CALDWELL-CLEMENTS'

RADIO & TELEVISION RETAILING

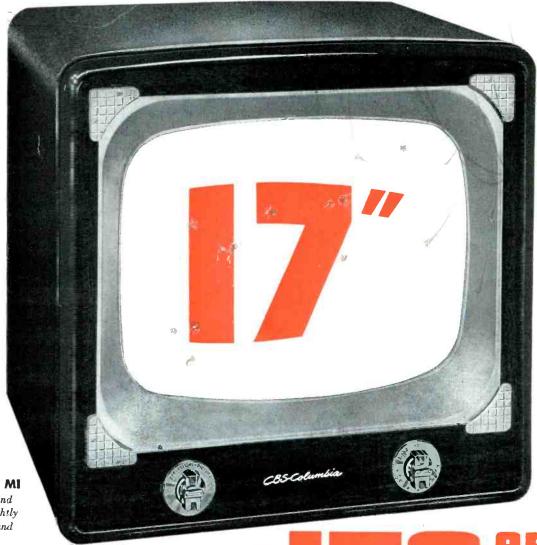
February • 1952



Build Store Traffic and You Build Sales!

EFFECTIVE Displays • CONTINUOUS Advertising • DIVERSIFIED Lines • EFFICIENT Servicing

CBS-COLUMBIA



MODEL 17 MI Warranty. Slightly

*Plus F. E. T. and higher South and West.

First with

CUSTOM TUNING

Model 17 M1, like all CBS-Columbia receivers can be "Custom-tuned" of for the neighborhood in which it is installed.



170 - 53 R D STREET, BROOKLYN CBS-COLUMBIA INC.,

*

RADIO & TELEVISION RETAILING

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

ORESTES H. CALDWELL Editorial Director

M. CLEMENTS
Publisher

MOHN L. STOUTENBURGH
Executive Editor
EDWARD A. CAMPBELL
Managing Editor
JOHN G. McGEOY
Assistant Editor
CHARLES F. DREYER
Art Director

BUSINESS DEPARTMENT
M. H. NEWTON
Business Manager
HOWARD A. REED
Assistant Sales Manager
DIXON SCOTT
District Manager
HAROLD C. WELTNER
District Manager
N. McALLISTER
Asst. Business Manager
A. O'ROURKE
Production Supervisor
MARTHA H. SAYFLLE
Director, Reader Service

BRANCH OFFICE CHICAGO 6 S. M. GASKINS, Western Manager JOHN D. LUPTON, District Manager 201 N. Wells St., Randolph 6-9225

LOS ANGELES 5 CHRIS DUNKLE & ASSOCIATES Southern California Representative 2506 W. 8th Street, Dunkirk 7-6149

B. V. SPINETTA, Directory Manager WARREN S. BROWN, Circulation Mgr

W. W. SWIGERT, Credit Manager

RADIO & TELEVISION RETAILING*

February, 1952, Vol. 55, No. 2, 35 cents a copy. Published monthly by Caldwell-Clements, Inc. Publication Office, Emmett St., Bristol, Conn., Editarial, Advertising and Executive Offices, 480 Lexington Ave., New York 17, N. Y. Application for reentry at Bristal, Conn., as seconcides matter pending. M. Clements, President; Orestes H. Caldwell, Freasurer. Subscription rates United States and U. S. Possessions \$2.00 for one year, \$3.00 for two years, \$4.00 for three years. Canada \$3.00 for one year, \$4.00 for two years, \$5.00 for three years. All other countries \$4.00 for three years. All other countries \$5.00 for one year, \$7.50 for two years, \$10.00 for three years. Printed in U.S.A.

*Trade-Mark Reg. U. S. Pat. Off.

CALDWELL-CLEMENTS, Inc.
Fublishers also of TELE TECH

IN THIS ISSUE

FEBRUARY, 1952

AM. FM. Television

Cover—Build Store Traffic and You Build Sales What's Ahead—In Radio, Appliances, Records and Television	27, 28, 29
How to Use Props as Show-Window Traffic Stoppers	32, 33
Paulson's 8-Point Program Punches Up Sales	34, 35, 36
How to Make More Dollars in Your Service Department	38, 39
	40, 41
Some Tips on "Alternate" and "Switch" Selling	
New Television Lines Announced	
Television & Appliance Retailing	22

* Records. Phonographs. Accessories

What's Ahead in the Phono Record Market	27, 28, 29
Boost Disc Sales With Phono Campaign	42, 43
Recent Events and Announcements in the Record Field	92
Custom Installation for Better Audio	

Electrical Appliances

A Successful Dealer's Plan for Making More Sales	34, 35, 36 44, 45
Electric Housewares Drive	
Year Round Gift Campaign	46
Roster of Electric Housewares Makers	47
New Models of Electrical Appliances	50. 55

* Servicing and Sound

Improving Performance of TV Sets	63
Servicing Video Detector Circuits in TV Sets	64, 65
Installation and Service Methods for Better Audio	66, 67
Trouble Shooting 3-Way Portable Radio Receivers	68. 69
	74 74
New Aids for Servicers	, -, , -

Photo Credits: International Harvester Co., page 33; A. Devaney, page 39.

Latest Product Specifications, Directories, etc. that have appeared in RADIO & TELEVISION RETAILING:

Specifications:

RecordersApr.	ου,	p.	02
Room Air ConditionersMar,	.51,	p.	60
Home RadiosApr.	'51,	p.	59
Portable and Auto RadiosApr.	151,	p.	56
Washing Machines	'51,	p.	84
Vacuum CleanersJuly	·51,	p.	67
RefrigeratorsSept.			
DishwashersOct.	'51,	p.	62
Television ReceiversNov.	'51,	p.	42
IronersNov.	'51,	p.	50
Hand IronsDec.	'51,	p.	42
Clothes DiversJan.			

Directories:

DistributorsJan.	52, p. 11/
TV & FM Antenna MfrsMar.	'51, p. 36
Custom Components Mfrs Apr.	'51, p. 34
Test Instruments	'51, p. 100
Electric HousewaresFeb.	52, p. 46
Phono Record MfrsJuly	51, p. 42
Roster of Representatives Oct.	'51, p. 101
Reference Charts:	
FM Coverage Areas July Battery Replacement Chart Apr. Four Field Statistics Jan. UHF Coverage Areas Aug.	'51, p. /3 '52, p. <mark>58</mark>



CALDWELL-CLEMENTS, INC., Publication Office, Bristol, Conn.

Editorial and Business Offices, 480 Lexington Ave., New York 17, N. Y. Telephone Plaza 9-7880

"Tune In" on your greatest profit



Top Cooling Capacity ...

thanks to the RCA "Heart-Of-Cold" Compressor—rated tops in comparative tests. Hermetically scaled. 5-Year Warranty.

Greater Air Flow ...

thanks to the new exclusive RCA "Airflow" Grille designed for widest, fullest air circulation to all parts of the room.

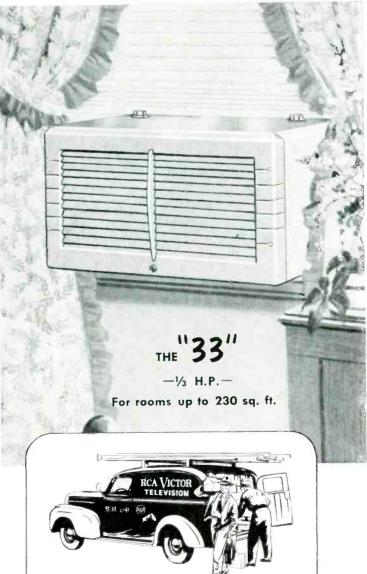
RADIO & TELEVISION RETAILING . February, 1952

opportunity since TV!

Air Conditioners!

RCA is helping you go after the HUGE untapped market for room air conditioners! With a complete line, handsomely styled, superbly engineered, and aggressively priced to sell. With a complete range of displays and merchandising helps. With a full-scale national advertising campaign in LIFE and on all RCA Victor radio and television shows.





RCA VICTOR DIVISION

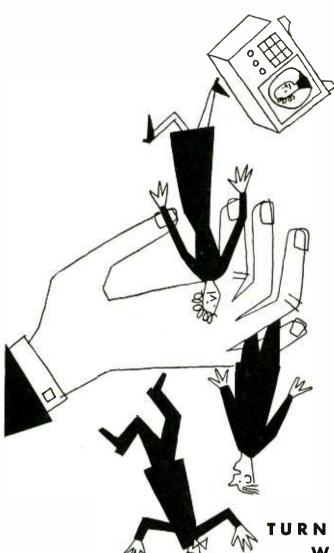
RADIO CORPORATION OF AMERICA



RCA makes your home a better place to live!

RCA Factory Service ...

low-cost contract covers installation and service by RCA Service Company, Inc. Full profit! No parts to stock. No service worries.



ARE TV SALES SLIPPING THROUGH YOUR FINGERS?



TURN SHOPPERS INTO CUSTOMERS WITH THIS FREE BOOKLET!

These facts tell you how to:—take the guessing out of selling—double your television profits

Describes all sales situations...gives the answers to customers' questions. Supplies complete sales technique from your prospects' entrance into the store to the ringing up of the sale. The 5 minutes that it takes to read this booklet might change your whole business life!

COVERS THESE IMPORTANT SALES POINTS:

Proper display of sets and promotion material • Gaining the prospect's confidence • Helping the customer make the right choice • Explaining how television sets function • Comparative value of different sets • How much should a good set cost • Possible trade-in values • Closing the sale

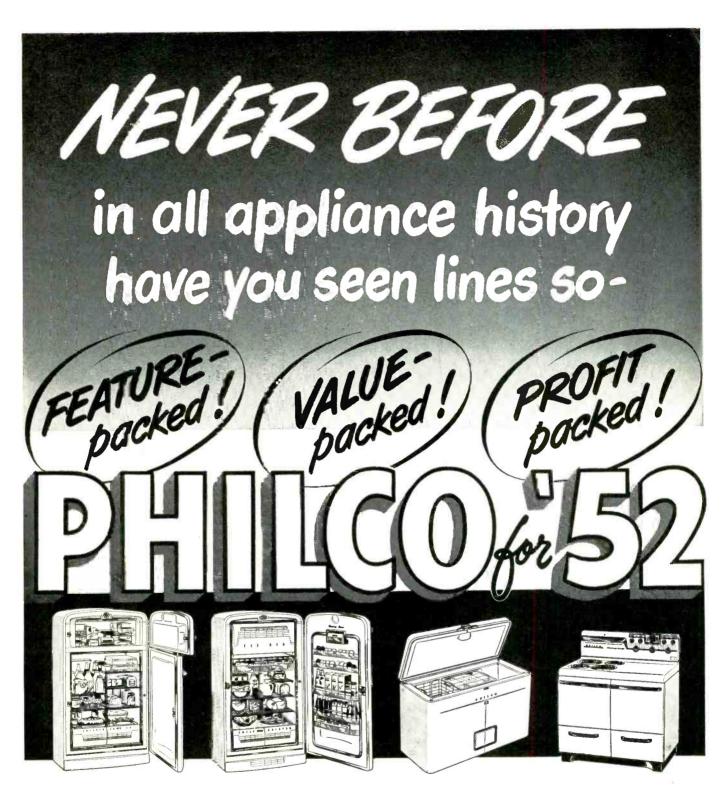
Dealers all over the country in all reception areas, have proven the success of Tele King's GOLDEN 5 MINUTES sales demonstration! Television retailers using this proven sales formula are now selling more sets—than ever before!

WRITE NOW FOR YOUR FREE BOOKLET!

Tele King with the Biggest Markup in Television is America's No. 1 Profit Line!



THE BEST IN TELEVISION — AT ANY PRICE!



2 DOORS!

Automatic Defrost!

The only complete 2-door line . . . 12, 10 and 8 cu. ft. All with Automatic Defrost, at prices even lower than competitive single door refrigerators.

Exclusive Philco DAIRY BAR

Door storage convenience and style appeal beyond anything ever offered in a refrigerator. Here for 1952, at prices that *rock* the industry for value.

America's First Choice HOME FREEZER

With dramatic new color appeal... the exclusive sloping front Philco. Easiest-to-use freezer ever designed. Fastest seller in appliance dealers' stores.

Takes the mystery out of **Automatic Cooking**

Another Philco "first"... the revolutionary Quick-Set Timer, now added to the Jiffy Griddle and "Broil-under-Glass"... priced for volume in '52.

SEE THEM NOW AT YOUR PHILCO DISTRIBUTOR

HERE'S THE ALAEW LINE FOR 52 Westinghouse

Exclusive
ELECTRONIC CLARIFIER

Exclusive SINGLE DIAL TUNING

Exclusive

New, Simple PLUG-IN UHF Adaptability

NO-GLARE PICTURE TUBES and protective mask

- AUTOMATIC FOCUS
- UNIFORM FOCUS
- . HIGH-SENSITIVITY TUNER
- . HIGH-GAIN AUDIO SYSTEM
- . SUPER POWER FOR FRINGE AREAS

You'll find it the line of marked dependability—low on service—high on performance.

During 1950 and '51, 4 out of 5 Westinghouse set owners (by actual count) bought on the recommendation of satisfied users. Quality performance is the reason!



Huge 21" picture. Model 676T21, The Westmore. Clearest, glare-free picture. Stays clear at all times. Polished mahogany table model gives big-screen TV at low cost.



Clear 16" picture. Model 689T16, The Westley. Well-designed table model. Durable brown plastic. Electronic Clarifier, Single Dial Tuning. Low price. Big value.



Interference-free 17" picture. Model 667T17, *The Marlow*. Mahogany table model. Electronic Clarifier, Single Dial Tuning, glare-free tube and protective mask. Plug-in UHF adaptability.

Unequalled 21" picture. Model 690K21, *The Barclay*. Handsome mahogany console. Concert speaker, flawless tone. Picture clarity and detail never before seen in this big size.



Flawless 21" picture stays clear at all times. Model 691K21, *The May-fair*. Distinguished modern blonde cabinet of frosted oak.



YOU CAN BE SURE...IF IT'S

Television

Perfectly focused 17" picture. Model 678K17, The Winslow, Unusually smart console of mahogany veneers. Luxury appearance, low price, and clear pictures that stay clear.

Marvelously clear 17" picture. Model 679K17, *The Newbury.* Blonde console cabinet of true "decorator" design. Electronic Clarifier, Single Dial Tuning with new twin locks.



Glare-free 17" picture. Model 668T17, The Spencer. Striking blonde table model of frosted oak. Contains every Westinghouse feature. Super power for good fringe area reception.





Magnificent 21" picture in an exquisitely crafted mahogany console with matchedgrain doors. A superb instrument for a distinguished home. Model 673K21, The Bancroft

Gigantic 24^{tt} picture. Model 688K24, *The Madison.* Beautifully crafted piece of fine furniture with the most flawless TV performance. Selected mahogany veneers.





You'll also find ...

it profitable to carry the complete line of

WESTINGHOUSE RADIOS for 1952

CLOCK RADIOS
TABLE RADIOS
PORTABLES
RADIO-PHONOGRAPHS

Westinghouse

WESTINGHOUSE ELECTRIC CORP. . TELEVISION-RADIO DIVISION . SUNBURY, PA.



Now! TV Plus Radio at the Cost of Other Sets with TV Alone!



21" Model 421M15—Smart, period styled walnut or mahogany TV console with built-in radio and phono-socket.

It's another sensational first from Admiral! Big picture television... in striking new 1952 table models and consoles... with Dynamagic radio built right into the TV chassis.

And what a radio! Never before such outstanding performance... achieved in large measure by "sharing" circuits and precision engineered components of Admiral's famous Triple-X television chassis.

Think of it! TV plus a complete radio that brings in all standard broadcasts...both in a compact cabinet no larger than one designed for a TV set alone...both for no more than other famous name sets with television alone.

Plus All These Features . . .

New "Glare-Trap"—with revolutionary "cylindrical-face" picture tube that completely eliminates annoying light reflections.

Triple-X Chassis — World's most powerful TV...engineered to outperform any set, anywhere, any time.

Amazing Cascode Amplifier—performs as though station power had been increased up to 400%.

Built-in Turret-Tuner—ready for UHF stations. No converter needed.

Roto-Scope Antenna—the only builtin antenna that's directional.

Admiral BIG PICTURE TV \$189.5

COOK-NO HANDS!



NO SEPARATE BOOSTER TUNING—automatically boosts signal on any channel

UNIFORMLY HIGH USABLE GAIN-across entire band width—with lowest noise factor

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

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

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

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

HIGHLY STABLE-DRIFT-FREE-EASY TO INSTALL

enna-lop

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

Model 3010 Tenna-Top Booster, List Price\$88.00

AUTOMATIC SELF-TUNING

une-0-Malic BOOSTER

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

Model 3000 Super Tune-O-Matic_ 4-tube. List . . . \$57.50 Model 3002 Tune-O-Matic, 2-tube, List \$39.50

SEND FOR BULLETINS 163-165

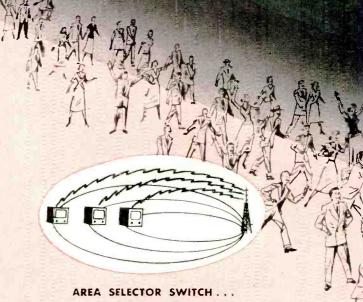


Patent Pendina

MANY NEW PROSPECTS NOW IN REACH

NEW STATION POWER PLUS NEW MOTOROLA CONCENTRATED POWER CHASSIS MEAN BIGGER AND BETTER SALES FOR YOU IN 1952

The new Motorola TV extra reception power plus the Area Selector Switch, will close more sales for you! Add to this sensational power story Motorola TV's other famous features . . . the Acoustinator Tone Control, anti-reflection Glare-Guard, Electro-Lock Focus, "Golden Voice" tone . . . and your 1952 TV sales success is assured!



ncentalen

Holds sensitivity at necessary minimum for local areas, steps up reception sensitivity for suburban locations and turns an maximum sensitivity for distant "fringe" areas.

19 NEW FAST SELLING MODELS...PRICED AS LOW AS \$199.95*
STYLE-SETTING... SALES-SPARKING... VOLUME-BUILDING
SEE THE NEW 1952 MODELS AT YOUR DISTRIBUTOR'S TODAY!



MODEL 17F12 AM radio, 17" TV, \$39995**



MODEL 21K1 \$29995*
Mahagany 20" \$29995*



MODEL 17K12W \$24995*
17 inch screen,
Walnut console.



MODEL 2111 Leatherette covered cabinet, 20" screen. \$24995*

Motorola TV PROVED MOST DEPENDABLE ...

WITH NEW 1952

Fower I Chassis

PROVED MOST DEPENDABLE



MODEL 14P2
Portable, leatherette case; \$1995*
14" screen; lid detoches.



MODEL 1717 \$19995*
17 inch screen.

THE PICTURE TELLS THE STORY .

Dramatic evidence of its performance ability is the quality of the picture you see on Motoro a TV ... sharp, steady, clear . . . with the most dependable night-after-night operation of any TV! The concentrated skill of a staff of 482 TV engineers has contributed this great new performance through better engineering for a growing TV audience of millians!

*Price includes 1 year Warranty, Fed. Tax Extra Prices slightly higher South and West Prices and specifications subject to change without notice

Most models also available in Limed Oak, slightly higher.



Sentinel LP* TV with Optional Matching (TURN) Tables

Give you fast T.V. turnover!

"Fully automatic selling!"—that describes these new Sentinels with optional, matching TURN-

tables. All the advantages of space-saving table models: attractively modest in price, they fit beautifully into any place in any room—as highly styled as fine consoles, they lend graceful dignity to the most opulent surroundings. Easy, fingertip turning. Famous Sentinel chassis—envy of the industry for its flick-of-a-switch fully automatic tuning, superperformance even in weak signal areas and amazing, profit-protecting freedom from service.

Turn store stocks FAST! Call your *Sentinel* distributor NOW or write *Sentinel* TODAY.

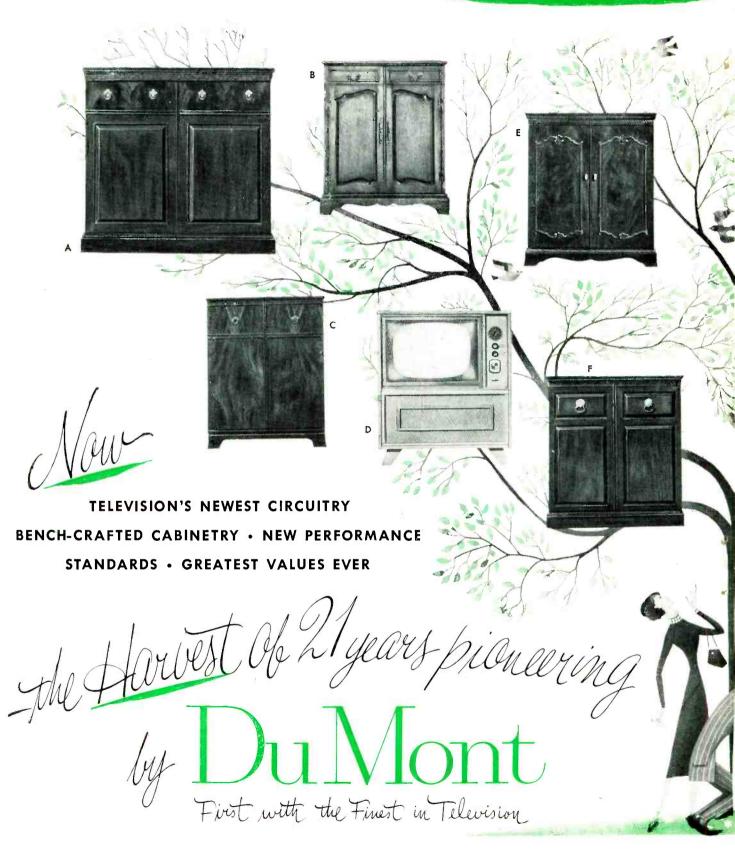
Sentinel Radio Corporation Evanston, Illinois



Above: Model 449-TVM—21" screen. Cylindr tal face tube. Mchogany, with superbly matchet TURNtable optional.

At right: Model 447-7'r.M — 17" screen. Mahagany, with stanningly matches TURNtable optional.

From the maker of the THE <u>ALL-NEW</u>



Allen B. Du Mont Laboratories, Inc., Television Receiver Division. East Paterson, N. J. and the Du Mont Television Network, 515 Madison Avenue, New York 22, New York

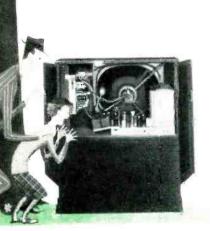
Finest_the Finest ever! 1952 DUMONTS



- A The ROYAL SOVEREIGN, by Du Mont, with 30-inch tube—the world's largest direct-view television picture tube. Handrubbed mahogany finish.
- B The FLANDERS, by Du Mont, with 21-inch rectangular tube. Fruitwood veneers. Designed by Harry Preble, Jr.
- C The WIMBLEDON, by Du Mont. with 21-inch rectangular tube. Mahogany veneers or blond finish.
- D The WICK FORD, by Du Mont, with 21-inch rectangular tube. Mahogany or lined oak veneers.
- Fig. 12. The WHITEHALL SERIES II, by Du Mont, with 21-inch rectangular tube. Mahogany veneers.
- F The SHERBROOKE SERIES II, by Du Mont, with 21-inch rectangular tube, AM-FM radio; 3-speed automatic phono. Mahogany veneers or blond finish.
- G The BANBURY, by Du Mont, with 21-inch rectangular tube. Mahogany or limed oak veneers, or with raffia doors in colors.
- H The MEADOWBROOK SERIES 11, by Du Mont, with 17-inch rectangular tube. Mahogany veneers.
- The CHESTER, by Du Mont, with 17-inch rectangular tube. Mahogany veneers.
- J The PARK LANE SERIES II, by Du Moot, with 17-inch rectangular tube. Mahogany veneers or blond finish.
- K The ANDOVER SERIES II, by Du Mont, with 17-inch rectangular tube, Mahogany veneers.
- L The DEVON, by Du Mont, with 17-inch rectangular tube, Mahogany or limed oak veneers.

All Cabinets designed by Herbert Rosengren.

AGAIN DU MONT PIONEERING PAYS OFF FOR DU MONT DEALERS WITH A COMPLETE LINE OF THE TOP PERFORMERS IN TELEVISION



Here they are—the all-new 1952 Du Monts. Absolutely unexcelled for sensitivity, for fidelity, for brilliance—absolutely unmatched for beauty, for value, for quality—these are Du Mont's greatest, the finest television receivers ever built.

See their superiority—in the new Du Mont, anti-glare cylindrical face, Selfocus* Tube that gives amazing sharpness, the full width of the picture—in the new Du Mont "Static Eraser" that screens out noise—in the new Du Mont "Distan-Selector" that lets the viewer enjoy faintest fringe and strongest local reception both, at the flip of a switch—in the new simplified tuning, in the new simplified servicing.

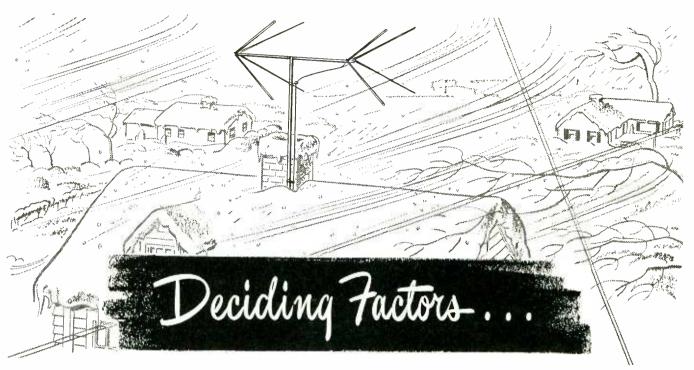
Get set to sell—with the support of Du Mont four-color spreads in America's leading magazines—with merchandising packages built from the dealer's point of view.

See the New 1952 Du Mont Telesets*

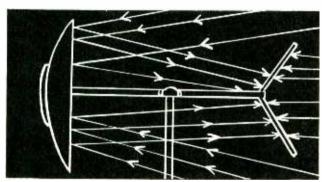
—at Du Mont Distributors and See Why Du Monts Do More in '52!

*Trade Mark





WITH WARD ANTENNAS INSTALLATIONS Stay Put!



Diagramatic sketch shawing haw parabalic reflectars gather in and cancentrate energy an canical elements.

WARD ANTENNA INSTALLATION KITS ... time savers ... money makers ... cut the cost of stocking and storing parts ... give everything you need at your fingertips at installation time. KIT MODELS TV-105 and TVS-103 contain necessary 6 element Ward Conical bays, including mast, base, stand-offs, lead-in, lag bolts all in one kit. Write for catalog.

Ward mechanical superiority is a deciding factor weighing heavily with men in the field. Ward installations "stay put" . . . eliminate call-backs.

WARD PARA-CON* Antenna not only combines parabolic and conical principles to assure maximum picture clarity on all channels in most reception areas—but it features a material and structural strength that defies the elements, and assures a permanent installation. Aluminum tubing, molded plastic insulators, heavy duty crossarm and other construction features make for rugged strength and unsurpassed durability. Write for catalog.

As the oldest, largest exclusive antenna manufacturer, Ward combines a complete, widely-diversified line of Radio and TV antennas. A single source of supply gives you every advantage and every superiority that means satisfied customers and bigger profits to retailers and service technicians.

THE WARD PRODUCTS CORPORATION

Division of The Gabriel Co.

1523 East 45th Street • Cleveland 3, Ohio In Canada: Atlas Radio Corp., Ltd., Toronto, Ont.

WORLD'S OLDEST AND LARGEST EXCLUSIVE MANUFACTURER OF A N T E N N A S

"TELEVISION OF TOMORROW TODAY"

with

CONTROL



the 24" PRESIDENT

Our latest and greatest triumph! Here is a brand new, power packed 24" table model with picture clarity and superb styling that will make your customers gasp.
"Power-Plus" control for superb fringe area reception. Available for immediate delivery! Priced far below your expectations. Ask for the "PRESIDENT" — Model 24T10.

'Power-Plus' control, the revolutionary new development exclusive with FADA, will bring satisfactory television performance to thousands of your customers' homes in outlying areas where reception was previously impossible!

A flick of the wrist, and **presto** — gone is the wobble, the tearing, the roll, formerly associated with "fringe area" reception — this new circuit brings in brilliant. clear pictures in areas where other sets won't even operate! The "Power-Plus" control, conveniently located in the back of the set, blocks out "noise" and interference; keeps the picture signal strong and steady. No need for special antenna installations — the new "Power-Plus" control does for TV reception what the superheterodyne circuit did for radio many years ago. Set it once for best reception . . . and forget it!

But that isn't all! FADA for '52 features its new ultra-sensitive Turret Tuner — adapts for UHF reception in seconds by merely changing tuning strips.

Quality costs no more — with FADA TV!

it's

the 17" CHURCHILL

> This new 17" toble model just shouts quality! Made with all of FADA's craftsmanship and electronic know-how, it speaks for itself with its fine picture and high definition. "Power-Plus" control eliminates wobble and tear in autlying areas. Cabinet entirely of genuine mahogany, hand-rubbed to a custom finish.
>
> The "CHURCHILL" — Model 775T.
> In Blonde Mahogany, Model 775 TBM.



ELECTRIC CO., INC.

BELLEVILLE, NEW JERSEY

SYLVANIA TV APPOINTS

AS DISTRIBUTOR FOR SOUTHERN



The ADAMS-Unexcelled reception in a 17" Console with HALOLIGHT. Movie-Clear* television at its best. Cabinet in Mahogany or Blonde.

pointment of Gough Industries, Inc. as its Southern California Distributor for the Radio and Television Division, Sylvania Electric Products Inc. San Diego, Long Beach, Bakersfield, San Bernardino, Santa Barbara and Phoenix will also be included in the Gough territory. The appointment becomes effective February 1, 1952.

As one of the outstanding figures in the Television In-

YLVANIA TV takes great pride in announcing the ap-

As one of the outstanding figures in the Television Industry, Mr. Philip Gough has guided his company's distributorship to a top-flight position recognized from Coast-to-Coast.

At this time Sylvania TV also announces that

HALOLIGHT

the frame of light that's kinder to your eyes is now available on certain 17" models for the Spring of 1952 as well as on 20" models. This means that HALOLIGHT, the most exciting feature in the Television Industry, will be within the reach of millions.



The LINCOLN - Deluxe 17" Television, Radio-Phonograph Combination with HALOLIGHT. Modern Mahogany cabinet.



TELEVISION SETS: RADIO TUBES: TELEVISION PICTURE TUBES: ELECTRONIC PRODUCTS: ELECTRONIC TEST EQUIPMENT; FLUORESCENT LAMPS, FIXTURES, SIGN TUBING,

GOUGH INDUSTRIES, INC. CALIFORNIA AND PHOENIX, ARIZ.

"It is a great satisfaction to us," said Mr. Philip Gough, as he signed the franchise for Sylvania TV for the Southern California territory, "to identify ourselves with Sylvania TV—with HALOLIGHT.

"Through handling the Sylvania line of fluorescent tubes and fixtures, we are very familiar with Sylvania's 50-year background in lighting and electronics and with the strength and reputation of Sylvania.

"We have great respect for the engineering skill of Sylvania and have watched with interest the development of its television receivers — their design, their beauty and Sylvania's sound service policies.

"We regard HALOLIGHT as the leading feature on any television line in the country today.

"It is our intention to make Sylvania TV the leading television line in our territory."



PHILIP G. GOUGH
President, Gough Industries, Inc.

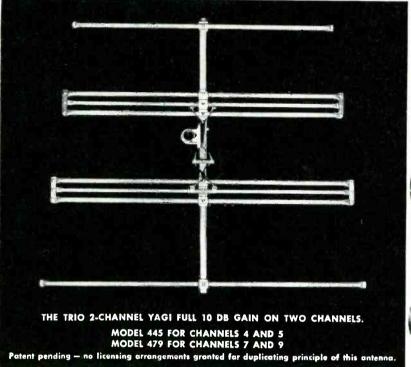


The JEFFERSON-20" Hepplewhite Console with Doors, featuring HALO-LIGHT. This superb television receiver will give unending satisfaction.

SYLVANIA TELEVISION

*Sylvania Trademark

WIRING DEVICES, LIGHT BULBS; PHOTOLAMPS; RADIOS. SYLVANIA ELECTRIC PRODUCTS INC., RADIO & TELEVISION DIVISION, 254 RANO STREET, BUFFALO 7, NEW YORK



Yagi elements of .035" thick seamless aluminum, are full 5%" in diameter. Ends are crimped for greater strength and to cut down vibration. Prevents en-trance of dirt and moisture.

An extra clamping member permits taking up bolts tight without putting undue strain on element. Cast aluminum V block assures perfect right angle alignment. No detail of design or construction has been overlooked to make the TRIO 2-Channel Yagi the finest friger area TV antenna available anywhere— at any price! where — at any price!

Double-folded dipole sections have heavy gauge aluminum brace bars securely riveted to element ends thus providing positive electrical connection and extreme rigidity. Workmanship throughout is of the highest order.

One of the most widely imitated antennas on the market today, the TRIO 2-Channel Yagi still stands alone in efficiency and strength.

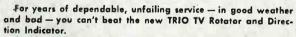
TV buyers — and sellers — are discovering that "look alike" is not enough — that imitations are never as good as the original.

There is no secret to TRIO's marked superiority. The simple truth is that TRIO slights no construction detail, overlooks no design feature. This means unparalleled efficiency - rugged dependability for both installer and TV set owner.

Installers! Avoid profit eating call-backs caused by poorly made imitations! Set owners! Enjoy years of dependable, efficient TV reception! Compare the TRIO 2-Channel Yagi with any other TV antenna at any price. Yes, compare — then you, too, will insist on an original TRIO - the 2-Channel Yagi that set the standards.

2-CHANNEL YAGI

the "Trouble-proof" TV Rotator



Sturdy and completely weatherproof, the TRIO Rotator will support the heaviest TV arrays - even in 80 MPH winds! Its sound design and construction has been proven by 3 years of extensive field testing under every extreme of weather. The TRIO Rotator will not freeze up!

2 HEAVY DUTY MOTORS

Two separate 24 volt motors are used — one for each direction of rotation. Thus, each motor operates just 50% of the time - cannot burn out. Positive acting electrical stops at both ends of 360° turn eliminates lead damage.

Housing is die-cast aluminum for greater strength, lighter weight and perfect alignment of parts. The TRIO Rotator is precision built throughout.



The TRIO Direction Indicator is housed in a sturdy plastic cabinet of graceful lines. It is a beautiful instrument that will blend harmoniously with any furniture style.

Utmost ease in selecting the desired antenna direction is provided by a new "finger-tip" control that operates at a light touch and the easy-taread dial face that clearly and instantly indicates the exact antenna position.



TOPS ALL IN DESIGN, CONSTRUCTION, PERFORMANCE



Now, the set that stays sold, teamed with the most challenging idea in TV today, is making a hit—with TV buyers, and Sparton dealers both!

Cosmic Eye knifes through claims and counterclaims, beams directly to TV buyers the unmatched performance of Sparton . . . "so clear, steady and true it's like having an eye in the sky!"

Sparton dealers hail the unlimited possibilities of this merchandising "first"! Through 1952 Cosmic Eye is to be featured twice a month in the Saturday Evening Post and Newsweek, monthly in Holiday. Local displays, promotions and selling themes will concentrate on Cosmic Eye Television, the set that stays sold.

True to the SCMP (Sparton Cooperative Merchandising Plan), Cosmic Eye Television is sold through only one exclusive Sparton dealer in each community or metropolitan shopping area. Why not write your Sparton District Merchandiser, or direct to the factory? Sparton Radio-Television, Jackson, Michigan.

The Superb



the set that stays sold

1952 SPARTON COSMIC EYE TELEVISION . LIKE HAVING AN EYE IN THE SKY



The Hastings Model 5225



The Roxbury Model 5270



The Bedford Model 5290



The Hampshire Model 5292



The Lochmoor Model 5298



The Beaconsfield Model 5296

THE PICTURE WITH THE



BILLION DOLLAR BACKGROUND

Bendix Lagic Interlace

Closes Sales in 30 Seconds!

IT ONLY TAKES ONE LOOK to end up in your ORDER BOOK!

CLEARER PICTURE . . . LONGER RANGE . . . BETTER STYLE

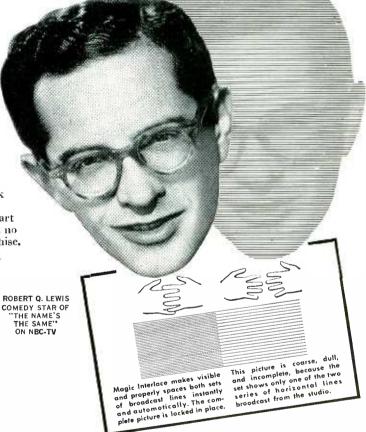
Here's a three-point program that pays off in quick profits and satisfied customers. First, Bendix Magic Interlace is still the finest sales closer in the industry—and it only takes half a minute to demonstrate it. Second, when fringe area prospects come shopping for a set that will pull in weak signals, Bendix TV is a natural. The picture is consistently sharp. And third, the Bendix line is short and sweet! Six smart models meet the needs of nine customers out of ten. There's no dust-gathering inventory to worry about with a Bendix franchise. Write for details of this great new line, two models of which are pictured below.



20L2—The big 20" picture and magnificent cabinetry of this model will appeal to the most discriminating buyers.



17K2—This 17" console features the life-like pictures of Magic Interlace and the ability to bring in clear pictures in fringe areas.



Do Business with **Bendix**—IT PAYS!

THE PICTURE WITH THE BILLION DOLLAR BACKGROUND

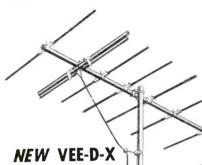
OF RADIO, TELEVISION, AUTOMOTIVE, RAILROAD, MARINE, AVIATION, AND INDUSTRIAL EQUIPMENT, INCLUDING ELECTRONIC DEVICES FOR SUCH ADVANCED FIELDS AS RADAR AND GUIDED MISSILES. FAMOUS FOR RELIABILITY IN EVERY MAJOR INDUSTRY, THE BENDIX NAME GIVES YOU THE FINEST PLEDGE OF QUALITY IN TELEVISION.

BENDIX RADIO TELEVISION AND BROADCAST RECEIVER DIVISION . BALTIMORE 4, MARYLAND

FOR POSITIVE, **PROTECTION**

YOU'RE SAFE...YOU'RE SURE LIGHTNING **ARRESTERS**





8 element Yagi

Gives equal gain to a double-stacked 5 element Yagi Array at lower cost

A new 8 element Yagi that provides 41% more gain that the best 5 element Yagi, or equal gain to a double-stacked 5 element Yagi array — yer is lower in cost, is easier to install, and provides better roof-top appearance. Famous VEE-D-X pre-assembled construction. The ideal antenna for fringe area operation.

(LESS MAST)

LIST

For Channels 7-13

VEE-D-X OUTBOARD BOOSTER

area operation.

Out of sight ... out of the way ... fits snugly against back panel of any TV set. This single chan-nel booster delivers pow-erful 18 db gain with full 5 megacycle band width. Install it — forget it! Bothersome tuning com-pletely eliminated.

Only

\$1995





a sensational NEW VEE-D-X antenna

MODEL RW-200

125

COSTS NO MORE THAN A MIDGET

Most popular full size arrester for standard two-wire transmission line. Exclusive saw-tooth contact points assure positive electrical connection without wire stripping. Exclusive case cover prevents pulling and straining of transmission line against contact — seals out moisture — adds to appearance.

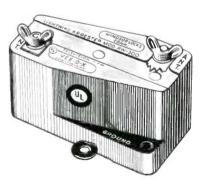


The first and still the finest arrester ever made to accommodate four-wire rotator line as well as standard two-wire transmission line. Exactly the same in size and appearance as Model RW-200.



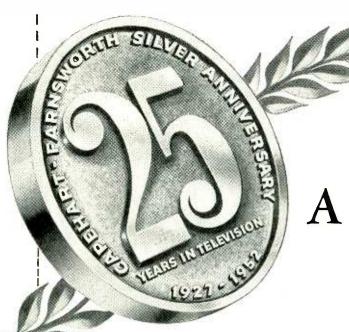
MODEL RW-300

For extra heavy duty. First arrester to be introduced to the television trade. It is the time-accepted standard with TV installation men everywhere. Air gap plus resistors provide double protection.



All models available with strap for mast or pipe mounting as well as standard models for wall or window ledge. wire stripping required on any VEE-D-X arrester.

Gentleme	Windsor Locks, Connecticut
	information on the following
Send me	information on the tono
NAME	
NAME STREET	



A Quarter Century in Television

YOU CAN DEPEND ON THE INCOMPARABLE

Capehart

marks the 25th anniversary of the first Farnsworth inventions that made today's television possible. The mind that created them has improved, refined, brought them to perfection in only one instrument—the incomparable Capehart.

Here is the key to Capehart's quality leadership. This is why Capehart is the first choice of the cream of your prospects.

The superiority of the Crystal-Clear picture—the fame of the Symphonic-Tone System—the sterling performance of the Capehart full power chassis—the pacesetting quality of Capehart cabinetry—these make Capehart the line it is for prestige—and profits!

There may be a pathway-to-success Capehart franchise open in your territory. Why not investigate! See your Capehart distributor or write Fort Wayne.



The CAPEHART Clock Radio

The fastest selling clock radio on the market – the most wanted, the highest-styled now available. Beautiful plastic cabinet in choice of colors. Only

\$4995



The CAPEHART Table Radio

True Capehart quality in miniature. Distinguished design beyond compare. Unbelievably beautiful tone. Choice of colors. Only \$3295



The CAPEHART "Quebec"

20-inch tube for Crystal-Clear picture. Provincial styling in mellow fruitwood. Symphonic-Tone. True Capehart quality for only

\$46995*

The CAPEHART Personal Portable

Plays where you play. Sets the pace for styling . . . for performance. Light-weight plastic cabinet in choice of colors \$2995



*Includes Federal Excise Tax. Warranty and installation extra. Prices for Zone 1.



CAPEHART-FARNSWORTH CORPORATION, Fort Wayne 1, Indiana

An Associate of International Telephone and Telegraph Corporation

World's Lowest Price Tape Recorder

Complete



COSTS YOU

ONE TO THREE UNITS SLIGHTLY HIGHER

Records Anything Plays back instantly! • Two Full Hours on One

- Light, Compact; Weighs Only 17 Pounds • Easy to Thread, Operate
- Big 5" x 7" Speaker

• Motor Rewind and Fast Forward

Gives You 40% Markup!

Put this new low cost tape recorder on your counter you'll be mighty pleased how easily it sells. Let your customers work it themselves. Once they see how simply it operates—how much real fun it is—all you need do is suggest a few uses and you've made a sale! Parents want it for keeping baby's voice, recording family events, party fun, music—professional folks use it for record keeping, dictation, training employees and students. Everyone in town is a potential prospect for this new self-seller.

AMPRO Corporation

2835 N. Western Ave., Chicago 18, III. (General Precision Equipment Corporation Subsidiary)

8mm Cameras and Projectors • 16mm Sound-on-film Slide Projectors • Tape Recorders

MAIL THIS COUPON TODAY

	AMPRO CORPORATION RTR-2-52 2835 N. Western Ave., Chicago 18, III. I am interested in complete information on a franchise for the new AMPRO Tape Recorder. I am a () Dealer () Distributor,
AMPRO \	Name
	Firm Name
	Address
	CityState,



RADO & TELEVISION." "RADIO & TELEVISION TODAY." and "ELECTRICAL RETAILING"

O. H. CALDWELL, Editorial Director

M. CLEMENTS, Publisher

CONFUSION OVER TV PRICES has had all segments of the trade in a dither. The situation arose when the OPS threw a monkey wrench into the plans of some of the manufacturers to lower list prices by changing their method of handling excise tax and warranty charges. Set makers must guide themselves by their practices during the base period, cannot raise the ceiling price on warranties, and cannot force the tie-in sale of a warranty. At this writing, of the top ten producers, one is including both tax and warranty in list, three include tax but not warranty, two include warranty but not tax,

AFTER THE LAST HALF OF THIS YEAR, there could be shortages of high-priced TV combinations and radio-combinations, (yes, there is a demand for them) some electric housewares, and certain models in major appliance lines. Look for the manpower situation to worsen for dealers as more and more technicians are siphoned off into defense plants. It's also likely that certain parts and tubes can be in tight supply before the year ends.

three exclude both, and one hasn't decided.

ALTHOUGH THERE'S A GROWING VOLUME of news about impending shortages these days, the smart merchant isn't going to be fooled this year. He's going to sell like sixty and worry about the merchandise famine if and when it comes. A little more than a year ago, numbers of retailers were inventorying heavily, vowing the while that they didn't want to sell themselves out of business. Today, the picture's different—the ones on the ball are vowing that they'll sell themselves in business!

DEALERS IN GENERAL ARE NOT PUTTING AS MUCH EFFORT back of selling dishwashers as they do in selling other appliances which "are far behind in growing demand," says Edward R. Taylor, Hotpoint vice-president. A poll made by the Chicago manufacturing firm showed that dishwashers get more widespread recommendation by users to friends than any other appliance surveyed.

THOUGH THERE WILL BE AN INCREASED DEMAND FOR MAHOGANY for defense work this year the supply of this and other woods for civilian products will probably be adequate to fill the demand.

THE SALESMAN WHO SELLS REFRIGERATORS TO ESKIMOS is a piker compared with H. A. Faroe, proprietor of the Northern Supply Co., of Anchorage, Alaska (population, 53,000). He sells freezers, and lots of them, in a place where winter temperatures drop to 60 below! Mr. Faroe told GE officials in Bridgeport, Conn., that he had sold six of the Company's 11-foot jobs just a day or two before his departure for the U. S. Freezers are in big demand, he explained, for the storage of moose meat.

BIG NEMA ELECTRIC HOUSEWARES gift sales campaign gets under way, and is aimed at achieving a sales goal of a billion dollars a year. Chairman of the Electric Housewares Section of NEMA this year is John A. Sullivan, of General Mills, and the vice-chairman is Stanley G. Fisher, of Landers, Frary & Clark. Big job in last year's drive was done by Gordon T. Ritter, 1951 chairman, Arvin's director of sales of the housewares division; and by J. P. McIlhenny of Waring Products, presently chairman of the Section's sales promotion committee.

BECAUSE OF THE BRISK PHONO RECORD MARKET, look for a number of dealers to take on discs; others presently in business to expand facilities. Meanwhile, merchants find it hard to get the right kind of salespeople; realize that genuine salesmanship could greatly increase volume through offering substitutes for numbers out of stock, and by suggestive selling in general. Too few record departments hold sales meetings these days.

AND SPEAKING OF PHONO RECORDS, no community enjoys anything like a healthy saturation point when it comes to modern changers. Sales volume in new speeds is dependent for its growth on the ownership of modern turntable equipment in the hands of the public, and the elementary task of getting such players into the homes rests with the dealer. The merchant who goes after sales of new players and modernization jobs makes himself more money via the equipment and service sold, and, at the same time increases the disc buying rate in each home he "modernizes."

RUMORS OF STILL HIGHER PERSONAL TAXES and stiffening of credit terms persist. Either one or both of such things would, if enacted, have a serious effect on the market. Meanwhile look for a real crackdown by the Federal Reserve Board on violators of Regulation W, who are not getting the required down payment.



CONSUMERS DOING A LOT OF LOOKING and shopping around these days. In spite of the fact that sales are lagging, there's plenty of store traffic in most centers. Dealers say that there's a real desire to buy on the part of the public, but such desire is coupled with reluctance to part with money because of the high cost of the bare necessitics of life. The answer as seen by progressive merchants: Convince people that purchases in this field represent sound investment, and do this through sound salesmanship.

What's Ahead! — in Radio,

WAVE OF PRICE REDUCTIONS BY TV MANU-FACTURERS a temporary proposition on an interim basis, many industry leaders believe. Rising costs all along the line, plus possible acute shortages plus a flood of buying by consumers in a low-inventory market could send prices up sharply in this industry of ours where just about anything can happen at just about any time.

TREMENDOUS INTEREST IN ROOM AIR CON-DITIONERS in the South, Southwest and West Coast, with numbers of wholesalers visiting the manufacturing centers looking for lines, which are hard to get because there are not many makers presently in production. In 1951, the industry sold 230,000 units. Room coolers are on the way up in all sections of the country, but require specialized selling effort, and a realistic approach to the overloaded or inadequate circuit problem encountered in a great many homes and offices. Profit-minded dealers make on-the-spot surveys before installing a room air conditioner.

WHILE MANY TV MANUFACTURERS CONTINUE to predict a production rate considerably lower than that of last year, distributors and dealers are buying carefully, with no signs of hoarding in the picture. "This could be the year that TV sets will be 'gold'," one big merchant said, but added that he was all through with the practice of warehousing in anticipation of shortages as he did in 1950.

THE 16,800,000 FAMILIES WHO LIVE IN AREAS not now served by television will buy sets much more rapidly than their counterparts in the present TV markets, as soon as the lifting of the freeze puts stations into operation nearby, according to a survey made by Scott Radio Labs. A few of the folk—about two per cent—already own TV sets, although a hundred miles or more from the nearest station. Of the remainder, 59 per cent say they plan to buy when broadcasting starts. Another 32 per cent are still undecided and only 7 per cent said they didn't intend to purchase. Survey was made in the following five cities: Denver, Ft. Wayne, Ind.; Tampa, Fla.; Tucson, Ariz. and Portland, Ore.



GREAT YEAR FOR TV, RADIO, RECORDERS, PA!

—Now's the time for dealers to start capitalizing on the tremendous interest in the political campaigns. Enterprising merchants can sell TV sets, portables, auto radios, extra radios, recorders and sound equipment. Everybody—but everybody will want to hear and see the candidates in the hottest election year the country has ever seen. Smart merchants will start their own campaigns soon—right now. In spite of the present slow sales tempo, a sudden surge in demand for merchandise by consumers, coupled with reduced production, could result in disappointment for a lot of one's customers. (P.S. And there's the baseball season coming, too!)

TV SERVICE VOLUME CONTINUING HIGH all over the areas served by video broadcasting, with dealers plagued by a shortage of good men. Bright spot in spite of manpower shortage is large amount of cash business being done, with few merchants carrying accounts receivable. Nowadays, when the set goes on the blink the customer expects to pay and pay promptly.

"RETAIL SALESMANSHIP WOULD BE MORE EFFECTIVE today if management did its part in developing a striking sales story on its own products."—Charles J. Coward, Kelvinator merchandising manager at a meeting of the Rochester, N. Y., Sales Executives' Club.

"TOO MANY HOMEMAKERS ARE UNAWARE of the factor of obsolescence in the vacuum cleaners they are using, bringing about an approximate uniformity of yearly sales totals since World War 2, with the result that the consumer market is not being worked to anything like saturation."—C. G. Frantz, secretary-treasurer of the Vacuum Cleaner Manufacturers Assn, and president of Apex Mfg. Co.

WHEN FARM FAMILIES BUY ELECTRICAL APPLIANCES they go to the retailer who handles their favorite brand, who provides adequate service and who has a reputation for business integrity. Price and trade-in allowance get only slight consideration. These and other factors in farm family purchasing habits are revealed in a joint survey made by the Curtis Publishing Company for the Farm and Rural Market Development Committee, NEMA, and Country Gentleman, national farm magazine. Some highlights from the study: Despite fact that 2,000 farm families reported buying substantial amounts of electrical equipment during the last 5 years, they said retailers made little or no attempt to solicit business. . . . Farm families not satisfied with their dealer relations suggested that merchants employ better trained men, make periodic checks of equipment, hold demonstrations, provide customers with more information on new products.

COMING FOR RADIO & TELEVISION RETAIL-ING READERS is a worthwhile feature article on selling room air conditioners, scheduled for the April issue. This article will go into the merchandising and technical aspects of compressor type room coolers, and will be of great value to dealers who want to add this up-and-coming product to their present lines as well as to merchants presently selling room air conditioners.

"THERE WAS A DAY WHEN A RETAILER could 'fly by the seat of his pants,' but that day is past. Planned operations are more important now than at any time in business history. In good times and bad, a retailer's business is what he makes it. Planning is the best insurance for the future."—George Edward Breen, in Journal of Retailing, New York University.

ABOUT 1.9 MILLION NEW CUSTOMERS for electric service were added last year, bringing the total to 46.9 million users. Electric service is now available to about 97 per cent of all occupied urban and rural homes in the nation, reports George M. Gadsby, president, Edison Electric Institute.

Appliances, Records and Television

"IN CHICAGO, THE NATIONAL COMMITTEES of both the Republicans and Democrats have agreed on something-they will change the site of the 1952 Conventions to suit the convenience of . . . television . . . It (television) has turned the family living room into a political soap box, a rustler's roost, Indian reservation, football stadium, wrestling mat, movie house, opera house, and (worse luck for young Hopalong) even a schoolhouse. Small wonder that folks are fascinated by the new miracle of television."-Dr. Millard C. Faught, writing in the CCG Spotlight.

"EVERY ONCE IN A WHILE you hear someone say that the television market will soon be saturated. This is obviously nonsense. Anyone who thinks that the television is even close to saturation ought to take a look at what has happened to radio. Certainly today everybody has a radio, yet during 1951 around ten million radios have been made and sold even in the face of a booming television market." -From Harry Alter Co. bulletin, issued by the Chicago wholesale firm for its dealers.

'THE NEW COMING UHF STATIONS will render as good or better service as the present VHF stations now in operation," said H. C. Bonfig, Zenith vice-president, in a speech at Kansas City, Mo. Bonfig said that broadcasters have been skeptical of the value of UHF just as they have been of every new radio frequency when it was first employed. He said this was true when short wave was first developed by radio amateurs, and, again, when TV moved into the present VHF band. "With each of these new radio frequencies we found many advantageous characteristics that made them superior to old frequencies for certain purposes," Bonfig said. "In my opinion, the same thing is going to happen when the UHF channels go into service.

THE COUNTRY'S PARTS DISTRIBUTORS are to be given an opportunity to tell the sponsors of the 1952 Electronic Parts Show what industry problems they want to discuss at the seminars and group educational meetings at Chicago May 20-21, the days set aside at the Show for such sessions. Jack A. Berman, of Shure Brothers, Inc., Chicago, chairman of the Show educational committee, said that questionnaires are being mailed to all distributors who are being invited to attend the Show, to be held at the Conrad Hilton Hotel, May 19-22nd, and the committee will consider the replies carefully in making up the two-day agenda of seminars and discussion periods. In addition to Berman, the committee consists of A. W. Greeson, Jr., Johnannesen Elect. Co., Greensboro, S.C.; A. G. Ruble, Srepco, Inc., Dayton, O.; W. D. Jenkins, Radio Supply Co., Richmond, Va.; Jerome J. Kahn, Standard Transformer Corp., Chicago; Lew Howard, Triad Transformer Mfg. Co., Los Angeles; J. R. Kirshbaum, Precision Apparatus Co., Elmhurst, N. Y., and V. N. Zachariah, Zack Radio Supply, San Francisco.

COMMENTING ON THE UPSWING IN SALES OF AIR CONDITIONERS, B. A. Mitchell, president of Mitchell Mfg. Co., says: "No longer is the would-be consumer possessed of the notion that room air conditioners are a luxury item. On the contrary, the public has become aware of the fact that summer comfort is fully as important as winter comfort and is considerably less expensive."

WITH RETAILERS BUYING VERY CARE-FULLY THESE DAYS, look for a dearth of high-pressure deals for the first half of this year in transactions between distributors and dealers, with very few, if any, "assortment" propositions be-



ing offered as musts. During the past two years the industry has seen some peculiar practices. First, dealers had to take on a lot of unwanted merchandise in order to get what they wanted. Next, the merchant was in the driver's seat, being offered everything from Cadillacs to Caribbean cruises. Now, however, salesmanship, coupled with deliberate buying is the order of the day. This situation is likely to remain static for some time, but could change radically if real shortages come.

SUPERSONIC SPEEDS UP TO 942 MILES AN HOUR will be reached by whirling blades of a giant new Westinghouse turbine-generator being built to supply additional power for Alabama. It will take an hour and a half to bring the machine to full speed; half an hour to stop it.

VOLTAGE PROBLEM GROWING WORSE, cautions J. G. Sola, president of Sola Electric Co., who points out that voltage instability is now a common problem in American homes. Citing voltage fluctuations up and down as much as 30% in many areas, pointed out as an instance that with a 10% drop in voltage it would take 31.5% longer to toast a slice of bread. Builtin voltage regulation transformers are one answer, Sola stated, citing increased use of these devices in TV sets, where voltage variations can cause flickering, and predicted that use of such transformers will grow in the appliance field as more manufacturers recognize this problem.

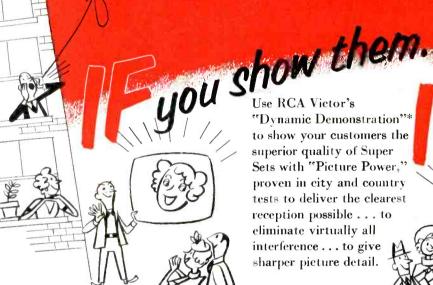
ADS RUN BY E. JONES OF THE DELTA COM-PANY, Cleveland, Ohio, bring a lot of people into his establishment, reports this Coolerator dealer, who points out the necessity for backing up such advertising with good salesmanship. "One thing you have to remember," says Jones, "is that promotion just brings people into the store. You have to sell 'em when they get there.'

Future Events of Interest to Readers

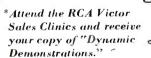
- Feb. 4-8: Winter Market, Western Mdse. Mart, San Francisco.
- Feb. 11-12: NAMM Southeastern Regional Conference, Hotel Ansley, Atlanta, Ga.

 Mar. 10-13: National Electrical Mfrs. Association, Edgewater Beach Hotel,
- Chicago.
- Mar. 22-Apr. 6: Chicago International Trade Fair, Navy Pier, Chicago. May 19-22: 1952 Radio Parts and Electronic Equipment Show, Hotel
- Stevens, Chicago. June 8-12: 44th Annual Convention, National Association of Electrical Distributors, Ambassador Hotel, Atlantic City, N. J.
- June 15: Father's Day
- Aug. 27-29: 1952 Western Electronic Show & Convention, Municipal Auditorium, Long Beach, Calif.
- Sept. 14-17: 4th Western Housewares Show, Hotel Biltmore, Los Angeles,
- Sept. 22-25: 3rd National Convention of the National Electronic Dist ibutors Association, Ambassador Hotel, Atlantic City, N. J.
- Oct. 6-10: National Hardware Show, Grand Central Palace, N. Y.





to show your customers the Sets with "Picture Power," proven in city and country tests to deliver the clearest





ONLY RCA VICTOR HAS

THE "GOLDEN THROAT

The Colby-17-inch Super Set. Table model with compact metal cabinet, Maroon finish. (17T150)



The Glenside -17-inch Super Set. Distinctive table model in mahogany or blondgrain finish. (17T151)



The Crafton-17-inch Super Set. Open face console. Choice of mahogany, walnut or limed oak finish. (17T163)



The Covington 17-inch Super Set. Two-door console. fashionably styled. Mahogany, walnut or limed oak finish. (17T172)



you tell

The Cathoun - 17-inch Super Set. Regency styling, bowed front and full-length doors. Mahogany or walnut finish. (17T173)

superior performance... YOURSELF IN 1952



Tell your customers that all receivers are adaptable to U.H.F. Point out that they have their choice of this complete line of breath-taking designs and beautiful finishes—no extra charge for rich mahogany finish. Tell them that all sets have the noise-free "Golden Throat" tone system—finest in RCA Victor history. THEN

Then you've got them sold with the tops in television—for only RCA Victor television has Picture Power. Millions of RCA Victor television sets in owners' homes prove to you that RCA Victor is the world's most popular and proven television.



The Clarendon—21-inch Super Set. Distinctive Provincial design. Four doors. Mahogany, walnut or maple finish. (21T179)



The Rockingham—21inch Super Set. Regency styling, bowed front and full-length doors. Mahogany or walnut finish. (21T178)



The Donley—21-inch Super Set, Modern design, Full-length doors. Walnut, mahogany or limed oak finish, (21T177)



The Suffolk—21-inch Super Set. Colonial style cabinet. Full-length doors. Mahogany, walnut or limed oak finish. (217176)



The Meredith—21-inch Super Set. Open face console. Comes in mahogany, walnut or limed oak finish. (21T165)



The Kendall—17-inch Super Set. Ultra-smart, cabinet styling. Two doors. Walnut, mahogany or limed oak finish. (17T174)



The Selfridge—21-inch Super Set. Giant screen, compact table model. Mahogany, walnut or limed oak finish. (21T159)





RCA VICTOR—World Leader in Radio...

First in Recorded Music... First in Television

How to Use

"Props" as Show-Window

They Can Help Identify Products, Stress Additional Features,

• The use of "props" in setting up effective show-window displays is growing in popularity, and justly so because they lend additional interest to exhibits, and also are most effective in providing rapid product identification.

Props are a must when it comes to the display of products which, appearance-wise, may puzzle a lot of viewers.

Take the clothes dryer, for instance. To the man or woman in the street it may be an automatic washer, or even a food freezer, but it will be readily identified as a clothes dryer if props are properly employed. Such props can be manufacturer-supplied display pieces, used either by themselves or in combination with exhibits of clothes. A dramatic effect, for example, in plugging drying machines can be achieved through the showing of an outdoors clothesline full of wearing apparel, bedding, table linen and so forth, with signs pointing out that this old-fashioned method exposes intimate household things to dust, soot and germs. Signs also stress the fact that the housewife who uses an outside clothesline must face all sorts of weather, or may be away when a storm comes to damage the clothes. Then, through a string of arrows or other props, the viewer's eye is led to the dryer where signs stress its features, such as fast, automatic drying, safeguarding of clothes through controlled heat and air; its bacteriakilling lamp, and so on.

Numbers of other products need props, too, in order to afford immediate identification. Among these are magnetic recorders, dishwashers, air conditioners, fryers and liquefiers, to mention a few.

Since some products offer combined features in one unit, each of such features should be made clear to the viewer. The clock radio is a good example. The show-window "reader" in the street may think that the small radio on display is rather high-priced unless he realizes that it also includes a high quality electric clock, and that the instrument puts folk to sleep, and wakes them up with music. And if he also knows that it can also be used for the automatic operation of lamps, appliances, etc., the viewer may be converted to a buyer. Here again, props can tell the story. The window-dresser who displays clockradios without descriptive material is overlooking a good bet.

Other multi-feature products include radio and TV combinations, TV or radio sets with phono jacks, sandwich-waffle units, dry-steam irons, vacuum cleaners with such attachments as de-mothing devices, paint sprayers, floor waxers; combination fan-heaters, and refrigerators equipped with separate foodfreezing compartments. Failure to stress all of the features of each product displayed short-changes the store and the viewer. In a great many cases people are actually moved to buy a certain product because of its adjunctory features.



Mueller Appliances, Toledo, Ohio, built a customer-operated prop to plug Webcor recorders. When passerby places hand on sign, a spotlight is turned on the recorder, and a brief commercial and music program is piped through a speaker in the transom.

Props are being widely used today, with many department stores coming out with some very elaborate set-ups designed to stop sidewalk traffic dead in its tracks. Radio-appliance dealerships have been a bit slow to adopt the practice of using props, with most of them sticking to conventional displays of products along with decorative background and floor material.

Manufacturers have come a long way in producing top-drawer display pieces, which are certainly effective props, but there is no reason why dealers shouldn't dream up some ideas of their own to go with such display pieces. The manufacturer-supplied display piece must be so designed as to fit in anywhere in the country, but the dealer has the opportunity to "localize" his own show-window exhibits through the use of props, in association with such display material from the manufacturer.

Props can be used to provide identification, associate the product with its end use, and to describe its adjunctory features, as before pointed out. And best of all, props can be tied in with the dealer's own local scene. For instance, some towns and cities are outstandingly "musical," having numerous groups of musicians who attend schools, perform over the local radio station, etc. Dealers in such communities

Effective use of props in show-window display set up by Stone & Thomas, Charlestown, West Virginia dealers who won national contest by Stromberg-Carlson.



Traffic-Stoppers

Lend Interest and Sales Appeal to Displays

can make good use of props in displaying recorders, new-speed phonographs, combinations, and phonograph records. Following are some suggested tie-in angles: 1. A lettered, framed card featuring names of local radio performers, station call letters, time, etc. 2. Show cards inviting local musicians and singers to make recordings free of charge. 3. Enlarged photographs of local performers. All of the foregoing props should be tied in with associated products.

Food freezers lend themselves well to the use of props in the various parts of the country. In hunting and fishing areas there are many angles one can use, including the display of mounted fish and game taken by local sportsmen, loaned to the dealer. Guns and fishing tackle, from the local sporting goods store, also make good props.

Since everyone eats for a living,



Manufacturer-supplied props are effective traffic-stoppers and prime sales stimulators.

food displays are always effective. In show-windows, dealers can set up "live" displays at low cost. Upright freezers, with door open, in actual operation, can feature real or mock-up food. Through the use of a mirror, top-loading units can show their attractive contents as well. It is only necessary to use a few real or mock-up things in the displays. In the top-loading freezer, only one layer of real food is necessary. In the upright type, the real or mock-up food is placed in front,

"Props" Can Be -

Manufacturer-supplied display pieces
Local products manufactured or grown
Things associated with community activities
Gimmicks built or assembled in the dealer's shop
Furniture, fixtures, dummies, etc., loaned by
non-competitive dealers
Scenic "charades" set up to describe product's
uses and benefits

with wrapped dummy packages filling up the space to the rear.

"Novelty" prop angles are good, too. For instance, golf balls and flashlight batteries "keep" better in the refrigerator or food freezer, so the window-dresser can use these items to good advantage in displays.

For the dealer who wishes to set up the more elaborate exhibit with the use of props, there are many sources of supply for the gimmicks, provided he is willing to reciprocate by displaying cards showing the sources of such props-his non-competitive fellow merchants' stores, such as furniture, dress shops, novelty outlets, etc. From the furniture dealer can come props to help sell radios, room air conditioners, fans, electric blankets, etc. The dress shop can supply attractive dummies to help promote TV, radio, kitchen appliances, and many other products. The local novelty

shop can furnish "seasonal" things such as would be used for Hallowe'en, Thanksgiving, Christmas, St. Valentine's Day, St. Patrick's Day, the Fourth of July, and so on.

Props can also be used to sell service. Exhibits of parts, chassis, antennas, etc., will impress the passer-by, and can build up additional volume for the service department. One dealer who had totally disassembled a junked TV set, spread out all of the parts on his show-window floor to form a spectacular exhibit.

Numbers of enterprising dealers have used "antique" radios and appliances as props in running local contests wherein customers were offered prizes for the oldest model of this or that. The antique sets, refrigerators, washers, etc., were displayed in show-windows alongside their modern counterparts.

(Continued on page 82)

Props tell 'em right away what the product is and what it will do for the user. The smart dealer sets up interesting displays to build "reader" interest and help pre-sell the passerby.



Paulson's 8-Point Program

Tacoma Dealer's Show-Place Store Features Selection, Service, Sparkling

• There are at least eight good reasons why Paulson's of Tacoma, Wash., sells approximately 2,000 television sets per year in this city of about 150,000 population. Each one of those reasons is an essential part of the successful formula of operation evolved by owner Cliff Paulson in 11 years of operation of his radio, television, and appliance

Actually, the firm of Paulson's had its beginnings 43 years ago with establishment by Cliff Paulson's father of his retail jewelry store. One of the first merchants in the city to foresee the possibilities of radio, he added a few battery radio sets to his jewelry inventory when the radio industry was still in its infancy. The radio department expanded with the growth of the industry.

In 1940, the radio department was separated from the jewelry store, Cliff Paulson taking over radios and appliances and his brother the jew-



At least 6 "live" TV sets are displayed at all times in windows of north side of store. They operate from dark till midnight. As many as 50 people at a time view the free video show provided by Paulson.

elry. The radio and appliance store opened on the corner diagonally across the street from the firm's present location.

Paulson's moved into its present store about three years ago. The new

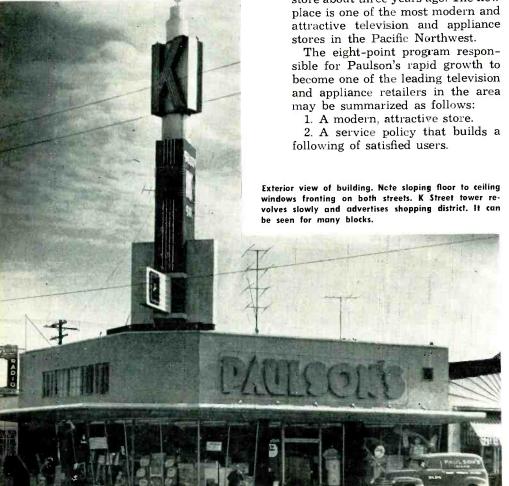
3. Regular and aggressive advertising program.

- 4. A variety of name-brand appliances and television sets.
- 5. Follow-up on completed sales to build additional future sales.
- 6. A sales commission policy that encourages teamwork by the salesmen. They are paid a percentage of total store sales.
- 7. Massed floor displays of merchandise.
- 8. Attention-getting window exhibits.

Entire Interior Visible

The new Paulson's store is located on a corner in the center of the "K Street" business district, about a mile from Tacoma's downtown business section. Floor to ceiling windows on both street front sides of the building, permit easy visibility of the entire store interior. Brilliant interior illumination contributes further to the same result. All merchandise on the main floor is thus on display from the street. The main floor and the second floor display rooms both measure 50 x 50 feet for a total of 5,000 square feet of floor display area. White goods are shown on the street level, and television sets on the second floor.

An unusual feature of the building is the tower mounted on the roof. The column with its large "K" re-



Punches Up Sales!

Displays. Gets Fast Results From Ads; Has Unique Salesmen's Pay Plan

volves slowly and is effectively illuminated at night. The tower was installed by all K Street merchants as a joint enterprise, Paulson's being selected as the best site for the district promotional fixture.

Good service has always been one of Paulson's strongest and most effective sales arguments. The firm was one of the first retailers in its area to jump "with both feet" into both sales and service of television. They realized that to build additional sales, satisfied customers were absolutely necessary. In the earlier days, each salesman was required to "sell the customer twice"—first in the store and that same evening, in his home. The purpose of the second



Left-hand side of main floor level features major appliances and electric housewares.

Service Plays an Important Part

Paulson's maintains two complete service departments—one for radio-TV, the other for appliances, large and small. Many leads originate as a result of repair calls.

call was to find out how the new owner liked the set, make any necessary adjustments, and instruct in its operation. Though this is no longer necessary, the practice contributed substantially to additional sales through word-of-mouth advertising.

Paulson's operates a complete and well equipped service department for television on the second floor, with three mechanics on duty. A strong promotional point is the three months' free service given with each television set.

The firm also maintains a service department for repair of appliances. The two mechanics in this department handle work on any range, refrigerator, or other appliance,

regardless of where the product was purchased. Service customers here are considered potential new appliance eustomers, and many leads for new appliance sales originate with a service call.

Advertising Regularly

In their advertising, Paulson's makes effective use of newspaper, radio, television, and direct-mail. The firm runs a large advertisement in a Tacoma daily newspaper on Monday and Friday of each week. Since the store stays open until 9 P.M. on each of those two nights, they get an immediate reaction the evening of the day on which the ad appears. They often sell as many as

10 television sets each evening following an ad insertion. The biggest share of their advertising budget is used for promotion of TV. Nearly as effective is the smaller ad inserted each Wednesday together with other K Street merchants in the two-page "K Street advertising section."

Cooperative advertising has been entirely effective, Paulson reports. In one case, by tying in with a manufacturer's promotion, the firm attracted a crowd of 2,000 persons. By the time the last contract had been signed, about 200 television sets had been sold and 100 appliances, all as a direct result of that promotion.

Direct mail promotion is effective if reasonable selectivity is exercised (Continued on next page)

Owner Cliff Paulson, standing, explains TV sales points to prospective buyers.



RADIO & TELEVISION RETAILING

Paulson's 8-Point Program

in making up each mailing list, Paulson believes. If a TV promotion is being developed, for example, only the names of customers who have purchased other items besides television, are selected. If refrigerators are being promoted, customers who have recently purchased one of those items, are weeded out of the list. In this way, the firm doesn't "fire any blanks."

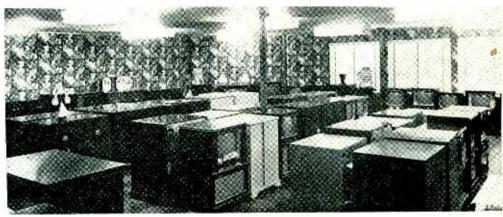
Wide Variety of Brands

In both appliances and television sets, Paulson's offers customers a wide variety of top brands to choose from. They carry six lines of TV sets, three of ranges, and four of refrigerators.

The thinking here is that there is little basic difference in quality between any of the top brands. By offering a variety, they can furnish the customer the item on which he has already sold himself. Further, they do not have to represent just one or two brands as being greatly superior in price, quality, or value, to the rest of the field.

A month after the sale of a unit, the salesman calls on the customer to see if he is satisfied and if the appliance is performing satisfactorily. At the same time, he finds out what additional appliances the customer may be in the market for, such as a clothes dryer to supplement an automatic washer. Then, when the contract on the original purchase is almost paid, he pays a second call to see if he can interest the customer in making a subsequent purchase. The follow-up pays off in many additional sales which might not otherwise be made.

Unlike many dealers, Paulson does



Showing part of television display room on second floor. As many as 75 sets are displayed here, all hooked up and ready to operate. TV accounts for 60 to 70% of total store sales.

not pay salesmen a commission over their base pay, on merchandise which they sell. Instead, salesmen are paid a percentage of total store sales. This method eliminates bad feeling when one salesman closes a sale another salesman started, and prevents various forms of cut-throat competition. The attitude in the store tends to be friendlier, and sales are increased by better teamwork.

A factor which has increased both store traffic and sales, is the massing of merchandise on both sales floors. Placing plenty of merchandise on the floor makes it look like a place that is doing business, Paulson believes. It also shows shoppers that there is a wide variety of merchandise to examine.

In the television display room, there are usually at least 75 sets on the floor, all of which are hooked up to demonstrate. Often, a row of 10 to 15 sets lined up against a wall, will be turned on simultaneously, with the sound in only one turned up. This makes an impress-

ive demonstration which stimulates the prospect's interest. One set is always placed at the stair landing overlooking the main floor where it can be seen by shoppers in the appliance department.

Show-Window a Magnet

Manufacturers' display advertising and operating TV sets are used to good advantage in window displays. In the windows on the north side are placed six sets, one model of each line which the store carries. The sets are turned on each night at dark and continue to operate until automatically shut off at midnight. Since there is a bus stop at that corner, the display attracts considerable attention, with as many as 50 people watching the performance at times. Manufacturers' display material is used liberally, to good effect in the displays.

Along with its aggressive promotional activities, Paulson's never loses sight of the basic fact that customers must be satisfied with its services and merchandise to build a continuing volume of sales. When they advertise an item for sale at a particularly favorable price, they make sure that they have ample merchandise to back it up, to supply all prospective buyers. Nothing antagonizes a customer more than the suspicion that he has been lured into a store to buy an item which is sold out by the time he arrives, Paulson believes.

The proportion of total store sales currently runs between 60 and 70 per cent in TV sets, the balance in appliances.

Right-hand side of main floor, with refrigerators, washers, and food freezers. Merchandise is massed for effective display. A wide variety of leading brands are featured.



No matter where your customer

lives...









NEW JENITH TV

gives **Customized Performance** for his location on every station!

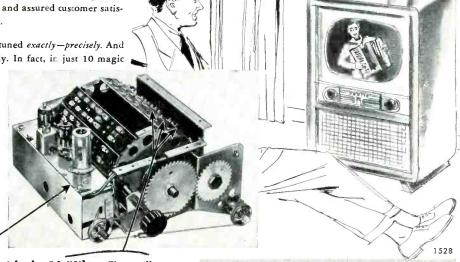
What a feature! New Zenith Customized Performance is sweeping the nation—building up store traffic and skyrocketing sales across the country! For here, at last, is the easy key to perfect TV reception. And—of greatest importance to you—here's the way to quicker sales and assured customer satisfaction. All with just 10 minutes installation time.

Yes—just 10 minutes! Customers want their sets tuned exactly—precisely. And you can do all that and more—quickly and easily. In fact, ir. just 10 magic

minutes you'll tune the Fringe-Lock on your customer's Zenith to his distance from the station—and custom-compensate for his angle from the station.

Think of what Customized Performance means to a customer. Then better think of what it means to you in real profit-making potential.

All that for just 10 minutes installation time? RIGHT! It's Zenith Customized Performance—the Greatest Refinement in Television since Television began . . . and—Only Zenith Has It!



The Miracle Zenith Turret Tuner with the 14 "Silver Fingers'

. . . a Zenith Exclusive on every 1952 model that really means something to television prospects. Thanks to a special "Bull's Eye Tuner Knob" built into Zenith's famous Turret Tuner—the tuner with the 14 "Silver Fingers"—every 1952 Zenith can be custom-tuned to the frequency of every individual stotion—for your customer's individual location.

And Customized Performance is permanent—yet it's simple! You can custom tune Zenith—any of your men can—with just a few minutes practice.

This profit-loaded feature ties in with Zenith's "Electronex" Tube, provision for UHF, Fringe Lock Circuit, and Dust-Proof Screen to give you the biggest selling combination in TV history.

ZENITH RADIO CORPORATION . CHICAGO 39, ILLINOIS



How to Make

More Dollars in Your

You Need Adequate Facilities, Trained Men, Accurate

• The well-run, efficient service department not only pays its own way through revenue brought in on repairs, but is the Number One means of keeping customers on the store's active list, and bringing in new ones.

Good service prevents the necessity for customers buying products in one store and having them repaired in another. Customers naturally prefer to have such products serviced where purchased. They have every reason to assume that the dealer from whom they purchased the TV set or appliance is an expert so far as the particular make is concerned.

If it turns out that the merchant is unable to render prompt, efficient repair work, and the customer must go elsewhere, then the store stands to lose several ways. For instance, it stands to lose the future sales and service business of that particular customer. It stands to lose a source of leads, and, worse, the dealer's reputation can be injured by what the disgruntled person may have to say about the store.

The least thing any merchant can do is to strive to give service on what he sells. The best thing he can do is to determine to expand his service department to attract new customers, handle diversified products of all makes so that he will continue to add more and more satisfied people to his list.

Building Big Customer List

While it is true that there are a great many headaches associated with the maintenance end of one's business, foremost among them being the handling of free service under guarantees, an efficient, profitable operation can be set up.

For the dealer who wants to build up a big customer list through the servicing of diversified products of all makes in his community, the editors have worked out a ten-step plan based on the operations of a number of successful service departments. This plan is outlined in an accompanying panel. Under the plan, the service department is considered to be a full-time partner, a business-getter, a profit-producer and a customer-pleaser.

For the dealer who is resigned to the belief that his repair department is nothing more than an unwanted, but tolerated step-child, and treats it as such, let him be reminded that a great many of his customers probably feel the same way about it—and will wind up taking their business to some other store.

The first step in the plan to strengthen the service department is to train personnel. While it's true that good men are hard to get these days, numbers of acceptable ones can be found by the dealer who is willing to spend some time seeking them out. The fully-staffed dealer can take a new look at his old men with a view toward making improvements.

Musts for Servicers

Too many service managers overlook the importance of such things as appearance and personality in servicers. What they should realize is the cold fact that a dirty mechanic, however efficient, is anything but a good advertisement for the store.

Women will dislike having an unkempt individual fixing the TV set in the living room, even if he had been graduated from a technical school. And it doesn't matter to the housewife whether the greasy refrigerator mechanic went to college or not. She will still object to having him handle the food in the refrigerator.

One of the best rules the dealer can insist upon is that his servicemen keep up to acceptable appearance standards. Money spent in uniforms is a good investment, numbers of dealers report.

A pleasing personality in a repairman is a great asset to any store. When the dealer considers the fact that a great many complaints are imaginary or trivial, he realizes that how the servicer handles the situation verbally can breed goodwill or ill-will, profit or loss to the store.

The dealer who impresses his men with the necessity for meeting the public the right way, and who trains them not only to be skilled mechanics, but worthy representatives of the store, will obtain the loyalty and interest of his men, and the confidence of his customers.

The servicer goes into the home more frequently than anyone else in the store. Only the right kind of men, properly trained, should be permitted to contact customers.

Estimating Prevents Grief

Another step in the plan to build up a big following of customers is to give an estimate on the cost of every repair job at the time the work is accepted. This technique will eliminate most of the headaches concerned with charges.

In a great many cases, customers are likely to consider even a nominal charge a high one when no estimate has been given. When people do kick about a repair bill, the dealer is on a spot. He can try to justify the charge, perhaps losing the customer in the process. Or he can knock something off the bill. In the latter instance he's taking a risk, too, because what he knocks off may well be his profit. And, furthermore the customer who has succeeded in beating down the amount of a service charge may well consider that he was deliberately overcharged in the first place. In addition, the customer is likely to believe that there's a whale of a big profit in repair work if the dea'er is willing to adjust bills downward.

The minute a dealer or service manager quotes a firm price he's qualified the customer. If the amount seems too large a kick will be registered before the work has been done. At this stage of the game it's easier for the dealer to justify the charge than it will be after the "surprised" customer has received the bill. At all events, if the customer understands exactly how much the job will cost, and agrees

Service Department

Estimating, Sound Business Methods, More Customers

to have it done, the money head-ache has been eliminated.

Advance estimating also permits the dealer to offer complete over-haul jobs in lieu of what might otherwise turn out to be the mere patching up of some out-of-order part on a job, a job which may well bounce back for a free re-repair by the dealer.

Advance estimating is also an arrangement of benefit to both dealer and customer. When accurately figured out, the dealer usually makes his full profit, avoids arguments, and keeps his customers happy. The very few times the expert estimator goes wrong in figuring will be more than offset by the saving in money, time and tempers over the method of not quoting in advance.

An examination of delinquent accounts receivable to the service department will reveal that a great many refuse to pay up because they feel they were overcharged, and neither they nor the dealer have found the time to get together to fight over the amount.

About Guarantees

Still another important step has to do with making certain that the customer understands two things (in addition to the cost). First, that he is informed as to the nature of the repair or overhaul job so that there can be no argument about it later. And second, that the customer knows just what part of the work is guaranteed, and for how long. It will pay any dealer or service manager to take the necessary time to explain such details, and to jot down on the customer's repair ticket a brief description of the terms agreed upon.

One of the surest ways to hold customers is to deliver work when promised. It isn't an easy thing to do, but the dealer who makes an honest effort to live up to his word will build up a following of loyal customers. It is natural for people to want pepairs made quickly. They appreciate having the dealer call them when delays crop up. They

dislike having to call the dealer repeatedly only to receive alibis cooked up on the spur of the moment. In this connection, the smart dealer makes certain that he has the right sort of person in the hot-seat to answer the service calls. Such person should be courteous, have tact and patience, and should be backed up by a sincere management.

Telephone answerers in stores where confusion runs rampant will soon develop a customer-killing technique as a sort of protective mechanism.

Many dealers are finding that they can keep customers happy by lending them a TV set, an electric clock or other product in cases where the repair job takes longer than usual. Such gesture on the part of the dealer is a friendship building one.

No dealer is doing a good job unless he sees to it that his men view the product to be repaired as an entire unit. This means that the servicers must be trained to examine each product carefully. For instance, they shouldn't be permitted to do makeshift jobs, such as repairing a thermostat in a refrigerator and ignoring a leaky door gasket; putting a tube in a TV set merely to restore a lost picture and paying no attention to a bad speaker rattle, for example.

In addition to putting repaired products in first class order, the smart merchant insists that they also be made to look attractive. In the good service departments, radio and TV cabinets are always polished before return to customers; toaster shells are shined, metal parts on vacuum cleaners are buffed, and so on. Some dealers always wrap small radios and appliances in neat packages to deliver to customers or to await store calls by those who make their own pick-ups.

A great many dealers have found that sending out postal cards to customers after repair work has been completed pays off handsomely. Such cards express the hope that the serviced product is in good operating condition, and that if it isn't,

(Continued on page 84)

10 Ways to Make Money in Your Repair Department



Frain servicers to hold the good-will of customers

Estimate every job in advance to avoid losses, headaches

Make sure customer understands about work done,
guarantees

Speed up repairs, and live up to promises you make

Lend products in cases where long delays are likely

If possible, open service department to the public view

Train some person to handle service calls, complaints

Strive for overhaul jobs, not mere makeshift repairs

See that every repaired article is carefully cleaned

Advertise: In newspapers, in classified directories, and via a card listing articles repaired. Send a follow-up card shortly after each service job has been completed

What Do Your Salesmen Do

When Customers Ask for

With So Many Good Makes and Models on the Market,

• Utopian selling would be where a dealer had everything any customer requested. This would include having the right size, the right style, the right finish, the right price, and the right brand.

If these five "rights" existed in every sale it would be Utopia for TV-appliance dealers because the selling effort would be reduced to a minimum. In fact, if everything was "right" there wouldn't be any selling . . . just order filling.

Of course, most retailers in this field try to stock the most demanded merchandise and to have a complete assortment for every customer's selection. But it is impossible to do a 100 per cent job when there are so many different sizes, styles, finishes and brands on the market. Too, there are many dealers who, because of limited operating capital find it impossible to carry large inventories.

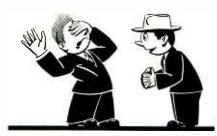


Many an order has been wrapped up by alert salesmen in spite of fact that they didn't have the exact make or model the customer asked for. Selling an equally good appliance is mutually beneficial to customer and dealer.

One of the answers to the question of how to cope with the "out-of" or "don't-stock" situation lies in the strength and reputation of the dealer. The merchant who has built up a following of satisfied customers through fair dealing and good service can create brand favorites in his community, and hence, to a marked degree is able to "switch" makes, and to practice substitute selling. However, the strongest dealership is no better than its

salesmen, and the latter must be carefully trained in order to meet the problem of substitute selling.

Salesmen who do something about this problem of not being able to stock everything, use effective selling strategy . . . selling something



The salesman who knocks a product or make his firm doesn't stock loses the customer's confidence. The salesman who pulls a swooning act over the mention of another brand may hurry the would-be purchaser to the competitor's store.

the customer doesn't specifically request. This requires real skill in selling and the salesman who masters this strategy will be the one who writes up more sales contracts for all big-ticket TV sets, radios and electrical appliances day after day.

Stock shortages, new models, unbalanced retail stock assortments all tend to make this "alternate" selling strategy more important. Tighter consumer spending might be another factor that would put added emphasis on selling something customers do not request.

The Three Alternatives

When a customer enters a store and requests a certain set or appliance that is "out" at the time, the salesman has three alternatives: (1) getting a signed order for future delivery of the exact model requested; (2) switching the customer to another brand or style for immediate delivery from store stock; or (3) losing the sale.

Obviously, the third alternative, losing the sale, is not what progressive radio and television salesmen want. Yet, if one of the other alternatives is not taken by the customer that is exactly what does happen . . . commissions and profits

"Alternate" selling should not be used to switch a customer from one definite product to another when the item originally requested is best suited to the customer's needs. For instance, switching a customer from a requested brand of automatic washer to a conventional washer might be possible, but the sales effort required to perform the switch might be better used to sell another brand. Or, better yet to get a signed order for the requested brand washer for later delivery.

Here are some suggestions that will make "alternative" selling easier and still retain the customer's good will:

1. Try for a Signed Order

When a customer definitely requests a certain TV brand, size screen, style cabinet, and finish that is temporarily out of stock, it is best to try for a signed order. A great many sales for future delivery can be made this way because the customer's resistance is at a low ebb.

Such customers have been presold on the particular set by advertising and their friends' comments. They know what they want and any effort to switch them to something else may antagonize them. Salesmen who sell the most get in step with the customer and try for a signed order for future delivery . . . and make the delivery as quickly as possible.

Remember: When a customer makes a specific request always try for a signed order for future delivery first!

2. Discover Customer's "Real" Wants

If the customer will not accept future delivery, or if the requested brand is one for which the dealer does not have a franchise it is necessary to apply substitute selling strategy. There are two alternatives in the approach to this problem: (1) tell the customer that the item is out of stock (or not stocked); or, (2) find out what it is that the customer really wants.

Telling the customer that the

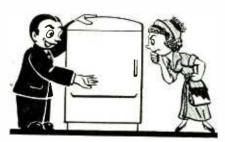
Brands You Don't Carry?

"Alternate" and "Switch" Merchandising Can Save Many a Sale

merchandise is out of stock or is not stocked will be a truthful answer, but it will not add any sales to the total for the day. Finding out what it is that the customer really wants will prepare the way to make a sale.

For instance, a customer might ask for a particular brand of television set. The dealer does not have a franchise for this particular make, but he honestly believes another brand he does stock is equal to the requested one. He might say to the customer, "That is a good choice, but why do you prefer that particular brand?"

The customer might say, "Because a friend of mine has one and he says it gives the clearest picture he has ever seen, and it's low priced." This gives the alert salesman three keys to the *real* wants of



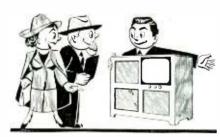
There are so many good brands on the market today that substitute selling can be practiced ethically by any salesman. No dealership can stock everything there is but all can sell the brands they have if they are the right ones for the community.

this customer: (1) a clear picture, (2) an inexpensive set, and (3) a desire to stand well with his friend.

Armed with this information the salesman can show other brands that give a clear picture and are inexpensive. Then, in talking about the sets he can point out features that this model has that his friend's set does not have. It will give the customer something that will satisfy his *real* wants.

When customers say they want to buy a TV receiver not stocked by the store, some salesmen use this opening remark, "That is *one* of the best television sets on the market." This gives the customer a chance to save face, is truthful, and leads naturally into a demonstration of another *one* of the best television sets on the market.

Successful salesmen agree, however, that the opening remarks



In cases where the dealer is out of a certain model, salesmen should try to get a signed order for future delivery. Where the dealer is not franchised for a requested make, a set equal (or better) to the one the customer asks about should be presented.

should not knock the requested brand in any way. In fact, the less said before asking "Why do you prefer that particular brand?" the better footing for the sale is the opinion of most salesmen.

Remember: When a customer requests a brand you do not stock, find out the "real" wants of the customer first!

3. Point Out Similarity of the Products

Some salesmen using the substitute selling strategy will fall back on the old saw, "This is just as good as...." In modern selling this is an extremely weak method. The customer doesn't believe it is just as good or he would have asked for this brand in the first place.

First it is necessary to know which of the features of the set rang a bell with the customer. Asking why the customer prefers this particular brand will bring out the features the customer wants. Then, it is necessary for the salesman to catalog these preferences so he will be able to point out the similarity between the requested brand and the other product.

When a customer asks for a particular selling feature or design of a television set that is exclusive with one brand, it is necessary to carry the investigation one step further. For instance, a customer might say, "I want that brand because it has a special screen." The salesman could say, "Why do you like that screen?" The answer to this will uncover the all important "why," and the salesman will know how to tailor his talk to the customer's wants.

Remember: When you know the real wants of the customer, point out the similarity of the substitute.

4. Be Frank and Earnest

Salesmen who are most successful in using the "alternate" selling technique find that they gain more sales by being 100% truthful. Customers appreciate the appeal of a frank statement and will face the issue with an open mind.

For instance, a salesman can say, "I'm sorry we are temporarily out of the television set you requested. We have had a run on that line that took all of our stock. We will have



Customers have confidence in what the reputable dealer tells them. Honesty pays off handsomely since people will take the dealer's word that the suggested substitute radio, TV set, or appliance will fill the bill.

more next week and I'll save the first one that comes in for you."

This gives the customer a frank answer and moves in for a close with a signed order for delivery next week. Customers know that merchandise sells and can easily see why this brand moved so quickly . . . other people wanted it just as

(Continued on page 88)

Boost Disc Sales

You Can Create a New Phono Record Market in Your

• Disc sales records for the past few years show that 78 RPM records are steadily giving way to 33½ and 45 RPM. They also show an overall rise in disc sales. It's evident, then, that as the new speeds gain higher acceptance, total disc sales rise.

The dealer who plans for the future will do well to consider this industry trend. More and more, as new folk come to appreciate the features of the new speeds, new record fans are born, and wider markets created for the dealer. But even with constant repetition of the new speed "sales story," many people still do not try them because of the one big stumbling block: their phonograph plays 78 RPM only.

This is very much like the story of years ago, of the high-pressure door-to-door vacuum cleaner salesman and his in-the-home demonstration. After reassuringly strewing the living room rug with oatmeal, sawdust, confetti, etc., the salesman proudly unpacked his demonstration vacuum cleaner and asked the housewife where he could plug it in, whereupon she told him that the house was not wired for electricity and he'd better get that mess off her rug before she called a cop.

The Equipment Comes First

It is much the same story today in the phono record field. A dealer can talk himself blue in the face enumerating the advantages of the new speeds to the owner of a 78-only phono, but unless he can first sell the proper playing equipment, he won't sell any of the new speed discs. The key, then, to high disc sales, is in selling new speed playing equipment.

A large market for sales of new phonographs is in the modernization or conversion of that equipment, if any, which the customer now owns. A conversion campaign to sell new equipment can include a number of plans, designed for customers who own 78 RPM players, 2-speed units, 3-speed units, or no phonograph equipment at all.

While selling new equipment to those who do not already own phonos is not, strictly speaking, a conversion deal, the dealer should have a prepared package deal for those prospects. A 3-speed plug-in attachment, **Push Sales of New Speed Phonos**

To Broaden the Market for Platters

To Make More Sales of New Sets

To Build Service Department Business

with or without a case or cabinet, will tie-in well with a regular conversion campaign. Those who already own equipment which will handle two of the speeds are prospects either for a plug-in attachment which will play the speed they are missing, or for a complete new 3-speed unit. Even those who already own 3-speed units are prospects for sales of new phono equipment, such as a one or three speed unit for the play room, children's room, summer home, etc.

What the Plan Includes

For those customers who own 78 RPM phonographs, of which there are still almost 12½ million in the U.S., a typical conversion plan should include: 1. A new-speed unit, 2. Complete installation, and 3. Removal of the old unit. The last item is important. It is this which changes the transaction from a straight sale of a new unit to a conversion job, with some "trade-in" value attributed to the old unit.

While the old 78 RPM unit represents very little, if any, value to the dealer, it still represents value to the customer, and he will, in his own mind, add this "waste" to the cost of the transaction. Taking it away as part of the conversion plan allows the customer to feel that he has realized some "trade-in" value from it.

The package deal should carry an overall price, without assigning any specific value to each part. Price can be adjusted accordingly for those cases where no installation is required, as with phono attachments.

The dealer who instigates such a conversion campaign will do well to concentrate on one or two specific replacement units. He will become

more familiar with the installation and operation of these units by continually working with them, and become more efficient in making installations.

In addition to selling more new speed phonographs and widening the dealer's market for disc sales, a well planned and well executed phono conversion campaign will yield other good results. It will start people thinking about their outmoded equipment and will spur sales of new sets and combinations. And don't forget trying to "sell-up" for all you're worth with those folk who inquire about your modernization plan. While they're considering a change in their equipment, they're ripe for a complete change, such as a new combination model.

Sell-Up to TV Combox

This "sell-up" attempt will be especially successful with those customers who do not yet own a television set, but perhaps own a radiophono combination with 78 RPM phono. You can point out that just as they now want to have new speed record playing equipment, they will before long be wanting a TV set, if they do not already want one, and this would be a good time to solve all the present and future problems by buying an up-to-date TV-radiophono combination.

In promoting a phono modernization campaign, make wide use of store displays, and pay special attention to disc customers who buy 78 RPM records. These customers are especially good prospects for conversion deals and for more disc sales because they endure as disc customers even with 78 RPM equipment. With new speed equipment they can

With Phono Campaign

Area; But You Must First Sell the Proper Playing Equipment

get even more enjoyment from records and become even more active as record buyers.

Another angle which can be incorporated into a modernization plan is a tie-in sale of new speed records. A few records can be offered as part of the overall price, to start off the new speed disc collection. This will help to sell the customer who says the deal will actually cost him more than the "overall" price because he will then have to buy some new speed discs in order to enjoy any benefits from his new instrument.

A Profitable Operation

All in all, the complete conversion deal represents a very profitable operation for the dealer. With the tie-in angle, he sells phono equipment, records, and service (the installation) at a pre-set price. He also uncovers for himself innumerable opportunities for add-on sales and for "selling up" to sales of new sets and combinations. And the combined as has been pointed out, often are met with the objection that the customer does not have new speed playing equipment. The objection to buying new speed equipment is that the customer does not have any new speed records to play anyway. And an attempt on the part of the service department to do installation jobs involves the individual "add-on" items of new speed equipment and records.

Job Must Be Complete

And the customer is right, too, for unless the conversion is complete, he will not get much benefit from it.

Thus, the complete conversion plan has the added advantage of grouping together all the good selling points, while overcoming most of the sales objections, and throwing in as the "sales clincher," the "trade-in" angle, thereby making excellent use

of the biggest sales objection most often raised by the customer.

And the happiest thought of all is that all of this business stirring sales activity is not even the main objective, but serves to widen the dealer's market for new speed phonograph record sales, thereby boosting volume even higher.

We at RADIO & TELEVISION RETAIL-ING have long encouraged correlating the various operations in the Four-Way dealer's store for making higher sales in all departments. A complete phonograph modernization plan is an excellent example of such inter-departmental activity. With the new speed disc sales indicating an industry trend, the conversion deal becomes a "how-to-boost business by-boosting-business" plan, and the dealer who makes the best use of his four-way operation must certainly take it into consideration.



Year 'Round Extra Profits in

Electric Housewares

Big NEMA Drive for Sales Under Way. Dealers Can Get on Bandwagon Now—Display



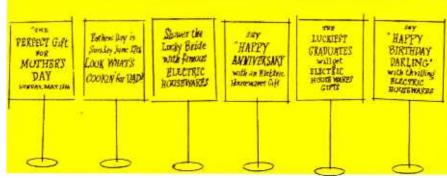
• A greatly expanded electric housewares Gift Campaign for 1952 has been launched by the Electric Housewares Section, National Electrical Manufacturers Assn., 155 E. E. 44th St., New York 17.

The theme, "Give Electric Housewares—first choice for every gift occasion," is designed to give dealers in this field a greater share of the multi-billion year 'round gift market. But there's a great deal more to this campaign than a mere slogan. The drive is being backed up by down-to-earth dealer aid material

Show How With Demonstration



Prepare a demonstration table with outlets near the gift display. Gift shoppers are frequently undecided, but all customers can be speeded toward a sale by action that captures their interest. Illustrations from NEMA Plan Book.



Transform a good intention into a sale with sign copy. Here are some suggestions that will help convert shoppers into customers, stimulate impulse buying. Special events can be capitalized on.

prepared by experts, and by a 32-page Plan Book, full of display, advertising and selling ideas.

100,000 copies of the Plan Book will be distributed to retailers, manufacturers, distributors, utility companies, electric leagues, newspapers, etc. About 68,000 copies will go to dealers free of charge.

Emphasizes Visual Aids

The Plan Book of 1952 places a greater emphasis on visual merchandising aids, giving merchants a large choice of display ideas which can be set up at little cost without the need of special material. The book contains three pages of reduced-size ad layouts, six pages of matted headings

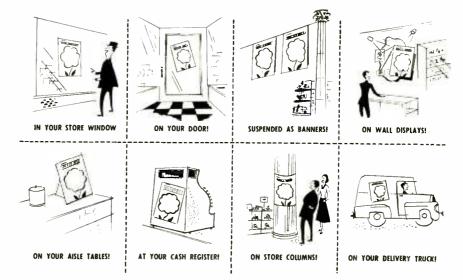
and six pages of matted product illustrations. Through the Bureau of Advertising, any daily newspaper can obtain a complete set of mats which would then be available for dealer use.

A 72-piece display kit, the largest ever offered by the Section, is also available at the extremely low cost of \$3.95. It contains 3 large poster blowups, 3 easel-backed mounted counter cards, 6 display streamers, 3 pennant displays, 15 salesmen's badges, 3 narrow display streamers and 39 item price tickets.

Details of a display contest for dealers throughout the nation will be announced at a later date.

Dealers all over the country will

8 Ways to Get the Best Use From the Gift Poster



Gift Campaign

and Promotion Material Available—72-Piece Kit at Low Cost Is Offered

cash in heavily on this expanded Electric Housewares Gift campaign. Participation by the merchant is a simple affair. He isn't required to join any group nor to pay a fee of any sort. All he has to do to get started is to send for his free Plan Book, the kit, previously mentioned, selling at \$3.95, and he's ready to take part in a nationwide sales drive bound to bring him additional sales volume every month in the year.

A Front Door Display Can Be Made to Pay



An Electric Housewares gift display at the front door ornear the entrance catches every passing customer with its extra eye appeal. Use a front door gift display the year 'round . . . re-dress it for special gift occasions.



Lovebird unit is cut out of beaverboard and mounted on a wooden pole. Copy is lettered on a paper ribbon. Unit is placed on platform which displays merchandise. Anniversary display is good any day of the year! Suggestive selling is enhanced by "silent salesmen" in attractive displays.

Promotion Timetable

TIE IN AND CASH IN ON ALL THESE SELLING OPPORTUNITIES!

APRIL

153,000 Weddings

3,000,000 Anniversaries

11,612,000 Opportunities

PLUS EASTER GIFTS

459,000 Showers

8,000,000 Birthdays

BED COVERINGS
BLENDERS
BOTTLE WARMERS
BROILERS
CLOCKS
COPPEE MAKERS
COPPEE MILLS
CORN POPPERS
DIEP FRYES
EGG COOKERS
FANS
FOOD MIXERS
HABE DRYERS
HEATING PADS

HEATERS HOTPLATES IRONS ICE CREAM PREEZERS ICE CREAM FREEZER
JUICE EXTRACTORS
KNIFE SHARPENERS
MASSAGERS
BOASTERS
SANDWICH GRILLS

FEBRUARY

122 000 Weddings 367,000 Showers 2,402,000 Anniversaries 8,500,000 Birthdays 11,391,000 Opportunities PLUS VALENTINE'S DAY

MAY

173,000 Weddings 518,000 Showers 3,391,000 Anniversaries 8,500,000 Birthdays 12,582,000 Opportunities

PLUS MOTHER'S DAY GIFTS PLUS GRADUATION GIFTS

MARCH

106.000 Weddings 319,000 Showers 2,084,000 Anniversaries 9,130,000 Birthdays 11,639,000 Opportunities PLUS EASTER GIFTS

JUNE

223,000 Weddings 670,000 Showers 4,380,000 Anniversaries 8,900,000 Birthdays 14,173,000 Opportunities

PLUS FATHER'S DAY GIFTS

Many times an attractively wrapped package is the clincher to a sale. Offering to gift wrap makes a good impression for your store, creates customer satisfaction and repeat sales.

Write now to Electric Housewares Section of NEMA, 155 E. 44th St., New York 17, N. Y.

On these and other pages the reader will find pictorial how-to-do ideas prepared by Ralf Shockey & Associates, merchandising counselors, who are handling the campaign for NEMA.

Gift-Wrapping a Must



Cash in on

Electric Housewares Drive!

NEMA's Expanded Gift Campaign Offers Dealers Opportunity to Up Sales and Profits

• Dealers who participate actively in the big Electric Housewares Gift Campaign can reap a lot of extra sales of small appliances. Active participation costs practically nothing in money, but it does call for a determined drive for business. The Number One step to take is to send for the 1952 Plan Book. It's free, and it is obtainable from the Electric Housewares Section, National Electrical Manufacturers Assn., 155 E. 44th St., New York 17, N. Y. A 72-piece display kit, described elsewhere in this issue, sells for \$3.95.

Armed with the promotional material available from NEMA, the dealer is ready to step out. He needs to set up some sparkling displays, such as the ones illustrated on this page. He needs to set up effective demonstration facilities, train his salespeople, and devote a portion of his advertising budget to advertising Electric Housewares.

More and more people are giving small electrical appliances as gifts, and the big campaign being staged by NEMA is bound to bring a lot more into the fold. The gift market is huge, and the dealer who suggests and sells Electric Housewares will get his share of this business, building floor traffic, volume and profits.

Father's Day Gift Display Is a Traffic-Stopper



Dad is cut out of beaverboard, placed on pedestal. Merchandise is displayed on platforms covered with Facil-Fab. Like all Electric Housewares gift displays, it should include descriptive signs and gift-wrapped boxes

Every Day Is Someone's Birthday



Birthday display represents a large cake. Tiers are made of various size platforms covered with Facil-Fab. Candles are painted. Drape above unit is cut out of beaverboard and is suspended from the ceiling. The NEMA plan book carries ideas for a number of effective displays.

NEMA Electric Housewares Section Members

American Electrical Heater Co. Arvin Industries, Inc. Camfield Manufacturing Co. Casco Products Corp. Chicago Electric Mfg. Co. Cory Corporation **Dormeyer Corporation** Dulane, Inc. The Emerson Electric Mfg. Co. The Fresh'nd-Aire Company (Div. of Cory Corporation) General Electric Company General Mills, Inc., Home Appliance Dept. Hamilton Beach Company Div. of Scovill Mfg. Co. The Hobart Manufacturing Co. Knapp-Monarch Company Landers, Frary & Clark National Pressure Cooker Co. National Stamping & Electric Wks. Nesco, Inc. Oster Manufacturing Co., John Proctor Electric Company Rival Manufacturing Co. Samson United Corp. Silex Company The Swartzbaugh Mfg. Co. Toastmaster Products Division, McGraw Electric Company U.S. Manufacturing Corp. Waring Products Corporation Westinghouse Electric Corporation

Here's How to Get Customers to VISIT YOUR STORE

Send out special invitations to your customers to visit store for special demonstrations on certain dates, at specific time. For instance: Invite them to a demonstration of how to make good coffee . . . how to iron clothes properly . . . how to bake delicious waffles . . . how to use blenders, broilers, fryers, food mixers, roasters. Demonstrate "health" and "comfort" appliances such as hair dryers, electric blankets, heat pads, vibrators, vaporizers, heat and sun lamps.

Mother's Day Calls for Special Treatment



Displays represents a large family album. Right side is a shelving unit decorated with paper doilies to display electric housewares. Left side shows page with Mother's picture drawn on beaverboard. Page is covered with Facil-Fab and ribbon. Illustration is from NEMA's new plan book.

Makers of Electric Housewares

B-Blankets BW-Bottle warmers —Casseroles —Chimes, door —Clocks —Coffeemakers

CN—Can sealers CP—Corn poppers DR—Dryers, hair EG—Egg cookers

FA—Fans FR—Fryers G—Grills, waffle, sandwich HE—Heaters, space

IF—Ice cream freezer IR—Irons, hand JU—Juicers KN—Knife sharpener

LI—Liqueflers M—Mixers MI—Mills, coffee P—Pads, heating

-Hot plates -Roasters RS-Rotissieries —Sleeping pad —Toasters -Vaporizers -Vibrators

AMERICAN ELECT. HEATER CO. (American Beauty), 6110 Cass Ave., Detroit 2. IR AMERICAN ELECT. MFG. CO. (Chief) 3456 S. Grand Ave., St. Louis, Mo. 1R

ARVIN INDUSTRIES, INC., Columbus, Ind. FA, G, HE, IR, RO, TO

ASQUITH ASSOCIATES, INC., (Chrom-Ever), 131 State St., Boston, Mass. FA, M,

ATLAS TOOL & MFG. CO., 5147 Natural Bridge, St. Louis, Mo. FA

AUTH ELECT. CO., 34-20 45 St., Long Island City, N. Y. CH

BERNS MFG. CORP. (Air King) Chicago

BERSTED MFG. CO., Div. of McGraw Electric Co., Fostoria, Ohio. FA (Eskimo & Zero), IR, PL, TO, CP, G (Fostoria), M (Eskimo & Whiz Mix), HE (Focalipse & Sun Valley), HE, VI, KN, P (Eskimo)

BROIL-QUIK CO., 2330 Fifth Ave., New York 37, BR, FR, RS

BUFFALO FORGE CO., 205 Mortimer St., Buffalo, N. Y. FA

BURPEE CAN SEALER CO., Barrington, III. FR, CN

CAMFIELD MFG. CO. (Blue Ribbon), Grand Haven, Mich. CM, TO

CARDINAL MFG. CO., 1629 N. 14 St., St.

Louis 6, Mo. IR CASCO PRODUCTS, INC., 512 Hancock Ave., Bridgeport, Conn. IR, P

CHELSEA FAN & BLOWER CO., INC., Irvington 11, N. J. FA

CHICAGO ELECT. MFG. CO. (Handyhot), 6333 W. 65 St., Chicago, 38. CP, FA, FR, G, HE, IR, JU, M, PL

CIRCULATORS & DEVICES MFG. CORP. (Frigid), Brooklyn 32, N. Y. FA

CORY CORP., 221 No. La Salle St., Chicago 1. CM, KN

DIEHL MFG. CO., Somerville, N. J. FA DOMINION ELECT. CORP., Mansfield, Ohio. CM, CP, DR, FA, FR, G, IR, PL, TO

DORMAY PRODS. CO., 612 N. Michigan Ave., Chicago 11. SP

DORMEYER CORP., 4300 N. Kilpatrick Ave., Chicago 41. FR, LI, M, TO

DULANE, INC., River Grove, III. CP, FR

ELECTRIC STEAM RADIATOR CORP., Paris, Ky. BW, HE, VA

EMERSON ELECT. MFG. CO., 8100 Florissant Ave., St. Louis, Mo. FA

EVANS PRODUCTS CO., Plymouth, Mich. FA S. W. FARBER, INC., 415 Bruckner Blvd., New York 54, BR, CM

FASCO INDUSTRIES, INC., Rochester 2, N. Y. FA

FINDERS MFG. CO., 3669 S. Michigan Ave., Chicago. BR, FA, FR, G, IR

FRESH'ND AIRE CO., 221 No. La Salle St., Chicago 1. FA

GENERAL ELECT. CO., Bridgeport, Conn. B, CL, FA, G, HE, IR, M, P, RO, TO

GENERAL MILLS, INC. (Betty Crocker), 1620 Central Ave., N.E., Minneapolis, Minn. IR, TO

A. C. GILBERT CO., 319 Peck St., New Haven, Conn. DR, FA, HE, M

HAMILTON BEACH CO., Racine, Wisc.

HANKSCRAFT CO., 1007 E. Washington Ave., Madison, Wisc. BW, EG

HILL-SHAW CO., 311 N. Desplaines St., Chicago, CM, PL

HOBART MFG. CO. (Kitchen Aid), Troy, Ohio. IF, M, MI

HOOVER CO., North Canton, Ohio. IR HUNTER FAN & VENT. CO., 390 S. Front St., Memphis, Tenn. FA

ILG ELECT. VENT. CO., 2873 N. Crawford Ave., Chicago. FA

INGRAHAM CO., Bristol, Conn. CL IONA MFG. CO., 24 Clark St., East Hart-

ford, Conn. M

JAY KAY METAL SPEC. CO., 340 Stanton St., New York. BR, RS

JEFFERSON ELECT. CO., Bellwood, III. CL JOHNSON FAN & BLOWER CORP., 1319 W. Lake St., Chicago 7. FA

KISCO CO., INC., St. Louis 4, Mo. FA KNAPP-MONARCH CO., 3501 Bent Ave., St. Louis 16, Mo. BR, CM, CP, DR, FR, G, IR, P, PL, TO, VA

KORAL ELECTRIC MFG. CO., 43-22 Van Dam St., Long Island City, N. Y. HE, IR

LANDERS, FRARY & CLARK (Universal), New Britain, Conn. B, CM, G, IR, LI, M,

LAU BLOWER CO., Dayton 7, Ohio. FA LECTRICOVERS, INC., 330 Fifth Ave., New York 1. B

LUX CLOCK MFG. CO., INC., Waterbury, Conn. CL

MANNING-BOWMAN & CO., McGraw Electric Co., Elgin, III. BR, CM, CP, FA, G, IR, P, TO

MARKEL ELECT. PRODS., Buffalo, N. Y. HE MARLUN MFG. CO., New York 10. RS

MARS MFG. CO., Beverly Hills, Calif. JU MEIER ELECT. & MACHINE CO., 3525 E. Washington St., Indianapolis, Ind. FA

MERIT-MADE, INC., 37 Franklin St., Buffalo 3, N. Y. TO

MIMAR PRODUCTS, INC., Brooklyn 5, N. Y. DR, FA

NATIONAL DIE CASTING CO., 3635 Touhy Ave., Chicago 45, HE, JU

NATIONAL ENGINEERING & MFG. CO., Kansas City 6, Mo. FA

NATIONAL PRESSURE COOKER CO., Eau Claire, Wisc. FR, IR, PC

NATIONAL STAMPING & ELECT. WORKS (White Cross), 3220 W. Lake St., Chicago, III. B, CM, G, IR, TO

NELSON MACHINE & MFG. CO., Ashtabula, Ohio. G, IR, PL

NESCO, INC., 270 No. 12th St., Milwaukee, Wisc. CA, PC, RO

NORTHERN ELECTRIC CO., Chicago 25. B NUTONE, INC., 1451 Merchandise Mart, Chicago 54, CH, HE

JOHN OSTER MFG. CO., Racine, Wisc. DR, KN, LI, M, VI

PALMER MFG. CORP., Phoenix, Ariz. FA PRECISION MFG. CO. (Rainbow), Dover, N. J. G, IR, PL, TO

PREVORE ELECT. MFG. CORP., Brooklyn 16, N. Y. G, BR, PL

PROCTOR ELECT. CO., 3rd & Hunting Park Ave., Philadelphia 40, Pa. B, IR, RO, TO

THE RITTENHOUSE CO., INC., Honeoye Falls, N. Y. CH

RIVAL MFG. CO. (Steam-O-Matic), 15 & Wabash Ave., Kansas City 1, Mo. BR, G, IR, JU

ROBBINS & MYERS INC., Memphis, Tenn.

ROMAR CORP. (Fleck) Asbury Park, N. J.

ROTISS-O-MAT CORP., Astoria, N. Y. RO RUTENBER ELECT. CO., Marion, Ind. FR SALTON MFG. CO., INC., 29-31 Jumel Pl.,

New York 32. PL SAMSON UNITED CORP., Rochester, N. Y. FA, G, IR

SCHWITZER-CUMMINS CO., Indianapolis 7, Ind. FA

SESSIONS GLOCK CO., Forestville, Conn. CL THOMAS CLOCKS, Thomaston, SETH Conn. CL

SIGNAL ELECT. MFG. CO., Menominee, Mich. FA

SILEX COMPANY, Hartford 2, Conn. CM, IR

SON-CHIEF ELECTRICS, INC., Winsted, Conn. HE, IR, P, TO

STERN-BROWN, INC. (Superstar), 42-24 Orchard St., Long Island City 1, N. Y. BR, G, IR, PL, TO

STEWART MFG. CO., Indianapolis, Ind. FA SUNBEAM CORP., 5600 Roosevelt Road, Chicago. CM, IR, M, TO

SUPERIOR ELECT. MFG. CO., (Chief), Cape Girardeau, Mo. IR

O. A. SUTTON CORP. (Vornado) Wichita, Kan. FA

TELECHRON, Dept. of General Electric Co., 144 Main St., Ashland, Mass. CL

TOASTMASTER PRODUCTS DIV., McGraw Elect. Co., Elgin, III. GR, TO

TOAST-O-LATOR CO., INC., 10-23 Jackson Ave., Long Island City 1, N. Y. TO

TOASTSWELL CO., 620 Tower Grove Ave., St. Louis 10, Mo. TO

U. S. MFG. CO., 1157 W. Grand, Chicago, CP VICTOR ELECTRIC PRODUCTS, INC., 2950 Robertson Ave., Cincinnati 9, Ohio. FA

VIKING AIR COND. CORP., Cleveland 2. FA WARING PRODUCTS CORP., 25 W. 43 St., New York 18. LI, IR

WEST BEND ALUMINUM CO., West Bend, Wisc. CA, CP, CM, PL, RO

WESTINGHOUSE ELECTRIC CORP., Mansfield, Ohio. B, CM, FA, G, HE, IR, M, P, PL, RO, TO

WINSTED HARDWARE MFG. CO., Winsted, Conn. IR

Andrea quality TV linë available to new markets

"Appointing distributors and developing new distribution areas, like producing high quality television instruments, is a serious problem requiring sound planning and a comprehensive program.

Today ANDREA distributors are successful business houses, contributing to the progress of profit minded dealers. These distributors are filling a need for high quality, "trouble-proof", distinctive television merchandise. The growth of ANDREA in every market where these fine instruments are sold has made it necessary for us to increase our production facilities. As a result, additional areas will be surveyed and ANDREA distributors appointed in pre-selected, strategic TV markets.

ANDREA receivers today have the lowest service incidence in the industry.* — Now ANDREA prices are more than competitive, but the ANDREA policy of ample distributor and dealer profit margins remains unchanged. Profit conscious distributors and dealers will want full particulars on the ANDREA line — the finest in the "quality" television field. I especially welcome inquiries from my many friends who have known me and the superior products of my companies during my 32 years in radio and television.

A letter today will bring you full particulars by return mail."

*Independent surveys prove that ANDREA receivers average less than one service call per year.

Grank a. D. andrea

PRESIDENT, ANDREA RADIO CORP.

A CALLER CONTROL OF THE ACTION OF THE CALLER CONTROL OF THE CALLER CONTROL OF THE CALLER CALL ANDREA-THE STABILITY LINE FOR '52

- *1. NO SERVICE "RED INK" . . . Independent surveys show Andrea with the lowest service incidence in the TV industry. It's the stability set of the industry.
- 2. LONG DISCOUNTS . . . One Andrea sale is worth two ordinary sales more margin-extra profit for you.
- 3. FAST-MOVING INVENTORY . . . Just 6 basic models, geared to 1952 popular demand. No white elephants on your hands.
- 4. RESTRICTED DISTRIBUTION . . . No "next door" competition-more prospects for you-room for real sales.
- 5. QUALITY LEADERSHIP . . . finest product of Frank A. D. Andreo's 32 years as a pioneer in radio and television.

Leaders of the '52 line



FOR THORD ... 20-INCH ... FM RADIO ... FULL DOORS



GCTHAM... 17- NCH... FM RADIO... TABLE MODE



EFEWSTER ... 7-INCH ... FM RADIO ... CONSOLE



STABILITY...today's biggest TV value

ANDREA RADIO CORP. • 27-01 Bridge Plaza North, Long Island City, N. Y.

New Television Lines

RCA VICTOR

Among the six new TV models in-Among the six new 1v models introduced, all of which feature the Super Chassis, is RCA Victor's first 21-inch table model, The Selfridge, shown here, Called model 21T-159, the Selfridge is



available in mahogany or walnut cabinet at \$379.50, and in limed oak, at \$389.50. A matching consolette base lists at \$20 in the darker finishes, \$22.50 in limed oak. Two other new table models are the Colby (model 17T-150), in maroon metal cabinet, at \$259.95 (matching base lists at \$18.95); and the Glenside (model 17T-151), mahogany grain finish, \$279.-95, and in blond grain finish, \$289.95. Matching base in either finish is \$18.95. The Crafton (model 17T-163) is an The Crafton (model 17T-163) is an open-face 17-inch console. List is \$339.50 in mahogany or walnut cabinet, \$349.50 in limed oak. The other 17-inch set introduced is a full-door console, the Calhoun (model 17T-173). Available in mahogany or walnut, the Calhoun lists at \$395. Also introduced was the Meredith (model 21T-165), 21-inch man-face cancale List price is \$425 in open-face console. List price is \$425 in mahogany or walnut finish, \$445 in limed oak.

limed oak.
Six models held over from the 1951
Fall line are the Covington, \$379.50;
Kendall, \$389.50; Suffolk, \$450 (\$470 in
limed oak); Donley, \$475 (\$495 in limed
oak); Rockingham, \$495; and the
Clarendon, \$525. RCA Victor Div. of
Radio Corp. of America, Camden, N. J.
—RADIO & TELEVISION RETAILING.

MAGNAVOX

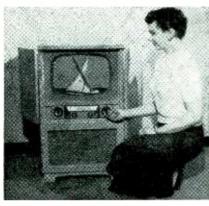
Highlighting the 1952 line is the introduction of three models incorporating Magnavox's new long distance syn-chromatic chassis. The new chassis is featured in the Avenue and Wedgewood 20-inch TV-radio-phono combinations, and in the Constellation table model (shown here). Called the Magnavox LD



105, the new chassis is designed especially for long distance reception. It employs 21 tubes, including two rectifiers and the picture tube. Magnavox Company, Fort Wayne, Ind.—RADIO & TELEVISION RETAILING.

ADMIRAL

Twelve new television models have been added to the 22 introduced late in 1951, to make up the new 1952 line. Highlighting the new additions is a 20inch table model, available in ebony or mahogany plastic cabinet, listing at \$239.95 and \$249.95, respectively (models 121M11 and 121M12). A 21-inch table model includes the AM radio feature which has been added to nine of the new models. It is available in mahogany cabinet (521M16) at \$349.95, and in blond cabinet (521M17) at \$359.95. New consoles include the 17-inch model, shown here, which also includes the AM



radio, and is available in walnut (47M-15) at \$299.95, mahogany (47M16) at \$309.95, and blond (47M17) at \$329.95. A 21-inch model (also with AM radio) is available in walnut (421M15) at \$399.95 and in mahogany (421M16) at \$409.95. The three new combination models introduced all include 21-inch television. They are: 321M25, walnut, \$499.95; 321M26, mahogany, \$519.95; and the 321M27, blond, \$539.95. Admiral Corp., 3800 Cortland St., Chicago, Ill.—RADIO & TELEVISION RETAILING.

STROMBERG-CARLSON

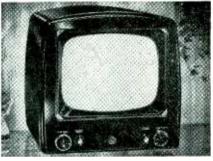
Two new 24-inch picture tube television consoles have been introduced. The Newcastle (324CDM), traditional mahogany veneer model shown here, is



priced at \$725. The Cathay, identical in electronic and mechanical design, is hand-decorated in classic Chinese tradition. It lists (model 324C5Dec) at \$795. It is also available in fine ribbon-striped mahogany veneers (model 324C5M) at \$695. Stromberg-Carlson Co., 100 Carlson Rd., Rochester 3, N. Y.—RADIO & TELEVISION RETAILING.

PHILCO

The 1952 line of Philco television receivers includes 17, 20 and 21-inch sets. All 19 models feature the super-chassis and Colorado tuner. Lowest price set is the 1802, 17-inch plum colored table model, shown here, priced at \$199.95. Two other 17-inch table models, the 1820 in tan finish cabinet, and 1821 in



burgundy, list at \$239.95 and \$259.95 respectively. The 1850, 17-inch mahogany console, lists at \$299.95.

The 20-inch series offers 3 table models: the 2120, cordovan leather cabinet, \$259.95; 2122-M, mahogany, \$299.95; and the 2122-L, blond oak, \$319.95; The other three 20-inch sets are consoles: 2150, wellow: \$319.95; 2151-M consoles: 2150, walnut, \$319.95; 2151-M, mahogany, \$339.95; and the 2151-L, blond oak, \$359.95.

The only table model in the 21-inch line is the 2224, in mahogany cabinet, \$339.95. Three 21-inch mahogany consoles, the 2252, 2253 and 2254, list at \$359.95, \$379.95 and \$399.95. Model 2256, 34 door mahogany console, lists at \$429.95. Full door mahogany model 2258 is \$449.95. Other two 21-inch sets are combos: 2283, with AM radio, \$599.95, and the 2275, top model in the line, shown here, with AM and FM radio, in solid mahogany and veneer cabinet, \$775. Phileo Corp., Phila. 34, Pa.—RADIO & TELEVISION RETAILING.

MAJESTIC

Two new models have been added to the 1952 television line. The first is a 17-inch open-face console, model 17C64,



featuring built-in antenna, phono jack, and mahogany wood cabinet. List price is \$249.95. The second item, which is shown here, is a 20-inch console combination, with AM-FM radio, 3-speed phono, and full door mahogany cabinet. Called the 20FP88, it lists at \$539.95. A blond mahogany version, the 20FP89, lists at \$559.95. Majestic Radio & Television, Div. of The Wilcox-Gay Corp., 385 Fourth Ave., New York 16, N. Y.—RADIO & TELEVISION RETAILING. featuring built-in antenna, phono jack,

New Electrical Appliances

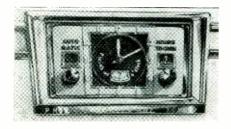
Philco APPLIANCE LINE

The 1952 Philco refrigerator, freezer, electric range, and air conditioner lines have been announced.

The refrigerator line includes nine full length single door models and three 2door models with Automatic Defrost. Prices of single door models are as follows: 722, 7.2 cu.ft., \$214.95; 7.1 cu.ft. models 724, \$239.95, and 726, \$259.95; 9.2 cu.ft. models 923, \$259.95 and 923D, 289.95; 9.4 cu.ft. models 924, 925, \$329.95; 925L, \$334.95; 1124, 11.1 cu.ft., \$339.95; and 11.2 cu.ft. models 1125, \$369.95, and 1125L, \$379.95. Two door models are the 8.2 cu.ft. 828, \$349.95; 10.1 cu.ft. 1028, \$399.95; and the 12.1 cu.ft. 1228, \$459.95. All single door models except the 722 are available in color other than black or grey.

The two new freezer models introduced are the 8 cu.ft. model GH82, listing at \$325, and the 12 cu.ft. model GH112, at \$399.95. Both models are colored in "Key Largo Green."

All eight electric range models feature the Broil-Under-Glass tempered glass broiling shield, four of the models feature in addition the built-in Jiffy



Griddle, and the two top models have, in addition to these features, the new Quickset Timer (shown in picture) which turns units on and off at preset times. The line includes apartment size model 223, \$189.95; full size, single oven models 421, \$209.95; 422, \$229.95; and 423, β269.95. Models which also include the Jiffy Griddle are the 423D, \$289.95; and the 425, \$319.95. The two top models, with all three of the features, are the 427,

all three of the features, are the 421, \$379.95; and the 428, \$419.95.

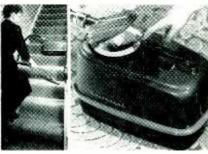
The 1952 Philos air conditioner line includes 10 models, features model 33-H, 13 HP model. This unit is designed for cooling small rooms. Has automatic temperature control thermostat which progressively reduces cooling effect as room temperature drops. List price is \$229.95. Philco Corp., Appliance Division, Philadelphia 34, Pa.—RADIO & TELEVISION RETAILING.

Hunter FAN DEMONSTRATOR

A new attic fan demonstration unit has recently been announced by the Hunter Fan and Ventilating Co. Customers using the unit can start the fan, see the shutters open, and feel the result. Unit is offered to dealers with the purchase of two or more Hunter Package Attic Fans. Dealers who so order, can get the demonstrator and a 12-inch oscillating fan (list price: \$24.95) for \$25. Hunter Fan and Ventilating Co., 400 S. Front St., Memphis, Tenn.—RADIO & TELEVISION RETAILING.

Universal VACUUM CLEANER

The new Jet 99 vacuum cleaner has been announced. The unit weights 18 lbs., has two-tone green colored steel housing. Has one horsepower motor. Wands are lightweight steel. Hose is 7 ft. long. Designed both for extra power and easy portability, the unit uses disposable paper bags. Accessories include the Jet 99 nozzle, with rubber bumper and floating brush, a round brush, an oval brush. a special crevice tool, an upholstery noz-



zle, a floor polisher, a demother, and a spray gun. Unit lists at \$99.95.

The Jet 99 will be promoted heavily with a more than 1 million dollar advertising budget. Promotion will include consumer and trade advertising, dealer cooperative ads and more than 3,000 billboards from coast to coast. Each billboard will list a local dealer's name and address. Promotion plans also include store displays and other dealer sales aids. Landers, Frary & Clark, New Britain, Conn.—RADIO & TELEVISION RETAILING.

Westinghouse RANGE

A new double oven electric range has been introduced. Called the Commander, the new model (AC-774) features the Super Corox unit, Two-Level speed cooker for deep well or surface cooking, and Miragle Seeled oven Color Clarge. and Miracle Sealed oven. Color Glance

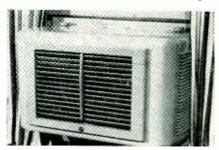


rotary controls have different colors for each heat selected. In all, four surface cooking units are provided.

Also announced is a new dehumidifier which requires no special wiring, plumbing or installation. Operates on 115 volts AC. Finish is blue-grey enamel. Unit lists at \$151.50. A timer clock is available as an accessory, at \$9.95, to operate the unit for predetermined periods. Westinghouse Electric Corp., Appliance Division, Mansfield, Ohio.—RADIO & TELEVISION RETAILING.

RCA AIR CONDITIONERS

Three models constituting the first line of home air conditioners to be offered by RCA have been announced. The models are designated for rooms of various sizes, with floor areas ranging up to 485 sq.ft.



Model numbers and prices are as follows: model 33 (up to 230 sq.ft.), \$249.50; model 50 (up to 325 sq.ft.), \$349.50; model 75, shown here, (up to 485 sq.ft.), \$399.50. Cabinets are finished in beige, grilles in tan. All grilles are adjustable, permitting control of air flow. Model 33 has \(^1_3\) HP motor, model 50 has \(^1_2\) HP, and model 75 has \(^3_4\) HP motor. RCA Victor Division of Radio Corp. of America, Camden, N. J.-RADIO & TELEVISION RETAILING.

Revco FOOD FREEZERS

Three models of food freezers are offered in the Revco line. Model FF-81, 8 cu.ft. model shown here, has a capacity of 280 lbs. of frozen food. List price is \$315. Model FF-150 is a 15.2 cu.ft. model, with 525 lb. frozen food capacity, listing at \$469.95. Largest model is the 23.1 cu.ft.

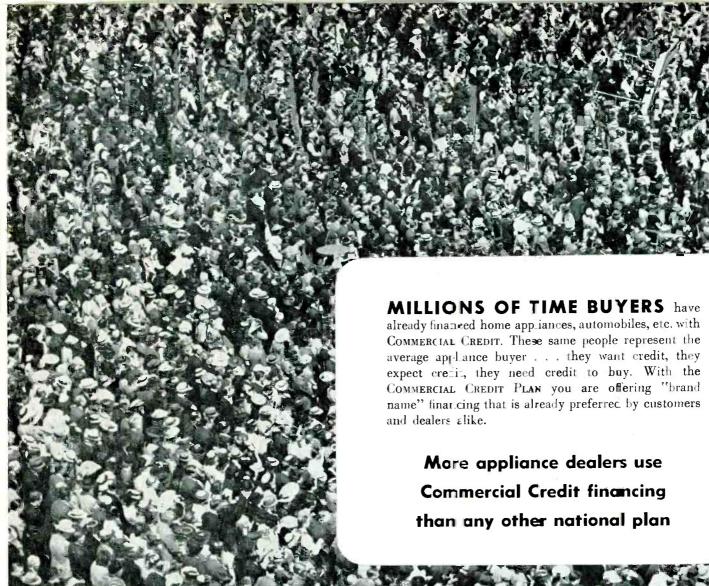


model FF-230, listing at \$599.95. model will store over 800 lbs. of frozen food. Models features include Easy Lift counterbalanced lid, plastic handled wire food trays, and temperature control from zero degrees down to minus 20 degrees. Revco, Inc., Deerfield, Mich.—RADIO & TELEVISION RETAILING.

Coolerator APPLIANCES

New models in the 1952 Coolerator refrigerator and electric range lines will be introduced this month. Announcement has been made that the line will include 8 new ranges and 7 completely new refrigerators. The refrigerator line will include several automatic defrost models. The Coolerator Co., Duluth, Minn.-RADIO & TELEVISION RETAILING.







FLOORSTOCKS HELP BOOST SALES—COMMERCIAL CREDIT offers dealers a complete financing package . . . from wholesale plan down to the smallest details of retail financing. Enables dealers to keep shelves and showrooms well-stocked with new sales producing merchandise . . . eliminates the necessity for tying up needed capital in inventories or instalment sales.



INSURANCE PROTECTS CUSTOMERS...Appliances sold under the COMMERCIAL CREDIT PLAN are automatically insured. Property Insurance coverage protects customers in event of loss of, or damage to, merchandise as outlined in policy. Life Insurance coverage cancels the unpaid balance due in event of purchaser's death.



ASK YOUR DISTRIBUTOR for a copy of this interesting book. See how the Commercial Credit Plan can help you... why many dealers have come to depend on Commercial Credit for financing as usual regardless of the times.

COMMERCIAL CREDIT CORPORATION

A Subsidiary of Commercial Credit Company, Baltimore . . . Capital and Surplus over \$120,000,000 . . . offices in principal cities of the United States and Canada.



Hot off the Wire

TO TELEVISION DEALERS EVERYWHERE

CLASS OF SERVICE

This is a full-rate Telegram or Cable-gram unless its de-ferred character is in-dicated by a suitable symbol above or pre-

WESTERN 151.

SYMBOLS DL=Day Letter

W. P. MARSHALL. PRESIDENT

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of origin. NA184 PD=WUX NEWYORK NY 16 1257P=

TELEVISION DE ALERS EVERYWHERE

IF YOU ARE NOT GROSSING UP TO 43% AND IF YOUR 17" MAHOGANY LISTS FOR MORE THAN \$169.95 AND YOUR 20" MAHOGANY LISTS FOR MORE THAN 219.95 SEE STARRETT IMMEDIATELY STOP

STARRETT TELEVISION CORPORATION FACTORY SHOWROOM 601 WEST 26 STREET NEW YORK 1 N Y



NOW SELLING DIRECT-TO-DEALER ON HIGH-DISCOUNT LOW-LIST BASIS

> Wholesale Distributorships available in some areas

tarrett Opticlear Super-Powered TELEVISION

with exclusively scientifically FILM-FREED* picture tube

*PAT. PEND.

Latest TV Models

GENERAL ELECTRIC

Among the five new television sets added to the line, is General Electric's first 20-inch table model, the 20T2, shown here. The set features legs which can be screwed into the base to convert it to a floor model if desired. With mahogany veneer cabinet, it lists at \$299.95. Another table model introduced is the 17T7, a 17-inch set, listing at \$269.95. New 17-inch console model is the 17C117, in mahogany cabinet, at \$319.95. An open-face mahogany veneer console with 20-inch tube is the model



20C105, listing at \$349.95. The other new model introduced is the 20C106, similar to model 20C105 but in natural blond wood cabinet, listing at \$369.95. All new models have a UHF socket to supply power to a UHF translator.

Also announced were price adjustments on four 17-inch table models and

Also announced were price adjustments on four 17-inch table models and one 17-inch console. The model numbers and new list prices are as follows: models 17T2 and 17T4, \$219.95; model 17T5, \$249.95; models 17T6 and 17C103, \$269.95. General Electric Company, Electronics Park, Syracuse, N. Y.—RADIO & TELEVISION RETAILING.

EMERSON

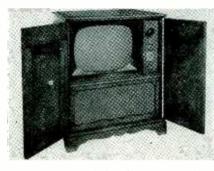
A 17-inch console model and a 20-inch table model television receiver have been added to the 1952 line. The new console, with 17-inch rectangular tube, is model 714. Available in mahogany veneer cabinet at \$249.95 and in blond cabinet at \$259.95. The table



model, shown here, is model 709. It is available in mahogany cabinet at \$269.-95, and in blond cabinet for \$279.95. Both new models are "Area Engineered," and are equipped with Emerson's Super-Fringe Compensator. Emerson Radio & Phonograph Corp., 111 Eighth Ave., New York 11, N. Y.—RADIO & TELEVISION RETAILING.

DU MONT

The new Du Mont television line, which incorporates glass rectangular picture tubes, consists of six 21-inch console sets, including one combination model, and five new 17-inch sets, one a table model. Sets are available in mahogany and blond cabinetry. Prices are 10 to 15% lower than for comparable models in last year's line. All 21-inch models feature a cylindrically-faced picture tube, which reduces reflections from room lights. Twenty-one inch models include: the Sherbrooke, with AM-FM radio and 3-speed phono, \$649.95 in mahogany, \$675 in blond; the Flanders, shown here, French Provincial design set, which includes phono jack, \$539.95 in fruitwood cabinet; the Banbury, \$459.95 in mahogany, \$479.95 in limed oak, and \$489.95 with raffia



doors; the Wimbledon \$479.95 in mahogany, \$499.95 in blond; the Whitehall Series II, \$499.95 in mahogany; and the Wickford, \$399.95 in mahogany, \$419.95 in limed oak.

Seventeen-inch consoles include: the Andover Series II, \$349.95 in mahogany; Park Lane Series II, \$349.95 in mahogany, \$359.95 in blond; Meadowbrook Series II, \$369.95 in mahogany; and the Chester, \$319.95 in mahogany. The Devon, 17-inch table model, lists at \$279.95 in mahogany, and \$289.95 in blond. Allen B. DuMont Laboratories, Inc., Receiver Sales Div., East Paterson, N. J.—RADIO & TELEVISION RETAILING.

TELE KING

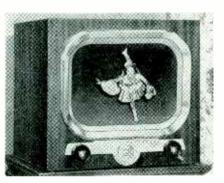
Four new special promotional TV sets are featured in the 25 models for 1952 offered by Tele King. The four include a 17-inch table model in leatherette,



priced at \$179.95; a 20-inch table model in leatherette, priced at \$199.95; a 17-inch open-face console, at \$199.95; and a 20-inch open-face console at \$219.95. The six 24-inch models introduced include the French Provincial, shown here, at \$524.95 in blond cabinet, \$498.95 in mahogany; two-door Masterpiece cabinet models in mahogany at \$549.95; in blond at \$579.95. Included in the 1952 line are fifteen other models. Tele King Corp., 601 W. 26th St., New York, N. Y.—RADIO & TELEVISION RETAILING.

MOTOROLA

Nineteen new television models have been announced. A portable set included in the line is the 14P2, in leatherette case, listing at 199.95. Also at \$199.95 is a 17-inch mahogany plastic table model, the 17T7. Shown here is the model 17T8, 17-inch table model in mahogany, at \$219.95, which is also available in limed oak (model 17T8B) at \$239.95. Another leatherette model, 21T1, a 20-inch table model, lists at \$249.95. Also available in blond leatherette (model 21T1B) at \$249.95. Also a 20-inch table model is



21T2 (mahogany) at \$279.95, and 21T2B (limed oak) at \$299.95. A 17-inch console model is available in walnut (17K12W) at \$249.95, mahogany (17K-12M) at \$250.95, and in limed oak (17K12B) at \$279.95. One of the 20-inch console models is 21K1, mahogany, at \$299.95, and 21K1B, limed oak, at \$319.95. The other 20-inch console model, also available in mahogany (model 21K2) and limed oak (21K2B), lists at \$339.95 and \$359.95, respectively. Combination models include the 17-inch model 17F12 (mahogany) at \$399.95, and 17F12B (limed oak) at \$429.95; and the 20-inch model 21F1 (mahogany) at \$575, and 21F1B (limed oak) at \$600. All models are built to accommodate a built-in UHF tuner. All models also feature Motorola's "Glare-Guard" process. Motorola, Inc., 4545 Augusta Blvd., Chicago 51, Ill.—RADIO & TELEVISION RETAILING.

TRANS-VUE-JACKSON

The new Trans-Vue-Jackson television line includes eight receiver models from 17-inch table models to 21-inch TV sets and combinations. Featured change in design of the models is the Tri-Lok chassis, which locks picture, sound and linearity circuits with one tuning control. Also featured are new and larger speakers in the sets. Trans-Vue-Jackson, 58 E. Cullerton St., Chicago, Ill.—RADIO & TELEVISION RETAILING.

Arvin's finest 21" table model

now priced

below many smaller sets!

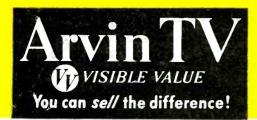




NOW! Arvin gives you a bigger competitive edge than ever! Arvin's finest 21-inch table TV (Model 5211TM)—the famous Dual Power Custom TV with all the superior features shown in this chart—is reduced \$70 in price! America has gone for Arvin's big-screen TV in a sensational way. Sales have far outstepped our most optimistic hopes. Production savings are passed on to you and your customers—so you can sell them America's finest 21-inch table model for much less than they'd expect to pay for a smaller-screen TV of lesser quality! Revolving Tele-Table to match at slight extra cost.

Radio and Television Division

ARVIN INDUSTRIES, INC., Columbus, Indiana
(Formerly Nobilit-Sparts Industries, Inc.)



Arvin TV has more tubes, more power, more features than the 3 top-selling makes

CHECK ALL THESE FEATURES	ARVIN Dual Power Custom 21" table model	The 3 present top-selling makes of TV			
		Make "A" 21" table model	Make "B" 21" table model	Make "C" 20" table model	Means THIS to YOU:
Number of tubes fincluding rectifier tubes and picture tubel	26	25	21	23	More tubes mean more power and greater range.
Tone Control	YES	NO	NO	YES	As much treble or bass as you want.
Local-Distance Control	YES	NO	NO	NO	"Distance" uses full power to pull in remote stations. "Local" subdues strong signals to prevent distortion.
Keyed Automatic Gain Control	YES	YES	NO	NO	Checks "airplane flutter" and other electronic interference
Number of Rejecting I.F. Traps	7	4	3	3	These trap circuits reject interference.
I.F. Circuit	41.25MC	41.25 M C	21.25MC	21.25MC	Intermediate Frequency Circuits in 41 megacycle spectrum minimize interference, facilitate UHF conversion.
Phono-Jack	YES	YES	YES	NO	Permits connecting record player.

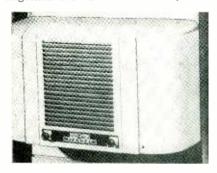
Sell the line that cuts down service calls!

Television & Appliance Retailing

Section of RADIO & TELEVISION RETAILING

Mitchell AIR CONDITIONER and Dehumidifier

Newly introduced model M-132, ½ HP window type room air conditioner, is designed for economy of operation. List price is set at \$229.95. Features include the "Mitchell-Mount," which permits easy installation, and the Turbo-Dryer, which eliminates stagnation of the refrigerant. Case is finished in ivory.



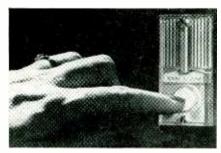
Also announced is the model D-182 dehumidifier, vertically constructed unit which measures one square foot by 37% inches tall. Can be used with or without a permanent drain attachment. The ½ HP motor unit removes from 17 to 25 pounds of water from 10,000 cu.ft. of air in 24 hours. Mitchell Mfg. Co., 2525 N. Clybourn Ave., Chicago, Ill.—RADIO & TELEVISION RETAILING.

Handybreeze FANS

Announcement has been made of the addition of two new fans to the 1952 catalog. One model is the Safe-T-Guard 12-inch fan. Wire mesh blade cover is designed for safe operation near children, etc. Finish is gray. Fan oscillates. List price is \$26.95. The other addition is the 20-inch Window-Aire exhaust fan. With ½ HP motor, this unit is designed of it any window from 29¾ to 38-inches wide. Has 3-speed selector switch. List price is \$59.95. Chicago Electric Mfg. Co., Chicago 38, Ill.—RADIO & TELEVISION RETAILING.

NuTone PUSH-LITE

Called the Push-Lite, this illuminated doorbell unit is built into a weatherproof Lucite case. A tiny electric bulb lights up



the name of the home owner. Light stays lit continually, costs about one cent a month to operate. List price for the unit is \$2.50. NuTone, Inc., Cincinnati 27, Ohio.

—RADIO & TELEVISION RETAILING.

SCOTT

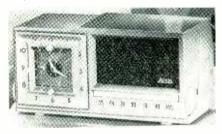
New 1952 models of the Ravenswood television series have been announced. The new units, a 17-inch open console and a 17-inch table set, will replace corresponding models in the 1951 line. List price of the 17-inch Ravenswood



table set is \$299. The 17-inch console lists at \$349. Sets feature the Silver Anniversary chassis, which is wired for later addition of UHF. Cabinets of the new models are finished in hand-rubbed mahogany. Scott Radio Laboratories, Inc., 4541 Ravenswood Ave., Chicago 40, Ill.—RADIO & TELEVISION RETAIL-ING.

Arvin CLOCK-RADIO

Called the "Sleepytimer," the new Arvin clock-radio shown here is designated as model 557T. List price is set at \$39.95. Set uses five tubes, including



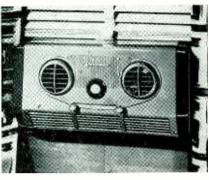
rectifier, and a Telechron electric clock with automatic timer. Automatically turns radio on or off at a preset time. Set also includes an electrical appliance outlet which is also controlled automatically. Arvin Industries, Inc., Columbus, Ind.—RADIO & TELEVISION RETAILING.

Stewart-Warner CLOCK-RADIOS

Two new models of clock radios have been announced. The model 9162-A (clock-radio) and the 9162-B feature an electric appliance outlet controlled by the unit's timer. Models 9164-A and 9164-B are similar models but lack the appliance outlet. All models have Telechron timers, and are 6¾ inches high, 11¾ inches wide and 6 inches deep. Models 9162-A and B, priced at \$39.95, are available in red, tan, ebony and yellow. Models 9164-A and B, priced at \$34.95, are available in ebony, gray and yellow. Stewart-Warner Corp., 1826 Diversey Pkwy., Chicago 14, Ill.—RADIO & TELEVISION RETAILING.

Vornado AIR CONDITIONERS

First model in a new line of room air conditioners is the ¾ HP model 75WAC, shown here. Finished in neutral twotone gray-green with burgundy and gold trim, the 75 WAC extends 9½ inches into



the room. List price on this first model is \$419.95. Plans for the complete line include $\frac{1}{3}$, $\frac{1}{2}$, $\frac{3}{4}$, 1 and $\frac{1}{2}$ HP models. The O. A. Sutton Corp., 1812 W. Second St., Wichita 1, Kansas.—RADIO & TELEVISION RETAILING.

Telechron CLOCKS

Two new electric clocks, the Pageant and Minstrel (shown), plus a special campaign price on the Decorator, have been announced. The Pageant, a kitchen wall clock, is available in red, yellow, green and blue. The Minstrel, alarm



clock, comes in an ivory colored plastic case, lists at \$6.00. Former price on the Decorator was \$8.34, including tax. This is now reduced to \$5.94, including tax, representing a reduction of \$2.40. Telechron Dept., General Electric Co., Ashland, Mass.—RADIO & TELEVISION RETAILING.

Gilbert SLIDE-ON PLUGS

The new type of electric plug and outlet is quickly attached to any standard no. 18 lamp or appliance cord. Internal contact points pierce the insulation and make contact. No tool is required for installation. Outlets can be removed and attached elsewhere without exposing bare wire or damaging electrical cords. List price is 10¢ each. Catalog and dealer prices available upon request from Gilbert Mfg. Co., Inc., Long Island City 3, N. Y.—RADIO & TELEVISION RETAILING.

Customers say it about the picture!

Dealers say it about the sales!



Emerson Model 714. Super-powered long distance

circuit specially engineered for super fringe area or city center, with Fringe Compensator to

adjust for best reception under each customer's particular reception condition. Built-in antenna. One knob Simplimatic Tuning. Black Magic Contrast. Full Screen Focus, Hand-rubbed

mahogany wood veneer cabinet

merson **EA-ENGINEERED**

TELEVISION

Customers will thank you for showing them Emerson TV! Because the Emerson Television you sell is specially engineered to work best in their homes, wherever they live in your viewing area.

Whether you demonstrate Emerson TV in your store or in customers' homes, you and your customers will see the wonderful picture difference made by the exclusive built-in Fringe Compensator Circuit. It's adjusted for best reception under your customers' particular TV broadcast conditions.

Your Emerson distributor has the whole exciting story for you. He'll show you how Emerson field engineers thoroughly check performance in your viewing area . . . how factory engineers take every special local condition into consideration . . . how Emerson brings you added miles of customers within telecast range for the first time!

For performance . . . for price . . . and for profits, too . . . it's Emerson TV.

CALL YOUR EMERSON DISTRIBUTOR NOW!



Television

Heads Sales Operation



Douglas Y. Smith, above, has been promoted to manager of sales operations for the Tube Department of RCA Victor, at Harrison, N. J., according to an announcement by L. S. Thees, general sales manager.

To Quam-Nichols Post

Helen A. Staniland, sales manager, jobber division of Quam-Nichols Co., Chicago speaker and electronics manufacturer, has announced the appointment of Marvin L. Bruckner as assistant sales manager, jobber div.

Westinghouse Distributor

Westinghouse Electric Corp. has announced the organization of a new firm known as the Danforth Corp., 6500 Hamilton Ave., Pittsburgh, which has purchased the assets of the former Danforth Company. The new firm will continue as a Westinghouse distributor.

Bendix Names Judd

Announcement of the appointment of V. C. Judd as district sales manager of the Bendix Radio Div. of Bendix Aviation Corp. was made by Arnold Rosenberg, general sales manager. Judd will be in charge of the new Bendix Radio sales office at 261 McDougall Ave., Detroit.

To Distribute IH

Floyd & Company, Inc., of Cincinnati, has been appointed wholesale distributor of International Harvester refrigerators and freezers in the metropolitan area of Cincinnati.

New General Sales Manager



John J. Lyons, above, has been made general sales manager for Kaye-Halbert, announces Harry Kaye, president of the firm.

Folsom Links Disc Sales To New Speed Phonographs

Frank M. Folsom, president of the Radio Corp. of America, has released the following statement on the progress and outlook of the phono record industry: "Popularity of the improved 45 and 33\% RPM systems of recorded music continued to rise throughout the country in 1951. Sales volume was substantially ahead of 1950 and gave indication of further increase during the next twelve months.

"Sales of 45's and 33\% RPM longplaying records accounted for 90\% of the year's industry-wide total in the classical field, providing conclusive proof of public favor for these improved systems as compared to conventional 78's in this category.

"The outlook for the record industry in 1952 may be regarded as very optimistic. The sales trend of records should continue sharply upward, unless material shortages cause a slackening in the present production rate of the new-speed instruments. But, even then, sales should be above those of 1951, due to the increased number of these instruments now in use and the eagerness of their owners to obtain larger quantities of the improved recordings."

Represents Vee-D-X



Jules J. Bressler, above, prominent New York city Rep., has been named to represent the La Pointe-Plascomold Corp., makers of Vee-D-X products, Windsor Locks, Conn.

Sylvania Official Sees Good TV Year

There is no reason why the TV industry cannot sell about 4,500,000 sets to the public in 1952, if there are no major economic upsets, according to Frank W. Mansfield, director of sales research for Sylvania Electric Products, Inc., who reported that the trend now points to a larger percentage of sales for replacement and a smaller percentage for initial installation.

Kaye-Halbert Appointee

Ed Altshuler has been appointed national marketing director for Kaye-Halbert, Los Angeles, Calif. He will supervise and coordinate the marketing research, sales planning, and advertising activities of the company.

Brach Lecture Program



Ira Kamen, right, director of TV sales, Brach Mfg. Co., Newark, N. J., announces that the firm has inaugurated a TV lecture program on antennas and antenna installations throughout the country. Lectures have been given at the Tydings Co., Pittsburgh, Warren Radio, Erie, Pa., and Lifetime Electronics, Toledo, Ohio, and more recently for Pioneer Radio Corp., Cleveland, and Radio Specialty Co., Detroit.

Universal Promotion Kit

Landers, Frary & Clark, New Britain, Conn., has announced a package of promotional material tied in with material issued by NEMA. Package includes a counter card, window banner, gift cards, and a coupon for more free material from NEMA.

Expands Jobber Territory

The refrigeration territory of RCA-Victor Distributing Corp. of Kansas City, wholesale distributor of International Harvester refrigerators and freezers, has been enlarged to cover roughly the entire state of Kansas and half of Missouri.

GE Names Lee

Robert E. Lee, manager of finance for the General Electric tube department, has been appointed assistant manager of the company's cathode ray tube operations, with headquarters in Syracuse, N.Y., J. M. Lang, tube department general manager, has announced.

Named Sales Manager



Jack Geartner, above, has been appointed sales manager of Emerson-New Jersey, according to Michael Kory, president of the company.

New Jewel "Nu-Day" TV

PACKS DOUBLE SALES PUNCH!

- 1. New UHF Cascode Tuner
- 2. New Rectangular 21 inch "Cylindrical" Picture Tube*



JEWEL "NU-DAY" TV
FEATURES
"UP-TO-THE-MINUTE"
PROVISION FOR
UHF AND COLOR!

POPULAR FAVORITE IN THE FAMOUS JEWEL RADIO LINE



Jewel "Slumber"
Model 5130 Bed Lomp-Rodio
Used two ways! As a bed
lamp-radio suspended from
headboard, or as a bedside
radio, on a table.

... an unbeatable combination adding up to

"Power Vision" that moves fringe areas back into town!

Here's your answer to a "value-hungry" TV public! JEWEL "Nu-Day" TV . . . with the famous UHF Cascode Tuner . . . grabs weak signals by the horns and brings 'em home to market. Sells TV's toughest market—the viewers in fringe areas and "dead spots"! Jewel's Cascode Tuner also compensates for changes in signal strengths . . . insures consistent, powerful, perfect reception.

But there's more than power in Jewel's "Power Vision". The amazing new Rectangular 21 inch "Cylindrical" Picture Tube* eliminates all possibilities of glare and side-view distortion, using a special interior tilt in the face of the tube.

Write today for full particulars on TV's latest profit-making bonanza

...the new JEWEL "Nu-Day"
TV with "Power Vision" that
moves fringe areas back into
town!



Model 2179-1 21 Inch Mahogany Veneer Table Model

*Featured in our 21 inch models only.



Right... Model 17C9-2 17 Inch Mahogany Veneer Console

RADIO CORPORATION

10-40 45th AVENUE, LONG ISLAND CITY 1, NEW YORK

Promoted by Capehart



Louis J. Collins, above, has been named director of sales of the Capehart-Farnsworth Corp., according to an announcement made by Fred D. Wilson, Capehart president.

New Distribution Set-Up



Haydon Products Corp., 1801 Eighth Ave., Brooklyn, N. Y., has undertaken the distribution of TV masts under a new direct mill arrangement, according to Ben Selsby, heading national sales, who is also sales director of Haygren Electronic Mfg., Inc., makers of TV installation parts. Under the new plan, all shipments of masts will be made direct from the mill to the distributor.

Honor Tele King Chairman



More than 300 TV dealers in Philadelphia honored Louis 1. Pokrass, chairman of the board of Tele King with an award certificate inscribed to him as a man "whose policy of fair dealer profits established him a true leader and set a standard in the television industry." Jack Joyce (center), Tele King salesman, makes presentation to Mr. Pokrass (right) with Harvey L. Pokrass, the firm's president, witnessing the ceremony.

Magnavox Expansion

The Magnavox Company has recently purchased the land and buildings at Ft. Wayne, Ind., which it has occupied under lease since 1930. An addition to the building now under construction will bring the total floor area to 320,000 sq. ft., plus 67,000 sq. ft. in warehouse facilities.

Westinghouse TV Show

Nationwide television and radio coverage of the 1952 presidential election campaign will be sponsored by Westinghouse Electric Corp. over the Columbia Broadcasting System TV and radio networks, it was announced by J. M. McKibbin, vice-president in charge of consumer products.

Crosley Distributing Corp. Forms New Divisions

Recent expansion by the Crosley Distributing Corp. of New York involves the creation of two new divisions. They are the appliance division, and the electronics division. W. J. O'Brien, formerly branch manager of Crosley Distributing Corp., New York, was announced as manager, appliance division, and Paul A. Hilton, formerly assistant branch manager, is announced as manager, electronics division.

Appointment of the Cannon Distributing Company as Crosley distributors in the Charleston, S.C., area, has been announced by E. W. Gaughan, eastern divisional sales manager of Crosley Div. of Avco Mfg. Corp.

Joins Electronic Devices

Frank H. Edelman, formerly chief chemist of International Resistance Co., has been appointed technical director of the Resistor division, Electronic Devices, Inc., 429 12th St., Brooklyn 15, N.Y.

Raytheon TV Distributor



Arthur C. Maryon, Sr., signs agreement that makes the Arthur C. Maryon Co., San Francisco, the Raytheon TV distributor in that city and in northern California. Looking on are Arthur C. Maryon, Jr., and William Helt, assistant general sales manager of Belmont Radio Corp., makers of Raytheon TV.

To Universal Post



Frank T. Barmore, above, has been appointed sales development manager of the Universal vacuum sales division. Announcement was made by Bret C. Neece, vice-president and general manager of Landers, Frary & Clark, New Britain.

Planning to Launch a New Television Line



The Lion Manufacturing Company, Chicago electrical devices makers, will shortly introduce a line of television sets under the brand name of "Lion." Raymond T. Moloney, right, president, is shown seated with his new TV division manager, Paul Eckstein. Chicago ad agency president, Dr. Burton Browne, is standing. Plans are being pushed ahead in time for the May Parts Show and to officially enter the market during the Chicago Furniture Show in July.

Lelliciters

GUARANTEES 150-MILE T-V RECEPTION:

Model 1005—20" Mahogany, Smart new showpiece, with Full-View "Super Dynamic Tuner" control. Model 1006—Same model, in Blond.

NO "NAMBY-PAMBY" CLAIMS! NO WEAK-KNEED PROMISES!

A MUST FOR YOU IN '52...FOR EXPANDING SALES!

The latest market studies show television sales saturations up to 71 per cent. That means you must "beat the bushes" for fringe business if you want to expand your sales during 1952. You need Hallicrafters... the ONLY television that GUARANTEES 150-MILE PERFORMANCE! Remember, Hallicrafters has the EXCLUSIVE, \$2,000,000 Dynamic Tuner. This famous tuner, with its precision photo-etched circuits, delivers a clearness of picture and long-range performance unmatched by any other set!

helliutifers

WORLD'S LEADING MANUFACTURER OF PRECISION RADIO & TELEVISION • CHICAGO 24

Proctor Technique Shown



Mary Riedel, left, Proctor Electric Company's director of women's activities, lectures to 650 Home Demonstration Agents at their recent convention at Fort Worth, Texas. In center is Mary Switzer of Buffalo, N.Y., H.D.A. president. Demonstrating the Mary Proctor ironing method is Ruth Watkins, wife of Proctor's Texas district manager, Ed Watkins.

1952 Reps Officers

Members of the Southwestern Chapter of "The Representatives" of Radio Parts Mfrs. Inc., have elected the following officers to serve for 1952: John I. Crockett, president; Mose Branum, vice-president; Hal F. Corry, secretary; and R. M. Campion, Jr., treasurer.

R. F. Brookfield was elected president of the Mid-Lantic Chapter for 1952. R. L. Wilkinson moved up to the post of vice-president, George Scarborough was elected secretary and Jack Mahoney, treasurer.

Robert Milsk will lead the Wolverine Chapter as president for 1952. The new vice-president is Edwin F. Liddle. John J. Hagerty was re-elected to the post of secretary-treasurer.

Ronald G. Bowen has been named president of the Rocky Mountain Chapter. W. Clif McLoud was chosen as the chapter's 1952 vice-president.

Raytheon Jobber Meetings

A Raytheon Bonded Dealer Meeting was held in the Springfield, Mass., area recently, under the auspices of L. C. DelPadre Associates, distributor of Raytheon tubes in western Mass.

Interstate Supply Co., of St. Louis, Mo., distributor of Raytheon tubes in the St. Louis area, held a series of two meetings in St. Louis to announce their sponsorship of the Raytheon Bonded Electronic Technician Program.

Offer "Talking Letters"

"Talking Letters," five minute taperecorded messages between members of the armed forces and their families, are being made for the servicemen at no charge by Revere Camera Co., maker of the Revere tape recorder, and Minnesota Mining & Mfg. Co., makers of the recording tape, and by their participating dealers in every community. Both recording and play-back facilities are offered by the dealers.

Hoover Appointments

Wm. H. Bond, manager of distributor sales for the Hoover Company, North Canton, Ohio, has been promoted to manager of the company's special products division.

Webcor Names Wallin

Directors of Webster-Chicago Corp. have elected Gus W. Wallin to the newly created post of vice-president in charge of engineering, R. F. Blash, president of the company, has announced.

New Audicraft Reps

Audicraft, Inc., 77 S. Fifth St., Brooklyn, N.Y., has announced the appointment of the following two sales reps: Emmet J. Tydings, to handle western Penn., Ohio, and W. Va.; and Jack Goss, to service the New England states. They will handle the Audicraft line of PA horn loudspeakers.

GE Campaign Ends

The General Electric Company's Tube Department has announced completion of its "Hit the Trail" campaign, a sales program with a cowboy motif, described as one of the most successful promotions in the department's history.

Rep Opens New Office

Carl A. Stone Associates, manufacturers' reps, with headquarters in Los Angeles, has opened a northern California office in Palo Alto, in charge of Frank E. LaFetra, sales engineer.

Takes Xcelite Name

Park Metalware Co., Inc., Orchard Park, N.Y., maker of Xcelite mechanic's hand tools, has changed its corporate name to Xcelite, Inc., President F. Birney Farrington has announced.

New South River Reps

South River Metal Products Co., Inc., South River, N.J., has appointed the following two sales reps: B&C Sales, 1355 Market St., San Francisco, and C. H. Mitchell Company, 1221 W. 11th St., Los Angeles 15, Calif.

Eureka Expansion

Announcement has been made by J. George Sauer, plant manager of Eureka Television and Tube Corp., Hawthorne, N.J., that large expenditures have been made for additional equipment for the production of 21-inch rectangular cathode ray tubes.

To Head Philco Auto Radio Division

Martin F. Shea has been named vicepresident, auto-radio division, in charge of car radio manufacturing sales and head of Philco's Detroit operation, according to an announcement by Larry F. Hardy, president of the television and radio division of Philco.

Allied Reorganization

A. D. Davis, president of Allied Radio Corp., Chicago, distributors of parts, has announced top-level reorganization as follows: Alex Brodsky, merchandising manager; S. H. Levey, sales manager; J. W. Rubin, sales promotion and advertising manager; and L. M. Dezettel, purchasing agent.

RCA Victor Appointee

William F. Carolan has been appointed general sales manager of the newly created air-conditioning department, of the RCA Victor Division, Radio Corp. of America, it was announced by Robert A. Seidel, vice-president. Carolan's headquarters will be in the company's home office in Camden, N.J.

Rider Offers "Handies"

Distributors of John F. Rider Publisher, Inc., 480 Canal St., N.Y., have received TV Tek-File Packs numbers 17 through 32. Included in many of the new Tek-File Packs is the Tek-File Handy, which is a troubleshooting card containing specific servicing information from the manufacturer of the receiver. Each Handy lists the maker's name, the model, chassis, trouble, symptoms, and repair procedure. The Tek-File Pack, with the Handies included, is still priced at \$2.00.

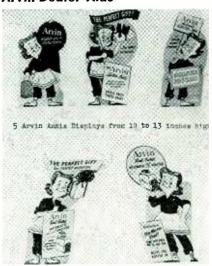
RCA Victor Forms West Central Region

The establishment of a new region for the RCA Victor Div., Radio Corp. of America, to be known as the West Central Region, with headquarters in Kansas City, Mo., was announced by C. M. Odorizzi, operating vice-president of the division. Odorizzi also announced the appointment of V. A. Kamin as manager of the new region.

Exports Recorders

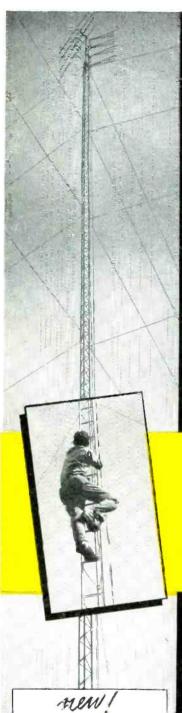
The M. Simons & Son Co., Inc., 25 Warren St., New York, exporters of electronic equipment for over 30 years, have recently completed substantial shipments of Presto professional magnetic tape sound recording equipment at Oslo, Norway, to be used at the 1952 Olympic Games which will be held on the Holmenkillen ski slopes outside of Oslo.

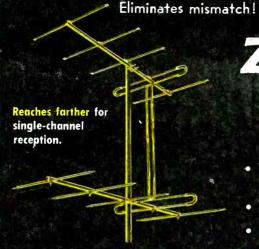
Arvin Dealer Aids



Arvin EA Display No EA951

"Arvin Annie" cut-out pieces plug electric housewares, put pep and personality in showwindow and counter displays.





GAIN CURVES

*Patent Applied For

Z-MATCH

Outperforms standard Yagis!

- Perfect match to 300 ohm line. single or stacked.
- Wider spaced elements for higher gain.
- 100% gain in stacking!
- Completely preassembled.

How The Z-Match Yagi Works

When antennas are stacked, the center feed bars of the folded dipoles are removed, automatically creating a perfect 300 ohm match for the entire stacked Yagi array. These same center bars are then used as half-wave connecting rods. This means

YOU DON'T PAY FOR STACKING BARS!

developed by

CHANNEL



MASTER

For "Far Reaching" Results

There's only ONE

SUPER

313 Series

The most widely used antenna in the nation.

The highest gain broad-band antenna ever developed.

New reinforced fibreglas inserts in all elements and reflectors.

Reaches farther for multi-channel reception.

> Completely preassembled.

Write for technical literature on these 3 outstanding products.

CHANNEL MASTER CORP. ELLENVILLE, N. Y.

TOWERS

by Channel Master

- Steel tubular uprights.
 Built-in ladder with no obstructions.
- · One standard interchangeable section which can be used as a top, middle or bottom section.
- Un'ver:al base mount.
- Dual parpose mast or ro-tator mounting prackets.

SERVICE & SOUND

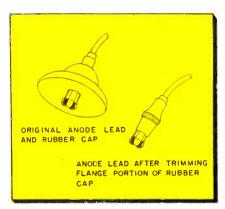
Section of RADIO ETELEVISION RETAILING

Improving Performance of TV Sets

Inside Tips from Set Makers Cut Troubleshooting Time

Arcing at 2nd Anode Button

It has been found that certain types of rubber anode caps gradually become conductive due to a chemical decompo-



sition of the rubber which is caused by the relatively high electrostatic stress present at the anode button. This produces a leakage path across the insulated area of the glass around the anode button (on glass tubes) and often results in corona or arcing. Ordinarily, wiping the glass under the rubber cap does not remove the deposit that results from the breaking down of the rubber. The suggested cure for this condition is to trim off the flange portion of the rubber cap to a point where no rubber touches the glass. This will leave only the sleeve portion of the cap which serves as a support for the lead into the conductor. The cleaning of the glass around the anode button can be accomplished quite easily if ordinary water and a scouring compound such as Bon Ami are used. The area around the anode button should be scoured and then thoroughly dried and polished with a clean dry cloth so that no residue remains.-Crosley Service Instruction No. 4-63.

Poor Sound in Fringe Areas

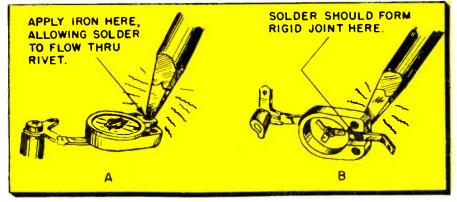
Normally the picture carrier falls at the 50% point on the slope of the overall response curve. When receiving signals of less than 50 microvolts, on intercarrier receivers, it is common practice to adjust the fine tuning control so as to move the picture carrier up the slope to improve the signal to noise ratio. On extremely weak signals, the pix carrier may be moved to as high as 80% to 90% on the slope of the curve. Under such conditions the sound may become weak and noisy even on intercarrier receivers. The reason for this is as follows: when the picture carrier is rolled up the slope it is lowered in frequency by as much as .75 MC, and the sound carrier is also lowered. The sound carrier therefore begins to fall into the adjacent channel picture trap with a consequent reduction in sound output. It is possible to overcome this difficulty on the RCA 17T153 and 21T176 series receivers by a simple adjustment in the field without test equipment and without removing the set from the cabinet. First tune in the desired channel and adjust the fine tuning control for best picture. Then, since the adjacent channel picture trap is under the kinescope,

disconnect the high voltage lead at the chassis to prevent getting a shock. Turn the T104 top core clockwise, approximately 1/2 turn if it is a threaded core type or 1½ turns if it employs a brass stud extending from the transformer shield. Restore the kinescope high voltage connection. Then from the top of the chassis, adjust T107 clockwise 1/2 turn or less. If adjacent channel picture interference is a severe problem, it may be necessary to remove the chassis from the cabinet and adjust T104 top core while observing the picture for minimum interference.—RCA Victor Service Tips, Vol. II Issue 9. Replacing 688GT Tubes

When 6S8's are used as the ratio detector, variations from tube to tube affect the alignment of the ratio detector Xformer. This must be checked whenever a tube is replaced, and can be done by tuning to a TV station and adjusting the secondary for best sound with a minimum of noise.-Westinghouse Service Hints, No. 7.

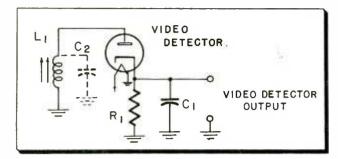
Microphonic Noise in Picture and Sound

This trouble in Telesets RA0112A and RA-113 is probably due to the stator plate of trimmer capacitor C118 in the oscillator circuit of the tuner being loose. Remedy: Apply a hot soldering iron to the top of the stator terminal, as shown. The chassis should be turned upside down and a small amount of additional solder applied-if necessaryso that solder will run down through the center of the rivet and form a rigid joint between the stator and the terminal .- DuMont Service News, No. 9.



Servicing Video Detector

Part I. Function, Method of Operation and Types of Circuits Used



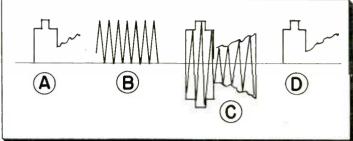


Fig. 1 (above, left): Simple diode detector circuit. L-1 resonates with C-2, the stray capacitance in shunt with it, to form the tuned input circuit. Fig. 2 (above, right): (A) Original video signal. (B) RF carrier with which the video signal is mixed. (C) Resultant modulated RF carrier. Note that this is a bi-directional signal. Note also that when the carrier is mixed with the video signal, its envelope acquires the shape of the video signal. The peaks of the carrier, in other words, vary in accordance with the video signal. At the receiver, the modulated RF carrier is stepped down in frequency, and becomes a modulated IF carrier. (D) In the video detector, the IF carrier is removed, and 1/2 of the signal is eliminated, restoring the video signal to its original, uni-directional form.

By Solomon Heller

• The function of the video detector in the TV receiver is to remove the video modulation from the incoming IF signal. Diodes are commonly used as detectors, because they are capable of better fidelity than triodes. A simple diode detector circuit is shown in fig. 1.

The modulated video IF signal is applied between plate and ground of the diode. Since the cathode is bypassed to ground for IF by C-1, the signal is effectively applied between plate and cathode. Current flows only when the incoming signal makes the plate positive to cathode. The diode thus acts like a half-wave rectifier. Rectification is necessary because the original video signal is a uni-directional, not a bidirectional one (see fig. 2), and it must be restored to that same form. If the video detector output was bi-directional, the video signal would have a net average amplitude of zero.

Let's see what the diode detector must do, then we can consider how it does it. We want the diode to give output only at the peaks of the incom-

ing signal, since these peaks vary in accordance with the video signal (see fig. 2C). In between peaks, the incoming signal is varying at an IF rate. We don't want output from the video detector at these times, because IF signals are undesired in the detector output circuit.

Peak detection in the diode is achieved in this way:

When the positive half-cycle of the modulated IF input signal is coming in, the diode conducts. The upper end of R-1 is made positive to ground, by the flow of conduction current. The voltage across R-1 charges C-1.

After a few cycles, C-1 becomes charged to the average level of the positive half-cycles of incoming signals. The voltage across C-1 is the diode's cathode-to-ground voltage. This voltage reduces the diode plate-to-cathode voltage. For instance, if the plate-to-ground voltage is +3V and the cathode-to-ground voltage is +2V, the plate-to-cathode voltage is +1V.

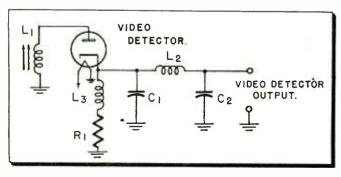
The diode will (after the first few cycles) no longer conduct during the entire positive half-cycle of incoming

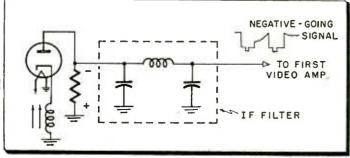
signal, but only during that portion of the half-cycle when the plate-to-ground voltage exceeds the cathode-to-ground voltage. In other words, the diode will conduct only at the peaks of the incoming signal. In between these peaks C-1 discharges through R-1 (since the diode, its source of voltage, does not conduct at these times) keeping the voltage across R-1 substantially constant, in spite of the signal voltage changes taking place at the diode input.

At the peak of the incoming signal, the plate-to-ground voltage of the diode exceeds the cathode voltage, the diode conducts, C-1 charges, and a change in diode output voltage takes place. This change occurs at a video rate, and represents the desired video signal.

Looking at the matter in another way: Because of C-1 R-1's long time-constant, the output voltage cannot follow the rapid IF variations in the incoming modulated IF signal, but only the relatively slow variations in amplitude corresponding to the signal envelope, or the video modulation. The output voltage across R-1 therefore reproduces only the video modulation.

Fig. 3 (Below, left): Video detector with π -type filter. L12, C-1 and C-2 comprise the IF filter. L-3 acts as peaking coil. L-2 generally acts as a peaking coil as well as an IF filter, resonating at about 4 MC with the capacitance in the circuit to boost the HF response in this vicinity. Fig. 4 (Below, right): Diode detector with negative-going video signal output.





Circuits in TV Receivers

to Remove Picture Information from the Composite Video Signal

C-1 thus acts as an IF filter in this simple detector circuit, bypassing IF from the load. In practice, C-1 is not an efficient filter. It is inefficient because the undesired IF (an approximately 26 MC signal) is too close to the highest video frequency to be bypassed (about 4 MC)

If C-1 is used by itself, and is made sufficiently large in capacitance to remove the IF, it will also attenuate high video frequencies as well. If C-1 is made small enough to prevent the attenuation or reduction of high video frequencies, it will be too small to completely remove the IF. A better filter must therefore be used.

The kind employed is a π -type unit or a variation thereof (see fig. 3). This band-pass filter effectively removes the undesired IF, without reducing the de-

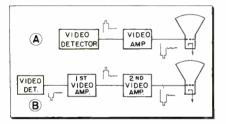


Fig. 5: A negative-going signal is needed at the CRT grid. Such a signal will drive the CRT to cutoff on sync pulses and black signals. (A) If one, or an odd number of amplifiers, is used between the video detector and the CRT, the video detector output will have to be positive-going. (B) If two, or an even number of amplifiers, is employed between the video detector and the CRT grid, the video detector output will have to be negative-going. (It is assumed in both cases that the signal is applied to the CRT grid.)

tector response at high video frequencies.

The output signal of the video detector may be either positive or negative (see fig. 4). Let's see what determines the polarity required.

The video signal applied to the CRT grid must drive the CRT to cut-off on black signals; and must reduce the bias on white signals sufficiently to cause white to be reproduced. In other words, a negative-going signal must be applied to the CRT grid (see fig. 5). (If the video signal is applied to the CRT cathode, it must be positive-going to achieve the same results.) The polarity of the video detector's output signal must therefore be such that the video signal will be correctly phased at the input to the CRT.

If an even number of amplifiers is used after the video detector, and the signal is fed to the grid of the CRT, the

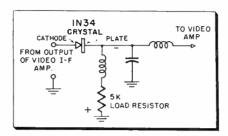


Fig. 6: Crystal detector circuit. A somewhat greater video output is possible with a crystal, due to the fact that 1. its internal resistance is lower than that of a diode and 2. the absence of interelectrode capacitance permits a higher value of load resistance to be used.

video detector output will have to be negative in polarity (see fig. 5B). If an odd number of amplifiers follows the video detector, and the signal is fed to the grid of the CRT, the detector's output will have to be positive-going (fig. 5A). If the video signal is fed to the cathode of the CRT rather than its grid, the polarity of the signal needed at the video detector output in each of the above cases will be reversed.

R-1, the load resistor (fig. 1) is small compared to the diode load resistors used in broadcast AM detectors. Large values cannot be used because of the shunting capacitance present across R-1. This shunting capacitance, which is composed of the tube inter-electrode capacitance and the stray capacitance present in the circuit, offers a decreasing reactance with increasing frequency. The load impedance therefore

tends to be considerably smaller for high video frequencies than for low and middle ones. The larger R-1 is, the greater will be the shunting effect of the capacitance across it at high frequencies, and the larger will be the difference in the low and high frequencies. To avoid such a condition—i.e., the attenuation of high-frequency video signals—R-1 must be kept low. It is generally somewhere between 2000 and 5000 ohms. Use of a low value of load resistance causes the output of the video detector to be reduced in proportion.

A peaking coil is often inserted in series with the load resistor to improve the high-frequency response (see fig. 3).

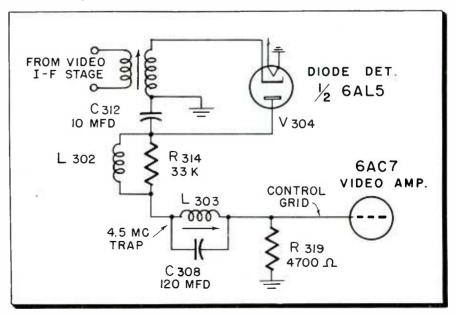
Crystals are sometimes used as detectors (see Fig. 6). The crystal functions as a rectifier, and is comparable in its action to a selenium rectifier. Advantages offered by a crystal over a conventional diode detector may be listed as follows: 1—The size of the detector unit is smaller. 2—Less wiring need be used, since only two terminals need connecting into the circuit. 3—No filament heating is necessary. 4—No hum is likely to be introduced into the detector circuit, since the crystal has no filament to act as a source of such hum.

The cost of a crystal was once too high to prevent its widespread use, but currently, relatively low-cost units can be obtained.

Crystals must, of course, be hooked up with the correct polarity, otherwise

(Continued on page 78)

Fig. 7: Video detector circuit used in Admiral 20A1, 20B1, and 21A1 sets.



Service and Installation

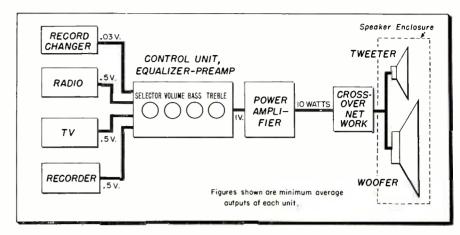
The Technician's Eye-View of the Choice of Components and the

With high quality chassis and components equally available to all assemblers and/or packagers of "Hi-Fi" custom installations, the only way the individual technician or dealer can stand out is through his superior technical knowledge, ability, craftsmanship and good taste—and ultimately through customer satisfaction. This article (the second of two parts) presents some of the things a trained and experienced man can do—some techniques he can use—some features he can include—to take his work out of the "stop and shop" category.

The amplifier in the custom set-up offers more questions to be decided, and more choices to be made, than any other item in the system. In most cases it will incorporate a pre-amplifier for the low output magnetic cartridge. In some cases the amplifier may be incorporated into one chassis with the AM-FM tuner. In such case there may or may not be a pre-amplifier for a low-level magnetic pickup built into the same unit. In most such cases, where quality reproduction is desired, but not high-fidelity, there is no real need to get any better reproduction than is afforded by a crystal cartridge. Should the customer insist on a magnetic cartridge, however, and thus require a pre-amplifier, do not take the power for it from the radioamplifier chassis. Use a self-powered pre-amplifier. These cost from \$9 to \$20, with the cheaper ones being recommended in this sort of application as more than adequate.

There are two reasons for not taking the power from the radio-amplifier. First, time and labor will go into wiring the pre-amp in, and will still result in a clumsy handling job. Second, the current load on the main power transformer will be increased, dropping the applied voltages throughout the set slightly and shortening the life of the set somewhat through the increased probability of over-heating.

An amplifier for which the manufacturer states the percentage of harmonic and intermodulation distortion at rated output, and which states the delivered output at all frequencies is usually more likely to come up to high fidelity standards than are amplifiers which simply state "blank % distortion at 14 watts" and let it go at that. The argument over triode versus beam output stages continues, but no one has been able to demonstrate that two amplifiers which measure similar percentages of IM (intermodulation distortion) on the same equipment will sound better or worse because they are triode or tetrode. Within their accurate ratings they will deliver identical



Above are shown the elements which make up the four major sections of the system: Program Source, Amplifier, Loudspeaker, and Cabinet and/or Speaker Housing. The first installment of this article, which appeared last month, covered program sources.

results. Triode adherents say that triodes are inherently more distortion-free, and have lower output impedance. But tetrode designers point out equally correctly that the enormous additional gain allows much more inverse feedback, thus lowering both distortion and effective impedance of the tubes. (The writer has made many ear tests of amplifiers side-by-side and agrees there's no difference.)

The loudspeaker end of the chain is where the most improvement remains to be made. Amplifiers of no matter what price level will do better by the signal which is delivered to them, than their companion speakers, and for most purposes any money over about one-third the total cost of the components will be better spent on the speakers and enclosure than on an amplifier with a smaller percentage of distortion.

Horns and Enclosures

There are at least two major problems to be attacked in setting up a loudspeaker enclosure. First it is desirable to keep the back wave, or the sound generated by the rear surface of the speaker, from coming around front and combining with the front wave to produce cancellations and additions which will sound bad. The speed of sound, the directivity of various frequencies, and the wavelengths of audio waves are so related that undesirable effects result from 30 to 300 cps when the rear surface of the speaker is not separated from the front surface. This is usually described as a lack of bass. It has been found best to completely isolate the back from the front, or to control the back wave by means of a bass reflex cabinet, in which the size of an opening (port) and the volume of the enclosure are such that the back wave is additive at a low frequency.

Second, it is desirable (but usually difficult) to couple the speaker diaphragm to the free air in the room, so that it moves the air most efficiently at low frequencies. This becomes increasingly difficult as the frequency is lowered, because the best way to couple the speaker cone (which has a relatively small area) to the air in the room (which in any plane is a very large area), is to use horn loading. This is a principle which has been recognized ever since the first megaphone was employed by the first herald in days of old (or the first cheerleader). Most outdoor sound systems use horn speakers, to get the maximum useful volume from a given driver speaker, and most movie theaters use horns for the same reason. The difference in the two systems lies only in the fact that the public address sound systems are designed for voice communication usually, and so need little output below 150 or so cps, whereas theaters must reproduce all sounds, down to about 30 or 40 cps as well as possible, and so they use not only small horns of PA size (for the treble) but also large horns for the

The design of horn speakers dictates that there be a smooth increase in the cross-section of the horn from the small diameter of the driver diaphragm to the larger area of the mouth. It has been found that sounds whose wavelengths are longer than 1/3 the diameter of the horn mouth will not be efficiently reproduced because of reflections generated in the horn. Thus as the frequency is lowered the necessary length and mouth size of the horn increase. To reproduce 30

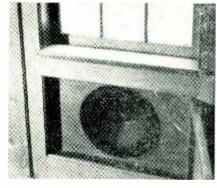
Methods for Better Audio

Proper Use of Them to Achieve Customer Satisfaction

cps at all well requires a mouth opening of around 15 ft. across and almost as long a horn. Theater horns are folded, but they are still too big for the home. Recently there have been a number of corner loudspeakers (folded horns) brought onto the market, and those which are true horns do a better job of producing clean and solid bass than any other sort of speaker.

But most systems will not justify the cost of a bass horn, so they use a large cabinet to simulate an infinite baffle (separation between front and back) or they use a bass reflex cabinet of some sort.

If the system is to do a good job on both the bass and the treble, it is wise to decide on a two-way speaker setup. Many such speakers are available in which the tweeter is secured in the middle of the woofer. If such is the case with the speaker selected for the particular installation, no means for separating the high notes from the lows is needed, since it will already be incorporated into the speakers. But if separate units are used, a crossover network or filter is required to keep the bass notes out of the tweeter, which can easily be ruined in about 1/10 of a second otherwise.



Custom loudspeaker installation under a window suggests one method which can be utilized to simulate an infinite baffle where available space is at a minimum.

A good heavy woofer and a medium priced tweeter (\$15 to \$25) will usually reproduce all that any but the most rabid "high-fidelity" fan will want. It is wise to concentrate on improving the low frequency end of the system generally, rather than spending effort and money on improving the scratch response.

Unless the customer is especially interested and insistent that he wants to hear everything, don't spend a great deal of money on a high priced tweeter which goes up to 18,000 cycles (or

maybe on two separate tweeters!), at the expense of the amplifier and woofer. The largest percentage of people who have sets built have one of two complaints—either they want cleaner reproduction, or they want better bass.

If a closet or wall can be found to house the speaker it may be utilized as an infinite baffle. Any enclosure over about 8 or 9 cubic feet will do fairly well, and especially if it has some clothes or other deadening material in it that will serve to damp out unnecessary resonances and reflection. If a cabinet is to be used it may be a bass reflex type, and it is best placed in a corner, for best room distribution, and for increasing the bass response slightly through slightly increased loading. To adjust the size of a bass reflex port, have a larger than needed port behind a grill cloth, and use a sliding panel to adjust it. A battery connected to the voice coil and switched on and off will produce clicks which may be listened to as the effective size of the port is varied. When the sound produced when the battery is connected most nearly matches the sound produced when the battery is disconnected, the port is at optimum.

Trossover Networks

The simplest crossover filter consists merely of one large condenser. Typical values are two or three mfd. (naturally they must pass AC, and thus are usually oil. For small values, paper condensers may be practical). The condenser is used in series with the tweeter to block the low frequency sounds out of the high frequency driver. Were it not for the reactance of the condenser (which increases as the frequency is lowered), the low frequency notes, containing most of the power, would cause extreme excursions of the tweeter voice coil, and ruin it.

This simple filter is amazingly effective. Proper values for the blocking condenser may be had from the manufacturer of each tweeter, and are usually furnished with each unit.

More complicated filters include a condenser which goes across the woofer voice coil, shunting the high notes into the tweeter only, and providing a short circuit across the woofer. A full crossover network is provided by adding still another pair of components—air core chokes, usually rated from .5 to over 1 mh.—across the tweeter and in series with the woofer. With such network the rate of slope of the network is about 12 db per octave, and is quite steep enough for the best systems.

Cables between the various chassis must be short and neatly laid out, or else the job will look sloppy and be difficult to service. In addition, long audio leads tend to attenuate the upper frequency response, on the extension of which so much money and effort is expended. Where leads more than about two feet long must be employed, the use of RG/59U or similar coaxial TV cable is recommended. The capacity per foot of such cable is very small, and therefore the reactance at



Cables between the various chassis must be short and neatly laid out or else the job will look sloppy (see illustration) and be difficult to service.

10 or 15 KC is extremely high. Consequently leads of 15 or 20 feet in length are not impractical. Since some servicemen consider this cable difficult to connect, a method for dealing with it is suggested:

- 1. Strip the black outside coating back about 3 inches, exposing the copper braid shield.
- 2. Push the braid back from the end so that it bulges away from the insulation on the center conductor, which is usually white plastic.
- 3. Make a hole in the braid by spreading it with a small screw-driver or pick, and pull the white center piece through the braid. Carefully strip the insulation off the conductor about 1½ inch.
- 4. Flatten the braid and tin it, holding it near the plastic with a long-nose pliers to conduct the heat away.
- 5. Take a 1-inch long piece of cloth, glass, or other heat-resistant type insulation. Slip insulation over the 1½ inch center solid conductor. Tin the phono plug and solder the cable to it, taking care to protect the center insulating plastic from getting

(Continued on page 80)

Trouble Shooting 3-Way

How to Diagnose and Repair Dead Sets,

• In the past few years the versatility (and consequently the popularity) of portable sets has grown far beyond the original suggested uses such as picnics, camping, beaches, etc. Now the threeway jobs are finding all-year round employment, with a major portion of their operation off the 110-volt power line.

As a result, servicing portables is no longer strictly a Spring and Summer problem to the dealer. The "problem" is not a momentous one, but there are certain peculiarities and eccentricities of the carry-about sets which must be kept in mind for speedy and successful service work. In addition, a certain amount of "education" of the customer is required concerning the care and operation of portables.

As a preliminary to discussing portables, it is pertinent to mention certain techniques which the author has found helpful in servicing any AC-DC sets. First, it is helpful and advisable to isolate the receiver under test from the line, especially where AC operated test equipment is being used. Second, in testing sets with power supply troubles (and this is especially prevalent where high-voltage filament tubes are used) it is a good idea to have a fuse in the line. This often saves the expense of plowing through the filament of one of your good tubes when you thought you had repaired the trouble (or when you thought that the only trouble was that the old tube had given up the ghost due to old age). A third useful function on the test bench is a method of varying the line voltage.

The test fixture shown in figure 1 serves all these functions at once. In addition, the pilot light immediately indicates that the fuse has blown, and the switch makes it possible to take the set off the line without pulling out the plug. The fuse is of the 3AG type and can be obtained in a variety of ratings from a fraction of an ampere up to several amperes. Pick a fuse which just about hits the receiver's power drain on the nose.

One additional test feature is useful on portables in particular. Since these sets don't have a pilot light (in order to lighten the current drain on the batteries) as a rule, and since it is often difficult (especially under a bright light) to tell whether the 1.4 volt filaments are lit, it is helpful to add a pilot light temporarily during servicing. This way you can always tell immediately when the set is on (even though it makes no sound) without a lot of fussing around. One handy way to accomplish this is to hang a neon tester from the plate of

the output tube to B+. These testers will operate on the range of voltages usually found on such tubes, have a high resistance (built in) and draw little current. Now you're all set with a pilot light to tell you that the set is on or off and you're ready to go.

Causes of Low Sensitivity

It is essential to get a complete description of the set's complaint from the customer before you start to work. If he complains that it is "weak," is it weak on power line, batteries, or both? Usually the complaint is on battery operation, and there are two points to consider here before servicing.

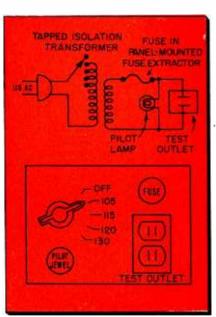


Fig. 1: Test fixture described in text. Servicer may use a separate switch with an ordinary isolation Xformer, a continuously variable voltage Xformer, a tapped Xformer such as the RCA Iso-Tap, or a similar unit constructed from old parts in stock.

First, you will rarely get the "pep" on batteries that you do on AC because you will usually find that either (1) a more powerful output tube is used on line operation and/or (2) Higher voltages are used on AC. Nevertheless, battery operation, though not quite as loud as power line, should be satisfactory.

The second point to remember is that when people use a set on batteries, they are often out in the country somewhere in the "fringe" for AM reception.

It is always advisable to check on these points to make sure that the customer isn't expecting too much from his set. Presuming that these points have been covered, you can proceed to check the set on AC.

If the sensitivity is low (even on AC), you have, in addition to the usual checks on any radio, a few extra points to consider on portables. One is the aerial. Often it takes an extra beating if it is the type which is loose (like the old Zenith Wavemagnet) or attached to the back cover (in which case it comes off every time the customer touches the batteries). It may also suffer abuse if it is attached to the back of the chassis and has to be removed for servicing. In any of these cases you may find that one of the leads has come loose from the set, or from the loop itself, or the loop may have developed an open or a short. The new powdered iron "antennas" are a great improvement over the old loop in this respect, since they are out of the way and not apt to be pushed around. In addition, they are non-directional and higher gain. Where it is necessary to replace a loop, it is suggested that the new type be considered for replacement.

Another type of aerial which can cause trouble is the type which is in a lid which lifts up in order to put the set in operation. The lead (or in some cases, joint) from the lid into the set may be subject to friction due to continued opening and closing and can become open, intermittent, or high in resistance.

Switch Troubles

The same is true, incidentally, of the on-off switch, when it depends on the opening of the lid. This is one of the beauties of having a pilot light. In this case, hang your tester across the AC line inside the set, and open the lid several times to see if it always makes positive contact.

Where the complaint is for battery operation, you will of course immediately try the batteries. If they are OK, look for possible dirty or corroded (or intermittent) battery plugs. Since everything is more critical on battery operation, high resistance connections to the battery (or as mentioned above), the antenna or the line switch may all cause trouble, or at the least, low sensitivity.

Up to now, we have mentioned several times "battery or AC operation." Of course, the sets are made to work on 110 DC, too. There are still a few localities in a few cities where DC is used and it never hurts to ask, just to be sure.

Occasionally an obvious case will

Portable Radio Receivers

Intermittents and Low Sensitivity

come up where the customer says that the set works on DC and batteries but not on AC. This suggests that the AC filtering is on the fritz. If the set won't work on DC, there's always the possibility that the customer didn't try reversing the plug in the socket.

Either dead sets, intermittents or low sensitivity can be caused by one of the elementary characteristics of these sets. namely that they are portable, and do get bounced around more than most table sets. A good deal of rough handling may loosen trimmers, for instance, and eventually get the set out of alignment. Or it may bounce a miniature tube up high enough out of its socket so that its pins (some of them, at least) are not making contact, or only intermittently. Don't assume that the job is complicated, and overlook some of the simple things which can go wrong.

Finding Intermittents

We have already mentioned a few possible intermittent troubles in portables. But probably the most common complaint is the set which quits at a certain time in the evening, only to play perfectly at other times.

Servicemen have long since learned to suspect the oscillator, which in these low-powered sets may be very critical of voltage. If there is a marked drop in the line voltage (such as in the evening in the winter, when the load on the lighting company is heavier), the oscillator can quit cold in its tracks.

But don't jump to the conclusion that the tube's emission is getting low, and that all we need here is a new tube (although this is sometimes the case). There are two other possible causes.

First, check the voltages in the set. It may be that they are on the border line due to defects in power supply, the ability of the rectifier to pass current, or a change in resistance in a plate resistor (or perhaps a wrong value originally).

For instance, the writer has a schematic in front of him in which a variation in a certain dropping resistor plus or minus 10% could cause a change of 6 volts on the tube element to which it is connected. We expect these things in any radio, but if both the power line voltage and that resistor were on the low side of their tolerances (let's say the resistor is down 10% and the AC is down 20%, from 115 to 92), the oscillator would be close to its critical point and it might guit. So where an intermittent oscillator is suspected to be due to low line voltage, give it the best break you can

in the set's power supply.

The second possible cause of a critical oscillator is that the transfer of energy may not be adequate to sustain stable oscillation. In such an instance, the set may function on normal line voltage but quit on low voltage, not because of the voltage itself, but because the voltage change exposes a basic flaw in the set (namely, inadequate transfer of energy in the oscillator circuit). A new tube may temporarily correct this situation, but it is really only concealing the trouble in the same way that a strong sauce may cover up a tasteless meat. In a little while the "new broom" tube will wear down a little and the old fault will crop up again.

To check for this type of trouble, check for a below normal grid-leak voltage (using a VTVM)—the average is 7-10 volts. Where trouble is indicated, check the resistance of the oscillator grid resistor; or try replacing the oscillator grid-leak condenser; or try a new plate by-pass condenser if any is used; and in general check for opens. shorts or high resistance solder joints in the tuned circuits (tuning condenser, padders, trimmers, coils and bandswitch all may be part of a tuned circuit). It is assumed, of course, that the plate and filament voltages of the oscillator would have been already checked.

Not by any means the least of the troubles to which portables are prone are difficulties in the switching arrangements for AC, DC and battery operation. Like any other switches, these can get dirty or pitted contacts, can have bent lugs which do not make contact.

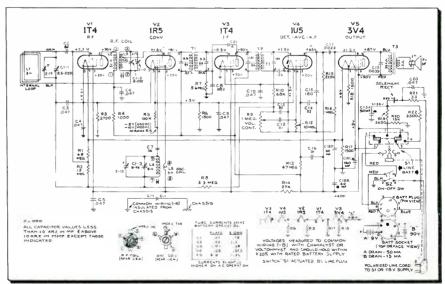
can have cold solder joints, leads jarred loose, etc. Where the switch is suspect, it is a good idea to start out by giving it a bath in carbon tet, and perhaps a little lubriplate, and then go over all the connections lightly with a hot soldering iron. If after such treatment it is still open or intermittent in some condition, one of the easiest ways to check every function quickly is with an ohmeter.

On sets with changeover accomplished simply by plugging the line cord into a socket in the set, the contacts should be checked with the plug in and out. Very often the two prongs of the plug will make 4 contacts in the socket, and these may have been pushed out of line with repeated use.

A large percentage of recent sets use selenium rectifiers in place of tubes. This greatly simplifies the design of the power supply, removes a considerable amount of heat, and also removes one of the most frequent sources of failure in AC-DC sets, which was the rectifiers with high voltage filaments. The life of these rectifiers is quite long (said to be in excess of 1000 hours of use) but they may eventually go bad. The output voltage may go down gradually, or in extreme cases they may short circuit. A resistance check is in order when the selenium is suspected. Be sure to check resistance in both directions before deciding that the unit is way off from the manufacturers specs, as these rectifiers usually measure from 4 to 5 times higher in the reverse direction.

(Continued on page 91)

Fig. 2: RCA Victor model PX600, a typical current model portable set using a selenium rectifier.



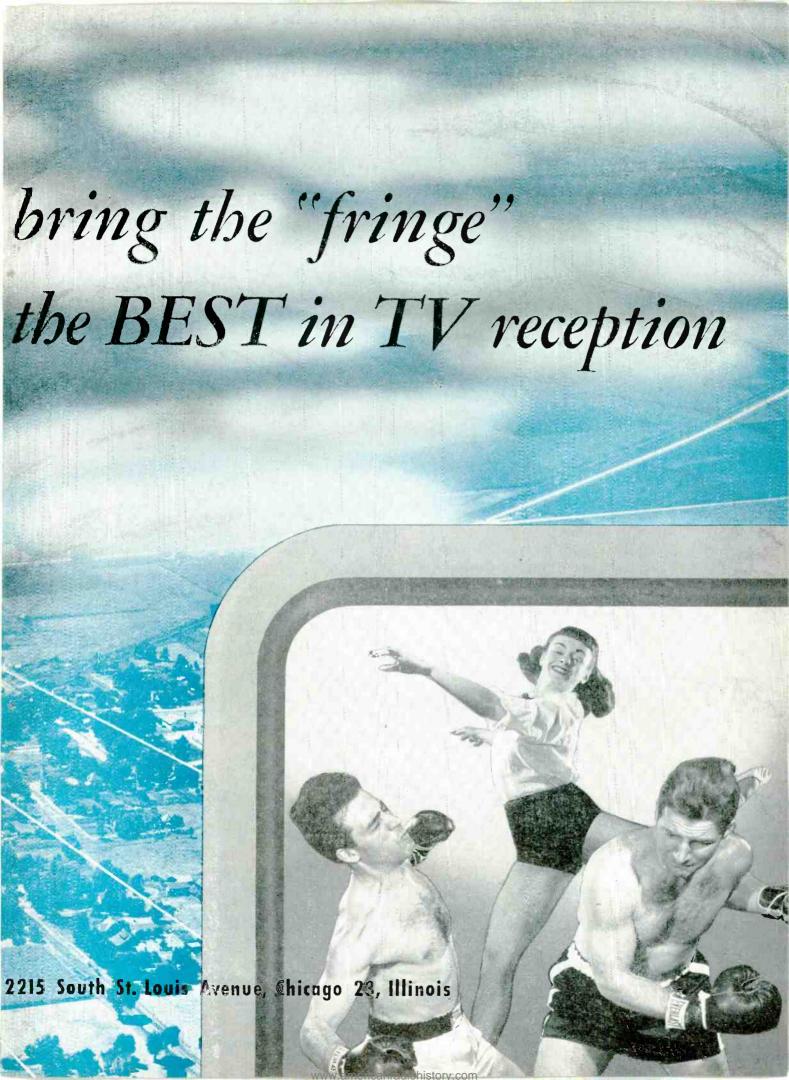


Ask your Distributor about Anchor's Easel Presentation on successful fringe installations

ANCHOR RADIO CORP.

ANCHOR" ENGINEER NO ALWAYS A YEAR AHEAD

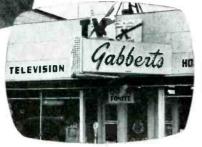
www.americanradiohistory.com



How



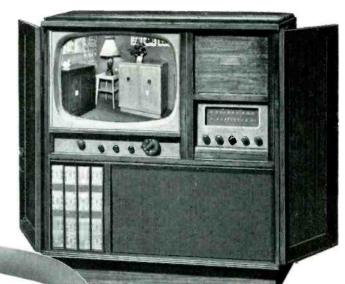
Magnavox



Business In 1951

- Don Gabbert of Minneapolis knows that his best chance for top profit in radio and TV lies with Magnavox. That's why he conceptrates on selling Magnavox to the tune of a half million dollars a year.
- He says you can sell Magnavox with the confidence that no fellow dealer is going to steal your sale by "discounting" or price-cutting.
- Price protection is only one of the vital factors in the Magnavox franchise which enables dealers to build up volume business for themselves-not for some chiseling competitor.
- Every Magnavox dealer enjoys this assurance. It is one of the "Big 7" fundamentals of the franchise that makes Magnavox your best profit opportunity. The Magnavox dealer is essentially a "partner" with the factory and his fellow dealers . . . and no partner cuts another partner's throat.

• "I like the Magnavox way of doing business," says Don Gabbert. "It has given me a profitable business over the years . . . a large list of loyal Magnavox customers, a happy selling organization and assurance of continued profits in the future.'



REASONS WHY Magnavox is Your Greatest Profit Opportunity

Each Magnavox dealer enjoys these positive and profitable advantages of the franchise

- 1. Protected Market
- 2. Direct Dealings
- 3. Longest Discounts
- 4. Reliable Prices
- 5. More Advertising Dollars per Dealer
- 6. Sound Merchandising Help
- 7. Staunchest Owner Loyalty

The Magnavox Belvedere

Representative of the famous Magnavox line is the magnificent Belvedere, a complete home entertainment center with AM-FM radio-phonograph and 20-inch television. Available also as radio-phonograph to which Magnavox Television can be added. In hand-rubbed mahogany or blonde finish.

Better Sight **Better Sound** Better Buy

the magnificent

television - radio - phonograph

Z new exclusive important advancements

GET THEM NOW ON THE

ational 📘



TELEVISION PICTURE TUBES

N.V.C. trade mark on every picture tube.

A MAGNETICALLY FOCUSED TUBE WHICH ELIMINATES A COSTLY FOCUSING COST

A BETTER GLARE-PROOF FACE WHICH ELIMINATES PRACTICALLY ALL DISTURBING REFLECTED LIGHTS

Three plants with over 17 acres of coordinated machinery and personnel.





THESE TWO ADVANCEMENTS YOURS-BECAUSE OF N.V.C.'S INDEPENDENT UNHAMPERED AND FORWARD THINK-ING ENGINEERING. Through every step of manufacturing - perfection - that's why the N.V.C. picture tube delivers the better performance. Designed for conversion and replacement in every standard make television set and engineered to give even a clearer, better and more lasting picture. Producing the world's finest television picture and receiving tubes.

Write for name of Representative gearest you 3019 West 47th Street, Chicago, III.

3019 W. 47th, 5t. Chicago

tional Video Corporati Grays Lake

901 W. Huron St.

New Audio Components

Bogen AM-FM TUNER

The new Bogen R604 AM-FM tuner may be mounted easily in custom or cabinet installations. It is supplied complete with dial escutcheon and mounting screws, knobs, shock mounts, templates, schematics and installation instructions. Sensitivity is 10 microvolts on both AM and FM; FM frequency response is 50-15,000 cps, plus or minus 1 DB; audio output is 1 volt on both AM and FM. Function selector switch provides switching to Phono, FM, AM and TV. List price is \$162.25. David Bogen Co., Inc., 663 Broadway, N. Y. 12, N. Y.—RADIO & TELEVISION RETAILING

Newcomb TRANSCRIPTION PLAYER

Model TR-16AM: A 10 watt, variable speed, portable transcription player and public address combination plays all records, any speed, any size up to 17½". Newly developed motor provides 3 basic speeds, 33½, 45 and 78 rpm, plus a special control to vary speeds, either faster or slower as desired. A



two pound, 10" turntable acts as a fly-wheel and contributes to maximum stability of speed. Other features: Individual bass and treble tone controls, a 12" Alnico 5 PM dynamic speaker, a GE dual needle variable reluctance magnetic pickup, and it weighs only 33 lbs. U/L approved. Manufactured by Newcomb Audio Products Co., 6824 Lexington Ave., Hollywood 38, Calif.—RADIO & TELEVISION RETAILING.

GE DUAL STYLUS

A new stylus for the GE magnetic pickup is called the Dual Reversible Sapphire and Diamond Stylus, Model RPJ 013. This new stylus employs the sapphire for standard records and the diamond for long playing and 45 RPM's. All diamonds and some sapphires used are genuine, some sapphires are produced under laboratory controlled conditions. The latter are of a uniformly high quality and are comparable in use to natural sapphires. A simple twist of the readily-accessible positioning knob will place either the diamond or sapphire in playing position without moving the cartridge or arm.—General Electric Co., Electronics Park, Syracuse, N. Y.—RADIO & TELEVISION RETAILING.

Waveforms AUDIO OSCILLATOR

Model 510-B extended range audio oscillator is a precision instrument of miniature size. Frequency range is 18 cycles to 1.2 MC in five overlapping ranges. Features low distortion, less than 0.2% over most of useful range; constant output ±0.5 DB from 18



cycles to 100 KC; calibrated output voltage; 300° vernier-drive dial; accuracy and stability ±2% ±1 cycle for all conditions of line voltage variation (±10 volts) to 210 KC. Type T-10 matching transformer is available for operation with balanced output.—Waveforms, Inc., 333 Sixth Ave., New York 14, N. Y.—RADIO & TELEVISION RETAILING.

Permoflux SPEAKER

This firm has announced the addition of a fifteen inch speaker to its DeLuxe Royal line. The new Royal 15" (15WP-8-1) has a range of from 40 to 13,000 cycles and is said to make a fine "woofer" for a two-way speaker system. The performance of the Royal speaker is due to its new improved cone, with the following features: slotted treated cone edge, and a flexible spider provide super soft suspension and greatly increases the low frequency response;



the royal blue cone is curvilinear and deeper than the regular speaker cone of the same diameter, and a special stiffening treatment at the throat of the cone results in a highly increased response at the upper end of the audio frequency scale; in Royal speakers, the distance between the pole-stem and the plateyoke is smaller. This places the voice coil in a more concentrated magnetic field. Result: high volume output with a smaller, lower cost magnet.—Permoflux Corporation, 4900 W. Grand Ave, Chicago, Ill.—RADIO & TELEVISION RETAILING.

Oxford COAXIAL SPEAKER

The new speaker, Model CO12JB, is a 12" coaxial speaker designed for quality AM, FM and TV receivers, as well as monitoring, recording applications and other sound installations. The frequency range is 65 to 15,000 cps; the network-crossover is at 4,000 cycles;



power rating 10 to 12 watts; input impedance—8 ohms; size and magnet weight: Woofer—12"—6.9 oz. Alnico V, Tweeter—3"—1.47 oz. Alnico V. Technical literature and other information are available upon request.—Oxford Electric Corp., 3911 S. Michigan Ave., Chicago 13, Ill.—RADIO & TELE-VISION RETAILING.

Garrard RECORD PLAYER

The new manual record player, Model "M," is identical in construction to the famous Garrard RC80 3-speed changer except for the record changing mechanism. It has a four pole heavy duty silent motor which is said to be hum free and rumble free; a heavily weighted turntable to insure flywheel



action and the Garrard parallel lift tone arm. In addition, the Model "M" has interchangeable plug-in heads, similar to those supplied on the RC80, which make it possible for the purchaser to use any cartridge of his choice, crystal or magnetic. A Model "MC" will also be available embodying these same features but with dual stylus crystal turnover cartridge already installed. For further details about performance and price on the Models "M" and "MC" write to Garrard Sales Corp., 164 Duane St., New York 11, N. Y.—RADIO & TELEVISION RETAILING.



the greatest improvement in vibrators

in 17 years*

VIBRATORS



on the points while the vibrator is on the



to allow the vibrator to "breathe" when in use. The Sealed Vent automatically opens when the wax melts from the heat generated inside the vibrator.

Who said you can't have your cake and eat it, too? WE'VE FOUND A WAY! The famous RADIART "RED SEAL" Vibrator that has been the standard of comparison of the industry for decades now is better than ever! The RED SEAL sandwich of rubber and bakelite NOW has a vent that is wax-sealed at the factory to prevent oxidation of the points. When the vibrator is put into use, the wax melts out and permits air circulation for EVEN GREATER PER-FORMANCE AND STILL LONGER LIFE! Unquestionably, this is the GREATEST ADVANCEMENT IN VIBRATORS SINCE THE CHANGE TO PLUG-IN DESIGN . . . get yours NOW!

*in our opinion the greatest improvement since the change from a permanentlywired-into-the-set vibrator to the plug-in design.

for additional literature and catalog sheets, see your jobber or write



THE RADIART CORPORATION CLEVELAND 2, OHIO

VIBRATORS - AUTO AERIALS - TV ANTENNAS - ROTATORS - POWER SUPPLIES

MERIT



SELL IMPROVED RECEPTION

MERIT "TV" Kit #1000 for edge to edge focus—contains MDF-70 Cosine Yoke, HVO-7 Universal Flyback and MWC-1 Width Linearity Control. Keep a Kit handy—you'll get plus business and a reputation for "know-how."



MDF-70... original of the "cosine" series low horz, high vert inductance. Used by such famous sets as Radio Craftsman. Cosine Yokes will improve 10,000,000 sets now in use!

MERIT...HQ for TV Service Aids

MERIT'S 1952 Catalog #5211 now available . . . introducing MERIT IF-RF Coils, includes Coil & Transformer data, listings. Other MERIT service aids: TV Repl Guide #404, Sept. '51 issue—covers 3000 models, chassis of 82 mftrs; Cross Ref Data on IF-RF Coils, Form #14. Write: Merit Coil and Transformer Corporation, 4425 North Clark Street, Chicago 40.

These three MERIT extras help you:

- Exclusive: Tapemarked with specs and hook-up data
- Full technical data packed with every item
- Listed in Howard Sam's Photofacts





Merit is meeting the TV improvement, replacement and conversion demand with a line as complete as our advance information warrants?

BURTON BROWNE ADVERTISING

New Products

JFD TV MASTS

The JFD M110 mast, produced by Republic Steel and called the JFD "Dura-Mast," is a seamless steel unit. It is electro-galvanized with the exact same process as EMT conduit and its 6" fitted joints provide an inter-lock grip which guarantees against any separation. The Jones & Laughlin mast, made of Permatube, is a seamless piece too. Like the M110, this mast—the M108—has 3"



fitted joints. Its corrosion-resistant coating is Vinsynite. Both masts are available in 10 foot lengths. These masts are packaged 14 to a carton, providing for easy stacking and excellent inventory control for both distributor and dealer. This method of packaging, too, insures receipt of the masts in top condition. Literature on the JFD antenna mast line may be speedily obtained by writing the JFD Manufacturing Co., Inc., 6101 16th Ave., Brooklyn 4, N. Y.—RADIO & TELEVISION RETAILING.

Tel-a-Ray BOOSTER

The new switching booster receives signals from four antennas and can be switched from one to another. It is designed for fringe area reception where single-channel antennas perform better than multi-channel antennas. The new product is equipped with four input terminals for four separate antennas, any of which may be switched from the front. Four sets of terminals, supplying 6-7 volts, AC for operation of up to four



antenna-mounted preamplifiers, are mounted adjacent to the four input terminals and automatically switched as the antennas are switched. Another refinement of this booster is the automatic switch, turning the booster off and on with the receiver. Complete details may be obtained by writing the manufacturer.—Tel-a-Ray Enterprises, Inc., Henderson, Ky.—RADIO & TELE-VISION RETAILING.

REEVES

SOUNDERAFT THE ONLY MANUFACTURER OF RECORDING MEDIA WITH 20 YEARS' EXPERIENCE IN SOUND RECORDING

ANNOUNCES NEW PRODUCTS.

NEW DEVELOPMENTS... NEW ERA IN MAGNETIC SOUND

NEW IMPROVED SOUNDCRAFT TAPE

Only Souncraft SPN magnetic recording tape with improved formulation has these new exclusive features. Available in all standard sizes.

UNIFORM COATING THICKNESS to produce the ultimate in sound fidelity. PRE-COATED BASE, BUFFED, SURFACE LUBRICATED to assure smooth, curlfree operation, uniform output level and high frequency response, plus years of extra service.

NEW SOUNDCRAFT 5 DRAWER CHEST

PERMANENT FILING CABINETS- with five drawers, constructed of durable, lined boxboard, containing 625 or 1250 ft. sizes, at no extra cost. Only Soundcraft can make this offer.

BUILD A BETTER TAPE LIBRARY. Recordings of fine artists, sound effects, memorable events can now be conveniently filed with the aid of this new cabinet.

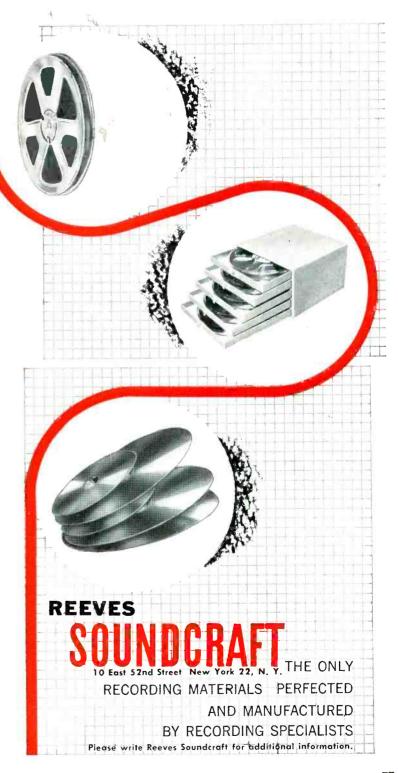
NEW SOUNDCRAFT DISCS

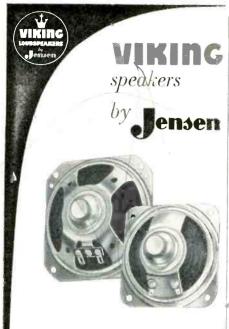
Only Reeves SOUNDCRAFT Recording Discs offer the latest developments to reduce surface noise to the point of inaudibility and produce the last word in fidelity.

> INGREDIENTS OF PERFECTION Heavy atuminum bases free of imperfections, with flawless mirrorlike finish, guaranteed flatness, fine-grain lacquer which has been subjected to microfiltration and blended with chemically pure solvents.

FACTORY WITH MAN-MADE WEATHER

Unlike most discs, Soundcraft Discs are manufactured in a weather-controlled factory, under dust-free conditions. Temperature and relative humidity are completely regulated. Soundcraft Discs, because of these controlled conditions. are delivered the year 'round.





low cost replacement speakers by Jensen . . . makers of the World's Finest Loudspeaker the G-610 Triaxial

Jensen

JENSEN MANUFACTURING COMPANY
DIVISION OF THE MUTER COMPANY
6601 S. LARAMIE AVENUE • CHICAGO 38 ILLINOIS

Viking speakers manufactured with the same engineering and production skills which go into every Jensen productare designed especially for low-cost replacement and utility applications. The Viking line includes 12 models from 31/2" to 12" with 4" x 6", 5" x 7" and 6" x 9" ovals, all P.M. An accessory bracket, designed especially for the Viking series, solves chassis and transformer mounting problems.

Video Detectors

(Continued from page 65)

they will not function correctly. One side of the crystal acts as a cathode, the other side as a plate. In other respects, the crystal circuit is similar in its operation to that of a diode tube.

One kind of video detector circuit used in commercial receivers is shown in fig. 7. Let's analyze the circuit, or at least those parts of it which may seem unfamiliar.

The video detector employed is ½ of a duo-diode tube us d as a combination video detector and sync limiter.

C-312 is a plate bypass condenser that removes the unwanted IF signal from the detector load resistor R-319. This resistor, incidentally, also acts as the grid resistor of the 6AC7 video amplifier. No capacitative coupling is employed.

L-302 is a peaking coil used to filter out IF, as well as to boost the high-frequency response. R-314, the resistor in shunt with it, is used to dampen, or broaden, the high-frequency response, and prevent excessive peaking at the high-frequency end of the video band-pass.

L-303 and C-308 form a tuned circuit that resonates at 4.5 MC. This circuit is used to trap out a 4.5 MC video signal. Where does this undesired signal come from? Well, the sound traps used in the video IF stages are not always 100% efficient. Some sound IF signal that is left over may therefore get into the video detector. This signal, which is often 21.9 MC, will beat with a video IF signal of 26.4 MC in the detector, and produce a difference frequency or beatnote of 4.5 MC. Such a beating action occurs because the video detector, being a rectifier, not a class A amplifier, offers a non-linear impedance to incoming signals, and whenever two signals meet in a non-linear impedance, they beat against each other as enthusiastically as a drumstick against a drum.

The parallel tuned circuit offers a very high impedance to such a 4.5 MC beat-note. The beat-note will therefore use up most of its energy developing a voltage across this tuned circuit, and very little of it will be left to develop a voltage across R₅319, at the input of the video amplifier.

Next month—more video detector circuit analysis, and troubleshooting procedures.

Toal Leaves Capehart

E. Patrick Toal has resigned as director of sales of the Capehart-Farnsworth Corp., Fred D. Wilson, president, has announced.

Telrex Names Philip

Michael D. Ercolino, president of Telrex, Inc., Asbury Park, N.J., antenna manufacturer, has announced the appointment of Manfred E. Philip as controller and director of purchases.





set owners use

jfd panorama
indoor tv antennas
triple-chrome plated dipoles

MODEL TA135 DELUXE 6.95 list

MODEL TA136 STANDARD COMPANION 5.95 list

MODEL TA137 ECONOMY COMPANION 5.50 list

COMPLETE WITH TWIN LEAD

absolutely tip-proof



JFD MFG. CO. BENSONHURST 6-9200 BROOKLYN 4, N.Y. GENERAL CEMENT

more than a name it's a complete package

OF TV AND RADIO SERVICE NEEDS!



G-C AMO MINIATURE TUBE PULLER No. 5093 for 7-pin tubes – list \$1.75 No. 8106 for 9-pin tubes— list \$1.75



G-C MINIATURE TUBE PIN STRAIGHTENER No. 5191 for 7-pin tubes— list \$1.05 No. 8105 for 9-pin tubes— list \$1.05 No. 8655 Duplex pin straightener—list \$2.50



No. 744-I SPEEDEX AUTOMATIC WIRE STRIPPER For Stranded or Solid Wires -list \$8.25



No. 8280 DELUXE TELEVISION ALIGNMENT. TOOL KIT 16 tools complete with case list \$12.90



No. 47-2 G-C TELEVISION HIGH VOLTAGE CORONA DOPE



G-C TELEVISION TUBE KOTE Prevents shorts on high voltage | For recoating surface of TV pic-TV circuits—list \$1.20 | ture tubes—list \$1.20



G-C DE-OX-ID CONTACT CLEANER Dissolves corrosion and oxidation on contacts and controlslist 85¢



No. 30-2 G-C RADIO SERVICE CEMENT Especially made for radio and speaker repairs—list 65¢



G-C TELEVISION TENNA-KLIP Saves time in clipping antenna to set-list 50¢

The items listed above are just a few of the thousands of service needs made by G. C. See your distributor.



CEMENT MANUFACTURING COMPANY

902 Taylor Ave., Rockford, Illinois

FREE	Dept. B Please send at once, your 80 page catalog of TV and Radio Service Needs
Company Na	ne
Street Addres	
City	ZoneState

Close Joins RCA Victor

E. Burt Close has joined the consumer products advertising and sales promotion department, RCA Victor Division, Radio Corp. of America, and will be in charge of advertising for the company's new line of air conditioners.

New Regal Tuner

Announcement has been made by Walter Spiegel, president of Regal Electronics, New York 27, N.Y., that all new 1952 television models will be equipped with the new Cascode tuner. The new tuner is designed to give higher gain in weak signal areas.

Hallicrafters TV Line

Nine new models of the new "150mile" TV set have been introduced by The Hallicrafters Co., Chicago. In announcing the new le. William J. Halligan, president, said, "Either the consumer ges the performance he wants, up to 150-miles distance from television transmitters, or we refund his money in

New Crosley Plant

Construction has begun on the 51/2 million dollar defense production plant being built by the Crosley Div. of Avco Mfg. Corp., at Evendale, Ohio.

Ward Lowers Prices

Price reductions averaging 10% were announced by Ward Products Corp., 1523 E. 45th St., Cleveland 3, Ohio, on several models in its TV antenna line. Reductions cover all Para-Con models and several accessories.

Arvin Co-Sponsors Show

Arvin Industries, Inc., and its newly appointed central Indiana distributor, the Gibson Co., are joining in sponsorship of the Indianapolis Symphony Orchestra, with Dr. Fabien Sevitzky conducting, on WFBM-TV for six tele-

Audio Methods

(Continued from page 67)

any heat from the copper braid, by holding the braid with longnose pliers.

In soldering to the standard phono plug it is often easier and makes a neater job to wrap a piece of solid hookup wire around the shell of the plug, sweat it on, and then tie and solder together this wire and the shield of the cable. Tape the whole thing for improved strength and appearance with black plastic tape.

It may be necessary to take care in installations which have several of the units close together to see that no transformers are too near the magnetic pickup head. If they are, they can induce severe 60 cycle hum. It is easy to check for this effect by turning the volume control to mid range, full bass tone control, and phono motor unplugged (disable any pickup muting by moving the arm in slightly from its resting position).

REMEMBER THESE CBS-HYTRON TV FIRSTS?



16RP4 original *studio-matched* rectangular picture tube.



12BH7 twin-triode sweep amplifier with superior efficiency.



1X2A compact, highvoltage TV rectifier.



6BQ6GT 25BQ6GT extra-performance deflection amplifiers.



YOU'LL BE SEEING THEM . . . BUYING THEM SOON

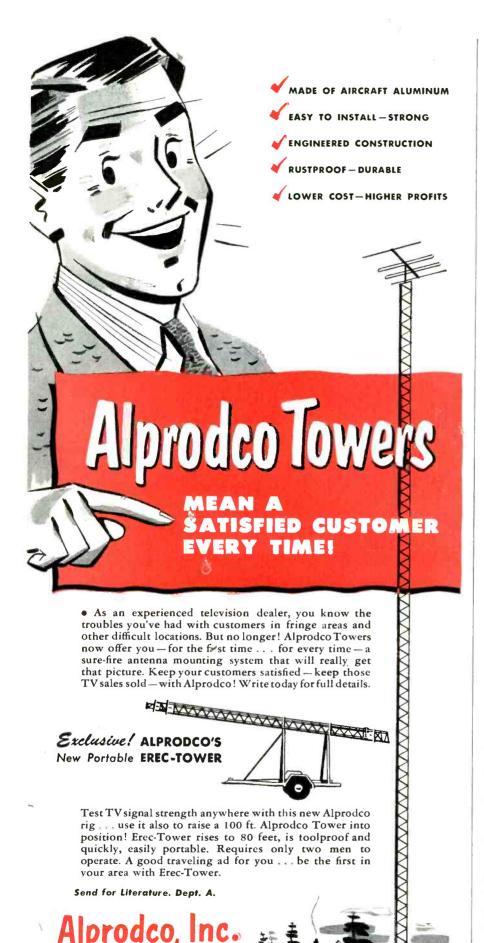
Because these tubes are specifically designed for high-performance, low-cost TV for the mass market. Watch for them in new models of famous TV sets. When you buy these CBS-Hytron TV firsts, follow leading set manufacturers. Buy the original. Buy CBS-Hytron!

MANUFACTURERS OF RECEIVING TUBES SINCE.

RANGE AND ELECTRONICS SYSTEM, INC.

RANGE AND STOOLUMBIA BROADCASTING SYSTEM, INC.

MAIN OFFICE: SALEM, MASSACHUSETTS



CBS COLUMBIA

Sixteen new models have been introduced. They include the 17M1, mahoany finish metal table model shown here, priced at \$179.95; the 17T2, also a table model, in mahogany cabinet, at \$199.95; and two open-face mahogany consoles, the 17C8 and 17C9, both 17-inch sets, listing at \$219.95 and \$229.95, respectively. Full-door 17-inch console model 17C10, lists at \$269.95. Twentyinch sets include 3 table models, the



20M1, mahogany finish, at \$219.95; the 20M3, ebony finish metal cabinet, at \$229.95; and the 20T2, mahogany cabinet, at \$249.95. Three of the 20-inch models are consolettes: the 20C1, mahogany, at \$279.95; the 20C4, mahogany, at \$299.95; and the 20C4B, in blond cabinet, at \$309.95. Top model is the French Provincial 20-inch full-door model, at \$369.95. CBS-Columbia, Inc., 170 Fifty Third St., Brooklyn 32, N. Y.—RADIO & TELEVISION RETAILING.

Show Windows

(Continued from page 33)

Cards listing names of the owners of the old products lent extra interest to the show-window exhibits.

Props can spell the difference between a window the people in the street will merely glance at or one which will keep them looking for a long time. Props can describe product use even faster than a lettered sign, and they can, through association, be made to create buying desire on the part of the onlooker, which is really what the show-window display should be designed to do.

A dull book will be skimmed through or cast aside by the reader. The show-window "reader" will react the same way to a drab, uninteresting display. Props can help hold "reader" interest and buying desire. The smart dealer will plan to set up a number of striking exhibits, using manufacturer-supplied props tied in with those he makes himself in order to get the people in his trading area accustomed to visiting his show-windows. Soon they will come to expect something new and interesting on display there, and they won't be disappointed.

DUBLIN, GEORGIA



STOP! DON'I PASS THIS PAGE

... until you've read about SYLVANIA'S power-packed
Service-Dealer Campaign

Talk about an exciting, sales-building Radio-TV Service Dealer campaign! Mister, this is it!

Featuring personal endorsements of some of the most glamorous and newsworthy people in the entire country, this campaign ties you in with big-space ads in Life, The Saturday Evening Post, Collier's and Better Homes and Gardens.

Just see what you get: . . . brilliant life-like cut-outs of the celebrated stars counter cards, streamers, appealing mailers . . . also radio spot announcements, and reminder stickers. You pay only two cents per prospect per month for the mailers. The rest is FREE. Don't delay! Call your Sylvania distributor or mail coupon N-O-W!

SEND COUPON
NOW FOR DETAILS
ON THIS BIG
CAMPAIGN



15/2

SYLVANIA

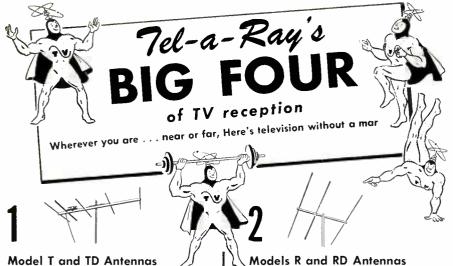
RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT: FLUORESCENT TUBES, FIXTURES, SIGN TUBING, WIRING DEVICES; LIGHT BULBS; PHOTOLAMPS; TELEVISION SETS

Sylvania Electric Products Inc. Dept. R-2402, Emporium, Pa.

I'd like full details about Sylvania's big 1952 Campaign for Service Dealers.

Street

City_____Zone__State_____



The antennas that are opening new markets for TV . . . famous for providing clear, stable, interference-free reception at distances up to 200 miles or more. With the Pre-Amplifier, they give up to a 300 times gain over dipole. Rugged, weatherproof construction.



New Switching Booster Handles Four Antennas

For areas where two or more channels may be received with separate antennas. One booster handles four antenias . . switch from one antenna to another with one knob. It is a low noise level, high gain booster that controls and supplies power far the Tel-a-Ray antenna system. Models R and RD Antennas

The middle-distance champions of television . . . providing the finest reception to outer service areas at minimum cost. Like all Tel-a-Ray antennas, they are simplicity itself to install. Same quality construction features as Models T and TD antennas.



The Pre-Amplifier

For antenna or mast mounting . . . the only device of its kind . . . dramatically multiplies signal gain while keeping noise at a minimum. Eliminates snow and makes signals strong and stable. weather-sealed unit guaranteed against weather damage.

HERE'S OPPORTUNITY TO MAKE YOUR PROFITS FAR BIGGER, YOUR WORK FAR EASIER!

With Tel-a-Ray's "Big Four," it's easy to sell television to the huge, wideopen market beyond the service areas. Easy to sell the growing replacement market in primary service areas. Easy to solve reception problems everywhere . . . in a jiffy and without call-backs. These products are in a class by themselves in performance . . . in quality appearance . . . in their construction of the finest corrosion proof materials and unconditional guarantee against wind and weather damage.

Tel-a-Ray, America's most progressive antenna manufacturer, has applied to the FCC to operate a UHF television station on Channel 50 . . . Tel-a-Ra, 's research engineers, keeping pace with America's fastestgrowing industry, have developed an effective UHF antenna. Such progress assures you better television.

Take this opportunity to up your profits with less work. Send the coupon for full information and the name of your nearest Tel-a-Ray distributor.

MAIL TODAY

7el-a-Ray ENTERPRISES, INC.



P. O. Box 332R, Henderson, Ky.

. I'd like descriptive literature an the Tel-a-Ray line and the name of my nearest Tel-a-Ray distributor.

Name
Company
Address

Dollars in Servicina

(Continued from page 39) will the customer please advise the dealer, and that the store will be glad to send over for any other work the customer may have.

Where conditions permit, dealers can open up their repair departments to the public, in order to advertise service. Customers will be deeply impressed by the well equipped shop, and the facilities apparent there will help influence many a person to buy.

Finally, in h lefforts to build up service revenue, the dealer turns to adve tising. Display ads are used in newspapers, and in telephone directories, and the newspaper classified is always a good bet.

One of the best business-pullers one can use is a sign listing all of the products the store services. Such sign is a powerful silent salesman, and it suggests things to people. For instance, Mrs. Jones may not know that her favorite dealer fixes electric clocks, but when she sees this item on the sign, and remembers that out-of-order timekeeper on the dresser, she acts.

The dealer who goes about it the right way can build his service department to become a highly profitable unit of his business, and can use it to make friends of his customers and customers of their friends. He needs proper facilities, good men, fast service and genuine effort to insure growth of the service department to the stature of full partner in his business.

To Rek-O-Kut Post

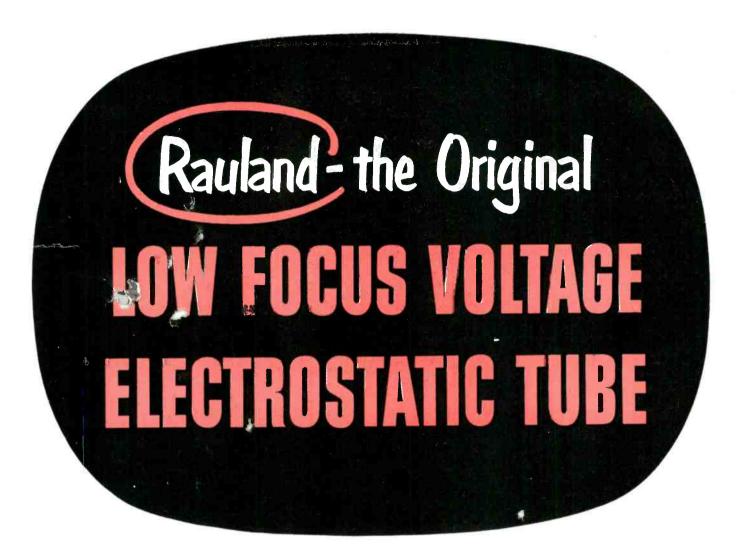
Avery Yudin has been appointed director of audio education for the Rek-O-Kut Company. In making this announcement, Louis Silber, president of the company, said Yudin will advise and assist schools and other users of audio playback and recording equipment.

JFD Booster Brochure

A new, colorful brochure describing the JFD "Tuck-Away" booster line has been released by the advertising department of the JFD Mfg. Co., Inc. The new "Tuck-Away" brochure can be obtained free by writing the JFD Mfg. Co., Inc., 6101 16th Ave., Brooklyn 4, N.Y.

Halldorson Names Fieldman

Appointment of Maurice P. Fieldman to the post of general sales manager of the Halldorson Co., Chicago, manufacturer of transformers since 1913, has been announced by P. J. Halldorson, president.



Perfected in Rauland Electronics Laboratories, this tube that gives edge-to-edge sharpness of focus without coils and magnets is proved and ready as the materials pinch becomes painful

BETTER in all ways! Gives better over-all focus—hair-line sharpness from edge-to-edge—with NO critical materials for focusing . . . and STAYS SHARP under considerable variation in line voltages.

recourses NO re-engineering of present television chassis... NO added high voltage focus circuit... NO added receiver tubes... NO additional components except an inexpensive potentiometer or resistor.

FOCUSES by using D.C. voltage already available in the receiver.

ELIMINATES focusing coils and magnets ... saves critically scarce copper and cobalt.

This new Rauland development is now available in substantial quantities in 17 and 20 inch rectangular tubes. For further information, address . . .

THE RAULAND CORPORATION



Perfection Through Research
4245 N. KNOX AVENUE · CHICAGO 41, ILLINOIS



Miller Needle Guide

M. A. Miller Mfg. Co., phonograph needle manufacturer, has announced its latest revised replacement cross reference guide. Copies are available by writing the company at 1169 E. 43rd St., Chicago 15, Ill.

Admiral to Sponsor Sports

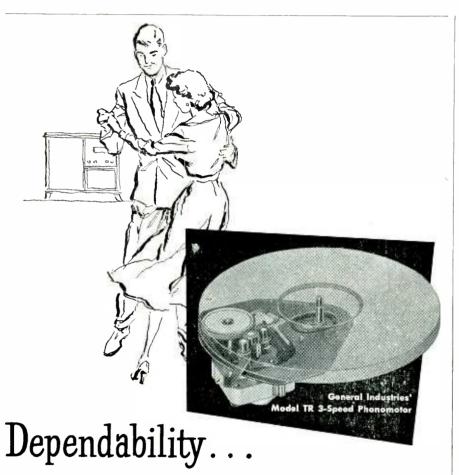
Sponsorship of the radio and television coverage of two of the nation's leading sports events in 1952 has been renewed by Admiral Corp., Seymour Mintz, advertising director, has announced. The events are: the Chicago finals of the Golden Gloves boxing tournament, March 7, 1952; and the All-Star football game, August 15, 1952.

Starrett Names Robbins

Irving Robbins has been named vicepresident and general manager of Starrett Television Corp., 601 W. 26 St., New York. He will continue as special consultant on procurement and finances, to the board of directors.

Large Show Attendance

The American Home Furnishings Market, held at 666 Lake Shore Drive, Chicago, from Jan. 7-18, brought together 25,000 buyers. More than 1250 manufacturers exhibited at the show. Larger attendance at the Winter Market than at the Spring Market is attributed to the introduction at the Winter Market of new home appliance, radio and TV lines.



an important reason why leading manufacturers prefer General Industries' 3-Speed Phonomotors

Year after year, General Industries' Smooth Power Phonomotors provide trouble-free performance—backing up fine radio, television and record-changer engineering with highest quality motor design and construction.

Write for complete information, including specifications, design features and dimensions. Quantity price quotations available on request.



THE GENERAL INDUSTRIES CO.
DEPARTMENT MD . ELYRIA, OHIO

Named Jensen Rep

Appointment of the L. F. Waelterman Co., 8543 McKenzie Rd., St. Louis 23, Mo., to represent Jensen Industries, Chicago phono-needle manufacturer, has been announced by Karl Jensen, vice-president.

Philco Appointments

William Balderston, president of Philco Corp., has announced a number of important advancements in the top level organization. John M. Otter, formerly vice-president and general sales manager, was appointed vice-president and general manager of the refrigeration division; Thomas A. Kennally, former president of the refrigeration division, will become vice-president on the executive staff and chairman of the distribution commerce. Philco's top level policy commerce and distribution planning for all products; Raymond B. George, who was vice-president-merchandising of the television and radio division, has been appointed corporate vice-president of merchandising; Frederick D. Ogilby has been named vicepresident television and radio division: John Kuneau, while retaining his post as vice-president on the executive staff in charge of public relations, will also serve as chairman of the newly formed merchandising committee for television and radio activities; and John L. Utz. in field sales as a district representative and division manager, has been advanced to national sales manager of television

Named to Service Post

Spencer Glaspell, formerly service manager of Packard-Bell, has been appointed general manager, Kaye-Halbert National Service Corp.

Radar-Radio Appoints

Radar-Radio Industries of Chicago, Inc., has named S. I. Neiman as executive secretary, and Kenneth C. Prince as general counsel, Leslie F. Muter, president of the trade group, has announced. Headquarters for Radar-Radio Industries of Chicago, Inc., will be located at One North LaSalle St.

RCA Names Foster

Election of Edwin Dorsey Foster as vice-president and director of planning for the RCA Victor Division, Radio Corp. of America, was announced by Charles M. Odorizzi, operating vice-president of the division.

Sprague Service Package

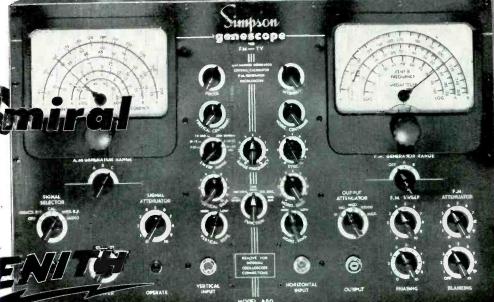
A new "service package" system announced by the Sprague Products Co. of North Adams, Mass., is designed to make it easy for TV repairmen to carry complete stocks of replacement capacitors for the brands of TV sets they service most frequently. A complete listing of the capacitors recommended for the service package for each brand of TV set is included in the new edition of the Sprague TV Replacement Capacitor Manual, M-481, available free through Sprague distributors, or directly from Sprague for 10¢ each.





TIM ALEXANDER

MAX SCHINKE





FRANK SMOLEK

LEADING EXPERTS

RECOMMEND

FLOYD MAKSTEIN





DON ANDERSON

hallicrafters

These leading manufacturer's service managers agree — the Simpson Model 480 Genescope is perfectly designed for proper testing, servicing and alignment of all TV and FM receivers!



THE SIMPSON MODEL 479 TV-FM SIGNAL GENERATOR

Exactly the same circuits, ranges and functions as the Model 480, with the exception of the oscilloscope.



BURTON BROWNE ADVERTISING

MINDSOM ELECTRIC COMPANY 5200 West Kinzie Street • Chicago 44, Illinois • Phone: COlumbus 1-1221

In Canada: Bach-Simpson, Ltd., London Ontario







INLINE ANTENNA

Because your TV antenna is continually being exposed to the rigors of Mother Nature—wind, ice and storm—choosing an antenna that is structurally strong is very important. The Amphenol Inline Antenna is engineered to repeatedly withstand winds of 70 miles per hour and one-half inch annular ice loadings. It is clean in design and presents no surface unduly exposed to wind. Its aluminum construction is strong and light in weight. In addition, the aluminum is rust and corrosion resistant and is especially suited for use in sea coast areas and other places where salt or other corrosive conditions are encountered.

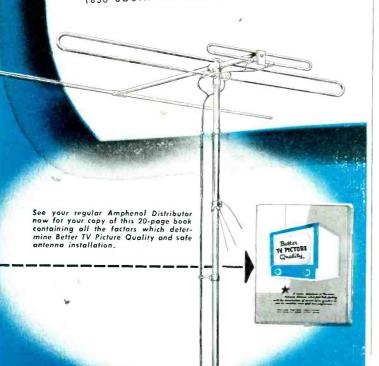
LIGHTNING ARRESTOR

The National Electric Code states that every unshielded outdoor antenna lead-in should have an approved lightning

arrestor. The Amphenol Lightning Arrestor is approved for this purpose and also carries the Underwriters' Laboratories seal of approval. It eliminates the danger of lightning causing damage to your TV set or home and also carries off the minor static discharges that interfere with good picture reception.



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





1068 Raymond Ave., St. Paul 8, Minn.



When You Install!!! Use The Best - Use Tele-Ex-Pand

ENGINEERED WITH THE FUTURE IN MIND IDEAL FOR USE AS:

- From the ground up with and safest way to install.
- AS A PROBE TOWER Mounted on a Pick-up or panel truck, at a cost the dealer can afford to pay.
- (3) AS A DEPENDABLE INSTALLATION FOR HAM OPERATORS AND SHORTWAVE INSTALLATIONS....
 Taxicab Companies. Fire Departments and Police Units, are but a few in this field.
- ADAPTABILITY FOR USE AS SUPPORTING STANDARDS FOR FLOOD LIGHTS AT DRIVE-INS, USED CAR LOTS, AND DRIVING RANGES....

WRITE US, OR CONTACT YOUR NEAREST JOBBER FOR PRICES

FOUR MODELS

Collapsed Expanded 10 ft. 18 ft. M-20 15 ft. 28 ft. 38 ft. M-40 20 ft.

20 ft. 55 ft.

TELE-EX-PAND PRODUCTS SALES CORP. BERWICK NATIONAL BANK BLDG.
BERWICK, PENNA.

Portables

(Continued from page 69)

We have listed here a few of the special problems of 3-way portables. Of course, in the last analysis, they are radios, and all the general rules apply: always get a complete description of the trouble from the customer, always try it out yourself before you go to work on it (sometimes there's nothing wrong), and when you find trouble, always check the tubes first—it's quick, and will often save you a lot of trouble.

New Crosley Lines

Crosley's new room air conditioner is available in three sizes, 1/3, ½ and ¾ HP at \$249.95, \$349.95 and \$399.95. A new 9-cubic foot fully automatic defrosting refrigerator has also been announced.

Fidelitone Record Brush

Gail S. Carter, vice-president in charge of sales for Permo, Inc., has announced that a new Fidelitone phono record brush has just been placed on the market, carrying a list price of 50 cents. It is easy to attach, and adds practically no weight to the tone arm. Comes in an individual brush box. A display merchandiser holds 12 units.

Admiral Buys Chicago Firm

Admiral Corporation has purchased the Molded Products Corp., of Chicago, one of the largest custom molders of plastics in the country, for an undisclosed sum. This acquisition brings to 10 the number of manufacturing plants owned and operated by Admiral.

Fidelity Names Samuels

J. J. Samuels has been appointed general sales manager of Fidelity Tube Corp., East Newark, N.J., manufacturers of TV picture tubes. The announcement was made by Benjamin Ozaroff, Fidelity president.

Moves to Louisville

The General Electric Company has moved its air conditioning division to the Louisville, Kentucky, major appliance division. The firm is presently marketing a ½ and ¾ HP room cooler.

Appoint F. A. Frank

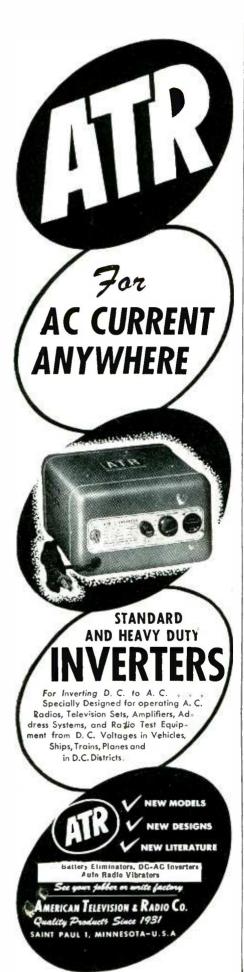
William Halligan, Jr., radio sales manager of the Hallicrafters Co. has announced that Fritz A. Frank has been named assistant radio sales manager. In his new position, Mr. Frank will be responsible for coordination of sales programs for both communications and home radios.

New GE Fan Announced

A new portable electric fan which can be used as a ventilator as well as a circulator has been announced by the General Electric Company. It operates at two speeds, weighs only 9½ lbs., and retails for \$34.95.







INDEX TO ADVERTISERS FEBRUARY 1952

Admiral Corp	8
Alprodco, Inc	82
American Phenolic Corp	90
American Television & Radio Co	96
Ampro Corp	25
Anchor Radio Corp	71
Andrea Rodio Corp	48
Arvin Industries, Inc.	54
	54
Bendix Aviation (Radio Television & Broad-	
cast Receiver Div.)	22
Blonder-Tongue Labs., Inc	91
CBS-Columbia, IncCover	r 2
Capehart-Farnsworth Corp	24
Channel Master Corp	62
Commercial Credit Corp	51
DuMont Labs., Inc., Allen B14,	15
asy-Up Tower Co	95
icor, Inc	12
electro-Voice	9
merson Radio & Phonograph Corp	
	56
ada Radio & Electric Co., Inc.	17
General Cement Mfg. Co	80
General Industries Co	86
Hallicrafters Co	60
tytron Radia & Electronics Co	81
FD Mfg	7 9
ensen Mfg. Co	78
ewel Radio Corp	58
aPointe-Plascomold Corp. (VEE-D-X)	23
Magnavox Co	72
Merit Transformer Corp	76
Motorola, Inc10,	11
National Video Corp	73
hilco Corp	5
Radiart Corp	75
Radio Corp. of America2, 3, 30, 31, Cover	- 4
:	93
aytheon Mfg. Co	3
leeves Soundcraft	77
	85
entinel Radio Corp	13
	87
parks-Withington Co	21
tarrett Television Corp	52
tromberg-Carlson Co	26
ylvania Electric Products, Inc 18, 19,	83
el-A-Ray Enterprises, Inc.	84
ele-Ex-Pand Products Sales Corp	90
ele King	4
el-O-Tube Corp. of America	94
elrex, Inc.	88
erado Co	90
rio Mfg. Co	20
ricraft Products Co	94
'ung-Sol Electric Inc.	
riplett Electrical Instrument Co.	92
. V. Wire Products	92 89
	89
Ward Products Corp.	
Nard Products Corp	89 91 16
Vestinghouse Electric Corp6,	89 91
Vestinghouse Electric Corp6, Zenith Radio & Television	89 91 16 7 37
Vestinghouse Electric Corp	89 91 16 7 37 cu- ity
Westinghouse Electric Corp. Cenith Radio & Television While every precaution is taken to insure according	89 91 16 7 37 cu- ity

Name Bert Rice

Bert Rice, an outstanding figure in New York merchandising circles, has been appointed manager of the New York Factory Distributorship of the receiver sales division, Allen B. DuMont Laboratories, Inc., it has been announced by Walter L. Stickel, national sales manager.

Appoint Langstroth



Frank D. Langstroth, above, has been named vice-president in charge of operations of Video Products Corp., and its affiliate, Sheraton Television Corp., announces Richard A. Marsen, president of the two firms. Langstroth who was formerly president of Starrett Television Corp., will now have charge of all plants of Video Products and Sheraton, manufacturers of TV receivers and TV chassis, and presently handling an expanding volume of government work.

New Sylvania TV Line

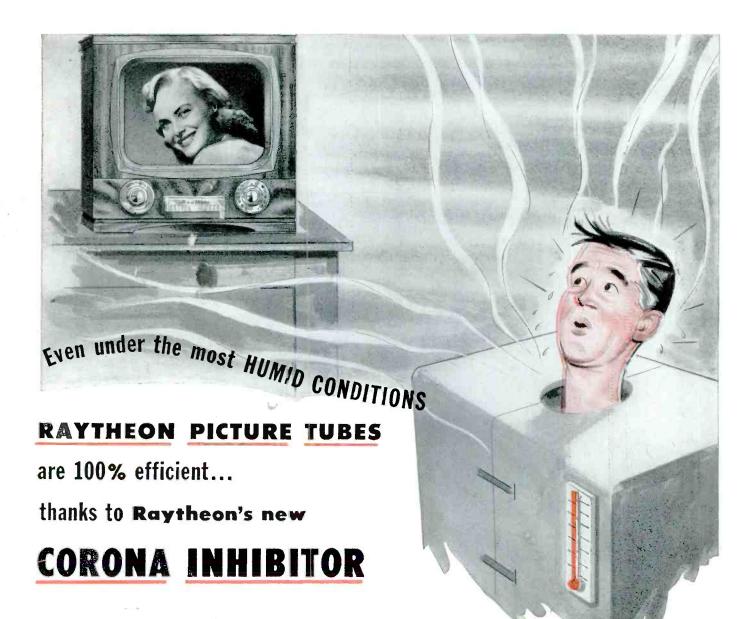
"HaloLight," Sylvania's surround lighting built into TV sets, has been adapted for 17" models, John K. Mc-Donough, general sales manager for the Radio and Television Division of Sylvania Electric Products Inc., has announced. The feature is incorporated in three 17" models, the "Adams," an open console, retailing for about \$369.95 in mahogany and \$379.95 in blond; the "McKinley," console with doors for about \$409.95 in mahogany and \$419.95 in blond; and the "Lincoln," a combination console at about \$579.95 in mahogany and \$599.95 in blond. In addition to 17" models, "Halolight" is also included in the 20" table model, the "Coolidge," which has a suggested list price of \$329.95 in conventional woods, or \$369.95 in scratch resistant laminates.

New Sylvania Distributor

John K. McDonough, general sales manager, radio and television division, Sylvania Electric Products Inc., has announced the appointment of Gough Industries Inc. of Los Angeles as distributor of Sylvania receivers and radios for Southern California and Phoenix, Arizona.

Speed Queen Distributor

Reines-Freeman Distributors, Inc., 210 Jay St., Albany, N.Y., has been named distributor for Speed Queen.



Ordinary picture tubes are adversely affected by humidity and wet weather — may lose up to 10% of their brightness on damp days. Not so Raytheon made Television Picture Tubes with new CORONA INHIBITOR.

This amazing Raytheon development puts a "raincoat" on Raytheon Picture Tubes, guarantees the same clear picture rain or shine. Exhaustive tests proved conclusively that even under a water spray on the high voltage contact. Raytheon made Tubes showed no loss of brightness.

Give your customers the tubes that give constant clarity no matter what the weather. Ask your Raytheon Tube Distributor for Raytheon Television Picture Tubes.



RAYTHEON

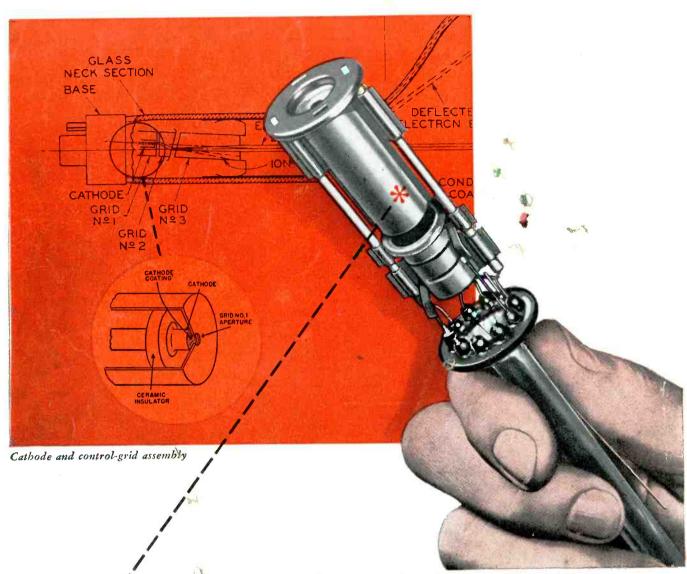
RAYTHEON MANUFACTURING COMPANY

Receiving Tube Division

Excellence in Electronics Newton, Mass., Chicago, III., Atlanta, Ga., Los Angeles, Calif.

RECEIVING AND PICTURE TUBES . RELIABLE SUBMINIATURE AND MINIATURE TUBES . GERMANIUM DIODES AND TRANSISTORS . RADIAC TUBES . MIREOWAYE TUBES

www.americanradiohistory.com



The gun that looked 100% "perfect" ... yet never "fired a shot"

The electron gun you see looks perfect, but actually it "never fired a shot." You see, RCA rejected it because the spacing between grid No. 1 and the cathode was out of bounds. Only a 0.001" departure from the design value for this spacing is sufficient cause for gun rejections in RCA factories.

Why does RCA prescribe such a close tolerance? Simply because RCA engineers have found that if the cathode-to-grid spacing is too small, or too large, the grid would have faulty "control." Such tubes, when installed in TV receivers, may be

the cause of poor picture performance, and may result in troublesome and timeconsuming service problems and callbacks.

RCA takes no chances with its reputation for quality. You get the benefit of RCA's quality reputation when you use RCA tubes. Constant vigilance and quality control at all stages of manufacture assure meeting RCA standards on the final production line. That's why RCA picture tubes are unmatched for reliability and uniformity.

In RCA picture tubes, the difference is

top-quality control. That's why, dollar for dollar, RCA picture tubes have no equal.





RADIO CORPORATION OF AMERICA
HARRISON, N. J.