases where people living within a 100-mile radius of a television transmitting station want to buy a set but they have never heard that a booster can give them good television reception. Television sets can be sold with a good booster and a good antenna in these areas. Here is the most profitable 3-in-1 package you could possibly have. The market is there right under your nose . . . the residents are begging for television so get out of town before it's too late and hit the road to an untapped multi-million dollar TV market.

New Rep Firm

Samuel K. Macdonald, well-known manufacturers' representative who has been active in the electronic parts industry since 1929, announces the incorporation of his business, head-quarters at 1531 Spruce Street, Philadelphia 2, Pa.

Visits Sentinel Plant

Carl Crandall, Sentinel distributor in Detroit, believes in sales training. One step in his current "activation program" was to take all his wholesale men to the Sentinel factory so they could see first hand with their own eyes, how TV sets were built.











SANGAMO'S TV TRIO

Used as original equipment Tops for replacement needs

Sangamo offers three top television capacitors that you can use with confidence. You'll like these tested, *proved* performers for their quality, their small size and their stability.

The with—on production line or on the bench—because its strong, tough casing stands rough handling and the flexible leads can't pull out! It gives long life at 85° operation.

The CHIEFTAIN is a dry electrolytic that fits anywhere! Tiny, but durable, it is ideal for application in tight spots beneath a chassis. Bare tinned-copper wire leads make it easy to mount. Maintains uniform capacity when subjected to heat and high ripple currents.

The **SIOUX** is a 6,000 volt paper television capacitor with a new standard of permanence. Designed to withstand continuous operation at 85° C, it is mineral oil impregnated to provide longer life and more stable performance over a wide range of operating temperatures.

A trial of these replacement capacitors will convince you. See your Jobber . . . if he can't supply you, write us.









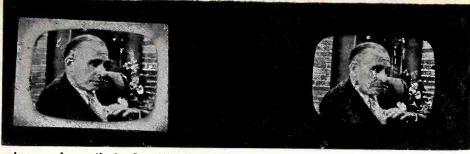
SANGAMO ELECTRIC COMPANY

SPRINGFIELD, ILLINOIS

IN CANADA: SANGAMO COMPANY LIMITED, LEASIDE, ONTARIO

8C\$0-7E

New TV Viewing Development by Sylvania Electric



Announced recently by Don Mitchell, president of Sylvania Electric Products, Inc., is the first application of "Surround Lighting," a principle long identified with the science of optics, to television sets. "A frame of soft, cool light," said Mitchell, "has been placed around the picture-screen. Our scientists believe that Halolight, as we call it, marks a new milestone in even greater enjoyment in viewing television."

New UHF Converter



J. F. Walsh, sales manager of Westinghouse Electric Corp., looks over the firm's new UHF converter. It can be connected to all Westinghouse TV sets now in use, to enable them to receive all UHF channels.

Capitol Vice-President



Lloyd Dunn, above, merchandising manager of Capitol Records, Inc., has been appointed a vice-president of the company, it was announced by Glenn F. Wallichs, president.

New Sylvania TV Line

The new Golden Jubilee TV line includes four table models: three 17-inch models, the 7110X at \$249.95, 72M, \$299.95 in mahogany and \$309.95 in blond, and a 20-inch model, 22M, at \$399.95. Four open faced consoles are: 17-inch set 73M (mahogany) at \$369.95 and 73B (blond) at \$379.95; and 20-inch Halolight model 23M (mahogany) at \$499.95 and 23B (blond) \$519.95. Seventeen inch console with doors is model 74M (mahogany) \$399.95, and 74B (blond) \$419.95. 20-inch console with doors, 24M, with Halolight, at \$529.95. Console combinations include the 17-inch 75M (mahogany) at \$549.95, and 75B (blond) at \$569.95, and the 20-inch model 25M (mahogany) with Halolight at \$659.95. In addition to these, 12 models have been carried over from the 1951 line. Sylvania Television, Buffalo, N. Y.—RADIO & TELEVISION RETAIL-ING.

Zenith "Royalty" Line

Five new TV models introduced by Zenith are called the "Royalty Collection." Model H2436Q, the Deauville, TV console in hand carved solid walnut cabinet, lists for \$1300. The Brittany, in hand carved walnut cabinet, is a combination, lists at \$1750. The Conquistador, combination in modern design walnut cabinet, also lists at \$1750. The Valencia, combination in bleached walnut, lists for \$1785. The Golden Harvest, combination in bleached mahogany, list at \$1925. All sets have 19-inch screens. Zenith Corp., Chicago 39, Ill.—RADIO & TELEVISION RETAILING.

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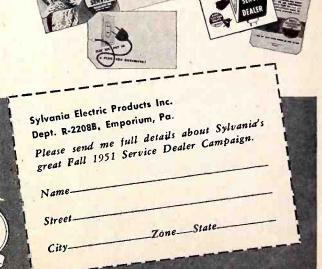
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Featuring 2 famous celebrities, Paulette Goddard and Patrice Munsel, this campaign ties in with big ads soon to appear in the Saturday Evening Post, Look, Life, and Collier's magazine, and is backed by the nation-wide weekly TV show, "Beat the Clock."

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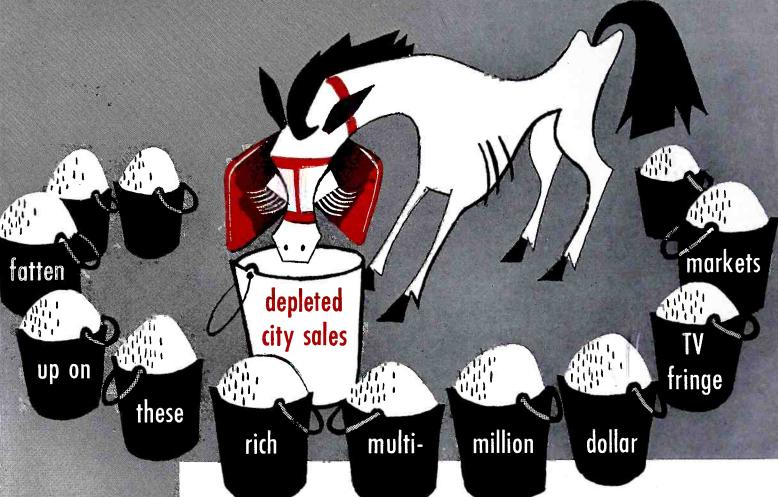
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