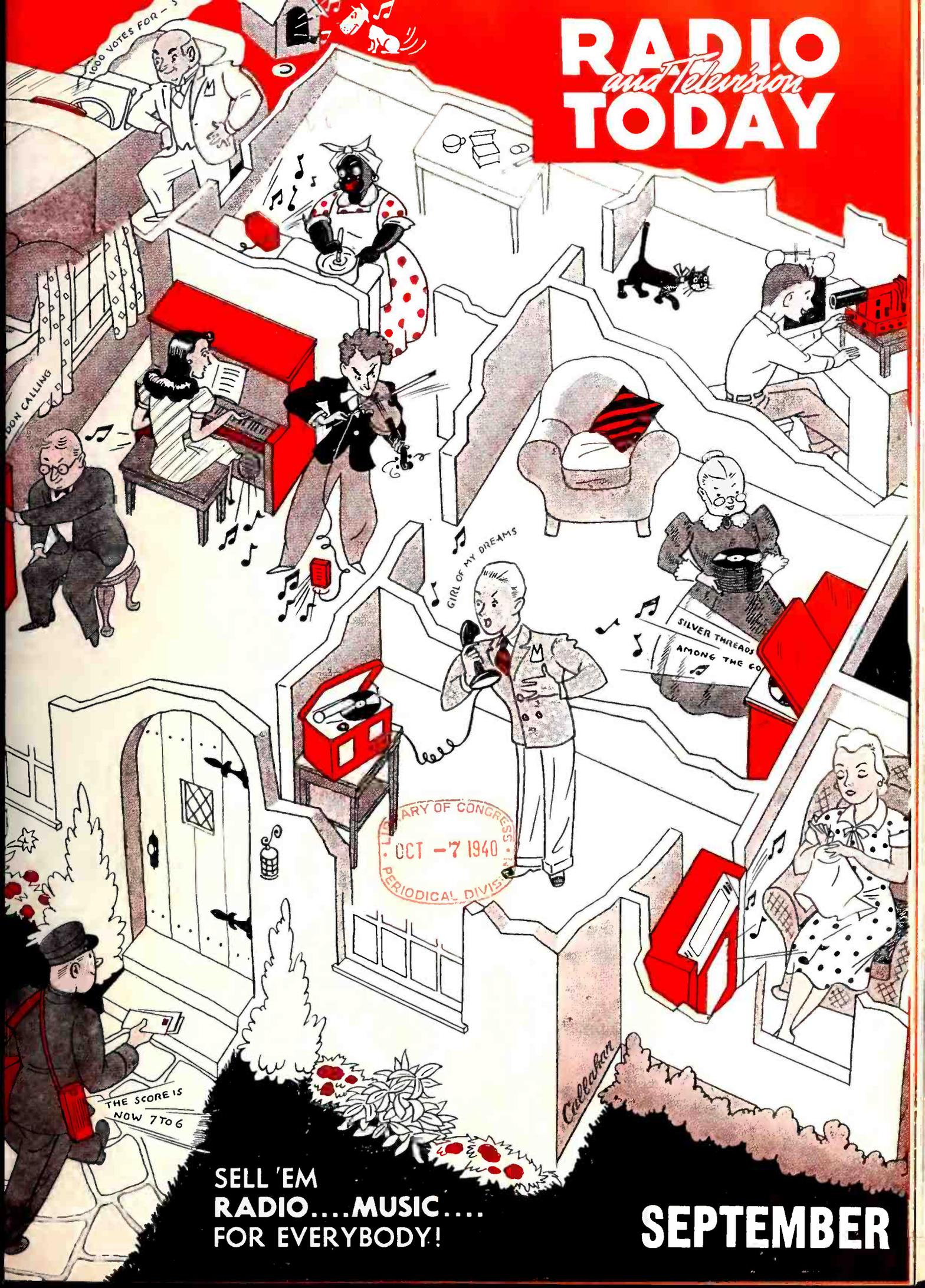


# RADIO *and Television* TODAY



1000 VOTES FOR - S

DON CALLING

GIRL OF MY DREAMS

SILVER THREADS  
AMONG THE CO

LIBRARY OF CONGRESS  
OCT -7 1940  
PERIODICAL DIVISION

THE SCORE IS  
NOW 7 TO 6

Collector

SELL 'EM  
RADIO....MUSIC....  
FOR EVERYBODY!

SEPTEMBER



**Motorola**  
 GIVES YOU 1941'S  
**BIGGEST**  
 BUY *in*  
**RADIO**

**WOW!**  
 WHAT A RADIO  
 VALUE



MODEL 83K1

**MODEL 83K1**  
**3-GANG CONDENSER**  
**TUNED R. F. STAGE**

- 8 Tubes including Rectifier
- 3 Wave Bands—Powerful 10" Speaker
- 6 Electric Motor-Drive "Feather-Touch" Push Buttons
- Rich Radiant Concert Quality Reception
- Easily Brings in Far Distant Stations

**\$6995\***

**Nationally Advertised in**  
**SATURDAY EVENING POST and**  
**LIFE—2-COLOR FULL PAGES**  
**CIRCULATION OVER 6,100,000**

\*Prices Slightly More in South and West

**GALVIN MFG. CORPORATION**

**RADIO**  
*and Television*  
**TODAY**



**SELL 'EM**  
**RADIO...MUSIC...**  
**FOR EVERYBODY!**

**SEPTEMBER**

**No Other  
Line Gives You  
Such Complete  
Coverage**

**P. R. MALLORY & CO., Inc.**  
**MALLORY**

**Replacement CONDENSERS**



\*TRADE MARK REG. U. S. PAT. OFF.

You can be absolutely sure of exact replacements, and thorough coverage of every condenser need because the Mallory line of Replacement Condensers has been specifically developed around an exhaustive study of millions of condensers in *all* makes and models of standard radio receivers.

Mallory Tubular Condensers are available in over 50 ratings with common anode, common cathode and separate mounting sections where sizes permit. All types afford exclusive mounting features that save time and money on every installation.

\*FP (Fabricated Plate) Condensers, made by Mallory, have brought about a new high in efficiency and performance. Averaging field returns of only 5/100ths of 1% . . . FP Condensers give you features not duplicated by any other condenser.

Mallory Type BB Condensers likewise afford Fabricated Plate Construction and give all of its advantages in these smaller sizes. Encased in a heavy, one-piece, drawn aluminum can, they are insulated with an attractive cardboard tube well marked for rating identification. Strong internal construction eliminates troublesome open circuits.

See your Mallory distributor today. He can give you complete information on the full Mallory line . . . and you'll find him well stocked to serve you.

**P. R. MALLORY & CO., Inc.**  
**INDIANAPOLIS INDIANA**

Cable Address — PELMALLO

Use  
**P. R. MALLORY & CO., Inc.**  
**MALLORY**  
APPROVED  
PRECISION PRODUCTS

*Include*

VIBRATORS • VIBRAPACKS • CONDENSERS • VOLUME  
CONTROLS • ROTARY SWITCHES • SINGLE AND  
MULTIPLE PUSH BUTTON SWITCHES • RESISTORS  
RADIO HARDWARE

THE POPULAR-PRICED LINE THAT'S

Going Big



Dealers by the hundreds are turning to ARVIN  
for radios that sell fast! **\$6.95** To **\$29.95**  
PRICED FROM

**MODEL 722A IVORY PLASTIC CABINET** . . . . . \$19.95  
Powerful 6-tube AC-DC superheterodyne. Extreme selectivity separates "close together stations." Permanent magnet speaker for fine tone. Built-in loop antenna. Big illuminated dial. Large beautiful cabinet with convenient carrying handle—size 12½" x 7¼" x 7".  
Model 722, same as above in walnut plastic cabinet . . . . . \$18.95

Arvin sales are far ahead of any previous year—so many dealers have taken on Arvins to supplement their higher priced lines. Low list prices, good discounts, exceptional performance and eye-appeal are all combined to bring you quick turnover and "clear" profits on Arvins.

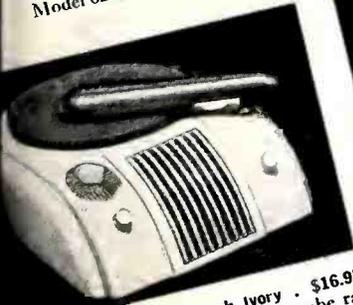
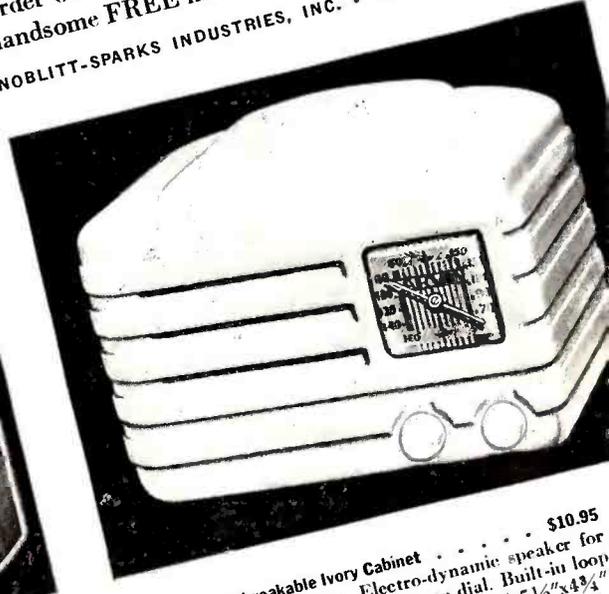
Backed by a company with total capital, surplus and reserves of more than \$5,000,000. Arvins are quickly obtained from conveniently located jobbers. Order one each of any six Arvin models and get a handsome FREE floor display and other sales helps.

NOBLITT-SPARKS INDUSTRIES, INC. • COLUMBUS, INDIANA



**Model 622A Ivory Plastic Cabinet** . . . . . \$14.95  
Big, powerful 5-tube AC-DC superheterodyne. Built-in loop antenna. Illuminated dial. Electro-magnetic speaker. Cabinet size 11½" x 9½" x 6¼".  
Model 622, walnut plastic cabinet . . . . . \$13.95

**Model 632 in Rubbed Walnut Wood Cabinet** . . \$17.95  
A rich looking, excellent performing powerful 5-tube AC-DC superheterodyne. Built-in loop antenna. Electro-magnetic speaker. Illuminated dial. Size 12½" x 8½" x 6½".



**Model 302A Radio Phonograph, Ivory** . . \$16.95  
Unbreakable cabinet. Powerful 4-tube radio. Beautiful reception. Plays 10" and 12" records. Permanent magnet speaker with special built-in audio system. Self-starting phonograph motor.  
Model 302, deep brown finish . . . . \$14.95

**Model 402A Unbreakable Ivory Cab.** \$7.95  
A snappy little 3-tube AC-DC radio. Electro-dynamic speaker. Attached 20 foot aerial. Duo-tone embossed dial. Size 6½" x 5" x 3¾".  
Model 402, same as above, in walnut, unbreakable cabinet . . . . . \$6.95

**Model 822** . . . . . \$29.95  
Battery-Electric Portable  
Operates on batteries out-doors—110 volt AC or DC indoors. A 5-tube set with built-in loop antenna. Beautiful case 12" x 11" x 7¼".

**Model 522A Unbreakable Ivory Cabinet** . . . . . \$10.95  
Popular 5-tube superhet. Electro-dynamic speaker for fine tone. Illuminated, airplane type dial. Built-in loop antenna. Full volume control. Cabinet, 7½" x 5½" x 4¾".  
Model 522, same as above in walnut . . . . . \$9.95

All prices slightly higher in extreme west, south and east.

PROFIT WITH **ARVIN** HOT NUMBERS



Bacillus S. paratyphi,  
magnified 12,000 diameters



Lacquer pigments,  
magnified 27,000 diameters

FROM RCA LABORATORIES COME

# Radio Eyes

## FOR MICROBE HUNTERS



Anthony van Leuwenhoek of Amsterdam was the first to peer into the universe of the infinitesimal. With his crude microscope, he discovered in 1683 the "small beasts" which Pasteur and Koch and Theobald Smith later branded the most dangerous enemies of man—the germs of disease.

**B**UT there are micro-organisms too small for optical microscopes to detect. These instruments operate by visible light, which cannot resolve objects much smaller than the wavelength of the light. Bacteriologists have been able to see only the larger microbes. They have been able only to hope that somewhere, somehow, an instrument would be found that would magnify not 1,500, but 20,000... 50,000... 100,000 diameters!

Scientists in RCA Laboratories have engineered such a microscope. They studied the electrons active in radio and television, whose length was but a tiny fraction of that of a light wave. Research proved these electrons could be used as "seeing" rays. Focused by powerful magnets upon photographic film, they would reveal what had hitherto been invisible.

### *Research is Radio's Road to Progress*

RCA's contribution to the development of the electron microscope is the result of a far-seeing policy laid down by the founders of the company in 1919: *that fundamental research must be the keystone of every activity of RCA.*

RCA research has made broadcasting better. It has made receiving sets better. It has perfected a magic voice for the motion picture. It has pioneered in television. It has developed facsimile transmission of pictures and printed matter. It has made substantial contributions to industrial progress in fields outside of radio... From continuing RCA research will come still more progress... still greater services to America and to the world.



With the RCA electron microscope, bacteriologists may study hitherto invisible filterable viruses... may discover causes of baffling ailments.



# RADIO CORPORATION OF AMERICA

RADIO CITY, NEW YORK

RCA Manufacturing Co., Inc.  
RCA Laboratories

Radiomarine Corporation of America  
R. C. A. Communications, Inc.

National Broadcasting Company  
RCA Institutes, Inc.



**HERE IS THE CAMPAIGN THAT WILL STIMULATE  
YOUR BUSINESS...ONE OF THE GREATEST RADIO  
SALES PROMOTIONS OF ALL TIME.**

● **IN LOCAL NEWSPAPERS**...with jumbo advertisements running regularly in newspapers in every territory, telling the story of the new 1941 Emerson Line and high-spotting outstanding models.

● **IN NATIONAL MAGAZINES**...full-page and half-page color advertisements in major national magazines—with endorsements of famous motion picture and radio celebrities.

● **IN DIRECT-BY-MAIL ADVERTISING**...attractive literature and dodgers for dealer distribution will get across the wide selection of Emerson Models for every purpose and every purse.

● **IN STORE WINDOWS**...crowd-stopping streamers, window displays and reprints of national magazine advertising will tie up your store with the complete over-all campaign.

● **ON STORE FRONTS**...powerful color posters and metal store front fixtures will "identify" your business and head customers your way.

● **IN YOUR STORE**...a new type of "talking" exhibit and "triangle" banners will enhance the appearance of your store and enable you to display and demonstrate Emerson Models to the best advantage.

**Prepare now to CASH IN on this great Sales Drive**

**WATCH FOR EMERSON DISTRIBUTOR ANNOUNCEMENT**

**EMERSON RADIO AND PHONOGRAPH CORP., NEW YORK, N. Y.**

**WORLD'S LARGEST MAKER OF HOME RADIO**

# FM DEMONSTRATIONS MAKE RADIO OWNERS EAGER TO REPLACE THEIR PRESENT SETS!



**NOW THAT FM IS HERE  
WE'RE GOING TO GET  
A NEW RADIO . . . A  
STROMBERG-CARLSON**

To the public, FM is the symbol of new radio enjoyment. To *you*, FM is the most powerful, most profitable sales builder in the industry. Dealers say that FM "Staticless" demonstrations actually make radio owners *eager* to trade in their old sets.

Get *your* share of this worthwhile business with Stromberg-Carlson—the only line that includes FM backed by over a year's field experience . . . the line with the exclusive Labyrinth and Carpinchoe Speaker Audio System . . . and the line with powerful national magazine advertising support.

**STROMBERG-CARLSON TELEPHONE MFG. CO.**  
ROCHESTER, N. Y.

*All Stromberg-Carlson FM Receivers are licensed under Armstrong Wide-Swing Frequency Modulation patents.*

**During September, 10,000,000  
Owners of Radios WITHOUT  
FM will read of the New  
Stromberg-Carlsons  
WITH FM!**



No. 535-PS AUTOMATIC RADIO-PHONOGRAPH with Sapphire Pick-up—NO NEEDLES TO CHANGE. Includes FM band, Labyrinth and Carpinchoe Speaker.



*There is nothing finer than a*  
**Stromberg-Carlson**

# A REAL JOB FOR TUBES!

Every person seated in the world's largest stadium, SOLDIER FIELD, CHICAGO, clearly hears each word the announcer speaks.

## NO WONDER RAYTHEONS ARE USED!

How would you like to make such a sound installation? If you did you would be forced to use the finest equipment obtainable. And undoubtedly—as was done at Soldier Field, Chicago—you would use the best tubes obtainable—RAYTHEON.

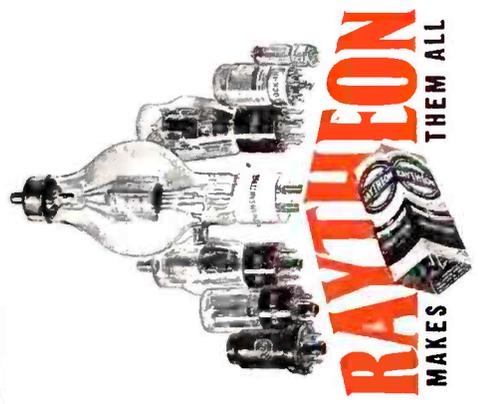
The thinking sound expert, serviceman and tube dealer—those who technically analyze—know the best quality material helps to build up a business quicker than trying to get by with inferior merchandise. The fellow who sacrifices quality eventually

runs out of customers. The solid businessman gets bigger and bigger.

There is profitable prestige and business insurance in selling the best—RAYTHEONS. Yet they cost you no more!

Your RAYTHEON Distributor has an unusual tube deal for you. See him without delay.

Raytheon Production Corp., Newton, Mass., New York, Chicago, San Francisco, Atlanta.

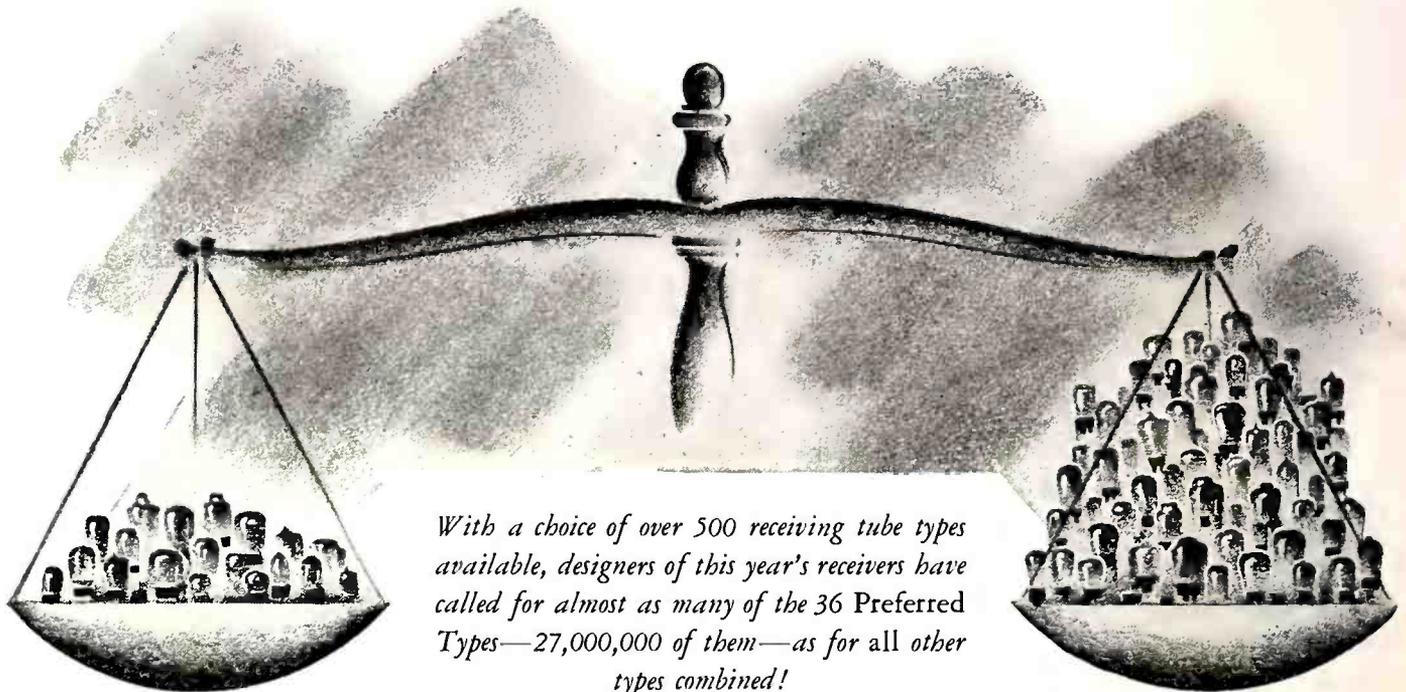


**RAYTHEON**  
MAKES THEM ALL

WORLD'S LARGEST EXCLUSIVE RADIO TUBE MANUFACTURERS

# 36 TYPES = 27,000,000 TUBES

FOR 5,000,000 OF THIS YEAR'S NEW RECEIVERS!



*With a choice of over 500 receiving tube types available, designers of this year's receivers have called for almost as many of the 36 Preferred Types—27,000,000 of them—as for all other types combined!*

**"36 PREFERRED TYPES"**

**"490 OTHER TYPES"**

OF ALL RCA TUBES now being supplied to set manufacturers for new radios, *better than 9 out of 10* are now Preferred Types! Of all tubes of *every* make, by *every* tube manufacturer supplying tubes for new radios, nearly half are Preferred Type numbers!

This is a good thing! Good for us. Good for *you*. It means that this year's 5,000,000 receivers using Preferred Type Tubes will simplify replacement-tube inventories for distributor, dealer and serviceman alike...will give increased turnover of fewer, faster-moving tube types faster deliveries, from manufac-

turers' stock—and better, more uniform tubes!

18 important radio manufacturers have endorsed and adapted the RCA Preferred Type Tubes Program because they, too, have benefited. Practically any type of receiver can be designed for finest performance at lowest ultimate cost. The RCA Preferred Type Tubes Program is not only the *best* suggestion ever advanced to solve the headache of "too many tube types"...it is the *only* constructive step so far offered! It deserves your support—for your own benefit!

*Over 380 million RCA Radio Tubes have been purchased by radio users.*



## Preferred Type Tubes

RCA MANUFACTURING CO., INC., CAMDEN, N. J.  
A Service of the Radio Corporation of America





MAKE THIS MULTI-MILLION MARKET

# Yours WITH ROCK-OLA Recorders

**Millions Want to—**

- Make records of musical progress • Put favorite radio programs on discs • Record holiday greetings, personal messages • Catch high spots of parties, birthdays, etc. • Make records of history making events • Practice public speaking • Play records • Use as public address system • Use as straight radio for broadcast reception.

**EVERY ROCK-OLA RECORDER WILL DO THESE 5 THINGS:**

- MAKE RECORDS of Voice or Music
  - PLAY ANY RECORDS—Your Own or Purchased
  - RECORD RADIO PROGRAMS
  - SERVE AS PUBLIC ADDRESS SYSTEM
  - RECEIVE REGULAR RADIO BROADCASTS
- Models R-4-6-8 Available with Automatic Record Changers.

6

**CONSOLES**

Exclusive AUTO-MATIC LIGHT REFLECTORS

Exclusive RECORD STORAGE COMPARTMENTS

Exclusive CONVENIENT MICROPHONE OUT-LET



A PORTABLE

A TABLE CONSOLE



Built Specially for Home Recording  
Single Button Switch-Over  
Crystal Microphone included with each set

HIGH FULL TONES  
SIMPLE EASY OPERATION  
Push Button Tuning

Topple Off the Profit Opportunity  
Rock-Ola Discs



● The key to dominating this season's market for recorders in your vicinity is to offer *most features, biggest value and best performance* for the money. Rock-Ola, already a leader in the phonograph industry, has come into this field *knowing the competitive values you need and giving them to you!* It's the sweet-profit line of Rock-Ola Recorders . . . Study the features—Add up the sales points, and the answer is, Rock-Ola, the Line for You . . . plus Rock-Ola Discs for continuing profits.

Get in touch with the distributor in your territory for detailed proposition, prices, sales promotional literature, banners, display cards, mailing pieces and a preview of the general advertising plan. Every detail you check, you'll find pre-arranged to make selling easy. If your distributor hasn't called yet, send the coupon for facts and we will contact you through his salesman. Start now to make this market yours. Send the coupon.

ROCK-OLA MANUFACTURING CORPORATION  
800 N. Kedzie Ave., Chicago, Illinois

Rock-Ola Manufacturing Corporation  
800 N. Kedzie Ave., Dept. RT-9, Chicago, Ill.

Please rush me the details on the line of Rock-Ola Recorders.

Dealer's Name .....

Address .....

City and State .....

My best selling radio line is .....

Distributor's Name .....

# EVERY WEEK IS

THE SATURDAY EVENING POST

Enjoy Radio's Finest Tone with the new **FARNSWORTH "Colortone"**



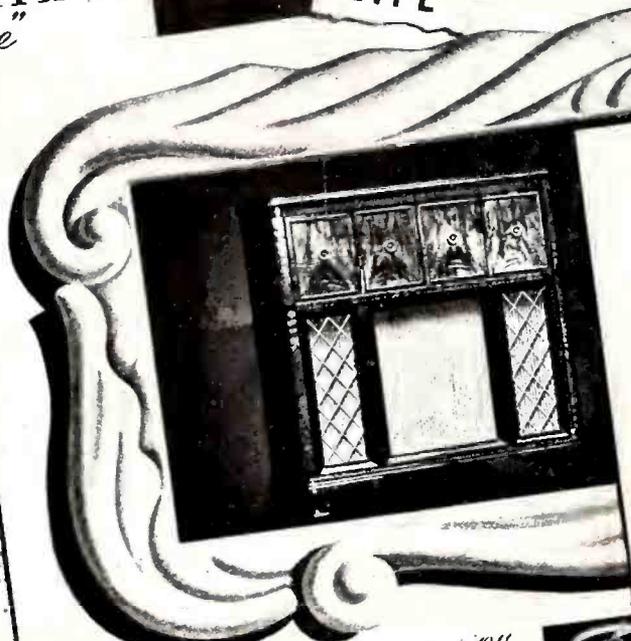
Now you can direct the radiators toward the music to suit your own ear with this amazing new Farnsworth development—the Colortone! Notice the two fine controls at either side of the dial above. Slide them up or down and you can choose from more than 90 different tone combinations. The Colortone builds up either the bass or the high notes without changing at all the volume you desire. You get out of the tone exactly what you desire.



Among the many other exclusive Farnsworth features is the "Tone-Boost" feature which gives you a more powerful sound than any other radio. The "Tone-Boost" feature is a really new feature. It is a really new feature. It is a really new feature. It is a really new feature.

FARNSWORTH MAKERS OF RADIO AND TELEVISION THE CAPEHART, THE CAPEHART-PANAMUSE AND FARNSWORTH

LIFE



## A Distinguished Name in Television presents the new 1941 **FARNSWORTH** PHONOGRAPH-RADIOS AT MODERATE PRICES EQUIPPED WITH THE CAPEHART-FARNSWORTH RECORD CHANGER

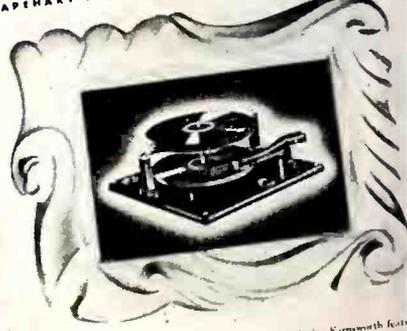
Now in a Farnsworth you can enjoy the most Capehart-Farnsworth record changer in the world. It is a really new feature. It is a really new feature. It is a really new feature. It is a really new feature.

But the Farnsworth and we believe you will be longer than you'll find the thrill and pleasure of your favorite music. It is a really new feature. It is a really new feature. It is a really new feature. It is a really new feature.

FARNSWORTH MAKERS OF RADIO AND TELEVISION THE CAPEHART, THE CAPEHART-PANAMUSE AND FARNSWORTH

Collier's

## Now **FARNSWORTH** Gives you the Amazing CAPEHART-FARNSWORTH RECORD CHANGER



You invest more of a phonograph in the past than in the present. You invest more of a phonograph in the past than in the present. You invest more of a phonograph in the past than in the present. You invest more of a phonograph in the past than in the present.

the many exclusive Farnsworth features. It is a really new feature. It is a really new feature. It is a really new feature. It is a really new feature.



FARNSWORTH MAKERS OF RADIO AND TELEVISION THE CAPEHART, THE CAPEHART-PANAMUSE AND FARNSWORTH



Here is the Capehart-Farnsworth automatic record-changer attachment, Model BP-2 for modernizing straight radios. Show it to your customers who have recently bought a radio, and you'll not only make another sale but also what their appetites for a combination unit later on.

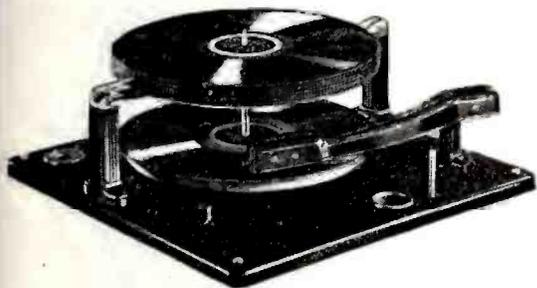


Outstanding values in the Farnsworth table models, in both wood and plastic cabinets, is exemplified in this exquisite model with period trim. A quality performer, priced for thrifty-minded buyers.



Your customers go for this Chair model. They sit in a chair, tune in an lax... they try it, they buy it. The Chairside automatic combination unit is the market at any near its price.

# Farnsworth WEEK!



## THE CAPEHART-FARNSWORTH CHANGER

... one of the many reasons why Farnsworth is the hottest combination line today. Another is that Farnsworth gives you *every* type and style of cabinets your prospects could possibly ask for. Most important of all, Farnsworth *values*, model for model, are not matched by any line ... in performance, in price, in design and in dealer profit.

## A BIG NATIONAL AD EVERY WEEK

Farnsworth advertising in *Life*, *The Saturday Evening Post* and *Collier's* will crowd dealers' stores with prospects for this great new line of radios and phonograph-radio combinations.

Here are the first three of the many big ads that will pound home the dynamic Farnsworth sales message to prospects in your community ... ads with "sock" and power that set a pace 'way above the usual run-of-the-mill radio advertising.

## EVERY AD IS YOUR AD!

Every one of these national Farnsworth ads is designed to create permanent prestige for Farnsworth dealers ... without losing sight of the need for *immediate* store traffic and profits for you. Local tie-in ads are built the same way—to get prompt results. Hard-hitting promotional material hits the same fast pace.

## ON THE AIR TOO!

National spot radio advertising in major cities from coast to coast will add another important push to the big swing of Farnsworth. All this, plus the industry's greatest line of combinations and sensational values in consoles, table models, portables and home recording, sums up to this important answer—*You're losing money every day that you delay "going Farnsworth"!*



← The Empire, another Farnsworth innovation in an automatic phonograph-radio, has "Tip-Top Tuning." To tune, the customer simply pulls out the convenient dial panel that's "always at hand whether you sit or stand." Many big features for little cost.



This big console → model (BC-80) gives your customers a lot of radio for the money. Styled to blend with any room setting. And just chock-full of exclusive Farnsworth radio features that you can demonstrate.

## NOT A DAY TO LOSE!

The Farnsworth advertisements are appearing **RIGHT NOW** in the three big national weeklies. Customers are coming in to Farnsworth dealers' stores. Sales are being made *today* ... with plenty more to pile up in the weeks ahead. Get the money-making facts from your Farnsworth distributor **TODAY!** Or wire, phone or write ... Farnsworth Television & Radio Corporation, Fort Wayne, Ind.

**FARNSWORTH** ... MAKERS OF RADIO AND TELEVISION TRANSMITTERS AND RECEIVERS, THE CAPEHART, THE CAPEHART-PANAMUSE AND FARNSWORTH PHONOGRAPH-RADIO COMBINATIONS





Here are Two New  
Westinghouse *21st Birthday*  
Radios I'm going to **PUSH**  
this Fall

Cool weather means more time for home entertainment. That's why these two new Westinghouse models are so popular. The first is a combination radio phonograph and home recorder that will enable you to make the most of this fascinating hobby. The second is a superb table model, of unexcelled tone and performance, at a modest price. These two Westinghouse 21st Birthday instruments are priced for fast selling . . . with a worthwhile profit to you on every sale.



### ANOTHER ENTERTAINMENT STANDOUT! MODEL WR-290

Built for those who are willing to pay a little more for the best in table model tone and performance. High quality 3-band circuit with tuned R.F. stage. Push-pull output and powerful 6-inch speaker. Upright walnut cabinet in eye-catching "waterfall" design.



### WHAT AN ENTERTAINMENT VALUE!

**MODEL WR-486.** See how much you can offer your customers . . . at a price many of them have paid for a standard console radio.

- Superb 9-tube radio . . . with push-pull output, 12-inch dynamic speaker, loop antenna, and 5 station push-button tuner.
- Automatic phonograph . . . plays six 12-inch or seven 10-inch records.
- High quality cutting head . . . makes recordings, either of the radio program or by microphone.
- Provision for making recordings of other records. (Separate record player needed.)
- Microphone and speaker may be used for home entertainment or as public address system.
- Supplied complete with crystal recording microphone and six blank records.
- Handsome cabinet of beautifully grained, hand rubbed walnut with divided lid.

*Write or phone your Westinghouse Distributor today!*

**Westinghouse** *Precision*  
**RADIO**

SEP 21 1940

©CIB 467768

# RADIO *and Television* TODAY

## RADIO MEN AS COMMUNITY LEADERS IN MUSIC

No local business man in any community has a greater opportunity for cultural influence on music than the radio-music merchant.

Through his hands pass the instruments that bring music to the homes of the vicinity—whether these instruments be radio, phonographs and records, pianos and organs, or the new electronic devices.

The radio-music merchant has a high calling. His is more than a mere business. It is a vocation which should go hand in hand with the professional groups of the community in its deep influence on the lives and happiness of young and old.

A STATEMENT FOR  
RADIO TODAY



Dr. Damrosch, thru NBC, wields wide influence among music lovers, young and old.



EDITOR, Orestes H. Caldwell;  
PUBLISHER, M. Clements;  
Managing Editor, Darrell Bar-  
tee; Merchandising Editor, H.  
L. M. Capron; STAFF, N.  
McAllister, G. H. Mayorga,  
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ton, R. A. Neubauer, J. A.  
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Y. Fitzpatrick, 201 N. Wells  
St., Chicago, Ill.; CALD-  
WELL-CLEMENTS, INC., 480  
Lexington Ave., NEW YORK,  
N. Y. Telephone Plaza 3-1340.  
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Vol. 6, No. 9, September,  
1940.

SEPTEMBER, 1940

# TODAY'S TRENDS

## Radio-Music Sales Are Humming

Latest reports show consumer buying at a high level. Some retail executives point to the great number of draft marriages as a contributing factor to this trend, and other factors are being mentioned. But the simple facts are that radio sales are up more than 30 per cent over a year ago, refrigerator sales are up some 50 per cent, and furniture volume has risen more than 25 per cent. This merchandise is riding the wave of new demands as many new homes are being furnished and older houses are being re-furnished.

A most significant trade factor, commented on by many retailers, is the growing consumer interest in the better types of merchandise, and the general interest in "selling up," with no drop in response to utility and price appeal.

## New VP of RMA



Don MacGregor, general manager of The Webster Co., which now has new title of Webster-Chicago Corp., has been named vice-president of RMA.

## More Radio for Their Money

You may have noticed that you have more to sell these days, as radio entertainment of the greatest sort starts pouring in a new flood from the grilles of the country. Many of the stars are already back on the air for the new season, such as Charlie McCarthy, Fanny Brice, Lux Radio Theatre, and a string of others.

More are coming; Kate Smith starts Sept. 20 on CBS, and Bob Hope Sept. 24 on NBC Red. Sept. 29 brings Lily Pons and Andre Kostelanetz, on CBS, as well as Helen

Hayes and Col. Stoopnagle on the same network and Sherlock Holmes on NBC Red. Fibber McGee starts Oct. 1 on NBC Red. On Oct. 2 you'll hear Fred Allen on CBS, Eddie Cantor on NBC Red, and the start of the World Series on MBS. Jack Benny is due Oct. 6 on NBC Red and the N. Y. Philharmonic tunes up for CBS on Oct. 13. Nino Martini starts singing Nov. 12 on MBS.

## Radios Up 23-33%, Jan.-Jun., '40

The number of radio sets sold by manufacturers during the first six months of 1940, totaled 4,865,803 units, an increase of 914,817 units or 23 per cent above the same period in 1939.

Meanwhile, the total dollar value of these sets increased 33 per cent, indicating an 8 per cent higher valuation per unit for the 1940 sets, as compared with 1939. This would make the retail average selling price about \$35.

Total sales for 1939 were 10,500,000 sets and it is expected that 1940 sales will number between 11 and 12 million radios.

## Simple Addition Gives Color Television

Color television is possible by a simple mechanical addition to the standard television receiving set, and tremendously increased public appeal will be given to television sales. This seemed the unanimous feeling of a large press group which attended a showing of the new television in colors, demonstrated by Dr. Peter Goldmark of the Columbia Broadcasting System at New York, Sept. 4.

In front of the present standard picture tube, a wheel of color disks is rotated, so synchronized that the eye sees successive red, blue and green pictures through the transparent color disks. The frames thus glimpsed have been similarly scanned through corresponding color filters. The eye combines the whole, and the result is to make the televised scene stand out with startling fidelity in brilliant natural colors.

## LOW COST; 3 DIMENSIONS?

Where television pictures in black and white tones had heretofore lacked clarity, due to blending of tint areas, the new color television seems to give sharpness and lively interest due to color separation and the natural appeal of color.

Estimates of the cost of the simple additional motor-driven color-wheel for standard television receivers, ran from \$30 to \$10, with even

lower possibilities as manufacturing progresses. For receivers not equipped with color-wheels, reception of color-television would be in black and white, quite similar to present television.

With color-television thus possible for the home, at small expense, the further suggestion is made that if successive frames are photographed stereoscopically and then viewed at the receiving end through polarized glasses, television for the home may soon be available with all the reality of *both color and three-dimensional effect!*

## Recorders and FM



Perry Hadlock, manager of GE radio sales, demonstrates the mike end of a GE radio-recorder. This week GE unveiled a new FM-AM set for \$175.

## FM Has Strong Music Appeal

Radio's strapping new baby whose initials are FM, is in the midst of more spirited growth this month. Stromberg Carlson reported dealers ordering heavily on the strength of FM transmitter applications being made in their areas, as the retailers responded generously to the very demonstrable qualities of the new art. SC ads in the *Saturday Evening Post* start this week. Freed Radio Corp. announced a fall advertising campaign (newspapers and radio) for the 11 areas which have service.

There are now 14 manufacturers making FM sets, at prices ranging from \$50 for "adaptor" units, up to \$600. Twenty FM stations are now on the air. It is estimated by FM Broadcasters, Inc., that by Jan. 1, 1941, when FM becomes commercial, 50 stations will be on the air then, and that the FCC's fast-growing list of applicants will leap to 150 by that time. Last month in Chicago, a group of representative broadcasters met to consider an FM network with national programming.

## In November, Celebrate "20 Years of Radio"

On Nov. 2, 1920, KDKA went on the air for its first broadcast with the Harding election news.

Industry leaders have suggested that the entire month of November, 1940, be devoted to a celebration of radio-broadcasting's 20th anniversary, by all broadcasters, manufacturers, distributors and dealers. This plan is already before executives of the networks and national associations.

Meanwhile RADIO TODAY is proceeding with its program to make its coming November issue commemorate "Twenty Years of Broadcasting Progress," and will tie in with the nationwide celebration on the air and in dealers' stores.

## Broadcast Reallocation March 29

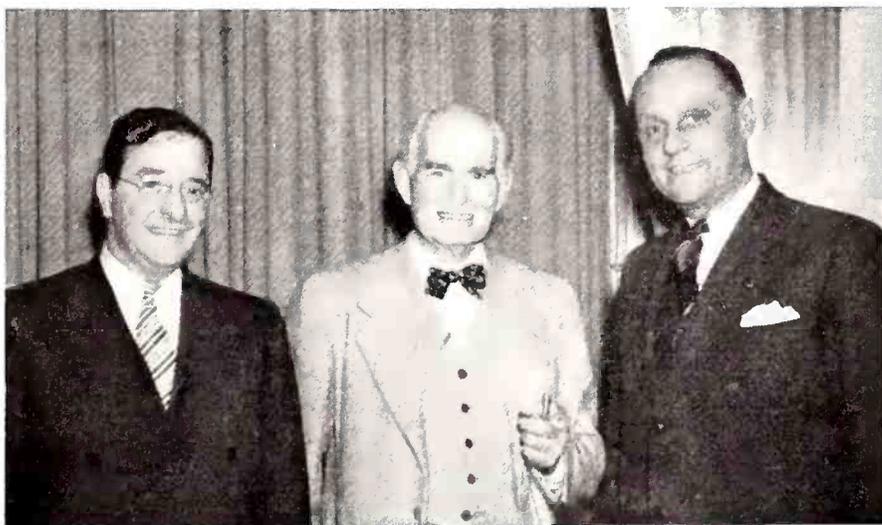
Extensive reallocation of stations in the broadcast band required under the Havana treaty, has been ordered by the FCC for March 29, 1941. This will involve shifts in the position of 777 out of the present 862 broadcast stations. Most of the shifts of the larger stations will be slight, only 10 to 30 kc, but extensive resetting of push-button radios will nevertheless be called for, involving several million radio jobs for servicemen. In coming issues, RADIO TODAY will outline plans by which radio dealers and servicemen can make profitable use of this Re-allocation opportunity to inspect radios, overhaul sets needing repairs, sell tube replacements, and sell new, up-to-date receivers.

## Music You Want, When You Want It



Frank B. Walker, RCA Victor record head, right, is shown here with W. W. Early, disc sales manager. Following Victor's price reduction on records, Mr. Walker announced increases as high as 700% in Red Seal dollar volume alone. See p. 18.

## Chicago Radio Leaders Celebrate Early Days



Chicago radio men honor Dr. Lee de Forest, center, on his 67th birthday. The "father of the radio tube" was feted by 200 guests at Aug. 26th banquet at Drake Hotel, where William Halligan, president of Hallicrafters, left, and E. S. Riedel, general sales manager of Raytheon, were two of the speakers.

## Video Progress in New Channels

Rapidly, equipment changes were made in television transmitters, so that the new channels may be occupied and broadcasting may begin again at the FCC deadline, Jan. 1, 1941. The Crosley Corp. was granted a construction permit for a \$100,000 experimental station in Cincinnati, and in New York the Du Mont station W2XWV began surveying program preferences, with a view of broadcasting them shortly.

The National Television Committee, formed by RMA with a nod from the FCC, expects to be well on its way toward the formulation of satisfactory all-industry standards by Jan. 1, 1941, so that another bid for commercialization may be made at that time. General chairman of the Committee is W. R. G. Baker of General Electric.

Chairman Baker appointed and announced the organization of "panels" or subcommittees with their respective chairmen as follows: System Analysis, P. C. Goldmark; Subjective Aspects, Dr. A. N. Goldsmith; Television Spectra, J. E. Brown; Transmitter Power, E. W. Engstrom; Transmitter Characteristics, Philo T. Farnsworth; Transmitter-Receiver Coordination, I. J. Kaar; Picture Resolution, D. E. Harnett; Synchronization, T. T. Goldsmith, and Radiation Polarization, David B. Smith.

## Radio Audience to Hear About Tubes and Music

Radio Magic,—NBC network program conducted by Editor Caldwell of RADIO TODAY, describing new uses of radio and radio tubes.—continues its position on the NBC Blue network Monday evenings at 7:15 P. M. Eastern time (6:15 P. M. Central time). Coming topics are as follows:

Sept. 23—"New Electronic Musical Instruments."

Sept. 30—"Listening on the Shortwaves."

Oct. 7—"How Radio Tubes Work."

Oct. 14—"Signal Systems Using Tubes."

Oct. 21—"Radio's Millions."

Oct. 28—"Twenty Years of Broadcasting."



Jenkins Music Co., Kansas City, Mo., emphasizes style, in feature showing of pianos and radios.

# RADIO-MUSIC

DEALERS GET MUSICAL NOTI



Smart shelves, soft lights at Lehman Radio, N. Y. C.

Compact beauty and efficiency are here—Gordon Hayes, Troy, N. Y., uses the Bitter "Record Bar."



Schusters, Milwaukee, gives a distinguished treatment to albums, stock and complete display of record accessories.



A handsome record dept. that's roomy and cheerful, at Stewart's, Louisville, Ky. Five booths at rear.



Plenty of musical appeal is created by Wurlitzer's, N. Y., with tiers of fine radios and instruments.

# QUALITY STORES

## VIA CHARACTER OF DISPLAYS

Aided by fine stores and capable staffs, the radio-music merchants of the nation play a distinguished part in the spread of musical culture and musical enjoyment throughout all groups of the population.

Today the radio-music man has a wide variety of merchandise to sell—and most of it tying back to the central magic of the radio tube. Let us look over the list:

- Console radios. Table radios.**
- Portable and automobile radios.**
- Phonograph-radios and players.**
- Phonographs. Records.**
- Recorders. Discs.**
- Electronic pianos. Amplifiers.**
- Electronic musical instruments.**
- Contact mikes. Sound.**
- Repairs and Service. Tubes.**

Here is a rich field for merchandising, with products in demand by every class of buyers—men, women, young folks, old folks, prosperous homes, hard-working people, business men, artists, professional people, educators, schools, churches, stores, communities. Ceaseless and limitless are their demands for the various instrumentalities the radio-music merchant has to sell.

And with his wide range of radio-music merchandise today, the merchant can specialize in this radio-music field, confident that he will get adequate volume to bring prosperous returns.

The radio-music man occupies a unique place in his community. He belongs with the group of leaders in the business and cultural activity of the town.

SEPTEMBER, 1940

J. L. Hudson Music Co., below, has one of the most varied, and richly planned set displays in Detroit.



Clark Music Co., Syracuse, N. Y., stars pianos, radio, records.



Jenkins Music Co., Kansas City, Mo., emphasizes style, in feature showing of pianos and radios.



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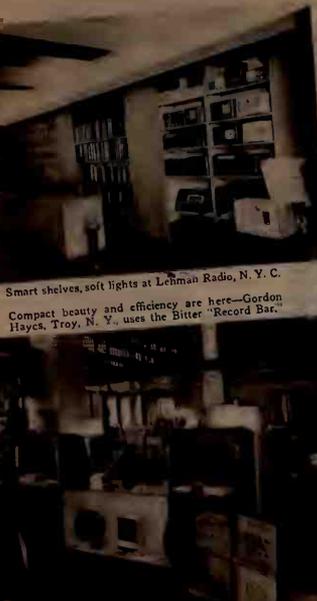
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# HIRING



The sales-makers of the radio business must be specially picked and trained. They can make or break the dealer.

There are few problems confronting radio merchants today which more and better sales will not answer.

And there is no more important single factor in getting these more and better sales than "man-power."

Man-power, its quality and quantity are vital factors in any business, though too often overlooked in the small business.

To build up man-power, men must be carefully selected, thoroughly trained, properly supervised.

Before selecting any sales person, the dealer should have very clearly in mind, just what he wants to do, and how he wants to do it.

He should be sure that his method of compensation is sound, and fair, to both the new employee and himself.

He must be willing and able to teach the newcomer "his way" of doing things.

## **JOB FOR THE BOSS**

Most failures of man-power to produce the expected results can be traced directly to the dealer himself—to his inability to properly train and indoctrinate his co-workers, to a faulty compensation plan, to a lack of intel-

ligent guidance and supervision, or to a poor understanding of the psychology of leadership.

When you are really prepared to do your new co-worker justice, is time enough to go about the task of selecting your new people.

In selecting new people, the average radio-appliance dealer knows that experience is important, but other characteristics may be even more important.

## **SIFTING THEIR QUALITIES**

*Age* is not an important factor.

What a person *knows* is less important than what he can be taught.

What a person *has* done is not as important as what he *can* do.

Honesty, sincerity, personality, are important.

The intelligence and willingness to learn, ambition and perseverance may be more important than sales records.

Ingenuity and adaptability should be considered.

Thinkability and workability should be looked for.

And *character* is vital.

Selection of the new personnel

should be made from applicants which the dealer has received through his customers, friends, acquaintances, co-workers, classified advertising, local high schools, business colleges, or distributors.

Selecting the right people is important, but *training* them is perhaps more important.

A vital factor in training is the human trait of giving more effect to *example* than to preaching.

The dealer who bases his training on his own *example*, on what he *does* and *how* he does it, is much more apt to build a strong organization than the one who merely drives—who says one thing and himself does another.

Of paramount importance in all customer relations is *courtesy*.

Courtesy must be preached, practiced and insisted upon, *always*.

Another quality which is powerful in building good-will is "keeping the promise."

By word and deed, the new employee must be thoroughly convinced that he must never make a promise he cannot keep, and once having *made* a promise his is the sole responsibility to see that it *is* kept.

# YOUR SALESMEN

No "canned" sales talk can ever take the place of an intelligent sales presentation, based upon the prospect's need, and the salesman's knowledge of his product.

## PRACTICAL SCHOOLING

New salespeople should be taught about their product through—

1. Personal use of it, and that goes for washers, ironers and ranges, too.
2. Personal study of its features.
3. Follow-up of users.
4. Service division's explanation of construction.
5. Manufacturer's literature and manuals.
6. Dealer's and distributor's selling instructions.

A phase of employee training which is often overlooked is company policy.

In direct contact with prospect or customer, the employee, old or new, is, in the eyes of the prospect, the company itself.

And so every co-worker should be thoroughly schooled in the policies, and customer relations practices of the dealer.

How complaints, or other situations were actually handled, what mistakes were made, how they could have been handled better, should be a continuing feature of training, day by day and week by week.

Though few businesses can rise above the ideals of the owner, any business through its employees, can fall *below* the ideals of its management.

No small part of the training of new employees should be to transfer the viewpoints, the ideals, the objec-

tives, the enthusiasm, of the dealer, to his co-workers. And this can far better be done by the inspiration of continuing example than by words without such support.

Successful training is not a haphazard thing. It is carefully planned, in detail, and goes on almost indefinitely.

Some dealers insist that all new employees must work several days in *every* branch of the business, office, service, delivery and sales.

Whether this is necessary or not, may be open to question, but the fact is that these dealers have a lower personnel turnover, more contented co-workers, and more effective and efficient man-power, than is common among radio appliance dealers in general.

## DEALER EXAMPLE

The life, enthusiasm, drive, of any dealer's organization must come from himself, or some other person in authority.

A smart dealer will quickly surround himself with people whose experience and ability complements his own, as the foundation on which to build his organization.

If the dealer is himself a successful merchandiser, he will employ the most experienced serviceman he can find to head his service division.

Or, if he is technically capable, the dealer may head the service division himself, and employ the most capable sales manager he can to run the selling end of his business.

Thus with experience and ability balanced, man-power can be built to its most effective level.

Acquiring experience never ends, and by the same token training is a continuous operation.



Vocafilm Photo

The final test of the training — when salesman and product serenade the buyer.

In the long run there is no substitute for training and experience in building man-power, as there is no substitute for man-power in making and keeping a business successful.

No business can long be bigger, or better, than the men who comprise it.

Men—man-power—by their ideals and principles, their courage and ability, are the backbone of any business.

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## SIX POINTS TO DRIVE HOME TO THE SALESPERSON

1. HONESTY—Be willing to tell your prospects the facts.
  2. TENACITY—Writing the order is only 5% of selling.
  3. ENTHUSIASM—is contagious, changes prospects into buyers.
  4. SINCERITY—is quickly recognized; it builds confidence.
  5. KNOWLEDGE—Full information of your product and its use.
  6. COURTESY—to make good impressions, good friends, good will.
-

# THE RUSH TO BUY



People are coming in to buy records, these days, in increased numbers. The new record prices have done it.

Yet the most surprising fact about the recent drastic price reduction on records, is not the reduction itself, but the length of time it has taken to arrive.

In the face of practically free music via radio, and in a decade of falling prices and reduced buying power, there is no question that the return of public demand for recorded music has been delayed by the uneconomic maintenance of record prices at an artificially high level.

Now, Columbia—a new company with an old name—has taken the initiative with a drastic price reduction. RCA Victor has also announced new reduced prices, and the pace of record merchandising has quickened.

With the barrier of price removed, there is every reason to expect a substantial quickening of the fast-growing popularity of records.

## RELATION OF PRICE TO MARKET

New markets will be opened up, new record customers will be created, and established record buyers will buy many more records than has been their custom.

Whether enough added volume will be created to offset the dollar loss in margin, is the question worrying

some dealers. Time only can prove the correctness of a 50 per cent price reduction, though there is no question of the merchandising smartness or the economic correctness of *some* reduction in record prices.

Decca proved that several years ago.

## BIG UNIT INCREASE NECESSARY

Many dealers with whom RADIO TODAY has discussed the new conditions and problems of record merchandising think that sales may be doubled—or even tripled.

Some dealers see nice merchandising profits ahead, with this increased volume.

But others figure that it costs about 30 cents, including rent, heat, light, demonstration facilities and direct selling expense, to sell a classical record. They insist that because classical records need so much personal attention during sales, there is little reduction of unit selling cost, as volume goes up.

According to their reasoning, a record listing at \$2 with a 40 per cent dealer discount, produces a gross margin of 80c and a net profit of 50c.

But when reduced in price to \$1 the cost becomes 60c, the gross margin 40c and the net profit only 10c.

Thus, it appears to dealers who figure their costs of doing business on a uniform unit rate, that while double present unit sales will give the same dollar volume, it will take about five times present unit sales to earn the same net profit.

This situation does not apply to

the manufacturer and distributor however.

To them, practically all costs except direct selling costs remain fixed in dollars, or nearly so, with the result that double the unit sales will almost cut in half the unit cost, and thus produce a net profit directly proportional to unit sales.

## MORE OR FEWER DEALERS?

Opinion among dealers is sharply varied as to whether the end result will be *more* dealers selling records, or fewer dealers each selling *more* records. There are potent reasons why either condition may result.

Certainly larger stocks will have to be maintained, wider assortments made available, more and better demonstration facilities, and more aggressive merchandising will have to prevail, to produce and handle three to five times current unit sales.

Many dealers will be unable to finance such an expansion, and others will be loathe to do so when their accustomed margins have been so drastically cut.

## HOW CAN DEALER BUILD PROFITS?

With larger stocks, more skill in buying will be necessary to keep turnover up, and a genuine knowledge of customer preference will become an important factor.

The buying practice of many dealers (which permits a re-order when the last record has been sold, thus producing an out-of-stock condition for 1 to 4 days) is much too slow for the new tempo.

Many a dealer will "stub his toe" on this rock, and lose many of his customers and prospective customers, to other more alert dealers.

It may thus be that we will ulti-

# RE-PRICED RECORDS

mately find fewer, but larger dealers, for dealers under present conditions must definitely keep pace, or be left behind.

With unit prices and unit profits drastically cut, it is obvious that unit sales and dollar volume must be held up, and substantially increased.

No dealer can expect to do that, by merely waiting for customers to come in and swamp him with their record demands.

To produce any such sales increase as is necessary dealers must—

1. Consistently advertise and publicize recorded music, the new low prices, and their own assortment and service.

Use newspaper space to attract new customers, use persistent direct mail to sell more records to old customers.

2. Employ aggressive merchandising, particularly to sell more records per customer, and more records via low-cost methods.

Records of the Month, Records of the Week, specific new releases, must be publicized and sold at every opportunity.

3. Sell combinations of records by a single composer, those recorded by a single artist, groups of patriotic records, folk songs of other lands, etc. Such groups of records must be



Leopold Stokowski has commented on the new situation in the distribution of records by saying that "it is highly desirable to make records available to more lovers of music all over the country, and it is greatly to the credit of Columbia that this is now being done through their foresight and vision."

"Records are of great importance to the musical life of our Nation because through them we can listen to the music that interests us over and over again."

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Window displays, attractive, attention-impelling, seasonal, keyed to the moment, should be consistently kept in the public eye.

## INCREASED "COMBINATION" SALES

A direct source of profit, at least comparable to that resulting from more energetic record merchandising should be found in the increased sale of combinations, phonographs, record players, record changers, albums, cabinets and accessories.

New record customers will be in the market for new equipment to play and house records, and old customers can be sold better equipment.

Records and the means of reproducing them, go hand in hand.

Beyond question there is a latent desire for recorded music. The current price reduction may turn this into a tremendous demand.

To the alert dealer, able and willing to give his sincere and consistent merchandising effort to records and the means of playing them, new opportunities are now open.

But dealers who do not measure up to the new tempo of record merchandising are almost certain to be disappointed.

A number of the leading executives in the record industry have analyzed the new market for recordings and have expressed themselves for RADIO TODAY. These statements are presented herewith.

## VASTLY INCREASED MARKET AHEAD. MORE DEALERS NEEDED.

By Edward Wallerstein, President, Columbia Recording Corp., Birdgeport, Conn.

The dealer who expects only to double his unit volume of records at the new prices, isn't very closely conversant with the market that actually exists. There is without question a much more widespread interest in music today, than existed in the years of 1915-1925 which was the so-called heyday of the record business. Certainly there is now available to the public a vast superiority of classical repertoires as compared to those days. For example, there were then no complete symphonic works, and practically no orchestral ones. The bulk of the total volume was done with a few operatic records. Yet the classical volume being done up to now at \$2 prices is probably no more than one-tenth of the volume done with this very limited repertoire in the so-called heyday.

The number of anything that anybody buys is controlled by the price.

The big problem today is to get the dealer to realize that the market isn't merely doubled at the new prices, but is multiplied 20 or 30 times! Also,

that the need, rather than for fewer dealers, is for more dealers who know more about the business. (This, of course, doesn't apply to certain larger markets where there is adequate dealership.)

Not only will present customers buy many more records but the number of customers will be increased beyond anything that the average dealer imagines.

## BRIGHT DAYS AHEAD FOR RECORD DEALERS

By Frank B. Walker, Vice-President, RCA Mfg. Co., Camden N. J.

It is my opinion that as long as the dealer's gross stays at the same percentage and selling methods are adapted to fit in with reduced list prices, there can be no question as to profits.

It is, of course, impossible for anyone to compute what increased volume a dealer must do to realize the same net profit in his record business. It depends upon his overhead, upon his methods of doing business, and upon how much he expects to derive as profit.

Dealers will not be made larger or smaller by virtue of this move but all who are aggressive and practice energetic merchandising will attain a size in proportion to their aggressiveness. It would also seem to me that there may be more dealers as a result.

There is no question but that present customers who have regular record-buying habits will buy more records. I have never yet found a record enthusiast who was quite satisfied with his collection. He can always give a long list of things he would like to have. And invariably the reason why he hasn't them is because he cannot afford to buy more than he is buying at present.

With the new prices, there is no doubt in my mind but that a vast new market will be created. The love of good music is far-reaching and has been limited somewhat, insofar as records are concerned, by cost.

I was an optimist on the record business in 1910 and have continued

---

## To Build Profits on Records in 1940-41

Advertise the new low prices.

Use newspapers to reach new buyers.

Mail out announcements to past customers.

Sell aggressively in the store.

Push special new releases.

Sell groups of records, by authors, topics, etc.

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# THE RUSH TO BUY RE-PRICED RECORDS



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Dealers will not be made larger or smaller by virtue of this move but all who are aggressive and unexcelled energetic merchandising will attain a size in proportion to their aggressiveness. It would also seem to me that there may be more dealers as a result.

There is no question but that present customers who have regular record-buying habits will buy more records. I have never yet found a record enthusiast who was quite satisfied with his collection. He can always give a long list of things he would like to have. And invariably the reason why he hasn't them is because he cannot afford to buy more than he is buying at present.

With the new prices, there is no doubt in my mind but that a vast new market will be created. The love of good music is far-reaching and has been limited somewhat, insofar as records are concerned, by cost.

I was an optimist on the record business in 1910 and have continued

## To Build Profits on Records in 1940-41

Advertise the new low prices.

Use newspapers to reach new buyers.

Mail out announcements to past customers.

Sell aggressively in the store.

Push special new releases.

Sell groups of records, by authors, topics, etc.



### New Musical Instrument for Radio Dealers' Attention

For homes with pianos, here's the Solovox invented by Laurens Hammond, of organ and Novachord fame. It's an extra keyboard, 3 octaves with 6-octave range, offering wide variety of tone combinations with piano, and sells at \$190.

to be one ever since. This includes the depression years from 1930 on. I see nothing in the 1940 picture or anywhere in the future that will affect a record dealer's manner of doing business or the profits to be derived therefrom. I do see, however, some very bright spots in his horizon, because he definitely has, at his command to serve, a splendid group numbering millions of record buyers throughout the country—to which he now has an opportunity to add millions more of new customers heretofore handicapped in their buying by price limitations.

#### NEW CUSTOMERS BEING CREATED. FRANCHISES DESIRABLE.

By Eli E. Oberstein, U. S. Record Corp., N. Y. C.

The amount of advertising and promotion being done by the record companies will mean more dealers and more interest by the dealers.

There will be a greater unit purchase by present customers and there will be great interest by new customers. Every radio line is now advocating the sale of record-playing devices. The publicity being given the price reduction in all the papers and magazines throughout the country will in itself create millions of buyers.

To a great extent price controls the number of records, whether classical or otherwise, that a customer will buy. This is particularly true with schools, which have a limited budget. I believe price reduction will increase the number of records purchased by the schools throughout the country.

The dealer fits in very well under the new plan because of increased sales and would certainly be protected by proper franchise. When there were franchise dealers, the dealers could

afford to carry a greater stock because their competition was eliminated from nearby stores. A dealer could promote and spend money on a line, which he does not do today to any great extent.

Franchising would help the dealer prevent overstock, as the same repertoire is being made by all the manufacturers and while he would lose some sales because of certain artists, he would more than make it up by the limited stock, and by the natural business he would get by being known as a "such-and-such record company" dealer.

### NY Musical Group Makes Offer on Operatic Records

A new element in the sale of operatic recordings in the New York metropolitan area was seen in the exceptionally big-scale announcements by the New York Committee for Music

### Wax Worth Watching

DINAH SHDRE with orchestra singing Maybe—Bluebird B10793.

HENRY RUSSELL and his Romancers singing Sierra Sue—Okeh 5649.

BING CROSBY with John Scott Trotter and his orchestra singing Only Forever from "Rhythm on the River"—Decca 3300.

GINNY SIMMS with orchestra singing "I'll Never Smile Again"—Okeh 5703.

JOHNNY MESSNER and his orchestra playing Bessie Couldn't Help It with vocal by Jeanne D'Arcy, Mr. Messner and ensemble—Varsity 8357.

ANDREWS SISTERS with orchestra singing Ferryboat Serenade—Decca 3328.

KAY KYSER and his orchestra playing Chiapanecas with VC by ensemble—Columbia 35621.

MILLS BROS. with guitar singing On the Banks of the Wabash—Decca 3331.

EDDY DUCHIN and his orchestra playing Only Forever from "Rhythm on the River" with VC by June Robbins—Columbia 35624.

Appreciation, that 86 recordings of 12 grand operas will be distributed by the Committee in a non-profit effort to get this music to the largest possible number of people.

These records are specially recorded for the offer, and are distributed at a charge of 58c per 12 in. disc, or \$1.75 for album sets of three or four. The event is announced as "a great public service in behalf of good music" and it involves the cooperation of radio, churches, schools and civic organizations.

An electric record-player, which plays through radios, is offered at \$4.75. All merchandise comes through 14 distribution stations set up by the Committee in the area. Operas will be offered one each week, for 12 weeks.

### Political Speeches Pull Millions

A good section of the 130 million people of the U. S. have decided to "listen before they vote" as the two major political parties swing into a more terrific phase of the Presidential campaign. The acceptance speech of Wendell L. Willkie drew a record audience for political speeches, according to the ratings of Cooperative Analysis of Broadcasting.

Sept. 16 was the opening day of "Listen Before You Vote" campaign, sponsored by the National Association of Broadcasters, working with RMA and RSA. Dealers and distributors are also helping to make a big point out of the long series of election broadcasts, so that more listeners will know where to buy more sets and more service.

### Dealers Nail Planks in Their Platform

A group of aggressive dealers in Illinois have adopted a sales platform, which is solid enough to discourage all the unfair trade practices, and comprehensive enough to develop a new cooperation between the manufacturers and the retailers. The action was taken under the banner of the Illinois Radio & Appliance Dealers' Association of Chicago, and is being widely publicized as the clean-up code of the business. The same platform has also been adopted by the Cincinnati association of radio and electrical dealers.

The planks of these platforms cover the same points which were listed by Caldwell-Clements, Inc., publishers of RADIO TODAY, in their efforts to provide a code of ethics for the radio and appliance business. The platform was published repeatedly, and was nationally applauded by readers. In many cases it was used by retailers as a store exhibit.

On page 22 the code is presented in feature form — a practical and straightforward statement of policy for radio and appliance men.

# PROFITS HIT ALL-TIME HIGH FOR COLUMBIA RECORD DEALERS!

## *Sensational Re-Pricing Plan Pioneered By Columbia Scoring Nationwide Triumph*

● Columbia's bold move in slashing classical record prices has opened up mass markets never before exploited. From Los Angeles to Boston, dealers (with *full rebate credits* on their stock from Columbia) are reporting history-making volume on Columbia "Masterworks." Sales of a few weeks are more than sales of the past six months!

And this is only the beginning. Columbia's revolutionary move to bring the world's finest music within the reach of everyone has yet to realize its full benefit. Popular sales are on the way up, too—thanks to increased store traffic created by Columbia's intensive "Masterworks" advertising campaign.

Columbia is re-writing record history—and making more money for every Columbia Record dealer!



### HERE'S WHAT DEALERS SAY ABOUT COLUMBIA'S DRAMATIC MOVE

The Boston Music Company, Boston, Mass.—“Since the Columbia ‘Masterworks’ announcement . . . we have enjoyed one of the best August months in record sales.”

Liberty Music Shop, Incorporated, Ann Arbor, Mich.—“At the new prices our Columbia volume has already doubled and we anticipate still greater gains when the fall season starts.”

Stradler's, Incorporated, Chicago, Ill.—“We have noticed in our monthly operating statement for August a decided increase in the sales of Columbia records over same period last year.”

The Record Album, Oakland, Cal.—“Sold more Columbia ‘Masterworks’ Records during the past month than our total volume for the previous 11 months.”

The May Company, Los Angeles, Cal.—“We doubled our sales force to take care of added business . . . unable to take care of the crowds adequately.”

The Emporium, San Francisco, Cal.—“Enlarging our facilities to take care of increased sales.”

H. F. Cole, Inc., Grand Rapids, Mich.—“Sales of ‘Masterworks’ increased more than 500%.”

Columbia Recording Corp., Subsidiary of The Columbia Broadcasting System, Inc. • Bridgeport, New York, Hollywood

# COLUMBIA “MASTERWORKS” RECORDS

# HERE'S OUR BUSINESS PLATFORM

1.

Radio and appliances should be sold at a profit.

2.

Production should be geared to current sales demand, with fewer conflicting models.

3.

Business belongs to the man who goes after it fairly.

4.

Vicious price cutting and misleading advertising have no place in radio-appliance selling.

5.

Manufacturers and distributors who perform a useful function and sincerely cooperate with radio-appliance dealers, are entitled to, and should receive, full dealer loyalty and support.

6.

Industrial-discount selling, employee-group buying, and non-retail distribution, must stop.

7.

Instead of fighting over existing business, the radio-appliance trade in general should develop new sales demands through cooperative "creative" selling.

8.

Radio-appliance merchandising should be elevated to a higher plane, and deserves modern stores and methods.

9.

Servicing is a responsibility which must accompany sales.

10.

The ultimate interests of dealer, distributor and manufacturer are identical.



Prepared by RADIO TODAY  
480 Lexington Ave., New York, N.Y.

TRUST G-E TO TURN OUT

# WINNERS!

Don't fail to see and to hear the brilliant new line of G-E Golden Tone Radios. *It's the Leadership Line for '41!*

Every set — a star! Tops in tone — tops in styling — tops in sales performance!

Display these sensational new radios prominently — on your sales floor, in your windows. Then watch how sales mount.



**INVESTIGATE** Get in touch with the G-E Radio Distributor — today.



MODEL J-805—Special Electioneer Console. Priced to sell where the sales are thickest.



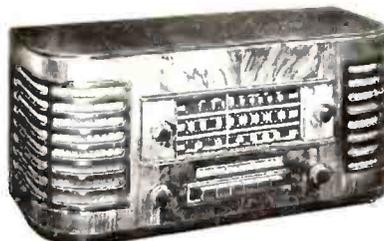
MODEL J-809—A Gorgeous Combination. Equipped with Special "Roll-Out" Phonograph Compartment.



MODEL JFM-90—A New FM Translator That Permits Practically Any Standard Radio To Receive Frequency Modulation Broadcasts.



MODEL J-51 — Special Electioneer Table Set. Splendid Design. Outstanding Value.



MODEL J-71 — De Luxe Table Model. Equipped with Frequency Modulation Key — 3 Bands—Dual Beam-a-scopes.



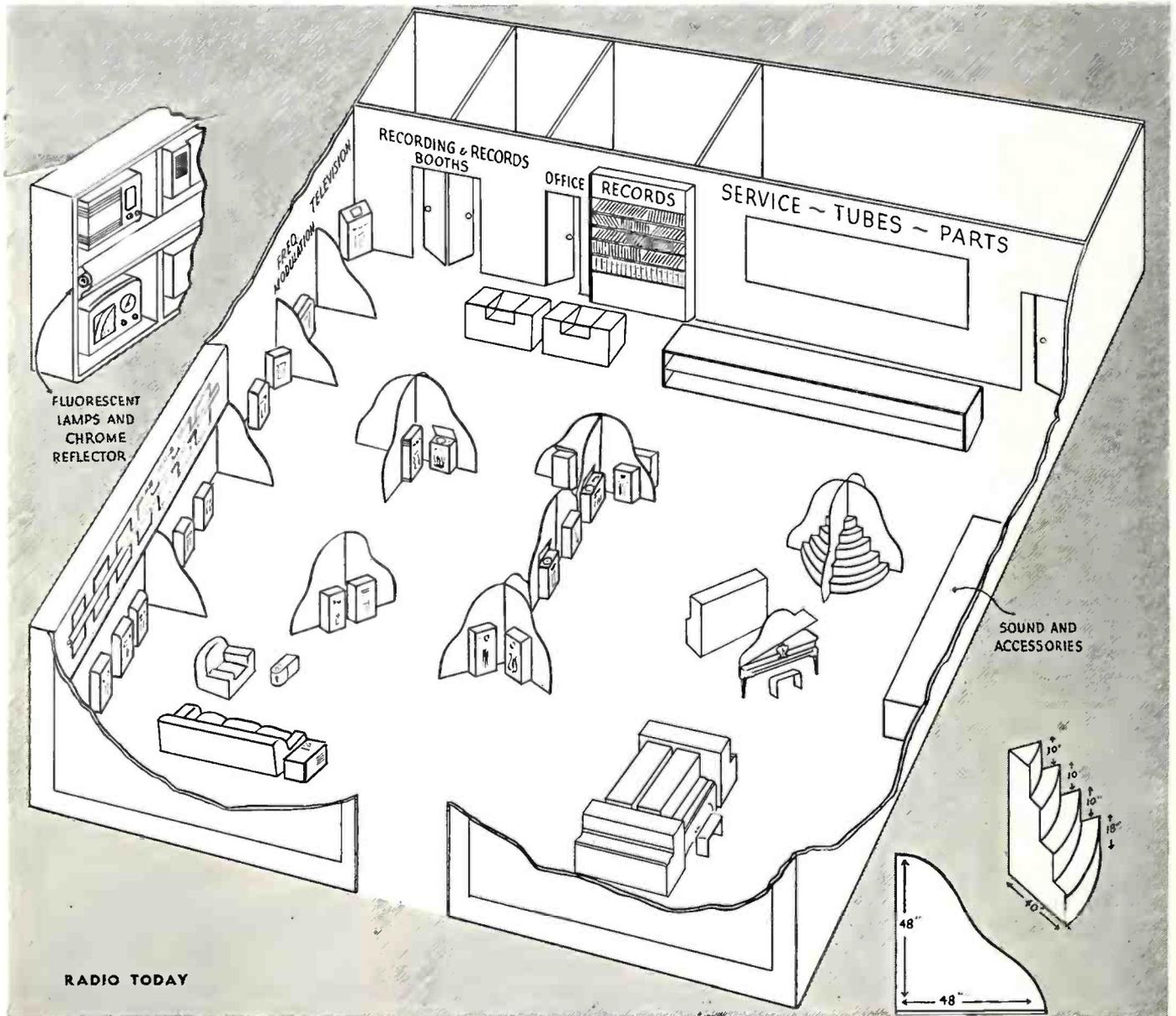
MODEL JM-7—Something Different! A Portable Home Recording Record Player Offered At A Price Surprisingly Low.

RADIO AND TELEVISION DEPARTMENT, BRIDGEPORT, CONN.

# GENERAL ELECTRIC

# BLUEPRINT FOR RADIO-MUSIC SALES

*A highly flexible floor-plan that emphasizes variety, color and economy, suggested in detail by Radio Today.*



A fresh, modern store arrangement always helps to put customers and salesmen on a better merchandising foundation. The store plan shown above is extremely flexible, and can be kept constantly fresh and interesting with a minimum of expense.

All partitions on the floor are uniform and movable, as shown in the smaller sketch at lower right. They may be used "in line" as shown in the center of the plan, or singly, as shown along the left wall. "Group" arrangements may also be used; dozens of positions are possible.

The step fixtures may be used alone or in combination with partitions, for displaying small sets and other appropriate merchandise.

Both the partitions and the step fixtures may be made locally, by any carpenter or cabinet-maker. The frame of each is made of 2 in. by 4 in. material, the sides and steps of wall-board or ply-wood. The edges of the fixtures are closed with 1/2 in. material, with quarter round, or chrome moulding to finish it off.

Although these fixtures are quite inexpensive, they are very durable, and are easily maintained. They can be painted by anyone for a complete change of appearance.

Decorated in two tones of green, or blue, this store will be most attractive and restful, and will have the effect of putting the prospect at ease. The plan will greatly facilitate selection and buying and with the actual floor layout frequently changed, it will never become tiresome.



EVERY NEWS-STAND IS HELPING YOU SELL

...**"The Instrument Great Artists Choose!"**

*RCA Victrola*

What's BEHIND this Advertising?

THE HOTTEST  
RCA VICTROLA  
LINE IN HISTORY!

*Here's the Greatest Advertising Support that  
ever backed any Phonograph-Radio!*

"Choose the Instrument Great Artists Choose!" That's the theme of the biggest national advertising campaign ever devoted to the RCA Victrola line...the *biggest* campaign offered by *any* manufacturer of phonograph-radios!

Pages...double-page spreads... full color! Circulation that reaches millions and more millions!

Results? The biggest buying-tide in the history of phonograph-radios is on *right now!*

Acceptance of RCA Victrola features...insistence on genuine RCA Victrola models...is the greatest in history!

Let this great tide sweep *you* on to greater profits! Every news-stand in your town is helping you sell the genuine RCA Victrola! Take full advantage of this greatest advertising support—you're *sure* to prosper!

*Over 380 million RCA Radio Tubes have been purchased by radio users.*



RCA VICTROLA ANNIVERSARY MODEL V-405... Automatic record changer, 10" or 12" records... new, exclusive RCA Victor tone guard... American, foreign reception, 3 bands... 12 watts push-pull output... stabilized electric tuning on 6 stations. Large record storage compartment in cabinet. Also available with *home recording* as Model VHR-407.



DE LUXE RCA VICTROLA V-300... Automatic record changer for 10" or 12" records... new exclusive RCA Victor tone guard... 10 tubes, plus Magic Eye... American, foreign reception, 4 bands... Overseas Dial, special 31-meter spread band... new stabilized electric tuning... Supersensitive 15" Electro-Dynamic Speaker plus 20 watts push-pull output.

*RCA Victrola*

Combines Record and Radio Entertainment  
A Service of the Radio Corporation of America



RCA VICTROLA V-100... 5 RCA Victor Preferred Type Tubes, Superheterodyne circuit... constant-speed, self-starting motor... built-in Magic Loop Antenna... plays 10" or 12" records with lid closed.



## CONSOLE SALES NOW PROMISE MORE PROFITS FOR RETAILERS

Manufacturers and dealers alike expect the ebbing tide of console demand to be turned into a flood tide of public acceptance, sales and profits this year.

This is much more than a hope. There are many sound reasons behind these expectations.

Manufacturers have *done* something to their 1941 consoles.

Almost universally, console styling has been brought nearer to public desires.

The handicap of appearance has been greatly reduced.

Performance, and particularly tone quality, is now demonstrably superior to even the best of the small sets.

Price differentials, for the much superior console performance and appearance, are much less than formerly.

Console lines are shorter—which means more concentrated stock, faster

turn-over, more real *selling* opportunity for the dealer.

These are very important factors in breaking down the consumer resistance to consoles, which has been growing for several years.

Couple them to the facts that there are more consoles than ever before which need replacement, that buying power and buying is on the increase, that the war and the presidential election bring more people to listen more, and the stage is all set for a great console year.

If dealers generally, will really sell the style, the performance, the tone quality, and demonstrate the superiority of 1941 consoles, they will find the public interested, willing and able to buy the new consoles.

The greatest console year since '29 can easily result if dealers do as good a selling job, as the manufacturers have done a styling and designing job in these consoles for 1941.

## MANY IMPROVEMENTS IN NEW ART OF ELECTRONIC MUSIC

The advent of the radio tube and amplifier have made possible new tone quality and facility of volume control in musical instruments. The piano and various stringed instruments now become the source of unique musical effects never before possible. And in addition there are electronic instruments in which the tubes themselves provide the oscillations.

Here are the three methods of radio-tube pick-up and amplification.

### ELECTRICAL PICK-UPS

First. We can clamp a microphone onto the instrument or onto its sounding box, and so hear its vibrations by direct contact. Such a microphone is called a "contact mike" and makes possible tremendous magnification of

the original sound. In this way the tones of pianos, violins, guitars, mandolins and other musical instruments can be amplified.

The second method does not pick up any sound at all, but uses a magnet coil near each vibrating steel piano string. The steel wire, vibrating in front of the poles of the magnet, with each vibration changes the amount of magnetic flux flowing across the air gap, so that faint electrical currents are caused to flow in the magnet coil, exactly corresponding to the vibrations of the steel piano string. These faint electric currents can then be amplified by radio tubes, and the vibrations of the string will be heard in a loudspeaker in any desired volume. This is the method used in picking up the string vibration of the Story & Clark "Storytone" Piano, as voiced by RCA.

### CAPACITY METHOD

The third pick-up method is the electrostatic or capacity process. In this field the leader has been B. F. Miessner, a prolific inventor whose work in radio is now incorporated in practically every radio set in use.

For electrostatic pickup, near each vibrating metal string of the piano is mounted a small insulated metal "plate"—actually the flat head of a wood screw. As the metal string vibrates back and forth, although its motion is hardly perceptible, this slight change of position correspondingly changes the electrical capacity between the wire and the nearby screw-head. These rapid changes of capacity, corresponding to the metal string's vibration, cause tiny currents to flow, which can be picked up by the sensitive radio tube and amplified to any desired volume.

The Hardman-Peck piano and Orgatron are examples of such electrostatic pickup, using the Miessner electronic patents.

Pianos in which the strings' vibrations are picked up by electrical methods have wide possibilities of tone, and can produce effects like those of an organ, mandolin and many other instruments. Such pianos can also be adjusted in volume over a wide range of sound. Even a small mini-piano can produce the great volume of a big concert grand. Or it can be turned down so as to be inaudible, while its player hears himself practice through earphones.

### OSCILLATING TUBES

In another group of instruments, represented by the Hammond Novachord, the "howl" of oscillating radio tubes has been converted into pleasing musical tones. Inventor Laurens Hammond has now developed a smaller instrument of three octaves employing the same principle of oscillating radio tubes, which is being applied as a singing solo tone to supplement the old fashioned piano.

(Continued on page 28)



All these artists have individual pick-ups, in the string section of the Croycroft all-electronic orchestra. Instruments and conductor's monitoring system designed by B. F. Miessner, inventor of the electronic piano.

The World's Most Expressive PIANO! An Automatic RCA VICTROLA! A splendid RCA VICTOR RADIO!

# -A COMPLETE MUSIC ROOM IN *One* LITTLE INSTRUMENT!

The Story & Clark

## STORYTONE

—Voiced by RCA-Victor

Here at last is a *non-competitive* merchandising opportunity that offers radio dealers an entirely new field for their sales abilities—an amazing combination of piano, radio and record-player, developed jointly by RCA-Victor and this 83-year-old piano company!

Yes, the piano itself—the Storytone—is voiced *not* by a wooden sounding board, but by fine electric pick-ups beneath the strings. The result is the purest tone, the most responsive piano, that the world has ever known! The speakers for both the piano and bench-contained combination set are hidden within the piano itself.

Several very well-known radio dealers have already proven that this market-widening instrument can be successfully and profitably sold by radio outlets. If you want to know all the facts, get in touch with us today.

*A few choice territories are still open!  
Investigate!*

The Story & Clark Storytone Voiced by RCA-Victor is sold to outstanding music houses on an exclusive basis. A few territories are still open. Write for full details, including prices and *very liberal discounts*.

## STORY & CLARK PIANO COMPANY

64 EAST JACKSON BOULEVARD, CHICAGO

*Instruments of Quality Since 1857*

*\* magnificent* says Nathaniel Shilkret  
*new possibilities* says Dmitri Mitropoulos  
*fascinating* says Hans Lange  
*wonderful* says William McPhail  
*superb* says Glenn Miller  
*great* says Stewart Wille  
*remarkable* says Melville Clark  
*a revelation* says Dick Todd  
*marvelous* says Leslie Chandesh  
*outstanding* says Bob Zurke



The Storytone is made in *two* exquisite styles—Eighteenth Century and Modern



A smoothly styled newcomer to the market, the Storytone electric piano, with both radio and phonograph in the player's bench. Developed by RCA engineers, working with experts of Story & Clark Piano Co., 64 E. Jackson St., Chicago.

(Continued from page 26)

By means of two bolts it can be attached to any ordinary piano, bringing its own keyboard paralleling the piano treble keys.

All of the sweet musical notes heard in the Solovox come from the oscillations of a single master radio tube, which is arranged to oscillate at any of the notes of the top octave, depend-

ing on which key is pressed. This oscillating tube provides for the eight notes of the uppermost octave. If notes in the next octave below are to be played a *subdivider* tube cuts the frequencies in half, producing another set of notes each one octave lower. And similarly a cascade of five such subdivider tubes enables notes of six octaves to be played.

## CONTACT MIKE GOOD SELLER

Overlooked by the rank and file of radio dealers, contact mikes are *really* being sold by the music dealers.

Contact mikes are specialties, of course, but they are being "taken to town" by dealers who really understand their use, and give them selling effort.

New models are a long step ahead of the early ones, in appearance, performance and price.

To the persons who play musical instruments for their own pleasure, a contact mike brings a new thrill as it adds new power, richer timbre, to the instrument.

To the professional instrumentalist, to the small "bands", contact mikes open a whole new range of coverage, bring new power to their instruments, amplify every nuance of tone, and through a mixing panel, gives new, and more delicate control of a "band" to the leader.

As these uses and features of contact mikes are being better understood, and they are easily demonstrated, demand is rapidly increasing.

Contact mikes carry with them both amplifiers and speakers, making a sale of substantial proportions and worthwhile profits.

Dealers who are willing and able to give contact mikes the necessary promotional and selling effort are being well repaid. Both the number of such dealers, and their sales, are increasing.

## COMBINATIONS GROOMED TO MEET NEW SALES DEMAND

Popular demand for recorded music has shown unusual improvement for several years.

This year radio manufacturers and dealers will "cash in" on this demand with greatly increased radio phonograph sales.

Cabinetry and styling of the new "combos" make them at home in any surroundings.

Tops which do not have to be "cleared" to be played, appeal to milady who likes neither bare expanses of wood, nor the haphazard placing of pictures, vases, flowers, or other ornamentation, made necessary by the old lift-top combination.

Automatic record-changers which are simple and dependable appeal to the real lover of fine music, make it possible to enjoy an uninterrupted hour of music of personal preference.

Priced now within reach of even modest incomes combination and automatic combination sales will set new sales records in the next few months.

To alert dealers this is probably the most important immediate prospect in the radio business.

Combinations represent a substantially higher unit sale, and better gross than most dealers have been accustomed to for a long time.

Even the table model combination is a fine step-up from the compacts.

The theme of "the music you want, when you want it" appeals to young and old, to all classes, to all income groups.

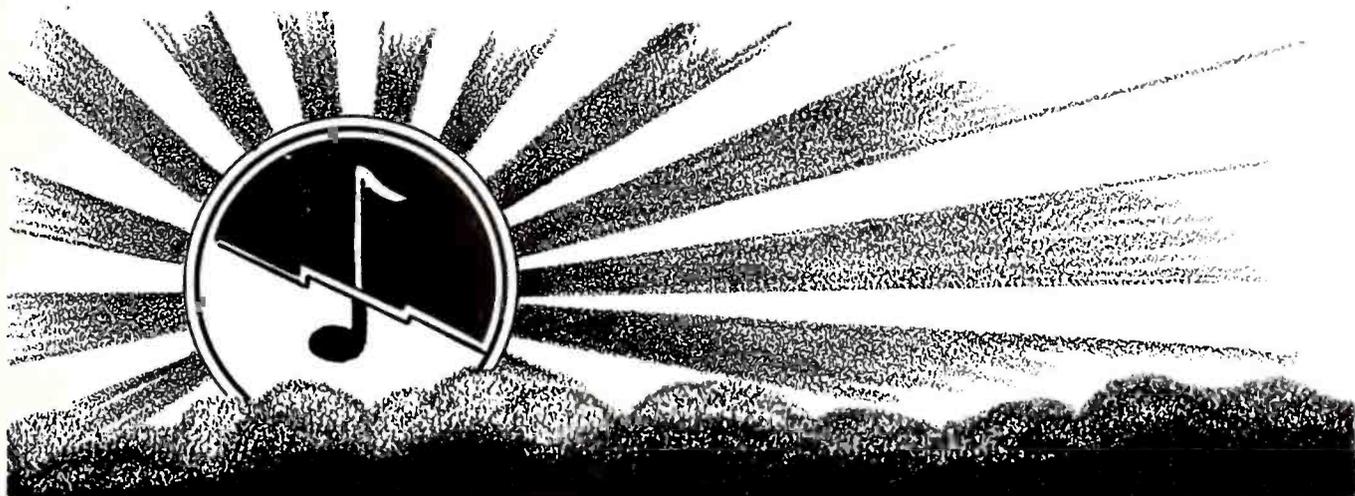
Sold soundly, and consistently, it is already paying dividends to those who know how to do the job, and are doing it.

More merchandising effort is being placed on combinations this year than on any other model by those who really have their finger on the buying pulse of the public.

Combinations have the call this year, and will represent a much greater percentage of both units and dollars than ever before in the history of these fine instruments.



Thousands of musicians are prospects for tiny mikes like this one on the harmonica. It's an Amperite Kontak that makes Joe sound like a pipe organ. Connects to amplifier or home radio.



# *The Day of* **ELECTRONIC MUSIC**

## **An Opportunity for Manufacturers and Dealers**

Electronic music, as developed by Miessner for pianos, organs and fretted instruments, is heralded far and wide as an achievement in the creation of music.

Yet it also has the makings of a merchandising **BONANZA** for the manufacturer and dealer who take it up in earnest.

The almost unlimited range and mastery of tone afforded by Miessner Electronic Music is matched by an equally unlimited market, as yet untouched but abounding in profit possibilities.

Miessner inventions in electronic music are covered by more than 45 patents issued and others pending. Licenses are available to manufacturers for immediate production, free of all problems of development work and capital investment—and free of the trade evils hampering radio.

The servicing of an electronic musical instrument presents no problem to a capable serviceman.

Correspondence invited.

**MIESSNER INVENTIONS, Inc.**  
Millburn, New Jersey

*is here!*

## **NO MANUFACTURING OR SELLING BY MIESSNER**



The business of Miessner Inventions, Inc., is entirely outside the field of manufacturing or selling. The company's sole activity is the licensing of manufacturers to produce electronic musical instruments under Miessner patents and with Miessner's consulting assistance.

Data on licensing, and technical information on electronic musical instruments, will be furnished to manufacturers who contemplate entering this field.



# **MIESSNER**

# RECORDER SPECIFICATIONS

## PRACTICAL DATA ON 112 MODELS OF NEW RECORDERS MADE BY 41 MANUFACTURERS

**C O D E :**  
**CABINET TYPES**  
 B—console  
 T—table  
 P—portable  
 S—chassis  
**CUTTERS**  
 C—crystal  
 M—magnetic  
**MIKES**  
 C—crystal  
 D—dynamic  
 R—ribbon  
**LEVEL INDICATORS**  
 E—cathode ray "eye"  
 N—neon tube  
 O—output meter  
 X—none  
 ..—not answered

COMPANY ADDRESS TRADE NAME	MODEL NO.	CABINET STYLE	PRICE	RADIO	CUTTING HEAD	PICKUP	MIKE	SOUND LEVEL INDICATOR	TURN-TABLE DIAM.	AMPLIFIER POWER	RECORD CHANGER
AIR KING PRODUCTS CO. 1523 63 St., Brooklyn, N. Y.	5C00 4000	T P	\$89.95 .....	.... ....	C C	C C	D D	N N	.. ..	2.5 w. 2.5	.... ....
AUTOMATIC RADIO 122 Brookline Ave., Boston	R60	T	\$99.50	yes	C	C	..	N	..	3	no
AUTOMATIC RECORDER .....	....	B	.....	yes	C	C	..	N	..	3	....
BELL SOUND SYSTEMS 1183 Fsex Ave., Columbus, Ohio	RC1P RC2P	P P	\$53.00 82.50	no no	C C	C C	C C	N N	10 10	X 4	no no
RECORD-O-PHONE											
BELMONT RADIO CORP. 1257 Fullerton Ave., Chicago, Ill.	797	B	.....	yes	C	C	C	N	10	4	no
BELMONT FRESHMAN MASTERPIECE											
CONTINENTAL RADIO & TELEV. 3800 Cortland St., Chicago, Ill.	R58-B11 R59-B11	B B	\$179.95 225.00	yes yes	M M	C C	C C	E E	10 10	10 10	yes yes
ADMIRAL											
CROSLY CORP. 1329 Arlington St., Cincinnati, Ohio	33BG 31BF 34BH 28AZ	T B B B	\$ 69.95 149.95 ..... .....	yes yes yes yes	C C C C	C C C C	C C C C	.. .. E ..	.. .. .. ..	.. .. .. ..	no yes yes no
DE WILD RADIO MFG. CORP. 440 Lafayette St., N.Y.C.	906 907 908	B B T	\$174.50 149.50 119.95	yes yes yes	C C C	C C C	C C C	E E E	10 10 10	10 10 10	no no no
RECORDOMAT											
EMERSON RADIO & PHONO. CORP. 111 8th Ave., N.Y.C.	384 364 371	P T B	\$ 69.95 99.95 149.95	yes yes yes	M M M	C C C	C C C	E E E	10 10 10	5 5 5	no no yes
FAIRCHILD AVIATION CORP. 88-06 Van Wyck Blvd., Jamaica, L.I., N.Y.	F26-3	P	\$645.00	no	C	C	..	..	16	10	no
FARNSWORTH TELEV. & RADIO Fort Wayne, Ind.	BKR-84	T	\$99.95	yes	M	C	C	N	10	5	no
FEDRAL RECORDER CO. 50 West 57 St., N.Y.C.	111 101 116 211 301 306 12LP 16SM	T T P B B B P P	\$ 69.95 89.95 72.50 99.95 129.95 159.95 199.50 399.00	yes yes yes yes yes yes yes yes	M C M C C C M	C C C C C C C	C C C C C C D	N N N N N E O O	10 10 10 10 10 10 12 16	3 3 3 3 3 4 5 5	no no no no yes yes no no
GALVIN MFG. CORP. 4545 Augusta Blvd., Chicago, Ill.	93F1 103F1	B B	\$169.95 249.95	yes yes	C ..	C C	C C	N N	10 10	10 10	yes yes
MOTOROLA	RW1	T	49.95	yes	C	C	C	N	10	..	yes
GENERAL ELEC. CO. Bridgeport, Conn.	JM7	P	\$49.95	no	C	C	C	X	10	X	no
GENERAL INDUSTRIES CO. 3537 Taylor St., Elyria, Ohio	R70	S	.....	no	M	C	X	..	10	..	no
GRAY MFG. CO 16 Arbor S., Hartford, Conn.	A	P	.....	no	C	C	D	..	..	4	no
GRAY AUDOGRAPH											
HOMOCORD MFG. CO., INC. 1600 Broadway, N.Y.C.	110 120 130	T B B	\$ 69.95 89.95 139.95	yes yes yes	C C C	C C C	C C C	E E E	12 12 12	.. .. ..	no no yes
HOMOCORD											
HOWARD RADIO CO. 1735 Belmont Ave., Chicago, Ill.	302RT 302R 302RA 5 8R 568RA	T B B B B	\$ 99.95 119.95 169.50 149.50 199. 0	yes yes yes yes yes	C C C C C	C C C C C	C C C C C	E E E E E	10 10 10 10 10	6 6 6 10 10	no no yes no yes
LAFAYETTE RADIO CORP. 100 Sixth Ave., N.Y.C.	S-28 S-53 BB-96	T B B	\$ 67.50 87.50 159.50	yes yes yes	C C M	C C C	C C C	E E O	10 10 12	.. .. ..	no no no
RADIOCORDER											
MAGNAVOX CO., INC. 2131 Bueter Rd., Fort Wayne, Ind.	Adam Secretary Chipperdale Ac am Com:mode Regency Commode	B B B B	..... ..... ..... .....	yes yes yes yes	M M M M	C C C C	C C C C	O O O O	.. .. .. ..	.. .. .. ..	.... .... .... ....
JOHN MECK INDUSTRIES 1313 W. Randolph St., Chicago, Ill.	R-15P	P	\$110.00	no	M	..	C	O	12	10	no
AUDIOGRAPH											
MELLAPHONE CORP. Rochester, N. Y.	R C	T T	\$40.00 60.00	no no	M M	M M	C C	E ..	9 9	X X	no no
MELLAPHONE RECORDER	TT	S	30.00	no	M	M	C	..	9	X	no
MUSIC MASTER 508 S. Dearborn St., Chicago, Ill.	H	P	\$84.50	no	C	C	..	..	..	..	no
PHILCO RADIO CORP. Philadelphia, Pa.	Attachment kit for radio-phono models.										
PILOT RADIO CORP. 37-06 36th St., L.I. City, N.Y.	HD192 LD192	B B	\$169.50 199.50	yes yes	.. ..	C C	C C	E E	10 10	10 10	yes yes
PILOT HOME RECORDER											
PRESTO RECORDING CORP. 242 West 55 St., N.Y.C.	Y K-6 K-7	P P P	\$595.00 215.00 230.00	no no no	M M M	M M M	D C C	O O O	16 12 12	10 3 3	no no no
RCA MFG. CO., INC. Camden, N.J.	MI-12700 MI-12701 VHR207	B P B	\$475.00 179.00 .....	no no yes	M M ..	M M ..	R R C	O O ..	16 12 ..	3 3 ..	no no yes
REK-O-KUT 173 Lafayette St., N.Y.C.	Overhead feed mechanisms and turntables.										
REMLER CO., LTD. 2101 Bryant St., San Francisco.	471	T	\$99.90	yes	C	C	C	N	10	6	no

(Continued on page 50)

# Things HAVE happened at CROSLEY!

## Sensational New "Glamor-Tone" Radio Line Acclaimed by Top-Flight Dealers from Coast to Coast

EVERYTHING we said a few months ago about the new Crosley organization has been realized. "Crosley on the March!"—"Watch Crosley!"—"Things Are Happening at Crosley!"—no longer are these predictions. Now they're confirmed—positive proof is at hand!

The new Crosley "Glamor-Tone" Radio Line has swept the nation!

Never before has there been such enthusiasm, such immediate response, such acclaim—all expressed in terms of ORDERS!

The tremendous values in this new line have been recognized. Distributors and dealers have ordered far beyond our expectations. New accounts have been opened up at a greater rate than at any time in Crosley history. From Maine to California and from Canada to the Gulf, first-line

dealers are doing a BIG business with this outstanding line! *This is a Crosley year!*

It's not too late to jump on and ride with the winner! Get in touch with the nearest Crosley distributor TODAY. See these great values for yourself! Get the details of the complete new Crosley program in detail.

### Continuous National Advertising

National advertising on the new Crosley radio line will continue throughout October, November and December with large advertisements, in color, in the Saturday Evening Post, Collier's, Life and Look!—an even bigger campaign than originally planned!

Cash in on this great advertising and this great line of radio receivers before it's too late. We ask only that you see them—bear them—and get the prices. They sell themselves!

### THE CROSLEY CORPORATION

Powel Crosley, Jr., President Cincinnati, Ohio  
Home of the Nation's Station—WLW—70 on Your Dial

### CROSLEY MARCHES ON!

Crosley's new factory organization, now complete, has formulated a long-range program—built on a sound sales and merchandising policy—that means great things ahead for the entire Crosley selling organization.

With a new and permanent program of product development, sales activity and advertising now well under way, the Crosley franchise rapidly is becoming one of the most desirable in the appliance field.

Big things have happened—bigger things are coming!

Keep your eye on Crosley!

## Still Greater Things to Come in 1941— KEEP YOUR EYE ON CROSLEY!

# PRESENTING—

## FALL PROFIT BUILDERS



### Westinghouse WR-290

★ Table model with 8 tubes, 3 bands, 6 in. speaker, 6 push buttons, built-in antenna in a walnut cabinet, lists for \$49.95. Westinghouse Elec. Supply Co., 150 Varick St., New York, N. Y.—RADIO TODAY.



### Farnsworth Tip-Top tuning

★ Radio control door in center of Farnsworth console model, BK-88 tips forward and downward. 8 tube radio, Built-in-Tenna, 6 push buttons, 2 wave bands, HI-spot dial. Automatic record player is under top lid of cabinet. Farnsworth Telev. and Radio Corp., Ft. Wayne, Ind.—RADIO TODAY.



RCA Victrola model V302 in regal 18th C. Sheraton incorporates new "Tone Guard" feature & 15 in. loud-speaker, 10 tubes, Magic Eye, built-in loop & short wave antennas.



### Andrea portable

★ Six-tube, 3 bands (coverage from 16.2 to 550 meters) 3 way superheterodyne portable is housed in simulated alligator leather (6G63A) or browned striped airplane covering (6G63). Has disappearing front cover with lock and key. \$39.95. Andrea Radio Corp., 48-20 48th Ave., Woodside, N. Y.—RADIO TODAY.



### Sonora Cameo model

★ A new table radio model KT-87, in 2-tone plastic (tan front and red brown back) is also available in ivory, KT-89. 5-tube, AC-DC superhet with built-in loop, standard broadcast band, A.V.C. and 5 in. P.M. dynamic speaker. Sonora Radio and Telev. Corp., 2626 W. Washington St., Chicago, Ill.—RADIO TODAY.



### Stromberg-Carlson combo

★ Automatic radio-phonograph, No. 509-PF, having standard broadcast and American and Foreign short wave reception. Plays and shifts 10 and 12 in. records automatically. Crystal pickup, A.V.C., dynamic speaker, walnut cabinet. Stromberg-Carlson Tel. Mfg. Corp., 100 Carlson Rd., Rochester, N. Y.—RADIO TODAY.



### Talk-A-Phone recorder

★ Model R-80 complete home recorder also includes record player and P.A. system. Crystal mike, 6½ in. dynamic speaker. Plays 10 and 12 in. records. 3 watts power output, 5 tubes, electric eye volume indicator. Striped airplane-luggage cloth case. Talk-A-Phone Mfg. Co., 1219 W. Van Buren St., Chicago, Ill.—RADIO TODAY.

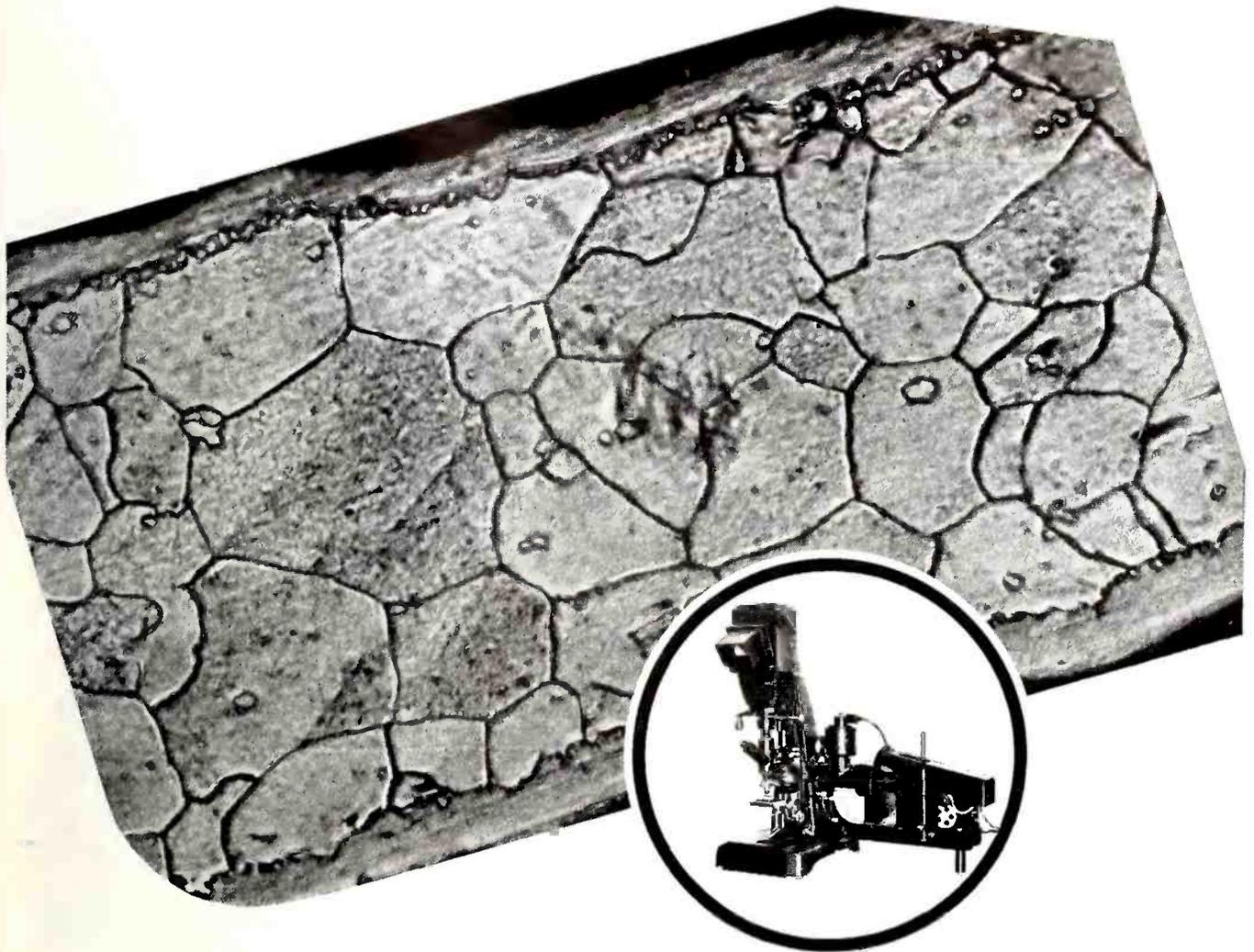
### Setchell-Carlson Dor-A-Fone

★ Combination radio and inter-call system, 411RD. Finger tip control. P.M. external speaker. AC-DC, superhet radio. P.M. dynamic speaker, built-in loop antenna. 5 tubes. Setchell-Carlson, Inc., 2233 University Ave., St. Paul, Minn.—RADIO TODAY.



### Knight superhet

★ Knight 5-tube, AC-DC, 2 band superhet, B10532. Magna-Beam built-in aerial, airplane dial, 5 in. dynamic speaker. Push button tuning. Molded plastic cabinet. Allied Radio Corp., 833 W. Jackson Blvd., Chicago, Ill.—RADIO TODAY.



## DAILY DEFENSE MAP...

**T**HE picture you see above is not an aerial view of a battlefield. It is a map showing the structure of a piece of metal five one-thousandths of an inch thin!

Sylvania engineers regularly map the structure of metals and wires which—if they pass Sylvania's rigid tests—will be used to make the world's finest radio tubes.

Through the use of the metallurgical microscope shown in the inset, greatly magnified photographs are

taken. By studying the structure thus exposed, Sylvania engineers determine the special characteristics of each batch of metals. Flaws which would be unnoticed by the unaided eye stand out as plain as warts on a nose.

Such a painstaking "defense measure" as mapping the structure of metal and wire is but one of the many special operations which guard the quality of Sylvania Radio Tubes... and *insure satisfied customers for you!*

Hygrade Sylvania Corporation... Emporium, Pa.

# SYLVANIA

SET-TESTED

RADIO TUBES



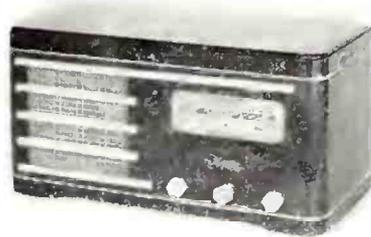
ALSO MAKERS OF HYGRADE LAMP BULBS AND MIRALUME FLUORESCENT LIGHT FIXTURES

# SALES BOOSTERS



## Motorola console

★ An 8-tube, AC superhet, No. 83K1, has 3 bands, 10 in. electro dynamic speaker, semi-rotatable aerovane loop and television, FM, phono connection switch. Walnut veneer cabinet. \$69.95. 6 push-buttons. Galvin Mfg. Corp., 4545 Augusta Blvd., Chicago, Ill.—RADIO TODAY.



## Majestic models

★ T1019, one of new line of table and portable sets has standard BC and SW bands. Walnut cabinet. Size 17 x 8 $\frac{1}{4}$  x 7 $\frac{3}{4}$ . Majestic Radio & Tele., 2600 W. 50th St., Chicago.—RADIO TODAY.



Columbia Recording Corp., Bridgeport, Conn., now takes its place among makers of phonographs. Here's a new \$69.50 model with 8 in. speaker, crystal pick-up.



## Farnsworth portable BT-68

★ Universal portable (AC, DC or battery) has 6 tubes, A.V.C., Bilt-in-Tenna. Simulated pigskin case, genuine leather handle. Farnsworth Telev. and Radio Corp., 3700 Pontiac St., Fort Wayne, Ind.—RADIO TODAY.



## Zenith 8S593

★ Radio-phono-recorder combination with crystal microphone & pickup, magnetic cutting head. 8 tubes, Wave-magnet, 12 in. speaker. American & foreign broadcasts. Walnut cabinet. \$129.95. Zenith Radio Corp., 6001 Dickens Ave., Chicago, Ill.



## Philco console

★ No. 605P, 6-tube phono-radio with automatic record changer. Tilt-front cabinet. Covers standard broadcasts, American and foreign short wave, state police calls. Philco Radio and Telev. Corp., Philadelphia, Pa.—RADIO TODAY.



## Stromberg table radio

★ No. 500J, AC-DC table radio with built-in loop, A.V.C., dynamic speaker. Rosewood cabinet, airplane type pointer dial. Stromberg-Carlson Tel. Mfg. Corp., 100 Carlson Rd., Rochester, N. Y.—RADIO TODAY.

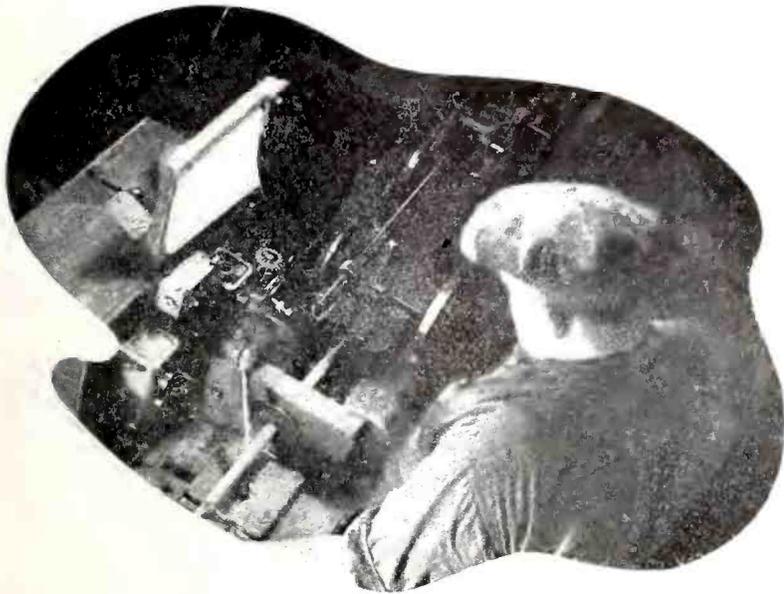


## Magnavox radio-phonograph

★ Adam commode, 11 tube radio with automatic record changing phonograph, also 11-tube FM receiver (separate chassis) or home recorder as optional extras. Record storage space. Magnavox Co., Ltd., 2131 Bueter Rd., Ft. Wayne, Ind.—RADIO TODAY.

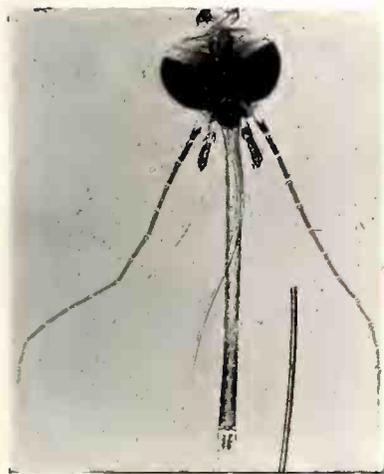
This smart-looking GE FM-AM receiver has 3 built-in antennas, double chassis; AM controls behind cabinet doors, FM on top under hinged lid. Television phono key. \$175.





### World's Smallest Metal Tube Compared with the Stinger of a Mosquito

On Display at New York World's Fair in the West Virginia Building



18 miles to the pound! This nickel tube, drawn by Superior Tube Company, has an outside diameter of less than  $19/10,000$  of an inch, a wall thickness of  $75/100,000$ , and an inside diameter of  $4/10,000$ . (The mosquito's stinger measures  $31/10,000$ .)

Superior used 30 passes, or drawings, to reduce the size of this tube from  $7/8$  inch O. D. down to  $19/10,000$ .

## THE LONG and THE SHORT of IT

Cold drawing small tubing is a tedious process — if you're not a small tubing man. At Superior, we start with raw stock of about 1" O.D. (seamless and welded)—and draw it practically out of sight, if that is what you need. We know just where to stop to meet your specifications. Every step down is small—a reduction of O.D. through the carefully machined die is made at the same time the wall is reduced by the mandrel. Time after time this operation is performed with intermediate anneals to keep the metal workable. Finally the tubing with Superior high finish is ready for laboratory check.

By concentrating in the small tubing field, Superior has made readily available to all industry a product which has erroneously been called "Specialty Tubing". *It is no specialty when you make it your only business.*

# SUPERIOR TUBE CO.

[ THE BIG NAME IN SMALL TUBING ]

NORRISTOWN, PENNSYLVANIA

Tubing from  $5/8$ " OD down . . . SUPERIOR  Seamless in various analyses. WELD-DRAWN  Welded Stainless. BRAUN  Welded "Monel" and "Inconel". SEAMLESS and Patented LOCKSEAM Cathode Sleeves.

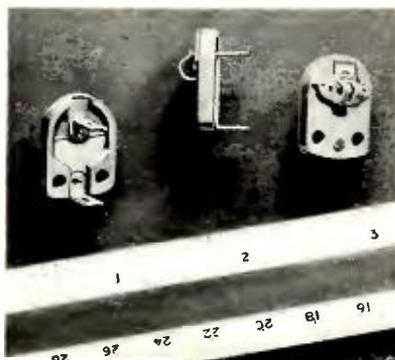
'FOR FINE SMALL TUBING'

# NEW THINGS



## Philco plug-in aerial

★ Auxiliary plug-in loop aerial for portables improves pick-up in trains, etc. Suction cups on the loop attach it to most surfaces. Attaching to portables automatically disconnects built-in loop. Philco Radio and Telev., Philadelphia—**RADIO TODAY.**



## Centralab trimmers

★ New ceramic trimmer capacitors have fixed plate bonded to insulation. Variable plate rotates on ground ceramic surface. Available in ranges 2-6, 3-12, 7-30, 60-75 mmfd. Centralab, 900 E. Keefe St., Milwaukee, Wisc.—**RADIO TODAY.**

## Precision coil bobbins

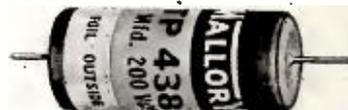
★ New type of coil bobbin of kraft or fish paper and fibre end pieces may be had in many standard sizes. Special lacquer improves electrical and mechanical characteristics. Precision Paper Tube Co., 2033 Charleston St., Chicago.—**RADIO TODAY.**

## Ohmite 750W rheostat

★ Model T rheostat handles 750 watts, is 10 inches in diameter, has 3/8-inch shaft, available in single or tandem assemblies. Large copper graphite contacts. May be had in straight or tapered winding. Ohmite Mfg. Co., 4835 Flournoy St., Chicago, Ill.—**RADIO TODAY.**

## Ideal battery

★ Rechargeable flashlight battery fits all 2-cell lights. Transparent case of special design prevents leaking. Small charger unit keeps cell at full voltage. Recommended for heavy users of flashlights. Ideal Commutator Dresser Co., 4033 Park Ave., Sycamore, Ill.—**RADIO TODAY.**



## Mallory coded condensers

★ All types of tubular capacitors now have color coding for easier identification of capacity and working voltages. Bands circle unit for easier checking of unit in a set. P. R. Mallory, 3029 E. Washington St., Indianapolis, Ind.—**RADIO TODAY.**



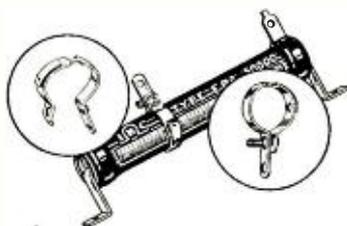
## Electro power unit

★ New A-B plug-in power pack converts portables and home battery radios into all-electric sets. Model AD operates any 1.5-volt radio having 4, 5 or 6 tubes from the 115 volt AC or DC line. List, \$8.95. Electro Products Labs., 549 W. Randolph St., Chicago—**RADIO TODAY.**



## Andrea record demonstrator

★ Walnut cabinet, designed for convenient record demonstrations is available to dealers at \$68. f. o. b. Contains high-gain push-pull amplifier, concert grand speaker, heavy-duty, constant speed motor, 12 in. recording turntable and crystal pickup. Andrea Radio Corp., 48-20 48th Ave., Woodside, N. Y.—**RADIO TODAY.**



## IRC sliding connector

★ New constant pressure connector for semi-variable resistors assures uniform contact to wire. Single screw holds band from moving. Spring is tempered for operation at normal resistor temperatures. International Resistance Co., Philadelphia—**RADIO TODAY.**

## C-D lamp filter

★ Fluorescent lamp line filter types IF-6 and IF-24 for plug-in lamps, and attachment to unit, respectively. Prevents radio interference by keeping radiation out of power line. Cornell Dubilier Electric Corp., Plainfield, N. J.—**RADIO TODAY.**



## Music-Master phono.

★ Concert model phonograph, DL, in portable carrying case. 8 in. speaker with well-balanced bass response especially suited for fine symphonic recordings or as a demonstrator. \$31.50. Music Master Mfg. Co., 508 S. Dearborn St., Chicago, Ill.—**RADIO TODAY.**

## "Buying Trend" Contest with \$1,500 Cash Prizes for Dealers

In order to bring home to the radio dealer the facts on what type of set the public is buying the Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York City, has announced a big contest in which retailers are asked to estimate the proportionate sales of all types of radios during the single month of September, 1940. Cash prizes totaling \$1,500 are offered for the closest estimates.

In a dramatic broadside headed "Sell Up, of Course," which has been mailed to the trade direct from Emerson's New York headquarters, the industry's production figures for the whole year of 1939 are given, and it is suggested that contestants refer to these figures as a guide to their guesses for the month of September, 1940. These figures show that 77.7 per cent of the total (7,161,295 units) were table models; 18.2 per cent (or 1,673,898 units) were consoles, and that 4.1 per cent (or 378,210 units) were console combinations.

The contest announcements suggest that dealers would do well to stock and feature the types of radios in these proportions, in order to cash in on current buying trends. Emerson also points to "many opportunities in our 1941 line of radios for 'selling up' to higher priced units and consequent greater dollar profit per sale."

Phil Gillig, sales promotion director for the firm, reports "a lively interest so far among dealers, in the merchandising principles of the contest." The competition closes Sept. 25.

## Ken-Rad Aired as a Leading Industry

The growth of the radio tube industry got a lively dramatization Sept. 8th, when the Ken-Rad Tube & Lamp Corp., Owensboro, Ky., was the subject of a broadcast over WLW, MBS and a string of southern stations. It was one of a series of programs conducted by the University of Kentucky, titled "Visiting Kentucky's Industries"; for this show the Ken-Rad firm had been picked as one of the leading companies.

The broadcast included all phases of radio tube manufacture, complete with recordings of actual factory processes. Roy Burlew, Ken-Rad president, reviewed the progress of the company, starting in 1922 when the firm began with 3,500 sq. ft. of floor space, and less than 20 employes making some 50 units per day. Now, Ken-Rad turns out about 80,000 units daily, and uses 375,000 sq. ft. of floor space and a maximum of 3,300 employes.

## Baldwin Joins Finch Facsimile

Announcement has been made that James W. Baldwin, formerly managing director of the National Association of Broadcasters and secretary of the Federal Radio Commission (predecessor of FCC) has joined Finch Telecommunications, Inc., as manager of the firm's Washington, D. C. offices.

SEPTEMBER, 1940

# NEW, PROFITABLE GENERAL INDUSTRIES PHONOGRAPH and RECORDER EQUIPMENT

FOR rebuilding and for assembly in new equipment, get the new, 1940 designed, precision-built motors, changers and recording units you want from General Industries—the world's largest manufacturer of phonograph motors. Priced to equip instruments for popular demand. Delivered ready to install.

Order samples to test in your own shops.



**Low-Cost, Simplified Recording.** Concealed feed-screw mechanism; high-impedance crystal pickup; separate cutting arm with depth-of-cut adjustment; weighted turntable; special-design, powerful rim-drive motor.



## Streamlined, Easily Operated Changers

Only 1 lever-adjustment necessary to change from one size record to another or to set for manual playing. Looks fine in all cabinets. Includes high quality tangent-tracking crystal pickup; cycling and on-off switches; sturdy, constant-speed motor.

## New Model LX Fan-Cooled Rim-Drive Motor

Low-cost, light-weight, compact in design, this latest addition to the popular "X" series of G.I. motors is designed for light-weight portables and table-model phonographs.



Send for  
NEW  
Catalog

The GENERAL INDUSTRIES CO.

438 TAYLOR ST.

ELYRIA, OHIO



*Coming* — the greatest  
the year for

# PHILCO J PRO



Your Philco distributor  
*merchandise event* that  
and **Big Profits** for the

A typical Philco promotion  
sales appeal . . . Biggest  
has ever done!

A *nation-wide* promotion  
national and local

A *practical* retail  
need to pull traffic

In a few days,  
tributor. In the  
opportunity of

## PHILCO ALL YEAR 'ROUND

HOME RADIO • PHONOGRAPHS • TELEVISION • AUTO RADIO • RAI

**profit event of  
radio dealers...**

# **ANNIVERSARY PROMOTION**



... bringing the news now of a *gigantic*  
... make history in the radio trade ...  
... dealers of America!

... full of fire, enthusiasm and sound  
... er, "Hotter" than anything *even Philco*

... backed by the power of Philco's great  
... ing campaign!

... on with the *propositions* and offers you  
... ose sales!

... et the full story from your Philco dis-  
... me, *clear the way* for the biggest profit  
... radio season ... *with Philco!*



## **PROFITS ALL YEAR 'ROUND**

**TELEPHONES • PARTS • REFRIGERATORS • AIR CONDITIONERS • DRY BATTERIES**



*Coming* - the greatest profit event of the year for radio dealers...

# PHILCO JUBILEE PROMOTION



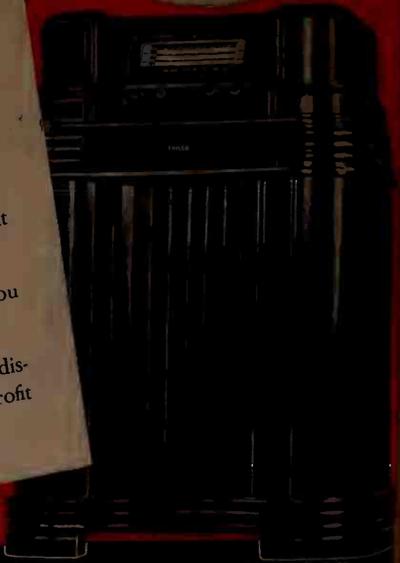
Your Philco distributor is getting the news now of a *gigantic merchandise event* that will make history in the radio trade... and *Big Profits* for the Philco dealers of America!

A typical *Philco* promotion... full of fire, enthusiasm and sound sales appeal... *Bigger, Better, "Hotter"* than anything even *Philco* has ever done!

A *nation-wide* promotion backed by the power of *Philco's* great national and local advertising campaign!

A *practical* retail promotion with the *propositions* and *offers* you need to pull traffic and close sales!

In a few days, you'll get the full story from your *Philco* distributor. In the meantime, *clear the way* for the biggest profit opportunity of the 1941 radio season... *with Philco!*



## PHILCO ALL YEAR 'ROUND FOR PROFITS ALL YEAR 'ROUND

HOME RADIO • PHONOGRAPHS • TELEVISION • AUTO RADIO • RADIO TUBES • PARTS • REFRIGERATORS • AIR CONDITIONERS • DRY BATTERIES



● Let this be a prophecy! You'll find **CRYSTAL EQUIPPED** Recording Sets setting the sales pace for 1940-41. Why? Because Crystal Recording Heads, Crystal Microphones and Crystal Pickups do such a swell job . . . are so thoroughly dependable and have been so universally adopted by a majority of leading manufacturers as standard parts of these new modern recorders. Be on the safe side! Make sure that the line you take on . . . the stock that you invest your money in . . . is crystal equipped.

● Many thousands of these new recording sets will come completely equipped with Astatic's high quality Recording Heads, Microphones and Pickups. Every single one of these parts is a product that has proven its performance and merits your complete confidence. No new "didos" to fuss with . . . no adjustments necessary . . . no worries to mix up with the business of selling. Crystal Equipped Sets reduce sales resistance and raise sales volume.

● **ASTATIC CRYSTAL RECORDING HEADS** give you these features: Fool-proof design. Rugged construction. Low wave form distortion. High internal stiffness for accurate groove cutting. Finest performance on all types of record blanks. Ample power reserves for peaks of volume.

**ASTATIC CRYSTAL MICROPHONES** provide wide range response with high output. Light weight, compact construction. Adaptable to modern design. High impedance simplifies input connections. Available in a variety of responses to meet different requirements.

**ASTATIC CRYSTAL PICKUP CARTRIDGES** give excellent response with high output. Input connections simplified by high impedance. Fundamentally simple construction. No adjustments necessary.

All these features and many additional are inherent in crystal devices and together insure performance that means unqualified customer acceptance and satisfaction.

**ASTATIC**  
**ASTATIC MICROPHONE**  
 IN CANADA: CANADIAN ASTATIC Ltd., TORONTO, ONT.  
 YOUNGSTOWN OHIO  
*Laboratory Inc.*  
 ASTATIC CRYSTAL PRODUCTS LICENSED UNDER BRUSH DEVELOPMENT CO. PATENTS

## RCA Enlarges Indiana Plant

Immediate expansion of the Indianapolis, Ind., plants of the RCA Mfg. Co. has been announced, and a new building unit of 100,000 sq. ft. floor space will be rushed to completion by Jan. 1, 1941. RCA acquired 15 more acres of land and makes the expansion as the first of a series to meet the requirements under the National Defense Program.

In an announcement by the Indianapolis mayor, R. H. Sullivan, it was pointed out that employment will be hiked from 1,500 to 2,500 and that the payroll will probably go from \$2,000,000 annually to \$3,000,000.

The Indianapolis plant is one of three operated by RCA besides its largest factory and home office at Camden, N. J.; others are at Bloomington, Ind., recently opened for making small radios, and at Hollywood, Calif., where records are manufactured.

## Big Volume in Westinghouse Birthday Models

"This season tops them all for sales," reports Steve Halstead, special radio representative for Westinghouse Electric Supply Co., who has been active in extensive sales presentations of the 21st Birthday Westinghouse models. The events were held in 20 key cities in the East, Central and Southern states.

"Dealers and distributors are saying that the line has the best values we've ever offered . . . public acceptance is pushing factory production far ahead of last year's outstanding performance . . . low-priced sets continue to sell in large volume, but there is a marked increase in the higher brackets."

## Majestic Ready with Strictly New Line

The new line of radios produced by Majestic Television & Radio Corp., will start coming through for shipment early in October, according to word from headquarters at 2600 W. 50th St., Chicago. Twelve or fifteen models will be introduced this year, all of them table and portable types, and early in 1941 the line will be expanded until a complete representative line is offered to the trade.

Engineering and designing of the new sets had been started before the recent reorganization of the Majestic company, so that now "everything is brand new."

## Port-O-Matic Corp. to Present New Models

Announcement from the Port-O-Matic Corp., 985 Madison Ave., New York City, is that the firm will be ready in October with a complete new line of phonograph-radio combinations, including 10 consoles and 10 portables. Meyer Lehman, president of the company, says that the 20 models now being prepared will feature a string of improvements in styling and engineering.

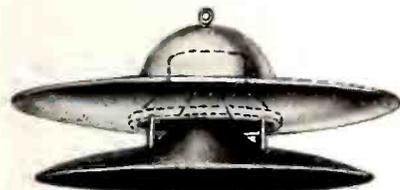
# Selling Sound

SEPTEMBER, 1940

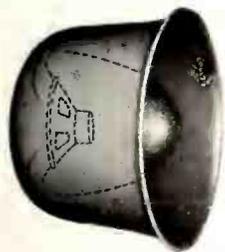
PUBLISHED SEMI-ANNUALLY AS A SECTION OF "RADIO TODAY"



**RE-ENTRANT TRUMPETS**—A compact trumpet of the double re-entrant type, made to occupy a small space, yet has a long air column. All RACON re-entrant speakers have base and inside tone arm made of aluminum castings, outside bell of heavy gauge aluminum spinning, and center reflecting section of RACON ACOUSTIC material to prevent resonant effects. These re-entrant trumpets are made in four sizes: 3 ft., 3½ ft., 4½ ft. and 6 ft.



**RADIAL CONE SPEAKER**—A radial speaker for cone operation. This speaker is designed to project sound over a complete circumference of 360°. The upper deflector is made of heavy gauge steel, cone covering of steel, and lower deflector of RACON ACOUSTIC material to prevent resonant effects. Made in four sizes: For 12", 10", 6" or 5" cones.



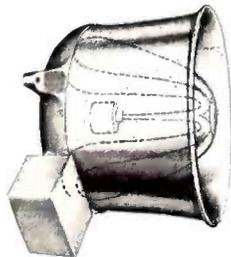
**CONE MARINE SPEAKER**—A re-entrant speaker of the marine type, for cone operation. Can be used outdoors as well as indoors, in all weather and temperatures, without impairment. Available in the following sizes: for 12", 8", 5", 4" and 3" cones.



**9 UNIT AEROPLANE HORN**—Bell 30" diameter. Length overall 54". Equipped to operate with 9 Units. A super-powerful and efficient Public Address Horn for extreme long range projection. Three mile ground projection capacity.



**PERMANENT MAGNET HORN UNITS**—All Permanent Magnet units use the finest grade of Alnico steel magnets and Armco iron throughout. Units are magnetized to give the maximum flux density obtainable in the gap. Made in the following sizes: Bull, Super Giant, Giant, Master, and Junior.



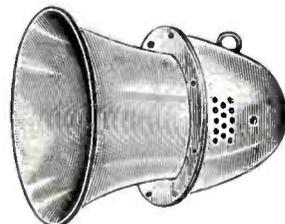
**MARINE SPEAKER**—A double re-entrant type of horn, made of heavy aluminum castings and heavy aluminum spinnings. The driving Unit and connections are enclosed. This Marine Speaker can be used as both a Loudspeaker and as a Microphone. Made in the following sizes: Bull Marine, Marine, Midget Marine, and Miniature Marine.



**PAGING HORN**—A small, extremely efficient, 2-ft. trumpet speaker, for use where highly concentrated sound is required, to override high noise levels, such as in factories, outdoors, etc. Horn is made of RACON ACOUSTIC storm-proof material with a beaded edge around the bell.



**TRUMPETS**—Straight trumpets made in all sizes from 3½ ft. to 6 ft. in length. Supplied in RACON ACOUSTIC storm-proof material, all metal construction or combination metal and RACON material. All use heavy aluminum castings for throat sections.



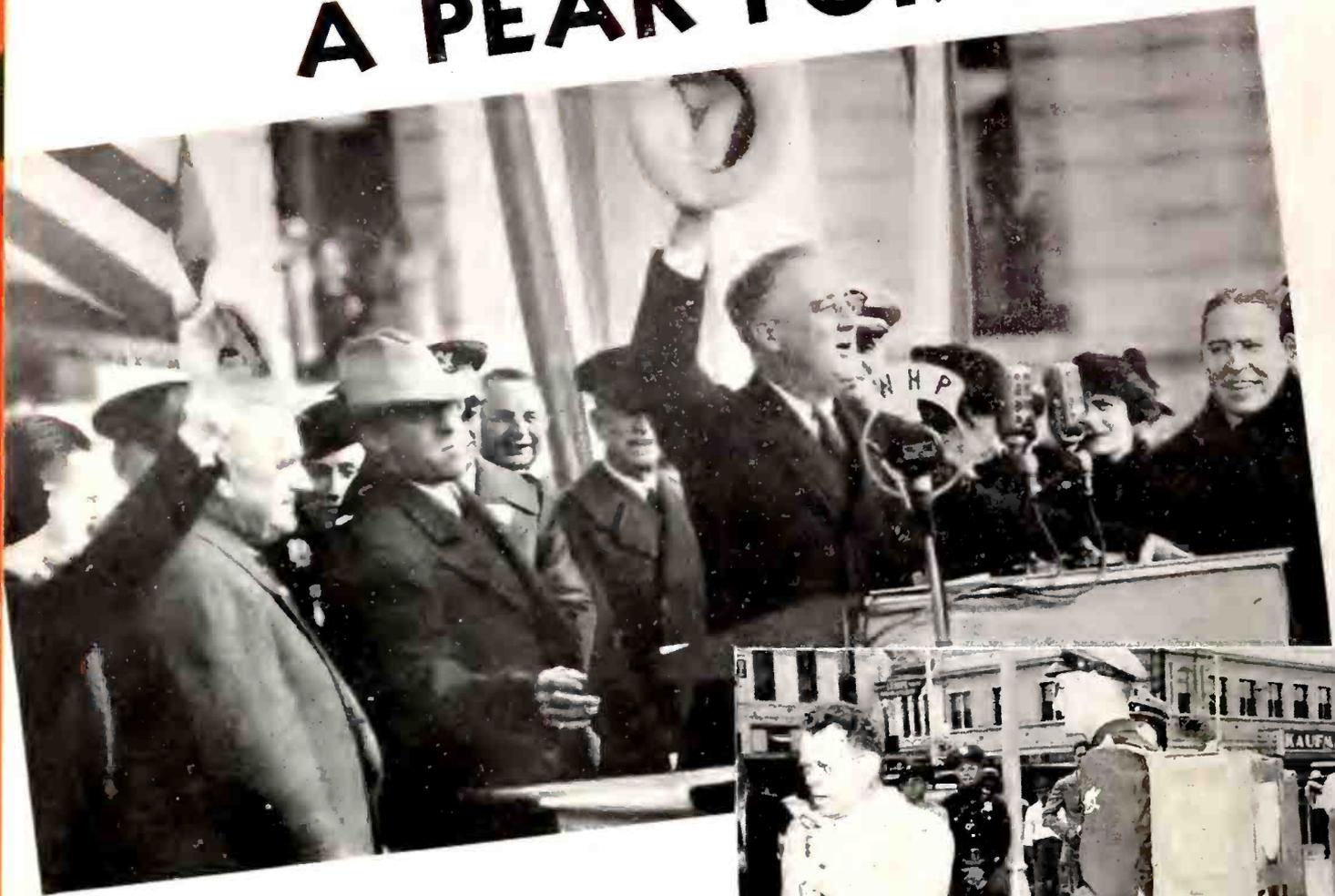
**ARMORED CONE PROJECTOR**—An efficient heavy gauge steel and aluminum projector for dynamic cone speakers. Rugged and suitable for indoor or outdoor use. For use with 12", 10", 8" or 6" cone speakers.

**RACON  
ELECTRIC  
COMPANY**

52 E. 19th St.  
New York



# A PEAK FOR P.A.



## SOUND MEN GET READY FOR NEW PROFIT IN POLITICAL ACTIVITY

Right now the political candidates begin to give a new emphasis to their campaigns. They're starting some organized work on the individual voter—to get him to the polls and to convince him that he should cast his ballot in a certain way. The problem is to get the ear of local groups of citizens.

Thus the sound man is confronted with his peak season, because he's a connecting link between the candidate and the voter. The p.a. dealer is the merchant for amplified voices, and more of them will be heard during the next two months than at any time in the history of horns. "Selling Sound" now has a brand new meaning.



At top, the President greets crowds through Amperite mikes.

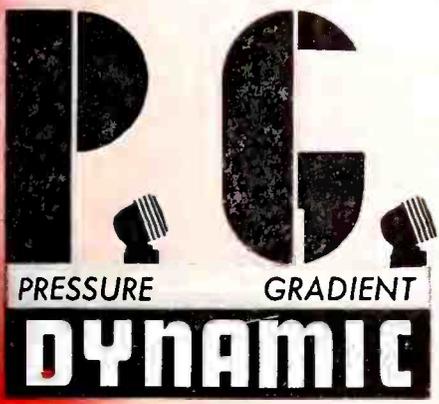
Above, right, Mayor Maverick of San Antonio, Tex., welcomes city guests via portable amplifier. Olsen Radio did the job.

Lower left, a trim job of University speaker mounting on fenders, by Federal Radio & Music Store of Belleville, N. J.

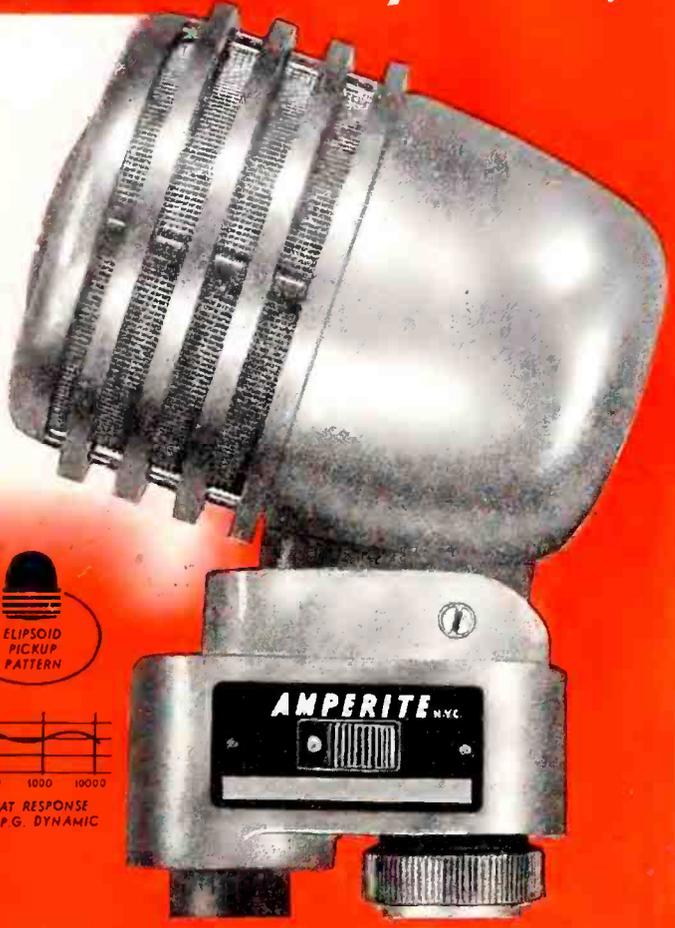
Lower right, a truck outfitted by F. B. Flessel, Huntington, N. Y., for election rentals—2 Atlas projectors, 2 drivers.



# AMPERITE Announces the *BIGGEST ADVANCE* in the Dynamic since its Inception!



- **UNI-DIRECTIONAL.** NEW SUPERIOR ELIPSOID PICKUP PATTERN
- **ELIMINATES FEEDBACK** TROUBLE BECAUSE IT HAS LOWEST FEEDBACK POINT OF ALL DIAPHRAGM TYPE MICROPHONES
- **FLAT RESPONSE.** FREE FROM ANNOYING PEAKS, GIVING STUDIO-QUALITY REPRODUCTION.



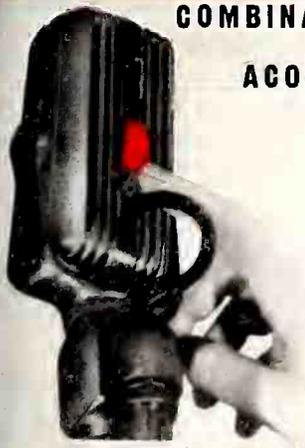
The P.G. diaphragm follows air particle velocity where amplitude is a GRADIENT of the PRESSURE. In ordinary dynamics amplitude is restricted from following air particle velocity.

The P.G. DYNAMIC is a radical improvement in this type of microphone. You can actually hear the difference. Case is designed according to modern acoustic principles. Rugged, not affected by temperature, altitude or humidity. HAS UNUSUALLY HIGH OUTPUT, —55 DB.

**MODEL PGH (PGL, 200 ohms).** Excellent for high fidelity P.A. installations, broadcast studio, and professional recording. With switch, cable connector, 25' cable. Chrome finish, LIST \$32.00 (40-10000 C.P.S.)

**MODEL PGAH (PGAL, 200 ohms).** For speech and music. 70-8000 C.P.S. Switch, cable connector, 12' cable. Chrome, LIST \$25.00

## COMBINATION VELOCITY-DYNAMIC ACHIEVED WITH ACOUSTIC COMPENSATOR



An exclusive Amperite feature: By moving up the Acoustic Compensator you change the AMPERITE VELOCITY to a DYNAMIC microphone without peaks. At the same time you reduce the back pickup, making the microphone practically UNI-DIRECTIONAL.

WITH ACOUSTIC COMPENSATOR:  
**MODEL RBHk; RBMk (200 ohms)** with switch, cable connector.  
Chrome, LIST \$42.00

**RSHk; RBSk (200 ohms).** Switch, cable connector, Acoustic Compensator.  
Chrome or Gunmetal, LIST \$32.00

## AMPERITE KONTAK MIKE Puts Musical Instruments Across



So beautiful is the tone produced with the Kontak Mike, that it was used in the Philadelphia Symphony to amplify a mandolin solo. Gives excellent results with any amplifier, radio sets, and record players.

- MODEL SKH (hi-imp)** . . . . . LIST \$12.00
- MODEL KKH, with hand volume control.** LIST 18.00
- Plug extra** . . . . . List 1.50
- FOOT PEDAL, for making beautiful crescendos** . . . . . LIST 12.00

WRITE FOR FREE SALES AIDS **AMPERITE** CO. 561 BROADWAY, N. Y. U.S.A.

# Specify **AMPERITE**





# SOUND FOR PAGEANTS

*Typical Installation No. 9. Outdoor and indoor opportunities for every PA specialist.*

Many pageants will get under way in the next few months—both outdoors and indoors. Sound installations for this type of work can be profitable and easily handled by the average sound man. The size and complexity of the job need not hold back the aggressive PA specialist. Here is a typical example of how it is and can be done.

During the 1939 New York World's Fair the gigantic historical pageant, "Railroads on Parade," employed a 350 watt sound system which was rented for the season. When preparations were being made to repeat this spectacle at the 1940 Fair some time was spent in convincing the management

Showing how one of the two pairs of speakers (woofer-tweeters) are mounted in permanent "sets" at sides of the stage.



that a system especially designed to meet the rather unusual requirements of this show, and purchased outright, would be more practical than rental of more or less stock equipment. Ultimately the selling effort was rewarded with an invitation to submit a complete proposal and quotation.

Relatively few sound men realize the advantages to be gained by establishing closer business relations with the manufacturers of the sound equipment which they use. There are many advantages in the form of design cooperation, when it comes to special equipment, assistance in preparing cost data for formal bids, and so on.

Martin L. Green, owner of Universal Sound Labs., Brooklyn, N. Y., recently completed the job involving power of 350 watts and cost running well into four figures; a job which aptly demonstrates these advantages and one which it is likely would not have been obtained if it were not for this cooperation.

## GETTING STARTED

One of the services provided free to its distributors by the Transformer Corporation of America, New York, is the design of any special equipment called for in a proposed installation, and the preparation of complete cost data on all equipment for the job.

When the opportunity to quote on this job was obtained, company engineers were consulted and they worked out the equipment requirements, price quotations, etc., to serve as the basis for the proposal to the management of the show. The only

obligation assumed was to employ Clarion equipment exclusively throughout the installation.

## SELLING THE JOB

Armed with these plans and quotations, which were expanded to include Universal Sound Labs. profit, Green was able to win the contract. Six weeks from the date of signing the dotted line, the equipment had been delivered, the installation completed and accepted, thus winding up this sound man's largest installation to date.

It is by no means an admission of inability on the part of a sound man if he accepts this sort of cooperation from a manufacturer. When it comes to a matter of special equipment a department set up for such work can do it more economically than an individual, in both design and actual manufacture. It is the manufacturer's business to be familiar with shortcuts and economies. This is likewise true of practically all large installations even though they do not necessarily involve much special equipment.

## GET THE BIG ONES

With such cooperation available the average sound specialist can go out after really big jobs without fear of sticking his neck out. The knowledge on the part of the prospect that the sound distributor has the facilities of a large manufacturer at his service creates confidence. The manufacturer's definite quotations on equipment costs permits a precise cost foundation on which to figure bids, and there

is the assurance that the equipment will all be properly coordinated, avoiding headaches on the job.

With the thought that this particular installation may hold some other points of practical and technical interest for sound men, some of its details are shown in the accompanying illustrations.

### TECHNICAL PROBLEMS

The "Railroads on Parade" show is staged in a great outdoor theatre with a stage that measures approximately 200 feet in length by 125 feet deep. In front of this is a narrow lawn and from this lawn rises a single-deck grandstand with seating accommodations for close to 5,000 spectators.

The sound problem is complicated by several things. Absorption in the open air is naturally very high. This, plus the fact that in some scenes there are entire trains powered across the stage by their own locomotives, creating unusually high background noise, requires high speaker output.

With the action taking place all over the stage and with this high noise level it is impractical to use microphones on the stage. Instead all spoken parts are played in pantomime by the actors on the stage while their lines are actually being spoken by others located in sound-proof studios under the front of the grandstand where they can watch the lip movements of their counterparts on the stage and synchronize their voices to these movements.

### NO STAGE MIKES

A picture of the central portion of the stage as viewed from the grandstand shows a scene representing a railroad passenger terminal. A pair of loudspeakers is mounted in the permanent sets on each side of the stage. A fifth speaker is concealed behind a gauze screen set into the center of the steps and beneath the elevated portion of the stage. A "behind the scenes" view of the pair of University Type WCC woofer-tweeter combinations is shown. Another backstage scene, this time looking from the wings toward the stage, shows (overhead) one of the several cuing speakers distributed around the sets and in the dressing rooms.

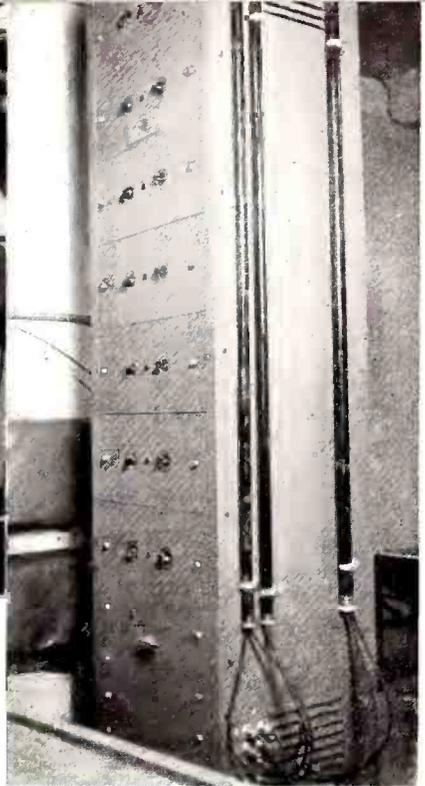
The sound room in which all amplifier and control equipment is lo-

Here's one of the overhead speakers used backstage for cues.



Top view shows the control console placed so operator can watch progress of the show.

At right, another part of sound room, with the rack housing all amplifier equipment.



ated, is so arranged that the operator can look through a window before him and watch all action on the stage.

### ONE CONTROL UNIT

The control console on the table provides complete control of the entire installation, including volume level meters in the outputs of each of the five main circuits. Also shown is the 84-inch rack which houses all amplifier equipment including separate power supplies for the pre-amplifiers.

Eight microphones are employed, each connecting to a corresponding pre-amplifier located in the lower portion of the main rack. The outputs of these pre-amps run to the control console where each feeds into an individual volume control circuit and an additional voltage amplifier. The outputs of these secondary amplifiers are grouped in pairs and fed into a series of push-button switches which permit the operator to switch any microphone, or group of microphones, into any desired combination of loudspeakers. This arrangement provided the utmost in flexibility of operation.

A series of eight knobs on the console provide for gain control of the individual input circuits while the five large knobs at the bottom control the output of the individual power amplifiers (in the circuits of which the volume level meters are located).

### SEVEN AMPLIFIERS

Following the console circuits are the power amplifiers. There are seven of these, each of the first five feeding one speaker. Number six is a bridging amplifier which drives a total of eight monitor and cuing speakers and seven is a spare which can be instantly substituted for any of the others by depressing two push switches and without the necessity for manually changing connection plugs, etc.

The power amplifiers are the standard A-75-K "boosters," individually rated at 51 watts continuous output and 75 watts on peaks. Such great power is actually not needed but was provided for in accordance with the

customer's requirements that amplifier equipment be such that it could be operated under extreme conditions and still provide complete assurance against breakdown, and also a maximum fidelity.

### EQUIPMENT ACCESSIBLE

All amplifier and power equipment in the main rack is so mounted that the under-chassis wiring of each unit is accessible from the front of the rack by simply removing the corresponding panel. In the console all equipment is mounted on the hinged top panel and is therefore likewise readily accessible.

All microphone and interconnecting cables are of the rubber covered and shielded two-conductor type. Speaker cables are for the most part run underground in lead sheathing and where above ground, are enclosed in rigid conduit. The speaker lines are all 500 ohms. Microphones are all Shure "Unidyne" low impedance dynamics, and the pre-amplifiers in the main rack are also low impedance. Monitor and cuing speakers are each equipped with individual local "L" pads so that the volume at each can be adjusted appropriately for its particular location and requirements.

### Sales Hints for Election Time

"Immediate action" is suggested to sound men who want to get their share of "the avalanche of sound business that accompanies a national election," in a bulletin issued to Audiograph sound equipment dealers. Thirty controversial states, where the election outcome is most doubtful, are listed, and it is pointed out that dealers in these states should be doubly active.

Five specific suggestions are made: (1) Contact the state central committees of each party, if you are near a state capital.

(2) Contact the county central com-

(Continued on page 69)



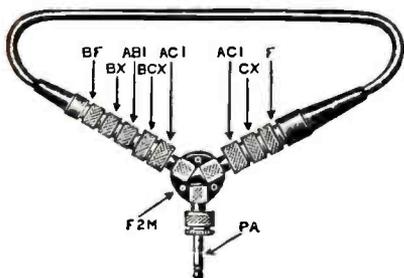
# SOUND PRODUCT PARADE

NEW EQUIPMENT TO BRING NEW PROFITS



## Webster super-dyne mike

★ Dynamic mike for high level output over frequency range of 40 to 10,000 cycles. Wide range pick-up, alnico magnet, dural diaphragm, edge wound flat-wire voice coil. Directional baffle is available. Webster Chicago Corp., 5622 Bloomington Ave., Chicago—RADIO TODAY.



## Selectar connectors

★ Universal connector kit consists of 10 units for making speaker, mike, and chassis connections, splicing cables, and phone cords. Time savers for PA and servicemen. Selectar Mfg. Corp., 30 W. 15th St., New York—RADIO TODAY.



## Meck mobile PA

★ Audiograph model AMR-15C is 15-watt mobile amplifier with built-in phono top, 6-volt DC or 110 volt AC operation. List, \$69.50. Optional equipment includes two-piece carrying case with 2 PM speakers. John Meck Industries, 1313 W. Randolph St., Chicago—RADIO TODAY.

## Shure dynamic mike

★ Model 508 "stratoliner" dynamic mike is moving conductor type; built-in transformer. Available in 35-50, 200-250 ohms and high impedance models. Long cables possible with low impedance models. With 25-foot cable, list, \$27.50. Shure Bros., 225 W. Huron St., Chicago—RADIO TODAY.



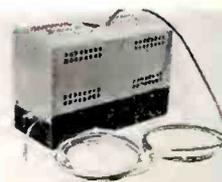
## Clarion portable PA

★ Model CS-46 is a 31-watt portable system housed in twin cases. Two 12-inch dynamic speakers, one of four types of mikes, all cables and plugs supplied. Response is 40 to 12,000 cps, universal output to 500 ohms. Four input channels for 2 mikes, 2 phono. List, \$193.32. Transformer Corp. of America, 69 Wooster St., New York—RADIO TODAY.



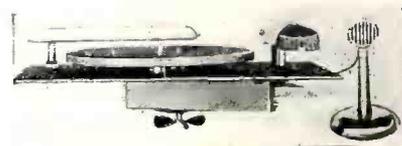
## Universal recording aids

★ New group of recording products include a paper base non-inflammable disc in sizes 4 to 12 inches. A new weight scale for servicemen determines the pressure of cutting heads or pick-ups on the record. Graduated in ounces. Universal Microphone Co., Englewood, Calif.—RADIO TODAY.



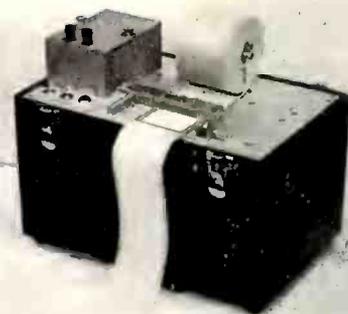
## Presto recorder aid

★ Blower system for preventing recording shavings from getting under cutter stylus. Keeps record clean in front of needle; does not produce noise in recording. List, \$75. Presto Recording Corp., 242 W. 55th St., New York—RADIO TODAY.



## Mellaphone recorder

★ Mellaphone recorder chassis has a magnetic cutting head, crystal pickup and mike. \$30. Mellaphone Corp., Rochester, N. Y.—RADIO TODAY.



## Sound apparatus recorder

★ Compact power level recorder keeps continuous record on tape of transmission characteristics of speakers, amplifiers, mikes, etc. Built for 110 volts 60 cps. Sound Apparatus Co., 150 W. 46th St., New York—RADIO TODAY.

# Your General Purpose Public Address Projector

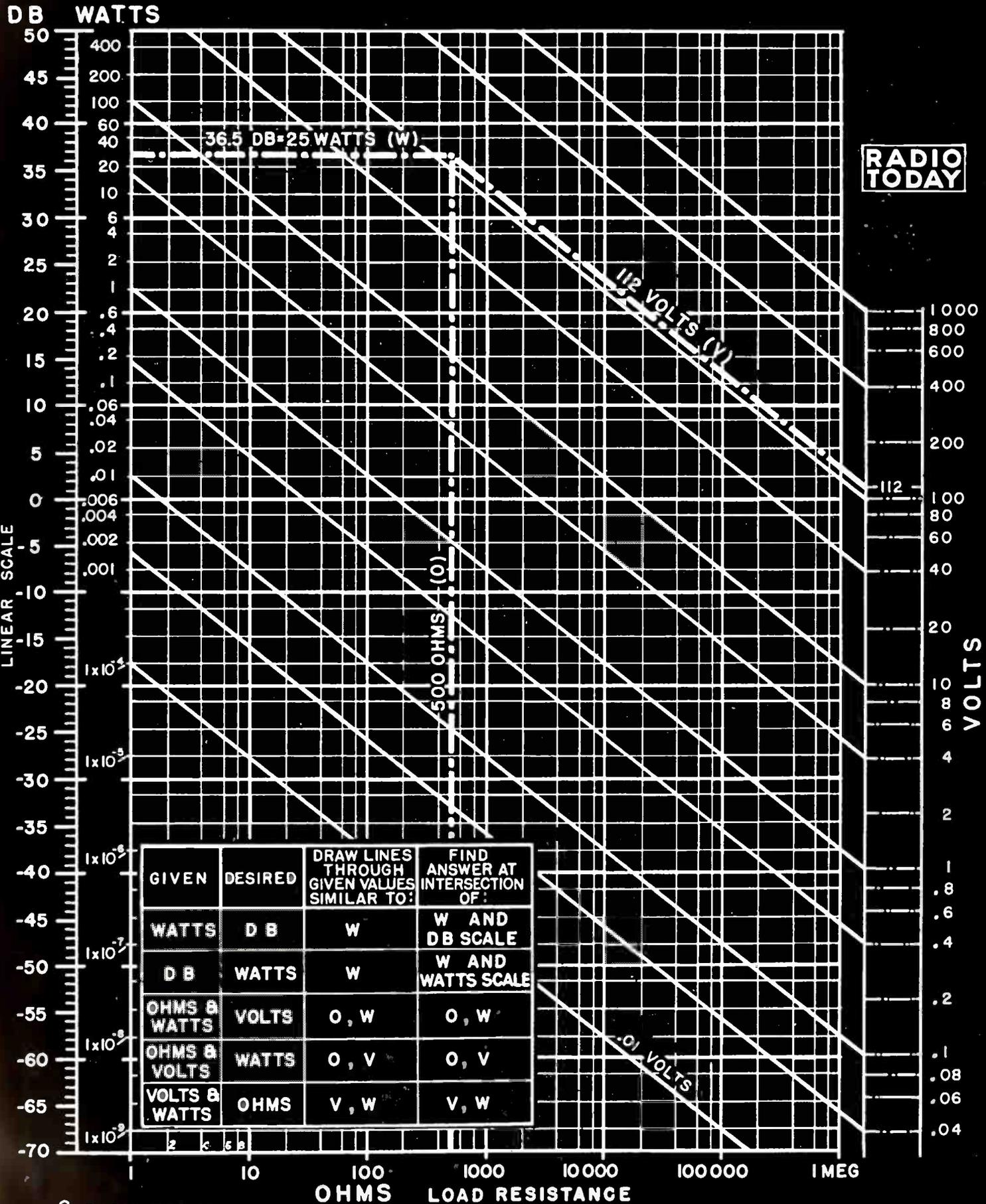
When the new Type "S" Peri-Dynamic Projector was introduced at the June Trade Show, immediate and wide acceptance throughout the public address industry was prophesied. All of these predictions have now materialized with even greater emphasis than was prophesied. High power handling capacity (15 to 25 watts), low cost and outstanding ability to reproduce both speech and music with a crisp clean cut quality fully justifies sustained leadership in this new product. Public address dealers and engineers who are not familiar through experience with this new product will do well to place their orders immediately. A steady increase in factory production permits prompt delivery.

Dealers' price, Type "S" Peri-Dynamic Projector (No. SPH-81) complete with Permanent Magnet Speaker installed, \$31.20 Net (mounting standard extra). Dimensions: 24-inch bell; 30 inches overall length.

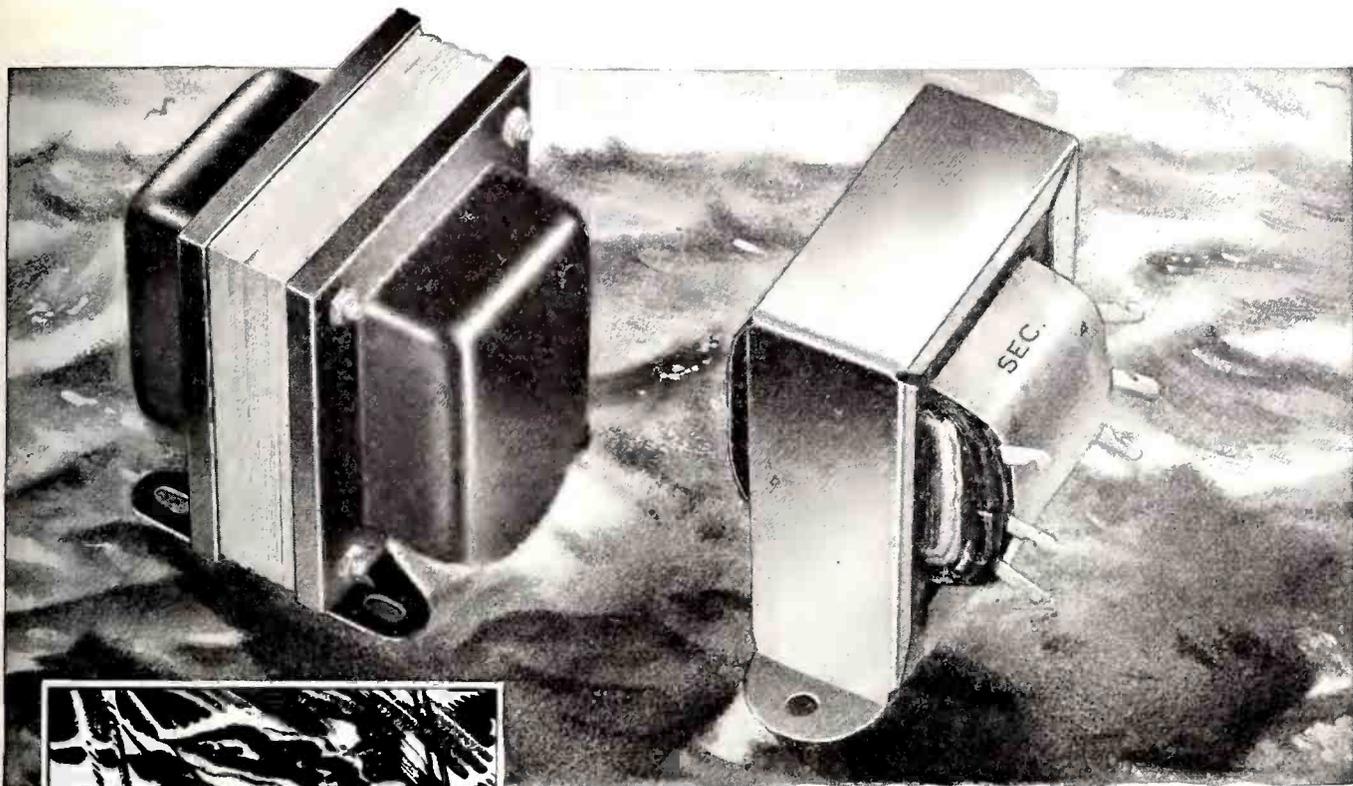
*by*

**Jensen**  
6601 SOUTH LARAMIE AVENUE • CHICAGO  
CABLE ADDRESS: JERAD, CHICAGO

# HOW TO FIGURE DECIBELS, WATTS, VOLTS, AND OHMS



**RADIO TODAY**



# UTAH TRANSFORMERS ARE "Dressed" FOR ROUGH WEATHER!

"The weather-resistance of a skipper on a fishing smack"—that's what they say about Utah Transformers.

A non-corrosive, protective film of cellulose acetate provides absolute insulation—prevents breaking down, even under extremely high humidity and other atmospheric conditions which are so frequently destructive to ordinary transformers. The high safety factor of their insulation is proved by the extra hours of satisfactory performance of the Utah Transformers which are standard equipment in millions of receivers throughout the world.

Precision manufacturing and the use of other scientifically selected materials such as high silicon content

steel, used in all laminations, make Utah Transformers uniformly dependable. These fully guaranteed transformers are individually boxed, with complete instruction sheets.

Utah Transformers are sold through parts jobbers everywhere. If you do not have your copy of the new Utah illustrated catalog containing complete information about the transformer line and other Utah products—write for it today—there is no obligation. **UTAH RADIO PRODUCTS COMPANY**, 814 Orleans Street, Chicago, Illinois. Canadian Sales Office: 560 King Street West, Toronto. Cable Address: Utaradio, Chicago. In the Argentine: Ucoa Radio Products Company, S. R. L., Buenos Aires.



## TRANSFORMERS

SPEAKERS • VIBRATORS • UTAH-CARTER PARTS

# RECORDER SPECIFICATIONS

(Continued from page 30)

COMPANY ADDRESS TRADE NAME	MODEL NO.	CABINET STYLE	PRICE	RADIO	CUT- TING HEAD	PICKUP	MIKE	SOUND LEVEL INDICATOR	TURN- TABLE DIAM.	AMPLI- FIER POWER	RECORD CHANGER
ROCK-OLA MFG. CORP. Kedzie & Chicago Aves., Chicago, Ill.	RA-4	B	\$99.95	yes	C	C	C	E	..	..	no
	RA-1	P	59.95	yes	C	C	C	..	..	..	no
	RA-3	T	69.95	yes	C	C	C	..	..	..	no
	RA-5	B	129.95	yes	C	C	C	..	..	..	yes
	RA-6 & 8 RA-7 & 9	B B	139.95 169.95	yes yes	C C	C C	C C	.. ..	10 10	.. ..	no yes
J. P. SEEBURG CORP. 1500 N. Dayton St., Chicago, Ill. RECORD-O-MATIC	JR	S	.....	no	M	C	X	X	10	X	yes
SELECTAR MFG. CORP. 30 West 15 St., N.Y.C. BRUNO	RA12	P	\$159.50	no	M	C	C	O	12	5	....
	BR12	P	179.50	no	M	C	R	O	12	..	....
	BR12A	P	295.00	no	M	C	R	O	12	10	....
	BR16	P	345.00	no	M	C	R	O	17	..	....
	BR16A	P	445.00	no	M	C	R	O	17	10	....
SENTINEL RADIO CORP. 2020 Ridge Ave., Evanston, Ill. SENTINEL	216M	B	\$119.50	yes	C	C	C	E	10	4	no
	216MY	B	139.50	yes	C	C	C	E	10	4	yes
	216F	B	119.50	yes	C	C	C	E	10	4	no
	216FY	B	139.50	yes	C	C	C	E	10	4	yes
	216J	B	149.50	yes	C	C	C	E	10	4	no
	216JY	B	169.50	yes	C	C	C	E	10	4	yes
	SPEAK-O-PHONE 23 West 60 St., N.Y.C.	88	P	\$ 87.50	no	C	C	C	O	12	4
1-52-A		P	179.50	no	M	C	C	O	..	..	no
9-M-A		P	94.50	no	M	X	X	O	12	X	no
9-M-C		P	135.00	no	M	X	X	O	12	X	no
1-16		P	525.00	yes	M	C	X	D	16	12	no
STEWART WARNER CORP. 1826 Diversey Pkwy., Chicago, Ill. MICROPHONO	1-58	P	245.00	yes	M	C	C	O	..	..	no
	6T8	P	\$ 89.95	yes	C	C	C	X	10	..	no
	6T9	T	89.95	yes	C	C	C	X	10	..	no
	8R8 8R9	B B	130.00 175.00	yes yes	C C	C C	C C	X ..	10 10	.. ..	no yes
TALKAPHONE 1219 W. Van Buren St., Chicago, Ill.	R-80	P	.....	no	M	C	C	E	10	3	no
UNIVERSAL MICROPHONE Inglewood, Calif.	Pro.	T	\$585.00	no	M	C	X	O	16	12	no
	Master	T	985.00	yes	M	X	X	O	16	30	no
	PB60	S	39.50	no	M	X	X	X	10	X	no
	5163	S	114.50	no	M	X	X	X	12	X	no
WEBSTER-CHICAGO CORP. 5622 Bloomingdale Ave., Chicago, Ill. WEBSTER-CHICAGO	W1205	P	\$149.50	no	C	C	C	O	12	10	no
	W1206	P	169.50	no	C	C	C	O	12	10	no
	W1275	S	75.00	no	C	..	X	X	..	X	yes
	W1295	S	95.00	no	..	..	X	X	..	X	yes
	W1285	S	145.00	no	..	..	X	X	12	X	yes
	W1265	S	125.00	no	C	..	X	X	..	X	yes
WESTERN SOUND & ELEC. 311 W. Kilbourn Ave., Milwaukee, Wis.	W.L. R-6	P	\$99.50	no	C	C	C	E	12	6	no
WESTINGHOUSE ELEC. SUPPLY CO. 150 Varick St., N.Y.C.	WR-486	B	\$150.00	yes	..	C	C	E	10	5	yes
WILCOX-GAY CORP. Charlotte, Mich.	A-89	B	\$149.95	yes	C	C	C	..	..	..	no
	A-93	B	169.50	yes	..	..	..	..	..	..	yes
	A-87	P	89.95	yes	C	C	C	..	..	..	no
	A-85	T	89.95	yes	C	C	C	..	..	..	no
ZENITH RADIO CORP. 6001 Dickens Ave., Chicago, Ill.	8-S593	B	\$129.95	yes	M	C	C	E	10	8	no
	8-S594	B	169.95	yes	M	C	C	E	10	8	yes

List of blank-disc manufacturers will be found in "Radio Today," July 1940, page 19.

## How to Figure Decibels, Power, Volts, Ohms

In this issue, page 48 shows a graph of the relations between decibels, or power ratios, power in watts, voltage, and load resistance. Useful to both sound and servicemen, this chart will prove valuable in computing these quantities.

For the sound man, there is the conversion of watts to decibels and of course the other way around. This is quickly done by laying a straight edge through the given units and reading directly opposite. In the example shown, 25 watts corresponds to 36.5 DB. The voltage developed across a given load resistance may be determined if the power is known. The example shows 25 watts into 500 ohms. The intersection of these two lines gives the voltage value of 112 which is read on the right hand scale after extending the intersecting point parallel to the sloping lines down to the vertical line just left of the voltage scale. The power output of an amplifier may be determined by using a pure load resistance of the correct value and measuring the voltage across it with a vacuum tube voltmeter while

supplying a standard signal from an audio oscillator. Draw the voltage line to the intersection of the load resistance and project straight across to the watts scale.

The serviceman will find the chart useful for output measurements on receivers where sensitivity measurements are being made. Use the same procedure as for determining the watts output from an amplifier. Also useful is the watts dissipation of any resistor which may be quickly figured after measuring the voltage across the unit.

## Manson and Hoyt Get More Territory

Two Stromberg-Carlson execs, Stanley H. Manson, radio sales manager of the Kansas City branch, and Jack Hoyt, sales representative in the South and Southwest, have been given more territory, according to radio sales manager Fred N. Anibal.

Mr. Manson will add the St. Louis area, and Mr. Hoyt will contact distributors in Memphis, Little Rock and Louisiana, as well as those in his former territory.

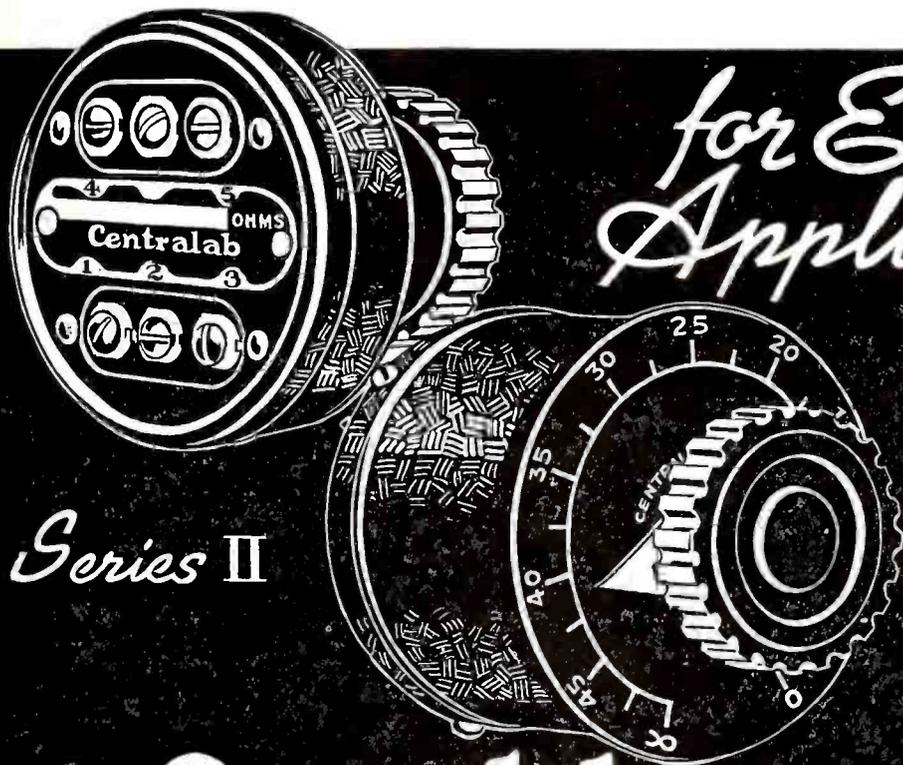
## "Personal Radio" in Nationwide Introduction

The RCA Victor "Personal Radio" has continued to maintain the speedy selling pace it established upon its initial introduction. Introduced first in the New York area, including Newark, N. J., Albany, Newburgh, Bridgeport and Hartford, Conn., the instrument was later introduced in the Los Angeles, Boston, Philadelphia and San Francisco markets. Chicago and surrounding territory will follow, and it is hoped to achieve national distribution between November 1 and 15.

In units already sold in the New York market, sales of Personal Radios are known to be far ahead of any other radio item introduced by RCA Victor in its entire history.

Delay in introducing the little set nationally has been due to the fact that virtually all of the components used in this instrument were specially designed to fit into the small area. The hold-up has been due chiefly, however, to a shortage of the newly developed 67½-volt "B" battery and the new miniature tubes used. Merchandisers now predict the little set will be the "hottest Christmas selling item in radio history."

*for Every Application*



*Series II*

# Centralab SOUND PROJECTION CONTROLS

## CENTRALAB SERIES II

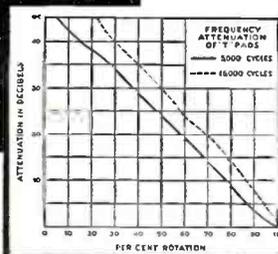
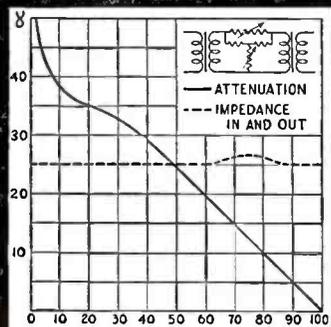
Controls are the finest for input circuits in broadcast stations, public address systems, and recording apparatus of new or old design. Will prove faultless in the most critical service.

The curve chart above shows the change in impedance and attenuation plotted against clockwise rotation for a "T" pad attenuator. The impedance characteristic (dotted line) is substantially the same at any setting. The attenuation curve (solid line) varies from infinity at zero rotation to zero Db. at full rotation. No insertion loss.

Electrostatic and electromagnetic shielding provided by a black finished steel case. Bakelite screw type terminal strip on back of case. All resistance elements insulated from shaft and bushing. Single hole mounting. Mounting bushing  $\frac{3}{4}$ " long with 2 locknuts and lockwashers. Case diameter  $2\frac{3}{4}$ ". Depth back of panel "T" Pad —  $2\frac{3}{8}$ "; Gain Control —  $1\frac{1}{8}$ ". Maximum load dissipation 1 watt.

*For detailed information, write for technical booklet.*

**CENTRALAB: Division of Globe-Union Inc.**  
MILWAUKEE, WISCONSIN



## ECONOMY P/A CONTROLS

These controls are intermediate to the series II line and the older series I types. As their name implies, they are economy controls designed primarily for inexpensive sound equipment, where original cost is a limiting factor. They are designed for all types of fading and mixing systems. All units have soft aluminum shaft  $2\frac{1}{4}$ " from end of  $\frac{3}{8}$ " brass bushing. Small diameter bakelite case same dimension as Standard Radiohm. Non-rubbing contact for smooth, quiet operation. Limited to input applications. Maximum power rating for all units one watt.

# MORE VOTES

When

## SHURE CARDIOIDS KILL FEEDBACK!

Feedback kills votes! Shure Cardioid Microphones give candidates the volume they need without vote-killing feedback—cut down pickup of background noise—give speakers more freedom to move about—and save valuable time in setting up your sound systems by solving your acoustic problems. Put a Shure Cardioid on the platform—every time.



**Shure Uni-flex Cardioid Crystal Microphone** (Illustrated above) List Price **\$32.50**



**Shure Uni-dyne Cardioid Dynamic Microphone** (Illustrated below) List Price **\$42.50 & \$45.00**

SEE THEM AT YOUR JOBBER

Shure Patents Pending, Crystal Microphones licensed under Brush patents.

### MAIL COUPON NOW!

**SHURE BROTHERS**  
225 W. Huron St., Chicago, Ill.

Send me free Bulletin 164T entitled "Goodbye, Feedback!"

Name .....  
Address .....  
City ..... State .....  
Occupation .....

# PREPAREDNESS!

National defense means preparedness! Profitable "sound" sales also need preparedness. Prepare now with Clarion superior sound equipment.

Wire or write for Clarion 5-point preparedness plan for increased P. A. sales and profits.

**Clarion PUBLIC ADDRESS Equipment**  
TRANSFORMER CORP. OF AMERICA • 69 WOOSTER ST., NEW YORK



Have Dealer Sign or Stamp Name Here

This ticket ADMITS YOU TO A PRIVATE SHOWING OF 1940-41 SOUND EQUIPMENT. ALL ITEMS SHOWN AND DEMONSTRATED. AMPLIFIERS ALL SIZES 12 TO 75 WATTS. PORTABLE SYSTEMS. FIXED AND MOBILE SYSTEMS. MICROPHONES. SOUND REPRODUCERS. SOUND ACCESSORIES. AUTOMATIC RECORD CHANGERS.

This first National Sound Showing is of great interest to educators... clubmen and club women... church leaders... doctors... manufacturers... civic organizers... political leaders... lecturers... showmen and others associated with mass enterprises...

Compliments of.....

Have Dealer Fill In Prospects Name Here

Admit.....  
**Manchester's National Sound Week**  
WEEK OF SEPT. 23rd-28th  
hours 9-12, 2-5 daily

at  
**Radio Service Laboratory**  
1187 ELM ST., MANCHESTER, N. H.  
Distributors of Erwood Sound Equipment  
and National Union Sound X-tra tubes.

(OVER)



Here are the admission cards and part of the promotion materials for a big P.A. event.

## National Sound Week Opens Sept. 23rd

A national event, designed to help dealers and distributors start off with a big volume of sound business during the political campaigns this Fall, has been organized by the National Union Radio Corp., 57 State St., Newark, N. J., in conjunction with the Erwood Sound Equipment Co., 226 W. Huron St., Chicago, Ill. The event is called "National Sound Week" which will run from Sept. 23 to Sept. 28, and which will amount to a series of lively sound equipment shows held on jobbers floors throughout the country.

Distributors have agreed to display and demonstrate during the Week, a complete array of sound products, including all sizes of amplifiers, portable systems, fixed and mobile systems, microphones, reproducers, accessories and automatic record changers.

In order to dramatically announce the event to communities, complete promotion and display materials are being supplied by National Union. These include streamers, posters, admissions cards, stickers, etc., in attractive colors.

Prizes for dealers are part of the Week. To the dealer bringing in the oldest amplifier (nationally) Erwood will present a 28 watt Mobile System. An automatic record changer will be presented to the runner-up. Prizes are also being offered by cooperating jobbers, for oldest models, and for attendance records.

FOR ALL HIGH POWER PUBLIC ADDRESS INSTALLATIONS



### UNIVERSITY LABORATORIES

195 CHRYSTIE STREET NEW YORK CITY

Dear Mr. Radio Parts Jobber:

This is only a friendly letter. Just wanted to check up on a few items of mutual interest.

**ABOUT DELIVERIES** - Due to improved facilities we can now assure you of 24 hour shipments. YOU CAN DEPEND UPON IT.

**ABOUT OUR MERCHANDISE** - As you know we are continuing to live up to and surpass our past records of manufacturing loudspeakers with the highest mechanical and acoustic standards. We will maintain our reputation. YOU CAN DEPEND UPON IT.

**ABOUT OUR GUARANTEE** - The 1 year guarantee is nothing new with us. It is simply a written presentation of a policy worked out during the past 3 years. YOU CAN DEPEND UPON THIS TOO.

**ABOUT SELLING SOUND FOR THE ELECTION CAMPAIGN.** Make sure that you have a sufficient stock of our U-6-40 catalogues on hand to be ready for the election sales rush. If it is low, write to the factory or get in touch with our local representative. Do not let the elections catch you napping. WE HAVE TO DEPEND ON YOU FOR THAT.

Yours for a good election season,

UNIVERSITY LABORATORIES

Irving Golin

IG:8

## Action on Recorder Blank Business

"A made-to-order business for the dealer who can act quickly to cash in on a new market," is what the home recorder blank business amounts to, according to a new statement by R. C. Powell, of Presto Recording Corp., 242 W. 55th St., New York City. Mr. Powell points out that thousands of new home recorders have just been bought—they are the most talked-about feature of new radio lines. These buyers will need blanks, and so far they have no fixed buying habits. Dealers who NOW establish themselves as headquarters for such accessories will get "a profitable and lasting repeat business for years to come."

Convenient disc order cards, with business reply addresses, are available free to retailers of Presto blanks. Many dealers are getting themselves a flourishing mail order business. Newspaper space used locally by dealers "is paying for itself many times over."

Presto has a home recording kit, and a handy counter display, both offered to dealers at special prices for the blanks and accessories included. Window posters, order cards and newspaper mats accompany them, free.

## Hill Heads Export Club



The new president of the Export Managers Club of Chicago is John C. Hill, Chicago, who has been engaged in foreign sales work for over 25 years. Mr. Hill is widely traveled in Europe, South America, and Africa, and is one of Chicago's best known experts in export markets. He represents Shure Bros., Simpson Electric Co., and Oxford-Tartak Radio Corp.

## Hollytran Names Neely

The appointment of Norman B. Neely, 5334 Hollywood Blvd., Hollywood, Calif., as national sales representative for the Hollytran Transformer Co., has been announced by Eddy Woodward, owner of the latter firm. The "Hollytran" company specializes in the design and custom building of Hi-Q chokes, audio transformers, etc., for special applications.

Mr. Neely has recently announced the addition of Tom Bissett to his technical staff.



*"Even-Speed"*  
**PHONO-MOTORS**  
MODELS 80 and K

## The IDEAL REPLACEMENT UNIT AT SENSATIONAL PRICES

The Models 80 and K "Even-Speed" Motors are self-starting, light weight motors, ideally fitted for the rising replacement market. They are interchangeable in mounting; quickly and easily installed, and fit practically all standard phonograph and combination models.

### SPECIFICATIONS

"Even-Speed" Model 80 (illustrated above) is available for operation on 110 or 220 volt, 50 or 60 cycle source at 16 watts input in 8", 9" or 10" turntable sizes; Model K for 110 or 220 volt, 25 watt operation in 8" or

9" turntable sizes. Both are exceptionally quiet in operation—no gears—smooth, positive friction rim drive. Excellent regulation characteristics for uniformity of table speed. Amply proportioned bearings—large oil reserves. Forced ventilation for cool operation. Slip type fan precludes possibility of injury. Mounting plate maintains correct turntable height regardless of mounting board thickness.

### WRITE FOR PRICES

Mail a postcard today for prices and complete details on the "Even-Speed" Models 80 and K. Address Dept. RT.

ALLIANCE MFG. CO., ALLIANCE, OHIO

## BRUNO "long cable" MICROPHONES by SELECTAR...

NOT just an improved earlier type but a positively NEW development . . . unaffected by humidity and other atmospheric variations. . . THE ONLY HIGH IMPEDANCE MIKE that will work satisfactorily with over 1,000 feet of cable (no loss in high frequencies). Output —50 db. Beautifully finished. Ideal for stage and platform operation.



### WIDE ANGLE MODEL WS

Supplied without cable in silver crystalline finish. Size 7 x 3 1/8 x 2"; weight 2 lbs.; impedance to grip; freq. response 80 to 12000 C.P.S.

	List
Model WS .....	\$13.50
Model WS-C (chromium) . . .	15.00
Model WS-S (built-in switch)	15.00
Model WS-CS .....	16.50
	(chrome, with switch)

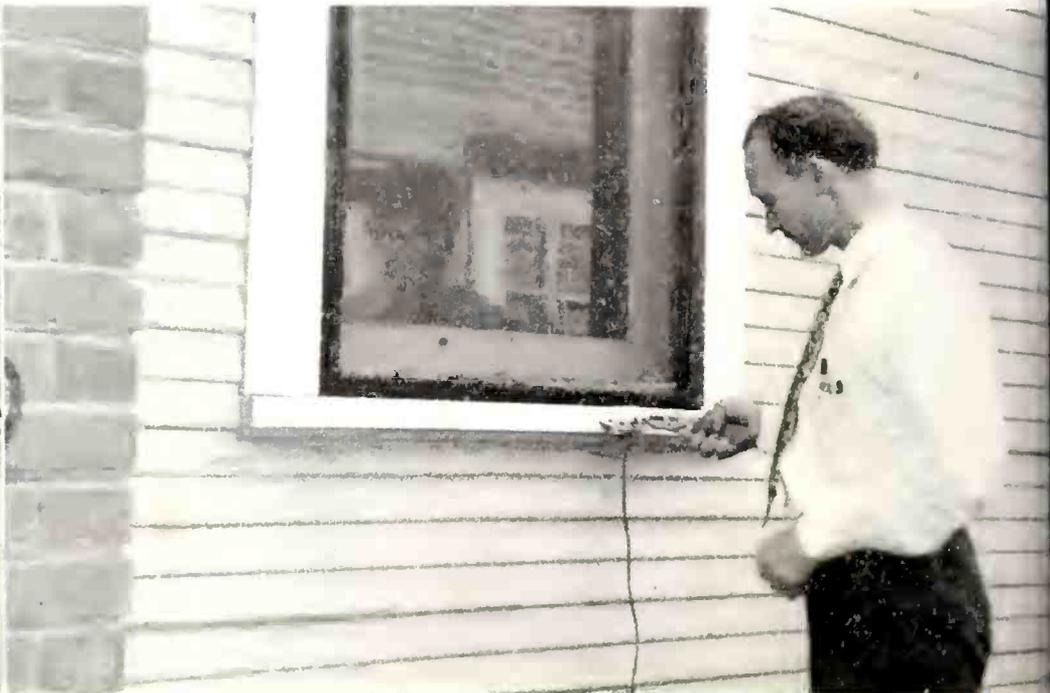
Write for complete illustrated literature

**SELECTAR MFG. CORP.,** 30 West 15th St., New York, N.Y.

# STREAMLINED



↑ Taking notes on the customer's complaints is first step toward streamlined service procedure.



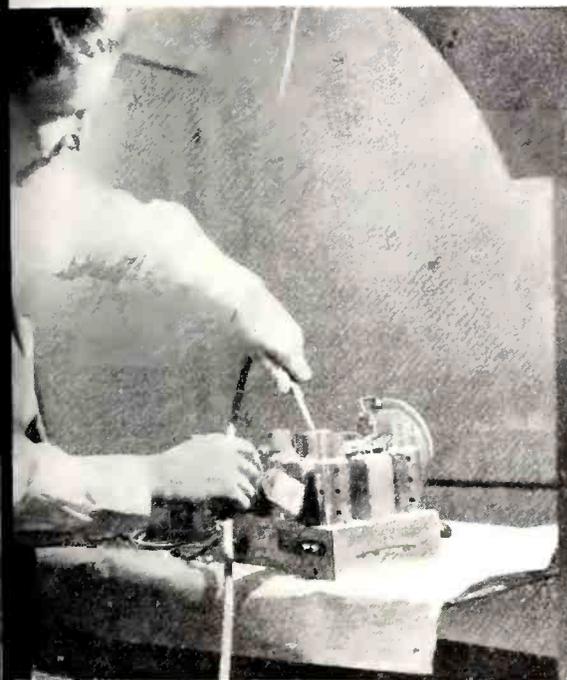
↑ Inspection of the antenna, ground, lightning arrester, and leads will eliminate them as a source of trouble. Extra profit may be added to the job by pointing out the improved reception possible with new installation.

↓ The precise job of alignment is also done by an expert using audio and frequency modulated oscillator, oscilloscope, VTVM. Shielding a portion of the shop for this work will improve quality of alignment work on sensitive sets.

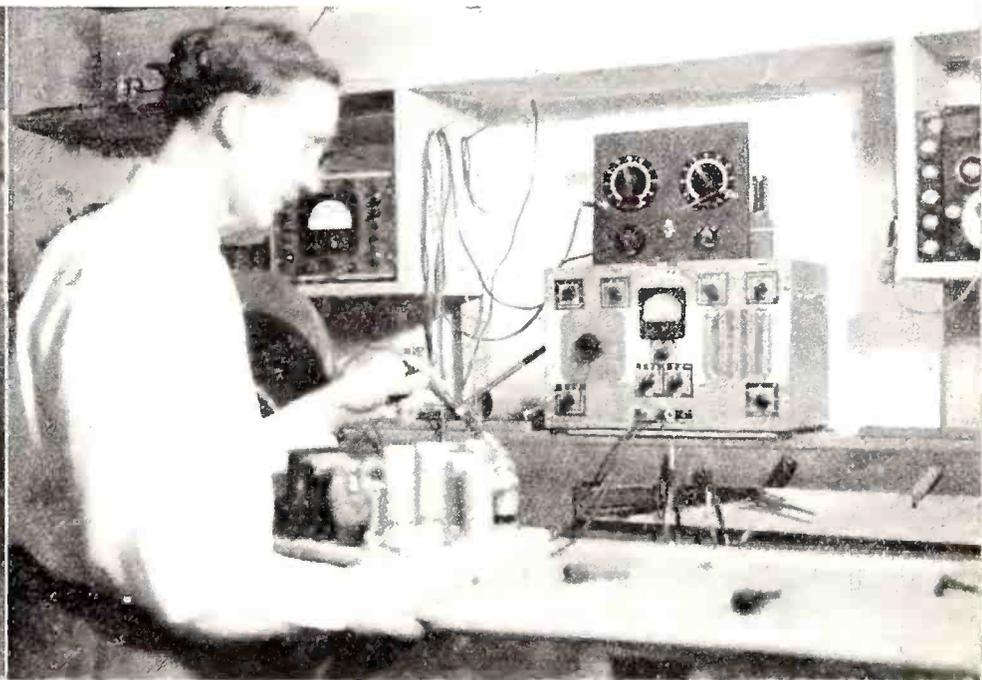


# SERVICE

*How shops employing two or more servicemen can speed up repairing, do better work.*



↑ Sets are thoroughly cleaned, defective dial lights and broken dial cords replaced by an apprentice before set receives checking by expert.



↑ The set is diagnosed by expert serviceman using signal tracing equipment and high voltage power supply to breakdown intermittent parts. Speed in tracking down faults is result of specialization.

↓ Auto radio sets are quickly and systematically handled with equipment having necessary power and speaker plugs. Test bench may also be rolled to side of car.

↓ Polishing the cabinet is final step before returning the set. The subject and pictures prepared by Harold Davis, jobber, Jackson, Miss.



# SERVICE NOTES

## Dual Triode Used As Converter

Twin triodes in the same envelope are functioning as the oscillator and mixer in 1941 Philco models 221, and 226. The new loktal tube is the XXD.

The complete schematic shows how the two bands (540 to 1720 kc., 9 to 12 mc.) are covered with the three gang condenser, one section of which functions only on the 9 to 12 mc. range in the oscillator circuit. The spreading out of the short wave band is accomplished by switching the 435 mmfd. fixed condenser in series with the antenna section of the tuning gang.

The two stages of IF use iron core transformers, and for that reason the plate lead is tapped down on the primary to reduce the gain but keep the selectivity.

### IF ALIGNMENT

The three intermediate transformers are aligned at 455 kc. Any type of output indicator may be used. If a vacuum tube voltmeter is used, connect the negative lead to the AVC bus and the positive terminal to the chassis. Maximum bias voltage may not be the resonance point unless a very low signal generator output is used. Adjust the IF trimmers from the second detector back toward the mixer. Signal is fed through 0.1 mfd. to antenna section of the tuning condenser.

### RF ALIGNMENT

The RF section of the receiver is aligned by using a few turns of wire across the signal generator output to form a loop antenna. This is coupled near the set loop which should be in

the same relative position with the chassis as it is when the set is in the cabinet.

The dial calibration should be checked to see that the pointer lines up with the small dot just below 550 kc. This is maximum capacity position.

With the dial and generator set at 1600 kc., volume control maximum, adjust the oscillator trimmer 15. This compensator is located under the deck on the rear wall just back of the 7C6. The antenna trimmer 6 located on the top of the gang condenser is adjusted with the set and generator set at 1500 kc.

The oscillator trimmer 15A and antenna trimmer 8 (below 6) are peaked at 12 mc. 15A should be adjusted for the first peak from the "tight" position.

## Typical Troubles

### Ford F-1740

Set dead: 3300 ohm 1/2 watt resistor in RF and detector plate supply is burned out. Replace with 1 watt unit. Condition usually due to short or intermittent short in I.F. or R.F. cans.

### Motorola 17D

Set dead: 78 IF tube is main cause of trouble. Replace with good tube.

The following typical set troubles were observed by Willard Moody, serviceman with the Edison Electric Shop, 30 Irving Pl., New York. These troubles have been observed in a number of models.

### Emerson portable 338

Weak reception. Check for volume control ground through shaft. Replacement necessary.

### Fada 5F60-T

Intermittent howling due to opening of bypass capacitor in 25L6 plate circuit. Same trouble may be due to movement of plate lead of 25L6 toward 6C6 grid lead. Poor filter section causes hum, distortion, or howling.

### General Electric G-106

Intermittent. Bad volume control or leaky 6F5.

### Philco 610, 625, 620, 630

Set dead. Test for short from 42 plate to chassis through .02 mfd. bypass. Removal of capacitor restores operation but causes set to howl. Tone control switch may have been damaged by short circuit. If there is distortion after the set warms up, check output tube and speaker cone which may be off center.

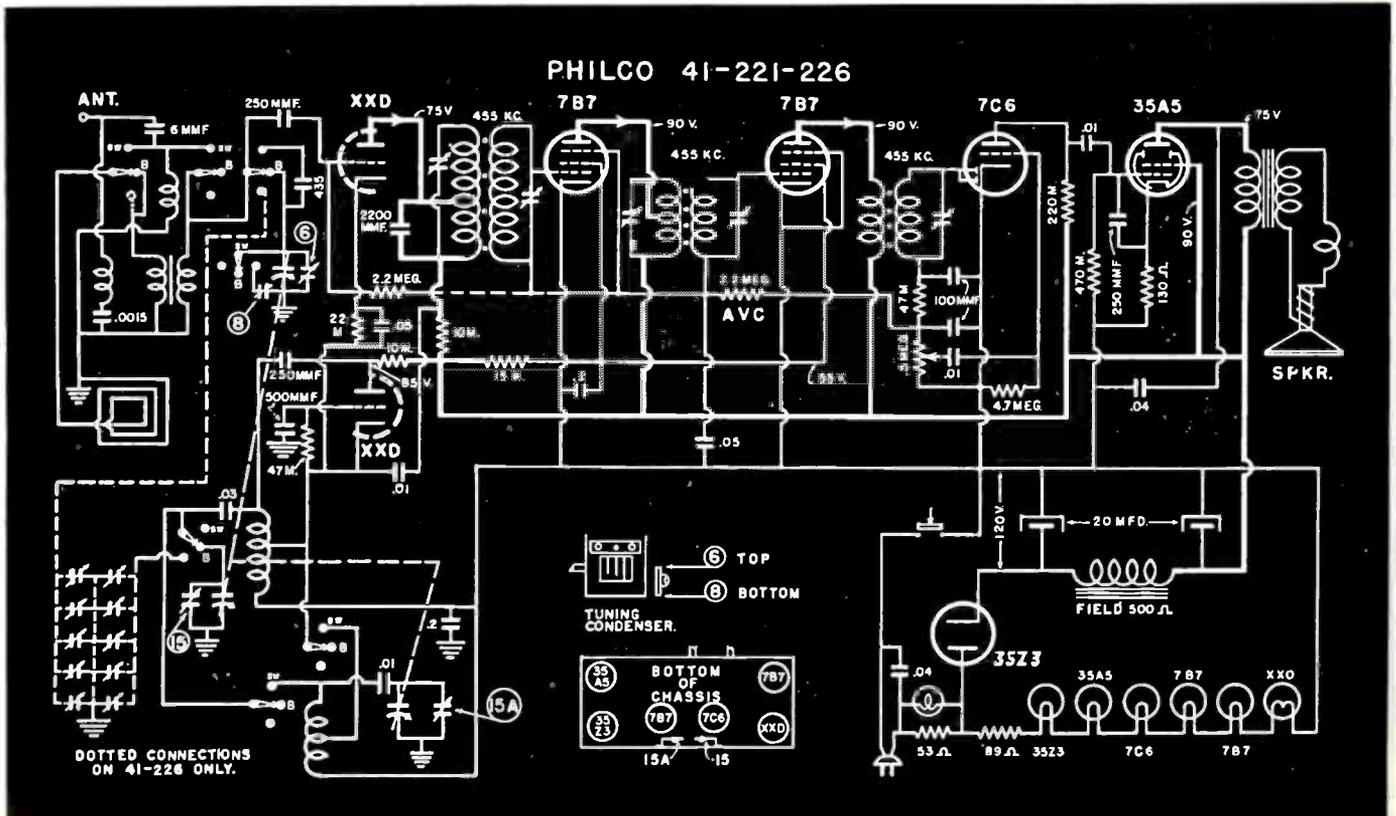
### RCA 5X

Flickering pilot lamp. Check interlock switch in line circuit. Weak, check for short between 75 cathode and 43 grid wires at sockets.

## Speaker Rattle Cure in Little Nippers

Some complaints of "off center" cones in RCA Little Nippers has been due to the rim of the speaker frame binding on the chassis. Where this and cases of rattling are noticed, the speaker should be shimmed out with 1/16-inch washers placed back of the field housing.

Low line voltage may cause the oscillator to fail to operate on push-button ranges of RCA models 16K, 16T3, 16T4, 17K, 18T, 19K, 110K, 111K. If such trouble occurs, see that the oscillator grid leak is 56,000 ohms and not 33,000 which was used in some sets.





**FIRST  
INTRODUCED  
IN 1936**

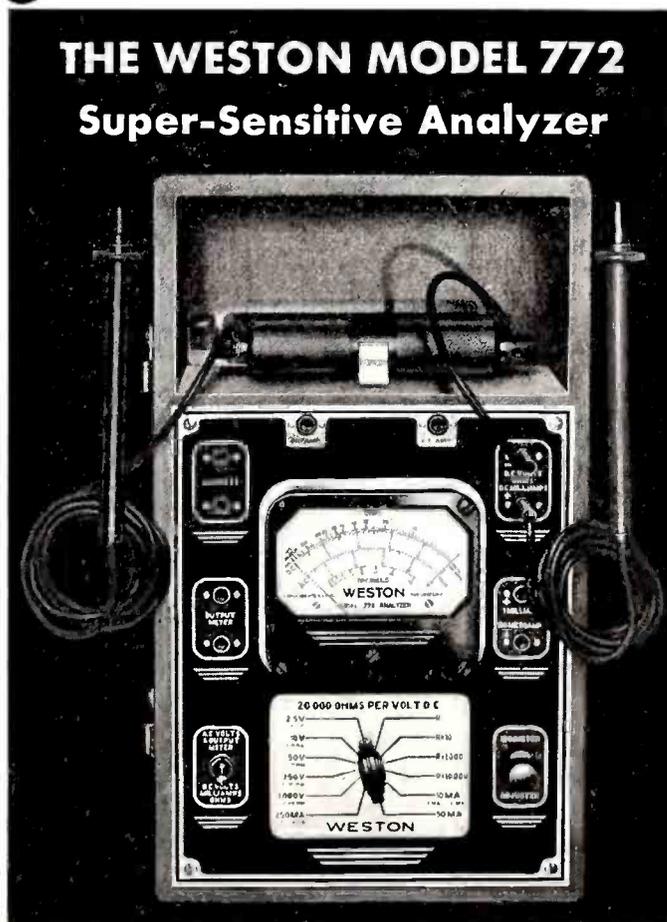
# Still Tops for 1941!

Owners of Model 772 have experienced the true economy of buying correctly designed instruments which measure in fundamentals

Servicemen who purchased one of the original Model 772's over four years ago have found this super-sensitive Analyzer "up-to-the-minute" all during this period ...and find it still "tops" in the field for today's and tomorrow's measurement needs.

It more than met the test requirements of all A.M. receivers...despite the refinements and circuit changes during these many years. It met the requirements of television, too; and today, it is the outstanding instrument for F.M. servicing...because of its high sensitivity, its sound design and construction, and because it measures in fundamental quantities. There are no trick circuits or gadgets to cause early and costly obsolescence. It is a fundamental instrument that, with usual instrument care, will remain in full service indefinitely.

Be sure to get all the facts on Model 772 and other WESTON fundamental test equipment. Write to Weston Electrical Instrument Corporation, 597 Frelinghuysen Avenue, Newark, New Jersey.



Laboratory Standards . . . Precision DC and AC Portables . . . Instrument Transformers . . . Sensitive Relays . . . DC, AC, and Thermo Switchboard and Panel Instruments.

# WESTON

Specialized Test Equipment . . . Light Measurement and Control Devices . . . Exposure Meters . . . Aircraft Instruments . . . Electric Tachometers . . . Dial Thermometers.

YEARS LEADERS IN ELECTRICAL MEASURING INSTRUMENTS

# WHY INTERMITTENT RADIO TROUBLES ARE HARD TO FIND

## 6 COILS—

Some wound with wire finer than hair, may break tiny leads, stopping and starting the set as vibration joins the ends of the wire.

## LOUD SPEAKER—

The voice coil, moving back and forth many times each second, has fine wire windings and leads that may be pulled apart at certain volume levels.

## 50 CONNECTIONS—

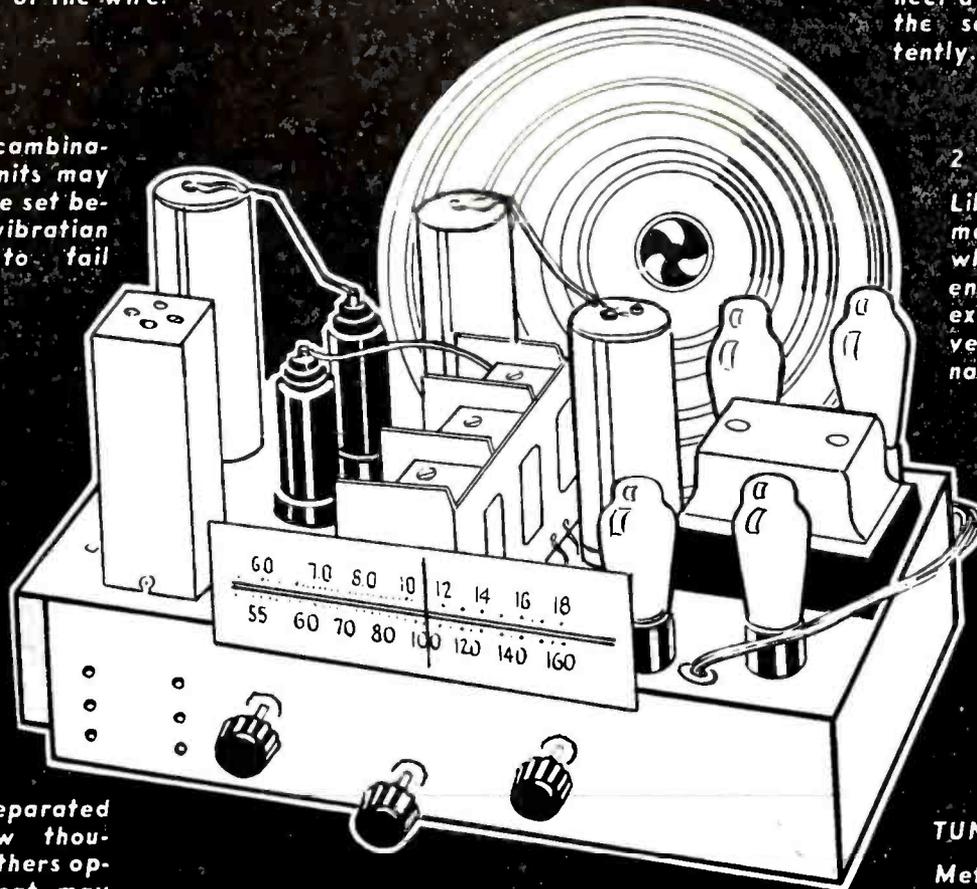
One or more soldered connections may break off, and short or disconnect a circuit that makes the set play intermittently.

## 12 FIXED CONDENSERS—

Each, and many combinations of these units may stop and start the set because heat, or vibration causes them to fail periodically.

## 2 TRANSFORMERS—

Like other coils, have many turns of fine wire which may become broken through expansion on extremely warm days, yet work perfectly in normal weather.



## 12 RESISTORS—

Slow fading may be due to changes in resistance by heating; sudden intermittents, by loose connecting leads.

## 6 TUBES—

Many parts, separated only by a few thousandths inches, others operating at red heat, may short or break, thus acting as "switches" to turn the radio off and on.

## VOLUME CONTROL—

May cause fading or intermittent operation as heat or vibration of certain notes changes the resistance.

## 2 SWITCHES—

May become loose, develop poor contacts because of dirt. Band change switches have 15 to 20 contacts.

## TUNING CONDENSER—

Metal plating may scale off and short radio signal out. Loose and dirty rotor contacts make the set go dead over part of the dial.

## 93 PLACES FOR TROUBLE

The average 6-tube radio has approximately 93 individual causes of intermittent reception. Combinations of these causes run the possibilities into the hundreds. Experience, adequate equipment, and good replacement parts are all needed to locate and repair intermittent sets.

Special low deposits on all N. U. Triplett Deals to November 30th

and it's Yours on N.U. DEAL

TRIPLETT  
TUBE TESTER  
Model 1620  
\$12.50  
DEPOSIT

**TRIPLETT TUBE TESTER  
MODEL 1620**

Has new lever-type flexible switching giving individual control for each tube prong . . . Filament voltage switching from 1.1 to 110 takes care of present and future tubes with filament voltages up to 117-volt types . . . Giant 6-inch scale RED•DOT lifetime guaranteed indicating instrument . . . Neon short test . . . Separate line voltage meter . . . Speed Roll Chart can be spun from one end to the other in less than four seconds . . . Housed in wooden case of graceful proportions with sockets, knobs and markings in ivory.



TRIPLETT  
MODEL 1620  
Regular Dealer  
Price \$37.84

YOU TOO CAN HAVE THE

*"Best Equipped Shop in Town"*

Get it the National Union way . . . you deposit \$12.50, immediate delivery is made on Triplett Model 1620 Tube Tester. You sign agreement to purchase 1275 points over a 2 year period. On completion you receive bill of sale and your deposit is refunded as a merchandise credit.

☆☆☆

National Union purchase points can be taken in Tubes, Condensers or Batteries. All products the finest in quality, thoroughly guaranteed and competitively priced.

☆☆☆

National Union Radio Tubes are known as the radio service dealer's tubes because they are used by more service dealers than any other make.

☆☆☆

You too can have the best equipped shop in town, just get your equipment the easy "N. U. Way" — Remember National Union has the finest sales helps and promotional pieces to help you sell yourself to your community and make more money.

☆☆☆

Special low deposit on all Triplett Testers until Nov. 30th, 1940.

Ask Your Jobber or Write to

Copyrighted

**NATIONAL UNION RADIO**  
57 STATE STREET, NEWARK, N. J. Corp

Over 50,000 completed deals your guarantee of complete Satisfaction



J. E. STAGE, Longview Radio Sales & Service Co., Longview, Wash. Think your Free Equipment Plan great—Have signed 20 N U Equipment Deals—have been using N U program 9 years. N U tubes all check alike—rarely have to make replacements.



MATHEW J. BERLOWITZ Juncos Radio Shop, Milwaukee, Wisconsin. I find in checking my records I signed 29 contracts. There is no better way for a serviceman to painlessly acquire good service equipment. In my 10 years of exclusive dealing with N U their products have always been satisfactory.



E. J. MAGINOT, Boston, Mass. In my opinion, and in the opinion of many other service engineers with whom I am associated, N U enjoys a prestige which needs no apology. Modern radio sets demand modern testing equipment. N U supplies it the easy way.

*The Best Equipped Shop in Town Gets the Business*

# SERVICE NOTES

## Solving the Intermittents

The problem of intermittents has long been one of the unpredictables in the serviceman's career. Sets that stop and start for no apparent reason are a big headache to fix. Beside the job of tracking down the inconsistent defect, the problem of how to charge is just as complex. Estimating the cost of such a job in advance is almost impossible.

Letters from servicemen such as the following, indicate the necessity of working out a plan for handling these cases. Here is what George S. Coburn of Farrington Radio Co., Arlington, Mass. has to say.

Editor, RADIO TODAY

We would like to get the opinions of dealers who operate service departments at a profit, on their basis of accepting sets with intermittent troubles. We hope that with your cooperation in printing this letter, other dealers will write telling of the most satisfactory ways they have found in handling intermittent radio service jobs.

In practically every case of intermittent trouble, the customer sums up his trouble in this manner, quote, "Oh, it's just some little thing like a loose wire. It just can't be anything else because nothing has ever bothered us for seven years until it started to fade and make that funny noise once in a while," end of quote.

### SUGGESTS TWO IDEAS

As we see it, there are two ways in which to handle such instances. The first way is to take the job on a gamble, quote a price low enough to satisfy the customer, and then perhaps spend hours on the bench isolating the trouble. And, in the final analysis you will find that you have lost money on the job.

The other way is not to accept the job unless the customer agrees absolutely to replace *all* tubes, filters, fixed condensers and volume control or such other parts as appear overdue for replacement and from which the intermittent condition could originate.

But, this suggestion invariably "scares away" the customer. We believe that there is a happy medium,

but unfortunately we have not been able to find it. Remember, we are talking about service at a profit. We are not talking about how to create good will at an investment of time and money, or how to build up the sale for new merchandise. We assume that this effort has already been made.

FARRINGTON RADIO COMPANY,  
Arlington, Mass.

### SEVERAL PLANS

It must be realized that there are several ways of handling intermittent radio cases. Here is one. Make no estimate of repair cost. Explain the multitude of possible causes and the difficulty of isolating the specific cause. Charge \$1.50 for examination and diagnosis. Report cost of repair to customer but not specific detail of the part or parts causing trouble.

In order to air out various plans, RADIO TODAY will devote space each month to the methods you are using, from both the customer relation angle and the tricks of tracking down intermittents. Send along your special methods and explanations of any gadgets used. The more ways you have of doing the job the easier it will be.

In this issue a full page chart, Why Intermittent Radio Troubles Are Hard to Find, points out the large number of places where periodic faults may be. Diagrams of this type are valuable in showing customers that the job is not simple, nor is it any reflection on the serviceman's skill if the trouble can't be spotted in ten minutes. Use it to

prove your arguments that repairing intermittent sets may be expensive if troubles are hard to locate.

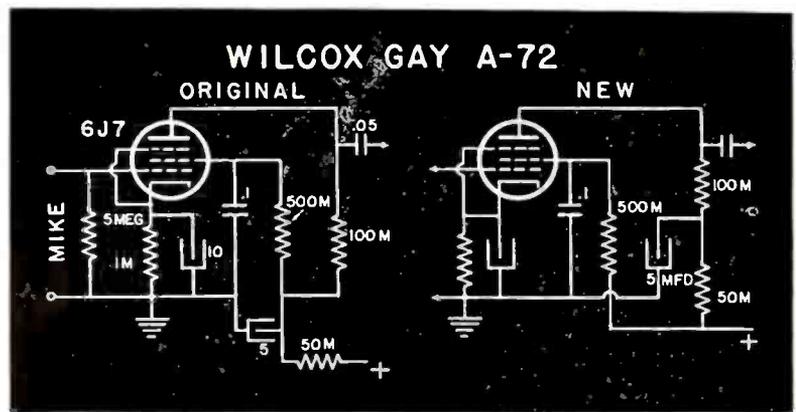
Watch for more details on how to shake out intermittents using your equipment and special tricks. In the meantime, send in the dope on how you are doing the job.

## Curing Recordio Oscillations

Audio oscillations are found in some of the earlier models of the portable Recordio, A-72 when the volume control is turned near maximum end and the selector switch is in the "cut" position. The oscillation is apparent from the flickering of the electron "ray" and also as a "motor-boating" sound on the recording. The oscillation is caused by the coupling in the common plate and screen 50M resistor. The trouble is eliminated by moving the 500M screen resistor from the decoupling filter to the B+. The circuit changes are shown in accompanying diagram.

## Notes on 1941 RCA Receivers

The stage gain values given on circuit diagrams for 1941 models are established with a fixed bias of three volts applied to the AVC system. Two flash light cells connected in series do



Circuit diagram changes shown at right prevent oscillation at high volume levels.

**For NET PROFITS Vote SENTINEL!**

Sentinel's the line that has: an unexcelled record for QUALITY and low service costs; prices and values that will all sales resistance; mass advertising that pulls prospects straight to your store. Everything it takes to give you top profits on every set you sell. Get on the band-wagon now—vote the straight Sentinel ticket! Write for Details TODAY!

**SENTINEL RADIO CORPORATION**  
2020 Ridge Ave., Dept. RT-9, Evanston, Ill.

**Sentinel**  
Quality Radio Since 1920

the job. Hook the negative end of the battery to the AVC bus and the positive terminal to the chassis or common negative wiring.

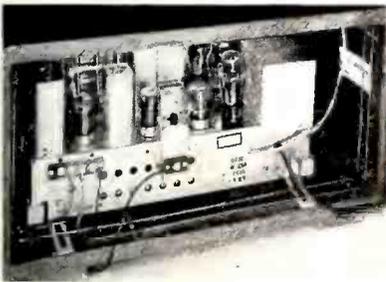
#### REDUCING GAIN

In certain locations, it may be necessary to reduce the RF gain of high sensitivity models to reduce noise pick-up between stations. The cure is the addition of a 500 to 3000 ohm resistor, depending upon the reduction in gain desired, and a .01 by-pass condenser. The parallel combination of these two parts is connected in series with the IF cathode lead. Some of the circuits have a 100 ohm resistor in the cathode lead, in which case the parts may be added or the present unit increased in resistance.

#### PHONO MOTOR CODE

A color scheme is used on phonograph motors for identifying the frequency for which they were designed. A green spot of paint on the motor means a 50 cycle unit, while 25 cycles and a white dot go together. No color code is used for 60 cycle motors.

### Aerial Coupler Simplifies Service Jobs

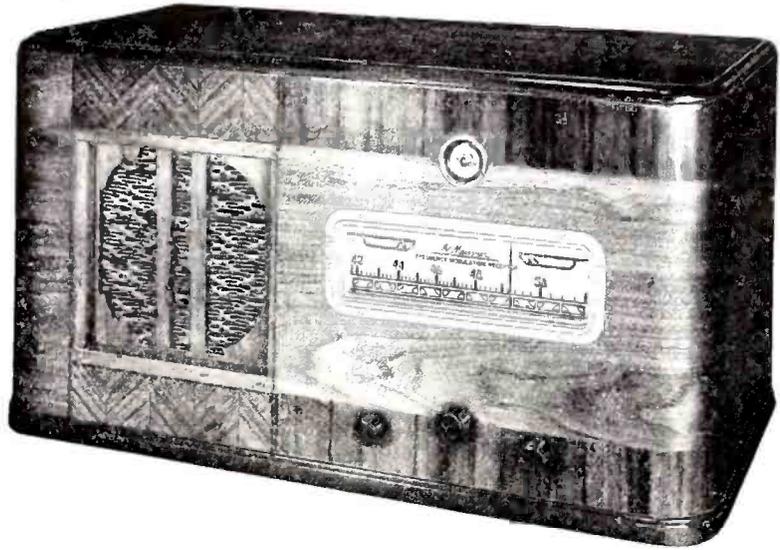


A new service aid announced by Philco is an aerial coupler which makes it possible to use conventional outdoor antenna while testing a loop set. Since the loop is built into the cabinet of some 1941 Philco sets, the coupler is a real aid when the chassis is out on the bench.



"It's a special rugged job we're building-up to stand the campaign speeches."

# F-M needs You— and You need this Complete Line



The immediate future of Frequency Modulation lies in the energetic efforts of the Radio Jobbers, Dealers, and Servicemen—the technical men who know what it's all about. Here, then, is YOUR opportunity to get in on the ground floor of this promising new phase of the radio industry!

In order to do this successfully, however, YOU must be prepared—with full information on the subject—with a complete line of sets and parts to meet every demand.

Meissner places this material "right in your lap." The beautiful, walnut-finish Table Model F-M set shown is 22 $\frac{3}{4}$ " wide, 12 $\frac{1}{4}$ " high and 11" deep. Has full-quality, 8" P-M dynamic speaker; five-position tone control provides choice of output response. May also be connected as a converter to feed the audio system of a larger receiver if desired.

#### CONSOLE MODEL

For highest-quality, noiseless, static-free reproduction of F-M Broadcasts, this big Console Receiver is the finest obtainable. Its powerful, 12-tube chassis, with built-in super-sensitivity, together with a special high-fidelity P-M dynamic speaker in the large bass-reflex tone chamber, assure the discriminating listener of maximum satisfaction. The walnut-finished cabinet is 41" high, 30 $\frac{1}{4}$ " wide and 15 $\frac{1}{2}$ " deep. Rich, two-toned veneers provide a beauty seldom seen except in the highest-priced receivers.



#### CHASSIS AND PARTS

The same 12-tube chassis used in both of the receivers described above, is available separately for use in "Custom-Built" installations. Requires 110 watts at 117 volts, 60 cycles; 6 watts undistorted output; 170-kc selectivity; 10-mv sensitivity. Special 4.3-mc I-F and Discriminator Transformers, as well as complete RF-Mixer-Osc. Tuning Assembly, covering 42 to 50 mc. are also available for those who build their own.

#### FREE SALES HELPS

New counter literature describing the Meissner F-M Receivers is now ready. Order a quantity now and be prepared for early fall sales. New 1941 General Catalogs will be ready soon. Write at once for your supply.

#### NEW 1941 CATALOG FREE

Every Dealer-Serviceman needs this up-to-date listing of the entire line of Meissner receivers, kits, replacement coils and hundreds of other daily requirements. Send a postal card TODAY for your free copy.

ADDRESS DEPT. T-9

**Meissner**  
MT. CARMEL  
ILLINOIS  
"A FAMOUS NAME FOR TWO DECADES"

TRIPLET

# Ultra Sensitive TESTER



## MODEL 1600-E

DEALER NET PRICE **\$21<sup>00</sup>**

DC scales of the instrument read: Voltage 0-10-50-250-1000 (25,000 ohms per volt); 0-1-10-50-250-500 milliamperes; Resistance, low ohms, backup circuit, 1/2 to 500 high ohms, 20,000-200,000 ohms and 2 and 20 megohms. Batteries included for all ranges but 20 megohms. 22 1/2 volt battery for that range can be mounted inside the tester case; brackets provided. AC Voltage 0-10-50-250-1000 at 1000 ohms per volt. A plug-in copper-oxide rectifier, easily replaced in case of overload, is used to obtain AC readings. Model 1600-E, less case for mounting in panel. . . . Dealer Net Price . . . \$21.00. In case with handle for portable use . . . Dealer Net Price . . . \$25.50

## MODEL 1270

DEALER NET PRICE **\$29<sup>83</sup>**

Eleven ranges Test ALL Household Appliances. . . . Five Wattmeter Scale Ranges 0-20-500-1000-2000-4000 (most essential for the modern electric ranges). Four Alternating Current Scale Ranges 0-260 Milliamperes; 0-6.5-13-26 Amperes. Two AC Voltage Scale Ranges 0-130-260. Has RED • DOT Lifetime Guaranteed Instrument. An advanced electrical circuit analyzer that shows the wattage consumption, amperes and line voltage of ALL household appliances and small motors under actual operating conditions. Complete with leads for two-wire circuits. . . . Dealer Net Price . . . \$29.83. (Special leads available for three-wire circuits.)



WRITE FOR CATALOG—SECTION 179, HARMON DRIVE

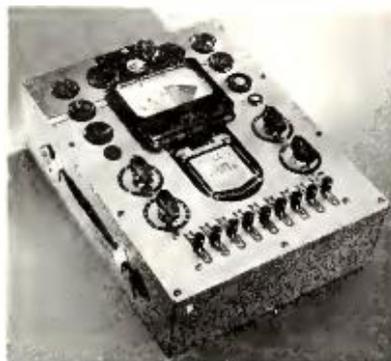
THE TRIPLET ELECTRICAL INSTRUMENT CO.  
Bluffton, Ohio

# NEW SERVICE



### Mallory noise filters

★ Complete line of noise filters have standard cut-out boxes for equipment drawing 10 amps or more. Type ZA1 is a capacity-inductance combination for using house wiring as an antenna. P. R. Mallory Co., Indianapolis, Ind.—RADIO TODAY.



### Philco tube tester

★ Model 050 tube tester with English reading scale checks all tubes including XXL and XXD loktals. Anti-obsolescence features are multiple pin selector switches, and spare socket space. Philco Radio and Telev. Corp., Philadelphia—RADIO TODAY.



### Sprague Atoms

★ New vertical mounting dry electrolytics have feet for direct soldering or fastening to chassis. Separate positive and negative leads. Type LM. 8 mfd. 450-volt unit, lists, 60c. Sprague Products Co., North Adams, Mass.—RADIO TODAY.

### Amperite ballast tube

★ New shape and size ballast resistor tube puts 80 volts on receiver when first turned on, raising it to 110 volts after 4 seconds. Four types of ballast tubes will replace 90% of resistor tubes used in AC-DC sets. Amperite Co., 561 Broadway, New York—RADIO TODAY.



### Drake soldering irons

★ Removable elements are featured in 600 and 800 series industrial soldering irons. Spring electrical contacts between element and handle permit quick removal by loosening a lock nut. Model 602, 100 w. list, \$9.50. Drake Electric Works, 3656 Lincoln Ave., Chicago.—RADIO TODAY.



### Radio City tester

★ Model 803 portable tester has single meter for both tube and multi-meter. DC ranges to 1000 volts at 1000 ohms per volt, current ranges to 1 amp and 10 amps. ohmmeter to 10 megohms. Tube tester takes all new tubes including miniature. Radio City Products Co., 88 Park Place, New York—RADIO TODAY.



### Solar checker

★ New model CE Exam-Eter for testing condensers, and resistors measures power factor, tests for shorts, opens, high RF impedance and intermittents. Has DC and AC vacuum tube voltmeter. Solar Mfg. Corp., Bayonne, N. J.—RADIO TODAY.



### Eagle staple

★ Insulated staple that drives like a nail is easy to use as wire may be hooked under after long leg is started. Locked fibre prevents insulation from falling off. Coppered or colored. Eagle Electric Mfg. Co., 59-79 Hall St., Brooklyn, N. Y.—RADIO TODAY.

# TOOLS



### Jackson audio oscillator

★ Model 652 audio oscillator develops fundamental frequencies rather than a resultant beat note. Three range scale, 5-step output impedances, 10 to "high." Better stability is claimed for new instrument. Jackson Electrical Instrument Co., 135 Wayne Ave., Dayton, Ohio—RADIO TODAY.



### Belden line filter

★ Model 8100 has dual condensers, high "Q" chokes for elimination of power line noise in receivers. Ground lead is carried through power cord in separate wire. Rated at 3 amps, 115 volts. Belden Mfg. Co., 4689 W. Van Buren St., Chicago—RADIO TODAY.



### Hickok bridge

★ Electronic bridge model 575 is sensitive to 1 mmfd.; has range to 1,000 mfd., 500 megs. Cosine galvanometer permits special electrical triangulation. Unit is fully shielded. Operates on AC. Hickok Electrical Inst. Co., 10514 Dupont Ave., Cleveland, Ohio.—RADIO TODAY.



## LIGHT WHERE IT'S NEEDED WHEN IT'S NEEDED

A modern, anti-aircraft battery is useless until enemy planes are picked out of the black by the powerful beams of the searchlights. Without light . . . where it's needed, when it's needed . . . the skill of the gunner is wasted.

In radio servicing, even the most skillful trouble-shooter must have a thorough knowledge of every detail of construction and wiring of the particular set on which he is working in order to do his job quickly and efficiently. That is why "Every Successful Service Shop has a Complete Set of RIDER MANUALS."

They provide, in the most convenient form, everything a serviceman needs to know about any radio receiver—data on alignment, I-F peaks, operating voltages, parts lists and values, voltage ratings of condensers, wattage ratings of resistors, coil resistance data, gain data, etc.

Like the searchlights, RIDER MANUALS provide light for the trouble-shooter . . . where it's needed, when it's needed . . . at a cost of less than a nickel a day! Fill in any missing volumes of RIDER MANUALS at your jobber's—today!

**JOHN F. RIDER, PUBLISHER, Inc.**

404 Fourth Avenue New York City

Export Division: Rocke-International Elec. Corp.,  
100 Varick St., N. Y. C. Cable: ARLAB

### DO YOU HAVE ALL Eleven?

A complete set of RIDER MANUALS is "must" equipment for every up-to-date service shop.

Vol.	Price	Covering	Vol.	Price	Covering
XI	\$10.00	Up to May 15, 1940	VI	\$7.50	1935-36
			V	7.50	1934-35
X	10.00	1939-40	IV	7.50	1933-34
IX	10.00	1938-39	III	7.50	1932-33
VIII	10.00	1937-38	II	7.50	1931-32
VII	10.00	1936-37	I	7.50	1920-31

*You* NEED RIDER MANUALS



# KEN-RAD



## DEPENDABLE RADIO TUBES

Ken-Rad radio tubes are used by many radio set manufacturers as original equipment—proving their dependability in service.

KEN-RAD TUBE & LAMP CORPORATION OWENSBORO, KY.  
Export Dept., 116 Broad St., New York, U.S.A. Cable Address: Minthorn, New York

**NOW BY POPULAR REQUEST BANTAM "50" DEAL**

FOR THOSE WHO WANT THE BEST

ORIGINATOR OF THE BANTAM

ASK FOR HYTRON TUBES

*Again*

## DEALERS CAN INCREASE PROFITS FROM TUBE SALES

Just one short season ago the Bantam-50 Cabinet Deal was an immediate success. Today — because so many of you Dealers and Servicemen have asked for it—we repeat it **BY POPULAR REQUEST!**

One reason for the success of this **DOUBLE FEATURE** is the fact that for the first time the Bantam 3 color, baked-enamel steel Cabinet provides a means of stocking Bantam "GT" type tubes conveniently—at your fingertips—on the counter or on the wall behind the counter. Secondly, the **HYTRON** Cabinet Assortment of 50 tubes includes 23 types which are popular, fast selling numbers . . . which will replace a total of 61 Metal, "G," "GT" and "MG" type tubes.

You get a maximum stock at a minimum cost. Order one or more assortments from your jobber today or write us direct.

Remember — Those who want the best buy **HYTRON** because they know that they are backed by the experience gained in manufacturing radio tubes **EXCLUSIVELY** since 1921.

\*Trade-name registered.

**HYTRON** CORPORATION  
 RADIO TUBES  
 23 N. DARBY ST. SALEM, MASS.  
 MANUFACTURERS OF RADIO TUBES SINCE 1921

# ELECTRONIC MUSICAL INSTRUMENTS

*A profitable field for servicemen*

The widespread popularity of the modern electronically picked-up and amplified musical instruments offers a real service opportunity for the servicemen. The pick-up, amplification, and even generation of the frequencies in some cases, are identical with the work the serviceman meets everyday.

Certain portions of all the instruments now on the market can be easily handled by the competent serviceman. The Hardman, Peck & Co. electronic Minipiano is a conventional up-right in the strings, keyboard, etc. The electronic addition to the piano is a variable capacity pick-up system, amplifier, power supply, speaker and proper controls. Each set of strings, two and sometimes three are used for each frequency, function as the movable element of a small variable condenser.

### CAPACITY PICKUP

In the diagram shown, the strings are attached to a frame where the usual tuning adjustments are located, and pass over a wooden bridge above the heads of special machine screws. These screws are all connected together electrically to form one set of the plates while the strings are also electrically connected to form the other element.

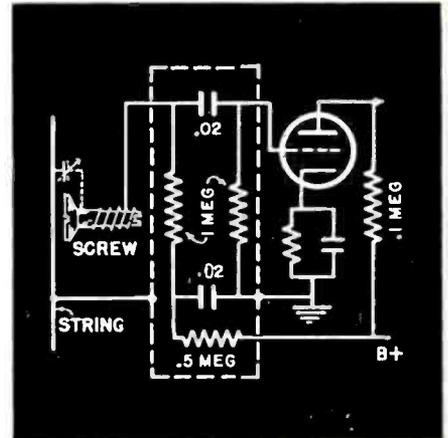
The screw heads have a potential difference with respect to the strings of about 300 volts positive. This voltage is fed through 1.5 megs as shown in the circuit diagram so that no dangerous shorts may develop or shocks result.

As the string vibrates at its natural frequency, an alternating current will flow through the 1 meg resistor connected to the screws because the capacity is changing between the particular string and screw. This current develops a voltage across the resistor which is of the same frequency as the vibrations, and it is this voltage that is amplified and delivered to the speaker. The pick-up mechanism is quite similar to the condenser microphone in operation.

The amplifier is a straight forward type with volume, high and low frequency tone controls.

### KEEP IT CLEAN

The serviceman's job usually consists of keeping the space between the screw heads and the strings clean and free



Input portion of the electrostatic pickup, B. F. Miessner patents.

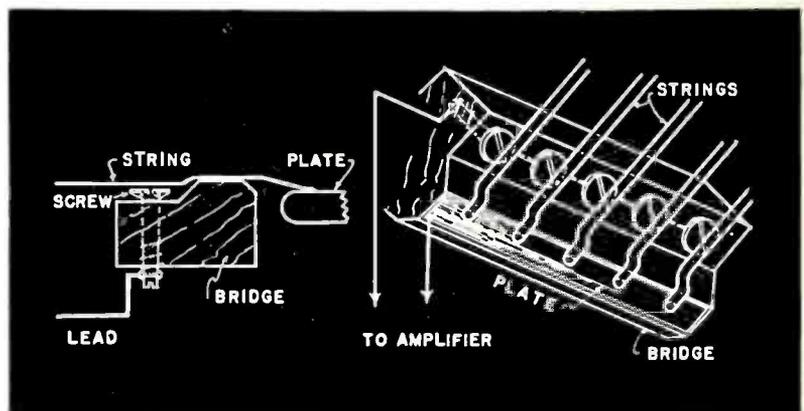
from small dirt or felt particles. Small cracking and popping noises heard when the piano is not being played is due to dirt particles becoming polarized by the high voltage and shifting around in the space between the strings and screws. This is best cleaned out with a vacuum system or small hand blower. Even though the strings and screw heads are lacquered, resistance tests should be made if shorts are suspected.

A loud grating noise heard when a particular key is struck hard, is due to the string shorting against the screw head. This particular screw should be backed away from the string. Both ends of the screw are slotted for easy adjustment. The right screw may be identified by counting the number of keys and screws from the same end of the keyboard.

Where particular notes are louder or weaker than others when struck with equal force, the volume may be raised or lowered by moving the screw toward or away from the string, respectively.

The inside of the cabinet is painted with graphite to form a shield and the back is a copper screen which must be kept in place to prevent hum. AC light cords should be kept clear of the piano.

The Story & Clark—RCA electronic piano is similar in operation except that the string vibrations are picked up electromagnetically rather than electrostatically.



Variable capacity pick-up system of Minipiano

These pianos must be tuned by a piano tuner just as other types.

The Hammond organ and Novachord are fully electronic with vacuum tubes as generators of the frequencies, amplifiers, frequency dividers, and controllers. Tube testing and replacement are good sources of profit for the aggressive serviceman.

### Vibrator Replacement Guide by Meissner

A complete, cross-referenced vibrator replacement guide for practically every model auto, and home set has just been announced by Meissner Mfg. Co., Mt. Carmel, Ill.

This free guide also has a buffer condenser capacity guide for most models, and a unique characteristics table with connection diagrams, operating voltage, type of case, and dimensions.

### Stancor Guide for Servicemen

Service Guide No. 125-B is now available from Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill. New book gives tube complement and replacement transformer guide for 4300 sets of 70 manufacturers. Several circuits to build are in this free book.

## Book Reviews

### Servicing by Signal Substitution

Precision Apparatus Co. 647 Kent Ave., Brooklyn, N. Y.

Price \$.35

This new pocket-sized manual of 119 pages covers the system of tracking down and isolating trouble in any type of receiver by the system of signal substitution. The basic theory of this method of servicing is the substituting of a standard test signal from any good signal generator to the various portions of the set and observing the results on output meters or other

indicating devices. Where the signal generator has a calibrated output control, stage gain measurements may be made. Less sensitive indicating equipment is required for this method of servicing and equipment already owned by the servicemen can be used without additional apparatus. This book describes the procedure and shows typical circuits with test points. Also described is the AVC substitution method in which the receiver is aligned under a fixed AVC bias to simulate actual operating conditions.

This book is recommended to servicemen who want to keep up with new techniques in finding set troubles quicker.

### Service Manual of Wiring Diagrams

Published by Supreme Publications, 3727-29 W. 13th St., Chicago, Ill. Price \$1.95

Including 427 of the most used circuit diagrams, this new manual brings a great deal of servicing information to the radio man through one 8½ x 11-inch book. The diagrams cover the popular models that were sold in large numbers, and whose circuit diagrams were most requested from the publisher.

The extra large page numbers and alphabetical and numerical index make it easy to find the particular circuit.

Beside the wiring diagram and circuit components, many of the more complicated sets have socket voltage tables, chassis layouts, and special service hints.

This manual will prove valuable as a convenient reference of the circuits most commonly needed.

### RCA Ham Guide

RCA Mfg. Co., Harrison, N. J. Price 15 cents

The new Ham Guide has 47 pages of tube data, transmitter circuits, and complete information on modulation circuits. Photographs of typical rigs give the constructor all the details. Also included is a section of general information covering grid-bias circuits, L-C ratios, neutralization, etc. This book may be obtained from any RCA transmitting tube distributor or from address above.

"HERE'S A BASICALLY NEW AUDIO OSCILLATOR"

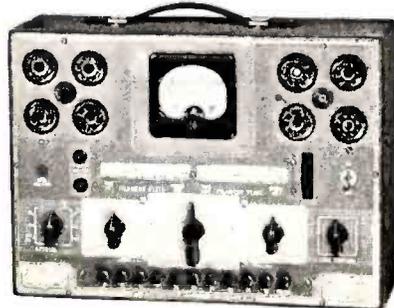


—Paul F. Jackson



MODEL 652

Here is all you could possibly ask for in an Audio Frequency Oscillator. It has everything! For example: A. F. Voltage is developed at its fundamental frequency . . . Model 652 is NOT a "beat frequency" oscillator and contains no RF circuits . . . Full range continuously variable from 20 to 20,000 cycles . . . 3 bands provide instant and exact settings . . . requires no zero adjustment . . . Five output impedance steps . . . 500 m. w. power output . . . constant output + or -1 DB (30-15,000 cps) . . . Price \$64.50.



### DYNAMIC TUBE TESTER

Proved to be more accurate! Jackson testers find "poor" tubes which might pass for "good" in ordinary testers. Model illustrated is 636B, \$29.95.

Write for Free Catalog

The Jackson Electrical Instrument Co.

Dayton, Ohio



JACKSON

HAVE YOU EVER SEEN ALL THE CLIPS THAT MUELLER OFFERS?



Solid Copper Clips

Special Clips for Every Use



Insulated Clips



Send for Free Samples and Catalog 980

MUELLER ELECTRIC CO., 1573 East 31st St., CLEVELAND, O.

# YOU CAN SELL MORE RADIO SETS THIS YEAR —if you follow these 6 rules

**1** Give a good demonstration of the new home recording feature. It's the quickest way to convince your customer that he ought to have a new set.

**2** To make good demonstrations give each of your salesmen a Presto STELLITE cutting needle for his own exclusive use. It will assure him of 100 or more perfect demonstrations at a fraction of a cent each.

**3** Use only **PRESTO BLUE LABEL DISCS** for demonstrating recording. It isn't worth while to save a few cents on the demonstration disc and take a chance of killing a \$150.00 sale.



**4** Sell each customer a **PRESTO HOME RECORDING KIT** with his set. Start him off right. It will save you free service calls. It will help him make good recordings from the beginning... make him a regular disc customer.

**5** Use the **PRESTO COUNTER DISPLAY**. Show your customers you carry the highest quality discs and needles. Everyone who comes into your store this Fall is a probable buyer.



**6** Use the Presto window and wall posters, advertising mats, direct mail order cards. They'll bring you new customers, more business.

**JOBBERS**—write today for full information on Presto recording accessories—price sheets for your salesmen's folders, free broadsides to mail to your dealers, free merchandising aids for your dealers.

**PRESTO RECORDING CORPORATION**  
242 W. 55th St., New York, N. Y.

World's Largest Manufacturers of  
Instantaneous Sound Recording Equipment

## RECORDERS UP TO NEW PEAKS

In more ways than one, recorders are making records!

Sales records, as well as sound records.

And they do "speak for themselves."

In a single year, from the product of a very limited number of manufacturers, sold by a limited number of specialized dealers, recorders have so captured the public fancy that now every major manufacturer and dealer sells them.

Not yet afflicted with so many of the selling evils which eat into profits, recorders offer now, excellent sales and profit opportunities for those who can and will give them the specialized promotional and selling effort they require.

In the home, in business, and in education recorders have their own special place.

They render a service, provide a utility, create a hobby, which neither radio, nor recorded music can fill.

Recorders are sold, not bought—and thus are outside the pale of cut-throat price competition.

But they are being sold successfully, in constantly increasing numbers, by radio dealers who know their product, their market and are bringing the two together.

Recorders, alone, or in combination with radio, are worthy of the best effort of every dealer who is willing and able to really sell.

There is no doubt that recorders will play a more important part in radio sales and profits this year than ever before.

### Demonstration Week for Victrolas

A national promotion event which invites many local tie-ins on the part of dealers is RCA Victrola Demonstration Week, Sept. 9 to 14, which honors the new Victrola line of radio phonographs. The drive started with 2-page color ads in *Colliers* and *Saturday Evening Post*, and continued with splashes in *Good Housekeeping*, *America Home*, *Time*, *Esquire*, *House & Garden*, and *The New Yorker*. Theme is "Choose the Instrument the Great Artists Choose."

David J. Finn, RCA ad manager, describes the Demonstration Week as "one of the most dramatic activities it has been possible to offer in a long time."

To back up distributors' selling efforts, RCA is making available 4-color blow-ups of the *Saturday Evening Post* and *Colliers* ads, a variety of full-page newspaper, dealer and distributor cooperative ads, window displays, a store kit display, demonstration records, a booklet "How To Sell Victrolas" and a prominent place on RCA Victor radio and record programs.



## Manufacturers! . . . Jobbers!

Here's a new foundation unit for the up-to-the-minute **RADIO-RECORDER • COMBINATION • RECORDER-PLAYER • or SOUND SYSTEM.**

The New

## MELLAPHONE RECORDER, CHASSIS and MIKE

Fully perfected. . . . Can be incorporated into your current product. . . . Has wide adaptability. . . . Gives you immediate access to radio's fastest-growing market. Precision cutting head. . . . Quality pickup. . . . High grade microphone. . . . Very low price!

Wire, phone or write for details

## MELLAPHONE Corporation

Manufacturers of  
Talking Picture and Phono Equipment  
**ROCHESTER NEW YORK**

Since 1870 the Best in Needles

## Buy American Made NEEDLES

**ACTONE**  
Shadowgraph  
Playback Needles

**BRILLIANTONE**  
Standard  
Known the World  
Over

**PRECISION**  
Cutting Needles  
for Acetate

W. H.  
BAGSHAW  
COMPANY

Lowell Represented by  
Mass.

H. W. Acton Co., Inc.  
370-7th Ave., New York



Two of the brand new store displays ready for the Jubilee

## "Fifteen Million Philcos" Jubilee

To mark the achievement of Philco in passing the 15-million mark, the Philco organization announces a smashing nation-wide Jubilee Promoton.

Philco's photo-electric radio phonograph—"Music on a Beam of Light"—it is pointed out, has revived the market for radios over \$100, and has brought back to radio the higher unit sale, with its bigger profits.

For the period of the Jubilee (Oct. 1 to Christmas) dealers will offer free with each of these Philco 1941 photo-electric radio-phonographs, a \$25 Philco home-recording unit. Also with every Philco radio console, it will be made possible for dealers to offer a new \$7.50 Sessions electric clock.

### BUILDS STORE TRAFFIC

To promote dealers' store traffic, placards are provided to be posted in display windows, inviting passersby to "Come In—Let Us Make a Record of Your Voice." America is flocking to make voice records, declare those putting forward this Jubilee promotion. "At 50 cents it's the liveliest concession at the fairs and amusement parks. At 10 cents it's a natural as a traffic getter for Philco dealers—a brand new way to bring prospects to your store—Good prospects, who want what you have to sell." The 10-cent charge, it is explained, covers the dealer's cost, with Philco's special co-operation—and also helps keep curiosity-seekers away.

To bring the campaign to the attention of the general public, Philco will use two-page spreads, in colors, in the leading weekly magazines of America. Meanwhile the regular Philco campaign ads will continue in 17 leading monthlies. In local newspaper areas, distributors will run striking announcements.

### DEALERS' PART

To tie-in with all this Jubilee promotion, dealers are urged to decorate their stores, trim their windows, tag their merchandise, train their sales-people, and map their campaign, using

advertising, circulars, broadcasting, direct-mail and telegrams.

"Make hay, Mr. Dealer," concludes the big announcement broadside. "The time is right—a presidential election—historic world events—everything contributes to a banner year for radio! If you ever had a chance to promote and make money, it's here, right now!"

## Invisible Salesman to Help on Period Cabinets

A dramatic and unusual sales aid for dealers and salesmen who are anxious to do a better sales job on authentic period radio cabinets, is being offered by the Brunswick Radio & Television division of the Mersman Bros. Corp., 206 Lexington Ave., New York City. This "Invisi-Talk Salesman" is a folio of eight two-minute records, one for each period style in the Brunswick line. These records unfold for prospects a personalized historical account on the origin and design of a cabinet, with details on the craftsmanship and woods used in it.

The records were prepared after a survey of retailers' needs, when it was found that a salesman's knowledge of period furniture matters may be limited. Dealers were anxious to sell the higher priced units, however, and hence Brunswick offers a solution. It was found, too, that prospects are genuinely interested in what the records reveal. Brunswick points out also that "such nationally known retailers as Marshall Field in Chicago and the Wurlitzer stores throughout the U. S. have accepted this type of sales device with enthusiasm."

## GE To Offer Line of De Luxe Models

A special line of de luxe radio receivers will soon be announced by the General Electric radio and television department. The company sees a new market for these jobs, and has named Fred A. Ray, formerly the eastern regional sales manager, as sales manager for the new line.

## HERE ARE THE Facts ABOUT GARRARD RECORD CHANGER DELIVERIES

You have heard rumors that Garrard Record Changer production has stalled, because Britain is at war. We want you to know that today Garrard, in America, has ample stocks, New Garrard models are arriving regularly. Garrard accepts their responsibility to you and intends to deliver as many Record Changers as you can sell. That's our answer to these rumors.

## GARRARD IS YOUR GREATEST PROFIT OPPORTUNITY

No other Record Changer can match the smooth, silent, precision performance of Garrard. It's a luxury instrument, frankly designed for quality buyers — your "best" customers who demand the finest and will consider nothing less. Here lies your greatest profit opportunity. A rich, ripe market — easy to sell when you have what it wants, and consequently, easily sold on Garrard.

## GARRARD GREATER PROMOTIONAL HELP

in national magazines and on your counters — at the point-of-sale — will make your selling job easier than ever. For complete information about the entire Garrard line — the facts on why it is your greatest profit opportunity — get in touch with your jobber or write direct to . . .

**GARRARD SALES CORP.**  
296 BROADWAY, NEW YORK, N. Y.

# GARRARD

*the world's finest record changer*

**THE CHANGER YOU WOULD WANT YOURSELF . . .**

# DYNAMIC DEMONSTRATOR

**RCA Test Equipment Licks Service Problems Faster — More Profitably**

Over 3.5 million RCA Radio Tubes have been purchased by radio users. In tubes, as in parts and test equipment, it pays to go RCA ALL THE WAY.



See exhibit of all RCA services including Television at RCA Building, New York World's Fair—and Goldentone Gate Exposition, San Francisco.

## Test Equipment

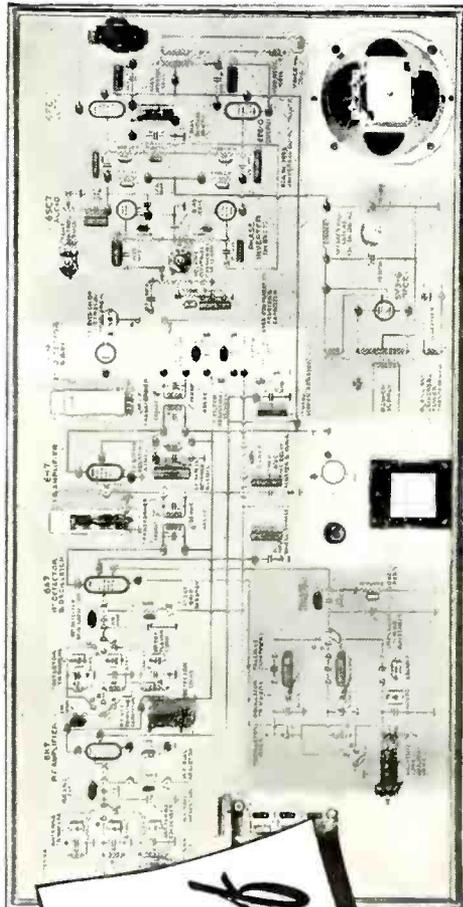
RCA Manufacturing Co., Inc., Camden, N. J.

A Service of the Radio Corporation of America

Are you in doubt about which test equipment—and which testing methods—are best? See the RCA Dynamic Demonstrator!

It's a radio set turned "inside-out"—designed so you can readily duplicate any type of circuit defect. All the parts of a typical modern super-heterodyne are shown, together with their wiring scheme.

See the Dynamic Demonstrator at your RCA Distributor's...ask for on-the-circuit proof of the superiority of RCA Test Equipment.



## NEW BOOKLETS

Handy catalog of phonograph motors, recording assemblies and automatic record changers is furnished on request by the General Industries Co., Elyria, Ohio.

"Mite" condensers manufactured by Atlas Condenser Prods. Co., 548 Westchester Ave., New York, N. Y., are classified in a new pamphlet.

Catalog No. 166, of the Universal Microphone Co., Inglewood, Calif., gives details and prices on 1941 mikes, headphones, recorder kits, mike stands and accessories.

Leaflet, form 1340, describes the new Triplett dry-battery tester. Eight page folder describes newest tube testers, multimeters, oscillators, and other products of Triplett Electrical Instrument Co., Bluffton, Ohio.

Superior Tube Co., Norristown, Pa., makers of fine small tubing in various metals and alloys, has issued a bright new booklet on tubes and how they are made at the Superior factory. Variety of applications are included on the 12 illustrated pages.

"Amateur Radio—A Beginners Guide" can be obtained from the Thordarson Elec. Mfg. Co., 500 W. Huron St., Chicago, for 75c.

Radex Corp., 1733 Milwaukee Ave., Chicago, Ill., announces publication of a new catalog dealing with choke, I.F., R.F. and oscillator coils, kits, radiating loops, signal tracers, etc.

\$1.50 can purchase a complete 1940 service manual, "Most Popular 1940 Radio Diagrams"—417 models by 43 manufacturers. Supreme Publications, 3727 W. 13th St., Chicago, Ill.

Hickok catalog No. 120 gives features, illustrations and prices of their line of electrical indicating instruments. Hickok Elec'l. Instr. Co., Cleveland, Ohio.

A 16-page short-wave station guide which lists several hundred stations throughout the world, with their frequencies, call letters, schedules and world-wide time map, is printed in English, Spanish and French. General Elec. Co., Schenectady, N. Y.

James Millen Mfg. Co., Inc. of Malden, Mass., have just released a catalog which describes and lists standard parts generally stocked by this company.

Power pack catalog No. 109-C, containing information on many stock packs manufactured by Stancor. Free of charge from Standard Transformer Corp., 1500 N. Halsted St., Chicago, Ill.

Now available from Walter L. Schott Co., Los Angeles, Calif., is thoroughly descriptive and illustrated catalog of all Walsco Products.

## GOLDENTONE

Precision-made  
Phonograph  
NEEDLES



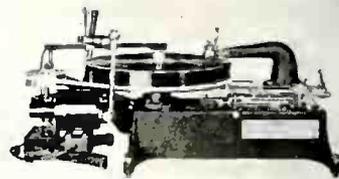
GOLDENTONE is the 100 per cent quality needle. We were the first maker of needles to put research into the manufacture, and to fully meet the requirements of the leading record-makers.

You can sell Goldentone Needles (and use them in your demonstrations) with the certainty of full fidelity. They are made of the finest American steel. Because of their design, material and finish, they will not injure the finest records.

Write for descriptive literature and jobber discounts

**LOWELL NEEDLE CO., INC.**  
PUTNAM, CONNECTICUT

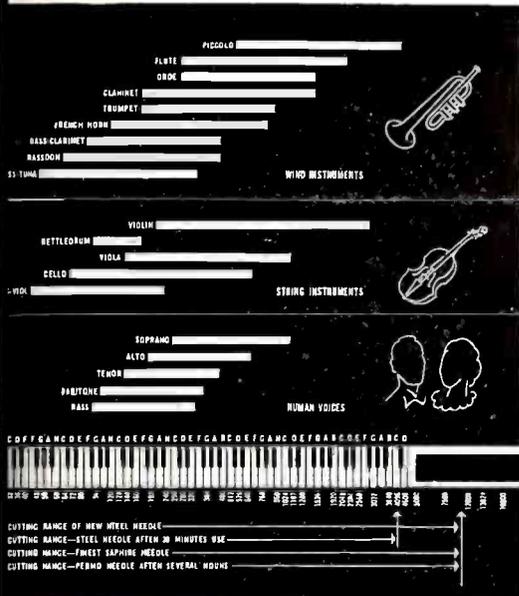
## UNIVERSAL — PROFESSIONAL RECORDER



Conceded everywhere as *THE* professional machine for professional use and results. Undisputed leadership for over 6 yrs. as the standard all-purpose recorder. Time tested all over the world by music teachers, schools and colleges, stations, recorders and laboratories. Engineered for long and continuous service. Heavy and rugged, weighs approx. 225 lbs., 16 in. turntable, 100% synchronous motor, new full freq. cutting head, patented lead screw, belt drive. A marvel of performance, long life and dependability. At your dealer or jobber.

**UNIVERSAL**  
**MICROPHONE CO., LTD.**  
Inglewood Calif., U. S. A.

# SOUND FOR RADIO-MUSIC DEALERS



Comparison of frequency ranges of musical instruments with cutting needles by Permo Products Corp., Chi.

## Fifty Dollars or Thirty Days

Because you have a powerful sound truck with output to burn, is no reason why you should try to blast the good citizens off the street. You may

find yourself in the clink, too, if you try to cover the earth with one set of speakers. Some fancy legal opinions have recently been expressed on the subject, and it appears that the right of free speech won't excuse you; court rulings indicate that a loud sound truck practically "forces people to listen," which is illegal. Free speech through an amplifier is not the same as just plain free speech.

Of course, the ordinances of your town, which no doubt have been prepared by a stern group of the local blue-noses, serve to keep you in line. These rulings are firmly supported by high interpretations of basic constitutional rights; no matter how magnificent the speech, it must not be yelled.

## One Fourth of the Nation to School

The bing-bong of school bells will bring 32,285,000 students back to classrooms this month. Of these, 1,425,000 are college folks who need to be outfitted with newly styled personal radios.

Also, the opening of school will mean the sale of more sound systems for school events, a new interest in football broadcasts, more demand for educational records, and more radio equipment for classrooms.

A school, and a school market, is something that *every* radio man has in his community.

## Sales Hints for Election Time

(Continued from page 45)

mittees of each party, for as many counties as you can conveniently cover.

(3) Locate the personal "campaign manager" for each prominent political candidate.

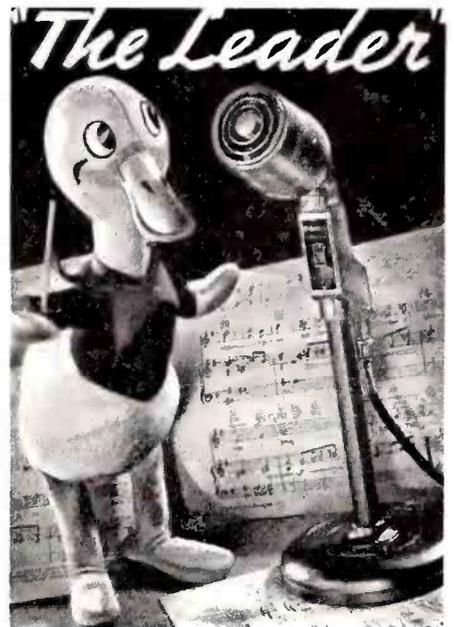
(4) Don't take promises for payment. Get it on the line.

(5) Put your personal inclinations aside; render a service to all alike.

All these hints are issued by John Meck, of John Meck Industries, Inc., 1313 W. Randolph St., Chicago.

## "Webster-Chicago" Is Now the Official Name

"Webster-Chicago Corporation" is the new corporate title of The Webster Company, 5622 Bloomingdale Ave., Chicago, whose products include sound equipment, record changers, metal stampings, tools and dies. The change was made in order to lessen the confusion resulting from the fact that the firm was widely called "Webster-Chicago" by the trade.



# Wherever you go you'll see this Electro-Voice Model 630 Dynamic MICROPHONE

Tiltable for directional or non-directional pick-up. Rugged construction. Impervious to heat, temperature changes, rough handling and salt air. Chromium and light gunmetal finishes. Three-contact locking connector, 20 ft. lead capacity cable, on-off switch and tilting stand mounting.

- FREQUENCY RESPONSE: 40-9000 c.p.s. with rising characteristic on upper end of curve.
- ★ OUTPUT: -56 db. (open line). Standard output impedances include Hi-Z, direct-to-grid.
- ★ VOICE COIL: Hard drawn aluminum wire for lightness, insulated with Polystyrene.
- ★ MAGNETIC CIRCUIT: Large alnico magnet with Armco magnetic iron pole pieces.
- ★ DIAPHRAGM: Heat treated Durex.
- ★ TRANSFORMER: Built-in in all models except 50 ohm. Core material has extremely high permeability.

630-GM (gunmetal) list price..... \$25.00  
630-C (chromium) list price..... 27.50

See this new "630" at your local radio parts distributor. Write for complete details.

**ELECTRO-VOICE MFG. CO., Inc.**  
1239 SOUTH BEND AVENUE  
SOUTH BEND, INDIANA  
Export Division: 100 Varick St., New York, N. Y.—Cables: "Arlab"

*Deliver*  
**SATISFACTION**  
*with your*  
*Recording Discs!*  
**SELL**



Your customers will have the best luck making home recordings when they use the finest cutting and reproducing needles. And it is profitable for you!

These two famous PERMO products are made with the same type precious metals alloy used on the most expensive fountain pens. PERMO recording Stylus retains its perfect cutting edge for more than 200 ten inch discs. FIDELITONE reproducing needles will play more than 4,000 home recording discs. Sold through your regular Radio Distributor, or write the factory.



**Permo Products Corp.**

MANUFACTURING METALLURGISTS  
 6415 RAVENSWOOD AVE. CHICAGO, ILL.

MORE THAN 2,000,000 USED PER YEAR

## SALES HELPS

### Popular Tube Cabinet Offered

The Bantam Tube Cabinet offer, which was made last Spring by Hytron Corp., 76 Lafayette St., Salem, Mass., and which drew a record number of requests from radio men, is now being repeated by the company. The cabinet is a 3-color steel one, filled with 50 tubes of the 23 most popular types—a convenient assortment offered "at minimum cost."

This "at your fingertips" tube cabinet is designed for use on the counter, or on the wall. They're available from Hytron jobbers or from Salem headquarters.

### Philco Parades Household Items



Philco has announced two new devices for faster and easier selling of its assortment of household items, such as Quick-release ice cube trays, furniture and refrigerator polish, phonograph needles, household cement and lubricant, noise eliminators, flashlight batteries and dial lamps.

One is a "handyman" sample case which neatly carries eight of the products, to be used by servicemen on their calls to homes. Many extra sales are made when the housewife gets a look at the assortment.

The other device is a display stand for the shop, where all of the items are neatly shown on attractive shelves. The display is sturdy and compact, 58 in. high, 20 in. wide, 12 in. deep.

### Nifty Dolls for Radio Promotion



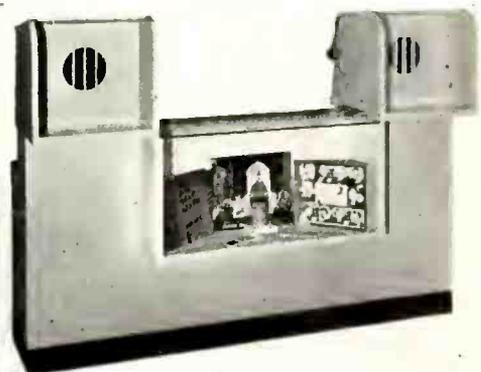
A colorful set of dolls—large elephants to represent the Republican Party, and appropriate donkeys for the Democrats—are now available from General Electric. Brightly dressed in their country's colors, they will help dealers sell more radios during the political campaigns of 1940.

The dolls are suggested for window or floor displays, or even for gifts to customers. GE features them in connection with its two "Electioneer" models—a table model and a console selected from the 1941 line for special presidential election year tie-ups.

### Football Interest Helps Radio

An 8-color window trim which shows an eye-catching football scene is now being distributed for the Fall season by the Hygrade Sylvania Corp., Emporium, Pa. The display consists of a 36 in. by 11 in. window streamer showing a full-back in action, and eight individual cut-out footballs spelling the word "Sylvania." When the footballs are placed in an arc above the streamer, you get an effect of kicking action. All pieces are gummed, for direct mounting on the window.

The very seasonal gridiron theme



**RECORD BAR\***

The modern record dept. demonstrates records to four customers at one time. Has display, accessory and stock space. Price upon request. \*Reg. and copyrighted U.S. Patent office 1940.



### For Profitable FALL SALES BITTER RECORD EQUIPMENT

Send for Free Folder

Established 1920

**A. BITTER CONSTRUCTION CORP.**

27-01 Bridge Plaza North

Long Island City, N. Y.

← RECORD RACK NO. 100 may be used separately or as a unit of a large record dept. Capacity 500 10" records, 500 12" records, and 75 albums.  
 Price \$44.00 F.O.B. Factory

MERCHANDISER NO. 27 → Suitable for display and storage purposes. Capacity 120 10" or 12" records.  
 Price \$2.25 Boxed F.O.B. Factory



## Streamlined Job for Radio Deliveries



For fast and economical delivery of radios or appliances, a streamlined job now offered by The Crosley Corp. It's an ad for the dealer every time it moves. Especially good at dodging through traffic, and parking in limited space.

gets across the idea of having radios properly tuned up for sports broadcasts, and dealers will have a start for a complete window on the football



subject. Local schedules, trophies, photos of grid stars, etc., are some of the materials. The displays come through Sylvania jobbers.

### Crosley Ready With Three Beauties

A trio of full-color displays, designed to set off the qualities of the Glamor-

Tone radios, are now being offered by the Crosley Corp., Cincinnati. They feature the beautiful blond model, Beatrice Blaxton, and two are life-size; a smaller one is 17½ in. high. The radio cabinets appear in realistic colors, and the girl in "peppermint candy" red and white stripes.

### Du Mont Products in New Catalog

Allen B. Du Mont Labs., Inc., 2 Main Ave., Passaic, N. J., announces that their line of cathode-ray oscillographs, electronic switch and cathode-ray tubes are now listed in the United Catalog, and catalog sheets covering these lines are available to Du Mont jobbers from United Publishers, Inc., 230 Fifth Ave., New York City. Du Mont also helps jobbers compile their catalogs by supplying electros, text, art proof, and bulletins for use in loose-leaf collections.

A  
*Portable Amplifier*  
**PRECISION**  
**ENGINEERED**  
by THORDARSON

Highly efficient universal amplifier ideal for all mobile and portable operations. Power output ample for sound truck and other outdoor installations. Use it everywhere the year around!

The amplifier includes electric phono motor and pick-up. Constant motor speed from battery or 115 Volt AC operation. Plays 10 inch or 12 inch records.



Power output 18 watts—7 tubes—Safety fuse—Separate microphone and phono volume controls permit mixing of voice and music—Tone Control—all input, output and power connections made on front panel simplifying installation—controls recessed and mounted at convenient operating angle—Dimensions: 14¼" x 10½" x 10¼"—Net Weight 32 lbs.

Model No. T-30W18 mobile amplifier (with selected tubes) \$125 List.

Model No. T-31W18—same as No. T-30W18 except phono motor and pick-up are not included—Input jack is provided for connecting external pick-up. \$114 List (with selected tubes).

Subject to usual trade discount at your Thordarson Distributor.

# THORDARSON

ELEC. MFG. CO.

500 W. HURON ST., CHICAGO

## AN EXTRA RECORD CLERK for only 40c a week!

### TUXEDO JUNCTION

BB—10409 Erskine Hawkins — Gin Mill Special  
BB—10612 Glenn Miller — Danny Boy  
DE—2989 Jan Savitt — Kansas City Moods  
DE—3097 Andrews Sisters — Rhumboogie  
DE—3042 Erskine Butterfield — Salt Butter  
CO—35423 Gene Krupa — So Long  
VO—5384 Al Donahue — Beethoven Bounce  
VA—8194 Harry James — Palms of Paradise

### TWEE-TWEE-TWEET

VO—5126 Cab Calloway — For the Last Time

### TWELFTH STREET RAG

V1—26362 Lionel Hampton — Ain't Cha Comin' Home  
DE—3359 Freddie Fisher — Ah-Ha!  
VO—4886 Count Basie — Jump for Me

### TWENTY-NINTH AND DEARBORN

BB—10096 Ziggy Elman — Sugar  
DE—2111 Doods Orch. — Wild Man Blues

Sample of listings from "RECORDAID"

Supply your record clerks with Recordaid, a consolidated catalogue, showing all records of a title at a glance and ALSO THAT WHICH APPEARS ON THE REVERSE SIDE.

#### OTHER FEATURES:

1. Weekly set of printed, gummed stickers for stock envelopes for all popular releases on Victor, Bluebird, Decca, Columbia, Okeh, Varsity and Royale.
2. Artists' Listing—All Tommy Dorsey records under one heading. All Benny Goodman discs listed together. 35 other prominent artists.
3. Theme song list.
4. Hit Parade List.
5. Kept up-to-date bi-weekly with a complete new book.

Send for Sample Book and Complete Information

# RECORDAID

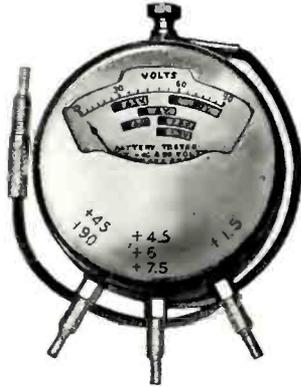
ALEX A. GETTLIN

1616 Walnut St. ★ Philadelphia, Pa. ★ Dept. A

# NEW STERLING POCKET METERS

TEST "A" AND "B" BATTERIES OF PORTABLE RADIO SETS

YOU NEED THIS LINE NOW!



No. 42A STERLING Graphic General Tester

for all "A" and "B" batteries of Portable Radio Sets. Designed especially for dealers and servicemen. Old type testers won't do. Dealer's Net Price..... \$3.60

Featured by All Leading Distributors

Write for bulletin No. 515-0 describing the complete line.

**THE STERLING MFG. CO.**

9205 Detroit Ave. Cleveland, O.

## Slash in Disc Prices Opens New Market

Brand new set of prices for the whole catalog of Victor Red Seal and Black Label classical and popular records, which mean reductions of as much as 50 per cent, have been announced by the RCA Mfg. Co.'s vice-president in charge of records, Frank B. Walker. (The general subject of selling records at the new prices is discussed elsewhere in this issue.)

At the new figures the 12 inch Red Seal discs (formerly \$2 and \$1.50) will sell at \$1, with similar cuts in the prices of album sets. The 10 inch Red Seals (formerly \$1.50 and \$1) will sell at 75c, and the 12 inch Black Labels are reduced from \$1 to 75c. Both classical and popular 10 inch Black Label discs are pared from 75c to 50c, and all albums are listed at 50c, except most "Black Label Classics" albums which are quoted at 25c.

Victor makes the move "after more than a year's trial at reduced prices on 12 inch classical and semi-classical records, and as a result of the unprecedented popularity of Black Label Classic series of albums and single records brought out in April, 1940." Mr. Walker points out that the firm started to plan more than a year ago, "for unheard-of new prices for our entire catalog."

"Now the priceless treasures of recorded music built up over a period of 42 years is available to new millions, while those already having record libraries are afforded new opportunities. That RCA Victor has been able to accomplish this aim without sacrifice of artistry, quality of recording and manufacture, or plans for continued research and development, is a tribute to the remarkable history of the organization and the world-wide reputation of its product."

## Philco Has New Offer on AC Course

Philco has made an arrangement with the Air Conditioning Training Corp., Youngstown, Ohio, so that all Radio Manufacturers Service members may enroll for a comprehensive air conditioning and refrigeration course.

The offer, announced by Robert Herr, manager of Philco's parts and service division, runs for thirty days, combines the home study training in commercial and domestic air conditioning and refrigeration, regularly priced at \$174.50, and a Model 41 Philco-York air conditioner which lists at \$129.50. This represents a total value of \$304.00 for \$115.00.

The combination offer for enrollment is available with down payments as low as \$5.

## Wilkinson Opens Oklahoma City Branch

Wilkinson Bros., the well known jobbers of 2406 Ross Ave., Dallas, Tex., have opened a new store at 628 N. Robinson St., Oklahoma City, Okla. At the new quarters, I. C. (Clive) Lankford, Jr., is in charge; Russell W. Lewis is inside salesman and C. F. (Clarence) Engelhart is traveling the area.

## SERVICE MANUALS

MOST POPULAR 1940 RADIO DIAGRAMS



This single manual will give you (1) over 80% of all 1940 circuits ever needed, (2) acquaint you with recent radio developments, and (3) teach you how to service quickly and efficiently millions of sets sold last year. Includes alignment, service hints, and parts lists. Sets of 43 manufacturers. 212 large pages 8 1/2 x 11 inches. Postpaid, \$1.50 special price ...

### Motorola Manual

This up-to-the-minute service manual will tell you how to repair every MOTOROLA auto radio. Includes detail schematics, service notes, alignment data for all of the 72 models made to date. \$1.00 Size 8 1/2 x 11 in. 100 pages. Price only...

### MOST-OFTEN-NEEDED WIRING DIAGRAMS

1926 to 1939

4 OUT OF 5 CIRCUITS YOU NEED

In one low-priced manual you can find all the diagrams you really need. 427 diagrams of most-often serviced radios is the help you want for easier, faster, and better repairs.

### PAYS FOR ITSELF

Get your copy of this radioman's biggest time-saver. Let it pay for itself with time saved on the first three jobs. 244 pages, 8 1/2 x 11 inches. Circuits, hints, alignment, parts lists. Compiled by M. N. Beitman. Order today, use this "on the job" manual this week. Every manual sold with a money-back guarantee. Postpaid, only..... \$1.95

### SUPREME PUBLICATIONS

3727 W. 13th St. Chicago, Ill.

# WAXES AND COMPOUNDS

FOR INSULATION & WATERPROOFING of ELECTRICAL and RADIO COMPONENTS

- such as transformers, colls, power packs, pot heads, sockets, wiring devices, wet and dry batteries, etc. Also WAX SATURATORS for braided wire and tape and WAXES for radio parts. The facilities of our laboratories are at your disposal to help solve your problems.

FOUNDED 1846  
**Zephar MILLS, Inc.**  
128-26th ST., BROOKLYN, N. Y.



Exceptionally High Quality Products—Extreme Low Prices

**"MITE"**

Hang Up Electrolytic Tubular  
Auto Filter Electrolytic Box  
Paper Tubular Electrolytic Can

Made by

**ATLAS CONDENSER PRODUCTS CO.**

548 Westchester Ave. New York, N. Y.

Jobber and Representative Territory Open

# JOBBER UNDER WAY

## NRPDA Takes Vigorous Action This Fall

A very active Fall season for the National Radio Parts Distributors Association is under way, as meetings are being called in various cities, and new territorial chapters are being established.

September meetings of NRPDA include the one on Sept. 8th at the Benjamin Franklin Hotel in Philadelphia, for the jobbers of Washington, D. C., Maryland and Eastern Pennsylvania, and another on Sept. 17 in Boston for the New England distributors.

A comprehensive program for the new series of meetings includes the discussion of many local and national problems. The matter of a uniform system of accounting in the parts industry has been taken up, and a suggested form for Income and Expense is being sent to all members. Part of the plan is to compile, from members reports, an average expense, so that each jobber can compare his own operations with the national average, and make the necessary adjustments. Improved forms will be worked out and mailed to members from time to time.

The office of NRPDA is now at 65 Park Terrace East, New York City.

## Admiral Lists New Jobbers

Admiral has announced that a number of firms have recently joined the ranks of distributors for Continental Radio & Television Corp., 2800 W. Cortland St., Chicago. These include: Auto Equipment Co., Denver, Colo.; Auto Electric Service Co., Manchester, N. H.; Boetticher & Kellogg Co., Evansville, Ind.; Herrlinger Dist. Co., Cincinnati, Ohio; Ludwig Hommel Co., Pittsburgh, Pa.; Jenkins Music Co., St. Louis, Mo.; Milhender-Afes Co., Boston, Mass.; Penton Shepard

## Doorway Session



Planning more tube business here at Syracuse, N. Y., is jobber Ed Berndt, right, shown with Ed DeNike of National Union.

Co., Miami, Fla.; Sunset Electric Co., Seattle, Wash.; Thurow Radio Dist., Tampa, Fla.; Williamsport Radio Supply, Williamsport, Pa., and Zimmerman Wholesalers, Inc., Hagerstown, Md.

## Scranton Parts Jobber States His Policy

The Scranton Radio & Television Supply Co., Scranton, Pa., the parts jobber who earlier this summer moved into new and improved quarters at 519-21 Mulberry St., emphatically points out that the firm does not engage in service work. Dahl W. Mack, the head of the firm, believes that some readers of RADIO TODAY may have the wrong impression, in this respect, as a result of the article "A Look at Servicing in Scranton" appearing in the July issue of the magazine.

Mr. Mack is well known in the Scranton area, having been connected with the servicing industry, first as a serviceman and for the past six years as a parts distributor, for a total of 16 years. He says that "we are very proud of the fact that we do not compete with our customers" and he hopes that this policy will indicate to servicemen in the area that "we deserve their cooperation and parts business."

## Southern Dealers Take on FM Sets

Dealers in the southern areas of the U. S. are enthusiastically placing their orders for FM sets, according to news from "Cliff" Hunt, Stromberg-Carlson distributor manager, who has just finished showing of Stromberg FM sets to some 300 dealers in cooperation with jobbers in Atlanta, Tampa, Miami and Jacksonville. W. L. Mullins of the SC sales staff was also on the program, where the SC portable FM transmitter was dramatically used to demonstrate the "amazing hi-fidelity reception possible with Labyrinth radios using Carpinchoe speakers.

FM transmitters are not yet operating in these southern areas, but applications have been filed and retailers are placing orders "in anticipation of the demand for good radios with something new and advantageous to offer."

## Smith Elected by The Crosley Corp.

The new vice president and treasurer of The Crosley Corp., Cincinnati, is George E. Smith, according to an announcement by Crosley's vice president and general manager, R. C. Cosgrove. Mr. Smith previously served as an executive for Nash-Kelvinator Co., Budd Wheel Co., United Wall Paper Factories, Gimbel Bros., in Philadelphia, and others.

## SO THEY ORDERED 150 MORE RCP TEST INSTRUMENTS!

"Your product," writes Hollywood Radio & Television Institute, "has been of the finest quality, and your service the best we have received from any manufacturer . . . Enclosed please find our order for 150 RCP Analyzer Units, to be shipped at the rate of 25 per month."

The Hollywood Radio & Television Institute teaches technical Radio. And so it is extremely important, as H. R. & T.'s President, C. H. Mansfield says, "that the test equipment we use measure up to the very highest standards." Surely, here is convincing proof of RCP Test Equipment **DEPENDABILITY**. And fresh proof that it pays—in volume sales and bigger profits—to stock the equipment experts choose.

### Model 312 SALES PROMOTER

It's a mighty sweet test instrument, but more than that, the RCP Sales Promoter is just what its name implies—a busy tube merchandiser. 9 inch Jumbo meter and large overall size is unusually impressive, and a profitable display on any counter. Model 312 features the newest roll-type "Rolindex" tube test charts, brass-gear and mechanically operated, insuring smooth, positive and speedy operation; also famous RCP Dynoptimum test circuit—completely modern in design, operation, and efficiency. Tests every tube type; spare socket provision for future tube developments. Separate test for noise, hum, intermittents and bad connections. Line voltage indicated directly on D'Arsonval meter—much more accurate and reliable. Jeweled pilot light. Dealer Net Price. . . . . \$25.95



### AC-DC Combination Tube and Set Tester Model 802

Tests all new and old tubes, ballast tubes, hot interelement short and leakage tests on each individual element. Smooth line voltage regulation 103 to 135 volts with direct meter indication. As Multitester, 802 provides four range DC voltmeter 0-10-50-500-1000, AC, 0-10-50-500-1000. DC milliammeter 0-1-10-100-1000. DC amps 0-10. Also, D.B. meter and output meter. **FUSED D'ARSONVAL Meter.** Where could you buy these two essential instruments individually and get RCP quality at this low price? Complete with tube, battery and test leads. Dealer Net Price. \$27.95



Right now write for latest catalog No. 124. Discover the profit-possibilities in RCP's complete line of dependable Test Equipment for every need and every purse.

RADIO CITY PRODUCTS CO., Inc.  
88 Park Place, N. Y. C.

**RCP**  
dependable  
TEST  
instruments

**MADE BETTER TO  
WORK BETTER**



• The combination of high tensile strength that assures a lasting bond, and faster, cleaner work made possible by quick acting flux of pure water white rosin, has given Gardiner Rosin-Core Solders an outstanding reputation for efficiency and economy on radio work by expert or amateur. Yet, due to modern production methods and big sales, Gardiner Solders cost less than even ordinary kinds. Made in various alloys and core sizes . . . and in gauges as small as 1/32 of an inch . . . in 1, 5 and 20-lb spools.



4815 S. Campbell Avenue, Chicago, Ill.

## SPECIAL RECORDINGS



Hymns, Sacred  
Songs Attract  
Church Patronage



**SELECTED** sacred and semi-sacred compositions—the favorites of millions. Meet the present amazing demand for selections of a serious type. Reproduced in acetate low-scratch materials. Advertised in an influential list of religious publications.

Prospective customers for these records know what they want, and only perfected renditions are necessary to sell them. It is also a fact that such renditions of sacred songs, hymns, suitable for all denominations, are extremely rare. Equip yourself to meet this situation. You can—with profit.

A number of these records are made especially for musical towers or carillons—no scratch, two-sided acetate 12" transcriptions. All suitable for both Catholic and Protestant churches, religious organizations, lodges, etc.

Write for list.

**SUNDT ENGINEERING CO.**  
4763 RAVENSWOOD AVE. CHICAGO, ILL.

SUNDT ENGINEERING CO.  
4763 Ravenswood Ave.  
Chicago, Ill.

Please send list of records, and further information on music for carillons, etc.

Name .....  
Company .....  
Address .....  
City..... State.....

## Wisconsin Radio Men Take a Day Off

The Wisconsin Radio Refrigeration & Appliance Association is holding its "annual industry frolic and golf party" Sept. 18 at the Merrill Hills Country Club, Waukesha, Wis. Everyone connected with the radio and electrical industry is invited, according to W. H. Roth, president of Roth Appliance Distributors, Milwaukee, chairman of the event. Entertainment includes golf, extra prizes, games, luncheon, soft ball, dinner, etc., for the full-day affair.

Sub-chairmen for the party include Frank W. Greusel, Jack Mehr, W. D. Baker, Al Haas, Oscar Goelzer and Gordon Ische. Association secretary is H. L. Ashworth, 125 E. Wells St., Milwaukee.

## Motorola Opens Big Series of National Ads

With full page ads in leading national magazines, and in the newspapers of all distribution centers, Motorola now launches a big-scale advertising program for "the most complete home radio line in its history."

The drive starts with full color splashes in the *Saturday Evening Post* of Sept. 17th and in *Life* of Oct. 7th, and will continue with dominant space in other publications. The ads stress the Galvin Mfg. Corp.'s big success with Motorola auto radio, and have a dramatic theme for home radio based on the "Heart of the Set." Jobbers already report a vigorous response from dealers who are tying into the campaign.

## FM Expert Joins Motorola

One of the country's leading authorities on FM, Daniel E. Noble, has accepted the post of director of Research and Advanced Development for Motorola, according to news from Paul V. Galvin, president of Galvin Mfg. Corp., Chicago.

Mr. Noble resigned his position as professor of electrical engineering at the University of Connecticut, and will now work on the development of FM communication equipment for both emergency services and military applications. He has worked closely with Major Edwin H. Armstrong, inventor of the FM system, in experimental work during the past four years.

## Promotion Man Wants New Post

Notice has been received from one of radio's young advertising and sales promotion experts, that he is seeking a new connection. He is college-trained, and has had 8 years of diversified experience with prominent concerns in radio and allied fields. He was formerly an assistant sales manager; he writes copy, makes layouts, and handles production of catalogs, folders, sales letters, dealer helps, etc. Those interested may contact him by writing to RADIO TODAY, Box 1213, 480 Lexington Ave., New York City.

## CONCENTRIC-SHAFT

## Dual Controls



Outer shaft operates the volume control of the dual unit.

★

Inner shaft operates the tone control and also the power switch.

★

★ Yes, that really complete line of Clarostat Exact-Duplicate Replacements includes Concentric-Shaft Dual Controls for those Philco and RCA sets. You don't have to improvise when you standardize on Clarostat. You get the right data and the right replacement for the best job. ★ Ask your jobber for copy of Clarostat Service Manual. ★ Or write direct to Clarostat Mfg. Co., Inc., Dept. 281 N. 6th St., Brooklyn, N. Y.



C'mon, you  
old timers!

**Shake a leg!** Twenty years of big doings in radio—in receiving and transmitting—will emblazon the pages of

**RADIO TODAY**  
in NOVEMBER

**RADIO'S 20th  
ANNIVERSARY  
NUMBER**

R.S.V.P. Editorial refreshments for the reader . . . advertising themes for the pioneer!

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While every precaution is taken to insure accuracy, we cannot guarantee against the possibility of an occasional change or omission in the preparation of this index.

## Stromberg Under Way with Big Ads on FM

The big Fall advertising campaign staged in national magazines by Stromberg-Carlson opens this week, with the Sept. 14th issue of the *Saturday Evening Post*. This full-page ad will be followed by others in the *Post*, *Colliers*, *Life*, *Time* and *The New Yorker*; all of the copy will stress the qualities of FM in a large-scale promotion drive planned up to the Christmas holiday season.

Warren T. Eastwood, Stromberg advertising manager, points out that these magazines have a combined circulation of some 9,638,575, so that "millions of prospective radio buyers all over the country will learn that they will not be able to enjoy 'radio's greatest advance' unless their new set has the FM band, and that only Stromberg-Carlson has the type of audio system capable of reproducing FM's extended musical range to best advantage."

## Philco Busy with Extra Farm Promotions

A new sales promotion and advertising program is now planned by Philco, to help dealers sell more farm radios. The firm is running ads in 22 farm publications, and emphasizes the farm listeners' interest in European war news, and in the 1940 Presidential campaign.

Dealers are being provided with materials to use in tie-ups with their local state and county fairs, for radio and for the new Philco farm refrigerator. John F. Gilligan, specialty division manager of Philco, reports that sales of the company's farm sets are now running more than 50 per cent ahead of last year.

## California Radio Men to Catalina Island

Thirty-eight of the prominent radio men of Southern California have again staged an annual outing—a yacht trip to the Isthmus of Catalina Island sponsored by the Radio Pioneers of Southern California. The event is one of many activities of Radio Pioneers, which are also well known for Christmas holiday and other gatherings.

At the last meeting of the Pioneers, Bert Knight was elected president; Herb Bell, vice-president; Jack Magner, 2nd vice-president, and Jack Perlmutz again re-elected as secretary and treasurer.

## Emerson Offers Tube Assortment

A new Radio Tube Service Kit, containing 50 tubes of the 20 types commonly used by servicemen in their daily repair jobs, is being offered by Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York City. The kit comes to radio men as a package, at a special price, for a limited time, from Emerson distributors.



## HI-CAPACITY LO-VOLTAGE ELECTROLYTICS

For those occasional applications calling for tremendous capacity at low voltages, these latest Aerovox PRS midget metal-can electrolytics are just the thing. Especially for certain low-voltage filtering jobs, for by-passing, and for electric fence control. ● 1000, 2000 and 3000 mfd.; 6, 12 and 15 v. D.C.W. ● Metal can fully protected and insulated by paper sleeve. Bare pigtail leads. ● Ask jobber about them and ask for our latest catalog. Or write us direct.



### JUST OUT! ALLIED'S 1941 RADIO CATALOG

**For EVERYTHING in RADIO**  
Get ALLIED'S FREE 1941 Catalog—the biggest ever, 212 PAGES—with special sections for Dealers, Servicemen, and Sound Men. Radio's greatest Buying Guide! Nothing like it for competence. New P.A. Section—24 new Sound Systems—7 to 75 watts—for all applications, easy Time Payment Plan—15 Day Trial Offer—brand new features—lowest prices! Servicemen—all the new Test Equipment, new tools and service gadgets. More than 15,000 quality replacement parts. New Bargain Section—real "buys" in brand-new merchandise! 83 New Radio Models—wonderful radio "leaders"—and profitable radio "leaders"—for every builder—all types—for every purse and purpose. It will pay you to keep your 1941 ALLIED Catalog handy for Everything in Radio at Lowest Prices!

**FREE** ALLIED RADIO CORP.  
833 W. Jackson Blvd.  
Chicago, Ill. Dept. 15-J-1

Rush me your FREE new 212 Page 1941 Radio Catalog.

Name .....

Address .....

City..... State.....

## "Carillotone" Products in Expansion

The new home of the Charles Jack Mfg. Corp. is at 420-22 Lehigh St., Allentown, Pa., where the company has occupied a much larger factory site. The firm was formerly located on Philadelphia St. in York, Pa. Charles Jack makes special amplifiers and automatic chime equipment for the towers of churches and special systems for the amplification of organs and chimes. Units range from 120 to 1,000 watts in size, and they feature an automatic record changing device as well as manually operated turntables.

## Cushing Releases Big Catalog

T. F. Cushing, 349 Worthington St., Springfield, Mass., distributor of radios, parts, sound and refrigeration, has issued a 250-page catalog, with latest listings and prices of hundreds of items. Servicemen and dealers get free copies direct from Cushing.

## Atlas Picks NY Rep

P. D. Terwilliger has been named by the Atlas Sound Corp., 1447-51 39th St., Brooklyn, N. Y., to represent the company in the New York State territory. He will cover all of the state except the Metropolitan district, from headquarters at 505 University Ave., Rochester, N. Y.



Execs on the program at the big meeting of Capehart servicemen—left to right, J. H. Pressley, chief engineer; Win Campbell, asst. manager, service dept.; F. B. Ostman, service dept manager; and Ernest H. Vogel, vice-president, Farnsworth Television & Radio Corp.

## Servicemen Flock to Capehart Meet

A group of 62 servicemen from all over the U. S. attended the big 3-day "factory school" held by Farnsworth at Ft. Wayne, and at Marion, Ind., late last month. The guests represented 53 Capehart dealers.

E. H. Vogel, vice-president of Farnsworth, addressed a special luncheon gathering and other representatives of the firm who were on the program included J. P. Rogers, vice president; C.

R. Jenkins, general superintendent; F. B. Ostman, service manager; J. H. Pressley, chief engineer; H. L. Naylor, S. E. Benson, Win Campbell, Vernal Layton, H. J. Beck, H. D. Rundell, engineers; Glen Eckley, chief inspector; C. F. Jeffrey, traffic manager; Dick James, cabinet refinishing department; John S. Garceau, advertising manager; and M. Cawein, engineer in charge of television receiver design.

## Dealers Use More Disc Merchandisers

A greatly increased demand for record-selling store fixtures is one of the new developments among radio dealers, due to the sensational reductions in the prices of classical records, according to a report from A. Bitter Construction Co., 2701 Bridge Plaza No., Long Island City, N. Y. The Bitter firm makes the "Record Bar" and other record merchandising equipment. Contact with disc retailers throughout the U. S. reveals that all are expecting a very busy Fall season.

Bitter products are now being used by dealers in Ohio, Vermont, California, Georgia, Virginia, and Florida, as well as in Canada and Hawaii.

## Hackbusch Named Canadian Head for Stromberg

Just named general manager for the Stromberg-Carlson Telephone Mfg. Co. of Canada is R. A. Hackbusch, who for the past 10 years has been chief engineer and factory manager there. He succeeds N. W. Baldwin, who has been called to headquarters in Rochester, N. Y., to head up production of army equipment for the U. S. Government.

## Steckel Joins Bittan

An announcement by Dan R. Bittan, former president of "The Representatives" reveals that Ray Steckel is now associated with the D. R. Bittan Sales Co., Inc., 53 Park Place, New York City. Mr. Steckel was previously connected with Cornell-Du-bilier, for several years.

**BU DIRECT FROM THE MANUFACTURER AND SAVE**



### THE NEW DYNAROMETER FEATURES NEW GIANT 8 1/2" DOUBLE JEWELLED METER

This amazing versatile instrument is our answer to the demands of radiotricians for a combination instrument which, in addition to making the usual V.O.M. measurements, will also permit DYNAMIC D.C. VOLTAGE MEASUREMENTS without interfering with or upsetting delicately balanced circuits, such as tuned circuits, electronic apparatus, control voltages, etc. Actually, as you will note from the specifications listed below, the DYNAROMETER is a combination Vacuum-Tube Voltmeter and V.O.M. besides permitting additional measurements such as Capacity, Decibels, Inductance, etc. All calibrations printed in large, easy reading type on the giant 8 1/2" double jewelled meter. The Input Impedance for the V.T.V.M. is 11,000,000 ohms with 2,000,000 ohms per volt on the lowest range. The 4 V.T.V.M. ranges are 5, 25, 100 and 500 Volts, and because of the zero center no attention need be paid to polarity since the meter will read either in the plus or minus direction, depending on the position of the probes. This eliminates the danger of the needle back-firing off scale.

#### SPECIFICATIONS:

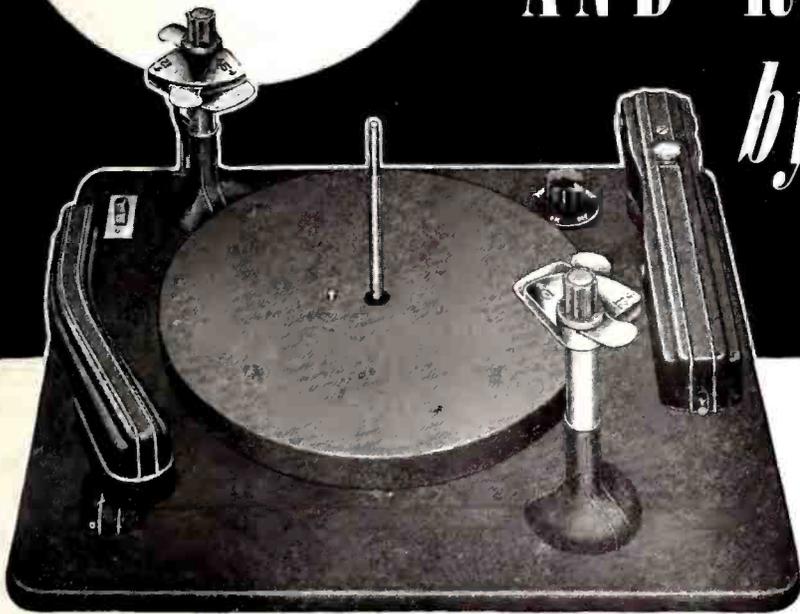
- 4 D.C. VOLT RANGES AT 11 MEGOHMS INPUT RESISTANCE: 0-5/25/100/500 Volts.
- D.C. VOLTAGE MEASUREMENTS IN 5 RANGES: (at 1000 ohms per volt) 0-10/50/250/500/5000 Volts
- A.C. VOLTAGE MEASUREMENTS IN 4 RANGES: (at approximately 800 ohms per volt) 0-15/150/1500/3000 Volts
- RESISTANCE MEASUREMENTS IN 3 RANGES: 0-1000 Ohms, 0-10,000 Ohms, 0-30 Megohms
- D.C. CURRENT MEASUREMENTS IN 4 RANGES: 0-1/10/100 MA. = 0-1/10 Amp.
- 4 OUTPUT RANGES: 0-15/150/1500/3000 Volts
- 2 CAPACITY RANGES: .0005-1 mfd., .05-100 mfd.
- INDUCTANCE: 1 H.-70 H., 7 H.-10,000 H.

The Dynarometer operates on 90-120 Volts 60 cycles A.C. Comes complete with test leads and all necessary instructions. Shipping weight 20 lbs. Size 13 1/2" x 10" x 8 3/4". Our net price **\$18<sup>75</sup>**

**SUPERIOR INSTRUMENTS CO., 136 Liberty St., New York, Dept. RT**

Meeting all  
requirements of  
the nation's leading  
manufacturers...

# Automatic RECORD CHANGERS AND RECORDERS by SEEBURG



## SEEBURG RECORD-O-MATIC

*Designed to maintain greatest consumer acceptance for your products. Record-O-Matic has the simplest automatic changer mechanism. Handles fourteen 10" or ten 12" records, gravity type. Is compact—14" long, 11" wide, 3" deep. No screws or brackets on top surface. Cutting head assembly contains no steel stampings—all parts cast for rigidity; hardened cone bearings at all essential points; lead screw has support bearings at each end; larger main bearing and ball thrust to carry weighted turntable; 1¾ oz. pressure crystal pickup in aluminum tone arm gives long record life; crystal or magnetic cutting heads; cutter has plunger type, automatic engagement with lead screw; separate switch for manual play-back frees tone arm from automatic mechanism—any size record may be played manually.*

**PRECISION MADE**

# Seeburg

SEEBURG CORPORATION 1500 GAYTON STREET CHICAGO



## SEEBURG RECORD CHANGERS

available in models for all practical purposes, feature utmost in quality and dependable performance. Model I (above) handles fourteen 10" or ten 12" records, gravity type. Model II (below) handles fifteen mixed 10" and 12" records. Complete information on all Seeburg Record Changers will be sent on request.



**FINE MUSICAL INSTRUMENTS  
SINCE 1902**

# MORE Motorola BEST BUYS! IN AUTOMATIC PHONO-RADIOS

The country's gone ga-ga about recorded music and record manufacturers have cut their prices so that all can afford their product. Now YOU can cash in on this recorded music craze with Motorola Automatic Phonograph-Radio Combinations at prices all can afford.



## TABLE MODEL 58FR

Nothing else like it in its price class. For small apartments it's perfect, and for performance you'll travel far and listen long for its equal. By every test for supreme radio performance it's the 1941 WINNER. Changes eight 10" or seven 12" records—crystal pick-up—5 tubes—large speaker for fine tone—tone control—"Aero-Vane" Loop.

**\$49<sup>95</sup>**

## CONSOLE MODEL 62FR

COMPARE THESE 8 BIG FEATURES

Values in Motorola are *bigger* because the music plays *better* • Automatic Record Changer changes eight 10" or seven 12" Records • Crystal Pick-Up • Automatic Record "Reject" • 6 Push-Button Tuning • 2 Bands—3-Gang Condensers • Continuously Variable Tone Control • 6 Tubes including Rectifier—10" Speaker • Aero-Vane Loop Aerial

**\$79<sup>95</sup>**

## FULL COLOR PAGES IN NATIONAL MAGAZINES

This is a Motorola Year! Motorola will be the best advertised radio this season! Saturday Evening Post . . . LIFE . . . Movie and Radio Guide . . . and dozens of big space National Newspaper Campaigns running all over America! For easier sales . . . better profits . . . get the Motorola story NOW! Write or Wire!

**GALVIN MFG. CORPORATION**

4545 AUGUSTA BLVD. . . . CHICAGO



\* Prices Slightly Higher in South and West.