

ONLY IRC GUARANTEES

SATISFACTORY MECHANICAL FIT

AND ELECTRICAL OPERATION

OR DOUBLE-YOUR-MONEY-BACK

The typical manufacturer's specifications shown here are exactly duplicated by IRC QJ-180 control. CONCENTRIKIT assembly includes P1-229 and R1-312 shafts with B11-137 and B18-132X Base Elements, and 76-2 Switch.



Wherever the Circuit Says -

The mechanical accuracy of IRC Exact Duplicate Controls or universal CONCENTRIKIT equivalents is based on set manufacturers' procurement prints. Specifications on those prints are closely followed.

Shaft lengths are never less than the set manufacturer's nominal length—never more than 3/2" longer.

Shaft ends are precisely tooled for solid fit.

Inner shaft protrusion is accurately duplicated for perfect knob fit.

Alterations are never needed.

For Exact Duplicate Controls, specify IRC. Most Service Technicians do.

#### INTERNATIONAL RESISTANCE CO.

Dept. 572, 401 N. Broad Street, Philadelphia 8, Pa.

In Canada: International Resistance Co., Ltd., Toronto, Licensee

# TECHNICIAN

#### & Circuit Digests

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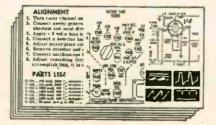
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#### MAY, 1956

FRONT COVER vast arrays of electronic parts and equipment, dependent on one another in a manner symbolized by an atomic structure, are classified in 19 major product categories of this 1956 Technician Buyers Directory Issue. Other features in this year-round reference include manufacturer addresses, service associations, reps, distribs and trade names. Starts on page 65.

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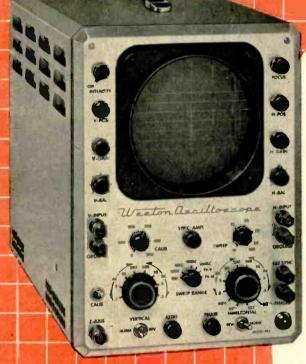
CIRCUIT DIGESTS

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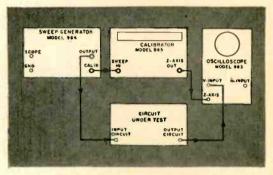
ADMIRAL: HI-FI Phonograph Chassis 5N3
BENDIX: TV Chassis T19
DU MONT: TV Chassis RA-356, 357
MOTOROLA: Transistor Portable Radio,
Chassis HS-483
SENTINEL: TV Models 1U-1202, etc.

ZENITH: TV Chassis 17Y20, 17Y22

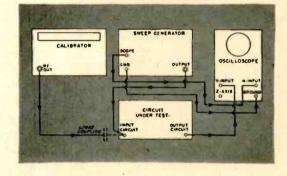
# Align in HALF



WESTON Simplified Method of Visual Alignment



Conventional Method of Alignment



Model 983 WESTON Oscilloscope \$329.50 net



Medel 984 WESTON Sweep Gener for \$199,50 net

Model 985 WESTON California, \$199.50 net



# the usual time!

# Simplified WESTON method makes aligning quick-easy-profitable for every serviceman!

There's real money in alignment . . . now that it's no longer necessary to use complicated, time-consuming methods. The Weston method is so quick, so simple, any serviceman can complete any alignment job in one hour maximum.

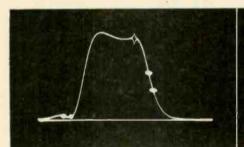
Note the simplicity of the hook-up illustrated at the left, in which the calibrator is not connected to the circuit under test. With only two simple connections to the receiver, oscillations encountered in conventional methods are entirely eliminated. Further, there is no disappearance of markers at trap frequencies. Z-axis modulation of the scope provides accurate intensity markers on the response curve under conditions where beat note markers would not be visible. Response curves are not disturbed. Annoying

trimmer touch-up on trap circuits is minimized. (See marker presentations shown below.)

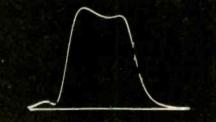
All you need to align simply, quickly, and get the big profits from this constantly increasing class of work are the WESTON Calibrator and Sweep Generator, and the Weston Oscilloscope or any scope with provisions for Z-axis intensity modulation.



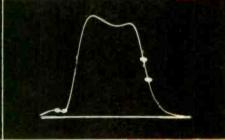
SEND for CATALOG NOW! A new cotolog describing this simplified method and the instruments used, is available for the asking. Also included are descriptions of other Weston Test equipment including — Model 980 Volt-Ohm-Milliammeter \$42.50 net — Model 982 YTVM at \$69.50 net — Model 981 Tubechecker at \$199.50 net. Send for your copy now.



Simultaneous marker presentation of video and sound carrier frequencies (positive intensity markers).



Simultaneous marker display of video and sound carriers (negative intensity markers).



Note that with intensity markers there is no possible misintenpretation with spurious responses.

# WESTON Electronic Testing Equipment

WESTON Electrical Instrument Corporation, 614 Frelinghuysen Avenue, Newark 5, N. J.

A subsidiary of Doystrom, Incorporated

# HOURS HOUT FAILURE"



Westinghouse Locked-TV Test\*at Lew Bonn Company operates for over six (6) years viewing time!

ARE CALL-BACKS EATING UP YOUR PROFITS? Listen to this report from W. J. Heisel (at left in photo), General Manager, Lew Bonn Company, Minneapolis:

"We wanted to prove to our service dealers the outstanding dependability of Westinghouse RELIATRON Picture and Receiving Tubes. So we conducted a Westinghouse Locked-TV Test in our showroom. The set shown in the photo, completely equipped with stock Westinghouse RELIATRON Tubes, was turned on at two P.M. on April 25, 1955. As these words are written, this Westinghouseequipped set has been operating continuously for 8,784 hours without a single tube failure—and it's still going strong!"

**8,784 HOURS!** Over six years of average family viewing! This is real dependability. Dependability that cuts costly call-backs practically to the vanishing point. And notice . . . the tubes used in the Lew Bonn Company test were taken right from stock. They're the identical kinds of tubes that you can handle—to protect your profits, win customer confidencesimply by calling your Westinghouse Distributor. Do it today. "You can be sure...ifit's Westinghouse."

Westinghouse RELIATION Tubes

\*This drametic tube-endurance test was rechecked April 25, 1956 when this ad went to press. On that date, the test had been operating 365 days or 8,784 hours.

6ET-4109

WATCH WESTINGHOUSE WHERE BIG THINGS ARE HAPPENING FOR YOU!

WESTINGHOUSE ELECTRIC CORPORATION, ELECTRONIC TUBE DIVISION, ELMIRA, N. Y.

damaged, weather-worn, obsolete!

# 6 out of 10 need replacement now!

replace them with
CHANNEL MASTER
TV ANTENNAS

#### FIVE ALL-CHANNEL FAVORITES — TOPS FOR REPLACEMENT!

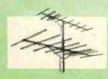


SUPER RAINBOW model no. 331

Still the most sensitive all-channel antenna made! Other popular Rainbow models also available.

"K.O." model no. 1023
"broad band)
Knocks out "venetion blinds" with

Knocks out "venetion blinds" with the highest front-to-back rotios ever recorded t





TRAILBLAZER model no. 335

Extra elements provide extra performance at no extra cost!

New SKYLARK model no. 337
Popular fringe-orea installation
— new rugged powerful design.
Also available: Super Skylark,
and economy "Challenger" model.





SUPER FAN model no. 313A
The finest of Fan-antennas —
superior both electrically and
mechanically I

## Here's the greatest profit opportunity in TV today!

The "Golden Age" of antenna replacement is here! Time has finally caught up with millions of older TV anternas that no longer provide good reception.

A national survey shows that 65% of all TV set-owners in established areas are not getting the picture quality they should be getting. THEY NEED NEW ANTENNAS! And you can profit in a big way by replacing now with a powerful, new CHANNEL MASTER installation!

YOUR BEST REPLACEMENT BUY is Channel Master, America's most widely advertised and merchandised antenna line. Channel Master provides you with the most advanced electrical designs, the soundest construction, the easiest, fastest installation.

See your Channel Master distributor



WORLD'S EAGEST MANUFACTURED OF TV ANTENNAS AND A CLASONS



## with UTICA " "Cushion Throat" Pliers

Here's a simple and effective way to control cut ends of wire—keep them from flying or falling into a chassis.

The UTICA® "Cushion Throat" is a tough, rubbery red plastisol coating bonded right beside the cutting edge of UTICA® pliers. As the pliers close, the cushion grips the short end of wire and holds it tightly.

The "Cushion Throat" is specially valuable in electronics work—makes it possible to cut inside chassis without danger of wire snips causing a short. Grips spring or hard wire, too—gives extra safety on every cutting job!





UTICA (when referring to hand tools) is a trade mark registered in the U. S. Patent Office.

#### LETTERS

#### To the Editor

#### Permission for Reprints

Editor, TECHNICIAN:

We would like to obtain permission to reprint the "You Can't Win" cartoon from your March issue in our association bulletin. This will be used as part of our membership drive.

BERNARD W. BOGNOVITZ Director

TV Service Assoc. of Metropolitan Wash. Washington, D.C.

• We are pleased to extend such permission, without charge, provided proper credit is given. Associations or individual techs similarly interested should write to us to obtain specific written permission.—Ed.

#### **Eliminating Retrace Lines**

Editor, TECHNICIAN:

While reading March TECHNICIAN "Letters to the Editor" column, I noted that one reader requested a copy of the article "Eliminating Vertical Retrace Lines" from your Sept. 1953 issue. You stated that a limited number of those copies were available. I would appreciate it if you would send me one.

BOB MESCHER

Bob's Radio & TV Service New Vienna, Iowa

. . . Would appreciate receiving a copy of "Eliminating Vertical Retrace Lines."

JOHN KUTA

John's Television Service Wellsville, Ohio

... I am encountering this retrace line problem. I hope you still have this article at hand.

GUY BOUCHER

G.M.B. Radio & TV Quebec, Canada

I did not receive that issue, May I please have the article?

B. W. Bernheim

Bernheim Appliance-Television Memphis, Tenn.

... I would very much like to obtain a copy of "Eliminating Vertical Retrace Lines."

FRANK KOWNACKI

Philadelphia, Pa.

• We've been deluged with so many requests from on-their-toes readers that our free supply is exhausted. In response to the great interest in "Eliminating Vertical Retrace Lines" shown by techs, we are revising the article, and will publish it again within the next few months. For impatient readers who want copies now, the charge for five photostat pages, covering the entire original article, is \$2.50. Other past articles are listed in the index published in Nov. 1955 TECHNICIAN, p. 68.

#### Filling Circuit Digests

Editor, TECHNICIAN:

Circuit Digests are fine, but how do you file them so they can be found when wanted?

J. P. SCHAMING

Schaming Service Pittsburgh, Pa.

• See article on page 36.-Ed.

#### **More on Part Timers**

Editor, TECHNICIAN:

I have been reading TECHNICIAN for quite awhile now, and it's tops with me. It made me feel good to read Paul Smith's letter in the March issue (supporting part timers). I have had work in my shop supposedly done by a most respected service man. Components had been replaced with incorrect values. No honest person in this business will ever be hurt by the part time tech.

HOW ARD WHEELER

Plant City, Fla.

#### The Phantom

Editor, TECHNICIAN:

Regarding the article, "Use a Phantom Antenna" in your March issue, can a satisfactory signal be picked up at 2600 feet? And does the antenna at the receiver have to be exactly parallel with the phantom antenna?

ARTHUR G. MOSER

Moser TV, Radio Sales & Service Pt. Marion, Pa.

• Quality of reception depends on local conditions such as field strength and terrain. For best results, both antennas should be facing one another, although broad radiation pattern of folded dipole phantom does not make it critical. The more off-parallel, the greater the reflected signal loss. However, phantom should face transmitter.—Ed.

Editor, TECHNICIAN:

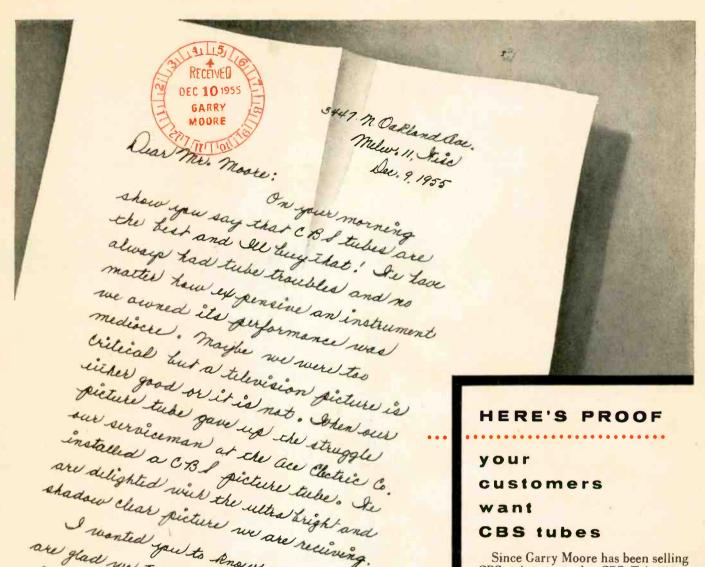
May I suggest that the dipole terminals (of the phantom) be short-circuited instead of terminated in the characteristic impedance with a resistor? You see, terminating the antenna as suggested will burn up about 50% of the received power. Direct short-circuiting will make almost all of the received power available for reradiation.

For servicemen who are also hams, this scheme also works "backwards"—for transmitting, that is, especially at VHF. Gets over obstacles nicely.

C. F. ROCKEY Highland Park, Ill.

• Author McRoberts feels there is some question as to which loss will be greater: that across the matching resistor or the loss introduced by the mismatch of the short circuit. He suggests trying both methods for the best results in individual cases. Another alternative: use an additional dipole, terminating the first and stacked with it. This would eliminate the loss of the resistor, provide a match, and give substantially increased gain.—Ed.

(Continued on page 12)



your customers want CBS tubes

Since Garry Moore has been selling CBS tubes over the CBS Television Network, most service technicians have had women customers ask them for CBS tubes. And not just once in awhile.

Every day more and more women are requesting CBS tubes. We hear stories like Mrs. Svensson's often.

It all adds up to these important facts. You build good will . . . cut callbacks ... and profit more when you install CBS tubes . . . the tubes with the Good Housekeeping Guaranty Seal.

Is your caddy well stocked with CBS tubes?



Show her the CBS carton with the Good Housekeeping Guaranty Seal. See Garry Moore sell your expert service over the CBS Television Network.

Danvers, Massachusetts A DIVISION OF COLUMBIA BROADCASTING SYSTEM, INC.

shadaw clear picture we are receiving.

are glad we took your advice and

believe me when the time comes to

buy a new set it will he a CBI

Linearly

mrs Ruch Suensson

if they make them. ( do Thy?)



## Centrala

Wirewound and carbon units snap together—in just seconds!

Snap wirewound unit...

(with outer shaft cut to length)



To carbon unit...

(with blue shaft cut to length)



Snap on switch...

(from Fastatch KB series)



Add the knobs...

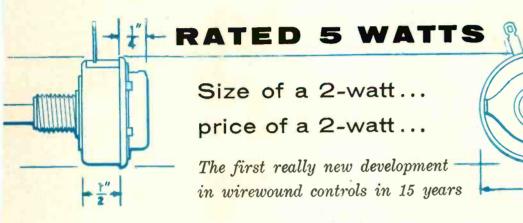
- and there's your wire-carbon combination

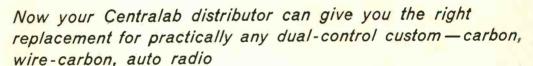


been added to

#### Centralab's Fastatch® Custom-Control system!

# has wirewounds!





Why risk irritating a customer, because you have to wait for an exact replacement before you fix his TV, radio, or auto set? It's not necessary at all.

Chances are, you can find just what you're looking for, in Centralab's complete line of Fastatch duals. You can get more than 5,000 different combinations of resistance and taper, to duplicate exact electrical characteristics.

You don't have to do the manufacturer's job — there are no loose parts... no lugs to bend... no tricky assembling. Fastatch units — both wirewound and carbon — are assembled, tested, and guaranteed by Centralab.

Have your Centralab distributor show you Fastatch wirewound and carbon duals. Then, try them on your next jobs.

Send coupon for bulletin 42-218R.

Tear out coupon and mail today!

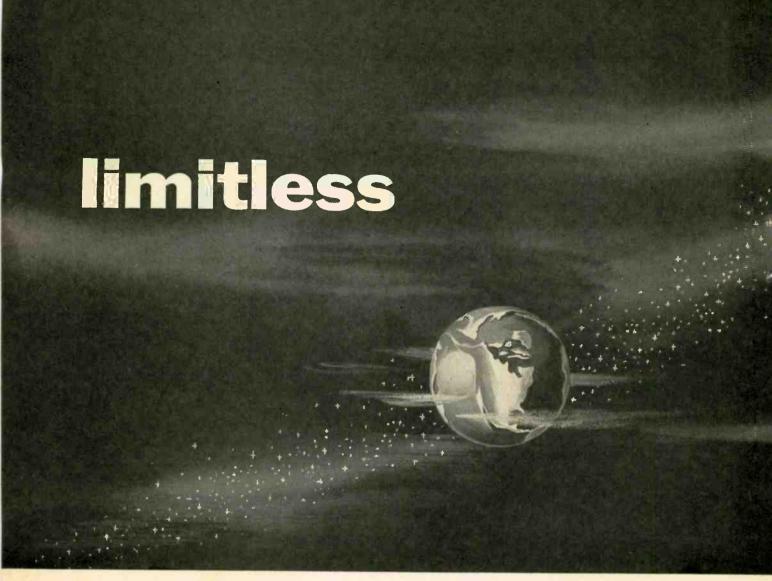
## Centralab

#### A DIVISION OF GLOBE-UNION INC.

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Send me free bulletin 42-218R.

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Company
Address
City
Zone
State



#### as the future of UNIVAC®

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FIELD LOCATION TECHNICIANS for maintenance of our large Univac Computers. Qualified men receive 4 to 6 months training at full salary before assignment to a permanent computer location.

LABORATORY TECHNICIANS to assist engineers on research and development projects.

If you have an electronic school background and some experience in electronic maintenance, send a complete resumé to . . .



Registered in U. S. Patent Office

#### Remington Rand Univac

DIVISION OF SPERRY RAND CORPORATION

AT ANY OF THESE THREE PLANT LOCATIONS —

MR. D. A. BOWDOIN Dept. MP-25 2300 W. Allegheny Ave. Philadelphia, Pa. MR. KURT PINKE Dept. MS-25 1902 W. Minnehaha Ave. St. Paul W4, Minn. MR. FRANK KING Dept. MN-25 Wilson Avenue South Norwalk, Conn.

## YOU PUT THIS TUBE IN AND...

AND I MISSED MY FAVORITE PROGRAM



#### ... IT'S YOUR REPUTATION!

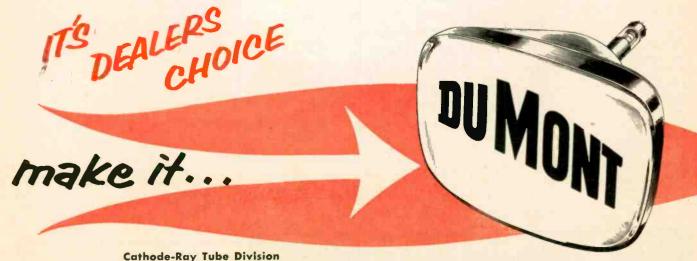
Serviceman, at this point you are on your own! Your customer holds only you responsible if the picture tube goes bad because it was your selection. If your selection for replacement was a high quality brand, chances are your reputation for quality work wouldn't be under the gun like this.

When you use Du Mont picture tubes your reputation is backed by the pioneer commercial cathode-ray tube manufacturer of the country. The Twin-Screen Hi-Lite\* alumi-

nized picture tube is a product of the finest engineering, design, and production features assembled in 25 years of commercial manufacturing. Your confidence is definitely assured because you know that the guarantee on Du Mont picture tubes is good—as it has always been.

Your reputation for high quality work is established when you use high quality products. You have a reliable partner when you use Du Mont picture tubes.

\*The ultimate in aluminized picture tubes



ALLEN B. DU MONT LABORATORIES, Inc., 750 Bloomfield Avenue, Clifton, N. J.



Complete SERVICE KNOWLEDGE

#### AT UNBELIEVABLY LOW COST!

RIDER MANUALS—THE ONLY FULLY FIELD-TESTED, FACTORY-APPROVED SERVICE DATA-IS AVAILABLE TO YOU AT AN INCREDIBLE PER CHASSIS COST OF 84! AT A PER-MODEL COST OF ONLY 24 . . .

#### **ANNOUNCING TV 18**



- For June 10th ONLY \$19.80 HAVE YOU **GOTTEN YOUR** TV 17 YET?

#### HANDBOOK OF 630-TYPE TV RECEIVERS

#### RECEIVING TUBE SUBSTITUTION GUIDE by H. A. Middleton

FIRST SUPPLEMENT: Lists 750 new and dif-ferent tube substitutions, not listed in the original edition. Soft Cover, 48 pp., 8½ x 11", illus. #139 ..... Only \$ .99

SECOND SUPPLEMENT: Features 134 TV pie-

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by Rider Lab. staff

A series of books, each covering a different part of the TV receiver, and showing typical troubles, their symptoms and causes. All ma-terial is from actual case histories. These books do your troubleshooting for you! Soft Covers, 5½ x 8½", illus.

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#168, 80 pp. .... Only \$1.35 VOL. 2: VERTICAL CIRCUITS SWEEP-DEFLECTION

#168.2, 96 pp. . . . . Only \$1.80 VOL. 3: VIDEO IF & VIDEO AMPLIFIER CIRCUITS

#168-3, 96 pp. ..... Only \$1.80

VOL. 4: AUTOMATIC GAIN CONTROL CIR-CUITS #168-4, 96 pp. . . . . Only \$1.80

#### TV FIELD SERVICE MANUALS WITH TUBE LOCATIONS

edited by Harold Alsberg

A practical series of tube location handbooks, plus discussion of trouble symptoms, adjustments, etc. Each volume has 7 years coverage, starting with 1947. Soft Cover, spiral binding, 5½ x 8½", illus.

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#155 ..... Only \$2.10

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Charles W. Pointon, Ltd. 6 Alcina Ave., Toronto, Ontario Prices opprox. 5% higher.

#### LETTERS

To the Editor

(Continued from page 6)

#### **Phoney Wholesale**

Editor, TECHNICIAN:

Enclosed ad ("TV tubes 50-70% off, TV antennas 95¢," etc.) from the N.Y. Sunday Mirror was placed in the TV program section of this newspaper. With outfits such as Surplus Electronic Stores in the market, how can a TV man compete?

JULIO BELLBER

New York, N.Y.

. Here's some more on phoney wholesale distributors. These ads ("17BP4 \$12.95, installed free," etc.) are from the N.Y. Sunday News.

NATHAN MEISTER

Meister Television Radio Repair Farmingdale, N.Y.

#### **Fast Buck Surplus Outlets**

Editor, TECHNICIAN:

We've been griping about fast buck discount and surplus outlets long enough. We ought to do something about it, but none of us are "legal-beagles" and are afraid of being sued if we notify other service organizations of the activities of these manufacturers and distributors. Can we or can't we name names?

JOHN E. TYLER, JR.

Town Television Branford, Conn.

• There's nothing to stop you from telling other techs, distribs and manufacturers why you refuse to buy a particular product or patronize some outlet. So far as naming names in print, you might consider doing as the Radio-TV Guild of L.I., Box 87, Bethpage, N.Y., does in its "Guild News." They publish a monthly distrib shopping report, listing jobber names and brands sold overthe-counter to people not identified as techs.-Ed.

#### Manufacturers' Literature

Editor, TECHNICIAN:

I wish to commend your magazine on its recent article (March issue) concerning a literature file for the TV servicemen. I have been receiving data sheets and catalogs from manufacturers for several years, and have benefited immeasurably. Filing this material is important, since it would be worthless to let it pile up. A practical means of filing would be to scrutinize the material, and place it back in the manufacturer's envelope. This segregates the manufacturer by name, makes it easier to file the great variety of sizes, and allows future data from the same company to be placed in the same envelope. R. J. CISZAK

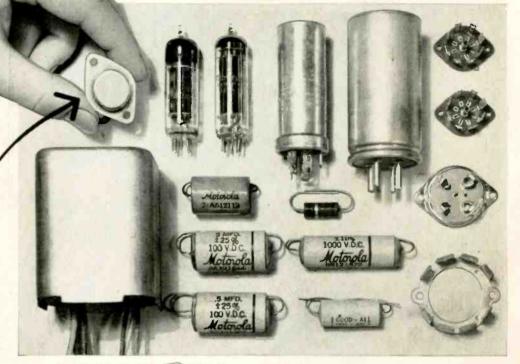
Bob's TV-Radio Service Buffalo, N.Y.

#### New Motorola

# THE MEST STORES

**Car Radio** 

Tiny transistor replaces 15 vital car radio parts



WITH A "GOLDEN HEART\_ THAT WON'T WEAR OUT"



Motorola Transistor-Powered Car Radio. (Model 6TAS-8, 12 volt) \$99.95.Othernew models from \$39.95

#### PLUS-NEW TWIN BAR STATION

**FINDER** Most automatic tuning of all! Electronically picks and pinpoints any station. Twin Search Bars move station selector either right or left from any point on the dial.

Most trouble-free car radio ever built—The amazing transistor heart won't ever wear out. And it replaces 15 parts that do wear out in conventional sets. (Including the vibrator and vacuum tubes.)

Cuts battery drain 50%—Transistors use hardly any power. Even with the engine off, this radio can play for hours without running down the battery.

Fits most cars—Custom fits instrument panels of most cars. Takes just a few minutes to put in. (Or, Motorola's Installation Depot can do it for you, in most cities.)

M MOTOROLA

World's Largest Exclusive Electronics Manufacturer

Here's how you fit in—Every fourth car lacks a radio. Car radio sales are up 30%... and still growing. And now, Motorola has produced the hottest car radio ever. Advertised in *Reader's Digest* (to reach every third American). Now's the time to get into the plus-profit car radio business. Send this coupon today. No obligation.

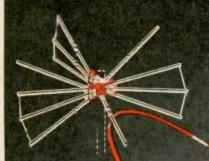
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Radio business. Thank you.

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City State



# Directionic 70 ANTENNA SYSTEMS

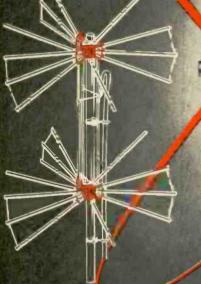
the Ultimate in Antenn-gineering



by Smile gelphia

S NGLE BAY
SUPER DIRECTRONIC





AX-524 FRINGE AREA
TWO BAY
SUPER DIRECTRONIC
47.50





DIRECTRONIC

6-POSITION BEAM SELECTOR

CLEARS PIX INSTANTLY ON ALL CHANNELS





\*\*O-POSITION BEAM SELECTOR
\*\*12 ALUMINUM
ELEMENTS
\*\*HI-PAO BAKEITE
INSULATION
\*\*2 MAST SECTIONS
\*\*GUY WIRE
\*\*TRIX CABLE
\*\*ROOF MOUNT
\*\*HARDWARE AND
ACCESSORIES

POMPLETE NOTHING ELSE TO BUY

TENNA KIT (K-80)

K-80 DIRECTRONIC

"DO-IT-YOURSELF"

TV TENNA KIT

COMPLETE! Nothing Else to Buy

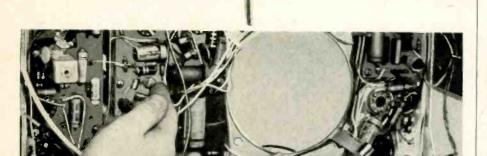
24 list

STERLING STUBILEE



SNYDER MFG. CG., PHILADELPHIA 40, U.S.A.
BELLE JE TUBE MILL, INC., PHILADELPHIA
SNYDE: ANTENN-GINEERS, LTD. TORONTO 14, CANADA
WORLD EXPORT: ROBURN AGENCIES, INC., N. Y.
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on-the-go with



RCA SERVICE PARTS

This is a peaking coil. It is an exact electrical replacement for the high-Q original used in RCA Victor TV receivers. Replacement peaking coils with improper inductance values can cause "trailing reversals" and "smearing." But, with this RCA peaking coil—as with all RCA Service Parts—you get maximum assurance that original performance will be restored—in quick bench-time. This is why successful servicemen everywhere depend on RCA Service Parts to keep their servicing on-the-go, profitably. RCA Service Parts for RCA Victor radios, TV receivers, record-changers, and "Victrola" phonographs are factory-tailored to fit right, install fast, and do their job precisely. So, when it's an RCA Victor home instrument you're repairing, insist upon an RCA Service Part—available from your local RCA distributor.



RCA VICTOR PRODUCTS . RCA SERVICE PARTS - made for each other!

#### Editor's Memo

Are pretty girls attracting or distracting?

This poser crops up frequently regarding publicity photos which manufacturers send to editors to focus attention on a new product or special event. To catch the reader's eye, the product is held (or pointed to, or sat on, or danced with) by a shapely model. Whether or not the reader will be inclined to turn his attention to the sexless equipment depends, of course on the individual.

The inclusion of come-hither female pictures in TECHNICIAN editorial material has been quite stricted for two reasons. From a practical viewpoint, our primary job is to present technical information. and space devoted to the distaff side eliminates so much

servicing data.
From our emotional viewpoint, we try to do the best job possible in every undertaking. One glance at a newsstand quickly reveals that there are other magazines better geared to present the fair

However, this once for the record, we present here some of the ladies (minus the products) who grace manufacturer publicity. Never let it be said we don't give broad coverage of the industry!

Credits, from top down: Thompson Prod., Hallicrafters, Jensen Mfg., Motorola, Jersey Spec.











al Forman



# AUTO AERIALS...

#### for:

- \* Top quality
- \* Customer acceptance for over 20 years
- \* Reliable performance
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For every radio installation you make, a WARD AERIAL tops it off with the most dependable, acceptable and popular antenna you can buy... yet it costs no more than an ordinary aerial.

Here's the *complete* top-quality line for every requirement:

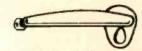
- EIGHT BALL—ever-popular favorite
- MAJORETTE—the economy model
- PHANTOM—disappearing antenna
- TWIN REAR MOUNT—midget 8-ball twins
- MIDGET PHANTOM—twin rear mounts
- SKY QUEEN—smartly styled side mount
- LONG RANGER—longer, for extra signal
- CONTINENTAL—flex-angle side mount for all foreign cars
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Order your WARD AERIALS now. Keep a few on hand all the time. Keep your customers satisfied with the ... World's Finest!

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DIVISION OF THE GABRIEL CO.
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the complete line of **NEW** 

#### COMMUNICATION VIBRATORS

in 6 Volt and 12 Volt Series

that outlast all others

These Ten Types Offer Complete Replacement for ORIGINAL Communication Equipment . . . the PROPER voltage for each application.

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5518	5718	6718
*	5721	6721
*	5722	6722
*	5725	6725
5605	5805	6805
5620	5820	6820
5621	5821	6821
5622	5822	6822
*	5824	6824

Again because of SUPERIOR ENGINEERING and CONSISTENTLY INCREASED QUALITY, Radiart offers you communication vibrators that are DEPENDABLE! The RIGHT vibrator... for EACH application! See for yourself... You're RIGHT WITH RADIART.

For Specific Applications See Latest Radiart Vibrator Guide
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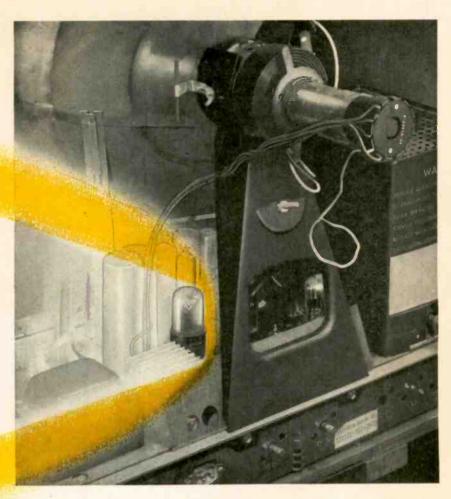
THE RADIART CORPORATION

CLEVELAND 13, OHIO

TV ANTENNAS . AUTO AERIALS . VIBRATORS . ROTORS . POWER SUPPLIES

#### A report on Sylvania's 6-Million-Hour Field Test in receiving tubes





### "Circuit tested" in 139 stock TV sets for universal protection against callbacks

FOR UNIVERSAL PROTECTION against callbacks, use the tube that's tested for top performance under actual operating conditions in the sets you service. Sylvania tubes in the familiar yellow and black carton are backed by more than 6 million hours of field testing in TV sets of leading manufacturers.

The 139 stock models selected for the 6-million-hour field test represent a cross section of the industry and their tube complements include every important replacement tube type. The 6-million-hour field test stacks up as the most extensive program ever under-

taken on the servicemen's behalf to insure universally dependable tubes.

Every set-testing cycle is based on one year of set use, assuring you maximum dependability during the period of your responsibility. That's why we say Sylvania tubes are "time-tested" for trouble-free service and the maximum profits which go along with it.

Look for the yellow and black carton—it represents a new kind of dependability backed by the 6-millionhour field test.



SYLVANIA ELECTRIC PRODUCTS INC.
1740 Broadway, New York 19, N. Y.
In Canada: Sylvania Electric (Canada) Ltd.,
University Tower Bldg., Montreal

TELEVISION . ATOMIC ENERGY LIGHTING . RADIO . ELECTRONICS .





Don't Settle
For Less
than MALLORY
FP Capacitors

Only Mallory makes genuine FP
Electrolytic Capacitors. Don't accept
substitutes or imitations—for only FP
Capacitors give you all these exclusive
features, pioneered by Mallory and
available without premium cost:

- Designed for 85° C—no de-rating
- Genuine fabricated plate anode
  - High ripple current rating
  - Unequalled shelf and service life
    - Fast, easy twist-prong mounting

Always ask for Mallory FP's by name—and you'll be sure of getting the best replacement capacitors on the market.

# MALLORY & CO Inc. ALLORY & CO Inc. ALLORY & CO Inc.

P. R. MALLORY & CO. Inc., INDIANAPOLIS 6, INDIANA

- Capacitors C
- Capacitors
- Controls
   Switches
- Resistor
- Ractifica
- Power Supplies Filters
  - Mercury Batteries

#### News of the Industry

UNITED TRANSFORMER CO. announces the appointment of H. C. HORNICKLE as general manager of its Pacific Div.

CLEAR BEAM has adopted a new package for its do-it-yourself antenna kit.

SYLVANIA has adopted a tube-fortube replacement warranty procedure on all receiving tubes sold by authorized distributors. E. M. LONGMIRE has been named Southeastern district sales manager for Sylvania's Radio and Television Div.

JENSEN MFG. CO. has supplied loudspeaker equipment for the first atomic submarine, the Nautilus, and the carrier Forrestal. Jensen's "Do-It-Yourself" book on hi-fi speaker systems has gone into its second printing.

In a recent shift of training representatives by the CLEVELAND INSTITUTE OF RADIO ELECTRONICS, R. E. PAGE has taken over the San Francisco-Bay area and F. M. RED-MOND the Long Beach, Cal. office.

PRESTO RECORDING CORP. has appointed SHAPPE-WILKES as ad agency for all products.

STANDARD COIL PRODUCTS CO., INC., has announced the promotion of R. W. RENIERS to assistant sales manager in charge of defense sales.

HARRY, JOE and LOU RESNICK, owners of CHANNEL MASTER CORP., were honored at a testimonial dinner for their services to Ellenville, N.Y., the site of their plant.

SNYDER MFG. CO., manufacturer of rear-deck antennas for automobiles, predicts that by 1958 all auto manufacturers will employ the rear-deck installation for increased safety and driver-visibility.

JERROLD ELECTRONICS CORP. has installed the first hotel closed circuit TV system in Palm Beach, Fla. Jerrold has purchased three community antenna systems serving 5,000 subscribers.

RAYTHEON MFG. CO. has announced the promotion of NORMAN R. TEIFELD to material control and traffic manager, and STANLEY E. RENDELL to factory engineering manager. Raytheon's week-long school in color TV is conducted each month in Chicago.

MAGNAVOX has announced the appointment of PAUL B. LOVEGREN as sales manager of speakers and capacitors, and DAN R. CAVALIER as sales promotion manager.

CBS-HYTRON announces the appointments of DONALD E. SMITH, central district manager, LEONARD M. MURCHISON, west coast equipment sales manager, WALTER J. FITZ-PATRICK, west coast regional manager, JOHN F. GILBERT, midwestern district sales manager.

GENERAL ELECTRIC has initiated a tune-up program to provide new customer contacts for the service dealers. National advertising is being used to remind the consumer to tune up his equipment.

THOMPSON PRODUCTS, INC. has announced the appointment of K. L. BISHOP as president and general manager of BELL SOUND SYSTEMS, INC., a subsidiary company.

RCA president FRANK M. FOLSOM has predicted that the electronics industry will reach a volume of \$18 billion in the next eight years.

ROHN MFG. CO. has announced the appointment of RICHARD H. KLEINE as sales manager.

ELECTRO-VOICE has expanded its sales force by the appointments of JAY CARVER, FRANK STROEMPL, and JIM JOHNSON.

INTERNATIONAL RESISTANCE CO. has signed a new union agreement providing for increased wages and employee benefits.

BURTON BROWNE, head of BURTON BROWNE ADVERTISING and president of the Gaslight Club has been named to an All-Chicago Citizens' Committee, formed to promote the city as "the greatest city in the world."

ACME ELECTRIC CORP. has appointed FLOYD VAN ALSTYNE as sales engineer for southern New York State.

WESTINGHOUSE ELECTRIC CORP., television-radio div., has announced the appointments of KENNETH H. BROWN, service manager, and ROBERT M. FICHTER, manager, product development dept. RAYMOND LOEWY, industrial designer, will design future Westinghouse TV lines.

**BENDIX** has appointed J. P. BROCKI TV service manager of the TV and broadcast receiver div.

**GENERAL CEMENT MFG. CO.** has appointed RUSSELL D. GAWNE general sales manager.

UNITED CATALOG has promoted ARTHUR I. RABB to general manager.

FAIRCHILD RECORDING EQUIP-MENT CO. has announced the appointment of R. E. CARLSON as vice-president and general manager.



#### New Books

CLOSED-CIRCUIT AND INDUSTRIAL TELEVI-SION. By Edward M. Noll. Published by the Macmillan Company, 60 Fifth Ave., New York 11, N. Y. 230 pages. Paper cover. \$4.95.

For those with a background in entertainment TV interested in technical information about this fast-growing related field, there is the basis for comparing the two types of systems as to similarities and differences and a good serving of information on the pickup or

transmission end to fill in the gaps for techs whose background has been confined to TV reception. There is also considerable detail on cameras and other present-day equipments and systems. The book also covers applications of closed-circuit systems, current and potential.

PUBLIC ADDRESS. By N. H. Crowhurst. Published by Norman Price Publishers Ltd., 283, City Rd., London, E. C. 1, England. British Radio Electronics, 1833 Jefferson Pl. N.W., Washington 6, D.C. 64 pages. Paper cover \$1.25.

This is No. 4 in the Audio Handbook series, and should prove a handy reference for techs interested in public address installation. The author covers the various problems encountered, equipment employed, and the proper techniques to be used in buildings. Of considerable interest is the section on electronic techniques, which includes helpful design nomographs and circuits.

RADIOMANS GUIDE. By Edwin P. Anderson. Published by Theo. Audel & Co., 49 W. 23 St., New York 10, N.Y. 1040 pages. Hard cover. \$4.

On an intermediate technical level, this information packed handbook covers the broad range of the electronic science. Among the many topics included are radio and sound fundamentals, components, transistor circuits, controls, public address systems, short wave, oscillographs, TV circuits, phototubes, radar fundamentals and Underwriter's standards.

TRANSISTORS I. Prepared and published by "The RCA Review," David Sarnoff Research Center, Princeton, N. J. 676 pages. \$4.50.

Written on an advanced technical level, this valuable book contains 41 technical papers written by RCA engineers, plus abstracts of 46 others published previously. Among the many subjects covered are "Basic Transistor Device Concepts," "The Drift Transistor," and "Transistorized Vertical Deflection for Television Receivers." An excellent source of information.

THE RADIO AMATEUR'S HANDBOOK (33rd Edition). By the Headquarters Staff of the American Radio Relay League. Published by the American Radio Relay League, West Hartford, Conn. 760 pages. Paper cover. \$3.00.

This leading reference work for amateurs, experimenters, students and engineers, as compared to last year's version, reflects interestingly the trends in communication that have been evident over so short a period. An entire chapter has been added, for example, on semiconductor devices, with special emphasis on transistors. On the other hand, there is less emphasis on microwave and UHF communication. In receiver construction, there is a swing toward simpler design. The transmitter section features units for the novice as well as advanced equipment.

WIRELESS & ELECTRICAL TRADER YEAR BOOK 1956. Prepared and published by Trader Publishing Co., Ltd., Dorset House, Stamford St., London, S. E. 1, England. 344 pages. Hard cover. 12 shillings and sixpence.

Here is a "bible" of the British radio, TV and electrical appliance field. Among the many items included are directors of organizations, legal data, wage rates, tube base connections, receiver specs, brand names and frequencies. If you want to learn who's who and what's what in the British electronic industry, this book will tell you.



# SERVICEMEN: NOW YOU CAN REDUCE YOUR RECTIFIER NEEDS TO 4 TYPES WITH

Federal's

# HI-DENSITY

SELENIUM RECTIFIERS

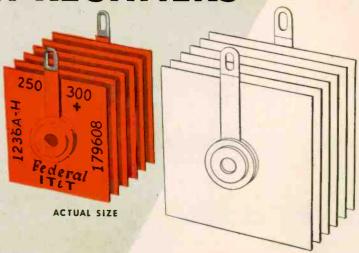
Engineered to handle 90% of your radio-tv replacements!

Nearly

50% SMALLER...!

More compact packages increase rectifier capacity of your kit ... save time on service calls!

SEE YOUR
FEDERAL DISTRIBUTOR!



#### COMPARE-

Compare, Mr. Serviceman, Federal's new 250-300 Ma. HI-DENSITY stack with its larger predecessor of the same rating!

Just 4 types—ranging up to 600 Ma. are needed to meet 90% of your requirements for radio-tv replacements.

Now you can really simplify rectifier replacement . . . with these smaller, lighter, higher-temperature, longer-lasting, more versatile HI-DENSITY stacks. Get the facts!

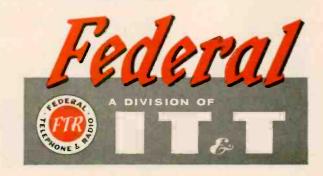
A Research and Development Triumph of Federal

Federal Selenium Rectifiers are listed in Howard W. Sam's Counter-Facts and Photo Facts

#### Federal Telephone and Radio Company

A Division of INTERNATIONAL TELEPHONE AND TELEGRAPH CORPORATION
COMPONENTS DIVISION • 100 KINGSLAND ROAD • CLIFTON, N. J.

In Canada: Standard Telephones and Cables Mfg. Co. (Canado) Ltd., Montreal, P. Q. Empart Distributors: International Standard Electric Corp., 67 Broad St., New York





## **CATCHES** ALL LEAKY CAPACITORS

**IN-CIRCUIT** ... CHECKS ALL COUPLING **CAPACITORS** FOR LEAKAGE

> **OUT-OF-CIRCUIT** ... CHECKS **ALL CAPACITORS** FOR LEAKAGE AND CAPACITANCE

#### CAPACOHMETER

**IN-CIRCUIT** 

CAPACITOR LEAKAGE TESTER



Here is the first complete "testing package" for all paper, mica, and ceramic capacitors. With this one instrument—the Simpson Capacohmeter—you can: (1) detect most borderline capacitors in-circuit by means of the exclusive Simpson Pulse Test; (2) measure leakage of defective capacitors, including coupling capacitors, in ohms; (3) determine the capacitance directly, of good capacitors, from 10.0 uuf to 10.0 uf.

With this instrument, most tests can be made incircuit. All tests are made under load conditions. There is no fussing with bridge circuits and balancing controls. Readings are indicated on a large 41/2" meter with better than 10% accuracy. But that's not all. You can use the Simpson Capacohmeter to test for leaky wiring, sockets, and transformers . . . to measure distributed capacitance of wiring to ground ... to "high-pot" good components ... and many other tests which you will discover.

Model 383A with leads and \$8995 Operator's Manual . .

See your Jobber, or Write

#### SIMPSON ELECTRIC COMPANY

5200 W. Kinzie St., Chicago 44, Illinois Phone: EStebrook 9-1121

In Canada: Bach-Simpson Ltd., London, Ontario



WORLD'S LARGEST MANUFACTURER OF ELECTRONIC TEST EQUIPMENT



Servicemen go for the new ILLINOIS "HANDEE-PAK" Capacitor Kit assortments because they take up little room in the service kit—are easily identified and since they are hermetically sealed in polyethylene bags, the capacitors are always factory fresh and clean!

Each PAPER CAPACITOR KIT is made up of 10 assorted

Each PAPER CAPACITOR KIT is made up of 10 assorted new Type ITC Ceramic Cased Paper Capacitors of the capacity and voltage ratings most used by servicemen. The ELECTROLYTIC KITS consist of 5 popular types.

LOOK FOR THEM ON THE NEW JOBBER COUNTER RACKS



New ILLINOIS "HANDEE.PAKS" are available at most better jobbers—carry a few "HANDEE.PAKS" in your service kit They are the ultimate in packaging, convenience and reliability.

#### ILLINOIS CONDENSER CO.

1616 N. THROOP STREET CHICAGO 22, ILLINOIS

A Valuable Service for Television Technicians—

#### SINGLE SCHEMATICS, 25¢ Each

The publisher of TECHNICIAN is receiving so many requests for reprints or additional copies of its Circuit Digests that it is making single schematics available at 25¢ each, postpaid and the complete group, as published in any issue, for 50¢ postpaid. Schematics for all receivers indexed are in stock. Be sure to order by Circuit Digest number and give brand name and chassis number to prevent error.

Address Reader Service Dept., TECHNICIAN,
480 Lexington Ave., New York 17

Currency or postage must accompany order.

# Here's The ANTENNA YOU CAN MAKE MONEY Installing

designed
for 1 man...
7 minute
installation

NEEDS ONLY A HAMMER TO INSTALL

GENUINE Color Beam

\$14.95 LIST

YOU MAKE \$600
ON ANTENNA
SALE ALONE



ANY ANTENNA THREE YEARS OLD SPOILS THE TV PICTURE

\*designed for

BLACK and

and COLOR

Available at Leading Parts
Distributors Everywhere or Write

Winegard Company
Burlington, Iowa

For Pamphlet "How to Make Money on One Man Antenna Installation."



Antenna boxed—completely assembled—attached lead-in-



Raise main crossarm.



Snap secondary crossarms in place



Nail up mounting bracket.



Drop lead-in wire



Attach lead-in to TV set - special clip snaps on.

## ANOTHER FIRST FOR RAYTHEON

#### BONDED ELECTRONIC TECHNICIANS



Something new — and very important — has been added to the sales force of Raytheon Bonded Electronic Technicians. It's "Operator 25". Customers seeking Radio-TV Service simply call Western Union by number and ask for "Operator 25". In answer to their request for a reliable source of bonded service, "Operator 25" gives them the name and phone number of the nearest Raytheon Bonded Dealer. That means more business - ex-

tronic Technicians.

This customer producing new sales advantage, plus the cash-protection of the Raytheon Bond,

clusive business - for Raytheon Bonded Elec-

the Raytheon Bonded Certificate, ID Cards, Decals, Raytheon Creed Displays, the Raytheon Code of Ethics, Classified Telephone Directory listings, all backed by sound, hard-hitting national advertising in LIFE, TIME, NEWSWEEK and TV GUIDE - make the Raytheon Bonded Electronic Technician Program the most powerful sales force a service dealer can have.

Call your sponsoring Raytheon Tube Distributor and ask him if you can qualify as a Raytheon Bonded Dealer.

If you can, you're well on your way to more volume and profit.



#### RAYTHEON MANUFACTURING COMPANY

Receiving and Cathode Ray Tube Operations

wton, Mass. • Chicago, III. • Atlanta, Ga. • Los Angeles, Calif.

Raytheon makes Receiving and Picture Tubes, Reliable Subminiature and Miniature Tubes, all these Semiconductor Diodes and Transistors, Nucleonic Tubes, Microwaye Tubes



#### TV-ELECTRONIC

# TECHNICIAN & Circuit Digests

CALDWELL-CLEMENTS, INC., 480 LEXINGTON AVENUE, NEW YORK 17, N. Y.

#### Some Manufacturers Are Missing the Boat

In a field that is in a constant state of change, electronic manufacturers have kept their footing. In a field that demands technical ingenuity, they have worked near-wonders. In a field that is extraordinarily competitive, they have achieved notable profits. This may come as a surprise to some manufacturers presently in financial difficulties, but a recent analysis by Dun & Bradstreet of 70 different lines of business (drugs, foundries, hardware, lumber, paper, etc.) over the five-year period 1950-54 showed that producers of radio parts and supplies had the highest average net profits on tangible worth—a whopping 17.57%—of all 70 fields studied. Most industries averaged only 6 to 12%.

The reason for quoting these business statistics is to indicate that most electronic manufacturers possess a high degree of business know-how. Despite this ability, many of them miss the boat in matters directly affecting service technicians, the men who represent the entire electronic industry in the public's eye.

DIRECTION OF SALES EFFORT: The first step is for manufacturers of components, tubes, instruments, antennas and other parts to recognize who their real customers are. It's not the jobber. He's the vital middleman who funnels products to dealers and technicians. It's not the housewife. She doesn't know an ABC Company resistor from an XYZ Company ion trap, and she is not supposed to. She relies upon the choice of the service technician, who is the only electronic expert who ever enters her home. It's the technician who is the manufacturer's real customer. He selects the product he wants and installs it as part of his service. This is the same procedure followed by carpenters, plumbers, electricians and other skilled trades.

While much of this may seem self-evident, we

still find otherwise alert manufacturers who apparently don't know the identity of their real customers. They spend huge sums of money promoting their products to the general public, which knows practically nothing of technical details, and perhaps cares less. They promote their products to technicians in a manner that overlooks the fact that he is an electronic specialist. (One manufacturer showed a tech in an advertisement doing something no professional would do. Readers caught it.)

HELPING THE CUSTOMER: Once the manufacturer in the servicing and replacement market realizes the technician is his real customer, he should help him. This is smart business, and standard procedure in a great many industries. Aids can take the form of sales promotion devices for technicians to use, educational clinics, credit, making technical data readily available, etc. Such efforts should, of course, be scaled to the size of the manufacturer.

RELATIONS WITH CUSTOMER: It is a well known fact that customers carry a particular mental image of individual brands, an image that is not always arrived at logically. Many small and often unrecognized things cause customers to picture a company as friendly, crooked, dependable or foolish. The best general guide is to treat each customer as an individual. For one thing, make sure inquiry letters are answered promptly.

There are many manufacturers who do cater to the technician, provide him with aid and give him personal attention. That is why we have the greatest respect for most of these companies. It is to the others that we address this message: Recognize the technician as your real customer and treat him fairly!

# Tuning In the

YOUR YEAR-ROUND REFERENCE, the annual Technician Buyers Directory published in this issue, tells you the entire who-what-where story of products and organizations. Want to find out who makes antenna rotators? Looking for the address of a cartridge manufacturer? The service associations in Oklahoma? The distributors in Delaware? All this, and much more, can be found in this only directory of the TV-electronic servicing industry. Keep it at hand throughout the year!

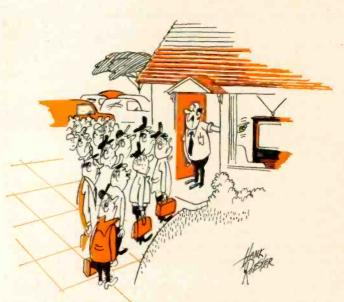
HOW MANY ELECTRONIC TECHS ARE THERE? According to a recent report released by the U.S. Dept. of Labor, there are 107,000. Included are 80,000 in radio-TV repair, 12,000 in broadcasting, 5,000 in aircraft manufacturing, 5,000 in electronic manufacturing, 3,000 in radio-TV manufacturing, and 2,000 in research.

LICENSING BILL calling for the creation of a state board to regulate TV servicing in Michigan has been killed by the state Senate. Proposed legislation was sent back to committee after opponents argued that law would protect gyps more than the public.

ELECTRONIC LIGHT AMPLIFIER, the Lumicon, consisting of image orthicon detector, amplifiers and TV pix tube, amplifies light 40,000 to 50,000 times. Linked with X-ray, it projects a bright image on a 1000-line-plus TV screen for the examination of mechanical castings, engine operation and the like. Other applications include medical radiography, astronomy and photography.

New video tape recorder (VTR) developed by Ampex records full hour TV program on 14-in. reel of 2-in. wide tape at a speed of only 15 in./sec. It is commercially available, and CBS has ordered three units at \$75,000 each. It records a 4 mc band by using a unique four-head assembly on a drum rotating at 14,000 rpm, one head always in contact with the tape. Magnetic signals for video are recorded transversely across the tape, rather than longitudinal as in conventional recorders. Units will first be used for network delayed programs. Compared to film-kinescope recording, VTR is less costly, has better quality, allows immediate playback, requires no processing, and may be reused.





"I called every serviceman in town . . . had to be sure one would be here before the fight."

#### MAY 1956 NETWORK COLOR TV SCHEDULE

MONDAYS through FRIDAYS			
May 1-4, 7-11, 14-18,			
21-25, 28-31			
3:00-4:00 PM (EST)	NBC	"Matinee Theatre"	(Live)
5:30-6:00 PM (EST)	NBC	"Howdy Doody"	(Live)
THURSDAY, May 3			
10:00-11:00 PM (EST)	NBC	"lux Video Theatre"	(Live)
SATURDAYS, May 5,			,
12, 19, 26			
7:00-7:30 PM (EST)	CBS	"Gene Autry Show"	(Live)
SATURDAY, May 5			
9:30-11:00 PM (EST)	CBS	"This Happy Breed"	
		(Ford Star Jubilee)	(Live)
SUNDAY, May 6			
3:30-4:00 PM (EST)	NBC	"Zoo Parade"	(Film)
4:00-5:30 PM (EST)	NBC	"Maurice Evans Presents"	(Live)
THURSDAY, May 10			
8:30-9:30 PM (EST)	CBS	"Shower of Stars"	(Live)
SATURDAY, May 12			
9:00-10:30 PM (EST)	NBC	"Max Liebman Presents"	(Live)
TUESDAY, May 15			
8:00-9:00 PM (EST)	NBC	"Milton Berle"	(Live)
SUNDAY, May 20			
3:30-4:00 PM (EST)	NBC	"Zoo Parade"	(film)
7:30-9:00 PM (EST)	NBC	"Sunday Spectacular"	(Live)
MONDAYS, May 21, 28			
7:30-7:45 PM (EST)	NBC	"Gordon MacRae"	(Live)
TUESDAYS, THURSDAYS,			
May 22, 24, 29, 31			
7:30-7:45 PM (EST)	NBC	"Dinah Shore"	(Live)
THURSDAY, May 24			
8:30-9:30 PM (EST)	CBS	"Climax"	(Live)
MONDAY, May 28			
8:00-9:30 PM (EST)	NBC	"Bloomer Girl"	(Live)
The second second		(Producer's Showcase)	(Live)
WEDNESDAY, May 30			
10:00-10:30 PM (EST)		"This Is Your Life"	(Live)
The above sched	tule app	plies at press time.	

# Picture...



COLOR TV RECEPTION requires closer attention to the condition of the antenna. According to Snyder Mfg. Pres. Ben Snyder, present indoor and outdoor high quality antennas are perfectly capable of receiving color. except when there is corrosion or breakage of wires or elements. For highest quality pictures, replacement every two years is recommended.

PIX TUBE REPLACEMENT market should offer a fairly steady demand at a volume of around 10.-000,000 a year, predicts DuMont manager Edwin Hinck.

TUBE FORGERY RACKET has been exposed in Boston, where police arrested a California man who they said has made \$250,000 in the past 10 years by forging code numbers on old receiving tubes to show the tubes had burned out within the warranty period. The tubes were turned in to jobbers in exchange for new ones, and the new tubes sold to dealers.

WHAT ARE YOUR BUSINESS PROSPECTS? Statistics reported by H. Leslie Hoffman, president of RETMA and Hoffman Electronics, show the following:

#### REPAIRS AND SERVICE Home Entertainment Devices (radio-TV-audio)

			L	istribution		Service &	
		Parts		Revenue	I	nstallation	Total
1955	\$	680,000,000	\$	450,000,000	\$	930,000,000	\$2,060,000,000
1960	\$1	,330,000,000	\$	870,000,000	\$1	,232,000,000	\$3,439,000,000
1965	\$2	,330,000,000	\$1	,538,000,000	\$1	685,000,000	\$5,553,000,000

#### CALENDAR OF COMING EVENTS

- May 21-24: 1956 Electronic Parts Distributors Show, Conrad Hilton
- Hotel, Chicago, III.
  May 22-23: RETMA Symposium on Reliable Applications of Electron Tubes, Irvine Auditorium, University of Pennsylvania, Philadelphia, Pa.
- June 27-30: Jobber-Rep-Mfrs. Conference, Breezy Point Lodge, Brainerd, Minn.
- July 16-20: 1956 Summer Market, Western Merchandise Mart, San Francisco, Calif.
- July 22-25: 1956 National Audio-Visual Convention and Trade
- Show, Hotel Sherman, Chicago, III.

  30- 3rd Conference, Rocky Mountain Chapter of "The Sept. 2: Representatives," Colorado Hotel, Glenwood Springs, Aug. 30-Colorado.
- Aug. 22-23rd Annual British National Radio Show, Earls Court, Sept. 1: London, England.
- Sept. 9-12: 1956 Distributor Conference, Heart of America Chapter of "The Representatives," Lake Taneycomo, Mo.
- Sept. 14-16: NATESA Annual Convention, Sheraton Hotel, Chicago, III.
- 1-3: Canadian I.R.E. Convention and Exposition, Automotive Building, Canadian National Exhibition Park, Toronto, Canada.
- 2-5: High Fidelity Show, Palmer House, Chicago, III.

TRANSISTORS remain prominently in the news. Newly released price list by Texas Instruments show germanium transistors for general purpose, radio and audio are available in small quantities for as low as \$1.20. Many others are in the \$3 range. Emerson's Model 856 portable radio, with two transistors and three subminiature tubes sells for only \$28. Raytheon notes that its T-2500 transistor portable can be bought and operated for 3.2¢ per hour, while radio types cost 10 to 17¢ per hour for operation alone.





## '56 Parts Show Preview

Distributor meet to be held in Chicago, May 21-24

The 1956 Electronic Parts Distributors Show will be held in Chicago's Conrad Hilton Hotel from May 21 through 24. Some 300 exhibit booths and display rooms will present the latest in electronic components and equipment to about 10,000 people.

Attendance at the Show is restricted to exhibitors, sales reps, parts distributors, government personnel, accredited advertising agencies and exporters up to 4 PM, May 21-23. On May 24, and after 4 PM on other days, non-exhibiting manufacturers will be admitted.

Five associations join hands to sponsor this show. These include the National Electronic Distributors Association, the Sales Managers Club Eastern Group, the Association of Electronic Parts & Equipment Manufacturers, the Radio-Electronic-Television Manufacturers Association, and the West Coast Electronic Manufacturers Association.

Serving as officers for this year's event are W. D. Jenkins, president; Ted Rossman, vice president; W. Walter Jablon, secretary; Herbert W. Clough, treasurer. Kenneth C. Prince is general manager, and S. I. Neiman is publicity counsel.

Under a new ruling, all persons qualified and planning to attend must register in advance by mail. No registrations will be processed at show time, and those who fail to preregister will not be admitted.

The following is a list of companies exhibiting at the show, together with the numbers of booths and rooms for each.

Company	Booth	Room
Aerovox Corp.	410	
All Channel Antenna Corp.	9	
Alliance Mfg. Co.	322	521
Alpha Wire Corp.	308	
Alprodeo, Inc.		619A-620A
Altec Lansing Corp.		504A
American Phenolic Corp.	207	560A-561A
American Television &		
Radio Co.	414	
Ames Manufacturing Corp.	14	
Amperite Company, Inc.	214	
Ampro Corp.		618A
Anchor Products Co.	12	

Company	Booth	Room	Company	Booth	Room
Antenna Specialists Co.		633	Eby Sales Co.	873	
Arco Electronics, Inc.	886		Elco Corporation	781	
Argos Products Co., Inc.		626A	Eidleo of New York, Inc.		604A
Astatic Corp.	779	601	Electronic Devices Inc.	879	651
Astron Corp.	775		Electronic Instrument Co. Inc	. 202	
Atlantic Wire & Cable Corp.			Electronic Measurements		
Atlas Sound Corp.	130		Corp.	112	
Audio Devices, Inc.	321	424	Electronic Publishing Co., In		620
Audiogersh Corp.		634	Electro Products Laboratorie		520 9 514
			Electro-Voice, Inc.	582 307	529 & 516
Baker Manufacturing Co.	127		Electrovox Company, Inc. Elgin National Watch Co.	575	619
Barker & Williamson, Inc.	421		Equipto-Div. Aurora	3/3	017
Baumker Mfg. Co.	116		Equip. Co.	688	
Belden Mfg. Co.	404		Erie Resistor Corp.	000	613
Berlant Concertone		500-501			
Birnbach Radio Co., Inc.		617			
B & K Mfg. Co.		604	Fanon Electric Co., Inc.	789	603
Blonder-Tongue Labs., Inc.	131		Federal Electronics Sales	10	
David Bogen Co., Inc.		505A-507A	Federal Telephone and		
Brach Manufacturing Corp.	684	602A	Radio Co.	573	
British Industries Corp.	407	614A-615A	Fenton Company	674	655A
Bryan-Davis Publishing Co		611	The Finney Co.	776	637
Bud Radio Inc.		523	Fisher Radio Corp.		621A-622A
Burgess Battery Company	310		Freed Transformer Co., Inc.	574	
Bussmann Mfg. Co.	218		Fretco Incorporated	578	
6.14-11.61		504	Can I am Mila C	204	
Caldwell-Clements, Inc.	077	504	Gee-Lar Mfg. Co.	204	410
Califone Corp.	877	652A	General Cement Mfg. Co. General Electric Company	590 209	612
Cannon Electric Company	677 211		General Industries Co.	413	
Carter Motor Company	315		G & H Wood Products Co.	883	
CBS-Hytzon Sales Corp. Centralab	790		Gramer-Halldorson	663	
Central Electronics, Inc.	,,,,	660A	Transformer Corp.	419	
Channel Master Corp.		61 2 A	Grayhill	71.7	6314
Chicago Standard			Great Eastern Mfg. Co.		650A
Transformer Corp.	405		Guardian Electric Mfg. Co.	303	•3•
Cinch-Jones Sales	872				
Clarostat Mfg. Co. Inc.	589				
Clear Beam TV Antenna Co			Hallicrafters Co.	680	605-607
Cletron, Inc.	129	553	Hardwick, Hindle, Inc.	101	
Collins Radio Company		623	Harman-Kardon, Inc.		656A
Columbia Wire & Supply C	o. 679		Hickok Electrical		
Comfort Lines, Inc.	7		Instrument Co.	304	
Condenser Products Compa	ny 219		Hi-Lo TV Antenna Corp.	122	
Conrac, Inc.		613A	Hycon Mfg. Company	27	651A
Consolidated Wire &			15 14 4		
Assoc. Co's.	114		IE Manufacturing Co.	24	638A
Continental Carbon, Inc.	316 585		Illinois Condenser Company Insuline Corp. of America	206	
Cornish Wire Co. Inc. Cowan Publishing Corp.	262	519A-520A	International Rectifier Corp		
Crest Transformer Corp.		661A	International Resistance Co		
ciesi iransiormei corp.		. 0014	international Resistance Co		
J. W. Davis & Company	8		Jackson Electrical		
Davis Electronics Co.	870		Instrument Co.	591	
DeJur-Amsco Corporation		621-622	James Vibrapowr Co.	208	
Delco Radio Division	783		J-B-T Instruments, Inc.	576	
D & M Products	13		Jensen Industries, Inc.	418	528A
Drake Electric Works Inc.	592		Jensen Manufacturing Co.		605A-607A
DuKane Corporation		512A-513A	Jerrold Electronics Corp.	671	
Allen B. DuMont			Jersey Specialty Co. Inc.	102	
Laboratories, Inc.	580		JFD Manufacturing Co., Inc	. 212	520
Duotone Company, Inc.		610A-611A	Johns-Manville Dutch	200	
Dyna Company		641A	Brand Div.	125	549
Dynamic Electronics-New York Inc.	26	653	E. F. Johnson Company Jontz Mfg. Co. Inc.	412	657
TOPK INC.	20	003	Joniz mig. Co. Inc.		03/

Company	Booth	Room
Kester-Solder Company	119	
Kuehne Mfg. Co.	787	
Lance Antenna Mfg. Co.	777	
James B. Lansing Sound, Ir	ıc.	650
LaPointe Electronics Inc.	115	
Littelfuse, Incorporated	584	
Lowell Manufacturing Co.	110	646A-647A
P. R. Mallory & Ca. Inc.	416	
Master Mobile Mounts, Inc.	681	
Mechanical Steel Tubing		
Corp.		649A
Merit Coil &		
Transformer Corp.	689	
James Millen Mfg. Co. Inc.	217	
J. W. Miller Company	118	
M. A. Miller Mfg. Co.	588	
Milwaukee Resistor Co.	25	
Model Engineering &		
Mfg. Co.	111	
Modern-Aire Mfg. Corp.		653A
Mosley Electronics, Inc.	123	
National Carbon Company	686	624A
National Company, Inc.	572	532A-533A
National Electric		
Products Corp.	133	
Newcastle Fabrics Corp.	117	
Newcomb Audio Products Co	<b>)</b> .	534
Ohmite Manufacturing	401	
Orradio Industries, Inc.	11	
Oxford Electric Corp.		533 & 536

# Visit TECHNICIAN & Circuit Digests at the Parts Show Room 504

Parker Metal Goods Co.	785	629A
Peerless Products Industries	107	
Penn Television Products Co.		636
Pentron Corp.	577	505-507
Permacel Tape Corp.	880	628
Perma-Power Company	586	
Permoflux Corporation		550A-551A
Permo, Incorporated	411	
Phaostron Instrument &		
Electronic Co.	782	618
Philimore Manufacturing Co.		
Inc.	587	557A
Pickering & Co., inc.		534A
Pilot Radio Corporation		639A-640A
Potter & Brumfield	222	
Precise Development Corp.	121	
Precision Apparatus		
Company, Inc.	403	
Premier Metal Products Co.	878	
Presto Recording Corp.		600
Pyramid Electric Company	213	
Q-Line Manufacturing Corp.	106	
Quam-Nichols Company	312	
dempany	312	
Racon Electric Co., Inc.		557
The Radiart Corporation	420	33/
Radio City Products Co. Inc.	420	
	581	
Radio Corporation of		
America	691	560-561
Radio & Electronic		
Jobber News		509A
Radio-Electronics		632
Radio Kits, Inc.	890	
Radio Merchandise Sales Inc.	583	
Radion Corporation		635A-636A
Radia Receptor Co.		530A
Radio & Televislan News		634A
Radio & Television Weekly		658
The Radix Wire Company	2	
Ram Electronics Inc. Rauland-Borg Corp.		537

Company	Booth	Room
Raytheon Manufacturing Co	. 422	
Recoton Corporation	313	
Reeves Soundcraft Corp.	126	
Regency Division-		
1. D. E. A., Inc.		539
Rego Insulated Wire Co.	687	657A
Rek-O-Kut Co.		522
Rhein Sound Systems, Inc.		628A
John F. Rider Publisher, Inc.	302	
Rockbar Corporation		609
Rohn Manufacturing Co.	201	632A
Rogers Electronic Corp.	780	
Ronette Sales Corp.		609A
S & A Electronics	791	
Howard W. Sams & Co.	408	
Sangamo Electric Co.	774	547
Saxton Products, Inc.	3	
Seco Manufacturing Co.	875	662A
Service Instruments Co.	778	***
Shepard Engineering Co.	887	660
Sherwood Electronic Labs.		603A 556A
Shure Brothers, Inc.	678	625A
Sigma Instruments, Inc. Simpson Electric Co.	124	539A
Mark Simpson Mfg. Co.	124	556
Herman H. Smith, Inc.	221	330
Snyder Mfg. Co.	210	
Sola Electric Co.	215	¥
Sonotone Corporation	213	635
South River Metal		033
Products Co.	871	
Spirling Products Co.		512-513
Sprague Products Company	311	
Standard Coil Products Co.	682	
Standard Electrical		
Products Co.	120	
Stevens Walden, Inc.	6	
Stromberg-Carlson Co.		515A-517A
Superex Electronics Corp.		630A
Superior Electric Co.		614-616
Switchcraft, Inc.	406	
Sylvania Electric Products		***
Inc.	676	535A-536A
Talk-A-Phone Co.	409	521A
Sarkes Tarzian, Inc.		623A
Tech-Master Corp.		553A
Technical Appliance Co.	21	
Technician—Caldwell		
Clements, Inc.		504
Telectrosonic Corporation	671	626
Telematic Industries, Inc. TeleTest Instrument Corp.	571	4.50
Telex, Inc.	205	652
Telrex, Inc.	135	
Tenna Manufacturing Co.	23	
Terado Company	885	
Tevco Insulated Wire	793	
Thomas Electronics, Inc.	103	
Thompson Products, Inc.	673	524A-526A
Thordarson-Meissner	402	

Sylvania Electric Products		
Inc.	676	535A-536A
Talk-A-Phone Co.	409	521A
Sarkes Tarzian, Inc.		623A
Tech-Master Corp.		553A
Technical Appllance Co.	21	
Technician—Caldwell		
Clements, Inc.		504
Telectrosonic Corporation		626
Telematic Industries, Inc.	571	
TeleTest Instrument Corp.		652
Telex, Inc.	205	
Telrex, Inc.	135	
Tenna Manufacturing Co.	23	
Terado Company	885	
Tevco Insulated Wire	793	
Thomas Electronics, Inc.	103	
Thompson Products, Inc.	673	524A-526A
Thordarson-Meissner	402	
Todd-Tran Corp.	784	629
Triad Transformer Corp.	579	
Tricraft Products Corp.	216	
Trio Manufacturing Co.	882	639-640
Trimm, Inc.	685	
The Triplett Electrical		
Instrument Co.	320	
Tung-Sol Electric, Inc.	104	
Turner Company	223	
T-V Products Co. Inc.	876	
Ungar Electric Tools, Inc.	128	
United Catalog Publishers,		
Inc.	683	655
United Transformer Co.	301	610
University Loudspeakers, Inc.	874	502 & 509
Utah Radio Products Co., Inc.		
Vaco Products Co.	317	
Vidaire Electronics Mfg. Corp.		664A
V-M Corp.	319	
Vokar Corp.	888	
Waldom Electronics, Inc.		658A-659A
D Wall Me C-		407

602

415

P. Wall Mfg. Ca.

Walsco Electronics Corp.

Company .		Booth	Room
Ward Leonard Electr	ic Co.	306	
Ward Products Corp.		314	
Webster-Chicago Corp	).		537A
Webster Electric Com	pany		659
Wellco		672	616A
Weller Electric Corp.		309	
Wendell Plastic Fabri	cs Corp.	4	633A
Wen Products Inc.		105	
Westinghouse Electri	Corp.	113	644-645
Weston Electrical			
Instrument Corp.		220	546A-648A
Wiregard Company		5	656
Winston Electronics,	Inc.		637A
Workman TV Inc.		884	
Worner Electronic De	vices	881	
G. F. Wright Steel &	Wire Co.	109	
Xcelite Incorporated		225	

#### CLOSED-TV FOR BANK



At the Texas National Bank's motor bank, twa blocks away from the main building in downtown Houston, four teller's booths like this are equipped with bullt-in closed-circuit television receivers made by Dage Television DIv., Thompson Products, Inc., Michigan City, Ind. The receivers are part of a closed-circuit TV system which speeds signature checking between the drive-in branch and the bank's main bookkeeping department.

#### "Rollabout" Cart TV



A 2-wheeled cart affixed to the bottom of Raytheon's model M-1760-E, 17-in. table model, permits the set to be wheeled about from one room to another, upstairs or downstairs, in a house, motel or hotel. The twa front legs, without wheels, provide solidity when the set is rolled into position. The cart is available with the set at no Increase in price. The receiver is a metal-cabinet vertical-chassis design with top tuning.

# Diagnosing Defects in

#### Before You Replace This Expensive Component,

CHARLES GARRETT

· Of all the tubes in a TV set, the crt or picture tube is the most difficult in which to isolate a defect accurately. The methods used to trace a picture defect to the crt are necessarily more complex than those used for regular receiving tubes, where direct substitution of a suspected tube is the usual simple way of proving them good or bad. The direct substitution method unfortunately is impractical with picture tubes due to the high cost of stocking even a small variety of tube types. Therefore other methods must be applied in order to prove a crt defective or not.

To begin with, the technician should acquaint himself, if he already hasn't, with defects that appear in the picture and on the screen which could be caused by a defective "big tube." Most of these are listed here, along with some possible internal defects in the tube which could cause them. They are: no brightness (low emission, open cathode, dead filament), low brightness (low emission, high-resistance cathode connection), no picture or faint picture (open grid), washed out or negative picture (low emission cathode, gassiness, defective grid), intermittently flashing picture and/or brightness (intermittent tube connection), and intermittent slowly fading picture and brightness (defective filament or filament base pin connections). Most of these conditions could also be caused by shorts or leakage between elements-and, of course, by other tubes and components in the set.

An important point to consider in checking pix tubes is the proper use of a crt tester. It might seem that many of the above picture conditions, if caused by the "big tube," would show up on such a tester, or a receiving tube tester with an adapter cable and socket. This, unfortunately, is not always the case. The emission test of a picture tube does not tell everything about its actual picture-reproducing qualities.

Often satisfactory performance can be obtained from tubes that indicate low and even very low emission; while tubes that indicate high emission can give poor performance. Words to this effect are usually contained somewhere in the tester's operating instructions. This does not mean that these units are worthless; just that the emission test is not an absolute indication of actual tube performance. The real value of the tester is the checking for shorts, leakage, and gas, which would otherwise be difficult to locate.

#### Some Pix-Tube Defects

Picture tubes are subject to a variety of intermittent conditions; as much, if not more than regular receiving tubes. Among these are: intermittent filaments, cathodes, grids, and intermittent shorts. The following are some ideas on tracing an intermittent picture or brightness condition to the crt.

First, let us consider the filament,

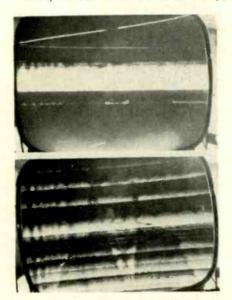


Fig. 1—These effects are produced when the neck of a crt with an open cathode is tapped.

since many of today's big-screen tubes develop filament trouble. Many cases of no brightness and fading brightness can be traced to a poor filament lead connection inside of the filament pins (pins 1 and 12) on the crt base, due to improper soldering during manufacture. When checking a set for an intermittent

brightness condition, always make a check on these pins.

With the set on, gentle twisting of the tube socket may cause the filament to go off and on; nevertheless, a visual inspection of the filament pins should be made. Look for a loose filament wire inside of the pin itself. If nothing is obvious, heat the pins with a soldering iron to remove the excess at the very tip. A thin shell of solder often falls away, revealing an unsoldered filament lead.

By crimping the defective pin or pins near the bakelite base with a pair of long-nose pliers, a good physical connection can be made which should clear up the trouble. If not, resolder. However, to solder it successfully, the pin may have to be split open at the seam by forcing a pointed tool into the end of the defective pin. This allows the wire and the inside of the pin to be cleaned of corrosion. Once cleaned and reshaped, solder will flow into it for a perfect bond.

#### No Pix or Raster

Another pix-tube condition, sometimes intermittent, shows up as an all-white screen with either no picture or a faint one; or a screen with no raster present at all. When this condition is intermittent, it may occur when the set is first turned on, then clear itself up after a few minutes; sometimes the reverse will happen.

Generally with a defective tube displaying a white-screen condition (only a raster present), the brightness (and sometimes the contrast) control is inoperative, and has a negligible effect on the raster. Nevertheless, if one of these conditions exists and no other cause can be found, try tapping the neck of the picture tube lightly with the plastic handle of a tool while watching the screen. Notice (if a black screen exists), whether the picture flashes on or whether white bars of picture content go across the screen; and (on a white screen) if flashes of picture go across. The entire picture may flash on and off also.

If these conditions show up when the tube neck is tapped, it indicates

## **Television Picture Tubes**

#### Make Sure You Have Eliminated Other Possibilities

that the tube has either an open grid or cathode, or perhaps has a short between these two. Tapping of the neck may make a momentary correction of one of these conditions. Try tapping the chassis and surrounding tubes and components to be certain that something other than the crt isn't defective in this manner. When this condition is brought on by a particle of some kind shorting between elements in the tube, tapping can permanently dislodge the particle and completely clear up the trouble.

#### No Contrast, Negative Pix

A defective big tube can be the cause of the loss of contrast or a negative picture developing when the contrast or brightness control is advanced beyond a certain point. There are several methods of tracing these conditions to the picture tube. One is to rotate the brightness control through its range while noticing changes in picture contrast and definition. A defective crt can be suspected if both deteriorate beyond a certain setting.

A negative picture often forms at a high brightness setting although all may appear normal at a lower point. The tube can be suspected, since the brightness control effects only the crt circuit and not the video stages, where the same conditions could arise. Another check is to advance both brightness and contrast controls to full and then rotate the ion trap one way and then the other to reduce screen brightness slightly. In a defective tube, a position for the ion trap usually can be found that will greatly improve the contrast and picture definition.

One further check is to install a tube "brightener" or "filament booster" for a few minutes, recheck the ion trap setting, and notice if any worthwhile improvement develops. If so, there can be little remaining doubt that the tube is worn out. A brightener is also useful when checking a low brightness condition. This device uses a filament step-up transformer to raise the crt filament voltage from 6.3 to 8 or 9 volts to encourage a higher cathode

emission. Since a brightener sometimes "pops" a filament when left on, be careful not to give any guarantee when selling one.

If, after making the preceding tests and quick checks, the technician still is doubtful, one more test can be performed to isolate a defect.

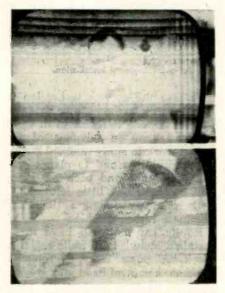


Fig. 2—These effects are produced when the neck of a crt with an open grid is tapped.

Direct substitution of the same crt type, of course, would be best, but the same results can be obtained by using an old 10 or 12 inch tube that is in known good condition. Simply install the small tube in the yoke; support it with any convenient support; connect the high voltage lead and tube socket, (also ion trap if needed), and then compare performance to that of the original tube. Width and focus may not be perfect when used on a big screen set; however, this is unimportant for testing purposes.

#### "Test Tube" Types

Convenient types to use as a "test tube" are the 10FP4 or the 12KP4, since they require no ion trap. If the tube used requires one, use the single-magnet type, since it is easier and quicker to set. The tube can be taken from an old junk set, or a low-cost "rebuilt" tube can be obtained for this purpose. Currently available

"universal" substitution types, like the 5AXP4, are also convenient, being made for just such applications.

The most important part of servicing picture tubes is being able to recognize those picture and raster conditions associated with defects. Being able simply and accurately to diagnose a big tube, good or bad, is a necessity to prevent the needless purchase of a new tube which, especially if an unusual size or type, might become stagnant stock and be very slow to sell.

#### Plan Your Shop Work

DAN VALENTINE

A radio-TV repair shop could borrow something from a newspaper city room.

In the news room of nearly any big-city daily newspaper, you will always find an assignment sheet hanging on the wall. It may be a blackboard, or it may just be a large sheet of paper—but it is always plainly visible, showing the assignments of the day for the paper's editorial staff.

When a reporter checks in for work, he automatically looks at the assignment sheet or board to find his day's work mapped out for him in black and white. There is no wasted time, no wasted motion. He is ready to go to work the moment he steps into the office.

The city editor of the paper keeps the assignment sheet up to date. He knows where each man is at any moment and he knows what he is doing.

A radio-TV repair shop can run on the city-desk system. Why don't you become the city editor in your shop? Plan work the evening before, and place assignments on a large blackboard in the rear of the store or stockroom. This plan, which makes for added efficiency, can save much confusion.

If the board is kept up to date, workers in the shop do not lose track of time to report, days off, and quitting time. They will know as soon as they check the board just what has to be done that day, and in what order.



Typical mounting of the control head and the speaker for a trunk-mount installation.

JOHN W. HARDY
ROLLA COMMUNICATIONS SERVICE
(A MOTOROLA STATION)

 Methods of installing two-way radio units will vary with the type of vehicle—car, truck, boat, etc. and with the individual service technician; yet a good installation will always be made with the following principles in mind:

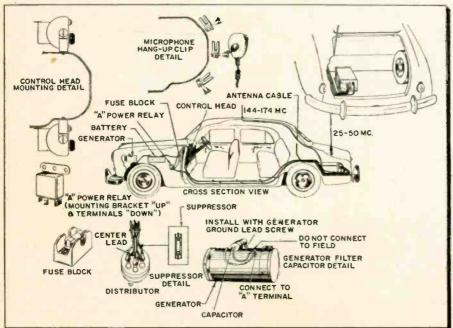
First, install the equipment to satisfy the user's present needs and future convenience. Second, provide an installation that will enable the radio to give optimum performance, not just "satisfactory performance." Third, consider the problems that

may face the service technician in the future; take the attitude that you will be the one to maintain it.

Spend time in advance of the actual work to study unusual installation problems and to plan where the radio unit and each accessory will be located. A little forethought will reduce installation time and eliminate future troubles.

Equipment that will have to be installed includes the radio set, fuse block, "A" power relay, microphone, antenna, a control head and speaker in the case of a rear mount radio and, of course, the interconnecting power and control cables. Only general considerations for installing

Detail for a trunk-mounted installation of a two-way mobile radio in an automobile.



# Installing

#### Procedures and

two-way radio are given here; for specific details on a particular radio, see the manufacturer's literature.

One of the most difficult installations to make is that in a service truck used by gas and electric utilities. The first problem will be that of finding space inside the cab for the radio set. If that is impossible, a quick solution is to put the radio unit in a weatherproof housing and install on a sturdy part of the truck body.

Generally the left side of the truck is to be preferred for the housing as it is less exposed to branches, etc. than the right side. Because the chassis should be accessible for maintenance, it should be placed so that it can be pulled out without unloading articles normally carried in the truck. For the same reason, the cables should be long enough to permit removal of the chassis.

#### Accessories

Spacers, washers and overhung braces will be required for the type of installation. The last can be made from galvanized pole cross-arm braces such as are usually available from electric utilities. They are sufficiently strong and can be bent fairly easily.

The control head and microphone should be located so that they are easily reached by the operator, yet will not interfere in any way with the operation of the vehicle. It is well to consider left-handed operators when positioning the control head and microphone. Also, leave enough slack in the control cables so that the control head can be turned around for inspection.

Loudspeakers should be mounted near the operator. When inherent noise level is high, a good location is on the face of the dashboard. If there will be occasions when management will wish to contact the vehicle operator while he is away from the truck, it may be desirable to mount a small weatherproof loudspeaker on the outside and install a DPDT switch on the control head for speaker selection. These external directional speakers, even though driven by an ordinary output stage,

# Mobile 2-Way Equipment

## Practices for a Professional Job in All Types of Installations

can be heard a considerable distance from the vehicle.

The fuse block and relay are usually mounted with sheet metal screws on the engine side of the firewall in an accessible location. Be careful to place them so that acid overflowing from the battery cannot reach them. As additional protection, and to prevent foreign matter from entering the block, clamp a large flap of rubber cut from a discarded inner tube under one side of the block, lap it over and secure it with screws. A Buss "Clip-Clamp" can be used to keep the fuse from coming loose.

Quite often the "A" battery power lead is connected from the block to the starter relay, so that there will be no possibility of battery acid corroding the connection. The voltage drop in the battery cable is very small and does not add materially to the overall voltage drop of the "A" cable. However, if there is any evidence that ignition noise is being picked up by the "A" cable, it is better to connect a cable directly to the battery terminal. The battery acts as a large capacitor and bypasses the noise to ground. Proper care of the battery will prevent corrosion at the terminals.

#### Cable Routing

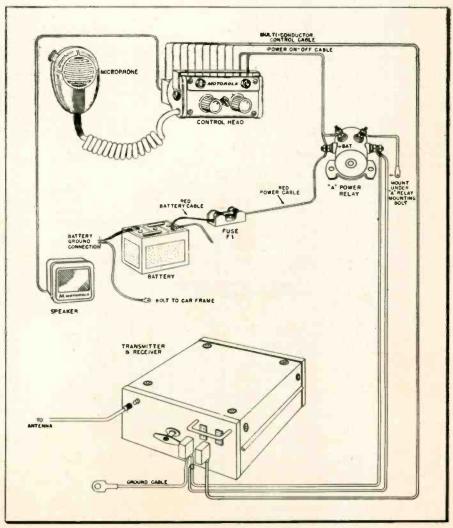
When the radio and its housing are mounted in the truck bed, cables must be thoroughly protected along their entire length. After the cable routing has been planned, route a length of Greenfield flexible conduit, "Sealtite," or other sturdy flexible conduit, from the fuse block and relay location on the firewall, alongside the frame on the inside of the "C" to the housing. Then mark and cut it. Metallic conduit is preferred over hose or plastic pipe because it is abrasion-proof and will not become crushed and difficult to work in subsequent installations. Conduit ends, if not terminated in "Tite-Bite" or similar connectors, should be wrapped with a piece of rubber (a reject lineman's rubber glove is perfect) leaving two inches excess over the ends. Then, when the cables have been fished through, the excess sleeving can be poked back inside the conduit, thus protecting the cables from the abrasive effect of the ends of the conduit. The end of the conduit on the firewall should be placed under the rubber fuse block flap to keep dirt out.

Openings in the firewall for the passage of cable from "A" relay to control head should be made high enough to prevent the entry of water or mud into the operator's compartment. A rotary hole saw is the best tool for cutting a hole large enough for the cable and rubber or friction tape wrap used for protection against abrasion. Conduit hangers of the proper size can be used to secure the conduit along much of its route;

however, wire is sufficient to secure it to the truck frame and prevent rattles. If the cable passes through the bed floor, be sure it is protected from shovels, pikes, etc., using a piece of old car frame or angle iron fastened securely.

After the conduit has been properly routed and fastened down, fish the cables through it using, as a combination fish wire and ground, a #4 copper wire for a 30-watt radio set or two #4 wires for a 60-watt set. Leave the wire in the conduit and connect one end to the battery ground, the other end to the housing and radio ground cable. Be sure to leave enough excess cable at the (Continued on page 53)

Cabling detail and connections to be made in installing a trunk-mounted mobile radio.



TECHNICIAN . May, 1956

# How to File Circuit Digests

## Three Methods of Arranging Schematics for Instant Reference

The monthly 16-page Circuit Digests section of TECHNICIAN has been widely acclaimed by service techs across the U.S. and Canada. Perhaps the main reason for this praise is the fact that Circuit Digests provides more schematics soon after the introduction of new models, at no extra cost, than any other comparable service.

There are dozens of TV-radio manufacturers, and every year each



Fig. 1—Numerical filing by Circuit Digests groups as they appear in each issue. Cumulative Index lists makes and models covered, and gives Circuit Digests numbers included in each Issue group.

one introduces many new models. Were Circuit Digests to include only a couple of sets in each issue, the yearly coverage would be only a small percentage of new sets, making the service rather sketchy. Instead, Circuit Digests packs in as many new and important sets as possible, providing comprehensive coverage of new receivers. In 1955 there were 74 separate digests covering an even greater number of chassis and applicable to hundreds of individual models.

In order to include all these schematics, it is often necessary to print some of them back-to-back with other circuits. As many techs have discovered, this introduces no trouble in filing Circuit Digests if one of the two following filing systems are used.

#### **Numerical Filing**

Perhaps the simplest method is to file all schematics in numerical Circuit Digests order. To find any particular make and model, look up the model under the manufacturer's name in the Cumulative Index of all Circuit Digests to date, which is published every few months (latest index is in the April

1956 issue). This index gives the Circuit Digest number, which you can then pull out of the numerical file.

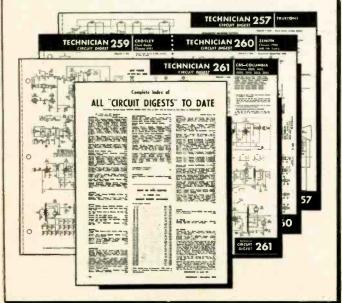
In this numerical filing, the Circuit Digests can either be kept folded in 16-page groups as they come in each issue of TECHNI-CIAN, with issue number showing (see Fig. 1), or they can be opened up to double-page size with Circuit Digests number showing (see Fig. 2). In either version, the Cumulative Index will tell you exactly where the make and model you want is located.

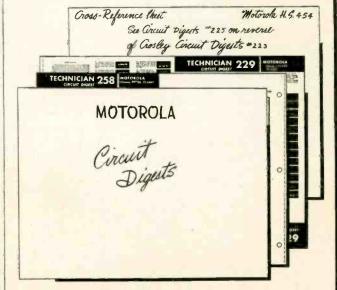
#### Alphabetical Filing

Many techs prefer to file the circuit Digests in the alphabetical order of the manufacturer's name. One reason for this preference is an especially handy application of Circuit Digests made possible by the compact size and format. When a call for service comes in, the set owner is sure to know the brand name of his set, but seldom likely to know the chassis or model number. Many techs have found that it is then a simple matter to reach into the alphabetical file, remove the entire group of schematics under

Fig. 2 (I)—Numerical filing by individual Circuit Digests numbers. Cumulative Index lists makes and models covered.
Fig. 3 (r)—Alphabetical filing by manufacturer's name. Cross-

reference sheet is inserted to locate circuit printed on reverse side of another Circuit Digest filed under different company's name.





one manufacturer's name, and pack it into the tube and tool caddy without taking up a great deal of space. When the tech reaches the customer's home, he is thus equipped to expand the possibility of economical one-trip service in the owner's home by pulling out the appropriate Digest.

It's a simple matter to separate the circuits from each issue and file by company. In those cases where one company's schematic is on the back of another manufacturer's circuit, a cross-reference sheet eliminates filing problems. For example, take the particular case where Motorola HS-454 (Circuit Digest #225) is back-to-back with Crosley R100 (Digest #223). The sheet may be filed in place with Crosley schematics. The cross-reference sheet (see Fig. 3), which might read:

"Motorola HS-454. See Circuit Digest #225 on reverse side of Crosley Circuit Digest #223," is filed in place in the Motorola group. When the technician is using his group of Motorola data, he quickly flips through the group to check for cross-reference sheets. He can then complete the Motorola file, from these sheets, on the spot.

Physically, the Circuit Digests may be kept in a file drawer, separate cabinet, notebook, accordiontype folder or similar device. When alphabetical filing is employed, a large, labeled separation card between companies is helpful. In any case, the Cumulative Index will specifically tell you the many hundreds of chassis and thousands of models Circuit Digests covers.

In the latter connection, it is worth noting that many manufac-

turers add new models to their lines, using chassis already in existence, long after the appearance of the original group of models. Since Circuit Digests bring you the data you need as soon after the appearance of the chassis as possible, it is not always feasible to include later models in the listings. Therefore, if you should come across a model that does not appear to be covered by Circuit Digests, always doublecheck under the chassis number, which is listed first. Receiver coverage is actually even more extensive, in this sense, than the Cumulative Index shows.

If your file is not complete, you may obtain back copies listed in the Cumulative Index for only 25¢ per circuit, or 50¢ for the complete 16-page Circuit Digests section as it appeared in any issue.

# Prices Technicians Charge

Survey Shows Averages for Various TV Servicing Jobs.

• In response to numerous inquiries, TECHNICIAN editors instituted a research project to determine how much technicians charge for making various TV repairs. The results are included in the accompanying chart, and provide all readers with a kind of yardstick against which their own charges may be measured. The survey was conducted among TECHNICIAN subscribers, practically all of whom are either shop owners or full-time techs.

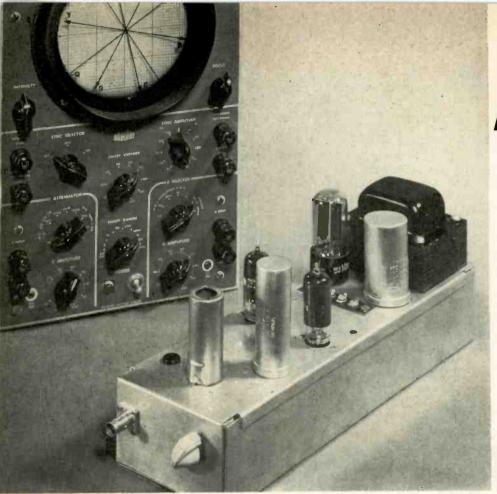
If your charges are much higher than those shown, perhaps you've been losing customers because they think you overcharge. If your prices are much lower, you may be selling yourself short, and cutting your income unnecessarily.

In the chart, prices for installing an antenna or replacing a coil include both the cost for labor and part. To indicate the price variations in different localities, the charges made in a half-dozen different states across the country are presented, in addition to the national average. To see how techs evaluate their own charges, the following question was asked: "Do you consider your charges higher or lower than average for your area?" The bottom section of the chart shows that most

consider their charges average.

One point of interest not covered in the chart is the charge for replacing a 21-inch picture tube. There is considerable variation here, depending on whether a new or rebuilt crt is used, a wide range of labor charges (from as low as \$3.00 to as high as \$20.00), etc. However, the national average is \$8.60 labor charge plus list price of the picture tube.

	NATIONAL	CONN.	IND.	MINN.	н.Ј.	ORE.	TEXAS
Basic charge for house call	\$ 3.93	\$ 3.67	\$ 3.30	\$ 3.52	\$ 3.43	\$ 4.60	\$ 4.71
Avg. total charge for house call	\$ 7.82	\$ 5.20	\$ 7.19	\$ 7.25	\$ 7.58	\$ 9.35	\$ 8.04
Flat rate for installing single							
bay antenna	\$32.60	\$29.00	\$25.75	\$34.00	\$27.90	\$33.46	\$32.00
Total charge for replacing tuner	\$34.68	\$34.50	533. <mark>80</mark>	\$32.32	\$30.93	\$38,50	\$36.15
Total charge for replacing power transformer	\$2 <mark>9</mark> .45	\$28.92	\$26.25	\$29.14	\$29.85	\$29.73	\$30.87
Total charge for replacing deflection yoke	\$17.48	\$16.42	\$16.20	\$17.14	\$17.64	\$17.55	\$19.50
Total charge for replacing flyback transformer	\$18.79	\$19.00	\$1 <mark>6.90</mark>	\$18.18	\$19.28	\$19.80	\$19.44
Total charge for replacing horiz.							
osc. transformer	\$11.71	\$11.25	\$ 9.40	\$10.82	\$13.49	\$11.65	\$13.00
% of techs consider own charges:	er						
Above avg.	13.0 %		0 %	0 %	28%	20 %	25 %
Average	59.3 %		40 %	77 %	43 %	60%	75%
Below avg.	27.7 %	6 50%	60%	23%	29%	20%	0 %



# **Adapt Your**

K. F. FEHLING, FORMERLY OF ALLEN B. DUMONT LABS.

 An increasing need in the service shop, for black-and-white service as well as for use in color TV, is a wideband oscilloscope that is essentially flat to 4 mc. Many service shops have well-designed scopes of earlier vintage that meet all the requirements for modern servicing but one: limited bandwidth prohibits their use in many color and monochrome circuits.

Until such time as the shop is ready to invest in a new wideband oscilloscope, satisfactory work can be done with the old instrument, provided it is supplied with a wideband amplifier, to be connected to its vertical deflection plates, as a substitute for its own integral vertical amplifier. The wideband amplifier described here and shown schematically in Fig. 1, containing three tubes plus a rectifier, can be built at low cost to serve this purpose.

Design is simplified by the relatively low gain required. The average 5-in. crt must have about 20 volts applied directly to its plates to produce 1 in. of deflection. The lowest amplitude of any signal of interest in, say, a color receiver is the output of the video detector. Since this signal usually exceeds 2 volts, a gain of only 10 times would ap-

pear to be sufficient. However, since it is often essential to use a low capacitance probe for counteracting circuit loading, gain must be somewhat greater to overcome the probe loss

The amplifier uses a 6AN8 triodepentode to drive two 12BY7's in push-pull. The 6AN8 can be replaced with a 6U8 with little change in performance. The input triode, connected as a cathode follower, features high input impedance, large signal-handling capability with low distortion, and low output impedance. The high impedance presents negligible loading to circuits under test. Low output impedance minimizes high frequency losses due to stray and wiring capacities. For the latter reason, placing the gain control in this low-impedance circuit reduces the usual distortion that occurs when the control is rotated from one position to another in a

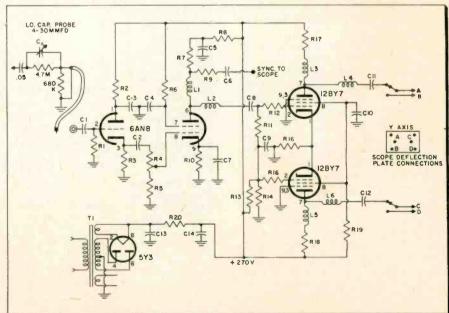
high-impedance circuit.

The pentode section of the 6AN8 is a good video amplifier, with very low output capacitance and high Gm. or transconductance. To realize maximum gain from this stage, combination shunt-series peaking is used. As a guide to those who may wish to build their own wideband amplifiers that depart from the design shown here or that use different tubes, computations used in determining values for this stage follow. See Fig. 2.

6AN8 output cap. = 2.3 mmfd 12BY7 input cap. = 11.1 Stray cap. (est.) = 1023.4 mmfd

Total cap. =

Fig. 1—Complete schematic of the auxiliary scope wideband amplifier; also LCP schematic.



# Scope for Wideband Use

Many Narrowband Scopes Now in Service Shops Can Be Used for Color, Other Wideband Work, with This Auxiliary Amplifier.

To simplify calculations, the value of C<sub>1</sub> has been rounded out to 24 mmfd, which is accurate enough. Formulas used in determining the values of the load resistor (RL), the shunt peaking coil (L<sub>1</sub>) and the series peaking coil (L<sub>2</sub>) are given in Fig. 2, along with definitions of the values appearing in the formulas. To insure flat response at least to 3.58 mc, the value assigned to f is 4 mc. Substituting actual values in the formulas, we work out the following values for the load resistor and the two peaking coils:

RL=  $\frac{1.8}{6.28 \times 4 \times 10^{4} \times 24 \times 10^{-12}} = 3000 \text{ ohms}$ L1=.12 Ct RL<sup>2</sup>=.12 $\times$ 24 $\times$ 10<sup>-12</sup> $\times$ 9 $\times$ 10<sup>6</sup>=26 uh
L2=.5 Ct RL<sup>2</sup>=.5 $\times$ 24 $\times$ 10<sup>-12</sup> $\times$ 9 $\times$ 10<sup>6</sup>=108 uh

The only difficulty in working out the arithmetic is in getting the deci-

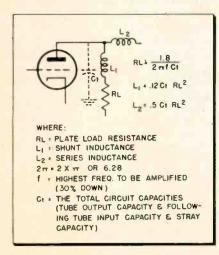


Fig. 2—Formulas for deriving values of load resistors and chokes for wideband stages.

mal point in the right place. Use of the powers of ten, as shown, helps considerably. Contrary to general belief, use of wire-wound resistors in the circuit will have little effect, if any, on overall response in this frequency range. The inductance of a typical wire-wound resistor for use in such an application is generally well under 5 uh.

The low-frequency compensation network (C5 and R8 in Fig. 1) is worked out from the following formula: Rc = 1/2 fCc, where Rc is the value of the compensating re-

sistor, f is the lowest frequency to which flat response is desired, and Cc is the value of the capacitor in the compensating network. Inasmuch as a 30-mfd capacitor was already available in the 3-section

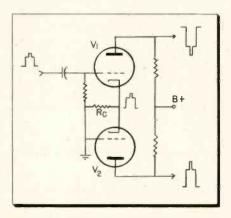


Fig. 3—Cathode-coupled paraphase circuit.

electrolytic chosen earlier for use in this amplifier, and the value of 1 cycle-per-second was assigned to f, the formula was used to solve for resistor Rc. This value was found to be 5300 ohms.

Use of a push-pull amplifier minimizes defocusing of the crt spot during use. For this circuit, 12BY7's were chosen for their high figure of merit and current-handling capability. To develop a sizeable output voltage, output current must be high, since a low value of plate resistance is made necessary for wide frequency response. For this reason, transmitting type tubes are often used in wideband high-gain amplifiers of this type. These latter tubes, however, require large driving voltages. For our application, the 12BY7 does a fine job.

#### Paraphase Circuit

To obtain push-pull signal for the output tubes, a cathode-coupled paraphase circuit is used. Commonly used in oscilloscope design for years, this network eliminates the need for a separate phase-splitter tube. Briefly, with reference to the simplified circuit in Fig. 3, it functions as follows: The signal input to V1

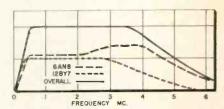


Fig. 4—Response curves for wideband stages.

develops an identical signal across Rc, the common cathode resistor of the two push-pull tubes. With the grid of V2 grounded, this latter stage (V2) uses its cathode as the signal-input electrode—as is common with grounded-grid amplifiers. Also as in other grounded-grid amplifiers, the signal present at the V2 cathode is amplified without phase reversal at the plate. Since V1 is meanwhile functioning as a normal amplifier with the grid used for signal input, it amplifies with the usual phase shift of 180 degrees.

Referring again to the complete circuit as shown in Fig. 1: because the 12BY7's operate with little or no bias, a positive bucking voltage is applied to the control grids through voltage divider R13 and R14.

#### 12BY7 Compensation

Plate load resistors, as well as shunt and series peaking inductors, were selected for the 12BY7's according to the formulas already presented in Fig. 2 and worked out for the first stage of amplification. It should not be necessary to execute the mathematics again. Values used for the computations on the pentode section of the 6AN8 are used again here except, of course, that the capacitances are different. These are as follows:

12BY7 output cap. = 3 mmfd CRT input cap. = 20 Stray cap. = 10

Total cap. 33 mmfd

The input capacitance of the crt may vary from one scope to another depending on the input capacitance to the deflection plates of the particular crt used and the manner in which wiring for external connection to these crt plates is made. Information as to the exact value of input capacitance may be sought in the specifications for the instrument, the tube manual, or from the instrument manufacturer. To allow for adaptability to different types of scopes, variable inductances could be used in the compensating networks. The value used in this case was for the Du Mont Type 304H scope, with which the amplifier was to be used. Ordinarily, differences in this value will not be great.

If the reader takes the trouble to verify some of the values shown with his own computations, he will find some small discrepancies in those actually used. This has been done for practical reasons. Where a slight sacrifice of bandwith for gain has been made in one stage, it has been made up in another, by "staggering" the compensation over two stages. This has some similarity to stagger tuning used in TV i-f amplifier design. The effect can be seen

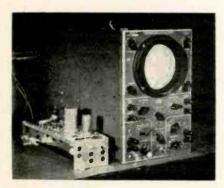


Fig. 5—Breadboard version of the amplifier.

by examining the separate response curves for the 6AN8 stage and the 12BY7 stage in Fig. 4. Combined, they produce the desired overall response curve, slightly down at 4 mc (about 3 db).

To facilitate development,

breadboard type of chassis was used (see Fig. 5), consisting of a rigid frame and an assortment of punched phenolic plates. The plates accommodate all types of tube sockets and provide numerous insulated tie points. This saved the trouble of punching out a chassis only to find that changes later required in layout could not be made easily. On completion of the unit, if desired, it may be permanently built on a conventional chassis, like the one shown in the illustration at the beginning of the article. The bottom view of the completed box-type amplifier chassis (12 in. by 3 in. by 21/2 in. deep) appears in Fig. 6.

Parts layout should follow good high-frequency wiring practice. Peaking coils, coupling capacitors, plate resistors, grid resistors, and all associated wiring should be well spaced from the chassis and each other. The arbitrary figure of 10 mmfd stray capacity allowed for in the calculations can be greatly exceeded if good practice is not observed.

#### Some Added Refinements

Peaking coils close to the computed values were selected from stock. Even flatter response can be obtained by the use of variable inductances. A switch has been included in the completed version to restore the oscilloscope to normal low-frequency use, when desired, without removing the input connection from the separate amplifier and transferring it to the scope input. Details of the switch and corresponding connections to the external deflection-plate tie points for the 304H scope are shown to the right in Fig. 1.

A low-capacitance probe can be purchased or built, since one will

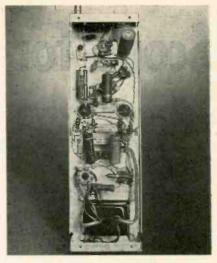


Fig. 6-Underside of the complete amplifier.

have to be used in conjunction with most high-frequency receiver circuits. The details of such a probe are shown at the upper left in Fig. 1. The components involved can be readily mounted in a length of phenolic tube having a ½-in. inside diameter. The compensating capacitor (Cc) should be adjusted for a flat-top squarewave response. Probe attenuation will be about 10 to 1.

When using the probe, any color signals may be observed without the need for a step attenuator in the amplifier input. The input stage of the amplifier will accept a 20-volt (peak-to-peak) signal without overload. Allowing for probe attenuation, this would correspond to a 220-volt (p-p) signal.

Measured sensitivity of the amplifier is 0.2 volt per in. Transient response is good.

Synchronizing voltage must be taken from the separate amplifier and applied to the external sync input of the companion oscilloscope. This take-off point is indicated as "Sync to Scope" in Fig. 1. Resistor R9, in this sync output point, is used to prevent the loading down of the 6AN8 pentode plate circuit when the sync connection is made.

#### 450-ma Series-String Tubes

The GE Tube Department announces a new line of TV receiving tubes intended to reduce seriesstring heater power 25%, easing design problems in the trend to smaller, portable sets. These tubes will draw 450 ma of heater current, instead of 600 ma.

Some advantages of this new line: elimination or reduction of heater dropping resistor, reduced cabinet size, reduction of ventilation problems and overheating, improved stability, and lower component cost.

#### PARTS LIST

C1	0.2, 600 v	C14	40, 450 v (B)	R13	100k, 1 w, 10%
C2	100, 25 v		1 meg		2.7k, 10%
C3	10, 250 v (A)	R2	10k, 2 w	R15	47
C4	10, 250 v (A)	R3	1k, 1 w	R16	100, 1 w
C5	30, 250 v (A)	R4	1k, pot.	R17	2.5k, 7 w
C6	0.01, 500 v	R5	150	R1-8	2.5k, 7 w
<b>C7</b>	0.0005, 200 v	R6	56k, 2 w	R19	6.8k, 2 w
C8	0.5, 400 v	R7	2.4k, 2 w	R20	500, 10 w
C9	50, 25 v	R8	5k, 2 w	LI	16-24, or 22 fixed
C10	10, 250 v (B)	R9	100k	L2	105
C11	0.1, 600 v	R10	100, 1 w	L3	22
C12	0.1, 600 v	R11	470k	L4	93
C13	30, 450 v (B)	R12	47	L5	22
				16	93

Power xformer (min. specs.): 6.3 v, 2 amp; 5 v, 2 amp; 650 v, ct, 80 ma. (Merit #P2951, or similar)

Switch, DPDT, wafer type

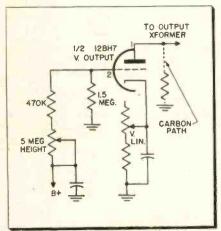
Unless otherwise stated, capacitor values are in microfarads, resistors in ohms at  $\frac{1}{2}$  watt and 20% tolerance, and inductances are in microhenries.

Capacitors marked (A) are sections of a triple-electrolytic can.
Capacitors marked (B) are sections of a triple-electrolytic can.

## Difficult Service Jobs Described by Readers

#### **Vertical Size Problem**

We couldn't get enough vertical size on this CBS-Columbia TV receiver. All components in the vertical circuit checked normal. A few replacements were tried for the vertical output tube, to no avail. The symptoms indicated leakage at the plate of the vertical output tube but,



Hidden socket leakage path reduced output.

except for the fact that the voltage was low at this point (pin 1, 12BH7, in the diagram), all checks of components showed normal conditions.

After spending some time to carefully eliminate other possibilities, it was decided that the pin on the tube socket must be at fault. However, after the pin was replaced, the trouble was still there. In a sense, this was our undoing, because it served to mask the actual trouble still further.

After some time spent in rechecking, it was once more concluded that the trouble had to be somewhere in that tube socket. From what could be seen of the socket while it was in the chassis, there were no abnormal indications. However, after it was removed, it was easy to see what had been causing the trouble. A carbon path had been burned between pin 1 and the center of the socket, which was grounded, creating a resistive leakage path from the plate of the

vertical output tube to ground. The guess is it was probably not the 420 volts of boosted B-plus at the plate of this tube that had set up this path, but rather the higher peak-to-peak value of the vertical output waveform at this plate that had been arcing. In any case, next time I come across a suspicious-looking pin on a tube socket, I'm going to save time by replacing the whole socket instead of one pin.—Russell Scarpelli, Gulfport, Mississippi.

#### Low-High VHF Converter

In your March issue, reader L. D. Howard of Tunnelton, West Virginia makes inquiry about a converter to change a high VHF channel into one on a low band. Several years ago, I successfully built such a device to convert Channel 13 to Channel 6. The device is illustrated here. Since reader Howard may wish to use channels other than the ones I used, the winding details given for the coils may vary from the figures given. However, with these details as a guide and a little experimenting with the coils and/or variable condensers to insure proper coupling on the channels he wishes to use, I believe it would work well for him too.-N. L. Brown, St. Johnsville, \$10 For Your "Tough Dag Story"

Have you tangled with a difficult or obscure service problem recently? Write it up, telling us how you licked it. Use drawings to illustrate your explanations wherever necessary. A rough sketch will do as long as it can be followed. Send it to "Tough Dog" Editor, TECHNICIAN, Coldwell-Clements, Inc., 480 Lexington Ave., N. Y. 17, N. Y.

#### Sound in Pix

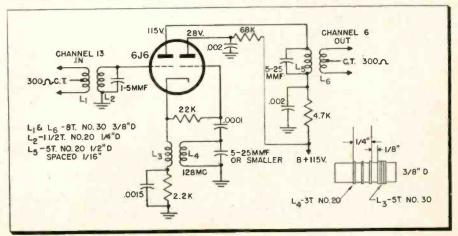
This set, a Philco, first came into the shop with low sound output. It was a simple matter to repair, and the set was returned to the owner. Not an hour later, the customer was back with another complaint.

At full volume, when the set was really blasting away, sound bars were so evident that they tore the picture apart. I checked for audio on B-plus line and found it there, as expected. The logical step was to bridge the bypass filters in the audio output stage; however, this didn't help.

The next check was on the agc line, where the sound modulation was also in evidence. To see how much of the sound was in the video circuits, I checked there. The video trace on the scope was just jumping with sound signal. Next the agc line was disconnected and straight dc bias from a battery was substituted. This got rid of the visible symptom.

(Continued on page 52)

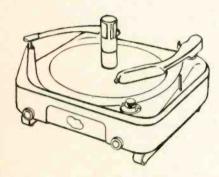
Schematic and coil detail for converter with Input on Channel 13, output on Channel 6.



# Phono Repair Check List

# Guide to Symptoms and Location of Trouble Sources

For quick reference, presented below are commonly encountered phono system troubles, together with servicing tips and the location of probable sources. For detailed explanations of servicing techniques for phonos and associated audio equipment, see accompanying list of selected articles.



#### Jamming

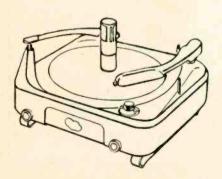
Symptom: Changer sticks momentarily or stops completely during record changing cycle.

Source: Dirt, burrs or broken part in trip actuating, drive or indexing mechanisms. Excessive friction or no lubrication between moving parts. Wiring enmeshed in gears. Bind in spindle bearing or motor shaft, motor stalling. Very low line voltage. Tip: With power off, rotate turntable by hand, observing action of parts under base.



Symptom: Pitch changes caused by variations in turntable speed.

Source: Drive wheel wobble, worn or eccentric idler. Turntable bent or rubbing against obstruction. Loose



bearing, washer missing on central bearing. Slippage caused by oil on drive wheel or belt. Loose idler spring. Tip: Extremely small dent on wheel can cause wow, so don't rely on visual inspection alone.

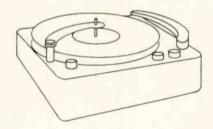


Symptom: Low frequency mechanical vibrations transmitted to pickup. Source: Changer not floating properly on spring isolators or cushions. Excessive cabinet vibrations. Tip: Make sure shipping screws fastening changer tightly against base have been loosened or removed. Sponge rubber turntable mat may help.

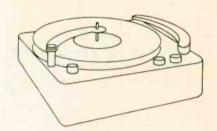


Symptom: Continuous pickup of 60-cycle ac.

Source: Improper placement or shielding of wires from pickup. Ground lead absent or broken. Stray field from turntable motor reaching pickup. Faulty cartridge. Unbalanced output tubes. Tip: Sometimes



changing orientation of amplifier, with its husky power transformer, cuts inductive coupling.



Output

Symptom: Output low, intermittent or absent.

Source: Worn or broken needle, faulty cartridge. Failure in amplifier. Poor connection between elements of system. Tip: After disconnecting cartridge, touch finger to amplifier phono input. If hum is heard, trouble may be attributed to pickup.



Symptom: Needle skips or repeats record grooves.

Source: Worn needle, inadequate arm pressure, turntable not level. Cartridge not properly positioned in arm. Binding in arm mount. High turntable vibration (see "rumble"). Warped and worn record discs. Tip: When groove skipping occurs only at beginning of record, check arm indexing mechanism.

#### AUDIO SERVICING

Selected articles from TECHNICIAN recommended for improving your troubleshooting and installation efficiency.

"Tape Recorder Case Book"-March

"Tell-Tale Marks Reveal Tape Recorder Flaws"—Feb. 1956.

"Connecting High Fidelity Phono Pickup Cortridges"—Jan. 1956. "Servicing Hi-Fi Record Preamplifier Equalizers"—Nov. 1955.

"Tooling Up for Hi-Fi"—June 1955.

"You Can Service Hi-Fi"-June 1955.

"PA Installation Problems"-May 1955.

"Adding Extra Speakers"—March 1955. "Sound System Application Guide"-Jan.

"Tape Recorder Repairs"—Dec. 1954.

"Electrostatic Hum Pickup"-Nov. 1954.

"Hum-Bugging Audio Amplifiers"-Oct.

"Setting Up a Successful PA Sound System"—Aug. 1954.

"Servicing Automatic Recard Changer Trip Mechanisms"—April 1954.

"Servicing Phono Motors and Drive Assemblies"—Nov. 1953.

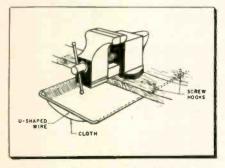
# SHOPHINTS



## Tips for Home and Bench Service by Readers

#### Vise Net Catches Parts

When parts are worked in a vise on the bench, there is often trouble because small parts fall from the



Net under bench vise catches falling parts.

vise to the floor of the shop. This can be avoided by the use of a simple cloth net, supported on a wire frame, placed right underneath the vise below the bench top. The frame is made of stiff wire bent into an approximate U shape, as shown in the illustration. The frame slides in and out of screw eyes or hooks, so that the net can be removed when needed. The edges of the cloth may be hemmed to fit over the wire, or held in place with safety pins.— Stanley Clark, E. Bradenton, Fla.

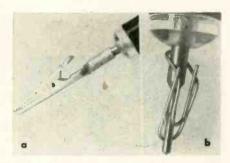
#### Low-Cap Probe Clips

When testing with crystal probes in high-frequency circuits-about the only place these probes are used -tests should be made with the probe in relatively permanent contact with the circuit element. This is advisable to keep the hand, arm, body, etc. away from the tested circuit. Enough stray variation occurs from the very presence of the probe case and leads without adding any additional variation due to hand capacity.

SHOP HINTS WANTED

TECHNICIAN will pay \$5 for acceptable shop hints. Unacceptable items will be returned. Use drawings to illustrate your explanations wherever necessary. A rough sketch will do as long as it can be followed. Send your hints to "Shop Hints" Editor, TECHNICIAN, Caldwell-Clements, Inc., 480 Lexington Ave., N. Y. 17, N. Y.

To accomplish this type of connection for relatively low-frequency circuits, such as in the video amplifier of a TV set for setting 4.5-mc traps and the like, the hot probe tip may have an alligator clip slipped on it as is shown in photo A. If the probe tip does not fit tightly into the end of the clip, crimp the round end of the clip to make a tight fit. For higher frequencies, such as in the i-f system, where even the additional capacity of an alligator clip may present a problem, a small paper clip may be used to make the connection. It is bent into the shape shown in photo B and slipped on the probe tip. The probe can be attached to circuit elements easily with this device.-L. A. Williams, Brooklyn,



Probe clips for use in high-frequency tests.

#### Extra Duty for H-V Aids

Accessories use in service work on high-voltage circuits can be employed for other unheralded jobs, in many cases. Anti-corona "dope," for example, makes an excellent replacement for the cement used in making speaker cone repairs. In fact, it does a much neater and more thorough job than regular speaker cone cement. Even when used with tissue paper patches, the black corona dope, heavy and undiluted though it is, sets evenly and smoothly.

High-voltage tape also has applications for which it was not originally intended. When wound around the base of a picture tube, it prevents the base from pulling out. It can also be wound around the neck

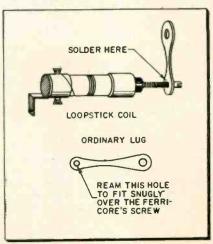
of the picture tube at the point where the flare of the pix-tube bell begins. This protects the yoke windings whenever pix tube removal is necessary. The latter function is very important because, in many sets, the clearance between the neck of the tube and the yoke is very, very small.—Clifford H. Goldstein, E. Elmhurst, N. Y.

#### Loopstick Adjustment

Widely used as original AM receiver antennas as well as for replacement, the adjustable loopsticktype aerials are often annoying and tedious to adjust. As the coils come from the manufacturer, they are provided with a tiny screwdriver slot at the end of the core's screw, often making them difficult to tune. Much time can be wasted in attempting this procedure with the small screw-

By soldering an ordinary lug on the screw as shown in the accompanying illustration, you can easily speed up the process of tuning and adjusting. If space around the loopstick coil is at a premium, the lug may be conveniently bent at right angles. Also, if it is desirable to do so, the lug can be snipped off shorter than is shown. It will still provide a convenient way of making the desired adjustments.-Joseph Amorose, Richmond, Virginia.

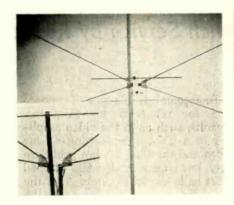
Lug on loopstick coil facilitates adjustment.



# **New Products for Technicians**

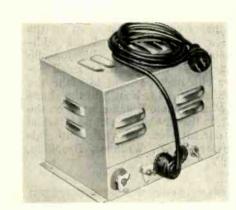
#### **Allweather CONICAL**

New type conical antenna has solid aluminum elements mounted on a giant tuning fork, thus eliminating common insulator. Manufacturer reports method gives increased signal strength, and prevents insulator failure due to seashore salt air or city soot. Close-up shows air gap separating opposing antenna elements. Design is built around the metal "tuned insulators" which are intended to tune out coating of foreign matter. Allweather Antennas Mfg. Corp., 350 S. Egg Harbor Rd., Hammonton, N.J. (TECHNICIAN No. 5—15)



#### James POWER SUPPLY

Model C-1450 fixed/mobile communications power supply enables user to power equipment from 6 or 12 v. ignition systems or 117 v. 60 cycle. DC output is up to 250 v. at 100 ma for receiving, and dual output 500 v. at 175 ma and 250 v. at 75 ma for transmitting. When operating from 117 v. ac, it also supplies up to 10 amps for 6 or 12 v. filaments. Complete with control circuits. For commercial and amateur service. James Vibrapower Co., 4050 N. Rockwell St., Chicago 18, Ill. (TECHNICIAN No. 5—14)



#### Telex TV "LISTENER"

Where individual TV listening is desired, the "Listener," part No. 9900 may be attached to set. The control unit has two jacks into which two earsets may be plugged. It also has a volume control and switch for turning set's speaker on or off. Unit measures 3½" diameter, 1" thick. Comes with 15-ft. cord from set to control, and earset with 4-ft. cord to control. Perfectly safer Protected from damage by cushioning polyethylene ring with hanger. Telex, Inc., Electro-Acoustic Div., Telex Park., St. Paul 1, Minn. (TECHNICIAN No. 5-13)



#### Delco AUTO AERIAL

Dual automobile radio aerial designed for rear deck installation is packed in a handy display carton. Each contains two chrome plated aerials, mounts, extension leads, clips and all necessary fasteners. Base assembly has been designed for top mounting, which overcomes restricted space problems often found in rear fender applications. Masts extend to 30", and are of 3-section design with built-in anti-rattlers. Delco Div., United Motors Service, General Motors Bldg., Detroit 2, Mich. (TECHNICIAN No. 5—12)



#### **Bell PA SYSTEMS**

"Pacemaker" line of public address amplifier systems contains eight models including 10, 20 and 33 watt systems; and two 6-volt and 12-volt mobile amplifiers. Accessories include three-speed phono top and case to carry two 12" speakers and 25 ft. of cables. Design utilizes ceramic pick-ups, and internal phono jacks provide for tape machine or second phono use from front panel. Bell Sound Systems, Inc., 555 Marion Rd., Columbus 7, Ohio. (TECHNICIAN No. 5—16)

#### Alpha WIRE SPOOLS

"ServiceSpool" packaged wire line contains the 114 most widely used wire items on three sizes of metal spools. Designed for the technician, it includes tubing, HV wire, filament wire, mike cable, multi-conductor cable, shielded cable, test lead, hook-up wire, tinned copper and many others. Alpha Wire Corp., 430 Broadway, New York 13, N.Y. (TECHNICIAN No. 5—17)

#### Elgin CARTRIDGES

New turnaround "throwaway" ceramic phono cartridge, light as a 4.5-gram peanut shell, are available with osmium and sapphire needles for 33-1/3, 45 and 78 rpm. A positive snapin action automatically locates the single needle replacement in proper alignment without the use of tools. Elgin National Watch Co., Electronics Div., Elgin, Ill. (TECHNICIAN No. 5—18)

#### **Vidaire FERRITE ANTENNA**

A service replacement ferrite coil antenna for radio sets, called the Ferri-Loop Model FL-6, may be used in place of older round loops. It is designed to track over the broadcast band with most of the standard variable capacitors in use today. It is sensitive and very compact. Vidaire Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N.Y. (TECHNICIAN No. 5—19)

#### Parker "STRATO"

"Strato" straightens guy wire as it comes off the spool and eliminates kinking, coiling, tangling and stretching. It does away with bulky boxes of coils and reduces waste. This tool consists of a special pulley and bracket arrangement on which the spool of wire mounts. Excellent for TV antenna installation. Parker Metal Goods Co., Summer St., Worcester, Mass. (TECHNICIAN No. 5—60)

# **Latest Test Instruments**

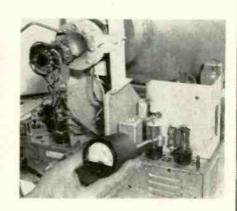
#### Triplett OSCILLOSCOPE

Cathode ray oscilloscope, 5" Model 3441-A, at \$249.50, permits changing polarity to vertical input amplifiers and thus keep wave form on tube showing in a conventional manner. Calibrated meter is included for comparison voltage measurements. Multi-vibrator type of internal sweep generator provides linear sweep voltages up to 60 kc, and wide frequency range provides for TV and FM servicing, including color. Size 15-11/32" x 11-1/32" x 16". Wt. 38 lbs. Triplett Electrical Instrument Co., Bluffton, Ohio. (TECHNICIAN No. 5-3)



#### RI VIDEO PROBE METER

R-F probe and absorption meter is designed to differentiate high and low frequencies. By placing pickup loop at right place on top or under TV or radio chassis, almost all circuits can be checked. Tests include video tracing, oscillator check, picks up sweep signal from outside tube, shows sync, drive, agc, detects arcing, etc. Used to adjust phasing circuits. Compact and easy to use. \$31.50. Also useful for color TV servicing. Research Inventions & Mfg. Co., 617 F St. N.W., Washington 1, D.C. (TECHNICIAN No. 5-2)



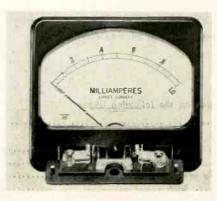
#### Hycon DIGITAL VIVM

Designed for mounting in a standard 19" rack, Model 615R Digital VTVM brings speed and accuracy to voltage and resistance measurements. A direct-reading, 3-digit counter eliminates interpolation and parallax errors, makes accurate readings easy, and avoids multiple-scale confusion. One-millivolt sensitivity is provided on the low scale, and accuracy is 1% on DC and resistance, 2% on AC. Illuminated polarity signs. Hycon Electronics, Inc., 321 So. Arroyo Parkway, Pasadena, Calif. (TECHNICIAN No. 5-1)



#### Hickok METERS

Newly developed 4%" rectangular meters permitting maximum length of scale to an accuracy of 1½% are now available in ac and dc models. Identified as Models 68 and 69, these meters are made for semi-flush panel mount applications and are supplied with or without illumination feature. New illumination technique permits bulb replacement from front of meter case without removal from the panel. Hickok Electrical Instrument Co., 10523 Dupont Ave., Cleveland 8, Ohio. (TECHNICIAN No. 5-4)



#### **Phaostron METER**

Line of 3½" rectangular panel meters feature a die cast bezel that can be finished in either polished chrome and black or in a solid black. Metal cases give antimagnetic shielding. Accuracy is 2% full-scale calibration. Phaostron Instrument and Electronic Co., 151 Pasadena Ave., South Pasadena, Calif. (TECHNICIAN No. 5-6)

#### Win-Tronix HV PROBE

High voltage probe with built-in voltage indicators, designated the Thermometer Model 900, is a self-contained high voltage tester requiring no meter or external indicator. Six calibrated neon counters show at a glance the amount of high voltage on the picture tube or other voltage source. The neon indicators are located in the handle of the probe. Calibration is from 2½ to 25 kv. Dealer net \$8.95. Winston Electronics, Inc., 4312 Main St., Philadelphia 27, Pa. (TECHNICIAN No. 5-5)

#### HP FREQUENCY METER

High-accuracy frequency meter with expanded scale, Model 500B, covers frequencies 1 cps to 100 kc and providing direct readings accurate within ±2% full scale. A feature of the new instrument is an expanded scale permitting any 10% or 30% segment to be viewed full meter range for high accuracy. Input requirements are 0.2 volt on sine waves and 1 volt minimum to 250 volt peak maximum on pulsed signals. Hewlett-Packard Co., 275 Page Mill Road, Palo Alto, Calif. (TECHNICIAN No. 5-7)

#### Shasta VTVM

Model 204 ac vacuum tube voltmeter is designed specifically for accurate measurements of ac voltages from .03 to 300 volts full scale in the low frequency range of 2 cps to 300 kc. Features of this instrument are: its regulated power supply, a large easy to read 6" meter, and an illuminated range selector switch which displays only the range that the operator is using. Accuracy is 2 to 5%. Shasta Div., Beckman Instruments, Inc., P.O. Box 296, Station A, Richmond, Calif. (TECHNICIAN No. 5-8)

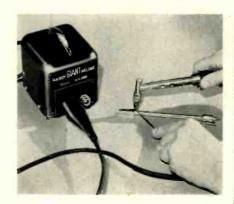
More New Products on pages 46, 48, 49, 58, 61

For more technical information on new products, use inquiry coupon on page 46

# New Tools & Shop Aids

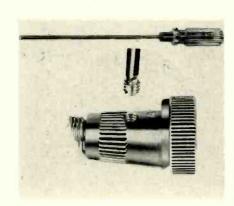
#### **Cauhorn WELDER**

The "Handy Giant" welder may be plugged into any 115 volt, 60 cycle outlet to weld, braze or cut metals. With the "Magic Wand" attachment, the technician can solder, etch or preheat any part. Also, wand may be employed for soldering and welding without the transformer by connecting to battery. Guaranteed for one year. Lifetime exchange policy of power unit for \$16 and wand for \$4. Also useful for soldering. Cauhorn Distributing Co., 20722 W. Seven Mile Rd., Detroit 19, Mich. (TECHNICIAN No. 5-29)



#### Walsco SCREWDRIVER

Precision screwdriver holds extremely tiny screws securely while starting or removing. Screws as small as #1 and #4 used in transistor radios and similar instruments may be held. Tool available in 4" and 7" lengths has ½" diameter shank. The 4" screwdriver (Catalog #2568) is sold at user's net of \$1.98. The 7" screwdriver (Catalog #2569) is \$2.24. Both tools for servicing miniature equipment are made of durable material. Walsco Electronics Corp., 3602 Crenshaw Blvd., Los Angeles 16, Calif. (TECHNICIAN No. 5-28)



#### **Techniques SCREEN KIT**

Perfect duplication of printed circuits, nameplates, dials and even greeting cards may be accomplished with this silk screen process kit. Kit contains resist ink, squeegee, DuPont film and chemicals, and instruction brochures. Reproduce almost anything that can be photographed, from one to more than 10,000 units. Kit shown, #5006P, is \$27. Smaller etched wire printed circuit kits also available at \$3.75, \$4.75 and \$9.75. Techniques, Inc., 178-84 Central Ave., Hackensack, N. J. (TECHNICIAN No. 5-30)



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#### 3M ELECTRICAL TAPE

High voltage splicing tape, "Scotch" brand No. 23 electrical tape, is self bonding, and uses butyl rubber base. High dielectric strength, 650 volts/mil, provides excellent ozone resistance. Shortly after application, tape fuses into homogeneous mass, yielding maximum moisture resistance. Minnesota Mining & Mfg. Co., Dept. D6-12, St. Paul, Minn. (TECHNICIAN No. 5-31)

#### **Hunter THREAD TAP**

"Tri-Tap" is a single tool which cleans or cuts any of the three most common thread sizes found in electronic and other craft work. Three taps are on one rod, graduated from smallest at tip to largest nearest handle. Sizes are \%2, \%2 and \frac{1}{2}. Hunter tool, Box 564, Whittier, Calif. (TECHNICIAN No. 5-32)

#### LS "WALKING" HAND TRUCK

Lightweight magnesium hand truck enables one man to handle TV sets or air conditioner. The "Hyker" walks up stairs on rubber-covered legs when its handles are pumped. It lifts appliances over obstructing furniture or radiators on its screw-operated lifter shelf. L-S Heating & Engineering Co., 900 W. Lycoming St., Philadelphia 40, Pa. (TECHNICIAN No. 5-33)

#### **E&L LAMINATED LADDERS**

Single and double section laminated wood ladders available in lengths from 8 to 30 ft. can support loads up to 1300 lbs. Features include long service life and ability to carry maximum loads for a long period of time. Engineering & Laminating Corp., 506 S. Central Ave., Baltimore 3, Md. (TECHNICIAN No. 5-34)

#### PE STAIR CLIMBING TRUCK

"E-Z Climber" hand truck has two rocker arms which act like an extra pair of wheels to carry loads up to 600 lbs. up and down stairs. Built of welded 1" OD tubular steel frame, with overall size 46" x 17¾", it weighs 39 lbs. \$39.90 fob Illinois. Precision Equipment Co., 3716 Milwaukee Ave., Chicago 41, Ill. (TECHNICIAN No. 5-35)

More New Products on pages 48, 49, 58, 61, 62

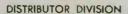


## HE PROVED IT FOR HIMSELF!

The new Pyramid Imp is smaller, yet better than any other molded paper tubular capacitor; Operates at full rating of 100°C (212°F—boiling point); Exceeds moisture resistance requirements of U. S. Gavernment specifications MIL-C-91A; Copperweld leads are securely imbedded to withstand 4 360° bends without breaking.

These features, plus an almost indestructible thermo-setting plastic encasement make Pyramid Imps your best molded paper tubular capacitor.

For full information on Pyramid capacitors and rectifiers, see your local distributor or write to



# PYRAMID ELECTRIC COMPANY

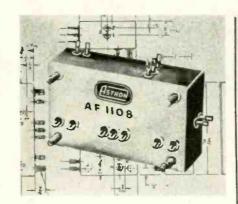
1445 Hudson Blvd., North Bergen, N. J.



# **New Electronic Components**

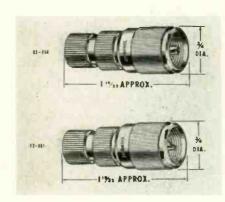
#### Astron FILTER

Miniaturized r-f noise suppression filter AF1108 contains fourteen toroids and eight capacitor sections for noise suppression in the range of 0.15 to 1000 mc. It is designed to withstand great amounts of shock and vibration, as well as elevated operating temperatures. It is hermetically sealed, small and light in weight, useful for portable equipment. Designed to meet and surpass the requirements of military specification MIL-1-11748. Astron Corp., 255 Grant Ave., Newark, N.J. (TECHNICIAN No. 5-23)



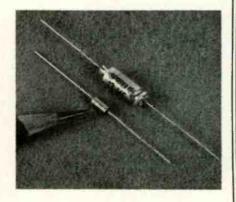
#### **Amphenol CONNECTORS**

Two r-f cable connectors eliminate the operation of soldering cable braid to the connector shell. These are the 83-851 and 83-850, the latter also eliminating soldering the center conductor of the cable to the contact. No special tools needed. They are made of brass, cadmium finished, with silver plated contacts. Both are re-usable. Dielectric material is mica-filled bakelite. Electrically similar to 83-1SP plug. The 83-851 is in the UHF series. American Phenolic Corp., 1830 S. 54 Ave., Chicago 50, Ill. (TECHNICIAN No. 5-21)



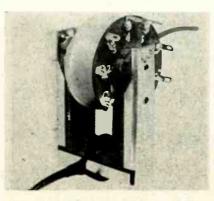
#### Sprague ELECTROLYTIC

Hermetically sealed solid electrolyte tantalum electrolytic capacitor Type 150D for transistorized and other miniature equipment is only ½" in diameter, ¼" long. Yet it has a capacity of 12 μf. Its capacitance varies only 5% from room temperature over the range of —132° to 185°F. Stability is comparable with the best oil-paper types rather than 10 times larger paste electrolytics. Engineering bulletin 3520 provides technical data. Sprague Electric Co., 97 Marshall St., North Adams, Mass. (TECHNICIAN No. 5-20)



#### **Merit TRANSFORMER**

HVO-53 horizontal and high voltage output transformer is an exact replacement for the following parts numbers in Zenith equipment: S-15015; S-15709; S-15911; S-15912; S-16191; S-16204; S-16566; S-17130; S-17140; S-17233; S-17244; S-17245; S-17265; S-71435; S-17646; S-17669; S-17767; S-17812; S-17925; S-17939; S-18125; S-17487; S-18537; S-18930; and S-20908. Additional data is available. Merit Coil & Transformer Corp., 4427 N. Clark St., Chicago 40, Ill. (TECHNICIAN No. 5-22)



#### Clevite TRANSISTORS

Six germanium power transistors for handling up to 20 watts input are of the PNP type. They are available for nominal 12 and 28 volt operation. They are particularly suitable for class A operation in the audio output stage of automobile radios. Clevite Transistor Products, 241 Crescent St., Waltham 54, Mass. (TECHNICIAN No. 5-26)

#### Quam FOCALIZER

New focalizer unit QF-4 which fits all TV picture tubes regardless of size or anode voltage replaces part numbers QF-1, QF-2 and QF-3. It is easy to install and comes attractively packaged. Designed with ceramic magnets. Diameter 3 1/16"; depth 1 1/16" at min. flux, 1 3/4" at max. flux. Bracket is 3 1/4 x 5 1/2". Shipping weight 1 lb. List \$4.25. Quam-Nichols Co., Marquette Rd. & Prairie Ave., Chicago 37, Ill. (TECHNICIAN No. 5-24)

#### Philco TRANSISTOR

Subminiature transistor, so small that 20 can be placed on a dime, operates in the audio range. Designated as the M-1, it has a 70 db gain, or a power gain of 10 million, and will operate on as little as 0.0001 watt. This germanium junction transistor is of the PNP type. Among many potential applications are hearing aids, portable radios, computers and guided missiles. Philo Electronic Tube & Transistor Div., Tioga & C Sts., Philadelphia 34, Pa. (TECHNICIAN No. 5-25)

#### Triad FLYBACKS

Eight new correct replacement fly-backs (horizontal output transformers) are designed for use in Admiral, Emerson, Motorola, Philco, Wells-Gardner, Westinghouse, Airline, Firestone, Raytheon and Bendix TV receivers. They are electrically and mechanically interchangeable with manufacturer's original equipment. Listed in Catalog TV-56. Triad Transformer Corp., 4055 Redwood Ave., Venice, Calif. (TECHNICIAN No. 5-27)

More New Products on pages 44, 58, 61, 62, 64

For more technical information on new products, use inquiry coupon on page 46

#### **New Tubes**

#### Westinghouse CASCODE TUBES

Two sharp cut-off cascode r-f amplifier tubes for TV receivers employing low B+ supplies are the 6BX8 and 4BX8 double triodes. The 6BX8 employs the conventional 6.3-v., 400-ma heater, while the 4BX8 with 4.5-v., 600-ma heater is designed for series strings. Both tubes operate with only 60 v. plate-to-cathode voltage, to give more gain than cascode tubes not especially intended for low plate voltage operation. Basing is same as the 6BZ7-6BS8 family. Westinghouse Electronic Tube Div., Dept. T-075, Route 17, Elmira, N.Y. (TECHNICIAN No. 5-9)

#### RCA TUBES

Six new tubes are designed for use in TV sets. The 5CG8 and 6CG8 are miniature triode-pentode converters for use as combined oscillator and mixer in sets with 40 mc i-f. Heater ratings are 6.3 v., 450 ma for the 6CG8, 4.7 v., 600 ma for 5CG8. The 2NB4 and 6NB4 are medium-mu miniature triodes for use as r-f amplifiers in VHF tuners. Transconductance is 6800 micromhos 6BN4 heater is 6.3 v., 200 ma; 2BN4 is 2.1 v., 600 ma. Two other tubes are the beam power 7-pin miniatures, 6CU5 and 12CU5, for use in TV audio output stages. Maximum output is 2.3 watts. 6CU5 heater is 6.3 v., 1200 ma; 12CU5 is 12.6 v., 600 ma. Tube Div., Radio Corp. of America, Harrison, N.J. (TECHNI-CIAN N. 5-10)

#### GE THYRATRONS

Three thyratron tubes with 6.4-amp negative control characteristics, the GL-6807, GL-6808 and GL-6809, carry high commutation factor ratings. They are particularly suitable for motor control and other inductive load circuits without cushioning. Their ability to operate over the wide temperature range of —55° to 70°C make them particularly useful in industrial applications. General Electric Tube Dept., Schenectady 5, N.Y. (TECHNICIAN No. 5-11)

#### Raytheon RECEIVING TUBES

Five new types in the line of TV receiving tubes include: 3B2 half-wave vacuum rectifier of HV pulses in TV scanning systems; 6CB5 high-perveance beam power amplifier designed for horizontal deflection in color sets; 6DC6 semi-remote cutoff pentode for color pix i-f stages and tuner r-f amplifier; 6BR8 triode pentode miniature for use as local oscillator-mixer in TV and FM; and 6BK4 low-current sharp-cutoff beam triode for HV low-current regulation in color TV power supplies. Raytheon Mfg. Co., Receiving & CR Tube Operations, 55 Chapel St., Newton 58, Mass. (TECHNICIAN No. 5-36)



General batteries are factory-fresh... shipped from 11 conveniently located warehouses. They test "Good" on your meter, and always give your customers dependable service. Your customers will rely on you to supply these top-quality replacement radio batteries. Ask your jobber about General Batteries.



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# KESTER



# Antenna "Co-Phaser" Cancels Interference

Where interference is picked up by the antenna, it can be fed to a control box and used to cancel itself out! So says S. D. Wooten, an inventor of Memphis, Tennessee. Wooten has filed patents on a device he calls the "Co-Phaser," which he says will do just that.

The inventor became interested in the problem when a man in Clarksdale, Miss., complained of interference. The complainant was having trouble picking up WRECTV, in Memphis, because another station in Jackson, Miss., which was using the same channel, managed to give co-channel interference although his antenna was beamed on the Memphis station. The Clarksdale man had already picked up one of the special antennas designed for co-channel interference problems but, in this instance, it didn't help.

Wooten installed a secondary antenna, putting it below the existing antenna, and beaming it in the opposite direction to pick up the unwanted channel. His Co-Phaser control box is connected directly to the receiver input. By adjustment of its amplitude control, the pickup from the second antenna is made to cancel out the interfering wave from the main antenna, so that only the desired signal is fed into the receiver.

An experiment is being planned at some receiving point midway between the Jackson and Memphis transmitters. It is believed possible that reception from either of the two stations on the same channel, originating from these two points, can be chosen by adjustment of the control device, giving the user his choice. The opinion has been voiced that, if interference can be controlled in this way, VHF channel assignments could be rearranged for more widespread use. In addition, a major antenna manufacturer is reported to be interested in the device.

Wooten believes his control box could be manufactured to sell for less than \$30.

#### **Articles Wanted!**

Think you really know something about TV, radio, audio, test equipment, antennas, components, or UHF? Why not put it into an article. Emphasis, of course, should be on service technique or other practical bread-and-butter aspects. For further information, get in touch with Manuscript Editor, TECHNICIAN & Circult Digests, 480 Lexington Avenue, New York 17, N. Y.

## **Reps & Distributors**

ALMO RADIO, Eastern parts distributor, has awarded Harry Caldabaugh's BOULEVARD TV of Salisbury, Md., \$200 first prize in Almo's "New Look" contest for the best looking, well equipped service shop. Contest did not require any purchase. Runners up were OVERBROOK RADIO, Phila.; HOLT-BY'S, Lansdowne, Pa.; APPLEBY'S, Millville, N.J.; and ASTRAL, Phila. Almo Pres. MORRIS GREEN has been appointed chairman of NEDA Inter-Industry Relations Committee.

NICK J. FAYMOVILLE, Jr., Minneapolis, has been appointed LITTELFUSE rep in Minn., N. D., S. D., and northwest Wisc.

MEL SCHWARTZ of 39-16 Tierney Pl., Fair Lawn, N. J., has established himself as a manufacturer's rep serving electronic field in N. Y.-N. J.-Conn. area. Mr. Schwartz has been an electronic sales engineer and manager for 13 years.

New tube promotion program announced by WESTINGHOUSE ad manager J. C. LANE, JR., covers areas of identification, standards, operating material and a "dividend." Three-way push promotes names of manufacturer, jobber and service tech.

SYLVANIA has appointed four new distributors to handle the company's full line of tubes: DEMAMBRO RADIO SUPPLY, Keene, N. H.; LEADER ELECTRONIC DISTRIBUTORS, Tampa., Fla.; RADIO SUPPLY, Reno, Nev.; and WORLD RADIO LABS, Council Bluffs, Iowa.

H. W. KNAGGS, Belleville, Ill., and ENGINEERING SERVICES CO., St. Louis and Kansas City, Mo., have been named reps for RADIO RECEPTOR.

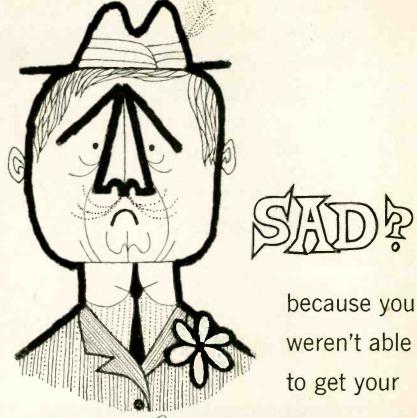
MILO RADIO, New York City, becomes distributor for AMPEREX ELEC-TRONICS.

CRESCENT INDUSTRIES has appointed H. L. DALIS, N.Y., distributor.

Officers of the Rocky Mountain Chapter of THE REPS for 1956 are Pres. DICK HYDE, VP BILL PEYSER, Sec. BILL GOLLIHER, and Treas. KEN RAYMOND.

TODD-TRAN has named GARY MARTIN of Palisades, N.J., industrial rep for its TV replacements. In the South, MANUFACTURERS SALES AGENCY, Wilmington, N.C., has been appointed jobber rep.

ROGERS ELECTRONIC CORP. has named two reps, ARTHUR K. ELLIOT CO., Kansas City, Mo., and AL ENGEL-MAN CO., Memphis.



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# CORNING LOW-POWER RESISTORS

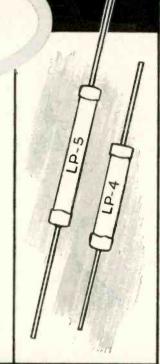
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Corning Low-Power Resistors Types LP-4 and LP-5 have been especially designed for radio, TV, and similar applications. They have the highest resistance range of any low-power resistors on the market, and are used by leading manufacturers. They are stable and non-inductive, and impervious to moisture and dirt. Resistance spiralling is automatic and is electronically controlled.

> For complete service information and prices . . . see your Erie Distributor,



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REALLY HOLDS...ratchet bolt design never lets go. FITS MAST UP TYO 1 % DIAMETER. LONG LASTING zinc plated and dicromate dipped for double weather proofing.
No. 9218 Hatchet mount with 24'

galvanized straps.
No. 9219 Ratchet mount with 24'



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Everything for fast profitable TV installations—stand offs, mounts, towers, arrestors, all accessories. The complete line is at your nearby TELCO distributor.

SEE US . . . BOOTH 590-ROOM 612-PARTS SHOW

## Tough Dogs

(Continued from page 41)

Tracing back through the agc system with the scope, a point was reached where a 0.047-mfd condenser runs under the cathode resistor of the audio output tube. This condenser was cut loose from ground to see whether it would pick up any audio from being near the resistor physically. It didn't.

This condenser in the agc circuit is grounded to the same lug as is the cathode resistor from the audio output stage. The scope was then placed on this ground connection-and there was the audio. This poor ground was corrected by disconnecting all components from this lug, re-wrapping and resoldering them. The audio signal was then gone. Without a good ground, audio signal at this point was coupled into the age line through this common point.

This connection had not been suspected because sound output was of good quality and very loud, but a scope never fails on a faulty ground connection, just as it can be depended upon for so many other things. It cannot be overused.—Andrew J. Olsen, Cut Off, La.

#### Easy-Install Antenna



One of the quick-installation no-tools-required features of the Winegard Color Beam antenna kit is the ingenious clip that fastens the lead-in wire to the receiver's antenna input. This clip is being explained by John Winegard (left), president of the Winegard Co., Burlington, Iowa, to his local jobber, Ron Korf, mgr. of Union Supply Wholesale Co. Hugh B. Cummings (right), Winegard gen. mgr., looks on approvingly. The only tool required to install the Color Beam in 7 minutes is a hammer.

## Mobile 2-Way Installation

(Continued from page 35)

radio end so that it is not necessary to disconnect the plugs in order to service the set.

The next step is to install the antenna and connect the co-ax leads. The 152-174 mc. quarter-wave whip antenna is generally placed on the center of the roof top. The 30-50 mc. spring-base antenna should be placed on the left side of truck in order to prevent damage by branches, etc.

Installation of the roof-top antenna requires drilling a hole through the metal roof top without damaging the lining. This can be accomplished with a hole saw and a 3/4" conduit coupling. File one end of the coupling flat and then put teeth on that end with the file. When tightened around the hole saw blade, the coupling will act as a stop when the



Mobile units used by utility companies are housed in heavy steel all-weather boxes and placed to take up minimum usable truck space. Here complete unit is in housing atop truck cab, with battery and control cables fed through flexible metal conduit to truck cab.

blade has just cut through the metal and will simultaneously remove a ring of paint to provide a good ground.

A good fish wire for the installation of the co-ax lead can be made from a piece of very stiff steel wire. Point the end and form a series of grooves around the wire near the point with a pair of heavy-duty side cutters. Expand a piece of flexible shield braid and insert both fish wire and co-ax leads through it. Then wrap some soft wire around the braid over the grooves in the fish wire. The co-ax leads can be pulled up through the hole by means of the fish wire. If desired, the antenna coax lead can be protected by flexible conduit in the same manner as the power and control cables.

#### Automobile Installations

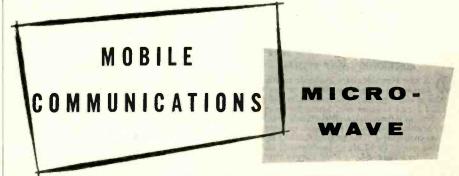
Installing two-way radio in a car is simpler than installing it in a truck. No conduit or weatherproof housings are used, and it is generally much easier to find a place for the radio set.

When mounting a radio set in the trunk, the major problem will be that of routing the cable. Usually the cables are run under the floor mats

without twisting, alongside the hump in the floor. Here, they will be least noticed and less likely to be stepped on. Abrasive action of the rear seat can be overcome by making a slight hump in the front spring support bar with a large pair of pliers so that there is room for the cable to pass through. For further protection, place a piece of discarded inner tube over the cable.

A good way to dress the cables in the front of the car is to extend them behind the cardboard heater duct and thence to the terminals. The power cable can be passed through

(Continued on page 54)



Find out how YOU CAN INCREASE YOUR INCOME by installing and maintaining mobile communications and microwave equipment!

Over 700,000 transmitters! Yes, without considering any government, military or amateur equipment, there are almost 34 of a million transmitters in daily use-and only an FCC licensed technician can install and maintain those transmitters.

The field of mobile communications and microwave has literally sky-rocketed in recent years. It will grow even faster in the coming years. "Private" radio-phone systems are in great demand. More people are requesting regular "car telephones" from the telephone companies. Microwave links are replacing land wire. Radio stations are going "remote."

These developments are not be-

ing restricted to big cities. The growth is just as extensive in smaller town and rural areas. But, in all areas, the supply of qualified technicians is not sufficient. Equipment users are not getting adequate service in many areas. In many cases, they must get technicians hundreds of miles away.

You are undoubtedly a good radio-television serviceman. Why not add a commercial FCC license to your qualifications and become an expert electronics technician. Your FCC license will open the door to hundreds of types of jobs which you don't handle now. Regardless of the job, if it involves electronics, Cleveland Institute will help you prepare for it.

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## for service and lab. work

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R. Purcell, 1347 Rittenhouse NW.	11
Washington	11
W. C. Goodall, 500 Forest Bl., Indianapolis 1st	10
Jock Sanders, 118 Nagle, Harrisburg, Pa1st	11
J. Yeardly 500 Lynn Pl., Falls Church, Vo 1st	13
Robert LaVoy, 247 Rochelle Rd., Toledo, O. 1st	11
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## Mobile 2-Way Installation

(Continued from page 53)

the firewall slightly above this duct.

The same general principles apply when installing front-mount sets. Attach the bottom bracket to the floor or as close to a horizontal portion of the floor as possible. Obtaining solid mounting of the top bracket to the dashboard may be difficult. If the dashboard is not reinforced, either mount the nuts with large washers to distribute the load, or

else add a reinforcing member.

Most of the screws used for mounting will be sheet metal or self-tapping screws. The best way to start them is to provide a pilot hole



Front-mount unit, with integral speaker and controls. This type must be mounted solidly.

with a hammer and a sharp pointed punch having a gradual taper. In this way the metal that would otherwise be lost if the holes were drilled is merely pushed out of the way and provides more holding surface for the screw.

To a great extent, the user will base his opinion of your service on the type of installation you make. In every installation, the quality of workmanship should be of the highest calibre to be consistent with the engineering knowledge and manufacturing skill that has gone into the radio itself.



"Al, you know that transformer with the open filament section from Mrs. Gallan's TV: Well, would you look up the model number again?"

### **Association News**

#### New Wholesale-Retail Angle

In an appeal to distributors, Television Service Dealers Assn., 5016 York Rd., Philadelphia 41, Penna., raises a practical point in the matter of retail sales by distribs. Service techs, claims TSDA, are avoiding distribs who give them slow service because countermen are tied up for half an hour or more finding some 50-cent item for a "student" or "hobbyist" as the dealer waits for service.

While the dealer usually takes advantage of the distributor's delivery service, when he does come in himself it is because he has a tech and a set tied up waiting for needed material. Under these circumstances, the distributor is wasting his own time as well as that of the dealer by handling unprofitable business. Increase your own efficiency, TSDA tells jobbers, by putting this small business on the retail level where it belongs, and stop driving away your real customers.

#### Stabilizing Charges

Associated Radio-TV Service Dealers, 2552 N. High St., Columbus 2, Ohio, is holding discussions on price stabilization so that action may be taken by a stabilization committee to formulate some guide in determining service charges. Aim of the measure is to combat unfair charges. This association is also continuing its work toward a clearing house for credit information, to cut down on credit losses by members.

#### **New ARTSNY Officers**

Officers of Assoc. Radio-TV Servicemen of N. Y. for 1956 include Peter La Presti, pres.; Bob Olson, exec. secy.; and Jack Spegal, treas. Chairman of the board of directors is Max Liebowitz.

Recent issue of ARTSNY Newsletter tells story of the role played by the organization in cooperating with law enforcement officials to bring TV gyps to justice, despite threats and attempts at bribes.

#### **TSDA Publication Bows**

The Television Service Dealers Association of San Mateo County, California, has launched its own official publication. First edition of TV Service appeared in March. This association has a grievance committee set up to handle customer complaints against service by its members. The committee is settling an average of 3 or 4 complaints a month.

#### Jack Webb Gets Ass'n Award

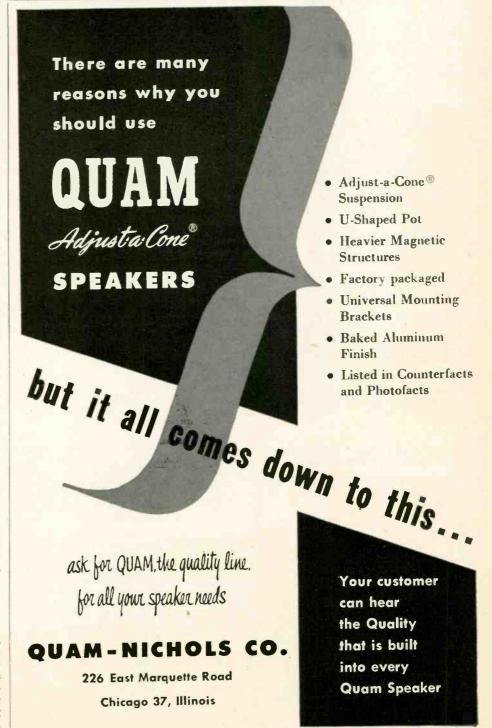
An achievement award for "exposing the practices of some TV service men who victimize the public" on his TV show, "Dragnet," will go to Jack Webb from the Federation of TV-Radio Service Ass'ns of Penna. Presentation of the award will be made in California by the California State Electronics Ass'n, 123 S. 3rd St., San Jose 13, Calif.

#### RTASCV By-Laws

As a service to its readers and members, the Radio and TV Association of Santa Clara Valley, Calif., is publishing its by-laws serially in its official organ, RTA. It leads off in the March issue with the first of 3 articles.

#### **New Ass'n Publications**

Joining the ranks of service organizations with their own official publications is the North Bay Radio and TV Association, Box 52, Vallejo, Calif. Vol. 1, No. 1 discusses zoning laws as they apply to TV repair techs operating out of their own homes, a membership drive, fair play with respect to wholesaleretail selling, and the role of the publication in acting as a sounding board for the membership.



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## Catalogs & Bulletins

TUBE CROSS REFERENCE: Up-to-date (8th edition) guide for miniature tubes lists 416 types regardless of make (88 of them new) and includes 168 basing diagrams. Large-bulb prototypes are also listed in this 16-page brochure. Bulletin #PA-1, available free. CBS-Hytron, Danvers, Mass. (TECHNICIAN No. B5-1)

CORRESPONDENCE COURSES: Home-study courses to prepare for FCC license examinations, with individual instruction, coaching, pre-exam tests and other features, including a guarantee tied to passing of examination, are described in 16-page brochure on FCC License Information. Cleveland Institute of Radio Electronics, 4900 Euclid Ave., Cleveland, Ohio. (TECHNICIAN No. B5-2)

SALUTE-TO-SERVICE POSTER: Window-sized blow-ups of its recent ad, "Sprague Salutes the Independent Service Dealer," printed in 2 colors, are available free from the manufacturer on letterhead request. Poster RP-15. Sprague Products Co., North Adams, Mass. (TECHNICIAN No. B5-3)

REPLACEMENT COILS, XFORMERS: Cross-reference guide to replacement yokes and flyback transformers lists Todd numbers, set mfr's numbers, models & chassis for 50 different makers. 16 pp. Available on request. Supplementary replacement guide. Todd-Tran Corp., Mount Vernon, N. Y. (TECHNICIAN No. B5-4)

BATTERY GUIDE: Dual-purpose radio battery replacement guide and comparative slide chart shows interchangeable types of various manufacturers and also lists types for most popular portable radios by 34 leading manufacturers. Available free. Ray-O-Vac Co., 212 E. Washington Ave., Madison, Wisc. (TECHNICIAN No. B5-5)

GERMANIUM DIODES: Technical data sheets give specs and ratings on complete line of glass subminiature germanium diodes, general-purpose and special types. Clevite Transistor Products, 241 Crescent St., Waltham 54, Mass. (TECHNICIAN No. B5-6)

TROL-MASTER DATA: Bulletin detailing operation of the Trol-Master cleaner and lubricator for radio-TV controls, together with information on adapters to accommodate special controls and control shafts, also describes Kleentrol solvent. Bulletin No. 22. R-Columbia Products Co., Inc., Highwood, Ill. (TECHNICIAN No. B5-7)

HI-FI: "This is High Fidelity" 100 page booklet explains functions of units. Lists components and systems in a wide range of prices. Allied Radio Corp., 100 N. Western Ave., Chicago 80, Ill. (Ask for B5-9) COMMERCIAL SOUND: Multi-color catalog covers complete line of Pacemaker commercial amplifiers, including portable and low-voltage mobile units, as well as accessories such as universal speaker housings, carrying cases, connectors. H. H. Seay, v-p sales, Bell Sound Systems, Inc., 555 Marion Road, Columbus 7, Ohio. (TECHNICIAN No. B5-8)

TAPE TIMING: User can determine at a glance the time and length factors used in tape recording for regular, long play, and extra long play tapes, determining in advance how much tape will be needed for recording job, or how much time can be put on a given length of tape. For all tape speeds, single and dual track. Soundcraft Timing Chart; \$1.20. Reeves Soundcraft Corp., 10 E. 52nd St., New York 22, N. Y. (TECH-NICIAN No. B5-19)

SERIES-STRING TUBES: Quick-selection chart lists 600-ma controlled-heater-warmup tubes, classifies 48 types according to elements, lists typical service and heater voltages, other characteristics. Chart ETD-1163-A. GE Tube Dept., Schenectady, N. Y. (TECHNICIAN No. B5-10)

ELECTRICAL TAPES: Various types and sizes of friction, rubber insulating, vinyl and color tapes are covered together with the applications for which each is best suited, and practical suggestions for use, in "Big 4 Electrical Tapes." Johns-Manville, Dutch Brand Div., 7800 S. Woodlawn Ave., Chicago 19, Ill. (TECHNICIAN No. B5-11)

CERAMIC CAPACITORS: Comprehensive 20-page catalog covers all popular disc, tubular, slug-type and special-type ceramic capacitors, including Tiny Mike line. Pat. No. 616. Sales Promotion Dept., Cornell-Dubilier Electric Corp., S. Plainfield, N. J. (TECHNICIAN No. B5-12)

CRT, TUBE SALES PROMOTION: 16-page brochure describes consumer give-away literature, prizes, book matches, decals, banners, other aids promoting Silver Screen 85 pix tubes and other electron tubes. Sylvania Electric Products, Inc., Advertising Dept., 1100 Main St., Buffalo 9, N. Y. (TECHNICIAN No. B5-13)

phono stylii: Form 5602 covers new phono needle kits for set-up of stylus sales departments, displays, sales material, combination offers including storage cabinets and microscope. Recoton Corp., 52-35 Barnett Ave., Long Island City 4, N. Y. (TECHNICIAN No. B5-14)

H-F TRANSISTORS: Tentative spec bulletin describes high frequency transistors, series GT-760. General Transistor Corp., 95-18 Sutphin Blvd, Jamaica 35, N. Y. (TECHNICIAN No. B5-15)

HI-FI: Amplifiers and tuners illustrated with specifications and descriptive highlights. Available from dealers. Harman Kardon, 520 Main St., Westbury, N. Y. (Ask for B5-16) AUDIO, HI-FI: Up-to-date 130-page 1956 catalog gives comprehensive rundown of leading lines of all types of audio and Hi-Fi equipment. Terminal Radio Corp., 85 Cortlandt St., New York 7, N. Y. (TECHNICIAN No. B5-17)

AUTO-RADIO XFORMERS: Replacements for nearly 500 models of auto radios, including 12-volt models, in 8-page Auto Radio Replacement Guide, Cat. No. AR-56. Vibrator power and audio output xformers cross-referenced for all makes. Triad Transformer Corp., 4055 Redwood Ave., Venice, Calif. (TECHNICIAN No. B5-18)

TUBES & CRT'S: 16-page booklet on picture tubes, their characteristics and replacement information (Form No. KB-106) includes color crt's, is designed to enable quick choice of a direct replacement. Revision of "RCA Receiving Tubes for AM, FM, and TV Broadcast," describes more than 600 types including pix tubes, includes classification chart, in 28 pages. Either booklet, 20 cents per copy. Commercial Engineering, RCA Tube Div., Harrison, N. J. (TECHNICIAN No. B5-20)

AUTO-RADIO ANTENNAS: Illustrated folder with specs on complete line of auto radio antennas of all types. Antenna Specialists Co., 12435 Euclid Ave., Cleveland 6, Ohio. (TECHNICIAN No. B5-21)

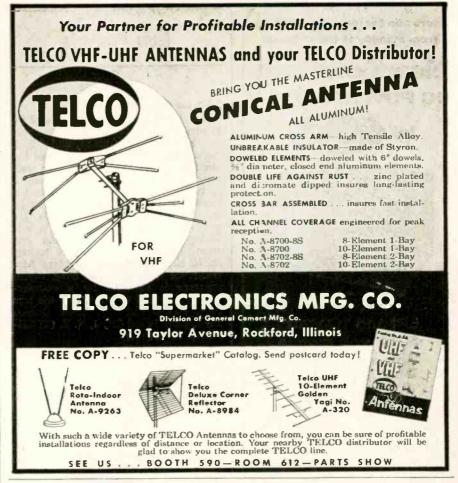
MERCURY CELLS: Complete line of industrial mercury cells and batteries, ranging from dime-size units up to unlimited arrangements for desired voltage and current, described in 4-page brochure. General Dry Batteries, Inc., 13000 Athens Ave., Cleveland 7, Ohio. (TECHNICIAN No. B5-22)

HI-FI AMPLIFIERS: Bulletin 222 describes complete line of separate amplifiers, preamp-control units and combination control amplifiers, all output ratings and prices, with special features. Electro-Voice, Inc., Buchanan, Mich. (TECHNICIAN No. B5-23)

ANTENNA PROMOTION: Brochures list newspaper mats and other sales aids for promoting sales of antennas and antenna kits, for dealers and jobbers. Clear Beam Antenna Corp., P. O. Box 471, Canoga Park, Calif. (TECHNICIAN No. B5-24)

closed-circuit TV: Low-cost TV camera and system for marketing and installation through local service outlets described in 4-page brochure. Mfr. offers assistance in planning systems for local hotels, schools, stores, banks, etc. Blonder-Tongue Laboratories, Inc., 526-536 North Ave., Westfield, N. J. (TECHNICIAN No. B5-25)

WIRE-WOUND RESISTORS: Power w-w resistors, tubular and flat, described with technical and physical data in detailed charts and graphs. Bulletin C-1a, 12 pages. International Resistance Co., 401 N. Broad St., Philadelphia 8, Penna. (TECHNICIAN No. B5-26)





More current <u>instantly</u> available from standby to transmission

# New Low Cost





# Service LPI and 10 watt 6/12 volt mobile communications equipment from AC lines

End unreliable battery servicing with Electro's new Model "H" performance-tested power supply. For servicing all low power input and mobile communications receivers used by taxis, police cars, fire trucks, ambulances, Red Cross and civil defense vehicles . . . also portable equipment used by forest rangers, construction crews, etc.

1	Delivers 6 volts to 20 amperes or 12 volts to 10 amperes continuously.
1	Adequate regulation.
1	Current up to 30 amperes instantly available for short test transmission periods.
1	5% ripple at maximum output.
1	The only power supply offer- ing so much performance and so much value at this price backed by Certified Perform- ance Chart.

See your Radio Parts Distributor or send directly for technical data



#### ELECTRO PRODUCTS LABORATORIES

4501-T N. Ravenswood Ave. Chicago 40, Illinois

#### **New Products**

#### Rek-O-Kut TURNTABLE ARM

Model 120 is for records up to 12 in. in diameter and Model 160 for records up to 16 in. Prices \$26.95, and \$29.95, respectively. The arm proper is of tubular construction, with cartridge shell attached by bayonet-lock arrangement. A twist secures shell to arm while a twist in the other direction permits quick removal. Cartridge shells are available separately at \$4.95. No soldering required. Silver plating and spring-loading assure positive contact for all standard pickup cartridges. Arm resonance is below audio band. Stylus pressure is adjusted by a counterweight threaded to far end of the arm tube. Rek-O-Kut Co., 38-01 Queens Blvd., Long Island City 1, N. Y. (TECH-NICIAN No. 5-37)

#### Ram FLYBACKS

The X126 flyback is a composite which replaces 12E-23939 and 12E-24612 for Airline, Coronado, Firestone, Raytheon and Truetone, including 28 chassis and 81 models. The X126 is an autotransformer-type flyback which is used in 66-70° systems. It delivers 13 to 15 kv. The X127 transformer covers Westinghouse numbers V-11548, -1, -2, V-12073, V-14346, V-14627, V-15324-1, -2, and V-15650. The X127 may operate both in the 66-70° and 90° systems, delivering from 15 to 19 kv. Ram Electronics Sales, S. Buckhout St., Irvington-on-Hudson, N. Y.—TECHNICIAN (Ask for No. 5-38)

#### Berkshire STROBE LAMP

Model 18-A, is a small, inexpensive stroboscope unit, giving 60 brief flashes of light per second when connected to 60-cycle power. It is useful for determining speeds of rotation of motors, machines, phonograph turntables, etc. Model 18-A uses a standard neon bulb for replacement. The instrument is housed in a chromium plated case, the same size as a standard two-cell flashlight. Price, \$9.95. Berkshire Laboratories, 518 Bank Village, Greenville, N. H. (TECHNICIAN No. 5-39)

#### Heyco STRAIN RELIEFS

Expressly designed for 300-ohm twin-lead, these strain reliefs are used where the wire enters UHF converters, indoor antennas or the TV set itself. Installation is in two simple steps. Heyco's "unitized" construction, which joins the two parts with nylon, cuts assembly time. Reliefs grip the wire, insulate and anchor it to chassis or antenna at the point of entry, absorb push, pull or torque. Available also for other wire sizes and applications. Heyman Mfg. Co., 100 Michigan Ave., Kenilworth, N. J. (TECHNICIAN No. 5-40)

#### Kedman SCREWDRIVER

"Midget" series of Quick Wedge drivers will hold, start, and drive #0 to #4 wood screws and bolts; #2 to #4 sheet metal screws. Quick Wedge ends dropping and fumbling with screws, lets you "reach" a screw into a tight spot. Precision-built, unconditionally guaranteed with shockproof, unbreakable handles, spring steel hollowground blades. The Midget #1253 has a spring pocket clip. Kedman Co., 233 S. 5th West, Salt Lake City 1, Utah. (TECHNICIAN No. 5-41)

#### Capcon MIN. CAPACITORS

Uncased "mylar" capacitors are available in sizes smaller than other miniatures for high-temperature uses up to 200°C. Type designations are: UR, for uncased round mylar capacitors, and UF, for uncased flat. Both types are available in standard tolerances of 0.5, 1.0, 2.0 and 5.0 percent. Capacity ranges are from 1 mmfd to 10 mfd. Working voltages are: 50, 100, 150, 200, 250, 300, 400 and 600 volts. Capcon, Inc., 25 Willett Street, New York 2, New York (TECHNICIAN No. 5-42)

#### Dodge AUTO-TRUCK

A vehicle for installing and servicing home appliances has the load capacity of a panel truck, comforts of a passenger car and greater versatility than a station wagon. The Dodge Town Wagon truck has passenger car styling but greater road clearance for use on rutted and muddy roads where cars cannot travel. Offered in 8 and 6-passenger models. Center and rear seats are easily removed. Maximum payload capacity is 1650 lbs. permits 90 cu. ft. of load space even with 6 passengers. Dodge News Bureau, 2751 E. Jefferson, Detroit 7, Mich. (TECHNICIAN No. 5-43)

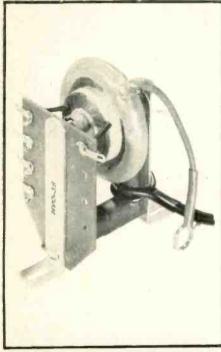
#### Phaostron VOM

The 666 VOM is fused to prevent most common burn-outs and instrument damage through misapplications. An overload signal light warns the operator of overloads, or incorrect polarity. An illuminated dial is used. The 666 measures: dc volts from 1.5 to 1500 at 20,000 ohms per volt; ac volts from 1.5 to 1500 at 2,000 ohms per volt; dc current from 50 ua to 15 amps; db from —10 to +50; resistance from .25 ohms to 10 meg. Phaostron Instrument and Electronic Co., 151 Pasadena Ave., S. Pasadena, Calif. (TECHNICIAN No. 5-44)



FIRST IN EXACT REPLACEMENT.





HVO-38 and HVO-54 FOR EX-ACT REPLACEMENT in ADMIRAL ... another in the complete Merit line of exact and universal transformers, yokes and coils. Merit is the only manufacturer of transformers, yokes and coils who has complete production facilities for all parts sold under their brand name.



## Transistor Replacements

Although interchangeability of different transistor makes and types has not yet reached the high degree of excellence available with tubes, a number of these units may be used as replacements for other type numbers when servicing transistorized radios. In some cases the characteristics of two different types may not be identical, but they may be close enough to permit the set to operate when they are interchanged.

Listed below are three portables, the transistors they contain, and the interchangeable types usable for replacements, as reported by General Electric. Note that a PNP type is never directly substituted for a NPN type.

#### RAYTHEON MODEL 8TP1

		GENERAL
	RAYTHEON	ELECTRIC
USE	TYPE	REPLACEMENT
Oscillator	<b>CK-760 PNP</b>	2N136 PNP
Converter	CK-759 PNP	2N135 PNP
IF.	<b>CK-760 PNP</b>	2N136 PNP
1st Audio	CK-721 PNP	<b>2N45 PNP</b>
2nd Audio	CK-721 PNP	2N45 PNP
Audio Output	CK-721 PNP	2N44 PNP
Audia Output	CK-721 PNP	2N44 PNP

#### **EMERSON MODEL 838**

			GENERAL		
		<b>EMERSON</b>	ELECTRIC		
U	SE	TYPE	REPLACEMEN		
Audia	Output	815003 PNP	2N44 PNP		
Audia	Output	815003 PNP	2N44 PNP		

#### **EMERSON MODEL 842**

		TEX/ INSTRU	MENT	GENERAL ELECTRIC		
ı	USE	TYF	E	REPLAC	EWEN.	
ı	Converter-					
ı	Oscillator	830	NPN	2N78	NPN	
ı	1st IF	2N146	NPN	2N78	NPN	
ı	2nd IF	2N146	NPN	2N78	NPN	
ı	Driver	310	PNP	2N44	PNP	
ı	Push-Pull					
ı	Output	353	PNP	2N44	PNP	
ı	Push-Pull					
ı	Output	353	PNP	2N44	PNP	
ı	1					

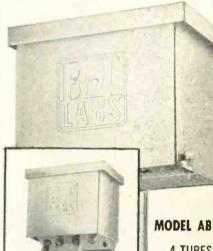


"Okay! Okay! So you're a man from Mars!"

# ALL-GLEAR TV PICTURES

with the new

(BROADBAND VHF)



Features the Exclusive B.T Swing-Down Chassis\*

- · Low-noise, all-triode circuit
- Easy mast-mounting
- Automatic 'on/off' from set
- 24 and 110v AC available plus step-ups for long-line drop
- Single lead line carries power 'up' and signal 'down'

4 TUBES 25DB GAIN \$95.00

LIST

WITH MULTI

**VOLTAGE POWER** 

SUPPLY

\*For Servicing and Maintenance . . . chassis swings down - trap door fashion - for easy handling and tube replacements.

For complete details, use this coupon



	BLONDER-TONGUE LABORATORIES, INC. Dept. GE-18 Westfield, New Jersey Please send complete specs of your new Antenna Booster. I am also interested in:  TV Amplifiers UHF Converters
	Master TV Systems
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à.	Address
D.	CityZoneState
	***

# THE HANDIEST TESTER YOU CAN HAVE IN YOUR KIT



# T-8394 VOLTAGE ADJUSTOR

Smart service men, who like to save time and make more money by doing so, are using the Acme Electric T-8394M Voltage Adjustor on every service tall. With this unit, varying voltage conditions ranging from 95 to 125 volts input can be simulated. Under these varying voltage conditions defective components that function properly at normal voltage, but cause trouble at low voltage or over voltage can be located and replaced.

And, in thousands of instances, service customers have insisted on buying this handy unit from the service man so that they may maintain a normal voltage at the set and enjoy top TV reception.

Furnished complete: primary cord and plug; secondary receptacle; accurate meter indicates output voltage; control switch regulates secondary voltage. Compact, inexpensive.

See this at your dealers.

ACME ELECTRIC CORPORATION
885 WATER STREET CUBA. NEW YORK



# Railroad TV

A successful TV installation in a passenger car of the Chicago, Indianapolis & Louisville Ry. paves the way to adding this attraction in club, parlor and pullman cars. The techniques are also adaptable to installation in off-shore and inland watercraft.

The installation, made in the executive office car of the rail line's president, uses a Taco Trapper antenna and a Crown CAR6B antenna rotator. The Trapper, a high-gain single-lobe antenna with all elements in the same plane, meets railroad regulation requirements that limit antenna height to 20 in. above the top of the car. Also, its springloaded tension boosters meet the stress placed on antenna elements as the car moves along at high speed. Shielded 300-ohm twin-lead wire was used to solve the problem of interference and stray-field pickup.



TV receiver (upper left) and rotator control box (lower left) inside executive RR car.

The Crown rotator, incorporating a strong and dependable drive mechanism, was capable of accurately aligning the antenna against

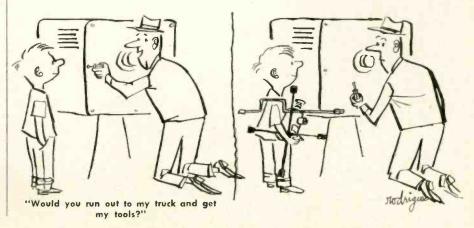


Taco Trapper antenna atop railroad car.

the strong wind resistances encountered during travel. On a round trip between Chicago and Rome, Ga., good reception was reported all along the way. Neither antenna nor rotator was affected by the rigors of the trip.

#### Why Fused Resistors?

The reason for using fused resistors has been concisely summed up by Workman TV of Teaneck, N. J. Their explanation states: "The need for using a current-limiting resistor in series with a selenium power rectifier is well known. In addition, it is quite obvious that. for protection against overloads, a fuse should also be used in these circuits. To the TV set manufacturer, however, the addition of these components, as well as the extra hardware needed, was too costly and so a way was sought to 'cut corners.' Instead of installing a separate fuse, holder, and power resistor; which would be ideal from the standpoint of servicing; they conceived the idea of the fused resistor."



# International

presents

# "AIRKORE"

a new selenium replacement rectifier so outstanding it

# Outperforms them all!

- 12° to 15° lower core temperature.
- Overload capacity 7 times normal rating.
- 20% less aging.
- Maximum air flow in any vertical mounting position (regardless of degree of rotation).
- Increased efficiency throughout life.

AirKore provides these outstanding advantages without sacrificing the basic design of proven superiority—"center-support" construction!

Compare any other rectifier with the new AirKore. Guaranteed for a full year, this new design assures increased efficiency...will help cut costly "call-backs." For products of the highest quality, manufactured under the most rigid standards in the industry, look for the name International.



This exclusive device provides greater contact area—uniform temperature rise across the plates—increased efficiency.

AirKore design permits maximum circulation of air around the plates, through the core and spring itself.



guaranteed

for 1 year!



A WORLD OF DIFFERENCE

# International Rectifier

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### New Audio Products

#### Magnavox HI-FI UNITS

The Concerto, model TP264B, is a phonograph-amplifier for table or floor-stand use. Push-pull output with 3 tubes plus rectifier. Three speakers include 2 6x9 oval reproducers and one 5-in. unit. Collaro 3-speed intermix changer features automatic shut-off, muting switches and dual sapphire stylii. Available with floor stand in mahogany, oak or cherry at \$119.50 retail

The Concert Master, model 268B, is a radio-phono console with an 8-tube AM-FM tuner, two 12-in. speakers, one 5-in. speaker, and a 20-watt 5-tube push-pull amplifier plus 2 rectifiers. Collaro 3-speed intermix changer features sapphire stylii. Available in mahogany, oak or fruitwood, priced as low as \$28.50. The Magnavox Co., Fort Wayne 4, Ind. (TECHNICIAN No. 5-48)

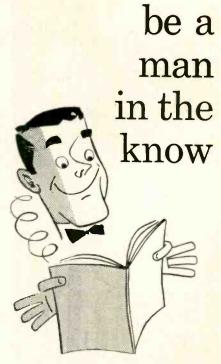
#### Fisher AMPLIFIER

Low-priced standard amplifier, model 20-A, features response from 15 to 30,000 cps within 1 db, less than 0.7 percent distortion at 15 watts, hum and noise level of 90 db below rated output, excellent stability and superior transient response. This basic power amplifier is designed to be used with any separate preamplifier-equalizercontrol unit. An octal socket provides ac and dc voltages for a companion unit that lacks its own power supply, plus connections for remote on-off switching. Price is \$59.50. Fisher Radio Corp., 21-21 44th Drive, Long Island City 1, N. Y. (TECHNICIÁN No. 5-49)

#### Garrard PHONO CHANGERS

Three new instruments include the RC88 Triumph, a deluxe auto-manual 3-speed changer replacing the RC80. Features include 1-piece bent spindle. interchangeable large spindle, design features to eliminate hum, rumble and flutter, non-resonant tone arm. Price is \$54.50 less cartridge and 45-rpm spindle. Model RC98 Crown, replacing the RC90, includes the features of the RC88 plus variable speed control at all 3 speeds to facilitate perfect pitch adjustment. Large extra spindle is included in the consumer price, \$67.50. The Renown, model RC121, is a compact straight-spindle changer with quality features that is small enough to be used as a replacement changer. Price, less cartridges and extra spindle, is \$42.50. Garrard Sale Corp., Dept. G-36, Port Washington, N. Y. (TECHNICIAN No.

More New Products on pages 44, 46, 48, 49, 58



# at no cost!

"THE CAPACITOR" comes prepaid direct to your home every month—12 times a year. 16 to 24 pages, including a complete full length technical or constructional article—AND the "TRADING POST" section for your ad.

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# to be SURE

#### buy Vokar

the originalequipment VIRRATOR



Leading manufacturers of original-equipment auto-radios specify Vokar vibrators as components for installation on the production-line. Why? They're sure Vokar quality never varies—will always contribute to top performance demanded of to-day's radios.

You too can depend on Vokar vibrators—for sure starts, longer life, silent operation. For all replacement jobs, buy Vokar Imperial or Quality Brand vibrators to be sure of satisfied customers.

Now is the time to stock up on 12-volt vibrators—ONLY TWO VOKAR IMPERIALS ARE NEEDED TO FILL ALL REPLACEMENTS!



VOKAR CORPORATION DEXTER 4, MICHIGAN

#### **New Products**

#### Harman-Kardon HI-FI TUNERS

The Overture, Model T-10, is a mating AM-FM tuner to the Prelude amplifier, featuring tuner r-f stage on FM and AFC. Retail price is \$79.50. The Rondo, Model T-120 is a mating AM-FM tuner for the Melody amplifier. Features include FM rumble filter, 10kc AM whistle filter, cathode-follower output, and 3-microvolt FM sensitivity for 20 db quieting. Price is \$95.00. The Solo, Model TA-10, is a single-chassis tuneramplifier. It combines features of the Overture tuner with those of the Prelude amplifier, including 10-watt output, equalization controls for tape and disc. rumble filter and loudness contour. Price is \$129.50. Harman-Kardon, Inc., Westbury, L. I., N. Y. (TECHNICIAN No. 5-46)

#### **Fanon AUTOMATIC PHONO**

The "Varsity" portable record player, model F-80, is a low-priced, 3-speed changer-player with intermix and slumber-switch features, dual sapphire styli, volume and tone controls, in a two-tone carrying case. List price is \$59.50. Fanon Electric Co., Inc., 150-09 South Road, Jamaica, N. Y. (TECHNICIAN No. 5-47)

#### Telco WALL MOUNT

TV antenna wall mast mount, the V-7, provides 7" of wall clearance. It is constructed of zinc plated heavy gauge steel, and is designed to support any mast up to 1.5" diameter. Catalog No. 9236, list price \$1.50. Television Hardware Mfg. Co., Div. of General Cement, 919 Taylor Ave., Rockford, Ill. (TECHNICIAN No. 5-51)

#### Colman PIX CONVERSION

Conversion kit allows changeover from 21" metal pix tube to all glass or aluminized crt's in Emerson TV receivers. Designated as No. C-3, with a



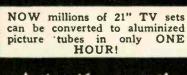
list price of \$5.95, the kit will work on both front and side tuning models. Colman Tool & Machine Co., Box 7026, Amarillo, Texas. (TECHNICIAN No. 5-52)

#### Only TOP-QUALITY brands of **STANDARD BRAND TUBES** NEW . . . FIRST QUALITY. Each tube carries a ONE YEAR GUARANTEE. Latest datings, no rejects, no rebrands or rewashed bargains. Name Brand 4 B Q 7 ..... 98¢ 2 A F 4 A .... 89¢ WHILE THEY LAST . 69¢ . 59¢ . 49¢ . 63¢ . 3585 6V6G 6SN7 12AT7 6AF4A . 63¢ 5U4GB AUDIO OUTPUT TRANSFORMERS MATCH 6V6—HEAVY DUTY MATCH 6K6—FINE QUALITY MATCH 5016—3516-2516 MATCH 3V4-3Q4-3S4 T.V. "CHEATER" CORDS ..... 22c ea. BY PASS CONDENSERS 75¢ Doz. 600V 400V 600V 400V .0082 .400V .01 ... 400V .0125 .1000V .015 ... 400V .035 .0125 GOV'T SURPLUS 6C4 NAME BRAND SELENIUM RECTIFIERS . 79¢ | 400 MA ... \$1.19 ... 99¢ | 500 MA ... \$1.39 No order Too Small. Merchandlse shipped within 24 hours of receipt of order, 25% deposit required with order. F.O.B. Brooklyn.

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METAL PICTURE TUBE - GLASS PICTURE TUBE

# EACH KIT CONTAINS ALL YOU NEED EXCEPT THE NEW PICTURE TUBE

Kit No.	21" Sets	List	Price
C-1	Early RCA's		\$5.95
C-2	Late RCA's		\$6.95
C-3	Emerson		\$5.95
C-4	Stewart-Warner Silvertone Tructone Hallicrafters Coronado		\$5.25
C-5	Silvertone Firestone	-4	\$6.25

Write for Complete List of Model Numbers

CBS-Columbia

Free adjustable power grip wrench offered with each kit. Write name and address on back of box flap and mail to factory. Wrench will be sent free. Offer expires Sept. 30, 1956.

Arrow Manufacturing Division
COLMAN TOOL & MACHINE CO. AMARILLO, TEXAS P. O. BOX 7026



- **√** 150-Watt Instant Solder Gun Model G14
- Cutting Tip for plastic tile, old putty, toys, etc.
- Smoothing Tip for furniture
- scratches, sealing, etc. √ Famous Kester TV-Radio Resin Core Solder
- √ Sandpaper for cleaning parts

#### "You'll like the way it HANDLES!"

IF HANDLES!"

COMBINES ALL THE ADVANTAGES OF THE
SOLDER GUN AND THE
CONVENTIONAL SOLDERING IRON. No woiting — press trigger and
solder at once, tdeal tool
for whom a home with the solder at once, tdeal tool
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120 Volts AC-DC 1/4" Tip (also available 1/8" Tip)

#### COMPARE THESE FEATURES WITH ORDINARY SOLDER GUNS!

POWER PACKED-150 Works

NO HEAVY TRANSFORMER -weighs only 8 oz.
STURDY LIFETIME TIP

-no soft fragile wire

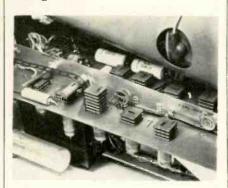
-new unique element design LONGER, THINNER REACH -EFFECTIVE SPOTLITE

HEXACON ELECTRIC COMPANY
180 WEST CLAY AVENUE, ROSELLE PARK, NEW JERSEY

Serving Craftsmen for a Quarter of a Century

#### First Modular Scope

Du Mont Labs has unveiled what is believed to be the first oscilloscope, Type 350, to use modular or "tinker-toy" design. This design uses components printed on ceramic wafers. Each module represents a complete circuit element and is wired into its proper position. The circuits are connected by printed wiring.



Tinker-toy design uses modules under tubes.

The outstanding advantage of modular construction is the simplicity of maintenance and repair. Instruments are repaired simply by discarding a faulty module and replacing it with a new one.

#### **GE Tune-Up Campaign**

A nation-wide TV-radio tune-up program to provide new customer contacts for service techs who sell GE tubes has been announced by John T. Thompson, mgr. of distributor sales for the company's Tube Dept. Thompson is urging service dealers to get in on the promotion by pushing their own local tune-up programs in conjunction with the national plan.

The tune-up plan, part of GE's 5ring "Circus of Values" sales program, is now before the public in a series of ads being run in Life, Look, Collier's, TV Guide, and This Week. The promotion will continue through June. Sales and promotion aids that tie in with this campaign are available from GE tube distributors.



"You just adjust these leaves, seeyour antenna . . .

Only the 5 TOP-QUALITY brands of

# STANDARD **BRAND TUBES**

AT SENSIBLE PRICES!

Individually boxed 1st quality only 90-day RETMA guarantee No rebrands or rewashed bargains 8 Brand new No private brands No rejects

FREE! Newest handy air-mail order form for your ordering convenience. Write for your free copy.

Lits ALL popular TV & radio types

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183GT . 185GT . 114	80	6AU4GT 1.05 6AU5GT 1.25 6AU6 70 6AU7 .90 6AV5GT 1.25 6AV6 .55 6AX4GT .85 6AX4GT .75 6B4G 1.25 6BA6 .65 6BA7 90	111
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1L4	85	6AU6	7L71.15 7N795
116	1.10	6AU790	7N795
1LA4	1.00	6AV5GT1.25	7071.00
1LA6	1.00	6AV655	7R7
1LB4	1.00	6AX4GT85	7771.30
11.05	1.00	6AX5GT75	7W7 1.30
11.05	1.00	68461.25	7X71.00
11.05	1.00	68A6 65	774
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THEORY.		60071.23	30476
1N5GT . 1Q5GT 1R4	95	68051.40	12A1655
105GT	1.15	68D6	12A17 ,95
1R4	1.00	68E670	12AU665
1R5	85	68F5 85	12AU780
154	90	68F6	12AV655
185	70	68G6G1.80	12AV71.00
1T4	80	6BH685	12AW61.00
ITSGT .	1.05	6BJ685	12AX4GT90
104	75	6BK51.00	12AW6 1.00 12AX4GT 90 12AX7 80
105	70	6BX7A1.10	12AY71.75
1V		6BL7GT1.15	12AZ790
1 V2	70	6BN61.15	1284A85
174 175G7 184 185 187 182 182 287 287 2021 282	95 70 1.40 1.00 1.00 1.00 55 75 76 65 70 80 1.05 80 1.05 80 1.00 80 80 80 80 80 80 80 80 80 80 80 80 8	6AX4GT 85 6AX5GT 75 6B46 1.25 6B46 6.5 6BA7 .90 6BC4 1.60 6BC5 7.0 6BC5 1.20 6BC5 7.0 6BC6 1.20 6BC7 1.20 6BC7 1.20 6BC8 1.20 6BC9 1.20	7W7 1.30 7TX7 1.00 7TX7 1.00 7TX4 7.00 1244 8.5 12415 70 12405 75 12417 95 12417 95 12417 80 12407 1.00 12444 1.00 12444 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.00 12447 1.75 12844 85 12847 95 12847 95 12846 75 12866 75 12866 75
2AF4A	1.40	6807A 1 20	128A7 . 95
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212	50	68Y5G 1 30	128F6 70
343	1 10	6877 1 25	12856 65
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JAUG		6086	12817A95
3AV6	00	OCDOG 1.80	128E6 70 128F6 65 128H7A 95 128H5 1.00 128Q6GT8 1.40 128Y7A 95 128Y7 1.00 12CU6 1.40 12SA7GT 85 12SC7 95 12SJ7 75 12SK7GT 75
3865	80	607690	120061.40
3886	1.05	6667 85	125A7GT85
3816	75	6CL61.15	12SC795
3086	80	6CM685	1231775
3CF6	85	6C3675	125K7GT75
3LI4	1,20	6CU61.40	12SL7GT1.00
304	85	6DC695	125N7GTA80
305GT .	1.00	6F585	12507GT 70
354	80	6F6G80	128K5 1.00 1288GGT8 1.40 128Y7A 95 128Z7 1.00 12CU6 1.40 12SA7GT 85 12SC7 95 12SL7GT 1.00 12SN7GTA 80 12SN7GTA 80 12SQTGT 70 12V6GT 75 12W6GT 75
374	85	6H6 75	12W66T 90
3086 3086 3086 3114 304 3056T 384 384 4807A 4807A	1.30	614 3.95	1444 1.00
4827	1.35	615 50	14A5 150
4827 5AW8	1.05	616 70	1447 96
SANR	1.10	617 05	34457 100
SANB	1,30 1,35 1,05 1,10 1,10 1,10 1,15 1,15 1,15 1,1	646CT 30	12%661 .90 12%64 .100 14A4 .100 14A5 .150 14A7 .150 14A7 .150 14A67 .100 1486 .85 14C7 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 1487 .100 125487 .130 12548461 .100
5448	110	647	148685
5A18 5AT8 5AV4 5A24 516	1 10	6K790	14671.00
CATO	3 36	6K81.25	14E61.20
DATE	1.15	6L6G1.35	14671.30
3A94	1 . 10	6L6GA1.30	14F71.00
3A44	60	6L6M1.75	14F81.30
210	90	6N71.20	14471.00
219	·1./5	6071.00	14N71.00
578 504G 504G 504G 508 574G 575GT 584GT	60	654	140795
50 1GB	70	658GT:1.10	14R71.30
508	1.10	65C790	14571.25 14W71.35 198666 2.00
2446	95	6SF575	14W71,35
5 V 5 G T .	70	6SF795	198G6G2.00
5W461	70	6SG795	19T81.20
5X4G	80	6SH795	25AV5GT1.30
5X8	1.05	6SJ7M75	25AX4GT1.10
54361	55	65K7GT75	258K51.00
574G	65	6SL7GT1.00	25896GT8 .1.40
523	90	6SN7GTA/B .80	25CD6GA 1.80
544	1.25	6SQ7GT70	25CU61.35
5V4G 5V6GT 5W4GT 5X4G 5X8 5Y3GT 5Y4G 523 524 6A7 6A8M	1.25 1.15 1.15 1.10	6SR7	25L6GT70
GASM	1.15	65571.00	25W4GT75
GASGT	1,10	618	252580
6A84	65	6081.05	2526GT65
6AG5GT	1.15	6V381.30	35A570
6AC7	1.10	6V6GT65	3585
6AD76	1,55	6V6M1.30	3505 .70
6AF4	1.30	6W4GT70	3516GT 65
6AF6G	. , 1.20	6W6GT 90	35W4 45
6AS5	75	6X450	35Y4 70
6AG7	1.35	6X5GT 55	3575 45
6AH4GT .	85	6X8 1 00	41 85
GANAGT .	85	6Y66 95	42 75
6A15	1.75	745 95	43 05
SYJGT 5YJG 52J 52J 52J 6AF 6ABH 6ABGT 6ABGT 6ABGT 6AFG 6AFG 6AFG 6AFG 6AFG 6AFG 6AFG 6AFG	75	616 70 617 95 6K6G 70 6K8 1.25 6L6G 1.35 6L6G 1.35 6L6G 1.35 6L6G 1.35 6L6M 1.25 6K7 1.20 6S4 65 6S7 95 6S67 95 6S67 95 6S67 95 6S67 95 6S67 75 6S17G 75 6S1	258K9 1.00 258869 1.00 25886GT8 1.40 25006GA 1.80 25006G 1.80 25006G 1.80 2516GT 70 2584GT 75 2585 70 3585 70 3565 70 3566G 65 3574 70 3574 70
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6ALS	1.10 .65 1.15 1.10 1.55 1.30 1.20 .75 1.35 .85 1.75 .75	7AR RO	42 .75 43 .85 50A5 .70 5085 .70 5005 .70 5016GT .65
GALTGT	1.65	7AG7 100	SOLECT
6AM4	1.55	7847 1.00	50X6CT65
6AM4	1 15	784	FONCET90
6AMA	1.50	705	50Y30Y80
6AN4	3.50	6X8 1,00 6Y66 95 7A5 95 7A6 80 7A7 85 7A8 80 7A67 1,00 7A47 1,00 7A47 2,00 7A5 786 80 785 786 80 786 80 787 80 788 90	30176180
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CADTOT			117N7GT 2.00
CARC .	1.20	76680	70L76T 1.55 80 .65 117L76T 2.50 117N7GT 2.00 117P7GT 2.00 11723 .70
CARD	75	70785	1172370
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0400	1,20	706 80 707 85 7E7 1.20 7F7 90 7F8 1.20	1174767 2.50 1178767 2.00 1177767 2.00 11723 70 1172467 1.15 1172667 1.15 5642 1.00
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Major Products Co., 17342 Evergreen
Rd., Detroit 19, Mich. (TECHNICIAN No. 5-53)

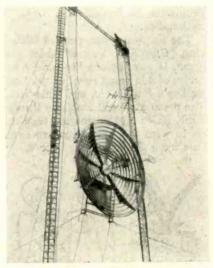
#### **Boonton RF VOLTMETER**

Model 91-A r-f voltmeter provides measurements down to 0.001 v. from 0.2 to 400 mc. Two probes, a high-impedance unit and a 50-ohm type with low vswr are provided. As a power meter with the 50-ohm probe, the instrument can measure down to 0.02 uw. Boonton Electronics Corp., 738 Speedwell Ave., Morris Plains, N. J. (TECHNICIAN No. 5-54)

#### CBC CRT BRIGHTENER

Picboost "Duz-All" TV picture tube brightener, Model DUB, is designed to cover every brightener-isolation requirement. In addition it features a full sweep variable voltage control which enables the user to increase voltage in small increments. Slide switch enables the user to select either series or parallel. List price is \$4.90. CBC Electronics Co., Inc., 2601 N. Howard St., Philadelphia 33, Pa. (TECHNICIAN No. 5-45)

#### TV "Dish" Hoisting



Giant TV "dish" antenna is on its way up to resting post atop two 100 foot towers. The 3,500 lb. paraboloidal structure was built by Jerrold Electronics Corp. to experiment in pickup of New York channels to be carried over the Ventnor, N. J., community antenna system. Worker standing on left tower appears pint-size next to the huge antenna.

#### Take Home The Winner

in weak signal and coastal areas



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says . . . The model 400 (which she is holding) is the only major improvement in TV
antennas . . the only 100% all-metal high
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which does away with common insulators
due to a new principle known as "Tuned
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HIGHER SIGNAL STRENGTH
LONGER LIFE—REGARDLESS OF WEATHER
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GREATER LIGHTNING PROTECTION
LESS WIND RESISTANCE
MO ANTENNA SAGGING OR DROOPING
GREATER PHYSICAL STRENGTH

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# Product Finding Index

A fast reference guide that enables you to find the product you want in the Product Directory—quickly. Here's how to use the Product Finding Index: (1) Look for the product you want (under the name you ordinarily use to identify it). (2) Turn to the

section number given in the Product Finding Index. (3) From the manufacturers listed in this section, select only those with the code numbers (listed in the Product Finding Index) after their names. These are the manufacturers of the products you want.

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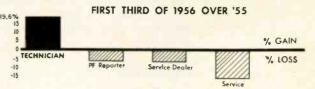
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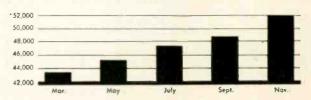
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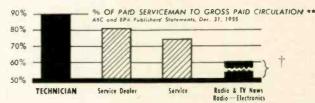


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# Product Listings

This is a complete listing of all service and replacement products, component parts, equipment, instruments, and materials in the radio-TV-electronic service industry—with the names and addresses of the

companies that make them. Product categories are arranged according to major group headings. Manufacturers are listed alphabetically under these groups.

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Penn TV Products Co., Allegheny & Trentor Aves., Philodelphia, Pa9-12-23-24 Philoo Corp., Accessory Div., A & Allegheny Ave., Philodelphia 34, Pa1-4-6-8-9-16- 17-20
Philippo Corp., Accessory Div., A & Alleghen
Ave., Philadelphia 34, Pa1-4-6-8-9-16- 17-20
Philmore Mfg. Co., 113 University Pl., New
17-20 Philmore Mfg. Co., 113 University Pl., New York 3, N. Y-7-11-15-22 Philson Mfg. Co., 60 Sackett St., Brooklyn N. Y-1-3-4-6-9-10-17 Phoenix Electronics, 50 Island St., Lawrence Mass1-3-9-11-12-14-16-21 Pioneer Mfg. Co., Huntley, III9-24 Pipestone Sales Co., Div., Pipestone Aviatlor Services, Pipestone, Minn16-24 Plymouth Electronics Corp., 50 Kingsbury St., Worcester 3, Mass1-2-9-12-13-17-19-23 Porcelain Products, P. O. Box 300, Findlay, Ohio-14
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Pioneer Mfg. Co., Huntley, III9-24
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Plymouth Electronics Corp., 50 Kingsbury St.
Porcelain Products, P. O. Box 300, Findlay
Ohio-14 Premax Products, Div. Chisholm-Ryder Co.
Premax Products, Div. Chisholm-Ryder Co. College & Highland Aves., Niagara Falls N. Y5-17-26
Press Wireless Labs., 25 Prospect Pl., West
Newton 65, Mass,-5-19 O-Line Mfg. Corp. 1562 61 St. Brooklyn 19
N. Y1-4-6-8-9-10-11-12-15-17-18-25
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N. Y5-17-26 Press Wireless Labs., 25 Prospect Pl., West Newton 65, Mass5-19 Q-Line Mfg. Corp., 1562 61 St., Brooklyn 19 N. Y1-4-6-8-9-10-11-12-15-17-18-25 Radiart Corp., 3455 Vega Ave., Cleveland 13 Ohio-4-6-8-10-20 Radlo Merchandise Sales, 2016 Bronxdale Ave., New York 62, N. Y8-9-10-15-16-17-18-20-21-23
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Radion Corp., 1130 W. Wisconsin Ave., Chi- cago 14, III-1-6-8-15
Radio Supply & Eng'g. Co., 85 Selden St., De-
Ramsey Radio & TV Co., 925 St. Louis Ave
cago 14, 111-1-6-8-15 Radio Supply & Eng'g. Co., 85 Selden St., Detroit 1, Mich1-9 Ramsey Radio & TV Co., 925 St. Louis Ave., Vandalia, III24 Rohn Mfg. Co., 116 Limestone Bellevue, Peoria 5, III1-16-17-24
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5 & A Electronics, 1025 Nevada St., Toledo 5,
Saxton Products, Inc., 2101 Grand Concourse,
Saxton Products, Inc., 2101 Grand Concourse, Bronx 53, N. Y15 Scala Radio Co., 2814 19 St., San Francisco, Calif1-8-24
Calif1-8-24 S/C Laboratories Inc. 37 Coses St. https://doi.org/10.1003/
S/C Laboratories, Inc., 37 George St., New- ark 5, N. J8-9
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Sherrick Products, 86-11 Sancho St., Hollis
Sherrick Products, 86-11 Sancho St., Hollis 23, L. I., N. Y26 Skyline Mfg. Co., 1652 Rockwell, Cleveland, Ohio-3-6-9
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Sky Ray Mfg. Co., McLeansboro, 111,-9 Skysweeper, Inc., P. O. Box 92, McHenry, 111,- 3-6-9-16-17
3-6-9-16-17 Smith, Inc., Herman H., 2326 Nostrand Ave.,
Drookivn 10. N Y = 11=21=24
51, N. Y2-5-8-9
Smolin Labs., 721 Walton Ave., New York 51, N. Y2-5-8-9 Snyder Mfg. Co., 22 & Ontario Sts., Philadel- phio, Pa4-8-9
Southern Industries, 1401 Reisterstown Rd.,
South River Metal Prods. Co., 377 Turnpike,
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Spirling Products Co., P. O. Box 411, Hicksville.
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Stone Machine & Tool Co., Bedford, Ind17 Summit Eng'g. Ca., 3324 Main St., Hartford,
Conn9 Superex Electronics Corp., 4-6 Rodford Pl., Yonkers, N. Y1-3-7-12
Taylor Mfg. Co. 302 S. Union St. Line China
Taylor Mfg. Co., 302 S. Union St., Lima, Ohio-
Technical Appliance Corp., 1 Taco Ave., Sherburne, N. Y1-5-6-9-12-13-16-17-18 Tel-A-Ray Enterprises, 335 Clay St., Hender-
Tel-A-Ray Enterprises, 335 Clay St., Hender-
son, Ky6-9-10-16 Telco Electronics Mfg. Co., 919 Taylor Ave., Rockford, III1-8-9-10-16 Tele-Beam Industries, 6 & Soscol Ave., Napa, Calif1-6-9-12-16-18-25
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Telematic Industries, Inc., 16 Howard Ave., Brooklyn 21, N. Y1-12
Telesine Antenna Corp., 3421 Terry Rd., Jack-
son 3, Miss9 Teletenno Co., 1033 Indiana Ave., La Porte.
Ind9 Tele-Vue Towers, 701 49 St. S., St. Petersburg
_ /, Fla24
Telkor, Inc., P. O. Box 186, Elyria, Ohio-1-9- 10-12-15
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Tescon, Inc., Springfield Gordens, N. Y.-9
Thomas Mold & Die Ca., Box 126, Wooster, Ohio-24
Thompson Products, Inc., Electronics Div., 2196 Clarkwood Rd., Cleveland 3, Ohio-20
Thordarson-Meissner Mfg. Dlv., Maguire Industrles, Mt. Carmel, Ill.-25
Tresco, Inc., 3824 Terrace St., Philadelphia 28, Pa.-25
Tricroft Products Corp., 1535 N. Ashland Ave., Chicago 22, Ill.-1-6-8-9-15-16-17
Trio Mfg. Co., Griggsville, Ill.-9-20
TV Equipment Mfg. Co., 17 & Sherman Sts., Wausau, Wisc.-24
TV Hdw. Mfg. Co., 919 Taylor Ave., Rockford, Ill.-1-11-2-14-15-16-17-18-21-22
TV Products Co., 145-68 228 St., Springfield Gardens 18, N. Y.-1-8-9-16-17
U.H.F. Resonator Co., 1405 16 St., Racine, Wisc.-5
Ultra-Hi TV Mfg. Co., 69 Hammond St., Worcester, Mass.-1-9
Unique Ventilation Co., 615 Tiffany St., Bronx 59, N. Y.-17
United Technical Labs., Morristown, N. J.-7-12
Universal Products, 4100 Taylor Ave., Racine, Wisc.-17-24
Utilities Service Co., 1 Pine St., Allentown, Pa.-1-13
Vector Electronic Co., 3352 San Fernando Rd., Los Angeles 65, Calif.-21
Victon Insulators, Inc., Mople Ave., Victor, N. Y.-14
Vidaire Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N. Y.-1-12-23
Video Accessory Mfg. Co., Box 223, Tulsa 1, Okla.-1-6-17
Video Electronic Lab., 304 Rodgers Rd., Des Molnes 15, Iowa-5-9
Vokar Corp., Dexter, Mich.-7
Vulcan TV Mast & Tower, 1224 National St., Birmingham 7, Ala.-1-13-16-24
Waldom Electronics, 4625 W. 53 St., Chicago, Ill.-1-2-11-12
Walnut Mochine Ca., 732 Western Ave., South Bend, Ind.-24
Walsco Electronics Corp., 3602 Crenshow Blvd., Los Angeles 16, Calif.-9-10-17
Woyce, Inc., P. O. Box 115, Waynesboro, Term.-9-24
Welco Mfg. Co., 225 S. 3 St., Burlington, Iowa-8-9
Western Coil & Electrical Co., 215 State St., Racine, Wisc.-13-16-17-21-24
Wind Turbine Co., E. Market St. & Penna R., W. Chester, Pa.-3-6-13-14-16-17-20-21-23-24
Wingawer Mfg. Co., 3000 Scotten Blvd., Burlington, Iowa-8-9
Wingawer Mfg. Co., 700 Scotten Blvd., Burlington, Iowa-9
Wingawer Mfg. Co., 500 Scotten Blvd., Burlington, Iowa-9 23-24
Winegard Co., 3000 Scotten Blvd., Burlington, Iowa-9
Winpower Mfg. Ca., Newton, Iowa-24
Wizard Electronics, 705 Herman Ave., St.
Louis 5, Mo.-8
Woodland Mfg. Co., 416 Woodland Ave.,
Toledo 2, Ohio-9

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Motors
Needles
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& chemicals
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Reels, tape
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Splicers, tape
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Affton Industries, 8300 Flex-O-Lite Dr., St. Louis 23, Mo.-20 Alliance Mfg. Co., Lake Park Blvd., Alliance, Ohio-9

American Electronics, Inc., 655 W. Washington Blvd., Los Angeles 15, Calif.-9
American Molded Products, 2727 W. Chicago Ave., Chicago 22, III.-15
Americon Phenolic Corp., 1830 S. 54 Ave., Chicogo 50, III.-5
Ampex Corp., 934 Charter St., Redwood City, Calif.-22
Amplifier Corp. of America, 398 Broadway, New York 13, N. Y.-19-20
Argos Products Co., Genoa, III.-11-16
Atlas Sound Corp., 1449 39 St., Brooklyn 18, N. Y.-5
Audok Co., 500 5 Ave., New York, N. Y.-24
Audio Devices, Inc., 444 Madison Ave., New York, N. Y.-6-20
Audio-Moster Corp., 17 E. 45 St., New York 17, N. Y.-20-21
Beam Instruments Corp., 350 5 Ave., New Audio Devices, Inc., 444 Madison Ave., New York, N. Y.-6-20
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Beam Instruments Corp., 350 5 Ave., New
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Bennett & Co., Poul, 230 E. Ohio St., Chicago
11, III.-10
Berkshire Recording Corp., 150 W. 90 St., New
York 24, N. Y.-21
Bestcraft Products Co., 626 Broadway, New
York 12, N. Y.-3-11
Bomoc Lobs., Salem Rd., Beverly, Mass.-3
Bozak Co., R. T., P. O. Box 966, Darien,
Conn.-5
British Industries, 80 Shore Rd., Port Washington, N. Y.-5
Brush Electronics Co., 3405 Perkins Ave.,
Cleveland 14, Ohio-15-20
Capehart-Farnsworth Corp., 3700 Pontiac St.,
Fort Wayne, Ind.-3-4-5-11
Capitol Records, Inc., 1730 Broadwoy, New
York J9, N. Y.-13
Capps & Co., Frank L., 20 Addison Pl., Valley
Stream, N. Y.-10
CBC Electronics Co., 2601 N. Howard St.,
Philadelphia 33, Pa.-16
CBS-Columbia, Inc., 3400 47 Ave., Long Island City I, N. Y.-13
Cletron, Inc., 1974 E. 61 St., Cleveland 3,
Ohio-5-16
Colosseum Records, Oakwood Rd. R.R. #3,
Norwalk, Conn.-13
Concertopes, Inc., 400 Jackson Ave., Glencoe, III.-21
Concert Holl Society, 43 W. 61 St., New York,
N. Y.-13
Consolidated Radlo Products, 350 W. Erie St.,
Chicago 10, III.-16 Onsolidated Radio Products, 350 W. Erie St., Chicago 10, III.-16
Cook Laboratories. 114 Manhattan St., Stamford, Conn.-13-14
Cousino, Inc., 2326 Madison Ave., Toledo, Ohio-17
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Decca Records, Inc., 50 W. 57 St., New York, N. Y.-13
D & M Products, 13144 W. McNichols Rd., Detroit 35, Mich.-3-11-16
Duala Co., P. O. Box 70, Coal Fork, W. Va.-5
Dubbling Sales Corp., 41-10 45 St., Long Island City, N. Y.-14-22
DuMont Labs., Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-2
Duotone Co., Locust St., Keyport, N. J.-1-6-10-15-18-20-23
DX Radio Products Co., 2300 W. Armitage Ave., Chicago 47, Ill.-16
Eby Sales Co., 130 Lafoyette St., New York 13, N. Y.-5
Eicor, Inc., 1501 W. Congress St., Chicago 7, Ill.-11
Electric Motors & Specialties, King & Ham-Eicor, Inc., 1501 W. Congress St., Chicago 7, 111.-11

Electric Motors & Specialties, King & Hamsher Sts., Garrett, Ind.-9

Electric & Musical Industries (U.S.) Ltd., 38 W. 48 St., New York 36, N. Y.-13-21

Electro-Eng'a. Prods. Co., 609 W. Lake St., Chicago 6, 1!1.-9

Electro-Sonic Labs., 35-54 36 St., Long Island City, N. Y.-20

Electro-Sonic Specialties, 7230 Clinton Rd., Upper Darby 19, Pa.-21

Electro-Voice, Inc., Buchanan, Mich.-7-16

Electrovox Co., 60 Franklin St., E. Orange, N. J.-1-8-10-18

Elektra Records, 361 Bleecker St., New York 14, N. Y.-13-19-21

Elek-Trik Seal Labs., 2419 Lanterman Terrace, Los Angeles 39, Callif.-18

Eltran Corp., 109 W. Station St., St. Anne, III.-16

E.M.C. Recordings, 806 E. 7 St., St. Paul, Minn.-21

Esoteric Records, 238 E. 26 St. New York 10 III.-16
E.M.C. Recordings, 806 E. 7 St., St. Paul,
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Esoteric Records, 238 E. 26 St., New York 10,
N. Y.-13
Federal Electronics Sales, Federal Electronics
Bldg., Rockwille Centre, N. Y.-5-18
Fidelitone, Inc., 6415 Ravenswood Ave., Chicago 26, III.-20-24
Fortune Records, 11629 Linwood Ave., Detroit 6, Mich.-13
Gard Industries, Inc., Green Bay Rd., Wilmette, III.-18
Gardadado, 70 Washington St., Brooklyn 1,
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Garrard Sales Corp., Sub. British Industries, 80
Shore Rd., Port Washington, N. Y.-8

#### OMISSIONS

Listings have been omitted in all cases where, after three requests, a company has failed to return our directory questionnaire or otherwise verify its activity.

Gee-Lar Mfg. Co., 418 S. Wyman St., Rockford, III.-3
General Apparatus, 344 E. 32 St., New York
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General Cement Mfg. Co., 919 Toylor Ave.,
Rockford, III.-3-7-11-15-18-23
Generol Industries Co., Olive & Taylor Sts.,
Elyrio, Ohio-7-9
Graybar Electric Co., 420 Lexington Ave.,
New York, N. Y.-20
Greot Eastern Mfg. Co., 165 Remsen Ave.,
Brooklyn 12, N. Y.-18
Honsen Mfg. Co., 1111 S. Hart St., Princeton, Ind.-9
Hartley Praducts Co., 521 E. 162 St., New
York S1, N. Y.-4-15-16
Haydn Society, Inc., 30 Huntington Ave., Boston, Mass.-13
Heath Co., 305 Territorial Rd., Benton Harbor, Mich.-5
Hunt Co., Philip A., Palisades Park, N. J.-18
I. G. Textile Co., 30 E. 21st St., New York,
N. Y.-3
Ingalls Electronics, 30 W. Putnam Ave.,
Greenwich, Conn.-23
Insullne Corp. of America, 186 Granite St.,
Manchester, N. H.-14
Interelectronics Corp., 2432 Grand Concourse,
New York 58, N. Y.-1-18
International Pacific Recording Corp., 858 N.
Vine St., Hollywood 38, Calif.-19-21-22
Jensen Industries, Inc., 7333 W. Harrison St.,
Forest Park, III.-10-18
Jensen Mfg. Co., Div. Muter Co., 6601 S.
Laramie Ave., Chicago 38, III.-5-16
Jones Apparatus Co., Walter M., P. O. Box
277, Sheffield, Mass.-5
Kral Products, 1704 Walnut St., Philadelphia
3, Pa.-1
Livingston Electronic Corp., Livingston, N. J.21
London Chemical Co., 1535 N. 31 St., Melrose Pork, III.-18

TECHNICIAN BUYERS DIRECTORY

London Records, Inc., 539 W. 25 St., New York 1, N. Y-13
Louis Labs., 175 W. 97 St., New York 25, N. Y-18
Lyrichord Discs, Inc., 619 W. 54 St., New York 19, N. Y-13
McGregor Electronic Industries, McGregor, Iowa-16
Magnasync Mfg. Co., 5546 Satsuma Ave., N. Hollywood, Calif.-15-17
Magnavox Co., 2131 Bueter Rd., Ft. Wayne 4, Ind.-4
Mojor Electronics, 42 Meserole St., Brooklyn. 6, N. Y-11
Marine View Electronics, 28 Main St., White Plains, N. Y-5
Mercury Record Corp., 35 E. Wocker Dr., Chicago, III.-13
MGM Records, 701 7 Ave., New York 36, N. Y-13
Microtron Co., Div. Crest Labs., 84-11 Rock-away Beach Blvd., Rockaway Beach 93, N. Y-5-12-19
Miller Electronics, 2840 Naomi St., Burbank, Calif.-15-21
Miller Mfg. Co., M. A., 4 & Church St., Libertyville, III.-10-18
Minn. Mining & Mfg. Co., 900 Fauquler Ave., St. Paul 6, Minn.-20
Montilla LP Record Co., 447 W. 50 St., New York, N. Y.-13
Musical Masterpieces, 43 W. 61 St., New York, N. Y.-13
Musitapes, Inc., 8540 Sunset Blvd., Hollywood 46, Calif.-13-21
National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.-16
Newcastle Fabrics Corp., 153 W. 23 St., New York 11, N. Y.-3
Norco Mfg. Co., 392 Bleecker St., New York 14, N. Y.-18
Olin Mathleson Chemical Corp., Electrical Div., 275 Winchester Ave., New Hoven, Conn.-18
Olin Mathleson Chemical Corp., Electrical Div., 275 Winchester Ave., New Hoven, Conn.-18
Olin Mathleson Chemical Corp., Electrical Div., 275 Winchester Ave., New Hoven, Conn.-18
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Pfanstiehl Chemicol Corp., 104 Lake View Ave., Waukegan, III.-10
Phonotapes, Inc., 248 W. 49 St., New York 19, N. Y.-21
Pickering & Co., 309 Woods Ave., Oceanside, L. I., N. Y-8
Plymouth Electronics Corp., 50 Kingsbury St., Worcester 3, Moss.-5
Precision Electronics, 9101 King Ave., Franklin Pork, III.-9
Presto Recording Corp., P. O. Box 500, Paramus, N. J.-6-23
Prosound Corp., 175 5 Ave., New York 10, N. Y.-1
Racon Electric Co., 1261 Broadway, New York N. Y.-1
Racon Electric Co., 1261 Broadway, New York
1, N. Y.-16
Radio Corp. of America, Camden, N. J.-15-20
Radio Corp. of America, Custom Record Sales
Div., 630 5 Ave., New York, N. Y.-10-13-14
Rason Mfg. Co., 3050 W. 21 St., Brooklyn 24,
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Recorded Tape of the Month, Inc., 449 W.
51 St., New York 19, N. Y.-21
Recordisc Corp., 395 Broadway, New York 13,
N. Y.-6 Recordisc Corp., 395 Broadway, New York 13, N. Y.-6
Recoton Corp., 52-35 Bornett Ave., Long Island City 4, N. Y.-10-11-20
Reeves Soundcraft Corp., 10 E. 52 St., New York 22, N. Y.-6-20
Remington Records, 551 5 Ave., New York, N. Y.-13
Replica Records, 7210 Westivew Dr., Des Plains, III.-13
Robins Industries Corp., 214-26 41 Ave., Boyside 61, N. Y.-11-17-23
Rola Co., 2330 Superior Ave., Cleveland 14, Ohio-4
Romar Plastics, Inc., 1311 E. Main St., St. Chorles, III.-11
Ronette Acoustical, 135 Front St., New York, N. Y.-10
Rowe Industries, 1702 Wayne St., Toledo 9, Ohio-5
Royal Dlamond Tool Co., 172 Green St., Boston 3, Mass.-10
Seeco Records, 39 W. 60 St., New York, N. Y.-13
Sherwood Electronic III. Seeco Records, 39 W. 60 St., New York, N. Y.-13
Sherwood Electronic Lobs., 2802 W. Cullom Ave., Chicago 18, III.-5
Shura-Tone Products, Inc., 440 Adelphi St., Brooklyn, N. Y.-10
Smith, Inc., Hermon H., 2326 Nostrand Ave., Brooklyn 10, N. Y.-11
Sonic Recording Products, 58 Mill Rd., Freeport, N. Y.-6
SOS Cinemo Supply, 602 W. 52 St., New York 19, N. Y.-17
Speak-O-Phone Recording & Equip., 23 W. 60 St., New York 23, N. Y.-6-10-20
Spectrutione Sound Associates, 66 E. Gloucester Pike, Barrington, N. J.-13
Stancil-Hoffman, 921 N. Highland Ave., Hollywood 38, Calif-20
Star Record Co., 243 W. 72 St., New York, N. Y.-13
Stevens Products, 86 Main St., E. Orange, N. J.-4-16
Sutton Electronic Co., 424 W. Short St., Lexington, Ky.-12
Tannoy (America) Ltd., 38 Pearl St., New York 4, N. Y.-5-10
Tayloreel Corp., 3 Rutter St., Rochester 6, N. Y.-15
Technical Tape Corp., 177 St. & Harlem River, Bronx, N. Y.-20 Tayloreel Corp., 3 Rutter St., Rochester 6, N. Y.-15
Technical Tape Corp., 177 St. & Harlem River, Bronx, N. Y.-20
Telechrome, Inc., 88 Merrick Rd., Amityville, L. I., N. Y.-5
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-15-20-22-24
Televex Co., 46 Lakeview Ave., Yonkers, N. Y.-10
Tempo Record Co. of America, 8540 Sunset Blvd., Hollywood 46, Calif.-13-21
Tetrad Corp., 62 St. Mary's Ave., Yonkers 2, N. Y.-10
Thorens Co., New Hyde Park, N. Y.-9-11
Toman & Co. E., 8700 W. 47 St., Lyons, Ill.-11
Transcriber Co., 98 County St., Attleboro, Mass.-10
Trend Textiles, Inc., 180 W. Randolph St., Chicago 1, Ill.-3
University Loudspeakers, Inc., 80 S. Kensico Ave., White Plains, N. Y.-4-5-16
U.S. Recording Co., 1121 Vermont Ave., N.W., Washington 5, D. C.-20
Urania Records, Inc., 40 E. 19 St., New York, N. Y.-13
Utah Radio Products Co., 1123 E. Franklin St., Huntinaten, Ind.-5 N. Y.-13
Utah Radio Products Co., 1123 E. Franklin St., Huntington, Ind.-5
Vanguard Recording Soc., Inc., 256 W. 55 St., New York 19, N. Y.-13
Vidaire Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N. Y.-5
V-M Corp., 280 Park St., Benton Harbor, Mich.-11
Vox Productions, 236 W. 55 St., New York 19, N. Y.-13
Waldom Electronics, 4625 W. 53 St., Chicago, Vox Productions, 236 W. 55 St., New York 19, N. Y.-13
Waldom Electronics, 4625 W. 53 St., Chicago, III.-4-16
Walsco Electronics Corp., 3602 Crenshaw Blvd., Los Angeles 16, Callf.-3
Weathers Industries, 66 E. Gloucester Pike, Barrinaton, N. J.-8-14
Webster-Chicago Corp., 5610 W. Bloomingdale Ave., Chicago 39, III.-20-21
Wendell Plastic Fabrics Corp., 17 W. 17 St., New York 11, N. Y.-3
Westminster Recording Co., 275 7 Ave., New York, N. Y.-13 White Inc., Stan, 725 S. La Salle St., Chicago 5, III.-16 Wilcox-Gay Corp., Charlotte, Mich.-6-20 Wright Zimmerman, Inc., New Brighton, St. Paul 12, Minn.-16

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Admiral Corp., 3800 W. Cortland St., Chicago 47, III.-26
Aero-Tone Mfg. Co., 4836 Joy Rd., Detroit 4, Mich.-29
Alamo Electronics Corp., 1415 N. Brazos St., San Antonio 1, Texas-1
Alco Electronics Mfg., 3 Wolcott Ave, Lawrence 1, Mass.-16
Allied Radio Corp., 100 N. Western Ave., Chicago 80, III.-1-24-25-27-28-32
Alonge Products, Inc., 163 W. 23 St., New ork 11, N. Y.-33
Altec Lansing Corp., 9356 Santa Monica Blvd., Beverly Hills, Calif.-1-10-20-23-24-25-27-28-29
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-15-20-23-25-26-28-29-32-35-37
American Microphone Co., Div. Elgin National Watch Co., 370 S. Fairoaks Ave., Pasadena, Calif.-5-6-20
American Scientific Development, 336 S. Main St., Ft. Atkinson, Wisc.-27-31-32
Ampex Corp., 934 Charter St., Redwood City, Calif.-1-4-21-23-25-27-28-29-31-32
Amplitel, Inc., 342 W. 40 St., New York 18, N. Y.-1
Ampro Corp., 2835 N. Western Ave., Chicago 18, III.-32
Ansley Mfg. Co., Arthur, Doylestown, Pa.-1-23
Anton Electronic Labs., 1226 Flushing Ave., Brooklyn 37, N.Y.-24
Applegate & Co., C. J., 1816 Grove St., Boulder, Colo.-1
A.R.F. Products, 7627 Lake St., River Forest, III.-29
Argos Products Co., Genoa, III.-3
Art Specialty Co., 3245 W. Lake St., Chicago III.-29
Argos Products, 7627 Edite St., River Forest,
III.-29
Argos Products Co., Genoa, III.-3
Art Specialty Co., 3245 W. Lake St., Chicago
24, III.-20
Astatic Corp., P.O. Box 120, Conneaut, Ohio5-6-20
Atlas Sound Corp., 1449 39 St., Brooklyn 18,
N.Y.-10-17-20-29-35
Audak Co., 500 5 Ave., New York, N. Y.-2-7-9
Audio Equipment Co., 15749 Wyoming Ave.,
Detroit 38, Mich.-1-3-16
Audiogersh Corp., 23 Park Pl., New York 7,
N.Y.-26-34
Audio-Moster Corp., 17 E. 45 St., New York
17, N.Y.-25-26-27-28-31-32

Audio Products, 2265 Westwood, Los Angeles 64, Callf.-1 Allegro Electronics, 226 New York Ave., Hunt-ington, L.I., N.Y.-23 AMI, Inc., 1500 Union Ave., S.E., Grand Rapids 2, Mich.-23 2, Mich.-23
Ampro Corp., 2835 N. Western Ave., Chicago 18, III.-32
Authorized Mfrs. Service, 919 Wyckoff Ave., Brooklyn 27, N.Y.-1-11-18-21-24-25
Autocrat Electronics Co., 5024 Elm St., Skokie 8, III.-1-23-26 Brooklyn 27, N.Y.-1-11-18-21-24-25
Autocrat Electronics Co., 5024 Elm St., Skokie 8, III.-1-23-26

Beam Industries, Inc., 624 S. Michigan Ave., Chicago 5, III.-23
Beam Instruments Corp., 350 5 Ave., New York, N.Y.-1-3-10-24-29-35-37
Becker Electronics Mfg. Corp., 1091 Rockaway Ave., Valley Stream, L.I., N.Y.-29
Bell & Howeil, 7100 McCormick Rd., Chicago 45, III.-32
Bell Sound Systems, 555 Marion Rd., Columbus 7, Ohlo-1-3-4-9-18-24-25-27-28-29-32
Bennett & Co. Paul, 230 E. Ohio St., Chicago 11, III.-23
Bennett Laboratories, Inc., 2700 Bay Rd., Redwood City, Calif.-18
Bergen Labs., 11 Godwin Ave., Fair Lawn, N. J.-1-32
Berger Communications, 109-01 72 Rd., Forest Hills, N. Y.-1-5-24
Berlant Instruments, Audio & Recordata Div., 4917 W. Jefferson Blvd., Los Angeles 16, Calif.-4-15-32
Bestcraft Products Co., 626 Broadway, New York 12, N. Y.-3
Birnbach Radio Co., 145 Hudson St., New York 13, N. Y.-20-30
Blonder-Tongue Labs, 526 North Ave., Westfield, N. J.-1
Boetsch Bros., 115 Cedar St., New Rochelle, N. Y.-3
Bogen Co. David, 29 9 Ave., New York 14, N. Y.-3-17-18-20-23-24-25-27-28-29-34
Bohn Sound Eng'g. Co., Lincoln Highway E., Fort Wayne, Ind.-1
Bozak Co., R. T., P. O. Box 966, Darlen, Conn.-3-29-35-37
Brainard Electronics, 8586 Santa Monica Blvd., Los Angeles 46, Calif.-4-11-24-27-28
British Industries Corp., 80 Shore Rd., Port Wayne, Ind.-1
Bozak Co., R. T., P. O. Box 966, Darlen, Conn.-3-29-35-37
Brainard Electronics, 8586 Santa Monica Blvd., Los Angeles 46, Calif.-4-11-24-27-28
British Industries Corp., 80 Shore Rd., Port Wayne, Ind.-1
Bozak Co., R. T., P. O. Box 966, Darlen, Conn.-3-29-35-37
Brainard Electronics Corp., 30 Shore Rd., Port Wayne, Ind.-1
Bozak Co., R. T., P. O. Box 966, Darlen, Conn.-3-29-35-37
Brainard Electronics Corp., 30 Shore Rd., Port Washington, N. Y.-1-29
Brush Electronics Corp., 30 Shore Rd., Port Washington, N. Y.-1-29
Brush Electronics Corp., 30 Shore Rd., Port Washington, N. Y.-1-29
Brush Electronics Co., 3405 Perkins Ave., Cleveland 14, Ohio-1-4-7-13-15-20-24
Bud Radlo, Inc., 2118 E. Betliwood, III.-3

Califone Corp., 1041. N. Sycamore Ave., Hollywood 38, Calif.-23-25-27-28-29-34

Calbest Electronics Co., 4801. Exposition Blvd., Los Angeles 16, Calif.-1-18-27-28

Cal-Lee Mfg. Co., 5653. W. Adams Blvd., Los Angeles 16, Calif.-3

Cannon Co., C. F., Springwater, N. Y.-13

Capcon, Inc., 25 Willett St., New York 2, N. Y.-30

Capehart-Farnsworth Corp., 3700 Pontiac St., Fort Wayne, Ind.-1-3-5-7-8-20-23-24-26-28-29-32-35-37

Capitol Records, Inc., 1730 Broadway, New York 19, N. Y.-23

Capps & Co., Frank L., 20 Addison Pl., Valley Stream, N. Y.-20

Carbonneau Industries, 100 Lexington Ave. 5.W., Grand Rapids 4, Mich.-29

CBS-Columbia, Inc., 3400 47 Ave., Long Island City 1, N. Y.-23-29

Centralab Div. Globe Union Inc., 902Y E. Keefe Ave., Milwaukee 1, Wisc.-1-24

Chiso & Sons, Randolph, Mass.-33

Clegg Labs., Inc., Box 641, Morristown, N. J.-1-24

Cletron, Inc., 1974. E. 61 St., Cleveland 3, Ohio-18-25-27-28-29 1-24 Cletron, Inc., 1974 E. 61 St., Cleveland 3, Ohio-18-25-27-28-29 Cline Electric Mfg., 3405 W. 47 St., Chicago 32, III.-1 Clime Electric Mfg., 3405 W. 47 5t., Chicago 32, III.-1
Codetyper Laboratories, 550 5 Ave., New York 19, N. Y.-18
Colortone Electronics, 100 Frank Rd., Hicks-ville, N. Y.-18
Columbia Records, 799 7 Ave., New York 19, N. Y.-23-32
Components Corp., 106 Main St., Denville, N. J.-9-34-35
Connecticut Telephone & Electric Corp., Meriden, Conn.-13
Consolidated Radio Products, 350 W. Erie St., Chicago 10, III.-12-13-29-37
Cook Laboratories, 114 Manhattan St., Stamford, Conn.-2-24
Cooper Electronics, Inc., 5637 Tulip St., Philadelphia 24, Pa.-1-3-18-24-28
Cornell-Dublier Electric Corp., 333 Hamilton Blvd., S. Plainfield, N. J.-30
Crescent Industries, Inc., 5900 W. Touhy Ave., Chicago 30, III.-23-26-29-32
Crosley Radio & TV, 1329 Arlington St., Cincinnati 25, Ohio-23
Davis & Co., J. W., 9212 Dentan Drive, Dallas

Davis & Co., J. W., 9212 Dentan Drive, Dallas 9, Tex.-3 Daystrom Electric Corp., 887 Main St., Pough-keepsie, N. Y.-32 Dean Sales Co., 425 Devoe Ave., Bronx 60 N. Y.-1-18-23

Decca Records, Inc., 50 W. 57 St., New York, N. Y.-23
DeJur-Amsco Corp., 45-01 Northern Blvd., Long Island City 1, N. Y.-32
Delco Radio, 1446 S. Home Ave., Kokomo, Ind.-29 Delco Radio, 1446 S. Home Ave., Kokomo, Ind.-29
Delson Mfg. Co., 126 11 Ave., New York, N. Y.-1
DeWald Radio Mfg. Corp., 35-15 37 Ave., Long Island Clty 1, N. Y.-23
Dictograph Products, Inc., Hi-Fidelity Muslc Div., 95-25 149 St., Jamaica 35, L. I., N. Y.-27-28
D. & M Products, 13144 W. McNichols Rd., Detroit 35, Mich.-29
Donner Scientific Co., 2820 7 St., Berkeley, Calif.-1
Dormitzer Electric & Mfg. Co., 5 Hadley St., Cambridge, Mass.-1-18-24
D. & R. Ltd., 402 E. Gutierrez St., Santa Barbara, Calif.-34
DuKane Corp., St. Charles, Ill.-1-3-18-23-24-25-28-32
DuMont Labs., Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-1-25
Dunkle Coil Co., 3257 W. 6 St., Los Angeles 6, Calif.-32
Qunwell Mfg. Co., Dept. T56, Carlstadt, N. J.-29-35
Ductone Co., Locust St., Keyport, N. J.-13-29 29-35
Duotone Co., Locust St., Keyport, N. J.-1-3-29
Dwyer Eng'g., P. O. Box 483, Nashua, N. H.-1
DX Radlo Products Co., 2300 W. Armitage
Ave., Chicago 47, III.-29
Dynamic Electronics, 73-39 Woodhaven Blvd.,
Glendale, L. I., N. Y.-29
Dynamu Magnetics Corp., Div. Maico Co., 21
N. 3 St., Minneapolls 1, Minn.-15
Dynavox Corp., 40-05 21 St., Long Island City
1, N. Y.-22-23
Fooles Fooles Co., 15 S. Fairview, Park Ridge Eagle Speaker Co., 15 S. Fairview, Park Ridge, lil..29
Eby Sales Co., 130 Lafayette St., New York
13, N. Y.-1
Eder Eng'g, Co., 1568 S. 1st St., Milwaukee,
Wisc..4-24
Edu-Craft Sales Corp., 150-45 12 Ave., Whitestone, N. Y.-23
Eicor, Inc., 1501 W. Congress St., Chicago 7,
Ill.-32
Elcraft Electronics, 32-28 49 St., Long Island
City, N. Y.-23
Electrend Products Corp., State & Water St.,
St. Joseph, Mich.-1-21-25-27-28-31
Electron Enterprises, 6917 Stanley Ave.,
Berwyn, Ill.,3-23-26
Electronic Crafts Co., 74 Cortland St., New
York 7, N. Y.-23
Electronic Hardware Corp., 2420 W. Cermak
Rd., Chicago, Ill.-3
Electronic Instrument Co., 84 Withers St.,
Brooklyn 11, N. Y.-1
Electronic Tube Corp., 1200 E. Mermaid Lane,
Philadelphia 18, Pa.-1-24
Electronic Utilities Corp., 153 W. Huron St.,
Chicago 10, Ill.-23
Electro-Sonic Lobs., 35-54 36 St., Long Island
City, N. Y.-3-7-11-24-27-28-32
Electro-Sonic Corp., 115 Halleck St., Boston
20, Mass.-1-3-18-24-27-28
Electro-Oxice, Inc., Buchanan, Mich.-1-2-3-5-6-10-11-17-20-24-25-27-28-29-35-37
Emerson Radio & Phonograph Co., 14 & Coles
Sts., Jersey City, N. J.-23-32
Epoc Electronics, 140 Liberty St., New York 6, N. Y.-11
Executone, Inc., 415 Lexington Ave., New
York 17, N. Y.-18
Fairchild Recording Equip., 154 St. & 7 Ave.,
Whitestone, N. Y.-12-7-79-24-32
Fanon Electric Co., 150-09 South Rd., Jamaica
33, N. Y.-1-18-23-27-28
Federal Electronics Sales, Federal Electronics
Bldg., Rockville Centre, N. Y.-13-16-30
Federal Mfg. & Eng. g., 1055 Stewart Ave.,
Garden City, L. I., N. Y.-32
Foot Electronics Soles, Federal Electronics
New York 10, N. Y.-2-7
First Amer Eby Sales Co., 130 Lafayette St., New York 13, N. Y.-1 Eder Eng'g. Co., 1568 S. 1st St., Milwaukee, Wisc.-4-24

General Phones Corp., 5711 Howe St., Pittsburgh 32, Pa.-13-29
G & H Wood Products Co., 75 N. 11 St., Brooklyn 11, N. Y.-3-17
G & M Equipment Co., 7315 Varna Ave., N. Hollywood, Calif.-1-13
Gonset Co., 801 S. Main St., Burbank, Calif.-1
Gotham TV Corp., 123 W. 64 St., New York 23, N. Y.-1-11-23-24
Granco Products, Inc., 36-07 20 Ave., Long Island City, N. Y.-23
Graybar Electric Co., 420 Lexington Ave., New York, N. Y.-1-20-24-25-29-35-37
Grayline Eng'g. Co., 12243 Ave. O, Chicogo 33, III.-1-23.
Gray Research & Development, 658 Hilliard Gray Research & Development, 658 Hilliard St., Manchester, Conn.-1-2-11-23-27 Greene Co., L. Charlton, 314 Washington St., Newton 58, Mass.-18-22-23 Guild Radlo & Television Co., 460 N. Eucalyptus Ave., Inglewood 3, Calif.-23 Hallicrafters Co., 4401 W. 5 Ave., Chicago 24, III.-1-23 Hamilton Electronics, 2726 Pratt Ave., Chicago 45, III.-1-3-16-18-20-21-23-24-25-27-28 Harman-Kardon, 520 Main St., Westbury, L. I., N. Y.-1
Hartley Products Co., 521 E. 162 St., New York 51, N. Y.-1-3-10-24-27-29-31-32
Heath Co., 305 Territorial Rd., Benton Harbor, Mich.-1-3-24
Hedco Mfg., 161 W. Huron St., Chicago 10, III.-23
Heppner Mfg. Co., Box 608, Round Lake, III.-29
Hoffman Electronics Corp., 3761 S. Hill St. HII-29
Hoffman Electronics Corp., 3761 S. Hill St., Los Angeles 43, Calif.-23-26
Hotel Radio Corp., 601 W. Fort St., Detroit 29, Mich.-28
Industrial Test Equip. Co., 55 E. 11 St., New York 3, N. Y.-1-24
Insuline Corp. of America, 186 Granite St., Manchester, N. H.-3
Interelectronics Corp., 2432 Grand Concourse, New York 58, N. Y.-1-24-25-27-28
Interrelectronics Corp., 259 Howell St. Manchester, N. H.-3
Interelectronics Corp., 2432 Grand Concourse, New York 58, N. Y.-1-24-25-27-28
International Electronics Corp., 159 Howell St., Dallas 7, Texas-29
International Radio & Electronics Corp., Box 123 Route 4, Elkhart, Ind.-32
International Research Associates, 2221 Warwick Ave., Santa Monica, Calif.-1-20
International Research Associates, 2221 Warwick Ave., Santa Monica, Calif.-1-20
International Scientific Industries, 3101 42 St. Minneapolis 6, Minn. 32
Interstate Photo Supply, 17 W. 17 St., New York 11, N. Y.-36
Irvington Varnish & Insulator, Div. Minn. Minning & Mfa. Co., 6 Argyle Terrace, Irvington 11, N. J.-33
James Instrument Labs., 9110 S. 52 Ct., Oak Lawn, III.-1-29-32
Jov Cee Corp., 475 Cosgrove St., Philadelphia Pa.-20
Jayell Mfg. Co., 1379 Washington Ave., New York 56, N. Y.-3
Jensen Mfg. Co. Div. Muter Co., 6601 S. Laramie Ave., Chicago 38, III.-3-10-17-29-35
Jèrrold Electronics Corp., 2222 Chestnut St., Philadelphia 3. Pa.-1
Johns-Manville. Dutch Brond Div., 7800 Woodlawn Ave., Chicago 19, III.-33
Karlson Associates. Inc., 1483 Coney Island Ave., Brooklyn 30, N. Y.-3
Kav Lab., 5725 Kearny Villa Rd., San Delgo 12, Colif.-24
Kendall Co., Polyken Sales Div., 222 W. Adams St., Chicago 6, III.-33
KInadom Products, 23 Park Pl., New York, N. Y.-29-35
Klipsch & Associates, P. O. Box 64, Hope, Ark-17
Kraft Bross., 148-12 94 Ave., Jamaica 52, N. Y.-23
Krohn-Hite Instrument Co., 580 Massachusetts Ave., Cambridge 39, Mass.-1 Kraft Bros., 148-12 94 Ave., Jamaica 52, N. Y.-23
Krohn-Hite Instrument Co., 580 Massachusetts Ave., Cambridae 39, Mass.-1
Lab. of Electronic Eng'a., 413 "L" St. N.W., Washington 1, D. C.-29
Langevin Mfg. Corp., 47-37 Austell Pl., Long Island City 1, N. Y.-1-24
Lansing Sound, James B., 2439 Fletcher Dr., Los Angeles. Calif.-27-28-29
Lear, Inc., 11916 W. Pico Blvd., Los Angeles 64, Colif.-1-13-29
LEL, Inc., 380 Oak St., Coplaque, N. Y.-24
Lipos, Edwin A., 5485 W. Washington Blvd., Los Angeles 16, Calif.-14-15
Livingston Electronic Corp., Livingstan, N. J.-2-4
Loge Sound Engineers, J. M., 2171 W. Washington Livingston Electronic Corp., Livingston, N. J.-2-4
Loge Sound Englneers, J. M., 2171 W. Wash-Ington Blvd., Los Anaeles 18. Callf.-1-18-25
London Records, Inc., 539 W. 25 St., New York
1, N. Y.-23
Lowell Mfa. Co., 3030 Laclede Station Rd., St.
Louis 17, Ma.-3-18
Lynmar Englneers, Inc., 1432 N. Carlisle St.,
Philadelphia 21, Pa.-24
McGohan, Inc., Don, 3700 W. Roosevelt Rd.
Chicago 24, Ill.-13-20-23-24-25-29
McGregor Electronic Industries, McGregor,
Iowa-1-29
McIntosh Eng'a, Lobs., 320 W. Woter St.,
Binghamton, N. Y.-1-24
Maanadyne Co., 84 S. Water St., Port Chester,
N. Y.-2-7-11-23-27-34
Maanavox Co., 2131 Bueter Rd., Ft. Wayne 4,
Ind.-1-3-6-23-29
Maanecord. Inc., 1101 S. Kilbourn, Chicago 24,
Ill.-31-32

Major Electronics, 42 Meserole St., Brooklyn 6, N. Y.-1-2-3-26
Malin Enterprises, 3733 E. Olympic Blvd., Los Angeles 23, Calif.-29
Manfredi Wood Products Co., 226 New York Ave., Huntingfon, N. Y.-3
Marcantz Co., 44-15 Vernon Blvd., Long Island City 1, N. Y.-24
Morine View Electronics, 28 Main St., White Plains, N. Y.-1-4-11-18-21-24-25
Markel Electric Products, 147 Seneca St., Buffalo, N. Y.-26
Martin & Co. H. S., 1916 Greenleaf Ave. Evanston, Ill.-1
Mattison TV & Radio Corp., 10 W. 181 St., New York 53, N. Y.-3
Metzner Eng'g. Corp., 1041 N. Sycamare Ave., Hollywood 38, Calif.-34
MGM Records, 701 7 Ave., New York 36, N. Y.-23
Michigan Electronics, 854 N. Rockwell St., Chicago 22, Ill.-19-25-31-32-36
Midwest Radlo & TV Corp., 909 Broadway, Cincinnati, Ohio-26
Miller Co., J. W., 5917 S. Main St., Los Angeles 3, Calif.-22
Miller Electronics, 2840 Naomi St., Burbank, Calif.-18
Miller Instrument, Inc. Wm., 325 N. Halstead Ave., Pasadena & Calif.-1
Milwaukee Record Changer Corp., 39 Warren St., New York, N. Y.-26
Minn Mining & Mfg. Co., 900 Fauquier Ave., St. Paul 6, Minn-33
Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14, Ill.-23-32
Motorolo, Inc., 4545 Augusta Blvd., Chlcago 51, 111-23-26
MP Eng'g. Co., Falifleld 3, Conn.-23
Munston Mfg. & Service, Beech St., Islip, N. Y.-1
National Aircraft Corp. Electronics Div., 3411
Tulare Ave., Burbank, Calif.-24
National Co., 61 Sherman St., Malden 48, Mass.-1-27-28
New London Instrument Co., 82 Union St., New London, Conn.-1
North American Phillips Co., 10 E. 42 St., New York, N. Y.-23
Northern Products Co., 2210 N. Clark St., Chicago 14, Ill.-29



O'Brien Electric Corp., 6514 Santa Monica Blvd., Hollywood 38, Calif.-25-28
Olympic Radio & TV. Inc., 34-01 38 Ave., Long Island City 1, N. Y.-23
Optron Mfg. Co., 3223 N. Sheffield Ave., Chicago 13, Ill.-23
Oxford Electric Corp., Distr. Sales Div., 556 W. Monroe St., Chicago 6, Ill.-29
Pacifle Transducer Corp., 11836 W. Pico Blvd., Los Angeles 64, Calif.-2-6-7-11
Packard-Bell Co., 12333 W. Olympic Blvd., Los Angeles 64, Calif.-23
Palmer, Inc., M. V., 4002 Fruit Valley Rd., Vancouver, Wash.-12-18-25
Paraplegics Mfg. Co., 10068 Franklin Ave., Franklin Park, Ill.-1
Pathfinder Electronics, 6836 Lexington Ave., Los Angeles 38, Calif.-1-25
Pedersen Electronics, P. O. Box 572, Lafayette, Calif.-1-24
Peirce Dictation System, 5900 N. Northwest Hwy., Chicago 31, Ill.-32-36
Pentron Corp., 777 S. Tripp Ave., Chicago 24, Ill.-21-31-32
Perfection Electric Ca., 2635 S. Wabosh Ave., Chicago 16, Ill.-29
Permacel Tape Corp., Highway U S #1, New Brunswick, N. J.-33
Permoflux Corp., 2835 N. Kedzie Ave., Chicago 18, Ill.-3-4-13-35-37
Philco Corp., Troga & C Sts., Phillodelphia 34, Pa.-26-29
Phillac Corp., Tioga & C Sts., Phillodelphia 34, Pa.-23
Philmorre Mfg. Co., 113 University Pl., New York 3, N. Y.-1-12-15-29
Physical Research Assoc., 1 Azurelee Dr., Malibu, Calif.-13-29-35-37
Pickering & Ca., 309 Woods Ave., Oceanside, L. I., N. Y.-2-6-7-8-11-24
Piot Radio Corp., 37-06 36 St., Long Island City 1, N. Y.-1-23-24
Port-O-Motic Corp., 37-06 36 St., Long Island City 1, N. Y.-1-22-24
Port-O-Motic Corp., 37-06 36 St., Long Island City 1, N. Y.-1-23-24
Port-O-Motic Corp., 37-06 36 St., Long Island City 1, N. Y.-1-23-24
Port-O-Motic Corp., 37-06 36 St., Long Island City 1, N. Y.-1-23-24
Port-O-Motic Corp., 38-05 Olive St., Highland, Ill.-1
Precise Development Corp., 2 Neil Court, Oceanside, L. I., N. Y.-1-24

Precision Electranics, 9101 King Ave., Franklin Park, III.-14-24-25-27-28-37
Precision Radiation Instruments, Inc., 4223 W. Jefferson Blvd., Los Angeles 16, Callf,-1-11-24-27
Press Wireless Labs., 25 Prospect Pl., West Newton 65, Mass.-1-32
Presto Recording Corp., P. O. Box 500, Paramus, N. J.9-32-34
Prosound Corp., 175 5 Ave., New York 10, N. Y.-26
Quam-Nichols Co., 234 E. Marquette Rd., Chicago 37, III.-29
Quincy Speaker Mfg. Corp., 221 Oak St., Quincy, III.-29-35-37
Racon Electric Co., 1261 Broadway, New York 1, N. Y.-10-17-20-29-35
Rada-Phone Corp., 609 W. Fulton St., Chicago 10, III.-25
Radio Corp. of America, Camden, N. J.-1-3-6-7-10-18-20-23-24-25-32-34
Radio Corp. of America, RCA Tube Div., Harrison, N. J.-29
Radio Craftsmen, Inc., 4400 N. Ravenswood Ave., Chicago 40, III.-1-12-4-27
Radio Merchandise Sales, 2016 Bronxdale Ave., New York 62, N. Y.-18
Radio Music Corp., 84 S. Water St., Port Chester, N. Y.-1-27-11-23-27-34
Radio Supply & Eng'g. Co., 85 Selden St., Detroit 1, Mich.-2-23-26
Rangertone, Inc., 73 Winthrop St., Newark 4, N. J.-32
Rauland-Borg Corp., 3515 W. Addison St., Chicago 18, III.-1
Roytheon Mfg. Co., TV-Radio Div., 5921 W. Dickens Ave., Chicago 39, III.-29-32
R & B Electronics, Box 6998, Washington 20, D. C.-24
Recoton Corp., 52-35 Barnett Ave., Long Island City 4, N. Y.-2-7
Reeves Sounderaft Corp., 10 E. 52 St., New York 22, N. Y.-33
Regency Division, Idea, Inc., 7900 Pendleton Pike Indianapolis 26, Ind.-1-24
Relter Co. F., 3340 Bonnie Hill Dr., Hollywood 28, Calif.-33
Rek-O-Kut Co., 38-01 Queens Blvd., Long Island City 1, N. Y.-9-23-25-34
Retron Corp., 697 N. Lake Ave., Pasadena 6, Calif.-1
Revere Camera Co., 320 E. 21 St., Chicago, III.-32
Ristaucrat, Inc., 1216 E. Wisc Ave., Appleton, Wisc.-23
River Edge Sales Corp., Sub. British Industries, 80 Shore Rd. Davi Washington D. M. Suber Rd. Davi Was III.-32
Ristaucrat, Inc., 1216 E. Wisc Ave., Appleton, Wisc.-23
River Edge Sales Corp., Sub. British Industries, 80 Shore Rd., Port Washington, N. Y.-3
RJ Audio Products, Sub. British Industries, 80 Shore Rd., Port Washington, N. Y.-3
Roanwell Corp., 662 Pacific St., Brooklyn, N. Y.-12-13-20
Robins Industries Corp., 214-26 41 Ave., Bayside 61, N. Y.-33
Rockbar Corp., 215 E. 37 St., New York 16, N. Y.-23-26-34
Rola Co., 2330 Superior Ave., Cleveland 14, Ohio-29
Rohette Acausticol, 135 Front St., New York, Cohio-29

Ronette Acausticol, 135 Front St., New York, N. Y.-2-6-7-20-32-35
Rowe Industries, 1702 Wayne St., Toledo 9, Ohio-1-10-17-29
Russell Speaker Co., 6158 S. Kedzie Ave., Chicago, III.-29
Sargent-Rayment Co., 1401 Middle Harbor Rd., Oakland 20, Callf.-1
Saxonburg Ceramics, Saxonburg, Pa.-5
Scott, Inc., H. H., 385 Putnam Ave., Cambridge 39, Mass.-1-11-24-34
Scott Radio Labs., Liberty St., Plymouth, Ind.-23
Seeburg Corp., J. P., 1510 N. Dayton, Chicago, III.-23
Sentinel Radio Corp., 2100 Dempster St., Evans-Seeding Corp., 7. P., 1310 N. Deyron, Chicago, III.-23
Sentinel Radio Corp., 2100 Dempster St., Evanston, III.-23
Sherwood Electronic Labs., 2802 W. Cullom Ave., Chicago 18, III.-1-29
Shrader Sound, Inc., 2803 "M" St., N.W., Washington 7, D. C.-28
Shura-Tone Products, Inc., 440 Adelphi St., Brooklyn, N. Y.-23
Shure Bros., 222 Hartrey Ave., Evanston, III.-2-5-6-7-12-14-15-16-20
Sightmaster Corp., 111 Cedar St., New Rochelle, N. Y.-1-26-27-29
Simpson Mfg. Co., Mark, 32-29, 49 St., Long Island City 3, N. Y.-1-9-18-21-24-25-27-28-32
Smith. Inc., Herman H., 2326 Nostrand Ave., Island City 3, N. Y.-1-9-18-21-24-25-27-28-32
Smith, Inc., Herman H., 2326 Nostrand Ave., Brooklyn 10, N. Y.-30
Sonex, Inc., 245 Sonsom St., Upper Darby, Pa.-1-4-11-24-27-28
Sonic Industries, 30-30 Northern Blvd., Long Island City, N. Y.-23
Sonotone Corp., 570 5 Ave., New York, N. Y.-5
SOS Cinema Supply, 602 W. 52 St., New York, 19, N. Y.-1-3-9-10-13-14-18-20-24-25-27-28-29-32
Speak-O-Phone Recording & Equip., 23 W. 60
St., New York 23, N. Y.-9-32
Special Products Co., P. O. Box 188, Rockville 9, Md.-1-21-24-30
Specially Assembling & Packing, 79 Cilinton Pl., Brooklyn 38, N. Y.-1-13
Spencer-Kennedy Laboratories, 1320 Soldiers Field Rd., Boston 35, Mass.-1-24
Standard Wood Products Corp., 47 W. 63 St., New York 23, N. Y.-3
Steelman Phono & Radio, 230 Anderson Ave., Mt. Vernon, N. Y.-23

Stephens Mfg. Corp., 8538 Warner Dr., Culver Clty, Calit.-1-20-27-28-29-35-37
Stromberg-Carlson Co., 100 Carlson Rd., Rochester, N. Y.-1-3-10-12-13-17-18-20-23-24-25-26-27-28-29-35-37
Super Ear Products Co., 675 Merrick Rd., Lynbrook, N. Y.-13-16
Superex Electronics Corp., 4-6 Radford Pl., Yonkers, N. Y.-13
Switchcraft, Inc., 1328 N. Halsted St., Chicago 22, III.-21 22, III.-21
Sylvanla Liectric Products, Inc., 1740 Broadway, New York 19, N. Y.-23
Symphonic Radio, 160 Washington St. N., Boston 8, Mass.-23
Talk-A-Phone Co., 1512 S. Pulaski Rd., Chicago 23, III.-18
Talkmaster, Inc., 543 Laurel St., San Carlos, Calif.-18
Tannoy (America) Ltd., 38 Pearl St., New York 4, N. Y.-1-7-17-20-24-25-28-29-35-37
Tape Recorders, Inc., 1501 W. Congress St., Chicago 7, IIII.-32
Toyloreel Corp., 3 Rutter St., Rochester 6, N. Y.-13-16
Technical Apparatus Builders, 109 Liberty St., N. Y.-13-16

Technical Apparatus Builders, 109 Liberty St., New York 9, N. Y.-23

Telechrome, Inc., 88 Merrick Rd., Amityville, L. I., N. Y.-1

Telecom, Inc., 1019 Admiral Blvd., Konsas City 8, Mo.-18-27-28

Telectral Industries Corp., 35-16 37 St., Long Island City, N. Y.-1-4-15-18-25-28-31-32-36

Telex, Inc., 1633 Eustis St., St. Paul, Minn.-4-13-16-20-29

Thordarson-Meissner Mfg. Div., Magulre Industries, Mt. Carmel, III.-1-24-27

Thorens Co., New Hyde Park, N. Y.-2-6-7-23-26-34

Tibbetts Industries, Colcord Ave., Camden, Me.-16-20

Toman & Co. E., 8700 W. 47 St., Lyons, III.-2-23

Transformer Metal Prods. Corp., 343 W. 26 St., 7-23
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Tri-Dex Electronics, P. O. Box 1207, Lindsoy, Calf.-1-24
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Trutone Electronics, Inc., 812 N. Hlghland Ave., Hollywood 36, Calif.-1-27-28
Truvox Mfg. Co., 575 3 Ave., New York 16, N. Y.-3
Turner Co., 909 17 St. N.E., Cedar Rapids, Iowa-20
Ultra HI-Fi Co., 709 Slp St., Union City, N. J.-3-27-28-29
United Audio Products, Dlv. United Optical Mfg., 202 E. 19th St., New York 3, N. Y.-26-29-35-37
Universal Microphone, 424 Warren Lane, Inglewood, Calif.-20
University Loudspeakers Inc., 80 S. Kensico Ave., White Plains, N. Y.-3-10-17-19-25-29-35-37
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Utah Radio Products Co., 1123 E. Fronklin St., Huntlington, Ind.-3-29-35-37
Vanity Fair Electronics, 50 S. 4 St., Brooklyn 11, N. Y.-1-23-34
Vidaire Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N. Y.-1
Video Corp. of America, 229 W. 28th St., New York 1, N. Y.-23
Videon Electronic Corp., 902 E. Michigan St., Indianapolis 2, Ind.-1
Viking of Minn., Inc., 3520 E. 43 St., Minneapolis 6, Minn.-32
V-M Corp., 280 Park St., Benton Harbor, Mich.-23-26-32
Vocaline Co. of Americo, Coulter St., Old Soy-Vocaline Co. of Americo, Coulter St., Old Soybrook, Conn.-18
Warren Corp., 21 Hanse Ave., Freeport, N. Y.-32 Warren Corp., 21 Hanse Ave., Freeport, N. Y.-32

Waterproof Electric Co., 801 S. Main St., Burbonk, Calif.-1
Waters Conley Co., Rochester 1, Minn.-23
Weathers Industries, 66 E. Gloucester Pike, Barrington, N. J.-2-6-7-8-11-22-23
Webster-Chicogo Corp., 5610 W. Bloomingdale Ave., Chicago 39, Ill.-23-26-32
Webster Electric Co., 1900 Clark St., Racine Wisc.-2-5-6-15-18-21-24-25-27-28-29-31-32
Western Sound & Electric Labs., 805 S. 5 St., Milwaukee 4, Wisc.-1-18
Westinghouse Electric Corp., Metuchen, N. J.-23-26
Weston Electrical Instrument Corp., Subsidiary Doystrom, Inc., 614 Frelinghuysen Ave., Newark 5, N. J.-1
Wheeler Insuloted Wire Co., Div. Sperry Rand Corp., 150 E. Aurora St., Waterbury 20, Conn.-1-12-18
White Sound, Inc., 5844 N. Broodwoy, Chicago 40, Ill.-1

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Worner Electronic Devices, Rankin I, III.-18
Wright, Inc., 2235 University Ave., St. Poul, Minn.-29
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Aerovox Corp., Distr. Div., 740 Belleville Ave., New Bedford, Mass.-3
Allied Engroving & Stamping Co., 17 Elm St., Buffalo 3, N. Y.-1
American Electronics Co., 1203 Bryant Ave., New York 59, N. Y.-10
Arvin Industries, Inc., Columbus, Ind.-1
Audel & Co., Theo., 49 W. 23 St., New York 10, N. Y.-10
Bell Sound Systems, 555 Marion Rd., Columbus 7, Ohio-1
Britisn Industries Corp., 80 Shore Rd., Port Washington, N. Y.-10
Caldwell-Clements Manuals Corp., 480 Lexington Ave., New York 17, N. Y.-8
Capehart-Farnsworth Corp., 3700 Pontiac St., Fort Wayne, Ind.-1-3-7
CBS Hytron Div., Columbia Broadcasting System, 100 Endicott St., Danvers, Mass.-9
Centralab Div., Globe Union, Inc., 902Y E. Keefe Ave., Milwaukee I., Wisc.-2-3-6
Cisin, Harry G., Amagansett, N. Y.-7-10
Dover Publications, 920 Broadway, New York 10, N. Y.-10
DuMont Lobs, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-4
Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif.-7
Emerson Radio & Phonograph Co., 14 & Coles Sts., Jersey City, N. J.-1
Federal Telephone & Radio Co., Div. IT&T, 100
Kingsland Rd., Clifton, N. J.-5
Ferris Business Equip., Inc., 45 Seymour St., Stratford, Conn.-11
Gernsbach Library Inc., 154 W. 14 St., New York 11, N. Y.-1
Harper & Bros., 49 E. 33 St., New York N. Y.10
Lee Rodio & TV, 1001 E. Elm St., Macomb, III.-11
Lyte Eng'a. & Mfa. Co., 105 W. Monroe St. Rodio & TV, 1001 E. Elm St., Macomb, III.-11
Lytle Eng'g. & Mfg. Co., 105 W. Monroe St., Chicago 3, III.-10
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Markem Service Systems, 145 Hudson St., New York 13, N. Y.-11
Nichols Products Co., 325 W. Main St., Moorestown, N. J.-3
Oelrich Publications, 4308 Milwaukee Ave., Chicago 41, III.-4-11
Ohmite Mfg. Co., 3601 Howard St., Skokie, III.-6
Pitman Publishing, 2 W. 45 St., New York, Chicago 41, III.-4-11
Ohmite Mfg. Co., 3601 Howard St., Skokie, IIII.-6
Pitman Publishing, 2 W. 45 St., New York, N. Y.-10
Prentice-Hall Publ. Co., 70 5 Ave., New York, N. Y.-10
Rider Publisher, Inc., John F., 480 Canal St., New York 13, N. Y.-18-9-10
Rinehart & Co., 232 Madison Ave., New York 16, N. Y.-10
Sams & Co., Howard W., 2201 E. 46 St., Indianapolis 5, Ind.-1
Scientific Book Publ., Vincennes, Ind.-10
Supreme Publicotlans, 1760 Balsam Rd., Highland Park, III.-10
Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.-37-9
Technician & Circuit Digests, 480 Lexington Ave., New York 17, N. Y.-1
Thordarson-Meissner Mfg. Div. Maguire Industries, Mt. Carmel, III.-3
Triplett Electrical Instrument Co., Harmon Rd., Bluffton, Ohlo-8
United Catalog Publishers, 106 Lafayette St., New York 13, N. Y.-3-10
Van Nostrand Co., D., 120 Alexander St., Princeton, N. J.-10
Walloces Telaides, Inc., 136 Day St., Jamaica Plain 30, Mass.-1
Wiley & Sons, John, 440 4 Ave., New York 16, N. Y.-10
Workman TV, Inc., 309 Queen Anne Rd., Teaneck, N. J.-3

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Alden Products Co., 117 N. Main St., Brockton 64, Mass.-1-2-4
Aluminum Mfg. Co., 1629 Portland Ave., Louisville 3, Ky.-7
Ads for Goodhousekeeping, 21 Plandome, Manhassett, N. Y.-11
Arbor Mfg. Co., Depew, N. Y.-10
Arbuck, Inc., 116 Troutman St., Brooklyn 6, N. Y.-11
Argos Products Co., Genoa, III.-6-8
Audia Equipment Co., 15/49 Wyoming Ave., Detroit 38, Mich.-2-3-4
Baumker Mfg. Ca., 3826 Summit St., Toledo 11, Ohio-1-2-3-4
Bell Sound Systems, 555 Marion Rd., Columbus 7, Ohio-8
Bergsma Bros., 1000 36th St. S. E., Grand Rapids 8, Mich.-11
Bestcraft Products Co., 626 Broadway, New York 12, N. Y.-11
Bolain Bending Co., 1702 N. Milwaukee Ave., Chlcago 47, III.-11
British Industries Corp., 80 Shore Rd., Port Washington, N. Y.-4
Brookcraft Mfg., 123 Lofayette St., New York 13, N. Y.-11
Bud Radio, Inc., 2118 E. 55 St., Cleveland 3, Ohio-1-2-3-4-8-9
Butler Mfg. Co., B. B., 3150 Randolph St., Bellwood, III.-6
California Cabinet Co., 522 S. San Pedro St., Los Angeles 13, Calif.-6
Capehart-Farnsworth Corp., 3700 Pontiac St., Fort Wayne, Ind.-1-2-3-6
Casard Furniture, 507 E. Russell St., High Point, N. C.-11
Case Mfg. Co., P. O. Box 889, High Point, N. C.-11
Case Mfg. Co., P. O. Box 889, High Point, N. C.-11
Case Mfg. Co., P. O. Box 889, High Point, N. C.-11
Colimc Electric Mfg., 3405 W. 47 St., Chicago 32, III.-10
Columbus Eng'g. Co., Electronics-Nucleonics Div., P. O. Box 464, Columbus, Nebr.-1-2-3-4-8
Comfort Lines, 1735 Diversey Pkwy., Chicago 14, III.-11
Di-Co TV & Plastic Co., 322 Boston Post Rd., 4-8 Comfort Lines, 1735 Diversey Pkwy., Chicago 14, III.-11 Di-Co TV & Plastic Co., 322 Boston Post Rd., Milford, Conn.-7 Duro Specialty Co., 8 Bennett St., Lynn, Mass.-11 Electronic Hardware Corp., 2420 W. Cermak Rd., Chicago 8, III.-1-2-4-10-11 Electro Sound Corp., 115 Halleck St., Boston 20, Mass.-3-4 Emerson Radio & Phonograph Co., 14 & Coles St., Jersey City, N. J.-4-5-6-8 Equipto, Aurora, III.-10 Fisher Co., Oscar, 1000 N. Division St., Peeks-kill, N. Y.-4 kill, N. Y.-4
Garrard Sales Corp., 80 Shore Rd., Port Washington, N. Y.-8
Gee-Lar Mfg. Co., 418 S. Wyman St., Rockford, Ill.-7
General Cement Mfg. Co., 919 Taylor Ave., Rockford, Ill.-11
General Industries Co., Olive & Taylor Sts., Elyria, Ohio-5
General Products Corp., Webb St., Union Springs, N. Y.-5
G. H Wood Products Co., 75 N. 11 St., Brooklyn 11, N. Y.-11
Gits Moulding Corp., 4600 W. Huron St., Chicago 44, Ill.-5
Gonset Co., 801 S. Main St., Burbank, Calif.-1-4
Gravely Novelty Furniture, Ridgeway, Va.-11 Gravely Novelty Furniture, Ridgeway, Vd.-11 Gusdorf & Son, 6900 Monchester Ave., St. Louis 17, Mo.-11 Hamilton Electronics, 2726 Pratt Ave., Chicago 45, III.-2-4
Hartley Products Co., 521 E. 162 St., New York 51, N. Y.-2-3
Hi-Lo TV Antenna Co., 3540 N. Ravenswood Ave., Chicago 13, III.-11
Hobbs, Inc., Guy, Dallastown, Pa.-11
Hoffman Electronics Corp., 3761 S. Hill St., Los Angeles 43, Callf.-11
Hubbell Mfg. Co., H. L., Rte. 21, Zeeland, Mich.-4-11

IE Mfg., 325 N. Hoyne Ave., Chicago 12, ill.-1-2-4
Industrial TV, Inc., 359 Lexington Ave., Clifton, N. J.-4
Insuline Corp. of America, 186 Granite St., Manchester, N. H.-1-4-8-9
Jacobson Mtg. Co., S. I., 1414 S. Wabash Ave., Chicago 5, Ill.-7-8
Jamestown Toble Co., Jamestown, N. Y.-11
Jansa Woodworking Corp., 315 Meserole St., Brooklyn, N. Y.-8
Karyali Body, Inc., 8221 Clinton Rd., Cleveland 9, Ohio-10
Kellogg Switchboord & Supply Co., 79 W. Monroe St., Chicago 3, Ill.-1-2-6
K & G Electronics, 2738 N. Sheffield Ave., Chicago 14, Ill.-11
King & Sons, J. E., Peru, Ind.-11
Kleer-Vue Mfg. Co., P. O. Box 10304, Pittsburgh 34, Po.-4
Koch Sons, Geo., 10 S. 11 Ave., Evansville 4, Ind.-11
Kraft Bros., 148-12 94 Ave., Jamaica 52, N. Y.-8
Lowell Mfg. Co., 3030 Laclede Station Rd., St. Louis 17, Mo.-1-2-4
Ludgate Assoc., John P., 351 5 Ave., Pittsburgh 22, Pa.-11
McGohan, Inc., Don, 3700 W. Roosevelt Rd., Chicago 24, Ill.-8
Magnavox Co., 2131 Bueter Rd., Ft. Wayne 4, Ind.-6
Manco Mfg., Washington & Locust, Bradley, Ill.-11 anco Mfg., Washington & Locust, Bradley, Mancor Co., 5831 S. Green St., Chicago, III.-11
Manfredi Wood Products Co., 226 New York
Ave., Huntington, N. Y.-11
Markell Associates, Jeff, 764 6 Ave., New
York 10, N. Y.-2-6
Masco Mfg., 1319 N. Market St., St. Louis,
Mo.-11 Markell Associates, Jeff, 764 6 Ave., New York 10, N. Y.-2-6
Masco Mfg., 1319 N. Market St., St. Louis, Mo.-11
Mastra Co., 2104 Superior Ave., Cleveland 14, Ohio-3-6-7-8-9
Mathis Tower & Equip. Co., P. O. Box 126, E. Peoria, Ill.-11
Mottison TV & Radio Corp., 10 W. 181 St., New York 53, N. Y.-2-6
Michigan Electronics, 854 N. Rockwell St., Chicago 22, Ill.-11
Middletown Mfg., Stack St., Middletown, Conn.-4
Midwest Cabinet, 2047 Churchill St., Chicago 47, Ill.-6-11
Milford Tool Co., 108 Gulf St., Milford, Conn.-11
Muckle Mfg. Co., Owatonna, Minn.-4-8-10
National Teletable, P. O. Box 1289, High Point, N. C.-11
Newcomb Audio Products, 6824 Lexington Ave., Hollywood 38, Calif.-8
O'Brlen Electric Corp., 6514 Santa Monica Blvd., Hollywood 38, Calif.-2-3-4
Par-Metal Products, 32-62 49 St., Long Island City, N. Y.-4
Peerless Products Industries, 812 N. Pulaski Rd., Chicago 51, Ill.-11
Prosotron Instrument & Electronic Co., 151
Passadena Ave., S. Pasadena, Calif.-9
Planet Wood Products, 3902 8 Ave., Brooklyn, N. Y.-11
Plymouth Electronics Corp., 50 Kingsbury St., Worcester 3, Mass.-4
Porter Mfg., 1524 Frederick St., Racine, WIsc.-11
Q-Line Mfg. Corp., 1562 61 St., Brooklyn 19, N. Y.-1-4
Radio Merchandlse Sales, 2016 Bronxdale Ave., New York 62, N. Y.-8
River Edge Sales Corp., Sub. British Industries, 80 Shore Rd., Port Washington, N. Y.-2-3-6
Rogal Tube Bendling Co., 3543 S. Normal Blvd., Chicago 9, Ill.-11
Romar Plastics, Inc., 1311 E. Main St., St. Charles, Ill.-2-5-9
Service Parts Systems, 13380 E. 9 Mille Rd., E. Detroit, Mich.-4-10
Standard Wood Products Corp., 47 W. 63 St., New York 23, N. Y.-6
Stone Machine & Tool Co., Bedford, Ind.-4
Streamline Wood Products, 4849 N. Cicero Ave., Chicago 30, Ill.-6
Tables, Inc., 5105 W. Lawrence Ave., Chicago, Ill.-11
Tannoy (America) Ltd., 38 Pearl St., New York Tables, Inc., 5105 W. Lawrence Ave., Chicago, III.-11 III.-11
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4, N. Y.-6
Telematic Industries, Inc., 16 Howard Ave.,
Brooklyn 21, N. Y.-8
Tele-Vue Tawers, 701 49 St. S, St. Petersburg
7, Fla.-11
Tell City Furn. Co., Tell City, Ind.-11
Tel-Rad Mfg. Co., 7 Madison St., Fennimore,
Wisc.-6
Thomas Associates, 4607 Alaes St. Los Andrews Wisc.-6
Thomas Associates, 4607 Alger St., Los Angeles 39, Calif.-8-9
Transformer Metal Prods. Corp., 343 W. 26
St., New York 1, N. Y.-1-2-3-4-8-9
Truvox Mfg. Co., 575 3 Ave., New York 16, N. Y.-2-3-6
TV Engineers, Inc., 3325 W. Bryn Mawr Ave., Chicago 45, III.-7-8
TV Hdw. Mfg. Co., 919 Taylor Ave., Rockford, III.-11

U. M. & F. Mfg. Corp., 10929 Vanowen St., North Hollywood, Calif.-1-2-4 United Mfg. Co. Div., W. L. Maxson Corp., 41 Halg St., Hamden 14, Conn.-4 Universal Co., High Point, N. C.-11 Universal Woodcrafters, LaPorte, Ind.-11 University Loudspeakers, Inc., 80 S. Kensico Ave., White Plains, N. Y.-6 Utoh Rodio Products Co., 1123 E. Franklin St., Huntington, Ind.-6 Vineta Mfg. Co., Div. K-G Electronics, 2738 N. Sheffield Dr., Chicago 14 III.-11 Waldom Electronics, 4625 W. 53 St., Chicago, III.-9 Walsco Electronics Corp., 3602 Crenshaw Blvd., Los Angeles 16, Colif.-10 Waterproof Electric Co., 801 S. Moin St., Burbank, Callf.-4

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Aerovox Corp., Distri. Div., 740 Belleville Ave., New Bedford, Mass.-1-2-3-4-5-6-7-8-9-10-11-12-13-15 New Deatora, Mass.-1-2-3-4-5-6-/-8-9-1011-12-13-15

Ajax Condenser Co., 932 W. Wrightwood Ave., Chicago 14, III.-1-3-4-7-8-10-11

American Condensor Co., 4410 Ravenswood Ave., Chicago 40, III.-3-8-10

American Radionic Co., 51 Austin St., Danbury, Conn.-1-2-8-9-10-11

Anchor Radio Corp., 2125 S. St. Louis Ave., Chicago 23, III.-4-8-10

Arco Electronics, 103 Larayette St., New York 13, N. Y.-1-2-4-6-8-17-18-20

Astron Corp., 255 Grant Ave., E. Newark, N. J.-1-3-7-8-10-11-12

Bel Fuse, Inc., 311 Mountain Rd., Union City, N. J.-14-20

Birnboth Radio Co., 145 Hudson St., New York N. J.-14-20
Birnboch Radio Co., 145 Hudson St., New York
13, N. Y.-19
Capcon, Inc., 25 Willett St., New York 2,
N. Y.-1-2-3-4-6-7-8-10-11-12-15
Cardwell Electronics Productions Corp., Allen D.,
97 Whiting St., Plainville, Conn.-17-18
Centralab Div. Globe Union, Inc., 902Y E.
Keefe Ave., Milwaukee 1, Wisc.-1-2-4-1418-20 18-20
Chicago Condenser Corp., 3255 W. Armitage Ave., Chicago 47, III.-1-4-7-8-10-15
Condensor Products Co., 7517 N. Clark St., Chicago 26, III.-8
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland 11, Ohio-19
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., S. Plainfield, N. J.-2-3-4-6-7-8-9-10-11-12-13-16
Corning Glass Works, Corning, N. Y.-5-18
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Delco Radio, 1446 S. Home Ave., Kokomo, Ind.-3
Deutschmann Corp., Tobe, Providence Hgwy., Ind.-3
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Dunkle Coil Co., 3257 W. 6 St., Los Angeles 6, Calif.-3-6-8-18
Dwyer Eng'g., P. O. Box 483, Nashua, N. H.-2
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Electronic Fabricators, 682 Broadway, New York 12, N. Y.-10-15
Erie Resistor Corp., 644 W. 12 St., Erie 6, Pa.-2-5-18 Electronic Fabricators, 682 Broadway, New York 12, N. Y.-10-15

Frie Resistor Corp., 644 W. 12 St., Erie 6, Pa.-2-5-18

Federal Electronics Sales, Federal Electronics Bldg., Rockville Centre, N. Y.-2

Federal Telephone & Radio Co., Div. IT&T, 100 Kingsland Rd., Clifton, N. J.-17-18

General Electric Co., Apparatus Sales Div., Schenectady, N. Y.-9-10-16

General Instrument Corp., 829 Newark Ave., Elizabeth 3, N. J.-10-17-18-20

General Products Corp., Webb St., Union Springs, N. Y.-11-12

Girard-Hopkins, 1000 40 Ave., Oakland 1, Calif.-10-12

Good-All Elec. Mfg. Co., Ogallala, Nebr.-10-15

Gudeman Co., 340 W. Huron St., Chicago 10, Ill.-1-2-3-4-5-9-10-11-12-13-15

Hammarlund Mfg. Co., 460 W. 34 St., New York 1, N. Y.-18-20

Illinols Condenser Co., 1616 N. Throop St., Chicago 22, Ill.-2-3-8-9-10-11-12-13 Industrial Condenser Corp., 3243 N. California Ave., Chicogo 18, III.-3-9-10-11-12 Insuline Corp. of America, 186 Granite St., Manchester, N. H.-19 Jennings Radio Mfg. Co., P. O. Box 1278, Son Jose-8, Calif.-7 JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.-18 Kellogg Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, III.-10-12 Magnavox Co., 2131 Bueter Rd., Ft. Woyne 4, Ind.-3 Mollory & Co., Inc., P. R. 3020 E. Washington Mollory & Co., Inc., P. R., 3029 E. Woshington St., Indianapolis 6, Ind.-1-3-9-13-16 Micamold Electronics Mfg. Corp., 1087 Flushing Ave., Brooklyn 37, N. Y.-3-5-6-7-8-9-10-11-12 Micamold Electronics Mfg. Corp., 1087 Flushing
Ave., Brooklyn 37, N. Y.-3-5-6-7-8-9-10-1112 Miller Co., J. W., 5917 S. Main St., Los Angeles
3, Calif.-18-19
Millen Mfg. Co., James, 150 Exchange St.,
Malden 48, Mass.-18
Monarch Condenser, 550 Westchester Ave.,
New York 55, N. Y.-8
Mucan Corp., 9 St. Francis St., Newark 5,
N. J.-2
National Copacitor Co., 60 Washington St.,
Quincy, Mass.-5-8-12
National Co., 61 Sherman St., Malden 48,
Mass.-2-20
New York Coil Co., 40 2 Ave., Phoenixville,
Pa.-11
Ohmite Mfg. Co., 3601 Howard St., Skokie,
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Ortho Filter Corp., 196 Albian Ave., Paterson
2, N. J.-19
Philco Corp., Accessory Div., A & Allegheny
Ave., Philadelphia 34, Pa.-2-3-8
Philmore Mfg. Co., 113 University Pl., New
York 3, N. Y.-18-19-20
Planet Mfg. Copp., 225 Belleville Ave., Bloomfield, N. J.-3
Plastic Capacitors, 2511 W. Moffat St., Chicago 47, III.-10-15
Pyramid Electric Co., 1445 Hudson Blvd., North
Bergen, N. J.-13-4-8-9-10-11-12-15
Radio Supply & Eng'g. Co., 85 Selden St., CeCamden, N. J.-18
Radio Supply & Eng'g. Co., 85 Selden St., CeTroit 1, Mich.-1-2-3-6-8
Romar Plastics, Inc., 1311 E. Main St., St.
Charles, III.-6
Sangamo Electric Co., Marion, III.-1-3-4-6-7-89-10-11
Shaltcross Mfg. Co., 520 Pusey Ave., Collingdole, Pa.-20 9-10-11
Shallcross Mfg. Co., 520 Pusey Ave., Collingdale, Pa.-20
Skottie Electronics, Inc., 204 Bridge St., Peckville, Pa.-2-4
Smith, Inc., Herman H., 2326 Nostrand Ave., Brooklyn 10, N. Y.-19
Sprague Products Co., North Adams, Mass.-1-2-3-4-6-8-9-10-11-12-13-16
Stone City Machine & Tool Co., Bedford, Ind.-20
Telectro Industries Corp., 35-16, 37 St., Long. Ind.-20
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-18
United Condenser Corp., 3400 Park Ave., New York 56, N. Y.-8
United Electronic Mfg. Corp., 542 39 St., Union City, N. J.-3
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago 10, III.-10
Wilmar Mfg. Co., 1110 Truman Rd., Kansas City 6, Mo.-18

### 7-CIRCUIT ACCESSORIES

Adapters	1
Brighteners, CRT	
Circuit Breakers	3
Clips	
Connectors	
	_
Fuse Clips & Holders	
Fuses	7
Hardware (see Sec. 10)	
Interlocks	8
Ion Traps	9
Jacks	10
Magnets, CRT	11
Plugs, power & socket	
Printed Circuits	
Relays	14
Sockets	15
Solenoids	16
Switches	
Terminals	
Thermocouples	
Inermocouples	. 7

Accurate Electronics Corp., 169 S. Abbe Rd., Elyria, Ohio-5-6-8-15-18 Advance Relay Co. Div., Elgin National Watch Co., 2435 N. Naomi St., Burbank, Calif.-14 Aero Instrument Co., 11423 Vanowen St., N. Hollywood, Calif.-17 Aerolite Electronics Corp., 507 26 St., Union City, N. J.-5-6-8-10

Alden Products Co., 117 N. Main St., Brockton
64, Mass.-1-5-6-18
Allied Control Co., 2 East End Ave., New York
21, N. Y.-14
American Electronics Co., 1203 Bryant Ave.,
New York 59, N. Y.-10
American Pameor, Inc., 181 Hillcrest Ave.,
Havertown, Pa.-18
American Phenolic Corp., 1830 S. 54 Ave.,
Chicago 50, III.-5-10-12-15
American Radio Hdw. Co., 152 MacQuesten
Pkwy. S., Mt. Vemon, N. Y.-1-5-6-10-1215-17
Anchor Products Co., 2712 Mantrose Ave. Pkwy, S., Mt. Vemon, N. Y.-1-5-6-10-12-15-17
Anchor Products Co., 2712 Mantrose Ave., Chicago 18, III.-2
Anton Electronic Labs, 1226 Flushing Ave., Brooklyn 37, N. Y.-5
A P Electro Lab, P. O. Box 862 Chestnut Station, Union, N. J.-18
Arrow-Hart & Hegeman, 103 Hawthorne St., Hartford 6, Conn.-17
Atlos E-E Corp., Bedford Airport, Bedford, Mass.-4-6-13-15
Audio Development Co., 2833-13 Ave. S., Minneapolis 7, Minn.-10
Audlo Products, 2265 Westwood, Los Angeles 64, Callf.-13
Automatic Metal Products, 315 Berry St., Brooklyn 11, N. Y.-1-5-12-14-17
Automatic Processing Corp., 121 S. Cowen St., Garrett, Ind.-13
Becks, Inc., 298 E. 5 St., St. Paul 1, Minn.-13
Bergen Labs., 11 Godwin Ave., Falr Lawn, N. J.-14
Birnbach Radio Co., 145 Hudson St. New York Pirnbach Radio Co., 145 Hudson St., New York
13, N. Y.-4-5-6-8-17-18
Blonder-Tongue Labs, 526 North Ave., Westfield, N. J.-5-14
8 & M Electric Corp., 838 3 Ave., Brooklyn 32, N. Y.-5
Bomac Labs, Salem Rd., Beverly, Mass.-17
Browning Labs, Inc., 750 Main St., Winchester, Mass.-13 Mass.-13
Bud Radio, Inc., 2118 E. 55 St., Cleveland 3, Ohio-1-3-5-10
Bussman Mfg. Co., University at Jefferson, St. Louis 7, Mo.-6-7
Cal-Lee Mfg. Co., 5653 W. Adams Blvd., Los Angeles 16, Calif.-6
Cannon Electric Co., 3208 Humboldt St., Los Angeles 31, Calif.-5-12-16
Carling Electric, Inc., 505 New Park Ave., W. Hartford 10, Conn.-17
Carter Parts Co., 213 W. Institute Pl., Chicogo 10, III.-10-17
Cass Mochine Co., 691 Antolnet St., Detroit 1 10, III.-10-17
Cass Mochine Co., 691 Antolnet St., Detroit 1, Mich.-1
CBC Electronics Co., 2601 N. Howard St., Phlladelphia 33, Pa.-1-2-5
Centralab Div. Globe Union, Inc., 902Y E. Keefe Ave., Milwaukee 1, Wisc.-13-17
Centraid Transformer Corp., 1877 Eastern Parkway, Brooklyn 33, N. Y.-16
CG Electronics Corp., 305 Dallas St. NE, Albuquerque, N. Mex.-14
Chance Co., A. B., 210 N. Allen St., Centralia, Mo.-5
Chatham Electronics, Div. Gera Corp., 630 W. Mo.-5
Chatham Electronics, Div. Gera Corp., 630 W.
Mt. Pleasant Ave., Livingston, N. J.-7-17
Chicago Standard Transformer Corp., 3501
W. Addison St., Chicago 31, III.-2
Chicago Telephone Supply, 1142 W. Beardsley
Ave., Elkhart, Ind.-17
Cinch-Jones Div., Cinch Mfg. Corp., 1026 S.
Homan Ave., Chicago 24, III.-5-12-15
Circon Component Co., Santa Barbara Municlpol Airport, Goleta (Santa Barbara), Calif.5-13
Clarestat Mfg. Co., 1 Washington, St. Dover. Circon Component Co., Santa Barbara Municlpol Airport, Goleta (Santa Barbara Municlpol Airport, Goleta (Santa Barbara), Calif.-5-13

Clarostat Mfg. Co., 1 Washington St., Dover, N. H.-9-17

Cline Electric Mfg., 3405 W. 47 St., Chlcago 32, Ill.-14

Clum Mfg. Co., Electronic Div., 611 W. National Ave., Milwaukee 4, Wisc.-17

Coaxial Connector Co., 37 N. 2 Ave., Mt. Vernon, N. Y.-1-5-10

Coil Co. of America, 207 Washington St., Northvale, N. J.-16

Colman Tool & Machine Co., P. O. Box 7026, Amerillo, Texas-12

Continental Carbon, Inc., 13900 Lorain Ave., Cleveland 11, Ohio-17

Cornell-Dubliler Electric Corp., 333 Hamilton Blvd., S. Plainfield, N. J.-13

Crest Transformer Corp., 1834 W. North Ave., Chicago 22, Ill.-2

Curtiss-Wright Corp., Electronic Div., 631 Central Ave., Carlstadt, N. J.-14

Cutler-Hommer, Inc., 315 N. 12 St., Milwaukee 1, Wisc.-3-14-17

Dage Electric Co., 67 N. 2 St., Beech Grave, Ind.-1-5

Daven Co., Route 10, Livingston, N. J.-17

DeJur-Amsco Corp., 45-01 Northern Blvd., Long Island City 1, N. Y.-5

Deltron, Inc., 2905 N. Leithgow St., Philadelphia 33, Pa.-14

Digital Products, 13144 W. McNichols Rd., Detroit 35, Mich.-4-17

Doormasters, Inc., 2310 Michigan Ave., Santa Monica, Calif.-1

Dorn Equipment Corp., 88 Broad St., Boston 10, Mass.-1-5-10-12

Drake Mfg. Co., 1713 W. Hubbard St., Chicago 22, Ill.-15

Dunkle Coil Co., 3257 W. 6 St., Los Angeles 6, Calif.-9-13 Durakool, Inc., 1010 N. Main St., Elkhart, Ind.Dwyer Eng'g., P. O. Box 483, Nashua, N. H.13
Ebert Electronics Corp., 212-26 Jamaica Ave.,
Queens Village 28, N. Y.-14-17
Eby Co., Hugn H., 4/00 Stenton Ave., Philadelphia 44, Pa.-1-4-5-10-3-15-17-18
Eby sales Co., 130 Latayette St., New York 13,
N. Y.-1-5-8-10-13-14-15-17
Edison, Inc., Thomas A., Lakeside Ave., W.
Orange, N. J.-14
Eitel-McCullough, Inc., 798 San Mateo Ave.,
San Bruno, Calif.-5-15
Elec Corp., M St. Below Erie Ave., Philadelphia 24, Pa.-5-15
Electronic Hardware Corp., State & Water Sts.,
St. Joseph, Mlch.-1
Electronic Hardware Corp., 2420 W. Cermak
Rd., Chicago 8, Ill.-4
Electronic Instrument Ca., 84 Withers St.,
Brooklyn 11, N., Y.Electro-1ech Equipment, 308 Canal St., New
York 13, N. Y.-14-16-17-19
Erie Resistor Corp., 644 W. 12 St., Erie 6, Pa.-17
Farrington Mfg., 76 Atherton St., Boston,
Mass.-13
Ederal Anti Capacity Switch Co., 72 Kingsley
St., Buffalo 8, N. Y.-17
Federal Electronics Sales, Federal Electronics
Bldg., Rockville Centre, N. Y.-13
Federal Telephone & Radio Co., Div. IT&T,
100 Kingsland Rd., Clifton, N. J.-14-17
Fisher-Plerce Co., 170 Pearl St., S. Braintree,
Mass.-14
Forest Electric Co., 7216 Circle Ave., Forest
Park, Ill.-13
Fretco, Inc., 406 N. Craig St., Pittsburgh 13,
Pa.-13
G-C Electronics Mfg. Co., 919 Taylor Ave.,
Rockford, Ill.-17
General Cement Mfg. Co., 919 Taylor Ave.,
Rockford, Ill.-17
General Cement Mfg. Co., 165 Remsen Ave.,
Elizabeth 3, N. J.-13
General Products Corp., 399 N. Rockford,
Ill.-4-15-6-8-10-12-15-17
General Electronics Mfg. Co., 165 Remsen Ave.,
Elizabeth 3, N. J.-13
General Electronics Corp., 3761 S. Hill St.,
Los Angeles 43, Calif.-15-18
Holub Incustries, 413 DeKalb Ave., Chicago 12, Ill.-4-17
Heppner Mfg. Co., P. O. Box 603, Round Lake,
Ill.-4-17
Hill-6-17
Hoppner Mfg. Co., 165 Remsen Ave.,
Bridgeport, Conn.-5-7-10
Hobon Bros., 4940 W. Lawrence Ave., Chicago 12, Ill.-1-16-17
Hobon Bros., 4940 W. Lawrence Ave., Chicago 12, Ill.-5-6
IMfg., 325 N. Hoyne Ave., Chicago 12, Ill.-1-1-2-4-6-18
Imperiol R Durakool, Inc., 1010 N. Main St., Elkhart, Ind.-Dwyer Eng'g., P. O. Box 483, Nashua, N. H.-Ingerial Radar & Wire, 820 E. 233 St., Bronx, N, Y-5
Industrial Devices, 22 State Rd., Edgewater, N, J-12
Industrial Hardware Mfg. Co., 109 Prince St., New York 12, N. Y.-5-8-12-115-18
Industrial Instruments, Inc., 89 Commerce Rd., Cedar Grove, N, J.-17
Insuline Corp. of America, 186 Granite St., Manchester, N. H.-1-4-5-6-10-15-17-18
Interelectronics Corp., 2432 Grand Concourse, New York 58, N, Y,-13
International Register, 2620 W. Washington St., Chicago 12, III.-17
Jan Hdw. Mfg. Co., 75 N. 11 St., Brooklyn 11, N, Y,-10
Javex, P. O. Box 646 Redlands, Calif.-5-13-15
J-B-T Instruments, 441 Chapel St., New Haven Jan Haw. Mrg. Co., 75 N. 11 St., Brooklyn 11, N. Y.-10
Javex, P. O. Box 646 Redlands, Calif.-5-13-15
J-B-T Instruments, 441 Chapel St., New Haven 8, Comn.-9-17
Jerrold Electronics Corp., 2222 Chestnut St., Philadelphia 3, Pa.-1-5
JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.-17
Lones H. B. Div. Cinch Mfg. 1026 S. Homan Jones, H. B., Div. Cinch Mfg., 1026 S. Homan Ave., Chicago 24, III.-10-12
Kellogg Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, III.-4-14-17-18
Keystone Electronics Corp., 423 Broome St., New York 13, N. Y.-4-5-6-10-18
Kings Electronics Co., 40 Marbledale Rd., Tuckahoe, N. Y.-1-5-10
Kurman Electric Co., 35-18 37 St., Long Island City 1, N. Y.-14 Leach Relay Co., 5915 Avalon Blvd., Los Angeles 3, Calif.-14
Leader Electronics Corp., 2925 E. 55 St., Cleveland, Ohio-17
Leland, Inc., G. H., 123 Webster St., Dayton 2, Ohio-14-16
Lerca Electronics, Inc., 501 S. Varney St., Lerco Electronics, Inc., 501 S. Varney St., Burbank, Calif.-4-18

Littelfuse, Inc., 1865 Miner St., Des Plaines, Livingston Electronic Corp., Livingston, N. J.-14-15 Lunenite Electronic Co., 407 S. Dearborn St., Chicago S, III.-14

McGregor Electronic Industries, McGregor, Iawa-14

Macson Co., 3260 Motor Ave., Los Angeles 34, Calif.-5-12-18

Magnadyne Co., 84 S. Water St., Port Chester, N. Y-14

Malco Tool & Mfg. Co., 4025 W. Lake St., Chicago 24, III.-18

Mallory & Co., P. R., 3029 E. Washington St., Indianapolis 6, Ind.-10-17

Mandex Mfg. Co., 2608 W. 16 St., Chicago 8, III.-1-5-10-15-18

Micro Switch, Div. Minneapolis-Honeywell Regulator Co., Chicaga & Spring Sts., Freeport, III.-17

Miller Co., J. W., 5917 S. Main St., Los Angeles 3, Calif.-9-18

Moran Electronic Components, 7660 Woodbury Dr., Silver Spring, Md.-16

Mueller Electric Co., 1501 E. 31 St., Cleveland Ohio-4

Nameplates, Inc., 425 E. 101 St., Brooklyn 36, N. Y-13 Lumenite Electronic Co., 407 S. Dearborn St., Chicago 5, III.-14 Ohio-4
Nameplates, Inc., 425 E. 101 St., Brooklyn 36, N. Y.-13
National Aircraft Corp. Electronics Div., 3411
Tulare Ave., Burbank, Calif.-16
National Co., 61 Sherman St., Malden 48, Mass.-12-18
National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.-5-8-10-12-15-18
Network Mfg. Corp., 213 W. 5 St., Bayonne, N. J.-17
Nichols Products Co., 325 W. Main St. Manne. Network Mfg. Corp., 213 W. 5 St., Bayonne, N. J.-17
Nichols Products Co., 325 W. Main St., Moorestown, N. J.-1-5
Narth American Model Prod., 9802 Warwick, Rd., Warwick, Va.-13
Otonite Mfg. Co., 3601 Howard St., Skokie, Ill.-14-17
Pacific Electricord Co., 3217 Exposition Pl., Los Angeles 8, Calif.-1-5-10-12
Palmer, Inc., M. V., 4002 Fruit Valley Rd., Vancouver, Wash.-14-17
Perfection Electric Co., 2635 S. Wabash Ave., Chicago 16, Ill.-11
Perma-Power Co., 4727 N. Damen Ave., Chicago 25, Ill.-2
Phaostron Instrument & Electronic Co., 151
Pasadena Ave., S. Pasadena, Calif.-3-10-14-16
Philmore Mfg. Co., 113 University Pl., New Philmore Mfg. Co., 113 University Pl., New York 3, N. Y.-5-10-11-17 Photocircuits Corp., New St., Glen Cove, N. Y.-13 Photocircuits Corp., New St., Glen Cove, N. Y.-13
Phen-O-Tron, Inc., 455 Main St., New Rochelle, N. Y.-13
Pomona Electronics Co., 1126 W. 5 Ave., Pomono, Callf.-1
Patter & Brumfield, Princeton, Ind.-14
Precise Development Corp., 2 Neil Court, Oceanside, L. I., N. Y.-2-13
Proto Tools, 2209 S. Santa Fe, Los Angeles 54, Calif.-15
Q-Line Mfg. Corp., 1562 61 St., Brooklyn 19, N. Y.-1
Quam-Nichols Co., 234 E. Marquette Rd., Chicago 37, Ill.-9-11
Radio Music Corp., 84 S. Water St., Port Chester, N. Y.-14
Radio Supply & Eng'g. Co., 85 Selden St., Detroit 1, Mich.-5-7-11-24
Raytheon Mfg. Co., Equip. Marketing Dept., Waltham, Mass.-6-10-18
Recora Co., 56 W. 103 St., Chicago 28, Ill.-17
Revere Corp. of America, Wallingford, Conn.-17-19
Roanwell Corp., 662 Pacific St., Brooklyn, N. Y.-17 or Prince Corp., 662 Pacific St., Brooklyn, Revere Carp. of America, Wallingtord, Conn.-17-19
Roanwell Corp., 662 Pacific St., Brooklyn, N. Y.-17
Ripley Co., Middletown, Conn.-14
Royal Electric Co., 95 Grand Ave., Pawtucket, R. I.-7
Sequoia Process Corp., 871 Willow St., Redwood City, Calif.-13
Shallcross Mfg. Co., 520 Pusey Ave., Collingdale, Pa.-17
Sightmoster Corp., 111 Cedar St., New Rochelle, N. Y.-7
Sinith, Inc., Herman H., 2326 Nostrand Ave., Brooklyn 10, N. Y.-1-4-5-6-8-10-15-17
Star Expansion Products, 142 Liberty St., New York 6, N. Y.-12
Star Fuse Co., 235 Canal St., New York 13, N. Y.-6-7
States Co., 19 New Park Ave., Hartford, Conn.-States Co., 19 New Park Ave., Hartford, Conn.-Stone City Machine & Tool Co., Bedford, Ind.-6-18 Stone City Machine & Tool Co., Bedford, Ind.-6-18
Struthers-Dunn, Lamb's Rd., Pitman, N. J.-14
Super Ear Products Co., 675 Merrick Rd., Lynbrook, N. Y.-15
Superex Electronics Corp., 4-6 Radford Pl., Yonkers, N. Y.-1
Switchcraft, Inc., 1328 N. Halsted St., Chicago 22, Ill.-5-10-17
Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.-15
Techniques, Inc., 178 Central Ave., Hackensack, N. J.-5-13-15
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-14-16
Telematic Industries, Inc., 16 Howard Ave., Brooklyn 21, N. Y.-12
Telex, Inc., 1633 Eustis St., St. Paul, Minn.-10
Tenna Mfg. Co., 7580 Garfield Blvd., Cleveland 25, Ohio-5

### 8—COILS, FILTERS & TRANSFORMERS

CHOROS, AT	
Chokes, filter	
Chokes, RF	
Colls, field	. 4
Coils, focus	. 5
Coils, IF, oscillator & RF	. 6
Coils, peaking	. 7
Coils, speaker voice	
Controls, linearity & width	
Deflection yokes	
Filters, audio	
Filters, bandpass	
Filters, interference	
Filters, noise	
Inductors, toroid	
Inductors, variable	
Limiters, noise	
Suppressors, auto ignition	
Transformers, antenna matching .	
Transformers, audio	
Transformers, constant voltage	
Transformers, filament	
Transformers, flyback	
Transformers, IF, oscillator & RF.	
Transformers, Isolation	
Transformers, power	
Transformers, step-down	
Transformers, variable	
Transformers, vibrator	
Voltage adjusters	

Acme Electric Corp., 8812 Water St., Cuba, N. Y.-30 Acro Products Co., 369 Shurs Lane, Philadelphia 28, Po.-20-26-27-29 Arco Transformer & Electric Co., 1602 S. Hanna St., Ft. Wayne, Ind.-1-2 Acro Transformer & Mfg. Corp., 26-02 4 St., Long Island City 2, N. Y.-1-2-11-12-15-20-22-25-26-27-29
Advance Electronics Co., 8510 North End Ave., Oak Park 37, Mich.-31
Aerovox Corp., Distr. Div., 740 Belleville Ave., New Bedford, Mass.-3-13-14
Airdeslgn, Inc., 241 Fairfield Ave., Upper Darby, Pa.-2-3-20-22-25-26
Ajax Condenser Co., 932 W. Wrightwood Ave., Chicago 14, III-13-14
Altec Lansing Corp., 9356 Santa Monica Blvd., Beverly Hills, Colif.-1-2-20-26
American Electronics Co., 1203 Bryant Ave., New York 59, N. Y.-13
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-18
Anchor Products Co., 2712 Montrose Ave., Chicago 18, III.-30
Arvin Industries, Inc., Columbus, Ind.-2-3-6-20-24
Astron Corp., 255 Grant Ave., E. Newark, N. J.-13-14
Atlantic Industrial Co., 101-38 91 St., Ozone Park 17, N. Y.-20
Audio Development Co., 2833-13 Ave. S., Minneapolis 7, Minn.-11-12-19-20-21-22-25-26-27-29
Barry Electronics Corp., 512 Broadway, New York 12, N. Y.-30
Bergen Labs, 11 Godwin Ave., Fair Lawn, N. J.-6-7
Bestcraft Products Co., 626 Broadway, New York 12, N. Y.-31
Best Electronics Corp., 617 19th St., Manhattan Beach, Calif.-19



Birnbach Radio Co., 145 Hudson St., New York 13, N. Y.-11-18
Blackburn Electronic Corp., 55 W. 7 St., Wyoming, Pa.-4-5-6-7-8-10
Blonder-Tongue Labs, 526 North Ave., Westfield, N. J.-14-19
Brach Mfg. Corp., Div. Genl. Bronze Corp., 200 Central Ave., Newark, N. J.-19
Bradley Labs, 168 Columbus Ave., New Haven, Corn.-17
Bud Radio, Inc., 2118 E. 55 St., Cleveland 3, Ohio-3-13
Caddell-Burns, 40 E. 2 St., Mineola, N. Y.-2-3-6 2-3-6 Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-12 Campbell X-Ray Corp., 110 Cummington St., Boston 15, Mass.-22-26 Capcon, Inc., 25 Willett St., New York 2, N. Y.-11-12-13-14-18 Centralph Div. Globa Union, Inc., 220 Capcon, Inc., 25 Willett St., New York 2, N. Y.-11-12-13-14-18
Centralab Dlv. Globe Union, Inc., 920Y E. Keefe Ave., Milwaukee 1, Wisc.,-91 Centroid Tronsformer Corp., 1877 Eastern Parkway, Brooklyn 33, N. Y.-20-22-25-26-27-29
CGS Labs, Inc., 391 Ludlow St., Stamford, Conn.-16-19
Chlcago Electronic Eng'g., 3223 W. Armitage Ave., Chicago 47, Ill.,-20-22-26
Chicago Standord Transformer Corp., 3501 W. Addison St., Chicago 31, Ill.,-1-2-11-12-15-20-22-23-25-26-27-28-29-30
Clarostat Mfg. Co., 1 WashIngton St., Dover, N. H.-9
Clippard Instrument Lab, 7350 Colerain Rd., Cincinnati 24, Ohio-3-6-7-13-19-24
Coil Co. of Americo, 207 Woshington St., Northvale, N. J.-2-4-16-20-22-25-26-27-28-29 Northvale, N. J.-2-4-16-20-22-25-26-27-28-29
Coil Winders, Inc., 100 New York Ave., Westbury, N. Y.-1-2-3-4-5-6-22-24-28
Colman Tool & Machine Co., P. O. Box 7026, Amarlllo, Texas-6
Communication Accessorles, Hickman Mills, Mo.-1-2-3-11-12
Consolidated Radio Products, 350 W. Erie St., Chicago 10, III.-1-2-4-5-10-20-21-22-23
Continental Carbon, Inc., 13900 Lorain Ave., Cleveland 11, Ohio-6-18
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., S. Plainfield, N. J.-11-12-13-14
Corning Glass Works, Cornling, N. Y.-6
Crest Transformer Corp., 1834 W. North Ave., Chicago 22, III.-1-2-11-20-22-25-26-27-29
Crown Controls Co., 40 S. Washington St., New Bremen, Ohio-27
Dane Electronics Labs, P. O. Box 209, Solem, Mass.-19
Delco Radio, 1446 S. Home Ave., Kokomo, Ind.-6-26
Delson Mfg. Co., 126 11 Ave., New York, N. Y.-31
Deutschmann Corp., Tobe, Providence Hwy., Norvond Mass.-11-12-13-14 N. Y.-31

Deutschmann Corp., Tobe, Providence Hwy.,
Norwood, Mass.-11-12-13-14

Dormitzer Electric & Mfg. Co., 5 Hadley St.,
Cambridge, Mass.-2-22-26

Drake Co. R. L., 18 E. Central Ave., Miamisburg, Ohio-13
D & R Ltd., 402 E. Gutierrez St., Santa Barbara, Calif.-11-12-13-15
DuMont Labs, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-31
Dunkle Coil Co., 3257 W. 6 St., Los Angeles 6, Calif.-5-6-20-23-29
DX Radio Products Co., 2300 W. Armitage Ave., Chicago 47, Ill.-1-2-3-4-5-6-7-8-10-11-12-13-14-15-20-22-23-24-25-26-27-29-31
Dyna Co., 5142 Master St., Philadelphia 31, Pa.-20 Pa.-20
Eagle Electronics Corp., P. O. Box 775, Merlden, Conn.-11-12-13-14
Electronic Communications Equip. Co., 1249
W. Loyola Ave., Chicago 26, III.-20
Electronic Components, 2655 W. 19 St., Chicago 8, III.-26
Electronic Specialties Mfg., 76 Irving St., Worcester 10, Mass.-19
Electro-Physics Co., 287U Broadway, New York 7, N. Y.-30
Electro-Tech Equipment 308 Canal St., New York 13, N. Y.-21-25-26-27-28
Electro-Voice, Inc., Buchanan, Mich.-11
Epco Electronics, 140 Liberty St., New York 6, N. Y.-13
Spey Mfg. Co., 200 W. 57 St., New York 19, N. Y.-1-2-3-6-20-24-26
Federol Electronics Sales, Federol Electronics Bldg., Rockville Centre, N. Y.-11-13-14-18-31 N. Y.-1-2-3-6-20-24-26
Federal Electronics Sales, Federal Electronics Bldg, Rockville Centre, N. Y.-11-13-14-18-31
Federal Telephone & Radio Co., Div. IT&T, 100 Kingsland Rd., Clifton, N. J.-2-4-12-15-16-20-25-26-29
Fenton Co., 15 Moore St., New York 4, N. Y.-27
Ferrontl Electric Co., 30 Rockefeller Plaza, New York 20, N. Y.-20-22-25-26
Filtron Co., 131-15 Fowler Ave., Flushing 55, L. I., N. Y.-13-14
Fisher Eng'g. Co., Huntlington, Ind.-1-2-20-22-26-27
Fisher Radio Corp., 21-21 44 Dr., Long Island City I, N. Y.-11-14
Forbes & Wagner, 345 Centrol Ave., Silver Creek, N. Y.-1-2-3-6-7-9-10-16-23-24
Forest Electric Co., 7216 Circle Ave., Forest Park, Ill.-1-2-4-11-14-19-20-21-22-25-26-27-29
Freed Transformer Co., 1718 Weirfield St., Brooklyn 27, N. Y.-1-2-11-12-15-20-21-22-25-26-27-29
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.-20-23-26
General Instrument Corp., 829 Newark Ave., Elizabeth 3, N. J.-1-2-3-4-5-6-7-9-10-15-16-19-23-24
Gromer-Holldorson Transformer Corp., 2734
N. Pulaski Rd., Chicago 39, Ill.-1-2-3-4-5-9-10-12-15-16-19-20-22-23-25-26-27-28-29
Great Eastern Mfg. Co., 165 Remsen Ave., Brooklyn 12, N. Y.-2
Gudeman Co., 340 W. Huron St., Chicago 10, Ill.-11-12-13-14-28
Harnett Electric Corp., 138 Haven Ave., Port Washington, N. Y.-3-6-15-16-23-24
Heath Co., 305 Territoriol Rd., Benton Horbor, Mich.-25
Heppner Mfg. Co., Box 608, Round Lake, Ill.-23
Hevi Duty Electric Corp., 138 Haven Ave., Port Washington, N. Y.-3-6-15-16-23-24
Hindle Transformer Co., 412 W. Highlond Blvd., Milwaukee 1, Wisc.-26-27
Hillburn Electronic Products, 55 Nassau Ave., Brooklyn 22, N. Y.-3-6-79-23-24
Hindle Transformer Co., 4050 N. Rockwell Ave., Philadelphia 8, Pa.-3
James Vlbrapowr Co., 4050 N. Rockwell Ave., Chicago 7, Ill.-2-4-20-22-22-22-22-22-23-23-24
Jinternational Resistance Co., 401 N. Brood St., Philadelphia 8, Pa.-3
James Vlbrapowr Co., 4050 N. Rockwell Ave., Chicago 18, Ill.-20-22-29
Jan Hdw. Mfg. Co., 75 N. 11 St., Brooklyn 11, N. Y.-9
Jay Cee Corp., 475 Cosgrove Ct., Philadelphia, Pa.-23
Jefferson Elec Bldg., 18-31 Jay Cee Pa.-23 Jay Cee Corp., 4/3 Cosgrove Cr., Prinddelphid, Pa.-23
Jefferson Electric Co., 900 25 Ave., Bellwood, III.-26
Jerrold Electronics Corp., 2222 Chestnut St., Philadelphia 3, Pa.-13-19
JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.-18-27-31
Kay Lab., 5725 Kearny Villo Rd., Son Dlego 12, Calif.-12
Kellogg Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, III.-10
Kenyon Transformer Co., 840 Barry St., New York 59, N. Y.-2-20-22-25-26-28
Kepco Labs, 131-38 Sanford Ave., Flushing 55, N. Y.-30
Krohn-Hite Instrument Co., 580 Massachusetts N. Y.-30 Krohn-Hite Instrument Co., 580 Massachusetts Ave., Combridge 39, Mass.-12 Langevin Mfg. Corp., 47-37 Austell Pl., Long Island City 1, N. Y.-19-20-21-22-25-26-27-28-29 28-29 Lear, Inc., 11916 W. Pico Blvd., Los Angeles 64, Calif.-6-12-13 LEL, Inc., 380 Oak St., Copiague, N. Y.-19 Linell Eng'a. Corp., 447 South Blvd., Oak Park, III.-19-24

Lynmar Engineers, Inc., 1432 N. Carlisle St., Philadelphia 21, Po.-14-19 Southwestern Industrial Electronics Co. 2831 Post Oak Rd., Houston 19, Texas-1-2-20 Spencer-Kennedy Laboratories. 1320 Soldiers Field Rd., Boston 35, Mass.-12 Sprague Products Ca., North Adams, Mass.-13-14 Stondard Electrical Products, 2240 E. 3 St., Dayton 3, Ohio-1-2-15-16-20-21-22-25-26-27-28-29 Standord Winding Ca., 44 Johnes St., New-burgh, N. Y.-2-3-6-9-15-16 Stanwyck Winding Co., 137 Walsh Ave., New-burgh, N. Y.-2-6-7-10

Stromberg-Carlson Co., 100 Carlson Rd., Rochester, N. Y.-1
Superex Electronics Corp., 4-6 Radford Pl., Yonkers, N. Y.-3-6-7-13-14-31
Technicol Apporatus Builders, 109 Liberty St., New York 9, N. Y.-2-3-28
Telectrione, Inc., 88 Merrick Rd., Amityville, L. I., N. Y.-2-3
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-1-11-14
Telematic Industries, Inc., 16 Howard Ave., Brooklyn 21, N. Y.-12-13-31
Televiso Corp., 1415 Golf Rd., Des Plaines, III.-11-21-3-14
Telex, Inc., 1633 Eustis St., St. Poul, Minn.-20
Television Labs., Wauconda, III.-2-5-10-12-15-20-26-29
Texas Instruments, Inc., 6000 Lemmon Ave., Dollos 9, Tex.-2-3-6-11-12-13-14-15-16-20-22-24-25-26
Thermador Electrical Mfg. Co., Electronics Div., 2000 Comfleld Ave., Los Angeles 22, Calif.-2-20-22-25-26
Thordorson-Meissner Mfg. Div., Maguire Industries, Mt. Carmel, III.-1-2-3-4-5-6-7-9-10-11-12-13-14-19-20-21-22-23-24-25-26-27-29
Triad Transformer Corp., 4055 Redwood Ave., Venice, Colif.-1-2-5-15-20-22-23-25-26-27-29
Triand Transformer Corp., 4055 Redwood Ave., Venice, Colif.-1-2-5-15-20-22-23-25-26-27-29
Triand Transformer Corp., 4051 N, Milwaukee Venice, Colif.-1-2-5-15-20-22-23-25-26-27-29

Triwec Transformer Co., 3261 N. Milwaukee Ave., Chicago 18, III.-22-24-25-26

United Technical Labs., Morristown, N. J.-12-13-14

United Transformer Co., 150 Varick St., New York 13, N. Y.-1-2-11-12-13-14-15-16-20-21-22-25-26-27-28-29-30

University Loudspeakers, Inc., 80 S. Kensico Ave., White Plains, N. Y.-8-11-20-21

Utah Radio Products Co., 1123 E. Franklin St., Huntington, Ind., 1-2-20-22-25-26-27-28-29

Valor Electronic Components Co., 5808 Marilyn Ave., Culver City, Calif.-15-27

Vidaire Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N. Y.-12-13-14-19-30-31

Vokar Corp., 7300 Huron River Dr., Dexter, Mich.-2-3-5-6-13-24

Waldom Electronics, 4625 W. 53 St., Chicago, III.-4

Waterproof Electric Co., 801 S. Main St., Bur-Waterproof Electric Co., 801 S. Main St., Burbank, Calif.-17
Webster Electric Co., 1900 Clork St., RacIne, Wisc.-20
Wheeler Involved Wisc.-6 Wisc.-20
Wheeler Insulated Wire Co., Div. Sperry Rand
Corp., 150 E. Aurora St., Waterbury 20,
Conn.-1-2-20-22-26
Wilco Corp., 546 Drover St., Indianapolis 21,
Ind.-1-2-3-7
Wilmar Mfg. Co., 1110 Truman Rd., Kansas
City 6, Mo.-6-24
Wirt Co., 5221 Green St., Philadelphia 44, Pa.3-15-16
Workman TV, Inc., 309 Queen Anne Rd., Teaneck, N. J.-25-30

9—COMMUNICATIONS & INDUSTRIAL ELECTRONIC EQUIPMENT

Antennas, commercial communica-

tions (see Sec. 1)	
Controls, industrial electronic	1
Garage door openers, electronic	2
Geiger counters	3
	4
	5
	6
	7
	8
Sound systems, industrial (see Sec. 3)	
Test equipment (see Sec. 16)	
Timers	9
Transceivers, portable hand1	
Transmitters, communications1	

Admiral Corp., 3800 W. Cortland St., Chicago 47, III.-3
Aero Instrument Co., 11423 Vanowen St., N. Hollywood, Calif.-9
Alco Electronics Mfg., 3 Wolcott Ave., Lawrence 1, Mass.-3
Alden Electronic & Impulse Recording Equip. Co., Westboro, Mass.-1-9
Altiance Mfg. Co., Lake Park Blvd., Alliance, Ohio-2
American Electronics, Inc., 655 W. Washington Blvd., Los Angeles 15, Calif.-1-3-7
Ameican Elite, Inc., 7 Park Ave., New York 16, N. Y.-5
Amplitel, Inc., 342 W. 40 St., New York 18, N. Y.-4

Anton Electronic Lobs., 1226 Flushing Ave., Brooklyn 37, N. Y.-7 Atlos Overhead Door Co., 375 Mill St., Quoker-town, Po.-2 Barber-Colman Co., P. O. Drower 99, Rockford, Barber-Colman Co., P. O. Drower 99, Rockford, III.-2
Becks, Inc., 298 E. 5 St., St. Paul 1, Minn.-1
Blonder-Tongue Labs., 526 North Ave., Westfield, N. J.-1-4
Brainard Electronics, 8586 Sonto Monica Blvd., Los Angeles 46, Calif.-4-11
Calbest Electronics Co., 4801 Exposition Blvd., Los Angeles 16, Calif.-2-8-11
Calder Mfg. Co., Lancoster, Pa.-2
CGS Lobs., Inc., 391 Ludlow St., Stomford, Conn.-8-11
Columbus Eng'g. Co., Electronics-Nucleonics Div., P. O. Box 464, Columbus, Nebr.-1-2-3-6-7
Crawford Door Co., 20263 Hoover Rd., Detroit Crawford Door Co., 20263 Hoover Rd., Detroit 5, Mich.-2
Curtiss-Wright Corp., Electronic Div., 631 Centrol Ave., Carlstadt, N. J.-9
Cutler-Hommer, Inc., 315 N. 12 St., Milwaukee 1, Wisc.-1
Deltron, Inc., 2905 N. Leithgow St., Philadelphia 33, Pa.-1
Doormosters, Inc., 2310 Michigan Ave., Sonta Monica, Calif.-1-2-11
DuMont Labs., Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-1-4-5-8-11
Eicor, Inc., 1501 W. Congress St., Chicago 7, III.-9 Eicor, Inc., 1501 W. Congress St., Chicago 7, IIII.-9
Electric Power Door Co., Minneapolis 7, Minn-2
Electrical Service Co., 1271 Mission St., San Francisca 3, Calif.-6
Electronic Instrument Co., 84 Withers St., Brooklyn 11, N. Y.-3
Electron-Radar Products, 4806 W. Chicago Ave., Chicago 51, III.-12-6
Electro-Physics Co., 287U Broadway, New York 7, N. Y.-1-6
Electro-Tech Equipment, 308 Canal St., New York 13, N. Y.-1-2-9
Englneered Instruments, Inc., DV Controls Div., 937 Soto St., Hayward, Calif.-2
Espey Mfg. Co., 200 W. 57 St., New York 19, N. Y.-8
Federal Telephone & Radio Co., Div. IT&T, 100 Kingsland Rd., Clifton, N. J.-5-6
Fisher Co., Oscar, 1000 N. Division St., Peekskill, N. Y.-6
Fisher-Pierce Co., 170 Pearl St., So. Braintree 85, Mass.-1-6-9
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.-1-6-7-9
General Motors Corp., Guide Lamp Div., Anderson, Ind.-6
Gonset Co., 801 S. Main St., Burbank, Calif.-5-8-10
Hamilton Electronics, 2726 Pratt Ave., Chicago 45, III.-9 Eicor, I Hamilton Electronics, 2726 Pratt Ave., Chicago 45, 111.-9 Hamilton Electronics, 2726 Pratt Ave., Chicago 45, III.-9
Hammarlund Mfa. Co., 460 W. 34 St., New York 1, N. Y.-1-8
Heath Co., 305 Territorial Rd., Benton Harbor, Mich.-3-9
Hoffman Electronics Corp., 3761 S. Hill St., Los Anaeles 43, Calif.-3-8
Howell Mfa. Co., 7199 Hasbrook Ave., Philadelphia 11, Pa.-2
International Register, 2620 W. Washington St., Chicago 12, III.-9
Jan Hdw. Mfg., 75 N. 11 St., Brooklyn 11, N. Y.-1
Kov Lab., 5725 Kearny Villa Rd., San Diego 12, Calif.-4
Kurman Electric Co., 35-18 37 St., Long Island City 1, N. Y.-9
McKee Door Co., 85 Hankes Ave., Aurora, III.-2
Magnasync Mfg. Co., 5546 Satsuma Ave., N. McKee Door Co., 85 Hankes Ave., Aurora, III.—2

Maanasync Mfa. Co., 5546 Satsuma Ave., N. Hollywood, Calif.—1

Mallory & Co., P. R., 3029 E. Washington St., Indianapolis 6, Ind.—9

Mitchell Industries. P. O. Box 17, Mineral Wells, Texas—8-11

Michlgan Electronics, 854 N. Rockwell St., Chicago 22, III.—16-9-10

Mobil Electronics Mfg., 1111 State Rd. 67 E. Anderson, Ind.—8

Morrow Radio Mfa. Co., 2794 Market St., Salem, Ore.—5-8-11

Motorola. Inc., 4545 W. Augusta Blvd., Chicago 51, III.—5-8-11

Multi-Tron Lab., 4624 Washington Blvd., Chicago 51, III.—5-8-11

Multi-Tron Lab., 4624 Washington Blvd., Chicago 44, III.—2-6

Nucleonic Co. of America ,196 Degraw St., Brooklyn 31, N. Y.—3-7

Olympic Radio & TV. Inc., 34-01 38 Ave., Long Island City 1, N. Y.—8

Overhead Door Corp., Hartford City, Ind.—2

Parapleaics Mfg. Co., 10068 Franklin Ave., Franklin Park, III.—1-6

Pennwood Numechron Co., 7249 Frankstown Ave., Pittsburgh 8, Pa.—9

Permo-Power Co., 4727 N. Damen Ave., Chicago 25, III.—2

Peschel Electronics, 13 Garden St., New Rochelle, N. Y.—1

Photostron Instrument & Electronic Ca., 151

Pasadena Ave., S. Pasadena. Calif.—9

Photo Crystals, Inc., 15 S. 1 St., Geneva, III.—1

Oceanside, L. I., N. Y.—2-3 1-6 Precise Development Corp., 2 Nell Court, Oceanside, L. 1., N. Y.-2-3 Precision Radiation Instruments, Inc., 4223 W. Jefferson Blvd., Los Angeles 16, Calif.-7 Press Wireless Labs., W. Newton Mass.-1-8-11

Radio City Products Co., Centre & Glendale Sts., Easton, Pa.-3 Radio Craftsmen, Inc., 4400 N. Ravenswood Ave., Chicago 40, III.-7 Raytheon Mfg. Co., Marketing Dept., 190 Wil-low St., Waltham, Mass.-1 Remington Rand Univac, DIv. Sperry Rand Corp., 1902 W. Minnehaha Ave., St. Paul 4, Minn.-1 Corp., 1902 W. Minnehaha Ave., St. Paul 4, Minn.-1
RIchard-Wilcox Mfg. Co., Aurora, III.-2
Sessions Clock Co., 61 E. Main St., Forestville, Conn.-9
Smolln Labs., 721 Walton Ave., New York 51, N. Y.-1-4-6
Special Products Co., P. O. Box 188, Rockville 9, Md.-6
Spencer-Kennedy Laboratories, 1320 Soldiers Field Rd., Boston 35, Mass.-4
Stanley Works, Hardware Div., 195 Lake St., New Britain, Conn.-2
Technical Apparatus Builders, 109 Liberty St., New Britain, Conn.-2
Technical Apparatus Builders, 109 Liberty St., New York 9, N. Y.-6
Telechrome, Inc., 88 Merrick Rd., Amityville, L. I., N. Y.-4
Telecom, Inc., 1019 Admiral Blvd., Kansas City 8, Mo.-1
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-7
Tensitron, Inc., 28 Depot Rd., Harvard, Moss.-1
Tork Clock Co., 1 Grove St., Mount Vernon, N. Y.-9
Transi-Mite Radlo Lab., Manteo, N. C.-3-10
U. M. & F. Mfg. Corp., 10929 Vanowen St., North Hollywood, Colif-3
United Electric Controls, 85 School St., Watertown 72, Mass.-1
U. S. Motors Corp., 412 Nebraska St., Oshkosh, Wisc.-2
Vemaline Products Co., P. O. Box 222, How-U. S. Motors Corp., 412 Nov. Wisc.-2 Vemaline Products Co., P. O. Box 222, How-thorne, N. J.-6-9 Wilmor Mfg. Co., 1110 Truman Rd., Kansos City 6, Mo.-11 Worner Electronic Devices, Ronkin 1, III.-1-6

### -HARDWARE & MISCELLANEOUS PARTS

Bearings
Brackets, mounting 3
Bushings 4
Cable clamps
Caps, tube (grid & plate)
Chassis, blanks
Cleaners, chemicals 8
Decais 0
Dials & dial accessories
Electronic Hardware, miscl11
Escutcheons
Flocking Material
Flux
Grille, metal & screen
Grommets
Grounding Equipment
Insulation, spagnetti sleeving 18
Insulators & Insulating Materials 19
Knobs
Lamps & Buibs
Lubricants
Markers, adhesive
Masks, CRT
Mounts
Paints, Lacquer & Varnish26
Panels
Plugs, hole
Polishes
Pulleys, idler
Screws, Nuts, Bolts, Washers31
Shafts, control
Shielding
Shields, tube & coli
Shims, speaker
Snaps & Studs
Solder
Spray, plastic protective38
Standoffs, terminal39
Tape, friction & insulating40
Tubing
Windows, digi

Accurate Electronics Corp., 169 S. Abbe Rd., Elyria, Ohio-4-5-11-19-20-27 Acromark Co., 9 Morrell St., Elizabeth 4, N. J.-10-27 Applies Electronics 10-27 Aerolite Electronics Corp., 507 26 St., Union City, N. J.-5-27-32-39 Alden Products Co., 117 N. Main St., Brockton 64, Mass.-6-7-21 Allied Engraving & Stamping Co., 17 Elm St., Buffolo 3, N. Y.-10-12-20-27
Allweather Antenna Mfg. Corp., 350 S. Egg Harbor Rd., Hammonton, N. J.-38
Alpha Metals, Inc., 56 Water St., Jersey City 4, N. J.-14-37
Alpha Wire Corp., 200 Varick St., New York 14, N. Y.-18-33
Alprodco, Inc., Kempton, Ind.-41
Aluminum Mfg. Co., 1629 Portland Ave., Louisville 3, Ky.-31
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-21
American Phenolic Corp., 1830 S. 54 Ave., Chicago 50, Ill.-5-12
American Radio Hdw. Co., 152 MacQuesten Pkwy. S., Mt. Vernon, N. Y.-4-10-11-16-20-28-31-32
American Screw Co., W. Main St., Willimantic, Conn.-31
American Solder & Flux Co., 19 & Willard Conn.-31

American Solder & Flux Co., 19 & Willard Sts., Philodelphia 40, Pa.-14

Anchor Metal Co., 244 Boerum St., Brooklyn 6, N. Y.-14-31-37

Anchor Products Co., 2712 Montrose Ave., Chicago 18, III.-6-15

A. P. Electro Lab., Box 862 Chestnut Station, Union, N. J.-1-3-22-26-29-41

Art Specialty Co., 3245 W. Lake St., Chicago 24, III.-21

Atlas E-E Corp., Bedford Airport, Bedford, Mass.-5-33-34

Audio Equipment Co., 15749 Wyoming Ave. Atlos E-E Corp., Bedford Alrport, Bedford, Mass.-5-33-34
Audio Equipment Co., 15749 Wyoming Ave., Detrolt 38, Mich.-15
Boker Mfg. Co., 133 Enterprise, Evonsville, Wisc.-25
Barco Chemical Products, 701 S. LaSolle St., Chicogo 5, Ill.-8
Boumker Mfg. Co., 3826 Summit St., Toledo 11, Ohio-7-17-27
Becks, Inc., 298 E. 5 St., St. Poul 1, Minn.-27
Behr-Monning Corp., 2054 Seifert St., Troy, N. Y.-40
Bentley-Horris Mfg. Co., Lime & Hector Sts. Conshohocken, Po.-18
Bestcroft Products Co., 626 Broadway, New York 12, N. Y.-10-15-18
Biggs Co., Corl H., 2255 Barry Ave., Los Angeles, Calif.-1-8-19
Birnbach Radio Co., 145 Hudson St., New York 13, N. Y.-5-10-11-18-19-20-31-33-41
Bloco Mfg. Co., 6541 Euclid Ave., Cleveland 3, Ohio-17-22
Brach Mfg. Corp., Div. Gen'l Bronze Corp., 200 Central Ave., Nework, N. J.-37



Brady Co., W. H., 727 W Glendale Ave., Milwaukee 12, Wisc.-9-19-23
Brand & Co., Wm., North & Volley Sts., Willimantic, Conn.-41
Bridgeport Brass Co., Aerosol Div., 774 E. Main, Bridgeport, Conn.-38
British Industries Corp., 80 Shore Rd., Part Washington, N. Y.-15
Bud Rodio, Inc., 2118 E. 55 St., Cleveland 3, Ohio-2-3-4-6-7-10
Cardwell Electronics Products Corp., Allen D., 97 Whiting St., Ploinville, Conn.-3-4
Coss Mochine Co., 691 Antoinet St., Detroit 1, Mich.-3-4-7-11-19-20-25-30-31-36
CBC Electronics Co., 2601 N. Howard St., Philadelphia 33, Pa.-13
Centralab Div. Globe Union, Inc., 902Y E. Keefe Ave., Milwaukee 1, Wisc.-3-19
Chompion Bronze Powder & Paint Co., 2526 W. Vonburen St., Chicago 12, Ill.-38
Channel Moster Corp., Ellenville, N. Y.-19
Chose & Sans, Randolph, Mass.-19-40
Chemical Electronic Eng'g., Matawan, N. J.-8
Churchill Lighting Corp., 344 Franklin St., Melrose 76, Moss.-3-7-11-27
Cinch-Jones Div., Cinch Mfg. Corp., 1026 S. Haman Ave., Chicago 24, Ill.-28
Circon Component Co., Santo Barbara Municipal Airport, Coleta (Santa Barbara) Calif.-11-21-31-39
Cooxiol Connector Co., 37 N. 2 Ave., Mt. Vernon, N. Y.-19
Colman Tool & Machine Co., P. O. Box 7026, Amarillo, Texas-20
Columbus Eng'g. Co., Electronics-Nucleonics Div., P. O. Box 464, Columbus, Nebr.-3-5-7-27
Constad Laboratories, 114 Manhottan, St. Stome Constad Laboratories, 15 Bridge St., New York 4, N. Y.-26 Cook Laboratories, 114 Manhattan St., Stom-Cook Laboratories, 114 Mannartan St., Stomford, Conn.-37
Co-Operative Industries, 100 Ookdole Rd., Chester, N. J.-33
Creative Plastics Corp., Rt. 25 A, Stony Brook, N. Y.-4-16-19
Dale Products, Inc., P. O. Box 136, Columbus, Nebr.-20 Nebr.-20 Deal Products, Hellertawn Rd., Easton, Pa.-3-25

DeJur-Amsco Corp., 45-01 Northern Blvd., Long Island City 1, N. Y.-39

8 M Products, 13144 W. McNichols Rd., Detroit 35, Mich.-15-20

Dorn Equipment Corp., 88 Broad St., Boston 10, Mass.-10-28

Droke Mfg. Co., 1713 W. Hubbard St., Chicago 22, III.-21

Easy-Up, Inc., 908 State St., Racine, Wisc.-17

Ebcor Electronics Co., 87 Merrick Rd., Baldwin, N. Y.-38

Eby Co., Hugh H., 4700 Stenton Ave., Philadelphia 44, Po.-11-20-34-39

Eby Soles Co., 130 Lafayette St., New York 13, N. Y.-8-20-22

Elastic Stop Nut Corp., 2330 Vauxhall Rd., Union, N. J.-31

Elco Corp., M St. Below Erle Ave., Philadelphia 24, Po.-34 Union, N. J.-31
Elco Corp., M St. Below Erle Ave., Philadelphia 24, Pa.-34
Electronic Chemical Corp., 813 Communipaw Ave., Jersey City 4, N. J.-8
Electronic Hardware Corp., 2420 W. Cermak Rd., Chicago 8, III.-7-25-31-39
Electrovax Co., 60 Franklin St., E. Orange, N. J.-8
Eltran Corp., 109 W. Station St., St. Anne, III.-15
Enderal Screw Products 3917 N. Kedzie Ave., Eltran Corp., 109 W. Station St., St. Anne, III.-15
Federal Screw Products, 3917 N. Kedzie Ave., Chicago 18, III.-11-31
Federaled Metals, 120 Broadway, New York 5, N. Y.-37
Fidelity Chemical Products Corp., 470 Frelinghuysen Ave., Nework 5, N. J.-8-26
Gorde Mfg. Co., 588 Eddy St., Providence 3, R. I.-19-39
Gee-Lar Mfg. Co., 418 S. Wymon St., Rockford, III.-20-25
General Aluminum Products, 287 5 Ave., New York, N. Y.-41
General Cement Mfg. Co., 919 Toylor Ave., Rockford, III.-15-6-8-10-11-13-14-15-16-18-19-20-22-26-28-29-30-31-35-37-38-40-41
Greot Eastern Mfg. Co., 165 Remsen Ave., Brooklyn 12, N. Y.-8
Hobson Bros., 4940 W. Lowrence Ave., Chicago 30, III.-6-11
Hoffman Electronics Corp., 3761 S. Hill St., Los Angeles 43, Calif.-11
Holub Industries, 413 DeKalb Ave., Sycamore, III.-31
Hudson Lamp Co., Arlington, N. J.-21 Hudson Lamp Co., Arlington, N. J.-21
Ideal Industries, 3316 Park Ave., Sycamore, III.-8 Ideal Industries, 3316 Park Ave., Sycamore, III.-8
IE Mfg., 325 N. Hoyne Ave., Chicago 12, III.-3-5-6-7-16-31-39
Imperial Radar & Wire, 820 E. 233 St. Bronx, N. Y.-3-19-41
Industrial Devices, 22 State Rd., Edgewater. N. J.-20-21
Industrial Hardware Mfg. Co., 109 Prince St., New York 12, N. Y.-39
Injection Molders Supply, 3514 Lee Rd., Cleveland, Ohio-38
Insl-X Sales Co., 26 Rittenhouse Pl., Ardmore, Po.-19
Insuline Corp. of America, 186 Gronite St., Monchester. N. H.-3-4-5-7-10-11-15-16-18-19-20-25-27-30-31-34
Irvington Varnish & Insulator, Div. Minn. Mining & Mfg. Co., 6 Argyle Terrace, Irvington 11, N. J.-18-19-40-41
Isolantite Mfg. Corp., Warren Ave., Stirling, N. J.-4-39-41
Jon Hdw. Mfg. Co., 75 N. 11 St., Brooklyn 11, N. Y.-11-32-33-34
JFD Mfg. Co., 6101 16 Ave., Broaklyn 4, N. Y.-3-5-33
Johns-Manville. Dutch Brand Div., 7800 Woodlown Ave., Chicago 19, III.-40 JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.3-5-33
Johns-Manville. Dutch Brand Div., 7800 Woodlown Ave., Chicago 19, Ill.-40
Jones, H. B. Div., Cinch Mfg., 1026 S. Homan
Ave., Chicago 24, Ill.-27-28
Jontz Mfg. Co., 1101 E. McKinley Ave.,
Mishowaka, Ind.—25
Kellaga Switchboord & Supply Co., 79 W. Monroe St., Chicago 3, Ill.-10-37
Kendall Co., Polyken Sales Div., 222 W. Adoms
St., Chicago 6, Ill.-1-03
Kenwood Eng'g. Co., 265 Colfax Ave., Colfax,
N. J.-3-25
Kerden Chemical Co., 6400 Hermon Ave.,
Cleveland 2, Ohio-8
Kester Solder Co., 4201 Wrightwood Ave., Chlcago, Ill.-37
Keystone Electronics, Corp., 423 Broome St.,
New York 13, N. Y.-2-3-4-11-19-27-39
K & G Electronics, 2738 N. Sheffield Ave.,
Chicago 14, Ill.-3
Krylon, Inc., Ford & Washington Sts., Norristown, Pa.-38
Lenk Mfg. Co., 30-38 Cummingtan St., Boston
15, Mass.-14-37
Lerco Electronics, Inc., 501 S. Varney St.,
Burbonk, Calif.-39
Lingren & Assoc., Erik A., 4515 N. Rovenswood, Chicago 40, Ill.-33
London Chemical Co., 1535 N. 31 St., Melrose Park, Ill.-14-37
Lowell Mfg. Co., 3030 Laclede Statian Rd., St.
Louls 17, Mo.-3-15
Lytle Eng'g. & Mfg. Co., 105 W. Monroe St.,
Chicago 3, Ill.-4-7
Macson Co., 3260 Motor Ave., Los Angeles 34,
Calif.-28
Master Mobile Maunts, 1306 Bond St., Los Angeles 15, Calif.-34
Matchless Electric Co., 1700 Washington Bivd.,
Chicago 12, Ill.-21
Mathis Tower & Equip Co., P. O. Box 126, E.
Peorla, Ill.-3-25

Mattison TV & Radio Corp., 10 W. 181 St., New York 53, N. Y.-3 Mechanical Steel Tubing Corp., 500 Barry St., Bronx 59, N. Y.-41 Medal Mfg. Co., 194 E. Silver St., Sharon, Pa.-3-17 New York 53, N. Y.-3
Mechanical Steel Tubing Corp., 500 Barry St., Bronx 59, N. Y.-41
Medal Mfg. Co., 194 E. Silver St., Sharon, Pa.-3-17
MeRix Chemical Co., 1021 E. 55 St., Chicago 15, Ill.-8-38
Mico Instrument Co., 80 Trowbridge St., Cambridge 38, Mass.-14-37
Micro-Circuits Co., New Buffalo, Mich.-1-26-33
Millen Mfg. Co., James, 150 Exchange St., Malden 48, Mass.-26-10-20-33-34-35
Miller Co., J. W., 5917 S. Main St., Los Angeles 3, Collf.-34
Minn. Mining & Mfg. Co., 900 Fauquier Ave., St. Paul 6, Minn.-23
Miracle Adhesives Corp., 214 E. 53 St., New York 22, N. Y.-1
Mitchell Rand Insulation, 51 Murray St., New York 70, N. Y.-19
Mobil Electronics Mfg. Corp., 4436 W. Roosevelt Rd., Chicago 40, Ill.-17-31
Modern Wire Co., 39-30 Review Ave., Long Island City 1, N. Y.-37
Mole-Richardson, 937 N. Sycamore Ave., Holly-wood 38, Calif.-21
Mueller Electric Co., 1501 E. 31 St., Cleveland, Ohio-17-19
Multicore Sales Corp., Sub. British Industries, 80 Shore Rd., Port Washington, N. Y.-14-37
Nagel-Chase Mfg. Co., 2811 N. Ashland Ave., Chicago 31, Ill.-3
National Electric Products 140 Stanwix St., Pittsburgh 22, Po.-3-25
National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.-11-19
Newcomb Audio Products, 6824 Lexington Ave., Hollywood 38, Calif.-27
Jichols Products Co., 329 Bleecker St., New York 14, N. Y.-21
Nylok Corp., E. 14 St. & Grand Central Ave., Yonkers, N. Y.-11-19
Newcomb Audio Products, 6824 Lexington Ave., Hollywood 38, Calif.-27
Jichols Products Co., 329 Bleecker St., New York 14, N. Y.-21
Jichols Products Co., 329 Bleecker St., New York 14, N. Y.-21
Poerfic Electric Co., 15th. Sales Div., 556 W. Monros St., Chicago 6, Ill.-21
Poerfic Electric Co., 20 N. Wacker Dr., Chicago, 111-33
Perfection Mica Co., 20 N. Wacker Dr., Chicago, 111-33
Product Top., Reading, Pa.-24-18-19-31-40-41
Philmore Mfg. Co., 13 University Pl., New Brunswick, N. J.-19-40
Phostron Instrument & Electronic Co., 151
Pasadena Ave., S. Posadeno, Calif.-10
Phelps Dodge Copper Products Corp., 300 Park Ave., New York 22, N. Y.-41
Philmore M Pomona, Colif.-27 Porcelain Products, P. O. Box 300, Findlay, Ohio-19 Ohio-19
Precise Measurements Co., 942 Kings Highway,
Brooklyn 23, N. Y.-10
Premax Products Div. Chisholm-Ryder Co.,
Niagara Falls, N. Y.-17 O-Line Mfa. Corp., 1562 61 St., Brooklyn 19, N. Y.-3-7 Quletrole Co., 395 St. John St., Spartanburg, S. C.-8-22 Quietrole Co., 395 St. John St., Spartanburg, S. C.-8-22
Radio Merchandise Sales, 2016 Branxdale Ave., New York 62, N. Y.-17
Radio Supply & Eng'g. Co., 85 Selden St., Detroit 1, Mich.-16-20
Rore Earths, Inc., Box 488, Pompton Plains, N. J.-29
Roytheon Mfg. Co., Equip Marketing Dept., Woltham, Mass.-20
R-Columbia Products Co., 305 Waukegan Ave., Highwood, III.-8
Reed & Prince Mfg. Co., 10 Duncan Ave., Worcester 1, Mass.-31
Rhodes & Sons, M. M., 12 Porter St., Taunton, Mass.-5
Rite-Lite Mfg. Co., 3243 W. Lawrence Ave., Chicago 25, III.-21
Rochester Iron & Metal, 335 St, Paul St., Rochester, N. Y.-41
Rogal Tube Bendina Co., 3543 S. Normal Blvd., Chicago 9, III.-41
Rogan Bros., 8031 N. Monticello Ave., Skokle, III.-20
Rohn Mfg. Co., 116 Limestone Bellevue, Peoria 5, III.-3-16
Romar Plastics, Inc., 1311 E. Main St., St. Charles, III.-10-12-20

### 11-KITS

Kits,	AM, FM Tuner 1
Kits,	audio
Kits,	battery charger, eliminator 3
Kits,	crystal set 4
Kits,	educational radio-TV 5
Kits,	electric eye equipment 6
Kits,	plx tube conversion 7
Kits,	power supply 8
Kits,	radio control 9
Kits,	short-wave set
Kits,	speaker enclosure11
Kits,	test equipment
Kits,	TV booster
Kits.	TV chassis

Alco Electronics Mfg., 3 Wolcott Ave., Law-rence 1, Mass.-3-4-5-8-12

Allied Radio Corp., 100 N. Western Ave Chacago 80, Ill.-1-2-3-4-8-10-12
American Electronics Co., 1203 Bryant Ave., New York 59, N. Y.-5
Anton Electronic Labs., 1226 Flushing Ave., Brooklyn 37, N. Y.-5-3
Anton Electronic Labs., 1026 Flushing Ave., Brooklyn 37, N. Y.-5-3
Arrow Mrg. Div., Box 20 Jumbus, 1rd.-7
Arvive and Control of the Corp. 17 P. Rev. 17
Arvive and Control of the Corp. 17 P. Rev. 18
Bellwood, Ill.-11
Central Electronics, 1247 W. Belmont Ave., Chicago 13, Ill.-12
Certified Radio Labs., 5507 13 Ave., Brooklyn 19, N. Y.-5-14
CE Electronics Corp. 305 Dallas St., N.E., Chicago 13, Ill.-12
Certified Radio Labs., 5507 13 Ave., Brooklyn 19, N. Y.-5-14
CE Electronics Corp. 305 Dallas St., N.E., Chicago Stondard Transformer Corp., 3501 W. Addlson St., Chicago 31, Ill.-2
Collins Audio Products, P. O. Box 368, Westfield, N. J.-1
Colman Tool & Macchine Co., P. O. Box 7026, Amarillo, Tex.-7
Colortone Electronics, 100 Frank Rd., Hicksville, N. Y.-8-12
D8 M. Y.-8-12
D8 M. Y.-8-12
D8 M. Y.-8-12
D9 M. Y. Selley M. Y. Selley M. W. Chicago M. Ave., Chicago 47, Ill.-4-13
Dyna Co., 5142 Master St., Philadelphia 31, Pa.-2
Eby Sales Co., 130 Lafoyette St., New York 13, N. Y.-2-12
Electronic Instrument Co., 84 Withers St., Brooklyn N. N. -2-3-12
Electronic Medical St., N. Selley M. Se

Worner Electronic Devices, Rankin 1, 111.-6

### 12—POWER SUPPLIES. **BATTERIES &** ACCESSORIES

Batteries,	dry cell	radi	0 .		. 15	٠		 1
Batteries,	hearing	aid						 2
Batteries,	mercury	a fu						14
Batteries,	solar .							 13
Batteries,								
<b>Battery</b> ch								
Battery el								
Dividers, v								
Dynamata								
Generator	s, power							 8
inverters,								
Pawer Pla								
Regulators	, voltag	e .						 11
Selenium	Rectifier	5 (50	ee :	Sec		15	;)	
Vibratars,	auto ra	dlo						 12

Acme Battery Corp., 59 Pearl St., Brooklyn, N. Y.-1-2

Acme Battery Corp., 59 Pearl St., Brooklyn, N. Y.-1-2
Alco Electronics Mfg., 3 Wolcott Ave., Lawrence 1, Mass.-10-11
American Electronics, Inc., 655 W. Washington Blvd., Los Angeles 15, Calif.-7-8-9-10
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-12
American TV & Radio, 300 E. 4 St., St. Paul I, Minn.-4-5-9-12
Anton Electronic Labs., 1226 Flushing Ave., Brooklyn 37, N. Y.-11
Applegate & Co., C. J., 1816 Grove St., Boulder, Colo.-11
Associated Specialties, 1751 Main St., Orefield, Pa.-10
Authorized Mfrs. Service, 919 Wyckoff Ave., Brooklyn 27, N. Y.-11
Barker & Williamson, 235 Fairfield Ave., Upper Darby, Pa.-10
Barry Electronics Corp., 512 Broadway, New York 12, N. Y.-10
Berger Communications, 109-01 72 Rd., Forest Hills, N. Y.-4-5
Bond Electric Corp., Div. Olin Industries, 505 Park Ave., New York, N. Y.-1
Bright Star Industries, 600 Getty Ave., Clifton, N. J.-1
Burgess Battery Co., Freeport, III.-1-2
Burlington Instrument Co., 203 N. 3 St., Burlington, Iowa-11
Carter Motor Co., 2644 N. Maplewood Ave., Chicago 47, III.-7
CBC Electronics Co., 2601 N. Howard St., Philadelphia 33, Pa.-11
Chatham Electronics, Div. Gera Corp., 630 W. Mt. Pleasant Ave., Livingston, N. J.-4-11
Chicago Standard Transformer Corp., 3501 W. Addison St., Chicago 31, III.-11
Clarostat Mfg. Co., 1 Washington St., Dover, N. H.-6
Colortone Electronics, 100 Frank Rd., Hicksville, N. Y.-11
Cornell-Dubilier Electric Corp., 333 Hamilton Blvd., S. Plainfield, N. J.-9-12
Crest Transformer Corp., 1834 W. North Ave., Chicago 22, III.-11
Celectonics, Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-9
Electronic Instrument Co., 84 Withers St., Brooklyn 11, N. Y.-4-5
Electronic Instrument Co., 84 Withers St., Brooklyn 11, N. Y.-4-5
Electro-Tech Equipment, 308 Canal St., New York 13, N. Y.-11
Electro Products Labs., 4501 N. Ravenswood Ave., Chicago 40, III.-5-10
Electro-Tech Equipment, 308 Canal St., New York 13, N. Y.-11
Electro Products Labs., 4501 N. Ravenswood Ave., Chicago 7, III.-19-10
Electro-Tech Equipment, 308 Canal St., New York 13, Eloin Electronic Corp., P. O. Box 13, Bluffton, Ind.-4
Ind.-4
Federal Telephone & Radia Co., Div. IT&T, 100 Kingsland Rd., Clifton, N. J.-4-5-17
Forest Electric Co., 7216 Circle Ave., Forest Park, 111.-11
Furst Electronics. Inc., 3322 W. Lawrence Ave., Chicago 25, III.-10-11
General Dry Batterles, Inc., 13000 Athens Ave., Cleveland 7, Ohlo-1-2-14
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.-4-7-9-11
G & M Equipment Co., 7315 Varna Ave., N. Hollywood, Calif.-9
Heath Co., 305 Territorial Rd., Benton Harbor, Mich.-5
H & H Products, P. O. Box 2333, Term. Annex, Los Angeles, Calif.-4
Hoffmon Electronics Corp., 3761 S. Hill St., Los Angeles 43, Calif.-13
Inet Div., Leach Coro., 4441 S. Santa Fe Ave., Los Angeles 58, Calif.-10
Interelectronics Corp., 2422 Grand Concourse, New York 58, N. Y.-1-2-3-4-7-9

Int'l Rectifler Corp., 1521 E. Grand Ave., El Segundo, Callf.-13
Int'l Research Assoc., 2221 Warwick Ave., Santa Monica, Calif.-10
Iames Vibrapowr Co., 4050 N. Rockwell Ave., Chicago 18, Ill.-9-12
JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.-11
Kato Engineering Co., 1415 1 Ave., N., Mankato, Minn.-4-8-9-10
Kay Lab, 5725 Kearney Villa Rd., San Diego 12, Calif.-10
Kellogg Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, Ill.-1-3-4-5
Kepco Labs., 131-38 Sanford Ave., Flushing 55, N. Y.-5-10
Krohn-Hite Instrument Co., 580 Massachusetts Ave., Cambridge 39, Mass.-10
Kurman Electric Co., 35-18 37 St., Long Island City 1, N. Y.-12
Lab. of Electronic Eng'g., 413 "L" St. N.W., Washington 1, D. C.-10
McColpin-Christie Corp., 3410 W. 67 St., Los Angeles 43, Calif.-4-9
Magnavox Co., 2131 Bueter Rd., Ft. Wayne 4, Ind.-1-2
Mollory & Co., P. R., 3029 E. Washington St., Indianapolis 6, Ind.-2-4-12-14
Marathon Battery Co., 840 Henrietta St., Wausou, Wisc.-1-2
Marine View Electronics, 28 Main St., White Plains, N. Y.-4-6-8
Microtran Co., Div. Crest Labs., 84-11 Rockaway Beach Blvd., Rockaway Beach 93, N. Y.-11
Miller Instrument, Inc. Wm., 325 N. Halstead Ave., Pasadena 8, Calif.-9-11
Miller Co., Sanford, 691 Bedford Ave., Brooklyn 6, N. Y.-4-5-10
Morgan-Rhein, Inc., 2319 McRae Ave., Orlando, Fla.-10
Moulic Specialties Co., 1005 W. Washington St., Bloomington, Ill.-10
Multi-Tron Lab., 4624 Washington Blvd., Chicago 44, Ill.-11
National Carbon Co., 30 E. 42 St., New York 17, N. Y.-1-2
Nyt Electronics, Inc., 2979 N. Ontario St., Burbank, Calif.-10



Ohmite Mfg. Co., 3601 Howard St., Skokie, 111.-6
Olin Industries, 655 Madison Ave., New York, N. Y.-1-2
Onan & Sons, D. W., 2515 University Ave., S.E., MInneapolis 14, Minn.-10
Perma-Power, Co., 4727 N. Damen Ave., Chicago 25, III.-5-11
Peschel Electronics., 13 Garden St., New Rochelle, N. Y.-4-5-11
Philco Corp., Accessory Div., A & Allegheny Ave., Philadelphia 34, Pa.-1
Pioneer Gen-E-Motor Corp., 5941 W. Dickens Ave., Chicago 39, III.-4-8
Plastic Capacitors, 2511 W. Moffat St., Chicago 47, III.-11
Precise Development Corp., 2 Neil Court, Oceanside, L. I., N. Y.-4-5-11
Precise Measurements Co., 942 Kings Highway, Brooklyn 23, N. Y.-9-11
Power Supplies, 1005 Olive St., Highland, III.-4-5-10-11
Press Wireless Labs., 25 Prospect Pl., West Newton 65, Mass.-6
Radiart Corp., 3455 Vega Ave., Cleveland 13, Ohio-10-12
Radio Corp. of America, Camden, N. J.-12
Ray-O-Vac Co., 212 E. Washington St., Madison 10, Wisc.-1-2
Raytheon Mfg. Co., Equip Marketing Dept., Waltham, Mass.-4-11
Sangamo Electric Co., Marion, III.-7-8
Schauer Mfg. Co., 45 Alpine St., Cincinnati 36, Ohio-4-5
Service Instruments Co., 171 Official Rd., Addison, III.-5
Service Instruments Co., 171 Official Rd., Addison, III.-5
Service Instruments Co., 520 Pusey Ave., Collingdel, Pa.-6,11
Simpson Electric Co., 5208 W. Kinzie St., Chicago 44, III.-7
Sola Electric Co., 4633 W. 16 St., Chicago 50, III.-10-11
Sonar Radio, 3050 W. 21 St., Brooklyn 24, N. Y.-3-4
Sterling Mfg. Co., 7201 Wentworth Ave., Cleveland, Ohio-4

Telkor, Inc., P. O. Box 186, Elyria, Ohio-5-9
Terado Co., 1067 Raymond Ave., Dept. 2, St.
Paul 14, Minn.-9-10
U. S. Electric Mfg. Co., 222 W. 14 St., New
York 11, N. Y.-1-3
United Transformer Co., 150 Varick St., New
York 13, N. Y.-11
Vidalre Electronics Mfg. Corp., 576 W. Merrick Rd., Lynbrook, N. Y.-11
Vokar Corp., 7300 Huron River Dr., Dexter,
Mich.-5-11-12
Welch Mfg. Co., W. M., 1515 Sedgwick St.,
Chicago 10, Ill.-4.
Willard Storage Battery Co., 246 E. 131 St.,
Cleveland 1, Ohlo-1-3-4
Wincharger Corp., E. 7 & Division Sts., Sioux
City 2, Iowa-7-8-9-10
Winpower Mfg. Co., Newton, Iowa-8-10
Workman TV, Inc., 309 Queen Anne Rd.,
Teaneck, N. J.-11
Yardney Electric Corp., 40 Leonard St., New
York 13, N. Y.-3

### 13-RECEIVERS, TV-RADIO **CONVERTERS & TUNERS**

Automatic Tuning Mechanism, radio	
Baasters, auta radio	2
Baasters, TV & UHF	3
Conversion Strips, UHF-TV	4
Canverters, colar TV	19
Canverters, UHF-TV	5
Radia sets, AM	6
Radlo sets, AM-FM	
Radio sets, FM	
Radia sets, transistor	
	,
Receivers, communications (see	
Sec. 9)	10
Sec. 9) Receivers & Meters, coin-operated	
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV	11
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV	11 12
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV	11 12 13
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV	11 12 13 14
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV Television sets, color Tuners, AM Tuners, AM-FM	11 12 13 14 15
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV Television sets, color Tuners, AM Tuners, AM-FM Tuners, FM	11 12 13 14 15
Sec. 9) Receivers & Meters, coin-operated Remate Cantrol units, TV Television sets, color Tuners, AM Tuners, AM-FM	11 12 13 14 15 16

ABT Mfg. Co., 715 N. Kedzie Ave., Chicago 12, 111.-10
Admiral Corp., 3800 W. Cortland St., Chicago 47, 111.-6-9-11-12-13
Aeromotive Equipment, 1632 Central St., Kansas City 8, Mo.-15
Allied Radio Corp., 100 N. Western Ave., Chicago 80, 111.-15
Altec Lansing Corp., 9356 Santa Monica Blvd., Beverly Hills, Calif.-6-7
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-6-7-8-9-16
American TV & Radio, 300 E. 4 St., St. Paul 1, Minn.-12-13
Ampro Corp., 2835 N. Western Ave., Chicago 18, 111.-14
Anchor Radio Corp., 2215 S. St. Louis Ave., Chicago 23, 111.-5
Andrea Radio, 27-01 Bridge Plaza N., Long Island City 1, N. Y.-6-7-8-12-13
Ansley Mfg. Co., Arthur, Doylestown, Pa.-7-15
Arvin Industries, Inc., Columbus, Ind.-6-7
Astatic Corp., P. O. Box 120, Conneaut, Ohio-3
Authorlzed Mfrs. Service, 919 Wyckoff Ave.,
Brooklyn 27 N. Y.-141-14 Ohio-3
Authorized Mfrs. Service, 919 Wyckoff Ave., Brooklyn 27, N. Y.-14-15-16
Automatic Radia Mfg. Co. 122 Brookline Ave., Boston 15, Mass.-6-7-8-9
Bell Sound Systems, 555 Marion Rd., Columbus 7, Ohio-15-16
Bendix TV & Broadcast Receiver Div., Bendix Aviation Corp., E. Joppa Rd., Towson 4, Md.-13
Benrus Watch Co., 50 W. 44 St., New York, N. Y.-6-7-8
Bergen Labs., 11 Godwin Ave., Fair Lawn, N. J.-1-11
Berger Communications, 109-01, 72 Rd., For-Bergen Labs., 11 Godwin Ave., Falr Lawn, N. J.1-11
Berger Communications. 109-01 72 Rd., Forest Hills, N. Y.-15-17
Blonder-Tongue Labs., 526 North Ave., Westfield, N. J.-3-4-5-11
Boaen Co., David, 29 9 Ave., New York 14, N. Y.-3-14-15-16
Brainord Electronics, 8586 Santa Monica Blvd., Los Angeles 46, Calif.-6-7-8-14-15-16
B R Electronics, 1701 Boone Ave., New York 60, N. Y.-6-7-8
Browning Labs., Inc., 750 Main St., Winchester, Mass.-15-16
Bulova Watch Co., Bulova Park, Flushing 70, N. Y.-6-7-8-9
Calbest Electronics Co., 4801 Exposition Blvd., Las Angeles 16, Calif.-6-7-8-13
Cal-Lee Mfa. Co., 5653 W. Adams Blvd., Los Angeles 16, Calif.-14-15-16
Capehart-Farnsworth Corp., 3700 Pontiac St., Fort Wayne, Ind.-4-7-13-15
CBS-Columbia, Inc., 3400 47 Ave., Long Island City 1, N. Y.-5-6-7-9-12-13 CGS Labs., Inc., 391 Ludlow St., Stamford, Conn.-1
Collins Audio Products, P. O. Box 368, Westfield, N. J.-16
Color Converter, Inc., P. O. Box 250, Columbia City, Ind.-19
Conrac, Inc., 19217 E. Foothill Blvd., Glendora, Callf.-13
Crosley Radio & TV, 1329 Arlington St., Cincinnat 25, Ohio-6-7-8-13
Delco Radio, 1446 S. Home Ave., Kokomo, Ind.-6
DeWald Radio Mfg. Corp., 35-15 37 Ave., Long Island City 1, N. Y.-6-7-9-13
DuMont Labs. Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-3-8-11-12-13
DX Radio Products Co., 2300 W. Armitage Ave., Chicago 47, Ill.-3-5-17
Dynavox Corp., 40-05 21 St., Long Island City 1, N. Y.-6
Edu-Craft Soles Corp., 150-45 12 Ave., Whitestone, N. Y.-16
Electrend Products Corp., State & Water Sts., St. Joseph, Mich.-2
Electron Enterprises, 6917 Stanley Ave., Berwyn, Ill.-6-10
Electro-Voice, Inc., Buchanan, Mich.-15-16
Emerson Radio & Phonograph Co., 14 & Coles Sts., Jersey City, N. J.-6-7-8-9-12-13
Espey Mfg. Co., 200 W. 57 St., New York 19, N. Y.-7-15
Fada Radio & Electric Co., 525 Main St., Belleville 9, N. J.-12-13
Federal Electronics Sales, Federal Electronics Bldg., Rockville Centre, N. Y.-11
Fisher Radio Corp., 21-21 44 Dr., Long Island City 1, N. Y.-6-8-15
Fleetwood Corp., 1037 Custer Dr., Toledo 12, Ohio-13
Fleming, Inc., Edward, Broad St., Westport, Conn.-11 Didg., Rockville Centre, N. Y.-11
Fisher Radio Corp., 21-21 44 Dr., Long Island City 1, N. Y.-6-7-8-15
Fleetwood Corp., 1037 Custer Dr., Toledo 12, Ohio-13
Fleming, Inc., Edward, Broad St., Westport, Conn.-11
Garod Radio. 70 Washington St., Brooklyn 1, N. Y.-14-15
General Instrument Corp., 829 Newark Ave., Elizobeth 3, N. J.-1-3-4-5-17
Gonset Co., 801 S. Main St., Burbank, Calif.-6-8-11-14-16
Gotham TV Corp., 123 W. 64 St., New York 23, N. Y.-6-13
Granco Products, Inc., 36-07 20 Ave., Long Island City, N. Y.-5-7-8-16
Grybar Electric Co., 420 Lexington Ave., New York, N. Y.-15
Guild Radio & Television Co., 460 N. Eucalyptus Ave., Inalewood 3, Calif.-6-13
Hallicrafters Co., 4401 W. 5 Ave., Chicago 24, Ill.-6-7-8-13-15
Harman-Kardon. 520 Main St., Westbury, L. I., N. Y.-7-8
Hastings Products, 161 Newbury St., Boston 16, Mass.-8
Havdon Mfa. Co., 245 E. Elm St., Torrington, Conn.-14-15
Heath Co., 305 Territorial Rd., Benton Harbor, Mich.-6-14-16
Hinners-Golanek Radio Corp., 25-14 Broodway, Long Island City 6, N. Y.-6-7
Hoffman Electronics Corp., 3761 S. Hill St., Los Angeles 43, Calif.-6-11-12-13
Hotel Radio Corp., 601 W. Fort St., Detroit 26, Mich.-10
Industrial TV. Inc., 359 Lexington Ave., Clifton, N. J.-3-5
Insuline Corp. of America, 186 Granite St., Philadelphio 3, Pa.-3-5
Kav Lab., 5725 Kearney Villa Rd., San Diego 12, Calif.-11
Kroft Bros., 148-12 94 Ave., Jamaica 52, N. Y.-10
LEI, Inc., 380 Ook St. Copiaque, N. Y.-6-9
Lyfle Engig, & Mac. Co., 105 W. Monrae St., Chicago 3, Ill.-15-16-17
Magnavox Co., 2131 Bueter Rd., Ft. Wayne 4, Ind.-6-7-12-13-17
Molor Electronics, 42 Meserole St., Brooklyn 6, N. Y.-6
Main Enterprises, Inc., 3733 E. Olympic Blvd., Los Angeles 23, Calif.-11
Mortin & Co. H. S., 1916 Greenleaf Ave., Evanston, Ill.-15
Mottins TV & Rodio Carp., 10 W. 181 St., New York 53, N. Y.-3-6-7-12-13
Meck Industries, John, Plymouth, Ind.-13
Mercury Morine Electric Co., 2905 Jones St., Son Francisco, Calif.-1
Miller Electronics, 2840 Naomi St., Burbank, Calif.-6
Miller Co., 10 W., 5917 S. Main St., Los Angel

### **OMISSIONS**

Listings have been omitted in all cases where, after three requests, a company has failed to return our directory questionnaire or otherwise verify its activity.

Monarch Condenser, 550 Westchester Ave.,
New York 55, N. Y.-3
Motorola, Inc., 4545 Augusta Blvd., Chicago
51, III.-6-9-12-13
Muntz TV, Inc., 1000 Grey Ave., Evanston,
III.-12-13
National Aircraft Corp. Electronics Div., 3411
Tulare Ave., Burbank, Calif.-9
National Co., 61 Sherman St., Malden 48,
Mass.-6-7-8-15
Newcomb Audio Products, 6824 Lexington
Ave., Hollywood 38, Calif.-6-15
Ook Electronics Co., 150 Oak St., Buffalo,
N. Y.-3
Olympic Radio & TV, Inc., 34-01 38 Ave.,
Long Island City 1, N. Y.-6-79-13
Pacific Mercury, 8345 Havenhurst, Sepulveda,
Calif.-12-13
Packard-Bell Co., 12333 W. Olympic Blvd., Long Island City 1, N. Y.-6-7-9-13
Paclfic Mercury, 8345 Havenhurst, Sepulveda, Calif.-12-13
Packard-Bell Co., 12333 W. Olympic Blvd., Los Angeles 64, Calif.-6-7-12-13
Palmer Inc., M. V., 4002 Fruit Valley Rd., Vancouver, Wash.-8
Pedersen Electronics, P. O. Box 572, Lafayette, Calif.-15
Philco Corp., Tioga & C Sts., Philadelphia 34, Pa.-6-7-8-9-12-13
Pilot Radio Corp., 37-06 36 St., Long Island City 1, N. Y.-5-15-16
Pioneer Gen-E-Motor Corp., 5941 W. Dickens Ave., Chicago 39, Ill.-5
Precision Electronics, 9101 King Ave., Franklin Park, Ill.-15
Precision Radiation Instruments, Inc., 4223 W. Jefferson Blvd., Los Angeles 16, Calif.-15-16
Radio Corp. of America, Camden, N. J.—6-7-8-9-12-13
Radio Corp. of America, RCA Tube Div., Harrison, N. J.-17
Radia Craftsmen, Inc., 4400 N. Ravenswood Ave., Chicago 40, Ill.-15-16
Radio Eng'a, Labs., 36-40 37 St., Lang Island City 1, N. Y.-16
Raytheon Mfg. Co., TV-Radio Div., 5921 W. Dickens Ave., Chicago 39, Ill.-6-9-12-13
Regency Division, Idea, Inc., 7900 Pendleton Pike, Indianapolis 26, Ind.-2
Roland Radio, 716 S. Columbus Ave., Mt. Vernon, N. Y.-6-7
Ryan Industries, 10910 S. Vermont Ave., Los Angeles, Calif.-18
Sargent-Rayment Co., 1401 Middle Harbor Rd., Oakland 20, Calif.-15 Koland Radio, 716 S. Columbus Ave., Mt. Vernon, N. Y.-6-7.
Ryan Industries, 10910 S. Vermont Ave., Los Angeles, Calif.-18
Sargent-Rayment Co., 1401 Middle Harbor Rd., Oakland 20, Calif.-15
Scott, Inc., H. H., 385 Putnam Ave., Cambridge 39, Mass.-15-16
Scott Radia Labs., Liberty St., Plymouth, Ind.-6-7-8-12-13
Sentinel Radio Corp., 2100 Dempster St., Evanston, Ill.-6-7-9-12-13
Service Instruments Co., 171 Official Rd., Addison, Ill.-3
Setchell-Carlson Inc., 330 5 Ave., N. New Brighton, St. Paul 12, Minn.-6-13-17
Sherwood Electronic Labs., 2802 W. Cullom Ave., Chicago 18, Ill.-15
Simpson Mfg. Co., Mark, 32-29 49 St., Long Island City 3, N. Y.-3
Sonora Radio & TV, 2023 W. Carroll Ave., Chicago 12, Ill.-6-7-8-13
Specialty Assembling & Packing, 79 Clinton Pl., Brooklyn 38, N. Y.-14
Spencer-Kennedy Laboratories, 1320 Soldiers Field Rd., Boston 35, Mass.-5
Standard Coil Products, 2085 N. Hawthorne Ave., Melrose Park, Ill.-4-17
Stratford TV, 2555 W. 21 St., Chicago 8, Ill.-13
Stromberg-Carlson Co., 100 Carlson Rd., Rochester, N. Y.-6-8-13-14-15-16-17
Superex Electronics Corp., 4-6 Radford Pl., Yonkers, N. Y.-3-6
Sylvania Electric Products, Inc., 1740 Broadway, New York 19, N. Y.-6-12-13
Tech-Master Corp., 75 Front St., Brooklyn 1, N. Y.-6-12-13-16-17
Techniques, Inc., 178 Central Ave., Hackensack, N. J.-9
Telechrome, Inc., 88 Merrick Rd., Amityville, L. I., N. Y.-12
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-3-5-11
Tenna-Lite Corp., 1809 N. Milwaukee Ave., Chicago 47, Ill.-3
Thordarson-Meissner Mfg. Div. Maauire Industries, Mt. Carmel, Ill.-6-7-8-13-14-15-16
Trad TV Corp., 1001 1 Ave., Asbury Park, N. J.-13
Trukaradio Nat'l. Sales, 228 E. Park Ave., Wheaton, Ill.-6
Trud Truer Co., 40-09 82 St., Jackson Blvd., Chl-cago 6, Ill.-6-7-8-13
Trukaradio Nat'l. Sales, 228 E. Park Ave., Wheaton, Ill.-6
Trudone Electronic Co., 820 N. Fairfax Ave., Los Angeles, Calif.-11
TV Tuner Co., 40-09 82 St., Jackson Heights, N. Y.-17 Voricon Corp., 65 Hope St., Brooklyn 11, N.Y.-5 Videon Electronic Corp., 902 E. Michigan St., Indianapolis 2, Ind.-3-5 Woldom Electronics, 4625 W. 53 St., Chicago, III.-1 Waterproof Electric Co., 801 S. Main St., Bur-bank, Calif.-14-16-17 Wells-Gardner & Co., 2701 N. Kildare Ave., Chicogo 39, III.-13

Westinghouse Electric Corp., Metuchen, N. J.-6-7-12-13 Zenith Radio Corp., 6001 Dickens Ave., Chicago 39, III.-6-7-8-9-13

### 14—RESISTORS & **RESISTIVE CONTROLS**

Attenuators
Ballasts
Controls, loudness, volume,
tome, etc
Line Cords, resistor 4
Pads, H, T, etc 5
Potentiometers
Resistors, adjustable tap 7
Resistors, carbon 8
Resistors, fixed composition 9
Resistors, fixed wire wound10
Resistors, fuse
Resistors, glass
Resistors, molded
Resistors, power
Resistors, precision15
Resistors, variable carbon16
Resistors, variable wirewound17
Resistors, vitreous
Rheostats19
Suppressors, auto ignition (see
Sec. 8)
Thermistors20

Aerovox Corp., Distr. Div., 740 Belleville Ave., New Bedford, Mass.-8-9-10-13-15-16
A-K Mfg. Co., 115 S. Northwest Hwy., Barrington, III.-4
Allen-Bradley Co., 1326 S. 2 St., Milwaukee, Wisc.-3-6-9-16-17-19
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-6-15-17-19
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Telectro Industries Corp., 35-16-37 St., Long Island City, N. Y.-5-6-14-16-18-24-27-28
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Tele-Diagnosis Co., 155 W. 72 St., New York 32, N. Y.-9
Telematic Industries, Inc., 16 Howard Ave., Brooklyn 21, N. Y.-3
Tele-Test Instrument Co., 92-24 Queens Blvd., Rega Park, L. I., N. Y.-8-9-10-41
Telex, Inc., 1633 Eustis St., St. Paul, Minn.-16
Tel-Instrument Electronics, 728 Garden St., Carlstadt, N. J.-19-20-21-22-23-24-25
Telonic Industries, 73 N. 2 Ave., Beech Grove, Ind.-19-20-21-22-23-24-25
Tescon Inc., Springfield Gardens, N. Y.-41
Texas Instruments, Inc., 6000 Lemmon Ave., Dallos 9, Tex.-29
Transvision, Inc., New Rochelle, N. Y.-8-10-45-47
Tricraft Products Corp., 1535 N. Ashland Ave., Chicago 22, Ill.-46-48
Triplett Electrical Instrument Co., Harmon Rd., Bluffton, Ohio-1-19-20-21-24-25-32-35-36-44-48-50-51-52
Triumph Mfg. Co., 1829 S. 55 St., Chicago 50, Ill.-98
Trojan Electronics, 3706 N. Halsted St., Chicago 13, Ill.-9
TV Engineers, Inc., 3325 W. Bryn Mawr Ave., Chicago 45, Ill.-948
TV Hdw. Mfg. Co., 919 Taylor Ave., Rockford, Ill.-46
TV Products Co., 145-68 228 St., Springfield Gardens 18, N. Y.-9-41
United Audio Products, Div. United Opticol Mfg., 202 E. 19 St., New York 3, N. Y.-36
United Transformer Ca., 150 Varick St., New York 13, N. Y.-15
Universal Circuit Controls Corp., 3610 Oaktan St., Skokie, Ill.-43
Vector Electronics Mfg. Corp., 576 W. Merrick Rd. Lynphook, N. Y.-3-41
Visulite Co., 423 Broome St., New York, N. Y.-39-45
Woveforms, Inc., 333 6 Ave., New York, N. Y.-3-9-45
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Woveforms, Inc., 333 6 Ave., New York, N. Y.-3-9-45
Woveforms, Inc., 333 6 Ave., New York, N. Y.-3-9-45
Woveforms, Inc., 333 6 Ave., New York, N. Y.-3-118-26-51
Welch Mfg. Co., W. M., 1515 Sedgwick St., Chicago 10, Ill.-34-35-50
Weston Electronics

51-52 Winston Electronics, Inc., 4312 Main St., Phila-delphia 27, Pa.-4-10-19-20-21-27-47 Workman TV, Inc., 309 Queen Anne Rd., Tea-neck, N. J.-41



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Tube pullers
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Acra Tools & Die Works, 4554 N. Broadway Ave., Chicago 40, Ill.-6

Admiral Corp., 3800 W. Cortland St., Chicaga 47, Ill.-1

Aerolite Electronics Corp., 507 26 St., Union City, N. J.-1-12-18

A-K Mfg. Co., 115 S. Northwest Hwy., Barrington, Ill.-12

Alden Products Co., 117 N. Main St., Brocktan 64, Mass.-12

Allled Mfg. & Sales Co., 201 N. Wells St., Chicago 6, Ill.-5

Alpert Co., Ned, 2878 N. Holton St., Milwaukee 12, Wisc.-8

Amailte, Inc., 1884 Pitkin Ave., Brooklyn 12, N. Y.-11

American Electric Cable Co., 181 Appleton St., Holyoke, Mass.-12

American Electrical Heater Ca., 6110 Cass Ave., Detroit 2, Mich.-23-24

American Mercantile Co., 33 W. 42 St., New York 36, N. Y.-23

American Phenolic Carp., 1830 S. 54 Ave., Chicago 50, Ill.-1

American Radio Hdw. Co., 152 MacQuesten Pkwy. S., Mt. Vernon, N. Y.-1-18-33

Anchor Products Co., 2712 Montrose Ave., Chicago 18, Ill.-23

A P Electro Lab., Box 862 Chestnut Sta., Union, N. J.-15

Argos Products Co., Genoa, Ill.-2

Arrow Fastener Co., 1 Junius St., Brooklyn 12, N. Y.-27

Audak Ca., 500 5 Ave., New York, N. Y.-8

Bache Semon & Co., 636 Greenwich St., New York 14, N. Y.-14

Barb City Industries, 1150 S. 4 St., DeKalb, Ill.-30

Boumker Mfg. Co., 3826 Summit St., Toledo 11, Ohlo-2-5

Berger Communications, 109-01 72 Rd., Forest Hills, N. Y.-17-22

Birnbach Radio Co., 6541 Euclid Ave., Cleveland 3, Ohlo-3-33

Blonder-Tongue Labs., 526 North Ave., Westfield, N. J.-8-28

Bruno Tools, Inc., 9330 Santa Monica Blvd., Beverly Hills, Calif.-30

Caliri Mfg. Co., 15 Union St., Lawrence, Mass.-23

Cal-Lee Mfg. Co., 15 Union St., Lawrence, Mass.-23

Cal-Lee Mfg. Co., 5653 W. Adams Blvd., Los Angeles 16, Calif.-30

Caliri Mfg. Co., 9999 Broadstreet St., Detroit 1, Mich.-11

Cauhorn Mfg. Co., 9999 Broadstreet St., Detroit 1, Mich.-11

Cauhorn Mfg. Co., 9999 Broadstreet St., Detroit 1, Mich.-11

Cauhorn Mfg. Co., 9999 Broadstreet St., Detroit 1, Mich.-11

Champion DeArment Tool Co., S. Main St., Meadville, Pa.-8-16-30
Chase Mfg. Co., 5008 W. Jefferson Blvd., Los Angeles 16, Calif-11
Colman Tool & Machine Co., P. O. Box 7026, Amarillo, Texas-17
Columbus Eng'g. Co., Electronics-Nucleonics Div., P. O. Box 464, Columbus, Nebr.-19
Components Corp., 106 Main St., Denville, N. J.-8
Cummins-Chicago. 4740 N. Rayenswood Chicagon Components Corp., 106 Main St., Columbus Cummins-Chicago. N. J.-8
Cummlns-Chicago, 4740 N. Ravenswood, Chicago, III.-9-10-21
Dee Electric Co., 1101 N. Paulina St., Chicago 22, III.-24
Drake Electric Works, 3656 N. Lincoln Ave., Chicago 13, III.-22-23-24
Dreier Bros., 5642 Lake Park Ave., Chicago 37, III.-21 Dunwell Mfg. Co., Dept. T56, Corlstodt, N. J.-Duotone Co., Locust St., Keyport, N. J.-8 Duro Specialty Co., 8 Bennett St., Lynn, Mass.-31-32 Duotone Co., Locust St., Keyport, N. J.-8
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Ebcor Electronics Co., 87 Merrick Rd., Baldwin,
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Eitel-McCullough, Inc., 798 San Motea Ave.,
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Electroic Soldering Iron Co., W. Elm St., Deep
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Erwood, Inc., 1770 W. Berteau Ave., Chicaga
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Esca Mfg. Co., Box 344, Summit, Ill.-5
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Federal Electronics Soles, Federal Electronics
Bldg., Rockville Centre, N. Y.-16-30
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Gee-Lar Mfg. Co., 418 S. Wyman St., Rockford, Ill.-5-14-31-32
General Cement Mfg. Co., 919 Taylor Ave.,
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Gramer-Halldorson Transformer Corp., 2734 N. Pulaski Rd., Chicago 39, III.-22
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Grobet File Co. of America, 421 Canal St., New York 13, N. Y.-30
Heller Ca., 2135 Superior Ave., Cleveland 14, Ohio-27
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Hunter Sales R N Div., Hunter Tools, 6608 S. Gretna Ave., Whittier, Calif.-1-11-30
Ideal Industries, 3316 Park Ave., Sycamore, III.-3-28-29-30
iz Mfg., 325 N. Hayne Ave., Chicago 12, III.-13-31-32
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Insuline Corp. of America, 186 Granite St., Manchester, N. H.-1-7-8-12-18-23-32
International Resistance Co., 401 N. Brood St., Philadelphia 8, Pa.-30
Jacobson Mfg. Ca., S. I., 1414 S. Wabash Ave., Chicago 5, III.-5
Jerrold Electronics Corp., 2222 Chestnut St., Philadelphia 3, Pa.-7
JFD Mfa. Co., 6101 16 Ave., Brooklyn 4, N. Y.-1-6-12
Kedman Co., 233 S. 5 St., West, Salt Lake City 1. Utah-11
Kelloag Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, III.-3-4-7-8-10-11-16-21-23-24-27-28
Kemode Mfg. Co., 161 W. 18 St., New York 11, N. Y.-23
Keystone Electronics Corp., 423 Broome St., New York 13, N. Y.-12-7-12-13-18
K & G Electronics, 2738 N. Sheffield Ave., Chicago 45, III.-16-19-30
Kraeuter & Co., 563 18 Ave., Newark 3, N. J.-16-33
Kwikheat Mfg. Co., 30-38 Cummington St., Boston 15, Mass.-4-22-23-24
Lesh Mfg. Co., 30-38 Cummington St., Boston 15, Mass.-4-22-23-24
Lesh Heating & Eng'g Co., 900 W. Lycoming St., Philadelphia 40, Pa.-5
Mortindole Electric Co., Box 617 Edgewater Br., Cleveland 7, Ohio-28
Mothis Tower & Equip Co., P. O. Box 126, E. Peorla, III.-25
Memoc Aerial Ladder Co., 1007 N. W. 36 St., Oklahoma City 18, Okla.-34
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Micro-Circults Co., New Buffalo, Mich.-17 Miller Radia & TV, 627 E. Maumee St., Adrian, Mich.-6
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Mueller Mfg. Co., 23 Tuscan Rd., Maplewood, N. J.-14
National Tel-Tronics Corp., 52 St. Casimir Ave., Miller Radia & TV, 627 E. Maumee St., Adrian, National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.–18 National Tel-Tronics Corp., 52 St. Casimir Ave., Yonkers, N. Y.-18
Olympic Instrument Labs., Cove. Wash.-8
Oryx Sales Co., 9015 Wilshire Blvd., Beverly Hills, Calif.-23
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Phillips Mfg. Co., 2816 Aldrich Ave., S. Minneapolls, Minn.-22-23-24
Phillips Mfg. Co., 113 University Pl., New York 3, N. Y.-21-6-18
Portable Elec. Tools, 320 W. 83 St., Chicago 20, III.-9-11-21-29
Precise Measurements Co., 942 Kings Highway, Brooklyn 23, N. Y.-8-18
Preclsion Equipment Co., 3714 N. Milwaukee Ave., Chicago 41, III.-5
Production Tool & Fixture Co., 37 W. Main St., Oyster Bay, N. Y.-31
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Radia City Products Co., Centre & Glendale Sts., Easton, Pa.-12
Reed & Prince Mfg. Co., 10 Duncar Ave., Worcester 1, Mass.-11
Robertson & Roth, Box 534, Elmhurst, III.-8
Roche Co., Paul C., 11 Park Place, New York 7, N. Y.-22
Rohn Mfg. Co., 116 Limestone, Bellevue, Peoria 5, III.-2
Safety Nail Drive Corp., Clifton, N. J.-30
Scala Radio Co., 2814 19 St. San Francisco Peoria 5, III.-2
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Schupack Supply Co., 7331 Cottage Grove
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Scranton Aluminum Mfg. Co., 419 S. Wyaming
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Self-Lifting Piano Truck Co., Findlay, Ohio-5
Simpson Electric Co., 5208 W. Kinzle St., Chicago 44, III.-1
Sinko Mfg. & Tool Co., 3135 W. Grand Ave.,
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Sittler Corp., 18 N. Ada St., Chicago 7, III.12-28
Skil Corp., 5033 Elston Ave., Chicago 30, III.-Skil Corp., 5033 Elston Ave., Chicago 30, III.-8-9
Smith Heat Treating Co., 5869 Wilmington St., Los Angeles, Calif.-33
Smith, Inc., Herman H., 2326 Nostrand Ave., Brooklyn 10, N. Y.-1-12-18-25-31-32-33
South River Metal Prods. Co., 377 Turnpike, South River, N. J.-34
Special Products Co., P. O. Box 188, Rockville 9, Md.-16 Special Products Co., P. O. Box 188, Rockville 9, Md.-16
Speedway Mfg. Co., 1834 5. Laramie Ave., Cicero 50, Ill.,9-21
Star Expansion Products Co., 142 Liberty St., New York 6, N. Y.-31
Stark Mfg., P. O. Box 489, Tuscaloosa, Ala.-23
Stevens Walden, Inc., 467 Shrewsbury St., Worcester, Mass.-1-11-19-20-30-33
Tatu, Inc., Albert J., 85 Columbia Dr., Williamsville 21, N. Y.-30
Technicraft Co., 1156 Commonwealth Ave., Boston 34, Mass.-8-23-30
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Telematic Industries, Inc., 16 Howard Ave., Brooklyn 21, N. Y.-12
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TV Accessories Co., Box 368, Scottsdale, Ariz.-TV Accessories Co., Box 368, Scottsdale, Ariz.-23 TV Hdw. Mfg. Co., 919 Taylor Ave., Rockford, III.-5-7-13-30 U M & F Mfg. Corp., 10929 Vanowen St., North Hollywood, Calif.-5 Ungar Electric Tool Co., P. O. Box 312, Venice, Calif.-23-24 Calif.-23-24 U. S. Products, Inc., 1549 Hutchins St., Columbus, Ind.-25 Utica Drop Forge & Tool Corp., 2415 Whitesboro St., Utica 4, N. Y.-16-30-33 Vaco Products Co., 317 E. Ontario St., Chicago 11, III.-7-13-16-28-30
Vemaline Products Co., P. O. Box 222, Hawthorne, N. J.-22-23
Viking Tool & Machine, 2 Mair St., Belleville, N. J.-30 Visulite Co., 423 Broome St., New York, N. Y .-Vulcan Electric Co., 88 Holten St,, Danvers, Mass.-23-24 Waldom Electronics, 4625 W 53 St., Chicaga,

Wall Mfg. Co., P., Grave City, Pa.-4-18
Walsco Electronics Corp., 3602 Crenshaw
Blvd., Los Angeles 16, Calif.-1-14-19-28-31
Wassco Elec. Products Corp., 126 W. Case St.,
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Weller Electric Corp., 808 Packer St., Easton,
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Wen Products, Inc. 5806 Northwest Live Wen Products, Inc., 5806 Northwest Hwy., Chicago 31, III.-21-22 Weston Electrical Instrument Corp., Subsidiary Weston Electrical Instrument Corp., Subsidiary
Daystrom, Inc., 614 Frelinghuysen Ave.,
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Xcellte, Inc., Bank St., Orchard Park, N. Y.11-16-30
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Admiral Corp., 3800 W. Cortland St., Chicago 47, III.-4
American Elite, Inc., 7 Park Ave., New York 16, N. Y.-2-3-6-8-9-10
American Standard TV Tube Corp., 94-50 158
St., Jamaica 33, N. Y.-4
American Vacuum Prods., 2242 S. Colby Ave., Los Angeles 64, Calif.-4
Amperex Electronic Corp., 230 Duffy Ave., Hicksville, L. I., N. Y.-5-9-10
Anton Electronic Labs., 1226 Flushing Ave., Brooklyn 37, N. Y.-7-9
Barry Electronics Corp., 512 Broadway, New York 12, N. Y.-3-4-5-6-7-8-9-10
Beam Instruments Corp., 512 Broadway, New York, N. Y.-3
Bendix TV & Broadcast Receiver Div., Bendix Aviation Corp., E. Joppa Rd., Towson 4, Md.-4-8
Bomac Labs., Salem Rd., Beverly, Mass.-8
Bradley Labs., 168 Columbus Ave., New Haven, Conn.-7
British Industries Corp., 80 Shore Rd., Port Washington, N. Y.-8-10
Calvideo Tube Corp., 5232 W. 104 St., Los Angeles 45, Calif.-4
CBS Hytron Div., Columbia Broadcasting System, 100 Endicott St., Danvers, Mass.-1-2-4-8
Certifled Tube Co., 16 & Luzerne Sts., Phila-4-8
Certifled Tube Co., 16 & Luzerne Sts., Philadelphia 40, Pa.-8
Chatham Electronics, Div. Gera Corp., 630 W. Mt. Pleasant Ave., Livingston, N. J.-8-9
Chromatic TV Labs., 1501 Broadway, New York 36, N. Y.-4
Claremont Tube Corp., 36-02 35 Ave., Long Island City 6, N. Y.-4
Clark Electronic Labs., Box 165, Palm Springs, Calif.-2
Continental Electric Co., 715 Hamilton St.

Calif.-2
Cantinental Electric Co., 715 Hamilton St., Geneva, III.-2-4-7
Continental Electronics Corp., 5320 Lancaster Ave., Philadelphia, Pa.-4
Dale Electronics, 31 Samerset Pl., Clifton, N. J.-5
Pelco Radio, 1446 S. Home Ave., Kokomo, Ind.-8 Ind.-8
DuMont Labs., Inc., Allen B., 750 Bloomfield Ave., Clifton, N. J.-3-4
Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif.-2-10
Electronic Tube Corp., 1200 E. Mermaid Lane, Philadelphia 18, Pa.-3-4
Electron-Radar Products, 4806 W. Chicago Ave., Chicago 51, III.-7
Electrons, Inc., 127 Sussex Ave., Newark 3, N. J.-2

Perranti Electric Co., 30 Rockefeller Plaza, New York 20, N. Y.-2-3-4
Furst Electronics, Inc., 3322 W. Lawrence Ave., Chicago 25, III.-2
General Electric Co., Apparatus Sales Div., Schenectady, N. Y.-2-7
General Electronic Equip. Co., Mantua Ave., & Glendale St., Easton, Pa.-48
Graybar Electric Co., 420 Lexington Ave., New York, N. Y.-2-8

Haydu Bros. of N. J., Box 1226, Plainfield, N. J.-3-4-8-10
Hughes Aircraft Co., Products Div., Int'l Airport Station, Los Angeles 45, Calif.-3
Int'l. Rectifier Corp., 1521 E. Grand Ave., El Segundo, Calif.-7
Kriss Electro

Kriss Electronics, Inc., 191 Oraton St., Newark 2, N. J.-3-4

Laine Electronics & Mfg. Co., 91 Industrial Ave., Little Ferry, N. J.-5-10 Le-Hi Electric Co., 115 Coit St., Irvington, N. J.-8

Livingston Electronic Corp., Livingston, N. J.-5 Magnavision Electronics Corp., Garwood, N. J.-Martin & Co., H. S., 1916 Greenleaf Ave., Evanston, III.-4 Midland Mfg. Co., 3151 Fiberglas Rd., Kansas City 15, Kans.-4 Multi-Tron Lab., 4624 Washington Blvd., Chl-cago 44, III.-2-3-4-5-6 National Union Electric Corp., Orange, N. J.-3-4-8-9 3-4-8-9
Philca Corp., Accessory Div., A & Allegheny Ave., Philadelphia 34, Pa.-4-8
Photo Crystals, Inc., 15 S. 1 St., Geneva, III.-7
Pioneer Electronics Corp., 2235 S. Carmelina, Los Angeles 64, Calif.-4
Practical Electronics Mfg. Co., 2214 S. Michigan, Chicago, III.-4
Progressive Electronics, 41 Hudson St., Yonkers, N. Y.-3-4 Radio Corp. of America, RCA Tube Div., Harrison, N. J.-3-4-5-6-7-8-9-10
Radio Supply & Eng'g. Co., 85 Selden St., Detroit 1, Mlch.-4
Rauland Corp., 4245 N. Knox Ave., Chicago, III.-4
Raytheon Mfg. Co., Newton, Mass.-3-4-5-6-7-8-9-10 Richardson-Allen Corp., 116-15 15 Ave., College Point, N. Y.-2 lege Point, N. Y.-2
SOS Cinema Supply, 602 W. 52 St., New York
19, N. Y.-2-8
S & R Electronics, 297 Central Ave., Bethpage,
N. Y.-1-2-3-4-6-8-9
Standard TV Tube Corp., 706 Dryades St., New
Orleans 12, La.-4
Stromberg-Carlson Co., 100 Carlson Rd.,
Rochester, N. Y.-2
Sylvaria Electric Products, Inc., 1740 Broadway, New York 19, N. Y.-1-2-3-4-5-6-7-8-9-10
Super Ear Products Co., 675 Merrick Rd., Lynway, New York 19, N. Y.-1-2-3-4-5-6-7-8-9-10
Super Ear Products Co., 675 Merrick Rd., Lynbrook, N. Y.-9
Taylor Tubes, Inc., 2313 Wabansia Ave., Chicago 47, Ill.-2
Technical Apparatus Bullders, 109 Liberty St., New York 9, N. Y.-2
Tele-Ray Tube Co., 984 Sawmill River Rd., Yonkers, N. Y.-3-4
Tel-0-Tube Corp. of America, 180 Van Riper Ave., E. Paterson, N. J.-4
Texas Instruments, Inc., 6000 Lemmon Ave., Dallas 9, Texas-2
Thomas Electronics, 118 9 St., Passaic, N. J.-4
Tube Service Corp., 2 Gaston Ave., Garfield, N. J.-4
Tung-Sol Electric, Inc., 95 8 Ave., Newark 4, N. J.-1-2-4-5-6-7-8-9-10
Westinghouse Electric Corp., P. O. Box 284, Westinghouse Electric Corp., P. O. Box 284, Elmira, N. Y.-3-4-5-8-10
Windsor Electronic Tube Co., 2612 Nostrand Ave., Brooklyn, N. Y.-4

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Cable, telephone 8
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Cords, line and cheater11
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Accurate Insulated Wire Corp., 25 Fox St., New Haven 1, Conn.-9-11-19-20-24
Admiral Corp., 3800 W. Cortland St., Chicago 47, III.-13
A-K Mfg. Co., 115 S. Northwest Hwy., Barrington, III.-1-2-3-4-5-6-7-8-9-11-14-15-17-19-20-23-24
Alden Products Co., 117 N. Main St., Brockton 64, Mass.-2-4-5-6-7-8-9-10-11
Alpha Wire Corp., 200 Varick St., New York 14, N. Y.-1-2-3-4-5-6-7-8-10-11-14-15-16-17-19-20-23-24
Aluminum Mfg. Co., 1629 Partland Ave 19-20-23-24
Aluminum Mfg. Co., 1629 Portland Ave., Louisville 3, Ky.-14-17
American Electric Cable Co., 181 Appleton St., Holyoke, Mass.-1-2-3-4-5-6-7-8-9-11-14-17-19-20-23-24

American Elite, Inc., 7 Park Ave., New York 16, N. Y.-5
American Mercantile Co., 33 W. 42 St., New York 36, N. Y.-21-22
Ames Mfg. Corp., 4320 Park Ave., New York 57, N. Y.-4-13-14-17-18-20
Amphenol Electronic Corp., 1830 S. 54 Ave., Chicago 50, Ill.-3-5-13-14
Anchor Metal Co., 244 Boerum St., Brooklyn 6, N. Y.-24
Anchor Products Co., 2712 Montrose Ave., Chicago 18, Ill.-6-19
Anchor Wire Corp., 183-16 Jamaica Ave., Jamaica 3, N. Y.-18
Ansonia Wire & Cable Co., 111 Martin St., Ashton, R. 1.-4-7-8
Atlantic Wire & Cable Co., 119-14 14 Rd. College Point, N. Y.-3-4-5-7-8-9-13-24
Beam Instruments Corp., 350 5 Ave., New York, N. Y.-3-45-7-8
Belden Mfg. Co., 4647 W. Van Buren St., Chicago 44, Ill.-3-4-5-7-8-10-11-14-15-16-17-18-19-20-21-22-24
Birnbach Radio Co., 145 Hudson St., New York 13, N. Y.-1-3-5-7-8-9-10-11-14-15-16-17-18-19-20-21-22-24
Black & Decker, Towson 4, Md.-9
B & M Electric Corp., 838 4 Ave., Brooklyn 32, N. Y.-9-11
Bogen Co., David, 29 9 Ave., New York 14, N. Y.-4-5-7
Brand & Co., Wm., North & Valley Sts. Willimantic, Conn.-3-4-5-6-7-13-14-19-20
Buchan Co., R. J., P. O. Box 9, Bricelyn, Minn.-13-14
Calcon Mfg. Co., 100 Oakland Ave., Washington 1, Pa.-14-15-19-20-23-24
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
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Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, N. Y.-14-18
Camburn, Inc., 32-40 57 St., Woodside 77, 23-24
Colortone Electronics, 100 Frank Rd., Hicksville, N. Y.-4
Columbia Technical, 5 E. 57 St., New York 22, N. Y.-3
Columbia Wire & Supply, 2850 Irving Park Rd., Chicago 18, III.-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24
Commercial Products, 417 Main St., Toledo 5, Ohio-18
Consolidated Wire, 1635 S. Clinton St., Ohio-18
Consolidated Wire, 1635 S. Clinton St., Chicago 16, III.-1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24
Co-Operative Industries, 100 Oakdale Rd., Chester, N. J.-1-7
Copperweld Steel Co., 322 Frick Bldg., Pitts-burgh 19, Pa.-14-17-18
Cornish Wire Co., 50 Church St., New York 7, N. Y.-4-5-7-9-11-14-20-24
Eagle Electronics Corp., P. O. Box 775, Meriden, Conn.-3-4-5-6-7-8-20-24
Easy-Up, Inc., 908 State St., Racine, Wisc.-17
Eby Sales Co., 130 Lafayette St., New York 13, N. Y.-9

Eitel-McCullough, Inc., 798 San Mateo Ave., San Bruno, Calif.-16
Electronic Hardware Corp., 2420 W. Cermak Rd., Chicago 8, Ill.-14-17-18
Essex Wire Corp., 1601 Wall St., Ft. Wayne 6, Ind.-2-4-5-6-9-11-20-22-24
Federal Telephone & Radio Co., Div. I T & T, 100 Kingsland Rd., Clifton, N. J.-3-4-5-7-8-13-14-19-20
Fenton Co., 15 Moore St., New York 4, N. J.-3-5-13-18
Flexo Wire Div., Copperweld Steel Co., Oswego, N. Y.-1-14-20
Forest Electric Co., 7216 Circle Ave., Forest Park, Ill.-13
Fretco, Inc., 406 N. Craig St., Pittsburgh 13, pa.-13-14-17
Gee-Lar Mfg. Co., 418 S. Wyman St., Rockford, Ill.-11
General Cement Mfg. Co., 919 Tavlor Ave. Gee-Lar Mrg. Co., 418 S. Wyman St., Rockford, III.-11
General Cement Mfg. Co., 919 Taylor Ave., Rockford, III.-10
General Insulated Wire Works, 69 Gordon Ave., Providence, R. 1.-3-5-8
Gonset Co., 801 S. Main St., Burbank, Calif.-13
Goodline Corp., 309 Date Ave., Alhambra, Calif.-2-3-4-5-6-7-14-16-17-20-23-24
Graybar Electric Co., 420 Lexington Ave., New York, N. Y.-3-5-13
Hi-Lo TV Antenna Co., 3540 N. Ravenswood Ave., Chicago 13, III.-13-14
Hitemp Wires, Inc., 26 Windsor Ave., Mineola, L. 1., N. Y.-19-20-21-22
Hudson Wire Co., Winsted Div., Winsted, Conn-21-22
IE Mfg., 325 N. Hoyne Ave., Chicago 12, III.-2-14-17-18
Imperial Radar & Wire, 820 E. 233 St., It Mrg., 325 N. Hoyne Ave., Chicago 12, III.2-14-17-18
Imperlal Radar & Wire, 820 E. 233 St.,
Bronx, N. Y.-3-4-5-6-7-8-9-10-11-12-1314-15-16-17-18-19-20-21-22-23-24
Insuline Corp. of America, 186 Granite St.,
Manchester, N. H.-2-3-7-11-14-18-24
Jan Hdw. Mfg. Co., 75 N. 11 St., Brooklyn 11,
N. Y.-12
Jersey Specialty Co., Burgess Pl., Mountainview, N. J.-13-20
JFD Mfg. Co., 6101 16 Ave., Brooklyn 4, N. Y.2-3-9-11-14-18-20-24
Kellogg Switchboard & Supply Co., 79 W. Monroe St., Chicago 3, III.-14-8-10-20
Lenz Electric Mfg. Co., 1751 N. Western Ave.,
Chicago 47, III.-21
Medal Mfg. Co., 194 E. Silver St., Sharon, Pa14-17-18
Miller Electric Co., 120 Main St., Pawtucket, Medal Mfg. Co., 194 E. Silver St., Sharon, Fa.14-17-18
Miller Electric Co., 120 Main St., Pawtucket,
R. I.-9
Mohawk Wire & Cable Corp., 320 River St.,
Fitchburg, Mass.-2-3-4-5-6-7-8-14-19-20-24
Modern-Aire Mfg. Corp., 4436 W. Roosevelt
Rd., Chicago 40, 111-17-18
Modern Wire Co., 39-30 Review Ave., Long
Island City 1, N. Y.-14-17-18
New England Electrical Works, 365 Main St.,
Lisbon, N. H.-1-21-22
Nichols Wire & Aluminum, 1725 Rockingham
Rd., Davenport, Iowa.-14-17
Porker Metal Goods Co., 161 Summer St.,
Worcester, Mass.-13-14-20
Pentron Corp., 777 S. Tripp Ave., Chicago 24,
III.-9 III.-9
Peschel Electronics, 13 Garden St., New Rochelle, N. Y.-19
Phalo Plastics Corp., 25 Foster St., Worcester 8, Mass.-3-4-5-6-7-8-11-14-19-20-23-24
Phelps Dodge Copper Products Corp., 300 Park Ave., New York 22, N. Y.-3-5-7-8-9-13-17-19-20-22
Plastoid Corp., 42-61 24 St., Long Island City, N. Y.-3-4-5-6-7-8-13-20-23 Plymouth Electronics Corp., 50 Kingsbury St., Worcester 3, Mass.-18
Radio Merchandise Sales, 2016 Bronxdale Ave., New York 62, N. Y.-17
Radio Supply & Eng'g Co., 85 Selden St., Detroit 1, Mich.-18-19-20-23-24
Radix Wire Co., 26260 Lakeland Blvd., Cleveland 32, Ohio-13-20
Rego Insulated Wire Co., 830 Monroe St., Hoboken, N. J.-13
Revere Corp. of America, Wallingford, Conn.-7-20
Rogers Electronic Corp., 40 Pt. Revere Corp. of America, Wallingford, Conn.-7-20
Rogers Electronic Corp., 49 Bleecker St., New York 12, N. Y.-13
Royal Electric Co., 95 Grand Ave., Pawtucket, R. I.-9-11-20
Runzel Cord & Wire, 4727 Montrose Ave., Chicago 41, III.-7-20
Saxton Products, Inc., 2101 Grand Concourse, Bronx 53, N. Y.-13-14-17
Sequola Process Corp., 871 Willow St., Redwood City, Calif.-3-4-5-7-8-19-20
Service Instruments Co., 171 Official Rd., Addison, III.-11
Sittler Corp., 18 N. Ada St., Chicago 7, III.-17-20-24
South River, Metal Prods. Co., 377 Turnpike, South River, N. J.-17-18
Special Products Co., P. O. Box 188, Rockville 9, Md.-10
Sprague Products Co., North Adams, Mass.-22
Superior Insulated Wire, W. Haverstraw, N. Y.-13-20
Technical Appliance Corp., 1 Taco Ave., Sherbura N. Y.-14-18 13-20
Technical Appliance Corp., 1 Taco Ave., Sherburne, N. Y.-14-18
Telectro Industries Corp., 35-16 37 St., Long Island City, N. Y.-22
Tensolite Insulated Wire Co., Tarrytown, N. Y.-1-3-4-5-6-7-11-20-21-22-23-24
Trimm, Inc., 400 W. Lake St., Libertyville, III.-3-9
TV Hdw. Mfg. Co., 919 Taylor Ave., Rockford, III.-18
TV Wire Products Co., 119 Prespect Ave., Bur-III.-18
TV Wire Products Co., 119 Prospect Ave., Burbank, Callf.-14-17
Unlon Plastics Corp., Wire & Cable Div., 1627
Paterson Plank Rd., Secaucus, N. J.-2-3-4-5-6-7-8-14-20-24
U. S. Wire & Cable Co., Progress Ave. & Monroe, Union, N. J.-3-5-7-9-19-24
Utah Radio Products Co., 1123 E. Franklin St., Huntington, Ind.-13
Utilities Service Co., 1 Pine St., Allentown, Pa.-18
Varflex Corp., 512 W. Court St., Rome, N. Y.-10 10
Victor Electric Wire & Cable Corp., 64 Ackerman Ave., Cllfton, N. J.-2-3-4-5-6-7-11-13-14-19-20
Vulcan TV Mast & Tower, 1224 National St., Birmingham 7, Ala.-17-18
Waldom Electronics, 4625 W. 53 St., Chicago, Ill.-9-1 Wisco Electronics Corp., 3602 Crenshaw Blvd., Los Angeles 16, Calif.-14-18
Wheeler Insulated Wire Co., Div. Sperry Rand Corp., 150 E. Aurora St., Waterbury 20, Conn.-21-22
Whitney Blake Co., 1565 Dixwell Ave., New Haven 14, Conn.-4-5-6-7-8
Wind Turbine Co., E. Market St. & Penna RR, W. Chester, Pa.-18
Witelrod Electrical Mfg. Co., 75 Pulaski St., Stamford, Conn.-9-11
Wright Steel & Wire Co., G. F., 243 Stafford St., Worcester 3, Mass.-18

## 1956 TECHNICIAN BUYERS DIRECTORY

### Brand & Trade Name Index

The brand names of service and replacement products, component parts, equipment, instruments, and materials in the radio-TV-electronic service industry are listed alphabetically, with

the name of the manufacturer. The address of the manufacturer whose brand or trade name is listed may be obtained by referring to the Alphabetical listing of Manufacturers, page 109.

Magnasync Mfg. CBC Electronics Accurate Insulated
Wire
ACME ACOUSTALLOY
Electro-Voice, Inc.
ACOUSTONE Newcastle Fabrics
ACROBOSS
Acromark Co.
ACRODIE Acromark Co.

ACROETCH Acromark Co. ACRO INK Acromark Co. Acromark Co. ACROPRENE Acromark Co. ACROPRINTER Acromark Co. ACRO-STAMP Acromark Co. Acro Products Co.
ACTO-tenna
Acme Tool & Specialties
ADAPHONE

Fenton Co. ADAPHONE PILLOW Fenton Co. ADAP-TEST Vidalre Electronics Electronic Specialties ADASHAFT ADASHAFT
Centralab Div., Globe
Union, Inc.
AD-A-SWITCH
Clarostat Mfg, Co.
ADCOLA
British Electronic Sales
ADELCO Advance Electronics Co. ADJUST-A-CONE

Quam-Nichols Co.
ADJUST-A-VOLT
Standard Electrical
Products Co.
ADVANCE Acme Battery AECO American Elect Cable
AEROCON
Aerovox Corp.
AERODYNAMIC American Elect Cable
AEROCON
Aerovox Corp.
AERODYNAMIC
Radio Corp. of America
AEROFILM
Aerovox Corp.
AEROLENE
AGROSENSOR
ALPHATAPE
Int'I Pacific Record'g
ALPHLEX
Alpha Wire Corp.
ALUMACOTE
Mechanical Steel
Tubing
ALUMAST

Roanwell Corp.
AIRBOY
Mitchell Industries Inc.
AIR-CORE
American Phenolic
AKRA-OHM
Shallcross Mfg.
ALLIED
Stranton Aliceles

Channel Master ALUZOOM JFD Mfg, Co. AMBERYL Vaco Products Co. American Solder & Flux AMCON American Condenser AMERCO American Mercantile
AMERICAN BEAUTY
American Electrical
Heater Company
AMERITE TV TOWERS
American Tower Co.

A-MP American Marine Prods. Centralab Div. Globe Union, Inc.
AMPHENOL
American Phenolic
AMRECON Ohmite Mfg. Co. AMVAC American Vacuum Prods ANGEL Electric & Musical Inds ANKOSEAL Ansonia Wire & Cable ANTENAPLEX Radio Corp. of America ANTENSIFIER Blonder-Tongue Labs. American Pamcor British Electronic Sales ARHCO American Radio Hdw. Electro-Voice Inc ARISTOCRAT Trio Mfg. ARROW Colman Tool & Machine Livingston Electronic Atlantic Wire & Cable Atlas E-E Corp. Sprague Electric Co.
ATTIC-TENNA
Control Electronics
ATR American TV & Radio AUDAX Audak Co. AUDET AUDET
Centralab Div, Globe
Union, Inc.
AUDIO-AID
Ansley Mfg., Arthur
AUDIO AID
Greene Co.,
L. Charlton
AUDIODISCS Audio Devices, Inc. AUDIOFILM Audio Devices, Inc. AUDIO POINTS Audio Devices, Inc. AUDIOSCOPE Audio-Master Corp.
AUDIOSPHERE
Livingston Electronic
AUDITORIUM Jensen Mfg. Co. AUTOBOOSTER Industrial Television AUTO BRIDGE Industrial Instruments
AUTO COUPLER
Industrial Television
AUTOGRIP Magnasyne Mfg. AUTOPOSITIONER Collins Radio Co. Collins Radio Co. British Electronic Sales AVIGATOR Mitchell Industries Inc.

Vanguard Recording Soc. BABEE SITTER Greene Co., L. Charlton BALANCE BALANCE
Self-Lifting Piano Truck
BALINE
JFD Mfg. Co.
BANSHEE
JFD Mfg. Co.
BANTAM Aerovax Corp. Electro-Voice, Inc.
BARRYPACK
Barry Electronics
BASEBALL Antenna Specialists
BASS ULTRAFLEX
Jensen Mfg. Co.
BATTERY-SCOPE McColpin-Christie
BAT WING
Telrex Inc. BBB
Butler Mfg., B. B.
BEAMADJUSTER
Perfection Electric
BEAMED POWER
ROTARIES Telrex Inc.

BACH GUILD

BEE LINE Radio Merchandise Sales, inc. BELFONE Bell Sound Systems. Inc.
BERLANT-CONCERTONE Bestcraft Products Co. BH Bentley-Harris BI-FI BI-FI
Federal Electronics
BIG BERTHA
Telrex Labs.
BIG DAN
Danforth Mfg. Co.
BIG JACK Kay-Townes Antenna BIG SHOT Radio Merchandise Sales BIRACO Birnbach Radio Co. BIRCH Boetsch Bros. BIRFLENE Birnbach Radio Co. BIRLON Birnbach Radio Co. BIRMINGHAM SOUND British Electronic Sales British Electronic Sales BLACK BEAUTY Sprague Electric Co.
BLACK & WHITE Tru-Pine Co.
BLUE JACKET
Sprague Electric Co.
BLUEPOINT BLUEPÖINT
Astron Corp.
BLUE RIBBON
American Standard TV
Tube
BLUE SHAFT
Centralab Div.,
Globe Union, Inc.
BLU-FLEX
Millers Falls Co.
BLU-MOL
Millers Falls Co. BLU-MOL
Millers Falls Co.
B & O
Fenton Co.
BOOST-A-VOLT
Workman TV, Inc.
BORON X
Technicraft Co.
BOSIPT
Workman TV, Inc. Workman TV. Inc. BOSTON Livingston Electronic
BOW-FLECTOR
JFD Mfg. Co. BOW-TIE JFD Mfg. Co.
BOY-MAR
Electrical-Service Co.
BRADLEYOMETER BKADLEYOMETER
Allen-Bradley Co.
BRADLEYUNITS
Allen-Bradley Co.
BRANDES
Cannon Co., C. F.
BREISCO
Brilish Electronic Sales
BRENELL
Fenton Co. Fenton Co. BRENKERT Radio Corp. of America BRILOK American Screw Co. BROADCASTER Int'l Radio & Electr
BROWN DEVIL
Ohmite Mfg. Co.
BRUNSWICK
Decca Records
BT

BUTTON Erie Resistor Corp. Chicago Standard Transformer Corp. CHROMABAR Kay Electric Co. CHROMALYZER CABINART
G & H Wood Praducts
CADET
Raytheon Mfg. Co.
CAMCO CHROMALYZER
Telechrome, Inc.
CHROMATIC
Radio Merchandise
Sales Inc.
CHROMATRON Camburn, Inc.
CANNON-BALL
Cannon Co., C. F.
CAPTAIN
Medal Mfg. Co.
CARBOFILM CHROMATRON
Chromatic Television
CIMALOHM
Cima Corp.
CINELITE
Mole-Richardson Co. CARBOFILM
Aerovox Corp.
CARBOMITE
Continental Carbon Inc.
CARBON-TET
Kerden Chemical Co.
CARDAX
Electro-Valce Inc.
CARDINAL
Midland Mfg. Co. CINEVISION
Calbest Eng'g &
Electronics Co.
CIRCLE "B" Vocaline Co, of America CIRCLE-VANE Ward Products Corp., Div. The Gabriel Co.

Illinois Condenser Co.
BULPLATE

Bussmann Mfg. Co.

Sprague Electric Co.

CARDYNE CARDYNE
Electro-Volce Inc.
CARLTON
Hudson Lamp Co.
CARRILON DYNAMIC
Miller Mfg. Co., M. A.
CARTWHEEL Aerovox Corp.
CASCADE
Industrial Television
CASCADE JFD Mfg. Co. Shallcross Mfg. Co.
CAVALIER RADIO
Hinners-Galanek Radio Electro-Voice Inc. Radiart Corp. Celbest Eng'g & Electronics Co.
CELAB
Clark Electronic Labs. CENTILATOR CENTILATOR
Kay Electric Co.
CENTRATHENE
Centralab Div.,
Globe Union, Inc.
CEN-TRI-CORE
Alpha Metals, Inc.
CENTURION IV Electro-Voice, Inc. American Standard TV
Tube
CENTURY Electro-Voice, Inc. CERAMELEX Erie Resistor Corp. CERAMICON Erie Resistor Corp. CERA-MITE Sprague Electric Co. CEROC Sprague Electric Co. CETRA-SORIA Capitol Records
CETRON
Continental Electric Co.
CHALLENGER BY BOGEN Bogen Co., David CHALLENGER (hack saw Promeir Bros.
CHALLENGER RECORDER
Rek-O-Kut Co.
CHAMPION
Channel Master
CHANALYST CHANALYST
Radio Corp. of America
CHANGE-A-CYCLE
Carter Motor Co.
CHANGE-A-VOLT CHANGE-A-VOLT
Carter Motor Co.
CHANNEL AUTOBOOSTER
Industrial Television
CHANNEL CHIEF
Barb City Industries
CHANNELITE
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VIJALORIES
VI Vidaire Electronics CHANNEL KING Armac Co.
CHANNEL KING
Mario Tech Products
CHANNELLOCK Champion DeArment Tool CHARGALYZER CHARGALYZER
MCCOlpin-Christie
CHARGOMATIC 88
Electric Cord Co.
CHASBESTOS
Chase & Sons
CHASSIS CARRIER
Barb City Industries
CHASSIS SUPPORT
Barb Cliy Industries
CHEM-ETCH-CIRCUITS
Automatic Processina

Automatic Processing
CHEMIFLEX
Technicraft Co.
CHEMIGLAS
Technicraft Co.

CHITRAN

CIRCLOTRON
Electro-Voice, Inc.
CIRCON CIRCON
Universal Circuit
Control
CIR-O-LINE
Atlantic Wire & Cable C LINE C LINE
Clarostat Mfg. Co.
CLARI PIX
VIdaire Electronics
CLARKSTAN Pacific Transducer
CLARO
Clarostat Mfg. Co.
CLEF Permoflux Corp. CLEVITE
Transistor Products Inc. CLIX British Electronic Sales British Electronic Sal CLOCK-TENNA Radio Merchandise Sales CLOCK TIMER International Register CLOVER-V-BEAM Telrex, Inc. COAXIAL
Jensen Mfg. Co.
COILCO
Coil Co. of America
COILTENNA
Electrend Products
CO-LATEVAL Hamilton Electronics Tennalab COLOR BEAM Winegard Co.
COLORSCOPE
Simpson Electric Co.
COLOR-TENNA
JFD Mfg. Co.
COLORTOP
Trice Trico Fuse Mfg. Winegard Co. Antenna Products Astron Corp.
COMMANDO (hack saw frame)
Dreier Bros.
COMMERCIAL Trimm, Inc. Bogen Co., David COMPENTROL
Centralab Div.,
Globe Union, Inc.
CONCERT
Jensen Mfg. Co.
CONCERTCASTER
Electrosonic Specialties
CONCERTO
Jensen Mfg. Co.
CONFIDENCER
PROPRIEDENCER Roanwell Corp. CONICAL-V-BEAM Telrex, Inc. CONNOISSEUR Livingston Electronic Neal Electronic Co.
CONSTELLATION
JFD Mfg. Co.
CONTACTENE Walsco Electronics
CONTENNA
Conn. Telephone &
Electric Corp.
CONTINENTAL DeJur-Amsco Corp.
CONTROL GUARDS
D & M Products
CON-YAGI Tennalab COPROX Bradley Laboratories CORONET Inc. Permoflux Corp. Ohmite Mfg. Co. JaMac Products Co. JFD Mfg. Co. COSMOPOLITAN Radion Corp. CO-TRAP Skyline Mfg. Co. COUNTRY-BELLE
Gulld Radio & TV
COUPLATE
Centralab Div.,
Globe Union, Inc.
CRAFTSMEN
Radio Craftsmen Corp.
CRESTBRITE
Crest Transformer CRESTBRITE
Crest Transformer
CRESTRAN
Crest Transformer
CRESTROL
Crest Transformer

CRESTWOOD
Daystrom Electric Corp. CRL Centralab Div. Globe Union, Inc.
CROFLEX
Waldom Electronics CROLITE Crowley & Co., Henry L. CROLOY Crowley & Co., Henry L CRONAME CRONAME
Waldom Electronics
CROWN
Int'l Radio
C T S
Chicaga Telephone Supply CUE TAPE Rangerione Inc.
CUNNINGHAM
Radio Corp. of America
CUSTOMLINE Antenna Products
CUSTOMLINER Fretco Inc.
CUTTER CARTRIDGE
Shure Bros. CX75 DALMOTRON Talkmaster, Inc. DALOHM Dale Products, Inc.

DUOTAPE
Duotone Co.
DUO-TENNA
Waldom Electronics
DUO-VOLT
Carter Motor Co.
DURAFLEX Self-Lifting Piano Truck Co-Operative Industries, Inc. DURAMEG Sprague Electric Co. DURAMIC Aerovox Corp. DANDEE Aerovox Corp.
DURA-RAMIC
Ward Products
DURIUM Aerovox Corp.
DAVIS SUPER-VISION Davis Electronics
DAVOHM
Daven Co.
DAVONOIL London Int'i Records
DURPOINT DURPOINT
Duotone Co.
DUZ-ALL
CBC Electronics Co.
DYMON-VANE
Word Products Carp.
Div., The Gabriel Co.
DYNACO
DVNACO Daven Co. DeARMOND Rowe Industries Dwyer Engineering
DECOR-TENNA Midwest Naturlite Co.
DeFOREST
Radio Corp. of America
DELPEC Dyna Co. DYNACORD Pentron Corp. Centralab Div.,
Globe Union, Inc.
DELTA BEAM
K-G Electronics Corp. Dyna Co.
DYNAMIC
Jackson Electrical DENSICHBON Instrument Co. DYNAQUIK 500 DENSITOMETERS
Welch Mfg. Co., W. M.
DEPENDABLE B & K Mfg. Co.
DYNASCOPE
Century Electronics Co.
DYNASET Trimm, Inc.
DETERMOHM
Ohmite Mfg. Co.
DIABOW
Tibbetts Industries Telex Inc.
DYNATRACER
Century Electronics Co.
DYNATROL DIALAMATIC North America Model JFD Mfg. Co. Products, Inc. Erwood, Inc.
DIAMOND PHONO STYLI
Royal Diamond Tool Millers Falls Co. DIAMOND WEAVE
General Instruments
DIBAND FAG-L-LINE General Aluminum
Products
EARSET Antenna Products
DIFFERENTIAL Telex, Inc. Electro-Voice Inc. Fretco, Inc. Permoflux Corp. Transistor Products Inc. Co. JFD Mtg. C

Miller Co., Sanford

DIRECTRONIC
Snyder Mfg. Co.
DIRON
Peerless Prods
Industries
DISCOVERS

Electrovox Co.

Ohmite Mfg. Co.

Dunwell Mfg.
DO-ALL
Radlo City Products

JFD Mfg. Co.
DOUBLE HEADER
Antenna Specialists
DOUBLETALK

Radio Merchandise Sales DREADNAUGHT Wall Mfg. Co., P.

Shure Bros.

DODO

DROP-LOCK

South River Metal Prod.
DUAL
United Audio Products
DUALCOTE

DUALCOTE

Mechanical Steel
Tubing
DUARC
Mole-Richardson Co.
DUETTE

Jensen Mfg. Co.
DUNCO
Struthers-Dunn
DUO

Permoflux Corp.
DUOBEAM
Antenna Products
DUOFONIC

Paraplegics Mfg.

Centralab, Globe Union, Inc. DUO-MOUNT

Sonic Industries
DUOTAPE

South River Metal
DUO SEAL
Welch Mfg. Co., W. M.
DUOSONIC

EASYCAP
Waldom Electronics
EASYCOUPLE
Waldom Electronics
EASYSPLICE
Waldom Electronics
Sales
EASY-VISION
Hoffman Electronics
ECHOPHONE Hallicrafters Co. ECONO-SWITCH ECONO-SWITCH
Centralab Div.,
Globe Union, Inc.
EDISWAN
British Electronic Sales EFCON Electronic Fabricators EICO Electronic Instrument 8-BALL Ward Products Corp., Div. The Gabriel Co. EIMAC Eitel-McCullough, Inc. R-BALL Webster Electric Co. EL Electrons, Inc. Electrons, Inc.
ELCOR
Eagle Electronics
ELECTENN
Electrend Products
ELECTRACER
Special Products
ELECTRALOY
Circon Component Co.

ELECTRICORD Pacific Electricard Co.
ELECTRO-GRAPHIC Precise Measurements
ELECTROLOX
Schauer Mfg. Corp.
ELECTRONAMIC Precision Apparatus Co.
ELECTRONIC BUTLER
Miller Electronics
ELECTRONIC STETHOSCOPE" Feiler Eng'g. & Mfg. ELECTRO-PROBE Erwood, Inc. Feller Eng'g. & Mfg. Duotone Co. Schauer Mfg. Corp. ELEKTRAN Ward Products Corp. Div. The Gabriel Co. ELIM-A-TRACE Vidaire Electronics Mfg. Co. ELITE American Elite, Inc. Camburn Inc. ELPHCO Electro-Physics ELSCO Electronic Specialties EMC Flactronic Measurements Corp. Electro Mechanical Instrument EMPIRE Electro-Voice, Inc. Livingston Electronic Technical Tape Corp. ENTISER
Master Electronics & TV Ansley Mfg., Arthur Electric Soldering Iron
ESICOLUGER Electric Soldering Iron Electro-Sonic Labs. Livingston Electronic
EVEN-DIP
Vulcan Electric Co.
EVERARD Electro-Physics Co. EVERLOCK
Thompson-Bremer
EVER-QUIET
Chemical Electronic Inc. Eng'g. I National Carbon Co.
EVER-KLEER
Chemical Electronic Eng'g. Inc.
EXACTOHM
Workman TV, Inc.
EXPANDIT EXPANDIT
Tele-Ex-Pand Corp.
EXPRESS CONTROLS
Centralab Div.,
Globe Union, Inc.
EXTENSION JAX
Switchcraft, Jnc.
EYE WITNESS
Radio Corp. of America E-Z Ideal Industries, inc. E-Z-BEE Spirling Products Co. Kleer-Vue Mfg. Co. E-Z FIND Akro-Mils
E-Z WIRE STRIPPERS
Ideal Industries, Inc.

FAN FARE
Fonnon Electric Co.
FASTATCH
Centralab Div.,
Globe Union, Inc.
FATHOMETERS
Roytheon Mfg. Co.
FB-7
National Co. National Co. FEATHERIDE Webster Electric Co. FEATHERWEIGHT Trimm, Inc. Federal Electronics FELCO Forest Electric Co. FEN-TONE Fenton Co.
FENTUBE-AIRSPACED
Fenton Co.
FENWIRE Fenton Co.

FERRI-CHOKE Superex Electronics FERRI-LOOPSTICK FERRI-LOOPSTICK
Superex Electronics
FERROTRON
Polymer Corp.
FG-EZ
Fretz Gross Co.
FIDELIS
V-M Corp.
FIDELITONE
Permo loc Permo, Inc.
FIDELITY PHASING
Finney Co.
FIDELITY X-UAR Fidelity Chemical
FIDELIVOX
Electrosonic Specialties
FILMITE Sprague Electric Co. Good-All Elec. Mfg. Co. FILPEC

FILPEC
Centralab Div.,
Globe Union, Inc.
FILPLATE
Centralab Div.,
Globe Union, Inc.
FILTA-COUPLER
Superex Electronics
FILTERMITES
Deutschmann Corn. Deutschmann Corp. Toh FILTEROL Sprague Electric Co. FILTERPOINT

Duotone Co.
FIL-TEST
Vidaire Electronics FIL-TRAN
Vidaire Electronics FINCO
Finney Co.
FINNFLEX
Finn & Co., T. R.
FISHBONE
Telrex Labs.
FIXTOHM
Campbell Industries
FIXTOHM
Control Man Co.

Clarostat Mfg. Co. Centralab Div.,
Globe Union, Inc.
FLEETWAY
Conn. Telephone &
Electric Corp.
FLEETWOOD

Conrac Inc. Art Specialty Co.
FLEXITUBE
Walsco Electronics Co. FLEXO

Art Specialty Co.
FLEXOHM
Clarostat Mfg. Co.
FLUTTER METER
Amplifier Corp. of
America

London Chemical
FLYWEIGHT MAGNEMITE
Amplifier Corp. of
America
F M F

America
F M E
Federal Mfg. & Eng'g.
FOAMFLEX
Phelps Dodge Copper
Products Corp.
FONOFLUID
Ronette Acoustical
Corp.
FORMEX

Fidelity Chemical Products
FORTISSIMO POWITSSIMO
Permoflux Corp.
POTO-LECTRIC
Worner Electronic
Devices
PRAWLEY
Hotel Radio Mfrs.
FRAZIER-MAY
LOUINGERAFER

LOUDSPEAKERS
Int'l Electronics
FRESHMAN
Hamilton Electronics FRETARAY Fretco Inc.
FRINGE BEAM
Neal Electronic Co.
FRINGELEADER
Radio Merchandise

FSK National Co. FSI National Co. FSR National Co. Workman TV, Inc. FUSE-LITE
Alden Products Co.
FUSETRON

Bussmann Mfg. Co.

FUSE-O-LET
Hilo TV Antenna Corp.
FUTURAMIC Channel Master FUZ-LOX D & M Products
FUZOHM
Clarostat Mfg. Co.

GALVO-O-MAST Mechanical Steel Tubing GB JET Workman TV Inc. General Cement Mfg. GEARMOTOR Atlas Overhead Door GEMCO GEMCO
Great Eastern Mfg. Co.
GENALEX
British Industries Corp.
GENEMOTOR
Carter Motor Co.
GENERAL
Medal Mfg. Co.
GENERAL HI-Fi PHONES
General Phones Corp.
GENESCOPE
SImpson Electric Co.
GEOMATIC
Finney Co. Finney Ca.
GEORGIAN
Electro-Voice, Inc.

General Industries Co. GIBSON GIRL
Robins Industries
G-L G-L Gee-Lar Mfg, GLAMORAMIC Radio Merchandise

GLASLINE

Knights Co., James GLASOHM

Clarostat Mfg. Co.

Chase & Sons
GLASWITCH
Revere Corp. of
America
GLOBE

Tube GLOBE TROTTER

Motorola, Inc. Peerless Prods Industries GOODMAN

Rockbar Corp.

GP
Erie Resistor Corp.
GRACOIL
Gramer-Halldorson
Transformer
GREEN BAND
Todd-Tran Corp.
GREEN BULLET

Shure Bros.
GREENOHM
Clarostat Mfg. Co.
GRIP-SPINTITE

Stevens Walden Inc.

Precision Electronics
GUIDE-A-TUBE

S/C Laboratories GYRO-TENNA Delson Mfg. Corp.

Livingston Electronic
HALLDORSON
Gramer-Halldorson
HALLOWELL
Standard Pressed Steel
HALOLIGHT

HACK SWAIN

Sylvania Electric

Mallory & Co., Inc., P. R. HANDIE-TALKIE Motorola, Inc. HAN-D-OHM

Cima Corp.

American Standard TV

Radio Corp. of America GLO-MELT Wassco Electric Products GOLD CUP

Carbonneau Industries
GOLDEN THROAT

Radio Corp. of America GOLDEN VOICE

**TECHNICIAN** 

BUYERS DIRECTORY

HI-STAR

HANDY Akro-Mils HANDY-KIT Insuline Corp. of America HANDYPAK

Akro-Mils
HEARD EVERYWHERE
Lowell Mfg. Co.
HEATHKIT Heath Co. HELICON Tibbetts Industries
HELIX

Hamilton Electronics HFS
National Co.
HI-BALL Radiart Corp.

HI-FYRE Master Electronics & TV Centralab Dly. Globe Union, Inc.

Erie Resistor Corp. HI-K CERAMICON

American Elite, Inc.
HIS MASTER'S VOICE
Radio Corp. of America

Erie Resistor Corp.
HI-TEMP
Consolidated Wire &

Associated Companies
HI-TENSION
JFD Mfg. Co.
HI-TOP

IHC Illinois Condenser Co. Illinois Condenser Co. ILLINI-HYCAP
Illinois Condenser
ILLINI-300
Illinois Condenser HANDYPAK
Technicroft Co.
HARMIC
Wall Mfg. Co., P.
HARMONIC
Dean Sales
HAZ-BIN IMP Carter Parts Co. Winegard Co.
IMPERIAL
Jensen Mfg. Co.
IMPERIAL Skyline Mfg. Co.

Int'l Radio & Electronics IMPERIAL IMPERIAL
Vokar Corp.
IMPERIAL KITS
D & M Products
IMS RECORD SPRAY
Silicone Spray Products
IN-A-GRIP Biggs Co., Carl H. HERCULES Shure Bros. H-E WAGON IN-A-GRIP
Stevens Walden Inc.
INCREDUCTOR
CGS Lobs. Inc.
INDCO OIL
Industrial Condenser
INDOOR TENNA
Spirling Products
INDUCT-O-PHONE Walden Inc.

INDUCT-O-PHONE
Fenton Co.
INDUCTUBE
Drake Co., R. L.
INDUCTUNERS
Mallory & Co., P. R.
INLINE
American Phenolic
IN-LINE
JFD Mfg. Co.
IN-STA-COM
Marine View
Electronics
INTELIN Erie Resistor Corp. HI-Q Aerovox Corp. HIRSCHMANN

Federal Telephone Radio Co., DIV. of IT&T Winegord Co. Co., Harvey

INTELIN

Hubbeil Co International Register
INT'L LEAGUER Antenna Specialists INVADER
Ward Products Corp.

Int'l Research Assoc. IRC Int'l. Resistance Co.
IRISH
ORRadio Industries

Tele-Ex-Pand Corp. Inc.
IRON GRIP
Equipto Div. Aurora ISI
Int'I Scientific
Industries
ISOHM
CBC Electronics Co.
ISO-KAP

Tele-Ex-Pand Corp.
HI-VO-DISCS
Centralab Div.,
Globe Union, Inc.
HI-VO-KAPS
Centralab Div.,
Globe Union, Inc.
HI-VOLT VOLTMETER
Industrial Devices Inc.
HOBBY-TIME
Western Coil & Centralab, Globe Union, Inc. ISOPHON Dunwell Mfg. Co. Western Coil & Electrical Co. HOLGUN

HOLGUN
Black & Decker
HONEYWELL
Micro Switch Div.,
Minn.-Honneywell
Regulator Co.
HORIZON JACKNIFE Radio Merchandise Sales JACKSON HORIZON
National Co.
HORTON SPEAKERS
Becker Electronics
Mfg. Corp.
HOUSE OF RESISTORS Vulcan Electric Co. JAVABOND
Javex
JAZZTAPE
Int'l Pacific Record'g Clarostat Mfg. Co.
HOWDY DOODY
Shura-Tone Products
HOYT METERS IEE

JEFO
Jarvis Electronics
JECO
Jarvis Electronics Div.,
Speer Carbon Co.
JET Burton-Rogers Co. HO
Hammarlund Mfg. Co.
HRO Carbonneau Industries
JETENNA
JFD Mfg. Co.
JET-HELIX National Co.

National Co. HUBBELLOCK Hubbell Inc., Harvey HUDSON Oxford Electric Corp. HUMDINGER JFD Mfg. Co. JETOMIC JFD Mfg. Co. JET PROBE Clarostat Mfg. Co. HUSH Workman TV, Inc. Chemical Electronic
HYDROFEED JIFFY
Akro-Mils
JIFFY-TENNA
Delson Mfg. Corp. Components Corp.

Stevens Products Inc. 111 JIL
James Instrument
Labs.
JK PRODUCTS
Jomes Knights Co.
JOLTA
Jan Hdw. Mfg.
JUNIOR
Homilton Electronics
Industrial Devices Sprague Electric Co. HYPEX Jensen Mig, Co.

Insuline Corp. of America

KANTARKS Trico Fyse Mfg. Co. KATOLIGHT Kato Engineering Kenwood Eng'g Co. K-51 Polymer Corp. KILO
Kay Electric Co.
KINE-LITE
Vidoire Electronics
KIN-EX
Vidoire Electronics
KLEE NEEDLE
Robins Industries
KLEEN-SWEEP Duotone Co. South River Metal
KLIPLOK
Trico Fuse Mfg. Co.
KLIPSCHORN Klipsch & Associates
KLIPZON
United Technical Labs. K-LOK Erie Resistor Corp. KNIGHT
Allied Radio Corp.
KOOLOHM Sprague Electric Co. KRAFTONE
Kroft Bros.
KRANK-UP MASTS
Joniz Mfg, Co.
KURMELEC
Kurman Electric Co.
KWIK
South Bro South River Metal South River Metal KWIK KLIP South River Metal KWICK-N-EASY Jontz Mfg. Co. KWICK-UP Jontz Mfg. Co.

LABCAL Berkshire Labs. LABMARKER Berkshire Laboratories Berkshire Laboratories
LABSTROBE Laboratories Berkshire LAMP-TENNA S/C Labs, Inc. LARGO Permoflux Corp. Radiart Corp.
LEAK
British Industries LEDEX Leland Inc., G. H. LEMCO Lytle Eng'g, & Mfg. LEVER-TYPE Shure Bros. LEV-R SWITCHES Switchcraft, Inc. LEWIS VERTICAL Universal Products LIFETONE LIFETONE
Duotone Co.
LIFT.A.DOR
Alliance Mfg. Co.
LIGHTNING LIFT
Atlas Overhead Door
LINE-O-LIFE
Carter Motor Co.
LITEMASTER
Art Society Co. LITEMASTER
Art Specialty Co.
LITTEL JAX
Switchcraft, Inc.
LITTEL PLUGS
Switchcraft, Inc. Switchcroft, Inc.
LITTLE BERTHA
Telrox Labs.
LITTLE CHAMP
Malin Enterprises
LITTLE DEVIL
Ohmite Mfg. Co.
LITTLE GIANT
JFD Mfg. Co.
LITTLE JEWEL
Descript Mfg. Co. Donforth Mfg. Co. LITTLE NIPPER Radio Corp. of America LL300 Buchen Co., R. J. LL450 Buchen Co., R. J. LOADED-X Radiart Corp. LOGATEN LOGATEN
Kay Lab.
LONG RANGER
Ward Products Corp.
LONG SHOT!
Antenna Products
LOOPSTICK
Superex Electronics

Kingdom Products LO-VOLT TESTER

LUSTERIZED American Electric Cable Vaco Products Co.
LYRICHORD
Livingston Electronic
LYTICAP Planet Mfg. Co.
LYT-L TUNER
Lytle Engineering

McMITE McCoy Electronics Co.
MAESTRO
Permoflux Corp.
MAG-ELECTRIC National Aircraft
MAGIC EYE
Radio Corp. of Radio Corp. of
America
MAGIC MONITOR
Radio Corp. of
America
MAGIC-TEE
Plymouth Electronics
MAGIC-TIP
Hunter Tools
MAGMOTOR
Corden Moder Co Carter Motor Co.
MAGNAPHONIC
Magnasync Mfg. Co.
MAGNA-TORC Hansen Mfg. Co. Magnecord Inc.
MAGNELOOP
Amplifier Corp. of America MAGNEMITE Amplifier Corp. of America MAGNEPAINT MICRO-Circuits Co.
MAJORETTE
Major Electronics Co.
MAJOR LEAGUER
Antenna Specialists
MANAGER Fanon Electric Radion Corp. MARBELITE
Good-All Elec, Mfg.
MARINERS PATHFINDER
Raytheon Mfg, Co. MARKA Kay Electric Co.
MARK TWAIN
Raytheon Mfg. Co.
MARVELCO
National Aircraft
MARVELITE

MARVELITE
CBC Electronics Co.
MARVELCO
National Aircraft
MASCO
Simpson Mfg. Co.,
Mark
MASTERLINE
Bloader Tongue Lab Blonder-Tongue Labs.
MASTERTAPE Audio-Master Corp.
MASTER-TENNA
Radio Corp. of America MAVERICK Channel Master MAX-MIXER Special Products MEGA-PIX MEGA-PIX
Kay Electric Ca.
MEGA SWEEP
Kay Electric Co.
MEG-O-MAX
Sprague Electric Co.
MEISSNER Thordarson-Meissner
MELLOTONE
Electronic Enterprises
MELODIER

Electro-Voice, Inc.
MERCURY
Vuican Electric Co.
MERITONE
Autocrat Electronics
Co. METALITE Astron Corp.
METER-MATIC
Internation! Register
METER-MATIC
Leitch Eng'g
METRO
Redien Comments Radion Corp. Telematic Industries
METROPOLITAN
Radion Corp.
MICAP

Micramold Radio Corp.

MICRO

Kay Electric Co.

MICRO

Waters-Conley Co.
MEMOTRON
Hughes Alrcraft Co.
MERCURY

Precise Measurements
MICRO-GAP Shure Bros. Kay Electric Co. MICRO-MIXER Kay Lab. Micro-Circuits Co.
MICROTHERM
Raytheon Mfg. Co.
MICROTRAN Crest Laboratories Inc. Sprague Electric Co. MIDGETESTER Simpson Electric Co.
MIDGETROL
Mollory & Co., P. R.
MIKESTER Art Specialty Co.
MILLIMAG
Transistor Products, Inc. MINI-BEAM

MICRO CIRCLE

Telrex Labs. Bud Radio Inc. MINI-CON Switchcraft, Inc. Javex MINIFON Interstate Photo MINI-KIT Insuline Corp.

MINI-MIX Switchcraft, Inc. Javex MINISEL Electronic Devices
MINI-SOCKETS

Javex
MINI-VOLT VOLTMETER
Industrial Devices, Inc. MIN-KAPS Centralab Div., Globe Union, Inc. MIRO-POINT Duotone Co.
MIRROR-TONE
Scott Radio Labs.
MI-TEE-RAY Fretco Inc. Jontz Mfg. Co. M-JAX

Switchcraft, Inc. MOBILFONE Mobile Electronics Mfg.
MOBILTONE
Mobil Electronics
MOLARC

Mole-Richardson Co. MOLD-KAP
Centralab Div.,
Globe Union, Inc.
MOLDTITE United Condenser Corp.

MOLD-X
Amerian Radionic Co.
MONARCH
British Electronic
MONITOR
Radio Merchandise
Sales
MONOPLEX
Shure Baco

Shure Bros. MONOSET Telex, Inc. Jordan Mfg. Co. Fenton Co.
MOTEX TAPE DECK
Fenton Co.
MOTORLYTIC

MOTORLYTIC
Micamold Radio Corp.
MOUNTIE
Danforth Mfg. Co.
MOVIE-CLEAR
Sylvania Electric

Products MUGWUMP Radio Merchandise Sales MULTIBOOSTER Industrial Television MULTI-MODE

MULTI-MODE
Tele-Beam Industries
MULTI-RAY
Borb City Industries
MULTIPLE UNIT
Hevi Duty Electric Co.
MULTIPLEX
Chicago Ind.
Instrument
MULTITESTER

Barrett Electronics
MUL-TEL
Brach Mfg. Corp.
MULTICOUPLER Amy, Aceves & King MULTI-DRAWERS

Cincinnati Ventilating
MULTI-SWITCHES ICRO Switchcraft, Inc.
Transi-Mite Radio Lab. MUSICAL MASTER

Greene Co., L. Charlton MUSIC LOVER Shure Bros. MUSITAPES Tempo Record Co. MUTED STYLUS Shure Bros. MYERS Allweather Antennas MYKAPLAST
United Condenser Corp.

NA-ALD Alden Products Co. Hitemp Wires, Inc. National Co. NATFAB
Hoffman Electronics
NEPCO NEPCO
National Electric
Products Corp.
NEPCOLINE
National Electric
Products Corp.
NEVATIR NEVATIP Radio Merchandise Sales NEVER-STAIN Nichols Wire & Aluminum Co. NIPPER Radio Corp. of America America
NITELIGHTER
Fisher-Pierce Co.
NOBLELOY
Continental Carbon Inc.
NOBLETTE Continental Carbon Inc.
NO NOISE
Electronic Chemical NO-OX Walsco Electronics Corp. NORMA United Audio Prods. National Tel-Tronics NUMECHRON Pennwood Numechron NYCO NYCO
New York Coil Co.
NYLAFLOW
Polymer Corp.
NYLASINT

Blonder-Tongue Labs. Livingston Electronic
O-GYRO Dynamic Electronics Shallcross Mfg. Co. OHM-SPUN States Co.
OILMITE
Deutschmann Corp., T. OMEGATAPE
Int'l Pacific Recording
OMNI-GLOW PILOTLIGHT
Industrial Devices
OPTO-MATIC Trico Fuse Mfg. Co.
ORPHEUS ORPHEUS
Int'l Research Assoc.
ORYX
American Mercantile
ORYX
TV Accessories Co.
OSCIL-O-PEN
General Test
Equipment Co.
OV-O-LINE

Corp.

Polymer NYLATRON

Polymer Corp.

Atlantic Wire & Cable Corp. PACE
Precision Apparatus
PACEMAKER
Bell Sound Sys.
PACE-SEYTER
JFD Mfg. Co.
PAINTON
British Electronic JFD Mfg. Co. PAMCO
Paraplegic Mfg. Co.
PANCOUSTIC PANCOUSTIC
U. S. Recording Co.
PANDUX
Pacific Transducer
PAN-I-IITE
Alden Products Co.
PANORAMIC
Radio Merchandise
PARABORAY
Neal Electronic Co.
PARACON
Ward Products Core

Ward Products Corp.

PARA-FLUX Radio Music Corp. PARANITE PARANITE
Essex Wire Corp.
PATRICIAN
Electro-Voice, Inc.
PARTRIDGE British Electronic Sales P & B Potter & Brumfield Potter & Brunner
P.E.C.
Centralab Div.,
Globe Union, Inc.
PECO
Pomona Electronics Co.
PEERAGE
Electro-Voice, Inc.
PEERLESS
Altrec Lanning Corp.
PEE-WEE
Mueller Electric Co.
PENDET

Mueller Electric Co.
PENDET
Centralab Div.,
Globe Union, Inc.
PENN-TRAN
Penn Transformer Corp.
PEN-OSCIL-LITE

General Test Equipment
PERCO
Linell Eng'g Corp., CS
PE REX

Fenton Co.
PERM-A-CAPS
Chicago Condenser PERMALINE Columbia Wire & Supply PERMASEAL

Sprague Electric Co. PERMA-TUBE Jones & Laughlin Steel
PERMO-SWITCH

PERMO-SWITCH
Centralab Div.,
Globe Union, Inc.
PET LINES
Portable Electric Tools
PFAN-TONE
Pfanstiehl Chemical Co.
PHANTOM PLASTICS
Tale-Ream Industries Tele-Beam Industries PHAZOR

PHAZOR
Industrial Test Equip.
PHOENIX SPEED-TENNAS
Phoenix Electronics,
Inc.
PHONO-DOODLE

Shura-Tone Products
PHONOLA
Waters Conley Corp.
PHONOSTROBE
Berkshire Laboratories
PHOTOTRON

PHOTOTRON
Thomas Electronics, Inc.
PICBOOST
CBC Electronics Co.
PICK-A-SMAFT
Clarostat Mfg. Co.
PIC-SYNC TAPE
Fairchild Recording
Equip. Co.
PIC-TRON
Tube Service Corp.
PILOTONE
Pilot Radio Corp.

Pilot Radio Corp.
PILOTUNER Pilot Radio Corp.

Spraque Electric Co. Walsco Electronics
PIP-JET
JFD Mfg. Co.
PISTOGRIP
Wall

Wall Mfg. Co., P. Winegard Co. PLASTICON Condenser Products Co.

PASTICORD Chester Cable Corp.
PLASTICOTE
Chester Cable Corp.
PLASTI-PAK

Centralab Div.,
Globe Unian, Inc.
PLASTISEL
Electronic Devices
PLEXICON

Erie Resistor Corp.
PLYMOUTH
Colortone Electronics PLYTUBULAR Tennalab
POLEX
Union Plastics Corp.

POLYCOUPLER CGS Labs., Inc. POLYKEN Kendall Co. Kendall Co.
POLYPENCO
Polymer Corp.
POLYPHANE
Technical Tape Corp.

PORTA-KALL Loge Sound Engrs., J. M. PORT-A-PHONE Feller Eng'g & Mfg. Co.

PORTAPLEX
Chiago Ind.
Instrument Co. PORTOFONIC
Dynavox Corp.
PORTO SHEARS Black & Decker PORTROLA PORTROLA
Bell Sound Systems
POWER FEREBALL
JFD Mfg. Co.
POWER HELIX
JFD Mfg. Co.
POWER-PAGE
University Loudspeakers
POWERSEL Eletronic Devices
POWR BLOX
Authorized Mfg. Co.
POWR-KORD Royal Electric Co. POWRMIKE University Loudspeakers POWR PAKT

Alliance Mfg. Co. POWR-RIB Ohmite Mfg. Co. Radio Engineering PREH American Elite, Inc.

PRINCE
Int'l Radio & Electr
PROFESSIGNAL Trimm, inc. Sprague Electric Co. Vulcan Electric Co.

Ol Superex Electronics Corp. QUAD Beam Instruments
Corp.
QUADNAURAL
Dynamic Electronics QUADRILINE Radio Engineering Labs Q-2005 Polymer Corp. QUARTET Califone Corp.
QUICK-WEDGE Kedman Co. QUICK-RIG JFD Mfg. Co. Kemode Mfg.

R & A British Electronic RADA Kay Electric Co. RADALIGNER RADALIGNER
Kay Electric Co.
RADAMETER
Raythean Mfg. Co.
RADOR
Atlas Overhead Door
RADARANGE
Raythean Mfg. Co.
RADAX
Electron Walco. Electro-Voice, Inc. Technicraft Co.
RADIODYNE
Western Coil &
Electrical Co. RECEITICAL CO.
RADIOHM
Centralab Div.,
Globe Union, Inc.
RADIOLA
Radio Corp. of America
RADIO'S MASTER
United Catalog Pub.
RADIOTRON
Radio Corp. of America
RAINBOW
JFD Mfg. Co.
RAITEX
Technical Tape Corp.
RANGER
Shure Bros.
RAREOX
Rare Earths, Inc.

Rare Earths,
RAY-SCOPE
Di-Co IV &
Plastic Co.
RAYOFLEK Walsco Electronics
RCA VICTOR
Radio Corp. of America
RCP RCP
Radio City
Products Co.
REACTRON
United Condenser

Earths, Inc.

Corp. Rek-O-Kut Co.

Wilcox-Gay Corp. RE-CORD-O-FONE RE-CORD-O-FONE
Bell Sound Systems,
Inc.
RECTICHARGER
Raytheon Mfg. Co.
RECTIFILTER Raytheon Mfg. Co.
RECTISEL
Electronic Devices, Inc.
RECTODYNE RECTODYNE
McColpin-Christie
Corp.
RECTO POWER
Mallory & Co., P. R.
REDI-RIG Radlo Merchandise Sales RED SEAL Radiart Corp. Radio Corp. of Ameria RED-WOOD JFD Mfg. Co. REGENCY Electro-Voice, Inc. REGENCY IDEA, Inc.
REG-O-MATIC
CBC Electronics Co.
REGOVAC

> Labs.
> RELIATRON
> Westinghouse Electric
> REMBRANDT All Channel Antenna RESLO Fenton Co. Hitemp Wires, Inc. REVCOTHENE Revers Corp. of America American Elite

Technical Apparatus
REK-O-KLEEN
Kral Products

Radio Engineering

Fenton Co. Shure Bros. RIVERSIDE Livingston Electronic
RHYTHMASTER Rek-O-Kut Co. Lowell Mfg. Co. Remote

Television F Control Co. RITEOHM Ohmite Mfg. Co. RMS Radio Merhandise

Sales ROCKETENNA TV Products Co. Circon Component Co.
ROLLPIN (R)
Elastic Stop Nut Corp.
RONDINE

Rek-O-Kut Co.
ROTALYZER
Kay Electric Co.
ROTO-KING JFD Mfg. Co.
ROTO-RANGER
Simpson Electric Co.
ROTO-TENNA

MOTO-TENNA
Motorola, Inc.
ROTOR QUEEN
Radio Merchandise
Sales
ROYAL Permoflux Corp.
ROYAL-NOARK Royal Electric & P RECESS Reed & Prince RPC

Resistance Products Co. RSE
Radio Supply &
Eng'g Co.
RTV-PROGRAM

Clarastat Mfg, Co. RYTEL Cal-Lee Mfg. SABRE

Welco Mfg. Co. SAFE-T-KLIP Industrial Devices Inc. SAFETVISION Bennett Laboratories SAFETY MARGIN Astron Corp.
SAFETY-MATIC Columbus Eng'g Fretco Inc.
SAXL
Tensitron, Inc.
SCINTILLATOR Precision Radiation

Minnesota Mining & Mfg. Co. Black & Decker
SECRET RECORDER
Amplifier Corp. of America SECTOR Jensen Mfg. Co.
SEEZAK PRODUCTS
U. M. & F. Mfg. Corp.
SELECT-A-CALL Telecom, Inc.
SELECTOHM
Chicago Industrial
Instrument Co. Instrument Co.
SELET-O-VISION
Malin Enterprises
SELETRON
Radio Receptor Co.
SELFOCUS DuMont Labs., Ailen B. SELPO Self-Lifting Piano Truck SENCO Service Instruments SENIOR Hamilton Electronics
SENSI-BEAM Antenna Products
SERAMELITE Good-All Elec. Mfg. Co. SERRASOID Radio Engineering Labs. SERV-A-UNIT Alden Products Co. SERVICE ENGINEERED Jackson Electrical Instrument Co. SERVICE SPOOL Alpha Wire Corp. SERVOTRON Raytheon Mfg. Co. 7 STAR Tele-Ex-Pand Corp. SHELF-PAK Centralab Div.,
Globe Union, Inc.
SHOPMATE
Partable Electric Tools
SHORTHORN Klipsch Associates JFD Mfg. Co.
SIE
S W Industrial Electr
SIGHTMASTER Art Specialty Co.
SIGNA-GLOW
Industrial Devel Labs
SIGNALETTE Lytle Eng'g, & Mi SIGNA-MATCHER Centralab Div., Globe Union, Inc. SIGNATURE & Mfg James B.
SILENT-SOUND General Phones SHEPTEY Erle Resistor Corp.
SILIKONE
Ebcor Electronics
SIL-LUBE Ebcor Electronics
SILVER ARROW
Fretco, Inc.
SILVERCEL Yardney Electric General Instrument SILVER WAND Peerless Products
SIMPLEX Chicago Industrial Instr. Co. SK Skottle Electronics Inc.
SKYCHIEF Camburn Inc. Thomas Mold & Die Co. Electro-Volce, Inc. SKY-LOK JFD Mfg. Co. SKY-MASTER Jewell Inc., A. W. SLENOYNE Shure Bros. Electro-Voice, Inc. SLIM-X Shure Bros. SLIP-DRIVE Clarostat Mfg. Co. SLUMBERTONE

SMALL BROADCAST Shure Bros. Shure Br SMART SET Bros. Calbest Eng'g & Electronics Co. SMATCO Stone City Machine
SMITH-BALDWIN SPEAKERS Consolldated Radio Products Hunter Tools
SNAPOUT RIGID-RIG
Medal Mfg. Co.
SNAPPER
Curtiss-Wright
SNAP-TITE Centralab Div., Globe Union, Inc. Special Products
SNAPPER CLIP Mueller Electric Co. Snyder Mfg. Co. Mole-Richardson Co. Solo Electric Broch Mfg. SOLDER MASTER Hexacon Electric Co. Stark Mfg. Wassco Electric Products Corp. SONA
Kay Electric Co.
SONALINE
Kay Electric Co.
SONARMETER Mfg. Co. Shure Bros. Hamilton Electronics SOUNDCRAFT
California Cabinet
SOUNDCRAFT Reeves Soundcraft COTP. Concertapes Inc. Video Accessory
Mfg. Co.
SPEAR
British Electronic Sales SPECO Special Products SPEECH MASTER
Jensen Mfg. Co Phoenix Electronics, SPEE-DEE SPEEDEX SPEEDEX
General Cement Mfg.
SPEE-D-LOK
Radio Merchandise
Sales, Inc.
SPEED-MOUNTS Phoenix Electronics SPEEDTENNAS
Phoenix Electronics
SPHEREX Electro-Voice, Inc. SPICE-CHEST Guild Radio & TV Co.
SPICO SUPER PHANTOM
Spirling Products Co. SPINLAB Special Instruments
Lab., Inc.
SPINTITE Stevens Walden Inc. Phelps Dodge Copper Prods SPIRAL-TENNA HILO TV Antenna Corp. Imperial Radar & Wire Corp.
SPRAINT Waldom Electronics SPRAYWAY Tru-Pine Co.
STABELEX CAPACITORS
Industrial Condenser
Corp.
STACO Standard Electrical Products Co. STANCOR Chicago Standard Transfòrmer Corp. STANDEE Clarostat Mfg. Co. STA-PUT Consolidated Wire & Associated Cos.

STANDO Parker Metal Goods STAR-HELIX JFD Mfg. Co. Metzner Eng'g Corp. Duotone Co. STATI-CLEAN Electrovox Co. STATI-MUTE Eby Sales Co. STAVOLT McColpin-Christie Corp. Micamold Radio Corp.
STEELBINDER
Gerrard & Co., A. J.
STENO Cresent Industries
STENTORIAN Beam Instruments Corp. STEP-SERVO Bergen Lobs. STEREO-MAGNEMITE Amplifier Corp. of America STEREOSCOPIC Radio Merhandise Sales, Inc. STERLING CABLE Beam Instruments Spirling Products Co. STRATOBEAM Antenna Products STRATOLINER Shure Bros. STRATO TOWERS Pipestone Sales Co. STRATO-TOWERS Spaulding Products Co. STRIP-EASE Radix Wire Co. Ideal Industries, Inc. STYROFLEX Phelps Dodge Copper SUPER-BEAM JFD Mfg. Co. Radion Corp. SUPERBULLSEYE Radion Corp. United Electronic Mfg.

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SUPER STAR HELIX
JFD Mfg. Co.
SUPERTENNA Tennalab SUPER THUNDER BIRD Telrex Labs.
SUPER-X Comburn, Inc. SWING-BIN Akro-Mils SWITCHMASTER Tork Clock Co. SWITCHMAT Recora Co. Radio Merchandise
SWIVLTOP
Moody Machine
Products Co.
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SYMPHONETTE Hedco Mfg. Corp.
SYNCHRON
Hansen Mfg. Co.
SYNCROLL DRIVE
Fairchild Recording
Equip. Co.
SYNKINETIC Magnasyne Mfg. SYNKOTE
Plastold Corp.
SYNTHINOL
Consolidated Wire &
Associated Cos. SYNTHOLVAR Varflex Corp.

TABLITE
Technical Apparotus
TABPAK
Technical Apparatus TABTRAN Technical Apparatus TACO Technical Appliance
TALKING COMICS
Kraft Bros.
TAPE-O-MATIC

Smith Heat Treating Co. TITONE Webster Electric Co. Sonotone Corp. Dumont Labs., Switchcraft, Inc TNT TOTE BOXES Mastra Co. JFD Mfg. Co. TELE-VANES Ward Products Corp. TELEVER SWITCHES TOBE Deutschmann Corp., Tobe TOBEMITE witchcraft, Inc. Deutschmann Corp. TELEVOLTER
Jackson Electrical Tobe
TOMAHAWK
Stevens Walden Inc.
TOMBONE Instrument Co. Sprague Electric Co. TELVAC Television Accessories Hitemp Wires
TENNA-CLAMP
Mueller Electric Co.
TENNA-CLIP
Industrial Television TENNA-LINER
Crown Controls Co.
TENNA-MASTER TENNA-MATER
Spirling Products Co.
TENNA-MATCH
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TENNA-PAK JFD Mfg. Co. TENNA ROTOR Alliance Mfg. Co. TENNA-SHINGLE Vidaire Electronics
TENNATUBE National Electric Products Corp. TENNA-TUBE Kato Engineering
TENSOLEX
Tensolite insulated Tensolite Insulated
Wire
TEN SPOT aldom Electronics TV Products Co. TEST MASTER Precision Apparatus
Co.
TEST-O-LITE Brach Mfg, Corp.
TESTOMETER
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W. L. Maxson Corp.
THERMALON

TELE-PLEX JFD Mfg. Co.

TELERING Telkor Inc. TELETALK

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Hitemp Wires
TEMPRENE
Hitemp Wires
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Hitemp Wires

Hitemp Wires

Javex TENNA-SWITCH

Javex TENNA TUNER

Wire

TESCON

TENSOLON

Co. Fenton C

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THERMOROD

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3-PI

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Sprague Electric Co.
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TI-MATCH Cambum, Inc.

TIME-ALL

Inc.

TINY GLOW

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Labs. THERMO-GRIP

THESAURUS



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TAPGUN

Black & Decker TARGET

Winegard Co.
SUPERCON
Antenna Products
SUPER-DAVOHM Daven Co.
SUPER DODO
JFD Mfg, Co.
SUPERFAN
Channel Master SUPERIOR Wall Mfg. Co., P. SUPER JOE TV Products Co. Kay-Townes Antenna SUPERKIT Superex Electronics SUPER MINI-BEAM SUPER MINI-BEAM
Telrex Lobs.
SUPER KWICK CLIMB
TOWERS
Jontz Mfg. Co.
SUPER MARKER
INJECTOR
Scala Radio Co.
SUPER-MITE
Transl-Mite Radio L Transi-Mite Radio Lab. Transi-Mite Radio L SUPERNAIL Radio Merchandise Sales SUPEROTOR Leader Electronics SUPEROTOR SUPEROTOR
Thompson Products
SUPER PHANTOM
Spirling Products Co
SUPER POWER HELIX
JFG Mfg. Co.
SUPER-POWER JET
JFD Mfg. Co.

SUPER'CEPTOR

TEECO A Electronics Trutone Electronics TEFEX
Union Plastics Corp.
TEFIFON Audio-Master Corp. TEFLON Polymer Corp. Wallace's Telades TEL-AIR Tele-Beam Industries
TELA-SET Telex, Inc. Vidaire Electronics TELECABLE
Whitney Blake Co.
TELECAP Sprague Electric Co. TELE-CHECK Telematic Industries, Inc. TELECON Teletenna Co. TELE-COUPLER TELEFUNKEN
American Elite, inc.
TELEFUNKEN London Int'l Records
TELE-MATCH
Vidaire Electronics
TELE-MIX Hamilton Electronics
TELE-MOBILE Tele-Ex-Pand Corp.

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Knights Co., James
TIPWRENCH

Electro Sound Corp.

SMA Lytle Eng'g, & Mfg. Co.

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Electro-Voice Inc.
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Amplifier Corp. of
America North American Model Prod. TWISTLOCK
Hubbell Inc., Harvey
TWIST-LOK Sprague Electric Co. Fenton Co. TWO-TIMER Vocaline Co. of America Inc. TYNISWITCH Sessions Clock Co.

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Kay Electric Co.
ULTRA-BEAM
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VarGLAS SILICONE
Varflex Corp.
VARIABLE D
Electro-Voice, Inc.
VARI-CHOKE Blonder-Tongue Labs. U-MIX-IT Technicroft Co.
UNECAP
United Electronic Mfg. Superex Electronics VARICON UNICON United Condenser Corp. UNIDIAL Elco Corp. VARIDOT Simpson Electric Co. Chicago Ind. Instrument UNIMATIC Trico Fuse Mfg. Calbest Eng'g & Electronics Co. Anton Electronic Labs

UNI-RACK
Alden Products Co.
UNIT-IZED

Mueller Electric Co.
URBANETTE
Videon Electronic
Corp.

United Transformer

Utah Radio Products

Setchell-Carlson

UNITONE

Co.

Duotone Co. UNIVERSAL

VARI-LOOPSTICK Superex Electronics
VARIPOLE Califone Corp. Deutschmann Corp., T. VARIOSCOPIC Radio Merchandise Sales VARRO Davis Electronics Hamilton Electronics Mitchell Industries Inc. JFD Mfg. Co. Lapoint Electronics VELA Video Electronic Lab. VERSA-TOOL
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VIDEOLA
Tech Master Corp.
VIDEO-BEAM
Camburn, Inc.
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Electron-Rodar VIDI-TROL Electron-Radar VIKING Forsberg Mfg. Co.
VIKING SPEAKERS
Jensen Mfg. Co.
VIL-MAGNEMITE
Amplifier Corp. of
America VINEX Union Plastics VISCOFILM Industrial Condenser
VISITRON
Rauland Corp. VIS-U-ALL Television Engineers VITAMETER Electronic Test Instrument Sprague Electric Co. VITAMIN O Ward Leonard Electric Millers Falls Co. Millers Falls Co.

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National Tel-Tronics
V-M, THE VOICE OF
MUSIC
V-M Corp.
VOCATRON
Vocaline Co. of
America
VOLTA-CHEK
Electronic Test Electronic Test Electro-Physics VOLTOHYMST Radio Corp. of America, RCA Tube Dept.

VIDI-TONE

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Stevens Wolden Inc.
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Woll Mfg. Co., P.
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WILKOR Aerovax Corp.

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WIREWATT
Ohmite Mfg. Ca. WISSH Workman TV, Inc.
WONDEROD
Columbia Products Co.

XCEL Xcelite, Inc. XELA Klein & Sons, M. XTALATOR Kay Electric Co. Fidelity Chemical Products

YAGI HELIX JFD Mfg. Co. YOK-EX Vidaire Electronics

ZEC-BE AM Welco Mfg. Co. ZIG-ZAG Trio Mfg. Co.
ZINKTRON
Constad Laboratories
ZIP
JFD Mfg. Co. ZIPPERS
Centralab Div.,
Globe Union, Inc.,
ZOOM-UP Camburn, Inc.

# Service Associations 1956 Roster

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### ARIZONA

PHOENIX—Better Electronic Service Technicians (BEST)
Box 1284 Hal Heath Secy
TUCSON—Electronic Assoc of Tucson Ariz 2616 E Broadway Arthur Wheeler Pres

### ARKANSAS

FORT SMITH-Fort Smith Radio & TV Telhnicians Assoc FORT SMITH—Fort Smith Radio & IV Teinhietans Assoc P O Box 133 Geo Goodin Seey HOT SPRINGS—Hot Springs Radio Servicemen's Assoc 608 W Grand Ave W Malsoll Seey NORTH LITTLE ROCK—TV Service Assoc of Arkansas P O Box 542 W T Head Seey

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COLTON—Citrus Belt Radio Technician Assoc Box 344

Roy Clark Recording Seey

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LONG BEACH—Radio TV Technicians Assoc P 0 Box
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Ed Mitchell Secy SAN CARLOS—TV Service Dealers Assoc P 9 Box 801
Ed Mitchell Secy
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Mission St T R Hopman Pres
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275 Ocean Park Station Herb Sulkin Secy
SANTA PAULA—Radio Electronic Specialist Assoc 622
Main St Robt Simmons Pres

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W Colorado Richard Starm Secy
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Chapter 814 16 St G M Norris Secy
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George E Nix Secy-Treas

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E Wright St W J Corner Jr Seey
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Wabash Ave James Pintl Secy
CHICAGO—National Alliance of TV & Electronic Service
Assoc 5908 S Troy St Robt Hester Secy
CHICAGO—TV Installation Service Assoc 5908 S Troy St los Isaak Serv

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St F R Hollingsworth Pres
JOLIET—Will County Radio & TV Assoc 35 W Van
Buren St Art McAllister Secy
ROCKFORD—Greater Rockford Appliance Dealers Assoc
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Lee White Secy
EVANSVILLE—Radio Service Men's Assoc 105 N Spring
St Earl Temple
SEYMEUR—TV Servicemen's Assoc R R #3 Cliff Locman Secy

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OTTUMWA—Ottumwa TV Service Dealer Assoc 515
Church St Gerry Brown Secy

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LINA—TV Electronic Service Assoc Salina Chapter SALINA—TV Electronic Service Assoc Salina Chapter 682 S 9 St Melton Shelton Seey WICHITA—TV Electronic Service Assoc Wichita Chap-ter 333 N Waco St Wm Nichols WICHITA—Wichita Appliance Dealers Assoc 822 Central Bidin C D Hughes Seey

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MASSACHUSETTS

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Mass Ave Edmund Chebator Secy
CAMBRIGE—Assoc of TV Service Engineers 18 Jackson
St I Werlin Pres
FALL RIVER—Radio-TV Technicians Guild of Greater
Fall River PO Box 1307 Maurice Provost Pres
NEW BEDFORD—Radio Technicians Guild 110 Topham
St James L Shepley Secy
WORCESTER—Worcester County Assoc of TV Technicians
General Delivery M R Hildebrand Secy

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KALAMAZOO—Radio TV Assoc of Kalamazoo PO Box 773 Wm G West Pres

### MINNESOTA

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MINNEAPOLIS—Minn TV Service Engrs PO Box 42

MINNEAPOLIS—Minn TV Service Engrs PO Box 42
Warren Schel Secy
MINNEAPOLIS—Radio Servicemen of America 1010 Second Ave S J R Trovail
MINNEAPOLIS—Radio & TV Assoc 2451 Hennepin
Harold Simmenson Pres
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Mitchell St E R Gelinas Secy

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NEW JERSEY

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IRVINGTON—W J Radio Appliance Dealer's Assoc 1156
Springfield Ave W A Bohr Pres
MARGATE—Electronic Technicians Assoc of S J 220 N
Argyle Ave Wm J McGill Secy
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St J P Murphy Secy
PERTH AMBOY—TV Technician of Perth Amboy 414
Amboy Ave Bud Anderson Pres
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Ave Lester H Allen Pres
TRENTON—Radio Servicemen's Assoc 72 S Olden Ave
M E Toth Secy

### NEW YORK

-Albany TV Service Assoc 364A Central Ave

NEW YORK

ALBANY—Albany TV Service Assoc 364A Central Ave Mr 0'Dea

ARDSLEY—Westchester TV Guild 21 Taft Lane Cliff Kantor Pres

BEACON—Hudson Valley Electronic Technician Assoc 55 Prospect St Thomas P Thorne Assoc Mgr

BETHPAGE—Radio & TV Guild of L i PO Box 87 C Stratigos Secy

BINGHAMPTON—Southern Tier Chapter R. S. A P O Box 201 M Harris Secy

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BROOKLYN—Nati' Electronic Technician Service Dirs Assoc 1431 Flatbush Ave Max Lelbowitz Pres

BROOKLYN—Radio & Electronic Dealers & Servicemen's Asson 1044 Rutland Rd irving Horowitz

BROOKLYN—TV Radio & Appliance Dealers Assoc 925

Kings Highway E Y Perlman

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BUFFALO—Buffalo Radio Institute Alumni 45 W Mohawk St Robert Dorio Recording Secy

BUFFALO—Redio Technicians Assoc 657 Broadway Theodore J Telaak Pres

BUFFALO—Western Electronics Guild 2011 Hertel Ave L Marshall Secy

BUFFALO—Western Electronics Guild 2011 Hertel Ave L Marshall Secy

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FOREST HILLS—Forest Radio & TV Assoc 109-01 72

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Ave Fred Booth
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N High St Jack Voigt Secy
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Pleasant Pl O G Shanteau Secy



### OKLAHOMA

OKLAHOMA CITY—Oklahoma Radio & TV Service Assoc 5707 North Western Russ Snyder Seey OKLAHOMA CITY—TV Service Assoc of Okla P O Box 9664 W L Jones Secy

### PENNSYLVANIA

PENNSYLVANIA

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BETHLEHEM—Lehigh Valley Servicemen's Assoc 1335 N Long St Claude Kramer
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St Paul L Weir Pres
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94 W Bennett St Milan J Cooper
LANCASTER—Conestoga TV Assoc 915 New Holland Ave
R G Wlegand Secy
OLYPHANT—Lackawanna Radio Technicians Assoc 104
Hull Ave Howard Green Secy
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PHILADELPHIA—TV Contractors Assoc 6017 Ogontz
Ave L J Smith Secy

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PHILADELPHIA—TV Service Dealers Assoc 6017 Ogontz
Ave L J Smith Seey
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1741 East St B A Bergenzer Chairman
PITTSBURGH—Radio & TV Servicemen's Assoc of Pittsburgh P 0 Box 6844 Tom Ging Recording Seey

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READING—Reading Radio Service Technicians 704 Walnut St John C Rader Secy
STEELTON—Mid-State Radio Servicemen's Assoc 22 S
Front St Fred J Schmidt Secy
WASHINGTON—Radio TV Service Assoc 471 W Chestnut St Carl J Wagner Secy-Treas
WILKES-BARRE—Radio & TV Servicemen's Assoc of Luzerne County P 0 Box 309 Milian J Krupa Secy
WILLIAMSPORT—Associated Radio Servicemen of Central Pa 1643 Memorial Ave Phil Marchion! Secy
YORK—Southern Pa Radio & TV Assoc 736 E Market St Carl E Sheffer Secy

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FORT WORTH—Fort Worth Radio & TV Assoc 1610 8

Ave Truett Kimzey Pres
HOUSTON—Texas Electronic Technicians Assoc P 0 Box 15011 Al Gaskey Assoc Mgr
SAN ANTONIO—American Electronic Council 801 St Mary's St F L Baker Chairman

SAN ANTONIO—San Antonio Radio & Television Assoc 730 S St Mary's St Alton Roberts Secy

### UTAH

SALT LAKE CITY-Utah Assoc of Radio & TV Service-men 418 Frick Bldg 23 E 1 St John F Burns Pres

### VIRGINIA

NEWPORT NEWS—Tidewater Radio Servicemen's Assoc 4313 Hunt Ave David Heorn Pres NORFOLK—Tidewater Radio Servicemen's Assoc 343 S Olney Rd E C Sholar Secy

### WASHINGTON

SEATTLE—North West Appliance & TV Assoc 512 1
Ave N D M Lombardo Secy
SNOHOMISH—Everett Radio Servicemen's Club 1120 1 St Joe Mulholland Pres

### WEST VIRGINIA

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### WISCONSIN

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CANADA

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KELOWNA B C—Assoc Radio Technicians of B C 519
Osprey Ave Ralph Mattie
MILNER B C—Assoc RadioTechnicians of B C R R 1
Fraser Valley Roy Tom
ORGANEVILLE ONTARIO—Radio Electronic Technicion
Assoc Box 414 V E Sharp
VANCOUVER B C—Assoc Radio Technicians of B C 918
Rogers Bldg W Munton
VICTORIA B C—Victoria & Island Chapter Radio Elec
Technicians Assoc 783 Fort St D Banfield Pres
WINNIPEG MANITOBA—Radio Electronic Technicians
Assoc Box 391 C Harder Secy

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### TECHNICIAN BUYERS DIRECTORY

### Distributors

These are the names and addresses of organizations handling the distribution of radio-TV-electronic parts and equipment in the United States. Listings are alphabetical under states and cities. Asterisk (\*) indicates membership in National Electronic Distributors Association (NEDA).

### ALABAMA

ANNISTON Dickert Supply Co 105 W 10 St AD 5-3933 Radio Dist & Supply 125 W 10 St AD 6-0671 BESSEMER Bessemer Radio Supply 114 N 20 St 5-9573

BIRMINGHAM

IRM INGHAM
Ack Radio Supply 3101 4th Ave SE 4-0588
Air Engineers 1529 2 Ave 54-3431
Auto Service 1916 S 4 Ave 3-4102
"Clary Co J W 1713 2 Ave S 4-2488
Forbes Distr 2600 3 Ave S 3-4105
Graybar Elec 709 1 Ave N B1 4-1861
Lewis Supply Co 1025 N 19 St 7-1148
McDavid & Co R P 1430 2 Ave S 7-7165
"Reid Distributing 1724 5 Ave N 4-7357
Steel City Supply 600 N 7 St 4-0433
ECATUR

Radio & Television Supply 415 Bank 2231

DOTMAN

Carmichael Wholesale 140 S Foster St 2-1255
Hand Supply Co 705 S Oates 4-3300
Signal Supply 1505 Mentgomery Hwy 4-0360
GADSDEN
Radio Dist & Supply Co Hdgrs Anniston
Southeastern Radio Parts Hdgrs Atlanta
HUNTSVILLE
Radio & TV Supply Hdgrs Decatur
JASPER
Ramen Radio Synally 20 St & O. Ann. O. 5003

Ramco Radio Supply 20 St & 2 Ave 2-5321 MoBILE
Emrich Radio Supply 20 St & 2 Ave 2-3521
MOBILE
Emrich Radio Supply 656 Dauphin St HE 8-2596
Forbes Electronic 57 N Washington HE 2-7661
General Elec 54 Eslava St 8-4571
Graybar Elec Supply 701 N Joachim St HE 2-3511
Harris Supply 10 Water 2-0541
McDavid Co R P Hdgrs Birmingham
McGowin-Lyons Water & St Louis Sts HE 2-8721
\*Nelson Radio 451 St Louis 2-0411
Radio Labs 111 N Royal 2-1715
MONTGOMERY
Noiln-McInnis 211 Commerce St 7323
Southeastern Radio Parts 224 N Court St 3-6488
Teague Hardware PO Box 240 2-0541
Walther Bros 2245 W Fairview Ave
SELMA MOBILE

Waither Bros 2245 W Fairview Ave
SELMA
Reid Distributing Hdgrs Birmingham
SHEFFIELD
Radio & TV Supply Hdgrs Decatar
SYLACAUGA
Campbell Distributing Co 300 W 1 St 2-4122
TUSCALOOSA
\*Allen & Jemison Co 8-2781
Radio Parts 402 20 Ave 8-5585

### ARIZONA

HOENIX
Electrical Comm 202 E Filimore Al 2-8248
Electrical Equip 1 Ave at Madison 3-3186
General Electric Sup 1102 N 22 Ave AL 8-6721
Graybar Electric 434 W Madison AL 2-2375
Mathias & Co Albert Hdgrs El Paso Tex
Midlamd Specialty 1930 N 22 Hdgrs El Paso Tex
\*Radio Parts of Ariz 214 S 11 Ave Al 8-6476
Radio Spec & Appl 305 E Roosevelt AL 4-7184
Southwest Wholesale 2 at Madison AL 2-1743
Westinghouse Eiec 1110 N 21 AL 4-9276
USSON.

Art Electronic Supply 145 S Park 4-4413
\*Elliott Electronics 418 N 4 Ave 4-2473
General Electric Supply 2 E 6 St 3-4773
Graybar Electric 212 S Park Ave 2-6439
\*Standard Radio Parts 218 N 1 Ave 3-2545

### ARKANSAS

BLYTHEVILLE
Teague Radio-TV PO 3-4056
FORT SMITH
Carter Electronic 805 N 11 St 3-4129
\*Wise Radio Supply 1001 Towson Ave SU 3-8926
HOT SPRINGS

HOT SPRINGS
White Radio Supply David Hdgrs Little Rock
JONESBORO
Martin Wholesale Radio Sup Hdgrs Paragould
LITTLE ROCK
Carlton Wholesale 606 E Capitol FR 2-0248
General Electric Supply 601 E Markham 5-5328
Graybar Electric 417 Byrd St FR 5-1246
Frank Lyon 214 E Markham St FR 5-5311
Southern Radio 1419 Main St FR 2-4198
Thurman Supply 115 W 11 St 7308
White Radio Supply 1222 Main FR 6-1391
NORTH LITTLE ROCK
Rye Wholesale 117 W Washington FR 5-2426

Martin Wholesale 1207 W Kings Hwy CE 6-4049

White Radio Supply David Hdgrs Little Rock TEXARKANA \*Lavender Radio Supply 520 E 4 St 2-4195 McCulloch Whse TV 305 E Front St 22-8411

#### CALIFORNIA

CALIFORNIA
ALHAMBRA
\*Coast Electronic Supply 2708 W Main CU 3-4049
BAKERSFIELD
Arbuckle J C 500 E 19 St Hdgrs Fresno
Dunlap Radio & TV 1134 33 St Hdgrs Stockton
Radio Specialties Hdgrs Los Angeles
Valley Radio Supply 716 Baker St FA 7-8831
BERKELEY
Partie Padde Supply 1000 Ather Ave TH 3 2000

Pacific Radio Supply 1940 Ashby Ave TH 3-8900 BURBANK Dean's Electronics Hdgrs Long Beach

Pacific Radio Exch Hdgrs Hollywood
Valley Electronic Supply 1302 N Magnolia Blvd
CATHEDRAL CITY
Wholesale Electronic Specialists PA 8-3302
CHICO

Dunlap Radio & TV Hdqrs Stockton
Kemp Co E M 815 Main St Fl 2-8703
Radio Television Products Hdqrs Sacramento
CONCORD
Pacific Radio Supply Hdqrs Berkeley
EL CENTRO

Ainza Electronic 540 Broadway EL 2-2528
EL MONTE
Kimbali-Stark 713 S Tyler F0 0-2594

EUREKA Redwood Electronics 711 Summer St HI 2-1301

FRESNO
Arbuckle J C 2349 Kern 4-6555 Arbuckle J C 2349 Kern 4-6555
Blilings Wholesale Radio 817 Broadway
Delarnatt Whate B J 223 Fulton 2-2153
Dooley Harry 725 L St 2-4108
Dunlap Radio & TV 2617 Tulare St Hdgrs Stockton
General Elec Supply 1234 0 St 4-4746
Graybar Electric 101 Van Ness Ave FR 2-4175
Inland Electronic Sup 843 Divisadero St 6-9666
Kinney & Faust 1740 Van Ness 6-8321
Ports Mfg Co 3265 Belmont 3-6728
Westinghouse Elec 2608 Calif 4-5091
FULLERTON
United Radio & Electr Hdgrs Los Angeles

United Radio & Electr Hdqrs Los Angeles GARDENA

Video Suppliers 14526 Crenshaw DA 9-4053
GLENDALE Hagerty Radio 6826 San Fernando Rd TH 8-2453

\*Weatherford Co R V 6921 San Fernando RO 9-2281

Hagerty Radio 6820 San Fernando RO 9-228

Weatherford Co R V 6921 San Fernando RO 9-228

HOLLYWOOD

Hollywood Radio 5606 Hollywood HO 4-8321

Pacific Radio Exch 1407 Cahuenga HW 2-1393

Western States Elec 1509 N Western HO 5-7185

Yale Radio Elec 6616 Sunset Blvd GL 4169

INGLEWOOD

Cook Electronics 210 E Hardy St OR 8-7644

Inglewood Electronics 363 S LaBrea OR 4-2366

Newark Electric Hdgrs Chicago

Long BEACH

Cal-Tenna Electronics 363 South St NE 6-1239

Dean's Electronics 2310 American Ave GA 7-0955

Electronic Supply 3363 Lime St Hdgrs Pasadena

General Electro Supply 840 W 12 St 3-5311

Gough Industries 388 W 12 Hdgrs Los Angeles

Graybar Electric 800 W 16 St HE 2-2911

Kleruiff & Co 1760 Pacific Ave Hdgrs Maywood

Lynde Electronics 1526 E 4 St 7-4807

\*Scott Radio Supply 266 Alamitos 7-8629

LOS ANGELES

American Flentronic 567 S Fairfax Ave WE 6-518

Lynde Electronics 1526 E 4 St 7-4807

\*Scott Radio Supply 266 Alamitos 7-8629

OS ANGELES

American Electronic 567 S Fairfax Ave WE 6-5181

Beil Radio Supply 1311 W Florence Ave PL 2-7191

Calif Sound Prods 7264 Melrose WE 1-1557

Ceazan J N Co 3535 S Broadway AD 1-9133

Dunkle Radio Parts 2506 W 8 St

\*Federated Purchasers 11275 W Olympia BR 2-0831

Flgart's Radio 6320 Comm Sloat Dr Y0 6218

General Elec Supply 700 Turner St MA 5-7141

General Electronies 1632 Venice Blvd RI 9-822

Henderson Co 628 N Alvarado DU 2-8301

Henry Radio 11240 W Olympic Blvd GR 7-6701

Hollywood Electronics 7460 Melrose Ave WE 3-8208

Kerwin Co J J 1525 S Flower St PR 5323

Kleruff Electronics 820 W Olympic RI 7-0271

K & L Radio Parts 1406 Venice Blvd RI 9-0553

Los Angeles Radie 10217 Venice TE 0-5862

Pacific Television 4032 S Figueroa AD 3-8058

\*Papel Bros 2605 E 4 St AN 2-5151

Quality Dist 1715 W 8 St

Radio Doc 721 S Main St VA 3104
\*Radio Equip Dist 1340 S Olive St PR 9151
Radio Parts Sales 5220 S Vermont PL 9-9178
Radio Prod Sales 1501 S Hill RI 9-7471
Radio Spec 1956 S Figueroa St RI 9-7271
Radio TV Sup 341 w 18 St RI 8-7131
Sheliey Radio 2008 Westwood GR 7-6741
United Radio & Elee 1924 S Grand RI 9-5241
\*Univ Radio Sup 1729 S Los Angeles PR 5241
\*Univ Radio Sup 1729 S Los Angeles PR 5241
Warsoo Sales Co 4301 S Figueroa St AD 3-8171
Westinghouse Elee Sup 905 E 2 MA 9-4161
MARYSVILLE
Dunlap Whise Radio Hdgrs Stockton

Dunlap While Radio Hdgrs Stockton

Duntap white Radio Hdgrs StocktonMAYWOOD
Kierulff & Co 6058 Walker Ave LO 8-1192
MENLO PARK
Peninsula TV & Radio Supply Hdgrs San Jose
MEGOCONE

MERCED Duniap Radio & TV Hdgrs Stockton MODESTO

Dunkap Whole Radio Hdgrs Stockton
Inland Electronic Suppliers Hdgrs Fresno
Pacific Teletronic & Radio Sup 417 7 St 3-7751
MONTEREY
Parlants

Peninsula TV & Radio Supply Hdgrs San Jose
Whofesale Electronics 229 Alvarado ST 2-7642
NORTH HOLLYWOOD
N Hullywood Radio 4212 Lankershim ST 7-3063
OAKLAND
REHI CO NO CONTROL

AKLAND
Brill CO W D 198 10 St TE 2-6100
Cass Altschuler Co 6038 Telegraph UL 3-7557
"Elmar Electronics 140 11 St HI 4-7011
General Electric Sup 5400 Hollis St 0L 3-4433
Graybar Elec 1911 Union St GL 1-5451
"Millers Radio & TV 336 E 8 St TW 3-3848
Wengsr Co E C 1450 Harrison GL 1-1020
Westinghouse Elec 711 E 8 VE 4-9900
(MARA)

OXNARD
Kieruff & Co Hdgrs Maywood

Rierutt & Co Hdurs Maywood
PALO ALTO
Associated Radio Distr Hdurs San Francisco
Zack Radio Supply Hdurs San Francisco
PARAMQUNT
Ley Co EW 16514 S Garfield ME 3-5108
PASADENA

Dow Radio 1759 E Colorado SY 3-1196 Electronic Supply 2685 E Foothfil SY 5-5901 Empire Electronic Dis 37 E Union RY 1-7671 PITTSBURG

Dunlag Radio & TV Hdgrs Stockton POMONA Anderson-Maggs 1095 E Third LY 9-9669

REDWOOD CITY
Electronic Supply 1740 Broadway EM 8-4093
TV-Radio Supply 415 Lathrop Hdgrs San Francisco RICHMOND

Millers Radio & TV Supply Hdgrs Oakland RIVERSIDE Electronic Supply Hdgrs Pasadena

SACRAMENTO
Broill-Parks 2225 19 St Gl 2-2983
Capitol Electronics 1714 10 St Gl 3-5931
\*Dunlap Whsle Hdgrs Stockton
General Elect Supply 1131 "S" St Gl 3-9001
Graybar Electric 1900 14 St Gl 2-8976
\*Kemp Co E M 1115 R St Gl 3-4668
Mayberg Co Leo J Hdgrs San Francisco
Radio Television Prod 2012 19 St Gl 2-7691
\*Sacramento Electronics 1219 "S" St HU 1-4821
Westinghouse Elec 1730 14 St Gl 3-6525
SALINAS
Peninsula TV & Radio Hdgrs San Insa

Peninsula TV & Radio Hdgrs San Jose

Peninsula TV & Radio Hdgrs San Jose
SAN BERMARDINO
Featherstone Radio & TV 1010 E St 81-1306
General Elec Supply 485 S "!" St 5135
Gough Industries PO Box 222 Hdgrs Los Angeles
Graybar Electric 655 S "H" St ST 9-1051
\*Inland Electronic Supply 843 Colton Ave 6-5571
Kleruff & Co Hdgrs Maywood
SAN DIFFO.

Klerulff & Co Hddrs Maywood
SAN DIECO
Electric Suppiles Dist 435 2 Ave
Electronic Equip Dist 1228 2 Ave BE 2-3155
General Elec Suppily 450 2 Ave BE 9-0271
Gough Industries 3255 5 Ave Hddrs Los Angeles
Graybar Electric 720 State St BE 3-1361
Radio Parts Co 2060 India BE 9-9361
Radio Specialities Hddrs Los Angeles
Shanks & Wright 2045 Kettner BE 9-0176
Western Radio & TV 1415 India St BE 9-0361

Shanks & Wright 2045 Kettner BE 9-0176
Western Radio & TV 1415 India St BE 9-0361
SAN FRAMCISCO

\*Assoc Badio Distr 1929 Market St HE 1-0212
Basford Co H R 235 15 St MA 1-8545

\*Brown Co C C 61 9 St MA 1-7000
Edwards Co Frank 382 6 St MA 1-9700
Ets-Hokin & Galvan 551 Mission St EX 2-0432
General Electric Supply 1201 Bryant St UN 3-4000
Graybar Electric 1750 Alameda St MA 1-5131
Hauer Radio Parts Karl 281 9 St MA 1-0552
Kaemper & Barrett 1850 Miss UN 3-3080

\*Meyberg Co L J 33 Gough St MA 1-3400
Offenbach & Remus 1564 Market St KL 2-2100

\*Pacific Whise 1850 Mission St UN 1-4843

\*San Francisco Radio 1284 Market UN 3-6000

\*Smith & Crawford 789 Stevenson St UN 3-2045

\*Television Radio Supply 326 Market St EX 2-2898
Westinghouse Elec 201 Potrero UN 1-3650

\*Zack Radio Supply 1424 Market MA 1-1424
SAN JOSE

SAN JOSE
Peninsula TV & Radio 881 S 1 St CY 4-8781
\*Quement Frank 161 W San Fernando St CY 4-0464
San Jose TV Supply 999 S 1 St CY 4-7990
Schad Electronic 256 W San Fernando CY 7-5858

SAN LEANORO
Millers Radio & TV Supply Hdgrs Oakland
Styles & Engleman 2255 Bancroft Ave LO 9-9433
SAN MATED Associated Radio Distrs Hilgrs San Francisco
SAN RAFAEL

Abbett Co E B 345 Francisco GL 3-1130

SANTA ANA
Electronic Supply Hdgrs Pasadena
Graybar Electric 301 French St Kl 3-8309
Hurley Electronics 1434 S Main Kl 3-9237
Radio & TV 207 Oak Kl 2-6741

SANTA BARBARA
Channel Radio Supply 523 Anaeapa WO 2-3429
Dealers Wholesale 209 W Canon Perdido Hdgrs Ventura
SANTA MARIA
Dealers Wholesale Sunniv Mdgrs Ventura

STOCKTON

DeJarnatt Whsle B J 515 N Hunter Hdgrs Fresno

Dunlap Radio & TV 27 N Grant HO 6-7907

General Electric Supply 24 N Aurora St HO 5-7231

Kømp Co E M 50 N Wilson Way Hdgrs Sacramento

Radio TV Products Hdgrs Sacramento

Sacramento Elec Supply Hdgrs Sacramento

Stockton Electronics 710 E Main St HO 5-2691

TEMPLE CITY

Radio Specialties Hdgrs Los Angeles

VALLEJO

Assoclated Radio Distr Hdgrs San Francisco

VALLEJO
Associated Radio Distr Hdgrs San Francisco
Walker Co R Lyman 1219 Monterey St VA 3-5675
VAN NUYS
Klerulff & Co Hdgrs Maywood
Tags Radio & TV Supply 14530 Calvert St ST 5-3123

Tags Radio & TV Supply 14030 Caltert St 51 3-2.
VENTURA

Dealer's Whsle Supply 265 S Laurel M1 3-6147
WALNUT CREEK
Millers Radio Hdgrs Oakland
WEST LOS ANGELES
California Electronics 11801 W Pico BR 2-2126

### COLORADO

BOULDER
Boulder Distri Co 1633 18 St 2-8750
COLORADO SPRINGS
D & M Electr Supply 717 N Weber St ME 3-0902
Marray Radio Co 9 E Vermijo ME 3-8248
Walker Radio Co L B Hdgrs Pueblo

DENVER
Electric Accessories 1959 Stout St
Electronie Parts Co 1322 Lincoln St TA 5-2661
Fistells Radio 1085 Lincoln St MA 3-3197
General Electric Supply 1429 18 St KE 4-6301
Graybar Elec 104 Wazee Market TA 5-7116
Hassco Inc 1745 Wazee Keystone 4-8151
inter-State Radio 1200 Stout St TA 5-5347
Niles Phono & Radio 1254 Arapahoe AM 6-1671
Radio Products Sales 1237 16 St CH 4-6591
Ward Terry 70 Rio Grande Blvd AC 2-1871
Walker Radio L B 620 Broadway Hddrs Pueblo
GRAND JUNCTION
Radio & Elec Supply 511 Ute Ave 486
Walker Radio Co L B Hddrs Pueblo
PUEBLO

Pueblo Radio TV Supply 211 Polk 8515

\*Walker Radio L B 100 N Victoria Ave LI 2-1924

### CONNECTICUT

BRIDGEPORT
Coastal Radio 1106 Barnum Ave 5-7441
D'Ella Distrs 1330 Fairfield Ave ED 3-0195'
General Elec Supply 1899 Seavlew Ave F0 8-1621
\*\*Matry of Bridgeport Hdgrs Waterbury
Kasfman Electronics 1710 Main St ED 3-1842
Sprague Electrical Supplies 347 RR Ave ED 6-2535
Waldhaus L N 1132 Norman St FA 5-7985
Westeonn Electronics 195 Colorado Ave F0 7-7747
DANBURY
Pligrim Flactronics 23 Colorado

DANBURY
Pilgrim Electronics 11 Spring St 3-4617
EAST HAVEN
J V Electronics 690 Main St H0 7-3034
HARTFORD

ANT HAVEN

J V Electronics .690 Main St H0 7-3034

HARTFORD

Dei Padre Assoc LL 374 Main St

Emerson Radio 20 Chestnut St JA 5-1476

Freed Electronics ine 1301 Main St CH 9-7579

General Elec Supply 2964 Main St JA 2-4111

Graybar Electric 453 New Park Ave AD 3-2631

"Hatry of Hartford Hdgrs Waterbury

"Moses Radio & Elec 54 Flower St 7-7247

Sceli & Cu R & 78 Maple Ave JA 2-1144

Signal Center 21 New Britain Ave JA 2-8116

Sprague Electrical Hdgrs Bridgeport

Wood-Alexander Co 100 Locust St

Yale Radio Electronics 1215 Main JA 2-9300

KENSINGTON

"Modern Radio 1224 Farmington Ave VA 8-3544

NEW BRITAIN

United Electronic Supply 49 E Main BA 3-3641

Universal Radio Co 61 E Main St

NEW HAVEN

Amerling 203 Henry St SP 7-7383

Amerlcan Distr 76 Franklin UN 5-0861

Amerlcan TV 84 Commerce St L0 2-6122

Ammrad Co 843 Grand Ave UN 5-4508

"Brown Co T H 15 Whiting St SP 7-7695

Congress Radio 207 Congress UN 5-6365

Connectleut Appl Distrs 140 Ferry St L0 2-9941

Dale Electr Div Dale-Conn 150 James SP 7-5555

General Elec Supply 74 Forbes St H0 7-6331

Graybar Electric 25 Union St UN 5-4363

"Hatry of New Haven Hdgrs Waterbury

Plymouth Electric Ce 393 Chapel St ST 7-0291

Radio Shack Corp 230 Crown St Hdgrs Boston

Tower Distr H M 48 County St SP 7-5320

NORWICH
Alkins Electronic Supplies 98 Water St TU 9-8427
STAMFORD
Stamford Radio Supply 562 Atlantic St

Westchester Elec Sup 181 Stillwater Ave Fi 8-5397 WATERBURY ATERBURY

\*\*Bond Radio Supply 439 W Main St 3-2149

General Elec Supply 23 Nichols Dr PL 4-2143

\*\*Hatry of Waterbury 89 Cherry 5-1181

Mac's Radio & Electronic 200 Bank St

#### DELAWARE

WILMINGTON

Almo Radio 1122 French St Hdgrs Philadelphia
Dela Electronics Supply 220 W 4 St 0L 4-7932
D & M Radio & Electronics 215 W 4 St 0L 6-2222
General Electric Supply 310 S Market St 5-5561
Graybar Electric 1005 W 4 St ST 6-7761
Radio Electric 3 & Tatnall Sts 6-8664
Westinghouse Electric 400 S Market 5-9611
Wholesale Electronic 3rd & Monroe Sts 6-1144
Wilmington Elec Supply 405 Delaware Ave 5-4321

WASHINGTON DISTRICT OF COLUMBIA ASHINGTON

\*Capitol Radio 2120 14 St N W H0 2-0800

\*Cleetronic Whosie 2345 Sherman N W HU 5200

General Electric Sup 705 Edgewood N E HU 3-6800

Graybar Elect 60 Fla Ave N E AD 4-4800

Kenyon Radio Supply 2020 14th ST N W DE 2-5800

\*Rucker Electronic 1312 14 St NW AD 2-8554

\*Silberne Radio 3400 Georgia Ave NW TU 2-7800

\*Southern Electronics 3405 Georgia NW TV 2-5000

Southern Whosiers 707 Edgewood NE HU 3-3422

Sun Parts Distr 514 10 St NW ME 8-2697

Westinghouse Elec 1216 K St NW NA 8-9700

### FLORIDA

DAYTONA BEACH Hammond Electronics Hdgrs Orlando
FORT LAUDERDALE
Certified Radio TV 2606 S Federal Hwy JA 3-6451
Graybar Electric 845 N W 6th Ave JA 3-9672
FORT PIERCE

McNess Radio Supply 900 S Dixle Hwy 2728 GAINESVILLE Baird Hardware Co 1 SE 1st 2-8531 HIALEAH

Herman Radio Supply Hdgrs Miami JACKSONVILLE ICKSONVILLE
Acme Electronics Distr 811 Main St 6-0485
General Elec Supply 530 E Forsyth St EL 3-9011
Graybar Electric 12 & Main Sts EL 6-7611
Kinkade Radio 1402 Laura Hdgrs Tampa
Peard Electronic Sup 535 Washington EL 5-34
Puthuff Co G F 2231 W Beaver EL 6-1591
Southeast Audio Co 930 W Adams St 4-6372
Southern Hardware 11 S Newman St
\*Thurow Distributors 15 E Charch St 5-3727
Westinghouse Elec 545 E 4 St 3-7431
XKELAND EL 5-3473

Hammond Electronics Hdgrs Orlando Radio Accessories Hdgrs Orlando LAKE WORTH

McNees Radio Supply Hdgrs Ft Pierce

McNess Radio Supply Hdgrs Ft Pierce
MIAMI
Certified Radio TV 675 NW 11 St 82-1637
East Coast Radio 1932 NW Miami Ct 82-4636
Electronic Supply 61 NE 9 St 9-4512
Emerson Radio of Fla 131 NE 10th St
Flagler Radio Co 1068 W Flagler St
Graybar Electric 2111 NW 22 Ave Mi 65-1411
"Herman Radio Supply 1365 NW 23 St NE 4-6591
Radio-TV Parts 2611 NW 21 Terrace NE 5-0629
Sandars Electronics Co 3408 NW 7 Ave 65-1389
Sea Coast App Dist 1481 NW 22 St ST 9-1761
"Therow Distributors 2207 NE 2 Ave 9-6571
"Walder Radio & Appl 1809 NE 2 Ave 9-4794
Westinghouse Electric 11 NE 6 St 82-3691
ORLANDO

Westinghouse Electric 11 NE 6 St 82-3691
ORLANDO
General Electric Supply 523 N Garland 3-6407
Goddard-Orlando 631 W Central Ave 5-5531
Graybar Electric 400 Pittman St 0R 5-4551
Hammond Electronics 533 W Central Ave 5-2688
Radio Accessories Co 2305 McRae St 5-2677
"Thurow Distributors 625 W Central Ave
PANAMA CITY
Flectronic State 2005 McRae St 5-2677
"Thurow Distributors 625 W Central Ave

PANAMA CITY
Electronic Supply 316 Luverne Ave SU 5-4821
PENSACOLA
Grice Radio & Elec 300 E Wright St HE 3-4616
Guif Elec & Hdwe 115 E Gregory St 6146
PENSACOLA
Hundley Distributing 1110 N 13 Ave HE 2-5457
SARASOTA
Radio Accessories Hdgrs Orlando
ST PETERSBURG

ST PETERSBURG
Cooper Radio Co 648 2 Ave S 7-7120
Graybar Electric 1900 1 Ave S ST 7-4161
Southern Electronic Labs 938 9 St S 75-2911
Teevee Parts 702 3 St S 7-0533
"Therow Distr 342 3 Ave S Hddrs Tampa
Weich Radio Supply 408 9 St S 7-8655
TALLAHASSEE
General Elec Supply 705 S Woodward St 3-0520
Radio-Tellevision Supplies 1320 S Adams St 3-2337
"Therow Distributors 739 Monroe Hddrs Tampa
TAMPA

TAMPA
Elec Supply Co 106 S Franklin St 2-3745
Emorson Radio of Fla 209 S Franklin St
General Electric Supply 514 S Morgan 2-1805
Goddard Distr 1502 Grand Central Ave 8-3117
Graybar Electric 416 Eliamae Ave TA 2-4621
Kinkade Radio Supply 1707 Grand Central 8-6043
Radio Accessories Co 417 E Platt Hdgrs Orlando
"Therow Distributors 134 S Tampa St 2-1885
Westinghouse Electric 417 Eliamae Ave 2-5595
WEST PALM BEACH
Goddard Distributors 1309 N Dixle 3-5701
"Therow Distr 327 Okeschebee Rd

### GEORGIA

ALBANY General Electric Supply 410 Hodges Ave HE 5-5631 Specialty Distributing Hdgrs Atlanta Stewart's Radio 212 N Washington 2-1072 Westinghouse Elec 610 N Washington 667

Mestinghouse Elec 510 N Washington 567
ATLANTA
Atlanta Phonograph 27 Pryor SW WA 3380
Garvin Electric 69 Forsyth St WA 2290
General Electric 333 North Ave NW CY 1751
Jackson Electronic Sup 840 Marietta St NW EL 5808
Southeastern Radio Parts 400 W Peachtree 6-9761
Specialty Distributing 425 Peachtree EL 5815
Thomas Electronics H 331 Luckie St NW LA 8477
WestInghouse Elec 1299 Northside Dr NW AT 2721
Yancey Co 1500 Northside Dr NW EL 8843
AUGUSTA
General Elec Supply 1547 15 St 6-8422
Prestwood Electronics 1445 Greene St 4-5444
Specialty Distributing Hdgrs Atlanta
COLUMBUS
Radio Sales 2000 12 Ave 7-3296
Westad 1047 13th St
MACON ATLANTA

MACON

MACON

\*Electronic Distr 995 Riverside Dr

Telephone 3-9379

Guy M White President
H W Chapman Store Manager
Mrs Janice Richards Office Manager
Area served Stote of Georgia
Hatcher Co A S 586 3 St 3-5464

Specialty Dist

Electronic Supply 217 E 1st St 7842

Electronic Supply 217 E 1st St 7842
SAVANNAH
General Electric Supply 301 E Bay St 4-2231
Graybar Electric 2601 Whitaker St SA 2-1121
Southeastern Radio Parts 38 Montgomery St 7:
Specialty Distg 411 P0 Box 102 Hdgrs Atlanta
Tuten & Long 1508 E 50 St
Westinghouse Elec 580 Indian 3-9682
Yancey Co 666 Indian St 4-1611 Hdgrs Atlanta

#### IDAHO

\*\*Craddock Radio Sup PO Box 297 2-6471
General Electric Supply 618 S 8 St 4343
Graybar Electric 1325 Idaho St 80 2-4501
\*\*Kopke Electronics 3113 Rosehill 2-2371
Robbies Radio 4001 Hill Rd 2-8892
Strevell-Paterson Hoars Salt Lake City
Westinghouse Electric 318 S Capital Blvd 2-3531
IDAHO FALLS
Schwendiman Distributing Co 380 E St 4393
POCATELLO
Ballard-Carter Hdgrs Ogden

POCATELLO
Ballard-Carter Hdgrs Ogden
Billmeyer's Wholesalers 625 S 1st 698
TWIN FALLS
United Automotive 328 3 St E 2355

### ILLINOIS

nics Alton Inc Hdgrs St Louis AURORA Ploneer Radio Supply 103 S La Salle St

\*Lurtz Electric 219 N Illinois St AD 3-0942 BENTON \*Lampley Radio 802 N McLeansboro 5111 BLOOMINGTON

Alverson Sales Co 217 E Front St 2-8380 Arco Electric Supply 908 S Lee St 2-5145 Suter TV Supply Hdgrs Springfield CALUMET CITY

Chamceys inc 136 Pulaski Ave Hhors Chicago CENTRALIA Centralia Eiec Supply 108 S Chestnut 7111 CHAMPAIGN

CHAMPAIGN
Electronic Parts Co 905 S Nell St 6-1896
CHICAGO
"Allied Radio 100 N Western Ave HA 1-6800
American Electronic 621 W Randolph DE 2-5226
Arplo Sales 4305 Lincoln St WE 5-7781
Ashbach Leonard 743 N LaSalle St WH 4-0077
Atronic Sales 6566 Sherldan RO 1-2424
"Bowman & Co J G 515 E 75 St TR 4-8070
Broadwin TV & Radio 5004 Broadway UP 8-6060
"Chaunceys Ine 4740 W Chicago Ave ES 8-0830
Chicago Radio Apparatus 415 S Dearborn HA 7-2276
Clayton Radio 3202 N Palaski AV 3-2570
"Electronic Expediters 2909 W. Devon Ave RO 4-8640
General Elec Supply 845 S Clinton WA 2-5656
Graybar Electric 850 W Jackson Blvd CA 6-4100
Green Mill Radio Supply 145 W 111 St PU 5-9840
Grove Electronic Supply 145 W 111 St PU 5-9840
Grove Electronic Supply 145 W 111 St PU 5-9840
Moraud Electr 4140 Archer Ave CI 4-1777
Lukko Sales Corp 5024 Irving Park Rd AV 3-4800
Merquig Co 5904 W Roosevelt Bld AU 7-6274
Mid-States Electronic 5028 N Bdwy LO 1-2894
"Midwest Electr 6907 N Western Ave RO 1-1160
Newark Electric 223 W Madison ST 2-2950
Olson Radio 623 W Randolph DE 2-5256
Pligrim Distributing 1230 E 53 St FA 4-6043
Ploneer Radio Supply 5243 W Diversy Ave BE 7-5754
Premier TV Radio 3239 W North St AR 6-5550
"Radio-TV Supply 4345 W Armitage Ave HU 9-3311
RCA Victor Distr 5000 S Kedzie PR 8-3000
"RPD" Arther Nagel Inc 918 E 55 St BU 8-5050
Stat Electronic 7736 S Halsted HU 3-8440
Stolz-Wicks 8110 S Western RE 7-3363
Trlangle Indestries 600 W Adams AN 3-5060
U S Radio & TV 6346 S Ashland WA 5-4111
"Walker-Jimleson 311 S Western Ave CA 6-2525
Westinghouse Electrole 603 N Glibert 1901 Electronic Parts Co 905 S Nell St 6-1896

Bud Electronic 118 E Van Buren St E 925 Westinghouse Electric 603 N Gilbert 1901

DECATUR
Crum Dist 704 N Monroe 3-7776
Edughnane & Co 802 N Water St 2-4187
York Radio & TV 518 E Prairie St 3-3484 Illinois Appliance 407 W 1 St 4-0091
EAST ST LOUIS
Electronic Part Supply 3619 State St UP 4-1212 ELGIN Elgin Electronic 157 Brook St SH 2-7635 ELMHURST
Malone Electronics 123 Addison St 1 4-5110
EVANSTON Chaunceys Inc 1908 Central St Hdqrs Chicago
HARRISBURG
Standard Distrs 432 W Poplar St 640
JACKSONVILLE
Baptist Radio & TV 419 S Mauvalsterre CH 5-4109 JOLIET
Joliet Radio Supply 460 N Chicago 3-9328
KANKAKEE Radio Doctors 892 W Station St 2-4726 York Radio & TV Hdgrs Decatur LA SALLE Warren Radio Co Hdgrs Peorla

Baptist Radio & TV Hdgrs Jacksonville MATTOON Mattoon Radio & TV 212 N 20 St. 5457 \*Lofgren Dist Co 1202 4 Ave M0 4-7436
MT CARMEL
Wabash Electronics 700 Plum St 728
OAK PARK MOLINE Melvin Electronics 541 Madison VI 8-3960

\*Molvin Electronics 541 Madison VI 8-3960
PEORIA
Graybar Electric 704 S Adams PE 6-0765
Griffin Distributing Co 400 Franklin St
Hardware Prod Co 3408 N Adams Hdgrs Sterling
\*Merberger Radio Supply 336 I St
Klaus Radio & Electric 707 Main St
Ross Radio 1915 Main St 3-3721
Selectronic Supplies 803 S Adams Hdgrs Toledo
Warren Radio 308 Oak St 4-5998
Westinghouse Electric 2800 N Adams St 2-5456
Williams Inc 828 S Adams St 3-4446
Yeomans Distributing 3302 N Adams 5-7631
QUINCY

\*Cooper Supply 419 S 10 St 237
ROCK FALLS
Hardware Prod Co Hdgrs Sterling
ROCKFORD

ROCKFORD
General Electric Supply 810 20 St 5-0551
H & H Electronic Sup 510 Kishwaukee St 5-4625
Johnson Sales Art A 1117 Charles St
J & M Radio & Telev 1133 Raliroad Ave
Mid-West Associated 506 Walnut St 4-5843
State-Wide Wholesale 922 North Ave
Superior-Rockford Högrs Racine Wise
Westinghouse Elec Supply 323 S Main St 5-0577
ROCK ISLAND
Cameron Co 1714 5 Ave 8-7457
Tri-City Radio Supply 1919 4 Ave 8-5681
ST JACOB

ST JACOB
Michael's Electrical Supply 4th & Douglas 3200
SPRINGFIELD

SPRINGFIELD

Brues Harold 1120 E Capitol Ave 8-7523
General Electric Supply 1007 E Jefferson 3-4509
Graybar Elec Co 405 N MacArthur Blvd SP 8-0484
Sasco United Tel 217 E Washington 2-6837
Swter TV Supply 1500 E Sangamon Ave 8-7369
"Wilson Supply 106 W Jefferson 7845
York Radio & TV Hdgrs Decatur
STERLINGS
Hardware Properts 201 Locust St 70

Hardware Proouets 201 Locust St 70 TUSCOLA

Moulden Distributing 106 W N Central Ave 163
WAVERLY
Waverly Wholesale 7471

ANDERSON Seyberts Radio Supply 1331 Main St 3-5431 ANGOLA Lakeland Radio Supply 525 S West St 70
Shaw Electronic Supply 200 S Darling St 291
BEDFORD BEDFORD
Electronic Supply Co 1718 K St 2350
BLOOMINGTON
Stansifer Radio 1805 S Walnut St
COLUMBUS Williams Co H A 1003 Washington St 7646
CROWN POINT
- Nub Distributors 106 N Main St 1110
ELKHART
Electronics Parts Inc 725 S Main St 2-1208
EVANSVILLE

EVANSVILLE
Castrop's Supplies 1014 W Franklin HA 2-7618
General Electric Supply 2000 N New York Ave 5-2655
Graybar Electric 1709 E Columbia St EV 6-1357
Hatch & Son 919 Yine St HA 4-6731
Ohio Valley Sound 20 E Sycamore 5-6173
Wesson Radio Parts 428 Penn St HA 2-2141
Westinghouse Electric 201 N W 1 St 5-7276
FORT WAYNE
Rohp Saund Fine's Lincoln Hay Fact FA 1202

Westinghouse Electric 201 N W 1 St 5-7276
FORT WAYNE
Bohn Sound Eng'g Lincoln Hwy East EA 1202
Fort Wayne Electronics 3606 Maumee EA 3431
General Electrie Supply 1609 S Calhoun HA 3243
Midwest Electronics 2016 S Webster St K-5330
Pembleton Labs 236 E Columbia E-1812
Protective Electronics 130 W Columbia A-9331
Radio Eguip 1815 E Wayne Hdgrs South Bend
Van Slekle Radio 1320 S Calhoun E-4136
Wail Distributing 241 Pearl St E-2027
"Warren Radio 1716 S Harrison Hdgrs Toledo
Wayne Hardware 254 W Main St A-7153
Westinghouse Elee Supply 610 S Harrison AN 3421
FRAMKFORT
Dossett Co M H 355 N Columbia 5394

GARY

GARY
Cosmopolitan Radio 524 Washington TU 5-0551
R-B Distr 3763 Broadway GA 4-8824
Waiker-Jimleson 615 W 11 Ave Hdqrs Chicago
HAMMOND
Broadwin Radio-TV 6547 Kennedy Ave TI 4-7200
General Elee Supply 506 Fayette St SH 5155
Graybar Electric 6445 Indianapolis Bivd TI 4-7800
Nationwide Radio 7015 Calumet Ave DE 2-6843
WestInghouse Electric 6341 Ind Bivd RU 9400
HUNTINGTON
Colfax Co 67 F State St 3610

Westinghouse Electric 6341 Ind Blwd RU 9400
HUNTINGTON
Colfax Co 67 E State St 3610
INDIANAPOLIS
Associated Distrs 210 S Meridian St LI 2593
General Electric Supply 1250 Stadlum Dr ME 4-8445
"Graham Electronics 102 S Penna St ME 4-8487
Graybar Electric 1300 W 16 St AT 2351
Hoosier Radio Supply 132 W 13 St ME 4-5579
Memier Radio Supply 132 W 13 St ME 4-5579
Memier Radio Supply 324 N Illinois St LI 8884
Moore Electronic Parts 320 Viriginia ME 4-4346
Peerless Electric 122 S Meridian Pl 2361
Radio Distributing 103 M Capital Ave ME 5-8311
Radio Equipment Co 1010 Central Ave PL 6453
Rodefeld Co 614 N Capital Hddrs Richmond
Warren Radio 908 N III St Hddrs Toledo
Westinghouse Elec Supply 139 S Penna St MA 3301
JEFFERSONVILLE
Moakler Electronic 500 E Chestnut 2-4311
KOKOMO

KOKOMO

ROMO George's Electronic 125 N Buckeye 6771 Radio TV Distr 507 N Washington 2-5651 RPD-Arthur Nagel Inc Hdqrs Chicago LAFAYETTE

LAFAYETTE

Holmes Radio State Rd 25 Box 559 2-6845

Lafayette Radio Supply 408 E North St 2-5217

LOGANSPORT

Conrad Co AE RFD 4 5-6456

Television-Radio Dist Hdgrs Perg

Television-nauto Marion
MARION
MARION
Mobile Radio Supply 507 N Washington NO 2-2981
Myers Radio Supply 115 W 22 St 1357
MICHIGAN CITY
Tri-State Electrical 216 E Michigan St

MUNCIE
General Electric Supply 904 Burlington Dr. MU 6614
Muncio Electroles 305 N Madison 8837
Standard Radio Parts 1104 S Walnut 5525

Television-Radio Distr 812 W Main 2005

FIXE Electronics 711 S 9 St 2-4676
Radio & TV Dist Hdgrs South Bend
Rinehart Inc 511 Main 2-2581
Rodefeld Co 96 W Main St 2-4088
SOUND BEND

SOUND BEND
Colfax Co 802 S Main AT 9-5548
General Elec Supply 422 E Monroe St 6-3411
Radio Distributing 1212 High St AT 8-4666
Radio Equipment Co 1202 S Lafayette AT 9-2471
Radio & TV Distr 116 N Hill St 3-9394
Wayne Hdw 1630 Lincolnway W Hddrs Ft Wayne
TERRE HAUTE
Evinger Co C T 1216 Wabash Ave CR 7757
General Elec Supply 801 Poplar St GR 9695
Terre Haute Radio PO Box 804 Lt 2-6025
VALPARAISO

VALPARAISO

\*Bowman & Associates Jess Hdgrs Chleago

BURLINGTON

### IOWA

Union Supply Co 409 Washington 7270 PL 2-5444 CEDAR RAPIDS CEDAR RAPIDS

\*Gifford-Brown 726 5 St Hdgrs Des Moines
towa Radio Supply 5D8 3 Ave SE 4-5346
Ken-Els Radio Sup 67 16 Ave SW Hdgrs Ft Dedge
Midwest Specialty 614 1 St SW
COUNCIL BLUFFS

\*World Radio Labs 3415 W Broadway 2-0277
CRESTON
Mid State Diete Hdge Des Midwest CRESTON
MId State Distr Hdgrs Des Moines
DAVENPORT
Crescent Elee Supply 511 Persñing Ave 3-9973
Graybar Electric 206 E 5 St DA 3-2768
\*Midwest-Timmerman 114 Western Ave 7-5288
RCA Victor Distr 1235 W 5 St 4-9847
\*TCR Distrs 1205 E River Dr 3-8051
Union Supply Co 320 E 4 St 2-3531
Westinghouse Electric 402 E 4 St 3-9966
DES MOINES
General Electric Supply 108 F 4 St 8-7401 Westinghouse Electric 402 E 4 3t 8-7401

ES MOINES

General Electric Supply 108 E 4 St 8-7401

Glifford-Brown Inc 14 & Walnut St 3-1257

Graybar Electric 24 11 St DE 3-8614

lowa Radio Corp 1212 Grand 2-8197

Mid-State Distr 1201 Grand 8-7231

Midwest-Timmerman Hdgrs Davenport

Onthank Co G W 10 & Mulberry 3-8166

Radio Trade Supply 1224 Grand AT 8-7237

Schneiderhahn Co A A 319 SW 5th St

Westinghouse Elec Supply 1400 Walnut 2-0244

DUBUQUE

Boo Distributing 1605 Rockdale Rd 3-5795

Crescent Electric Supply Hdgrs Davenport

FORT DUDGE FORT DODGE

FORT DODGE

\*Ken-Els Radio Supply 501 1st Ave WA 3880

MASON CITY

\*Ray-Mac Supply Co 307 9 St 5900

OTTUMWA

\*Friday-Lynch Radio 429 W 2 St MU 2-5407

Mid State Dist Hdgrs Des Moines

SIOUX CITY

Rurchardt Radio 611 F 5th St 5-8023

OUX CITY
Burghardt Radio 611 E 5th St 5-8023
Crescent Electric Sup 308 Iowa St Hdgrs Davengort
\*Duke's Radio 209 6 St 5-5056
Graybar Elec Co 510 Pearl St St 8-7507
\*Power City Radio 410 Jones Hdgrs Sloux Falls SD
\*Warren Radio Supply Hdgrs Sloux Falls SD
Westinghouse Electric 1005 Dace St 5-7634

WATERLOO ATEKLUU Farnswarth Radio & TV 201 E Mullan Ave AD 4-6682 •McDermott Electric D A 200 Ballou St AD 3-5296 Westinghouse Electric 300 W 3 St 4679

### KANSAS

ATCHISOE Blish Mize & Silliman 223 S 5th St COFFEYVILLE Four State Radio Hdgrs Joplin Mo GREAT BEND \*Radio Supply Co of Great Bend 1109 Main 9491 HUTCHINSON Aeme Radio & Television Hdgrs Topeka \*Interstate Electronic Supply 325 W 4 St 2-7941 KANSAS CITY KANSAS CITY
Henshaw Radio Hdgrs Kansas City Mo
RGA Victor Fairfax & Funston Rd AT 3075
MANHATTAN
Acme Radio Supply Hdgrs Topeka
PITTSBUR&
Pittsburg Radio Supply 212 S Broadway 356 Pittsburg Radio Supply Co 533 N Santa Fe 7-3841

\*Radio Supply Co 533 N Santa Fe 7-3841

\*Western Dist 227 Santa Fe N 7-0561

TOPEKA

\*Aeme Radio Supply 412 E 10 St 5-1363

General Elec Supply 115 Jackson 5-4474

\*Overton Electric 522 Jackson St 3-3261

WICHITA

\*Amateur Radio 1203 E Douglas Ho 4-357 \*Amateur Radio 1203 E Douglas HO 4-3579
\*Excel Distributors 118 W 2 4-4783

### KENTUCKY

ASHLAND
Ashland Radio Supply 2125 Winchester 3125
BOWLING GREEN
Crescent Radio Supply 212 W 10 St VI 2-2444 COVINGTON
United Radio Inc Hdqrs Cincinnati
HARLAN General liectric Supply Hoskins St 815 HOPKINSVILLE Randolph & Hale Hdgrs Nashville LEXINGTON Randolph & Hale Hdgrs Nashville
LEXINGTOM
Electronic Distr 134 w 3 St 2-7414
General Electric Supply 309 n Nahland Ave 2-1887
Ky Radio Supply 376 E Main St 2-3373
Lex-Tronics 810 E 3rd St 4-3470
Miller's Barney 232 E Main 2-9622
\*Radio Equip Co 480 Skain Ave 3-1577
LOUISVILLE
Arcby Electronics Hancock & Gray WA 8851
Burks Co P I 911 W Broadway JU 4-0254
Ewald Distributing 309 S 9 St JA 8227
Fails City Supply 315 Roland WA 7447
Fulmer Ine Arthur 118 W Chestmut Hdgrs Memphis
General Electric Supply 2315 Strook St CA 3651
Graybar Electric 614 Myrtle ME 7-5411
\*Peerless Elec Equip 2210 S 7 St CA 7678
R.K Distr 801 W St Catherine JA 5-5349
Universal Radio Supply 533 S 7 St JU 4-4166
MADISONVILLE
Hutch & Son Hdgrs Evansville Hetch & Son Hdgrs Evansville NEWPORT Apex Distributing 506 York St AX 1949 Holub & Hogg Co Hdqrs Cincinnati OWENSBORO Centronies Inc 600 W 3 St 3-6727
Peerless Elec Equip Hdqrs Louisville
PADUCAH

### LOUISIANA

Warren Rallio 455 S 31st St 2-4367

ALEXANDRIA

Brown-Roberts Hdw Supply 1810 3rd St
Central Radio Supply 601 N 3 St 3-4517 \*Central Radio Supply 601 N 3 St 3-4517
BATON ROUGE
Electronic Supply 1753 N 21 St 2-0517
Gautreaux's 1370 Government St Hdqrs New Orleans
General Electric Supply 5575 Adams Ave 7-7586
Graybar Electric 2442 T Dunham Ave BA 3-3427
La Radio TY Distr 1645 Plank Rd 8-1456
Ole Miss Sapply 1801 N Boulevard 3-4035
\*Ralph's Radio Electronic Supply 812 Main St
BOGALUSA
Contravy's Midney New Orleans Gautreaux's Hidges New Orleans Crescent Radio & Sup Hdgrs New Orleans
LAFAYETTE LAFAYETTE

\*Raigh Radio & Electronic 1419 Cameron St
Wholesale Radio Hdgrs Lake Charles
LAKE CHARLES
Graybar Electric 206 W 11 St HE 3-4229
Wholesale Radio Equip 324 Ryan St HE 9-9017 MONROE C & O Electronics 500 N 3 St 3-5732

"Hale & McNeil 421 Walnut St 2-5136
Powlans Electrical Co 501 Morris Ave 3-7701
NEW ORLEANS Fourins Electrical to 301 morris Are 3-701
EW ORLEAMS
Allen Supply Co W B 1601 Orleans Ave RA 8222
Audiotronics Supply 1834 N Clalborne VI 5579
Bell Radio Supply 2625 Tulane Ave TU 0644
\*Columbia Radio & Supply 3404 3 St TW 5-4893
\*Cressent Radio & Supply 1600 Baronne St CA 3112
Electrical Supply Co 201 Magazine St
Electronic Bistrs 1526 Magazine MA 6700
Gautreaux's Elec Supply 2746 Orleans Ave AU 1619
General Elec Supply 4221 Blenville GA 5771
Graybar Electric 1116 Magnolia St CA 6263
Industries Sales 2927 Jackson Ave
Interstate Electric 1001 S Peters CA 8541
Pee-Jay Radio 2306 Tulane Ave AU 0807
Pelican Radio Supply 824 N Broad St
Radio Parts Inc 807 Howard Ave CA 0217
Radio Specialty 3119 S Carrollton Ave Shuler Supply 2508 Tulane Ave RA 2166
\*Southern Radio Supply 1909 Tulane TU 2345
Stratton-Baldwin PO Box 253
Telev & Appl Distrs 500 N Carrollton AU 8701
Walther Bros 1722 Poydras St CA 7731
\*\*Celluber Struck CASS Router TU 5411 Westinghouse Elec 2538 Poydras TU 5411

OPALOUSAS
Wholesale Radio Equip Hdgrs Lake Charles
SHREVEPORT

Baggett Radio & TV 872 Texas Ave 2-5137 Dunckelman Distributing Co 119 Beech St 2-8452 General Electric Supply 1430 Dalzell St 5-8631 Graybar Electric 90 Famili St SH 5-3271 Interstate Electric Co 1410 Culpepper St 3-6131 \*Koelemay Sales Co 2530 Linwood Ave 3,4256
\*Lavender Radio & TV 936 Milam St 3-7161
Ports Electronics Parts 309 Airport Dr 2-2193
Westinghouse Electric 120 Caddo St 3-0583

#### MAINE

AUBURN Radio Supply Co 26 Cross St 4-5486 AUGUSTA Westinghouse Electric 98 Water St 2040

Westinghouse Electric 98 Water St 2040
BANGOR
Commercial Distrs 135 Exchange St
General Elec Supply 840 Hammond St 7331
\*\*Maine Electronic Hdgrs Portland
Radio Serv Lab 16 Salem Ct Hdgrs Manchester NH
Radio Supply Co Hdgrs Advan
Westinghouse Elec Supply 175 Broad St 6487
HALLOWELL

\*Powell Radlo 115 Water St 3-3839 PORTLAND HALLOWELL

BRUAN CO F M 12 Free St 3-4791
Commercial Distributors 35 Commercial St
General Electric Supply 170 Anderson St 2-3721
Graybar Electric Center & Commercial SP 3-1766
\*Maine Electronic Supply 148 Anderson 4-0301
Radio Serv Lab 1004 Congress Hudges Manchester

#### MARYLAND

MARYLAND

American Distr Co 1200 N Fulton LO 6-8930
Berman H O Co 12 E Lombard LE 9-7002
D & H Distr Co 2025 Worchester St SA 7-5100
General Elect Supply 1500 Barciny LE 9-3565
Graybar Electric 100 South St SA 7-5050
"Kann-Ellert Electronics 9 S Howard SA 4242
Lytron Distr Co 1338 W North Ave LA 3-8880
"Radio Elec Serv 5 N Howard LE 9-3835
Spartana Ca A R 239 Gay St SA 7-0484
Valley Electronics 1617 Belair Rd HA 6-7913
Westinghouse Electric 2415 W Franklin LO 6-4400
"Wholesale Radio Parts 308 W Redwood St MU
5-2134
CUMBERLAND

CUMBERLAND
Altoona TV Supply Hdgrs Altoona Pa
"Zimmerman Wholesalers 162 Bedford 920

FREDERICK
Hankey's Radio & TV 404 Elm St M0 2-1381
HAGERSTOWN
General Elec Supply 1095 Jefferson Blvd 6216
Stoddard Supply Co 354 S Cannon 6342
York Radio 67 W Franklin Hdgrs York Pa
\*Zimmerman Wholesalers 114 E Washington St 408
SALISBURY
Almo Radio Co Marc Ballactata

Almo Radio Co Hdgrs Philadelphia Pa Standard Electronics 301 Snow Hill Rd 7593

Rucker Electronics 8049 13 St Hudgrs Washington Silver Spring Electronic 948 Silgo JU 8-3567

### MASSACHUSETTS

ARLINGTON Herman Co Louis M Hdgrs Boston BOSTON

Merman Co Louis M Hddrs Boston
OSTON
Arvedon Distributors 73 Portland CA 7-4034
Commercial Radio 36 Brattle Rd Rl 12 1241
\*\*Cramer Electronics 811 Boylston CO 7-4700
\*\*DeMambor Radio 1111 Commonwealth St 2-7870
Electro Sales Co 50 Eastern Ave CA 7-3456
General Electric Supply 145 N Beacon AL 4-5300
\*\*Gerber Radio Supply 1900 Columbus GA 7-1144
Globe Electronics Co 200 Washington St LA 3-3117
Graybar Electric 287 Columbus KE 6-4567
Herman Co L M 885 Boylston St CO 7-5520
\*\*Mayer Co A W 895 Boylston CO 7-5530
\*\*Radio Shack 167 Washington LA 3-3700
Radio Wire TV 110 Federal St Hdgrs NYC
Sager Elec Supply 201 Congress St LI 2-2281
Tee-Vee Supply 3211 Washington JA 2-3980
WestInghouse Elec 95 Brookline Ave CO 7-3100
Yankee Electronics 257 Huntington Ave CO 6-0212
ROCKTON

\*Ware Radio Supply 913 Centre St 8-0810
CAMBRIDGE

AMBRIDGE
Eastern Co 620 Memorial TR 6-4720
\*Electrical Supply 1739 Mass Ave UN 4-6300
HI-FI Lab 89 Mt Auburn St TR 6-2666
Northeastern Distrs 304 Vassar St
Selden Distr Co 800 Mass Ave KI 7-0920

FALL RIVER

Ross & Co E A 341 Columbia St. 3-0921 FITCHBURG \*Young & Young 372 Water St 3-3078 HOLYOKE

Springfield Radio 93 High Hages Springfield

LAWRENCE

\*Young & Young 262 Lowell St 7171

McCartin Co F P 181 Market St GL 9-9750

Des Roberts Elec 24 Mt Vernon St LY 5-0015





MEDFORD
Durrell Distr 222 Mystic Ave MY 6-8780
MELROSE Melrose Sales Co 60 Essex St ME 4-3821 MATICK Willett Radio Supply 11 Court 1313 NEW BEDFORD \*Beckman Co C E 11 Commercial WY 6-8201
Ross & Co E A 1663 Purchase St Hdgrs Fall River
NEWTON
Delta Distr 314 Washington BI 4-1560
NORTHAMPTON C & I Distributors 228 Pleasant St JU 4-4164 NORWOOD Herman Co Louis M Hdyrs Boston PEABODY TeeVee Supply 39 Main St Hdgrs Boston
PITTSFIELD
Del Padre Supply 111 West St
Pittsheld Radio 41 West St
Young & Young Hdgrs Springfield
QUINCY QUINCY
Gerber Radio Supply 1153 Hancock St MA 9-4300
SPRINGFIELD
\*Cushing T F 349 Worthington St ST 8-7341
\*Dei Padre Assoc L L 236 Chestnut 9-5658
General Electric Supply 484 Worthington RE 4-8255
Graybar Electric 32 Patton ST 8-7331
Radio & TV Supply 906 State St RE 6-5641
Regent Sales 236 Chestnut St
\*Soundco Electronic 147 Dwight RE 9-3847
Spinney Co B H 153 Plainfield St RE 4-8284
\*Springfield Radio 405 Dwight St RE 2-3411
Western Mass Distr 1 Belmont Ave RE 6-6374
Westinghouse Elec 46 Hampden 4-3101
\*Young & Young 169 Spring St RE 4-1138
TAUNTON
\*Dan & Co D B 85 Cohannet St TA 4-4117 \*Dean & Co D B 85 Cohannet St TA 4-4117 WORCESTER ORCESTER

\*DeMambro Radio Supply Hdgrs Boston
General Elec Supply 163 Mechanic WO 6-4351
Graybar Electric 108 Grove PL 6-4311
Johnson Electronic 12 E Worcester PL 6-7136

\*Radio Electronic Sales 52 Chandler PL 7-5671

\*Radio Maint Supply 80 Thomas St PL 6-8311
Westinghouse Elec 107 Thomas St 7-5641

### MICHIGAN

ADRIAN Wedemeyer Electronic Supply Hdgrs Ann Arbor ALBION
Matteson Electronics Hdgrs Jackson
ANN ARBOR
Purchase Radio 605 Church 8-8696
\*Wedemeyer Electronic 214 N 4 Ave 2-4457
BATTLE CREEK
\*Electronic Supply 94 Hambiin 2-9515
BAY CITY
Kinde Distr Co 504 Washington St 7461
BENTON HARBOR
Benton Electronic 643 W Main 5-1373
Radio & TV Distr Co 1331 M-139 WA 5-3301
CHEBUYGAN
\*Straits Distributors 412 N Main St 960 \*Straits Distributors 412 N Main St 960 DEARBORN \*Westside Radio 7521 Wyoming WE 3-6972 DETROIT \*Westside Radio 7521 Wyoming WE 3-6972

EETROIT

Audio Equip Co 15749 Wyoming UN 4-1884

Detroit Electronic 8000 Grand River TY 6-9500

Duffy & Co M N 2040 Grand River WO 3-2270

\*Ferguson Radio 2306 Puritan Ave UN 1-6700

General Elec Supply 12866 Woodward Ave TU 3-1500

Grayabar Electric 15045 Hamilton Ave TO 8-5550

Hi-Park Distrs 155 La Belle Ave TO 8-9409

\*Kia Labs 7422 Woodward TR 4-1100

Nor-West TV & Radio 21223 Grand Ave KE 5-0300

RCA Victor Distr 7400 Intervale TE 4-3500

Radio Distr 15401 Woodrow Wilson TO 9-7900

Radio Electronic 1112 W Warren TE 2-5611

\*Radio Specialties 456 Charlotte TE 2-0800

\*Radio Specialties 456 Charlotte TE 2-0800

\*Radio Specialties 456 Charlotte TE 4-8420

Rissi Electronic 14405 Wyoming Ave TE 4-8420

\*Rissi Electronic 14405 Wyoming Ave TE 4-8420

\*Rissi Electronic 2211 Kirby W TY 8-9000

SCANABA

Electronic Expeditors Hdgrs Miliwaukee

Electronic Expeditors Hdqrs Miliwaukee
Felton Radio 1617 Ludington 2855
FERNDALE
Erickson's Electronic 1201 Woodward Hts Li 5-6710
FLINT

FLINT
C & S Electronic Sup 758 E Witherbee St CE 8-1739
General Electric Supply 4705 N Dort Hgwy SU
9-9101
Graybar Electric 2424 Kansas CE 2-4101
\*Lifsey Distr Co 1409 N Saginaw CE-6657
Radio Tube Merch Co 508 Clifford CE 4-3654
\*Shand Radio Spec 2608 Leith St CE 2-9714
Westinghouse Electric 2330 N Dort H'way 4-8623
GRAND RAPIDS

IAND RAPIDS
Bursma Radio Supply 870 Grandville CH 5-0501
General Electric Supply 305 Fulton St W 9-3243
Graybar Electric 432 Monroe Ave N W GL 1-2561
\*\*Radio Electronic 505 Jefferson S E 9-4611
Radio Equip Co 13 Ionia Ave S W Hdgrs S Bend
Radio Parts Inc 542 S Division 9-0247
Warren Radio 24 Logam St S W GL 6-5385
Westinghouse Elec 511 Monroe Ave N W 9-4664
CKENN JACKSON

JACKSON

\*Fulton Radio 1208 Greenwood St 4-6106

Matteson Electronic 1617 E Michigan ST 2-8286

KALAMAZOO

\*Electronic Supply Hdgrs Battle Creek
General Electric Supply 112 Parkway 3-2645

Ralston Co R M 201 N Park St 5-0188

\*Warren Radio Hdgrs Toledo

LANSING "Elec Product Sales 427 E Mich Ave IV 2-4123
Fulton Radio Supply Hdgrs Jackson
General Elec Supply 428 N Grand IV 7-5401
Graybar Elec Supply 421 E Elm St IV 7-5075
"Offenhauer Co 227 W Washentaw 2-9896
"Wedeneyer Electronic Hdgrs Ann Arbor
LAURIUM
"Northwest Badio 435 Tomorach 797

LAURIUM
\*Northwest Radio 435 Tamarack 797
LINCOLN PARK
Glendale Electronic Sup Hdgrs Detroit
MANISTEE
Gardner Radio 258 River St 1653
MARQUETTE
Northwest Radio Hdgrs Laurium
MUSKEGON
Bell-Lourin 1839 Peck St 2-6019
Bursma Radio Hdgrs Grand Ranids

Bursma Radio Hdyrs Grand Rapids
Fitzpatrick Elec 444 Irwin 2-6621
MUSKEGON HEIGHTS
Western Electronic 1781 5 St 2-7628
PUNIJAC

PUNITAC

\*Electronic Supply 248 E Pike St 2-8341
PORT HURON
Main TV Supply Hdgrs Akron Ohio
SAGINAW
Carson Distrs 708 N Washington Ave 5-5301
General Elec Supply 125 Davenport St 3-6474
Orem Distributing 401 S Franklin St 5-6571
\*Radio Parts Co 803 S Washington 5-5338
Saginaw Distributors 1751 E Geneses Ave 3-5444
SAULT STE MARIE
Straits Distrabutors Hdgrs Cheboygan
YPSILANTI
Wedemeyer Electronic Supply Hdgrs Ang Arbor

Wedemeyer Electronic Supply Hdgrs Ann Arbor

#### MINNESOTA

Radio Elec Sup Hdqrs Minneapolis Bonn Co Lew 228 E Superior Hdgrs Minneapolis General Electric Supply 246 Lake Ave S 2-0826 Graybar Electric 320 W 1 St RA 2-6646 "Northwest Radio 123 E 1 St RA 7-1565 "Stark Radio 17 N 2 Ave E Hdgrs Minneapolis Westinghouse Elec 230 Lake Ave S ME 2-2625 MANKATO Southern Minn Supply 2 & Main Sts 4501 MINNEAPOLIS

Southern Minn Supply 2 & Main Sts 4501
MINNEAPOLIS

\*Bauman Co 3033 S Lyndale Ave GI 1745
\*Bonn Co Lew 1211 La Saile St FE 9-6351
Ecklen Radio 114 N Lyndale Ave FE 3-0516
\*Electronic Center 107 3 Ave N LI 8678
Forster Distr 1122 Harmon PI FE 3-5471
General Electric Supply 63 S 13 St BR 3266
Graybar Electric Supply 63 S 13 St BR 3266
Graybar Electric Supply 63 S 13 St BR 3266
Graybar Electric Supply 63 N AVE N LI 8671
Hayer Co F C 250 3 Ave N AT 1401
Larson Elec J H 114 Glenwood Ave FE 9-2761
National Electronics 1215 Nicoliet FE 8-8821
Northwest Radio 52 S 12 St Hdgrs St Paul
Radio Elec Supply 2451 Nicoliet FE 7733
Radio Maintenance 3016/2 27th Ave S DR 7546
Reinhard Bros 11 S 9 St K GE 2681
Royeraft Co 1625 Hennepin Ave GE 8881
Spencer George 444 Stinson Blvd ST 9-7241
\*Stark Radio Supply 71 S 12 St FE 3-1325
Sterling Electric 33 S 5 Ave PA 4-1460
Westinghouse Electric 515 S 7 St LI 7001
ROCHESTER
Elliott & Hanson 119 1 Ave NW 2-2778

Elliott & Hanson 119 1 Ave NW 2-2778 S Minn Supply Hdqrs Mankato CLOUD

Radio Supply Hdgrs Minneapolis Stark ST PAUL

PAUL
Bonn Co Lew 141 W 7 St CA 4-2821
\*\*Electronic Distr 856 Raymond PR 3911
General Electric Supply 540 N Fairview Ave PR 2761
Gerner Supply 173 W 454 CA 2-5549
Gopher Electronics 370 Minnesota St CA 4-9666
Graybar Electric 717 N Prior Ave NE 2631
\*\*Hall Electric Co 566 N Robert St CA 4-5696
Northwest Radio & Electronic 194 W 4 St GA 3801
\*\*Stark Radio & Electronic 194 W 4 St GA 3801
\*\*Stark Radio & Electronic 253 E 4 St GA 7441
ADENA WADENA

Central Co-op Wholesale Hdgrs Superior Wise WORTHINGTON Radio Elec Sup Hours Minneapolis

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BILOXI Geautreaux's Electronics Hdgrs New Orleans Nelson Radio Supply 613 Calllavet St 2-8651 COLUMBUS Bluff City Distg Hdgrs Memphis Swan Distg Hdgrs Jackson GREENVILLE Bluff City Distg Hdgrs Memphis Goyer Supply Co 815 Alexander St 8151 GULFORT Crescent Radio Hdgrs New Orleans HATTIESBURG Swan Disty Hodrs Jackson
JACKSON

\*Cabeil Elec Co 422 S Farish 2-2624

Ellington Radio 816 S Gallatin St 3-1327
General Electric Supply 614 Gesco P1 2-5041
Graybar Elec 154 E Porter St JA 3-6316

May & Jackson Dist Co 628 S State St 5-6880
Southern Distributors 1400 Terry Rd 2-3456
Swan Distr Co 342 N Gallatin 2-5516
Television & Radio 323 N West 5-6406
Westinghouse Elect 325 S Farish 4-8354
LUREL

Radio & TV Essentials Box 1131 6100 Swan Distg Hogrs Jackson

Radio & TV Essentials Box 1131 6100 MERIDIAN Griffin Radio Supply 2511 8 St 2-6174 MISSOURI

BUTLER Henry Radio Co 211 N Main St 395
CAPE GIRARDEAU
General Electric Supply 402 S Spring 805
"Suedekum Electronic 2215 Broadway 5-8202
JEFFERSON CITY
"Central Mo Distr Co 324 E Capital Ave 6-3149

JEFFERSON CITY

"Central Mo Distr Co 324 E Capital Ave 6-3149

JOPLIN

"Brotherson Co M 515 N Byers Ave 3-1596

Continental Elec Hdgrs Kansas City

"Four States Radio 201 Main St MA 4-0369

General Electric Supply 922 Penna Ave MA 4-5622

KANSAS CITY

"Burstein Aralba Colon."

ANSAS CITY

\*Burstein-Applebee 1012 McGee St BA 1-1155
Continental Electric 1321 W 13 GR 1180
General Elec Supply 2101 Broadway HA 7447
Graybar Elec Co 1644 Baltimore Ave BA 1644

\*Henshaw Radio 3617 Troost Ave WE 1-5550

\*Manhattan Radio & Equip 1732 Grand BA 1-9797

\*McGee Radio & Electric 1422 Grand Ave VI 9045
RCA Victor Distr Corp 2113 Broadway HA 0300
Radiolab 1612 Grand Ave HA 0171

OBERLY MOBERLY

MOBERLY
Central Missouri Dist Co Clark & Coates St 260
POPLAR BLUFF
\*Tri-State Radio 536 E Pine Bivd 2821

POPLAR BLUFF

\*Tri-State Radio 536 E Pine Bivd 2821

ST JOSEPH

\*Acme Radio Supply 892 S 10 St 4-4558

\*St Joseph Radio 720 S 9 St 2-8000

ST LDUIS

\*Ashe Radio Co Walter 1125 Pine CH 1125

Brightman Distr 4421 Ridgewood SW 7575

Brown Radio Co Tom 3924 Washington St JE 1-2259

\*Ebinger Radio 2501 S Jefferson Mo 4-7700

General Elec Supply 2653 Locast St JE 1-3000

Graybar Electric 600 S Taylor Ave JE 1-4700

\*Interstate Supply 24 S 10 St CH 2325

Napper Electronic 6253 Natural Bridge EV 1-8358

Phone Craft Co 427 N Euclid F0 1-3147

\*Radionics 5040 Easton Ave F0 1-7311

Tolar Radio Ralph 4855 Easton Ave F0 1-9169

\*Van Sickle Radio 1113 Pine St CH 1-1814

Westinghouse Elec 1011 Sprace St CE 4838

SPRINGFIELD

General Elec Supply 1301 W Webster 2-1722

PRINGFIELD
General Elec Supply 1301 W Webster 2-1722
Graybar Electric Co 524 St Louis St SP 2-0587
Norman Electronic 700 E Brower 5-1435
\*\*Reed Radio Supply Harry 805 Boonville St 4-0752
Stout Radio Supply 702 Boonville 2-9444

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BILLINGS BILLINGS
American Appliances 2505 Montana St
Central Distr Co P 0 Box 1551 8-8447
Electronic Supply 250 11 St W 2-2197
General Elec Supply 2710 Montana Ave 9-4550
Heard Supply 3008 1st St N 5-5141
Midland implement 2301 Montana Ave
Northwestern Auto 420 N Broadway 3-3146
Smith Supply 2521 Montana Ave Hdgrs Butte
BUTTE

BUTTE
General Electric Supply 900 E Front St 2-2314
Graybar Electric 604 E Aluminum St BU 3233
Smith Supply 201 E Park St 2-8278
westinghouse Electric 949 S Montana St 2374
GREAT FALLS
Bakers Radio & TV Supply 20 2 St S 2-7825
Lindgren Co Geo 16 4 St NW 8-8721
Radio Electronic Box 1376 2-6610
Smith Supply Co 808 Central Ave Hdgrs Butte
Valley Motor Sup 512 1 Ave S Hdgrs Havre
HELENA
Latus & Co D N 3625

Latus & Co D N 1531 Nat'i Ave HI 2-3940 MISSOULA Northwest Distr 509 S Higgnis 4-4311

NEBRASKA BEATRICE Central Radio Sup Hdqrs Hastings GERING Messersmith-Corr Radio-TV 1345 S St W 625 GRAND ISLAND Central Radio Sup Hdgrs Hastings Radio & Equip Co Hdgrs Omaha HASTINGS Central Radio Supply 518 W 1 St 2-2139
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General Radio & TV 322 S 12 St 2-6000
"Hicks Radio Co 1422 "0" St 2-7561
"Leuck Radio Supply 243 S 11 St 2-2797
Scott Electronic Supply 2201 O St 2-6558
NEBRASKA CITY
Arbor Radio TV Supply 921 Central 757
NORFOLK

Radio Equip Co Hdgrs Omaha

Radio Equip Co Hdqrs Omaha
OMAHA
Alco Radio 4011 Cuming St WA 8461
General Appliance 1101 Harney WE 4620
General Elec Supply 914 N 18 St JA 0456
Graybar Electric 3626 Martha St WE 7676
\*JB Distr Co 1616 Cass St AT 5525
Omaha Appl 18 & St Mary's AT 3440
\*Radio Equip Co 2852 Douglas AT 7700
\*Sidles Co 7302 Pacific St RE 5225
WestInghouse Elec 117 N 13 HA 8700
SCOTTSBLUFF
Joachim Radio 1913 Broadway 109
Skinner Supply Co 1305 1 Ave 700

#### NEVADA

LAS VEGAS
Radio & Sound Sup 25 E California Ave DU 2-5585
Saviers Elec Prod 110 E Charleston Hdgrs Reno

Osborne & Dermody 300 Valley Rd 2-6957 Radio Supply 690 Tahoe St 3-4680 Saviers Elec Prod 640 Sierra St 2-9134

### NEW HAMPSHIRE

CONCORD Evans Radio PO Box 312 CA 5-3538 DOVER American Radio Corp 6 St 404

\*American Radio Corp 6 St 404
MANCHESTER
\*DeMambro Radio Supply Hdgrs Boston
General Elec Supply 57 Bedford 5-5418
Graybar Electric 103 Hampshire Lane MA 4-4341
\*Radio Serv Lab 670 Chestnut 5-5444
Westinghouse Electric 147 Hanover 5-5456
RYE BEACH
Belta Distributors, Hdgrs Newton Mass Delta Distributors Hdgrs Newton Mass

### NEW JERSEY

ATLANTIC CITY LANTIC CITY Almo Radio 4401 Ventnor Ave Hdgrs Phila BR Elect Supply 926 Atlantic Ave AT 5-3448 \*\*Carans Inc Harrisburg & Atlantic AT 5-3233 \*\*Radio Elec 452 N Albany Ave Hdgrs Camden BLOOMFIELD

Berger Electronic 241 Bloomfield BL 2-7900 BRADLEY BEACH Lippman & Co Aaron Hdgrs Newark BRIDGETON

\*Joe's Radio Shop 67 S Pearl 9-0251 CAMDEN

CAMDEN
Almo Radio 1133 Haddon Ave Hdgrs Phila
General Radio 600 Penn St WO 4-8393
Radio Elec Service 513 Cooper St WO 4-2830
CLIFFSIDE PARK
Niddsco-Cliffside 658 Anderson Ave CL 6-0510

CLIFTON

Eastern Radio 312 Clifton Ave GR 1-2800
Graybar Electric 1454 Main Ave GR 1-4800
EAST ORANGE
Gross Service 444 William St OR 6-7500
\*International Distr 185 Central OR 5-1927

\*International Distr 185 Central OR 5-1927
ELIZABETH
Jersey Radio-TV Sup 1068 Elizabeth Ave EL 2-7324
New Jersey TV Supply 906 E Westfld EL 3-6166
Tubes of N Y 1148 E Grand St Hdgrs Newark
HACKENSACK

American Distr 756 Main St Hdgrs North Bergen Nidisco-Hackensack 55 State St HU 9-2000 Radio & Elect Supply Co 756 Main St HU 7-1267 Trade Radio Sales 14 Essex St HU 7-5512

HILLSIDE Sherwood Distr 1255 Liberty Ave EL 2-1126
JERSEY CITY

JERSEY CITY

\*Hallmark Electric 592 Communipaw DE 2-9696
Nidisco-Jersey City 713 Newark Ave OL 3-2360
MORRISTOWN

M & M Television 7 Maple Ave MO 4-5274
MORRIS PLAINS
Continental Sales 642 Speedwell Hdgrs Newark
Park Electronics 187 Speedwell MO 4-6922
MOUNTAINSIDE
External Researce 1003 US Route 22 WE 2-821

Federated Purchaser 1021 US Route 22 WE 2-8200

Federated Purchaser 1021 US Route 22 WE 2-8200
NEWARK
All-State Distr 457 Chancellor WA 3-4900
Apello Distr Co 15 Shipman MI 2-7266
Continental Sales 521 Bloomfield HU 2-8223
Electronic Marketeers 25 Hoyt St MA 3-2516
Electronic Supply Corp 357 Avon Ave BI 2-1470
Emerson-New Jersey 985 Broad MA 2-2217
Federated Purchaser 114 Hudson Hdgrs Mountainside
General Elec Supply 254 Elizabeth Ave BI 2-1600
Graybar Electric 2 Liberty St MA 2-5100
Hudson Radio & TV 35 Market St Hdgrs NYC
Igoe Bros 35 Halsey St MA 4-2000
\*Krich-New Jersey 428 Elizabeth BI 8-7408
Leader Electronic Supply Corp 88 Lock St MA 4-8842
\*Lippman & Co Aaron 99 Newark St MA 3-9477
Pyramid Supply 343 W Market MA 3-7800
Radio Wire Television 24 Central Ave Hdgrs NYC
Tubes of New York 944 18 Ave ES 2-2631
Variety Electric 468 Broad MA 2-6760
Westinghouse Elec Supply 528 Ferry MI 2-3450
NEW BRUNSWICK
Graybar Electric 2762 Livingston Ave CH 9-4300
William Radio Supply 265 Woodbridge CH 7-4908
NORTH BERGEN
American Distr 6335 Hudson Blvd UN 5-5306

American Distr 6335 Hudson Blvd UN 5-5306

Nidisco-Passaic 294 Passaic St PR 9-4962



PATERSON
General Elec Supply 561 E 31 St LA 5-5100
"Jersey Electronic Distr 524 21st Ave LA 5-3134
Trade Radio Sales 780 E 18 St Hdgrs Hackensack
PERTH AMBOY

Bennett's Radio 224 Market St HE 2-1736
PHILLIPSBURG
WIlliams Co C B 154 S Main St 5-1245
PLAINFIELD

Radio Wire TV Inc Hdgrs NYC
Union TV Parts 403 Watchung Ave PL 4-6930
RED BANK
Monmouth Radio 404 Shrewsbury RB 6-3300
RIOGEFIELD

Nidisco-Ridgefield Inc 480 Bergen Bivd CL 6-0510

NEM Wholesale Radio 284 Teaneck Rd HU 7-0715

Masters TV Supply 96 N Gaston Ave RA 5-3583 TEANECK

TEAMECK
Ross Homer M 367 Queen Anne Rd TE 6-5331
TRENTON
Allen & Hurley 23 S Warren St EX 3-0386
Allied Electric 333 S Warren Hours Phila
Cooper Sales 508 Hamilton Ave EX 2-8008
Dragon Co 959 Liberty St 4-1479
Fineburg's 547 S Broad TR 4-5125
General Elec Supply Brunswick Circle Ext TR 5-3453
Nidisco-Trenton 985 Princeton Ave EX 3-4536
Westinghouse Electric 745 E State ST 5-5421
W POINT PLEASANT
Ocean Electronics Co 2108 Lakewood Rd

### NEW MEXICO

ALBUQUERQUE ALBUQUERQUE
General Electric Supply 820 1 St NW 2-5246
Middland Specialty Hdgrs El Paso
Radio Equip Co 523 Central Ave NE 2-5681
Tele-Radio Supply 915 Central NE 2-1141
Walker Radio L B Hdgrs Pueblo
LOS ALAMOS
Valley Eng'g Co 601 Cedar St 2-3310
ROSWELL
ROSWELL

ROSWELL
R & R Supply 605 E 2 St Hdgrs Lubbock Tex
Supreme Radio 129 W 2 St MA 2-6320
SANTA FE
A-1 Communications 441 Cerrillos Rd 3-8041

### NEW YORK

NEW YORK

ALBANY

Air Waves Electronic Radio 43 Hudson Ave 4-8119

\*Ft Orange Radio 904 Broadway 5-1.594

Graybar Electric 40 Van Woert AL 5-1364

R T A Distrs 36 Broadway PR 5-7346

\*Taylor Co E E 465 Central 8-8713

Westinghouse Electric 19 R R Ave 8-7801

AMSTERDAM

\*Allrondack Radio Supply 185 W Main St VI 2-83 Adlrondack Radio Supply 185 W Main St VI 2-8350

Dare Radio 22 Genesee 2-0441 Roberts & O'Brien Hdgrs Syracuse BINGHAMTON NGHAMTON
Broome Distr 221 Washington St 2-4273
"Federal Radio 188 State BI 2-2394
Graybar Electric 518 Security Mutual Bidg 2-5296
Morris Distr 195 Water Hugrs Syracuse
Stack Electronics Inc 25 State St 3-7337

JFFALO
Bergman Co W Oak & Eagle MO 6300
Bergman Co W Oak & Eagle MO 6300
Bison Electrical 1137 Main St Ll 8447
Buffalo Radio 219 E Genesee WA 9004
\*Dymae Inc 2329 Main PA 2300
Faysan Distrs 506 7th St SU 1300
General Electric Supply 960 Bustl EL 5100
\*Genesee Radio & Parts 205 E Genesee CL 1970
Graybar Electric 180 Perry WA 3700
\*Huron Electronics Supply 324 N Oak St MO 6865
RCA Victor Dist 1209 Broadway Fl 1209
Radio Equipment 147 E Genesee MA 9676
Scheller Radio 929 Kensington Ave AT 2100
Standard Elect 1501 Main GA 5000
Stummit Distrs 916 Main GR 3100
DRTLAND CORTLAND

CORTLAND
Winchell Radio 149 Main St SK 3-0868
ELMIRA
"Harrison Co F C 108 W Church 3-5676
LeValley-MoLeod 312 State St 6167
FLUSHING See Long Island
FREDDNIA
Parker Michael 27 Water 2-8666

Barker-Highee 27 Water 2-8666

Roberts & O'Brien Hdgrs Syracuse
GLEMS FALLS

"Ray Supply Upper Glen St 2-5848
GLOVERSVILLE

Fulton County Dist 16 Bleecker 5-2515 HEMPSTEAD—See Long Island HICKSVILLE—See Long Island

HORNELL Hornell Electr Motor & Equip 286 Main St 2451

ITHACA
\*Stallman of Ithaca 714 W Clinton St 4-9918
JACKSON HEIGHTS See Long Island
JAMAICA See Long Island
JAMESTOWN
Johnson Radio & Electr Equip 119 Hunt Rd 8-916
Warren Radio 31 Forest Hdgrs Erie Pa
JOHNSON CITY

JOHNSON CITY
WestInghouse Elec 419 Grand Ave 9-1561
KINGSTON
Arace Electronics 25 Henry 6622
Certified Electronics Hdgrs Middletown
LOCKPORT

Standard Electronics 8 Elm St 4-3684

MALONE
Pond Electric 123 E Main St 135
Ray Supply 55 W Main St Hdgrs Glen Falls
MASSENA
Beacon Electronics Hdgrs Utica
NIDDLETOWN

MIDDLETOWN
Artec Distr 17 Cottage 3173
\*Certified Elect Montgomery Rd 2-1055
Roskin Bros 27 W Main
S & L Electronics 17 Cottage 3175
MINEGLA See Long Island
MONTICELLO
Fleisher Distrs 248 Broadway 1820
MOUNT VERNON
Davis Radio 70 E 3 M0 4-0747
Radetoo inc 246 W 1 M0 8-6173
NEWBURGH

NEWBURGH
Chief Electronics Hdqrs Poughkeepsie
Newburgh Distr 354 Liberty St 4830
Shapiro Distrs 315 Broadway

Shapiro Distr 354 Liberty St 4830
Shapiro Distrs 315 Broadway
Westinghouse Electric 26 Liberty 5420

NEW YORK CITY, BRONX & STATEN ISLAND
Arrow Electronics 65 Cortiand St DI 9-4714
Avnet Electronics 52 Broadway WA 5-7000
"Bay Electronics 512 Broadway WA 5-7000
"Bay Electronics 512 Broadway WA 5-7000
"Bay Electronics 512 Broadway WA 5-7000
"Bay Electronics 5136 Broadway WA 5-7000
"Bay Electronics 1736 Jerome Ave LU 3-2384
"B & D Distr 639 Tompkins Ave Rose Bank
Staten Island GI 7-2660
"Bruno-New York 460 W 34 LO 4-1252
Calvert Electronics 536 Broadway CA 6-7400
Center Electronics 536 Broadway CA 6-7400
Center Electronics Co 72 Cortlandt St CO 7-6475
Concord Radio 55 Vessey DI 9-1133
Consolidated Radio 768 Amsterdam AU 2-2678
Dale Distr Co 40 E 32 MU 9-5252
Dalis Inc H L 175 Varick AL 5-3000
Dorosin Distr 10 W 13 OR 5-6765
Douglas Radio Sup 128 Greenwich St WO 4-0470
Edile Electronics 154 Greenwich DI 9-3143
Electronics Wholesalers 5047 Broadway LO 9-4906
Electronics Center 118 Duane St BA 7-2241
Emeltone Electronics 71 Broadway RE 2-1696
Emerson-NY Inc 524 W 23 St WA 9-2264
"Federated Purchaser Hadrs Mountainside N J
"Fordham Radio 265 E 149 St LU 5-0330
General Electric Supply 585 Hudson AL 5-3300
Goldman Louis 251 W 42nd St BR 9-8872
Graybar Electric 420 Lexington LE 2-4000
Greylock Electronics 525 W 168 St TO 7-9050
Haas Electronics 862 Southern DA 9-1466
Harrison Radio 225 Greenwich BA 7-777
Harvey Radio 103 W 43 JU 2-1500
"Hudson Radio & TV 1275 Webster LU 8-0991
Lafayette Radio 100 6 Ave RE 2-8600
"Leonard Radio & TV 1275 Webster LU 8-0991
Lafayette Radio 100 6 Ave RE 2-8600
"Leonard Radio & TV 1275 Webster LU 8-0991
National Radio 165 Southern Bird DA 8-8800
North Radio 62 Cortiandt St CO 7-1430
0 & W Radio 141 Cedar CO 7-2635

"Powell Radio 142 W 169 CY 3-2623
Radio Wire TV Inc 100 6 Ave RE 2-8600
Rand Radio Corp 84 Cortlandt St CO 7-7368
Roburn Agencies 431 Greenwich W0 6-2130

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\*Slate & Co 2755 Webster LU 4-0614
Steve-El Electronics 61 Reade St CO 7-0086
Sun Radio & Electronics 650 6 Ave OR 5-8600
Swedgal Electronics M 258 Broadway WO 2-5485
\*Sylvan-Wellington 269 Canal CA 6-5811
TAB Co 111 Liberty St RE 2-6245
\*Terminal Radio 85 Cortlandt WO 4-3311
Time Electronic Sales 368 Broadway BA 7-3922
Tri-Par Distr 1403 Bronx River Ave TY 3-7060
\*United Electr Sup 181 West End Ave EN 2-9695
Westinghouse Electric 40 Wall St WH 3-4321
Wholesale Electronics 673 Elton Ave LU 5-6705
\*Wilco Radio 383 E 138 MO 9-1654

### LONG ISLAND

BROOKLYN

Acme Electronics 74 Willoughby TR 5-3833

Benray Electronics 485 Coney Island BU 7-9650

\*Buchman Radio 492 Atlantic UL 5-5143

Dorosin Dist 1749 MacDonald Hdgrs NYC C-7597

\*Green Tele-Radio 472 Sutter HY 5-0200

Laco Electronics 4924 4th Ave HY 2-5920

\*National Radio Parts Distr's 572 Albany PR 8-0800

\*Stan Burn Radio 558 Coney Island UL 3-8049

Witmal Electronic 126 Manhattan EV 8-0945

\*FLUSHING

\*Melville Radio 134 Dablis Ave HV

\*Metville Radio 134 Dahlia Ave Hdgrs White Plains Stuart Electronic 149-09 Union Ave OL 8-3553 FOREST HILLS Berger Distr 109-01 72 Rd HEMPSTEAD

Arrow Electronics 215 Front St

Davis Electronics 204 Main St IV 3-9200

\*Island Radio 412 Fulton HE 2-1097

\*Standard Parts 277 N Franklin IV 1-9010

HICKSVILLE

Con Fig. 1

Gem Electronics Distr 236 Broadway HI 3-3400 General Electric Supply 4 & Bway HI 3-1890 JACKSON HEIGHTS "National Radio Distr 73-20 Northern Bivd Hdgrs

JAMAICA

JAMAICA

Chaurose Radio 170-16 Jamaica OL 8-2900
Electronic Maintenance 172-24 Jamaica Ave
JA 3-2870
Harrison Radio 144-24 Hillside Ave Hdgrs NYC
Norman Radio 94-29 Merrick Rd RE 9-4651
Peerless Radio Distr 92-32 Merrick Rd RE 9-6080
LONG ISLAND CITY
Dalis Ine HL 35-35 24 St
Electronic Supply 41-08 Greenpoint Ave ST 6-2730
Mannifed Electronics 21-26 36 Ave EX 2-6000
Philo Distr 47-51 33 St ST 6-8400
Schweber Electronics 122 Herricks PI 6-6520
Spera Electronic Supply 37-10 33 St ST 6-2199
Westinghouse Elec 29-50 Northern Bivd HU 6-7700

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PATCHOGUE
South Bay Radio 159 W Main St PA 3-4488
RICHMOND HILL
Anchor Electronics 116-01 101 Ave VI 6-2420
ROCKVILLE CENTER Tele-Radio Dist Hagrs Brooklyn WOODSIDE

Boro Electronics 69-18 Roosevelt Ave HA 6-9718 (end of Long Island)

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General Electric Supply 11 & Whitney 6921
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Radio Equipment Corp 1363 Pierce Ave NI 5531 Radio Equip Corp 449 N Union St 0L 8560 Standard Electronics Olean Corp 2-0109 Wanamaker & Redstone 415 N Union St ONEONTA Crouch Distr 202 Main 2596 PATCHOGUE See Long Island

PEEKSKILL

B & B Electronics 1607 Main 7-3150
PLATTSBURG Ray Distr Hdgrs Glens Falls PORT CHESTER

Ratec Inc 136 Irving Ave WE 9-3940
POUGHKEEPSIE
Chief Electronics Inc 14 N Bridge St 7300
Mid-Hudson Elec 408 Main St
Victory Specialties 6 Raymond 7247
ROCHESTER

Victory Specialities on Asymonu 7.247

American Electronic Sup 482 St Paul St L0 3010

Beaucaire Inc 319 W Main St HA 2830

Case Electronic Supply 82 St Paul St BA 4580

General Electric Supply 867 Mortimer HA 7500

Graybar Electric 186 N Water BA 7700

"Hi-C Radio Electronics 109 State St BA 8119

Kemp Equipment 57 Mt Hope HA 8050

Masline Radio 192 Clinton N HA 0790

RCA Victor Distr 120 Portland Ave L0 4180

Radio Parts & Equipt 108 Sylvan Rd M0 5272

"Rochester Radio 600 E Main St L0 9900

Silver Corp M E 120 Portland Ave BA 7300

Westinghouse Electric 1 McKee Rd GE 8880

ROCKVILLE CENTER.see Long Island

ROME

Rome Electronic Supply 102 Erte Blvd E 5550 SCHENECTADY \*Electric City Radio 1566 State
Schenectady Electronic Dist 1667 Broadway 4-8520
Schwartz & Son Maurice 710 Broadway Di 6-4717
SYRACUSE

Schwartz & Son Maurice 710 Broadway D1 6-47; MACUSE
Baldwin-Hall Co 475 Oswego 3-5103
\*Bernott Co W E 655 S Warren 2-3385
Broome Distributing 100 Tulley 75-3176
City Electric 514 W Genesee 3-517
Gordon Dist Co L 935 W Genesee St 74-3338
Graybar Electric 327 N West SY 74-6851
Karl-William Co 404 S Crouse 75-2755
Morris Distr 1153 W Fayette 75-9955
Paul-Jeffrey Co 519 Erie E 75-4126
Penfield Mig 516 Erie 75-4154
Reliance Distr 343 W Jefferson 75-2157
\*Roberts & 0'Brien 839 Hiawatha Bivd 2-0421
\*Smith Inc S W 325 E Water 2-7768
Stage Roy C 265 Erie Bivd W 2-8686

Empire State Wholesale 218 Congress St AS 2-6160 Q & Q Electronic Supply 801 Jacob St AS 4-7323 \*Trojan Elec Sup 15 Middleburg St AS 4-4481

UTICA

Associated Elect Supply 1427 Sunset Ave 3-169

\*Beacon Electronics 411 Columbia St 5-4411

\*Electronic Lab 1415 Oriskany W 4-5168

Miller Electric 11 Hopper St

Vaeth Electric 35 Genesee 2-5177

Wastinghouse Elec 112 N Genesee St 4-8116

WOODSIDE see Long Island

WATERTOWN

\*Beacon Electronics 680 Mill St Hours Utlea

Watertown Electronics 411 W Main 863

Westinghouse Electric 245 State 6527

WHITE PLAINS

Emerson Radio 285 Mamaroneck WH 6-3816

Hub Electronics 249 Tarrytown Rd WH 6-3121

\*Melville Radio 259 Mamaroneck WH 8-6131

\*Westchester Elec 602 Mamaroneck WH 9-5765

YONKERS

General Electric Supply 16 Harrison Ave 8-3700 Yonkers Elec 541 Nepperhan YO 9-6044

### NORTH CAROLINA

ASHEVILLE \*\*Freck Radio Supply 38 Biltmore Ave 3-3633
General Electric 47 Rankiln Ave 2-4481
Graybar Electric 221 Patton Ave AS 3-4761
\*\*Longs Distr 12 Biltmore Ave 3-4371
BURLINGTON
\*\*Woment Flatters\*\*

BURLINGTON
Womack Electric Supply 623 Worth St
CHARLOTTE
Allied Electronics Hdgrs Raleigh
Allison Erwin 209 E 5th St
Dixle Radio Sup 1431 Bryant St Hdgrs Columbia S C
General Electric Supply 700 Tuckaseegee FR 5-7321
Glasgow Supply Co 224 S Cedar St FR 6-2457
Graybar Electric 120 W Morehead FR 6-4886
\*Radiotronic Distr 208 N College 2-1258
Shaw Distr 205 W First St FR 6-3533
Southern Radio 1625 W Morehead 6-4461
Westinghouse Electric 324 N College 5-3715
CONCORD

Dixle Radio Supply Hdgrs Columbia S C



DURHAM Graybar Electric 303 S Duke DU 2-1135 FAYETTEVILLE Eastern Radio 532 Hay 2-7161 General Electric Supply 461 Robeson St 2-5143 GASTONIA
Bryant Supply 605 E Franklin Ave UN 5-3466
Dixie Radio Supply Hdgrs Columbia S C
GOLDSBORO
Signal Radio Kinston Hwy 3234

GREENSBORD General Electric Supply 1111 Willowbrook 3-8207

\*Johannesen Elec 312 N Eugene 3-6906

\*Southeastern Radio Hdgrs Raleigh
Westinghouse Elect 1410 Westover Ter 3-8661

GREENVILLE Czrolina Sales Corp 1410 Evans St 3143 General Electric 200 Hooker Rd 5104 Radio Equip Co Hdgrs Norfolk Va HICKORY

Bryant Supply Co Hdqrs Gastonia Victor Radio & TV 1058 3 Ave Dr NW 2-6927 MOREHEAD CITY Machine & Supply Co Box 335 2-5971

RALEIGH

RALEIGH
Allied Electronics 413 Hillsboro 3-4627
Electrical Wholesalers PO Box 247 3-5588
General Electric Supply 800 W Poole 3-4691
Nash-Steele-Warren 615 W Hargett St
\*Southeastern Radio 414 Hillsboro 3-1936
Waskinghouse Electric 319 W Martin 3-4841
ROCKY MOUNT
Graybar Electric 761 Planters St RO 2-5171
\*Womack Electronics 105 Marigold St 2-6153
SALISBURY
Leonard Electronics 316 N Depot St 5280

SALISBURY
Leonard Electronics 316 N Depot St 5280
WASHINGTON
Jowdy Distributing 110 N Respass St 40
WILMINGTON
French Radio 1220 Dock 9878
WINSTON SALEM
\*\*Obliton-Hege 924 W 4 2-5141
Graybar Electric 955 Brookstown Wi 4-2461

### NORTH DAKOTA

BISMARCH Bristol Dist Co Hdgrs Fargo FARGO

ARGO
Bonn Co Lew Hdgrs Minneapolis
\*Bristol Distr 419 Northern Pacific Ave 2-7493
General Electric Supply 69½ Broadway 2-8131
Hayer Co FC 714 1st Ave N 2-7479
Radio Equipment 624 2nd Ave N 5462
Westinghouse Elec 109 Roberts 2-4446
Wolter Electronics 65 5 St N 4886

GRAND FORKS Bristol Dist 1017 S Washington St Hdgrs Fargo MINOT NOT Bristol Dist Co 25 Main Hdqrs Fargo McFall Radio 5 N Main St

### OHIO

AKRON
Akron Electr Supply 107 S Arlington St PO 2-8818
Electronic Engineering 362 W Bowery FR 6-3191
General Electric Supply 225 E Mill FR 6-8195
Graybar Electric 185 Carroll 1E 5-4143
Main TV Supply 1013 N Main St WA 8-2117
Olson Radio 73 E Mill St JE 9191
Sacks Electrical 605 S Main St JE 8196
\*Sun Radio 110 E Market St HE 2171
\*Warren Radio 71 S Broadway Hdqrs Toledo
ASHTABULA
\*Morrison's Radio 331 Center St 3-9336
CANTON

CANTON Armstrong Electr 1261 Cleveland NW GL 2-6533

\*Burroughs Radio 711 2 St NW 5-0273

Fall Radio Supply 410 Arlington Ave NW 5-8451
General Electric Supply 123 6 St S W 4-5187
Sommer Electric 818 3 St NE 5-9454

CINCINNATI

\*Chambers Electronic 3669 Central Phys. MA 1-7

Sommer Electric 818 3 St NE 5-9454
CINCINNATI

\*Chambers Electronic 1669 Central Pkwy MA 1-7616
General Electric Supply 215 W 3 St GA 1750
Graybar Electric 115 W McMicken MA 1-0600
Herrlinger Distr 15 & Vine Sts CH 1-7273
Holub & Hogg 1400 Sycamore St CH 1-7274
\*Hughes-Peters 1128 Sycamore Hdgrs Columbus
Lockle & Glenn 2110 Gilbert W0 3396
Mytronic 121 W Central Pkwy GA 2245
Dhio Appl 804 Sycamore St DU 1-5430
Radio/TV & Refr 1129 Walnut MA 1-2940
\*Schuster Electric 321 E 8 St CH 1-7610
\*Steinbergs 633 Walnut St CH 1-1880
Telefronic Supply 3935 Montgomery Rd
Tri-State Distr 8th & Broadway DU 7400
United Radio 1314 Vine St CH 1-6530
Westinghouse Elect 3011 Stanton CA 1300
CLEVELAND
Broadway Electric 6209 Broadway D! 1-8500

EVELAND

Broadway Electric 6209 Broadway DI 1-8500

Carnegle Radio Distr 2536 Prospect Ave CH 1-2433

Euclid Radio 16379 Euclid GL 1-1375

Freshman Chas 6610 Euclid Ave EX 1-8723

General Electric Supply 4958 Woodland Ave HE

1-7280

1-7280
General Radio Supply 1588 Hayden Ave UL 1-0700
Goldhamer 2239 E 14 St CH 1-1690
Graybar Electric 1100 E 55 St HE 2-2500
Kane 1666 E 40 St EX 1-4800
Main Line Cleveland 1260 E 38 St EX 1-1800
Northern Ohio Appl 5403 Prospect Ave HE 2-0500
\*Northern Ohio Labs 2073 W 85 W0 1-2756

Olson Radio 2020 Euclid MA 1-6187

\*Pioneer Electronic 2115 Prospect Ave SU 1-9410
Progress Radio 413 Huron Rd CH 1-5630

\*Radio & Electronics 3235 Prospect UT 1-6060
Taylor G W 2157 Fairhiil Rd SW 1-5442
Tecca Distr 4501 Prospect HE 2-1040
Westinghouse Elect 1809 E 22 TO 1-5660

\*Winteradio 1468 W 25 St MA 9383

COLUMBUS

Bennett Distrs 1051 W Goodale Blvd CA 4-6216
Buckeye Electronics 242 E Long St CA 8-2697

\*Electronic Supply 134 E Long St
General Electric Supply 146 N 3 St CA 8-4371
Graybar Electric 3 & Chestnut St CA 8-3811

\*Hughes-Peters 111 E Long CA 1-6575

Kane 168 N 3 St Hdgrs Cleveland
Thompson Radio 182 E Long CA 1-7434
Tracy-Wells 175 N Front St
Westinghouse Electric 266 N 4 St MA 5571

\*Whitehead Radio 124 E Long St AD 6131

AYTON

DAYTON

OAYTON

\*Allied Supply 359 W Monument Mi 9833
General Electric Supply 601 E 3 St Mi 0781
Graybar Electric 332 W Monument Ave Mi 5665

\*Hughes-Peters 300 W 5 St Hdgrs Columbus
Moore Equip Inc 18 Bruen St HE 2841

\*Srepco 314 Leo St Mi 3874
Stotts-Friedman 135 E 2nd St Mi 8373
Westinghouse Electric Supply 226 W 5 St Mi 0331

DEFIANCE
Hutch & Son Hdgrs Lima

E LIVERPOOL

D. & R. Radio 631 Dresder Ave Mides Stabusille

D & R Radio 631 Dresden Ave Hdgrs Steubenville ELYRIA

A-Co 235 Lodi St 2169 FINDLAY Lima Radio Parts Hdgrs Lima

LANCASTER
Bletzacker Electronics 135 W Chestnut St 2137
Snyder Electric 319 Forest Rose 2986

MA Allied Supply 460 S Main St Hdgrs Dayton Hutch & Son 125 S Elizabeth St 9-8411 \*Lima Radio Parts 600 N Main 6-6756 Northwestern Radio 131 S Elizabeth St 4-2878 \*Wairen Radio Co 222 S Elizabeth St 7-2011 LOBALN

Pioneer Electronic Supply Hdqrs Cleveland MANSFIELD

\*Burroughs Radio 218 E 2nd St 1691-6
Wholesaling Inc 775 Springmill 7287-6

MARIETTA

Marietta Radio & Elect 221 2 St FR 3-4987

MARION

Bell Radio 527 N Main St 2-5513

Diliman Radio Supply 389 W Center St 2-8063
Servex Distributing 213 N Main St 2-0031

MASSILLION
Martin M H 1118 Lincoln Way TE 2-7467

PAINESVILLE
Morrison's Radio Hdgrs Ashtabula

PORTSMOUTH
General Electric Supply 1723 10 St 3-2341

Graybar Elec Co 923 Washington St PO 3-1766

Bing & Irwin 1007 Lawson St
Sound Elec Supply Co 7 & Finley St

SANDUSKY

Barco Electronic Parts 119 E Water 2471

Servex Electronic Dist Hdgrs Marion

SPRINGFIELD

Barco Electronic Parts 119 E Water 2471
Servex Electronic Dist Hdgrs Marion
SPRINGFIELD
Eberle's Radio Supply 522 W Main St FA 3-8552
Standard Radio 1300 St Parls Rd FA 5-6431
STEUBENVILLE

D & R Radio Supply 221 S 3 St AT 3-3643

\*Hausfold Radio Supply 116 N 3 St 2-4391

Hutch & Son Hdgrs Lima

Benarr Distrs 1034 Grand Ave CH 4-6753
General Electric Supply 28 N St Clair's GA 8661
Graybar Elec 1700 Canton Ave CH 1-9166
Harry's Auto-Radio 713 Adams St FA 3447
\*Howard's Electronic 135 17 CH 3-2277
Kane Co 1926 Canton St Hdgrs Cleveland
Lifetime Electronics 1501 Adams St CH 1-5643
Main Lins Distributors 380 S Erie St CH 4-4996
Selectronic Supplies 1320 Madison Ave CH 8-3361
\*Tol-Jo Radio Spec 1215 Jackson St AD 5828
\*Warren Radio 1002 Adams St Hdgrs Lima
Westirahouse Electric 1225 Indiana AD 6184
ARREN

Water nation 1002 Adams St Hughs Lima
Wastinghouse Electric 1225 Indiana AD 6184
WARREN
D & J Electronic 236 Vine Ave SE 3721-6

\*Radio Specialties 136 Pine St SE 5-8770
Sommer Electric 2609 Youngstown Rd 7-5055
WASHINGTON COURT HOUSE
Hutch & Son 209 E Market Hdgrs Lima
YOUNGSTOWN
General Electric Supply 265 W Rayen Ave Rl 6-6511
Graybar Elec 602 W Rayen Ave Rl 4-0124
Hood Electric Co 128 W Rayen Ave 4-0255
Kane Co W Rayen Ave Hdgrs Cleveland
Ross Radio 325 W Federal St Rl 6-8881
TV Parts Co 1408 Market St Hdgrs New Brighton Pa
ZNESVILLE
Thompson Radio 135 S 60 St GL 2-8473

Thompson Radio 135 S 60 St GL 2-8473

### **OKLAHOMA**

ADA
Johnson Wholesale Electronics Hdqrs Okta City
ARDMORE ARDMORE
Johnson Wholesale Electronics Hdgrs Okia City
BARTLESVILLE
Four States Supply Hdgrs Joplin Mo
ENICH Johnson Wholesale Electronics Hdgrs Okla City



LAWTON • Radio Supply Hdors Okla City • Reynolds Radio 9091/2 C Ave 1292 McALESTER McAlester Radio & TV 407 N Main St GA 3-2282

MUSKOGEE

\*Muskogee Electronic 211 Caliahan St MU 2-9651

OKLAHOMA CITY
Capitol Distr 1017 W Reno St
Dulaney's 100 N W 44 St JA 5-1511

Electronic Supply 212 N W 10 CE 2-5215

General Electric Supply 127 E Calif Ave F0 5-5475

Graybar Electric 12 E Califforia F0 5-9351

Johnson Wholesale 927 N W 1 St F0 5-6388

\*Miller-Jackson 121 E Califf St F0 5-8426

Modern Parts Distr 15 E Grand RE 9-1523

\*Radio Supply 724 N Hudson St CE 2-6128

Southwest Radio & Equip 3 N E 8 St RE 6-8535

Westinghouse Electric 850 N W 2 St 2-7101

TULSA

General Electric Supply 18 N Guthrie St 3-6121

ULSA
General Electric Supply 18 N Guthrie St 3-612
Graybar Electric 2406 E 12 St TU 6-2121
Industrial Electronic Supply 1124 E 4 St
Midwest Electronic 219 E 1 St CH 2-8086
Oil Capitol Electronics 923 E 4 LU 4-2437
Patterson Radio 211 E 13 5-3179
\*Radio Inc 1000 S Main 4-9127
\*S & S Radio 537 S Kenosha St CH 2-7174
Westinghouse Electric 307 E Brady St 3-7155
Wholesale Radio Supply 538 S Lewis St
ENITA VENITA

Pittsburg Radio Sup Hdgrs Pittsburg Kansas

### OREGON

EUGENE \*Carison Hatton & Hay 971 Oak St DI 4-4255 Græybar Electric 2180 6 Ave W EU 4-2224 \*United Radio Supply Hdgrs Portland KLAMATH FALLS

R F Supply 2367 S 6 St 6572

MEDFORD
General Electric Supply 121 W 4 St 3-2423
United Radio Supply Hdgrs Portland

\*Walker Co V G 205 W Jackson 2-4558

PORTLAND

Appliance Whole 600 NW 14 AT 6584
\*Central Distrs 1131 NW Couch CA 8-0146
Connelly Co F B 905 NW 12th Ave CA 1755
Eoff Electric Hdgrs Salem

Comeral Electric Huggs Salem
General Electric Supply 300 NW 14 Ave BR 0651
Graybar Electric Park & Flanders BR 6641
Home Makers Supply 824 SW 18 St CA 9385
H & R Radio Sup 5210 NE Sacramento AT 7-0057
Johnson Co Lou 1506 NW Irving CA 2-9551
North Pacific Supply 2950 NW 29 Ave CA 8-9576
Northwest Radio Supply 110 SE 8 Ave BE 4-9787

Portland Radio 1234 W Stark St AT 8647
Saelens Radio 1605 NW Everett CA 8-6395
\*Stubbs Electric 33 NW Park Ave BR 5404
Television & Radio 720 SE Aider BE 2-1104
\*Tracey & Co 937 NW Glisan St CA 3-6263
\*United Radio Supply 22 NW 9 Ave CA 3-6323
\*LEM

SALEM

Eoff Electric PO Box 709 3-9251

Johnson Co Low 935 S Commercial Hdgrs Portland

United Radio Sup 697 S 12 Hdgrs Portland

### PENNSYLVANIA

ALLENTOWN LLENTOWN
Bell Co Chas L 14 & Gordon HE 3-5101
\*Federated Purchaser Hdgrs Mountainside N J
General Electric Supply 16 & Summer St HE 3-5206
Graybar Electric 1941 Hamilton HE 4-9341
Luckenbach & Johnson 1828 Tilghman St HE 4-6235
Peters A & 231 N 7 St HE 4-9361
Steedle Norman D 1005 N 19 HE 5-6753
Westinghouse Elect 745 Union Blvd HE 4-5105
LT00NA ALTOONA

Altoona TV Supply 1713 Union Ave 4-0827 General Electronics 508 Crescent Hdgrs Wheeling "Hollenback's Radio Supplies 2221 8th Ave 6171 AMBRIDGE

Barrett Bres 127 Merchant St AM 6-6750 BETHLEHEM

Buss Radio Electric 431 W Broad St UN 7-3151 BRADDOCK

Marks Parts Co 317 Braddock Ave EL 1-1314
BRADFORD
Johnson Radio Hdgrs Jamestown N Y BRISTOL

Cooper Sales Co 449 Mill St BR 8-6577 BUTLER

Barron's Radio 333 E Jeff 7-5930 TV Parts Co Hdqrs New Brighton

TV Faits Co Hadrs New Brighton
CHESTER
A C Radio Supply Hdgrs Phila
Beil Electronics Supply 1835 W 9 St 4-7161
CLEARFIELD
Altoona TV Supply Hdgrs Altoona
EASTON

FERSIUM

Federated Purchaser Hdgrs Mountainside N !
Radio Electric Service Hdgrs Philadelphia

ELKINS PARK

A G Radio Parts 939 Township Line TU 6-5100

ERIE

B & D Whole Distr 502 E 10 St

\*Duncombe Co J V 1011 W 8 St 4-5278

Erle Electronic Supply 801 W 21 St

General Electric Supply 824 E 9 2-1477

\*Jordan Electronic Co 1130 German St 2-2462

\*Warren Radio 1315 Peach St 4-5286

WestInghouse Elec 1820 State 4-8191

Young Brothers 1909 Peach St 4-5297

### M. V. MANSFIELD CO.

and

South Hills Electronics

McKeesport Electronics

John Marshall Co.

Mon Valley Electronics

Pittsburgh, Pa.

GETTYSBURG Hartley & Co M A Hugrs Staunton Va GREENSBURG General Electronics Hdgrs Wheeling W Va HANDVER York Radio & Refrigeration Parts Hdqrs York HARRISBURG ARRISBURG
Blessing Co John A 48 N Cameron St CE 6-9311
D & H Distr 2535 N 7 St CE 8-7327
Excelsior Radio 17 & Derry St CE 8-8261
Graybar Electric 1039 S 13 HA 8-7303
Harrisburg Radio 1124 Market St CE 6-2755
Knerr C 6 317 S Cameron St
\*Radio Distr 915 S 13 4-0139
AZELTON HAZELTON
Cerulio Electric 39 S Vine 1296
Moyer Electronic 758 N Locust \*\*Baker Radio Electric 111 John St

\*\*Cambria Equip 17 Johns 6-1291
Dick's Automotive 633 Napoleon St

TV & Radio Parts 226 Main St 7-5345
Westinghouse Electric 75 Hickory St 8-1293
LANCASTER
Barbey Co & D. 622 Co. Barbey Co G D 622 Columbia Hdgrs Reading Eshelman Supply 110 N Water 4-5625 York Radio 519 W King St Hdgrs York LEBANON Barbey Co Geo D Hdqrs Reading LEWISTOWN Electronics Hdgrs State College McKEESPORT

Barno Radio 321 6 Ave

McKeesport Electronics 1661 5th 8-5111 MEADVILLE Mansfield Co M V Hdgrs Pittsburgh Warren Radio Inc Hdgrs Erie MONESSEN Mon Valley Electric 420 Sensonness
NANTICOKE
Modern Electronic Hdgrs Wilkes-Barre
NEW BRIGHTON
Mansfield Co M V Hdgrs Pittsburgh
Television Parts Co 509 5 Ave NB 3000
NEW CASTLE
Midwestern Elec 235 W Grant OL 4-9961
NEW KENSINGTON
Bearer Electric 1017 5 Ave ED 5-5801
NORRISTOWN Mon Valley Electric 456 Schoonmaker Ave 1233

Almo Radio Co 550 Markely St Hdgrs Phila General Radio Supply 624 W Airy St NO 8-8115 Kratz Bros Kohn & Oak BR 5-4379

"A C Radio Sup 1539 W Passyunk H0 2-9379
"A G Radio Parts 3552 N 17 St Hdgrs Elkins Park
"Allied Electric 1320 W Erle Ave BA 9-8800
"Almo Radio 412 N 6 St WA 2-5153
"Barnett Bros 622 Arch St L0 3-9780

PHILADELPHIA

0

"Wife Eugene G 218 S 11 St WA 3-1343
PITTSBURGH
Atlantic Dist 1630 Saw Mill Run TU 2-0504
\*Cameradio Radio 1121 Penn Ave
Electronic Parts 5744 Baum Bivd M0 1-6413
Fischman Co Max 1141 Penn Ave EX 1-3232
General Electric Supply 200 W River Ave FA 2-1530
Graybar Electric T11 Galveston Ave FA 2-0300
Hamburg Bros 213 Galveston Ave AL 1-2400
Mansheld Co M V 937 Liberty Ave GR 1-4175
Marks Parts 508 E Ohlo Hdgrs Braddock
\*Marshall Co John 201 Anderson FA 1-5400
\*Radio Parts 6339 Penn Ave EM 1-6053
Rogers Co C R 5210 Liberty Ave MA 1-4700
South Hills Electronic 1420 W Liberty Ave FI 1-6200
\*Superior Distr 5124 Liberty Ave MU 1-4311
Varlety Electronics 605 Bigelow Bive EX 1-1524
Westinghouse Elect 209 W Gen'l Robinson AL 1-5500
POTTSTOWN
Barbey Co Geo P Hdgrs Reading Barbey Co Geo B Hdgrs Reading POTTSVILLE
Schuylkili Electric 611 Mauch Chunk St 4404
READING
A G Radio Parts Hdgrs Elkins Park
Barbey Geo D 155 Penn St 6-7451
\*Barnett Bros 201 S 4 Hdgrs Phila
General Electric Supply 447 N Front RE 4-2169
Graybar Electric 22 S 3 St RE 6-1581
Westinghouse Electric 4 & Elm Sts 6-7236
ROCHESTER ROCHESTER Reliable Radio & TV 402 Adams St SAINT MARYS \*B & R Electric 26 Railroad St 4-4918 SCRANTON CANTON
Consolidated Distr 844 Crpouse DI 7-6380
General Electric Supply 204 Monroe Ave DI 4-8563
General Radio & Refr 1129 Wyoming Ave DI 7-5033
Morris Distr 228 Franklin Hdgrs Syracuse
Purseli Fred P 1221 N Washington Ave DI 7-5616
Scott Charles B 119 Franklin Ave 2-8221
\*Scranton Radio/TV Supply 419 Poplar St DI 3-1259

\*Consolidated Radio 612 Arch St LO 3-7871
\*Emerson Radio 223 N Broad LO 4-3350
Everybody's Supply 810 Arch St WA 2-7800
General Electric Sup 401 E Hunting Park GA 6-8800
Graybar Electric 910 Cherry WA 2-5405
\*Herbach & Rademan 1204 Arch LO 7-4309
Lectronic Research Lab 715 Arch MA 7-6771
\*M & H Sporting Goods 722 Market LO 7-2587
Nadisco 3960 M 16 BA 6-2020
\*Nat-Lazar Radio 4231 Lancaster Ave BA 2-5604
Neuber H K 1539 Race St LO 7-2125
\*Penn Electronic 5303 Frankford JE 5-1533
\*Radio Electric 3412 Germantown BA 9-5900
\*Radio Electric 3412 Germantown BA 9-5900
\*Radio Elec Serv 7 & Arch LO 3-5840
\*Rosen & Co Raymond 2121 Market St TR 8-2200
\*Steinberg & Co 2520 N Broad BA 3-9400
Westinghouse Electric 141 N 11 St WA 2-8950
\*Wile Eugene G 218 S 11 St WA 3-1343
PITTSBURGH
Atlantic Dist 1630 Saw Mill Run TU 2-0504

Shelborne Corp 239 Franklin Ave DI 7-2005 SHAROM Sharon Electronics 1336 E State DI 6-3014 STATE COLLEGE Alvo Electronies 103 S Pugh St AD 8-6277 SUNBURY

Electronic Sales 734 Market St AT 6-4212

Moyer Electronic Hdgrs Hazelton UNIONTOWN \*Zimmerman Wholesalers Hdqrs Hagerstown Md WILKES-BARRE WILKES-BARRE
General Electric Supply 85 E Union St VA 2-5106
General Radio 396 S Main Hdgrs Scranton
Modern Electronic Supply 245 S Main St VA 3-6872
Radio Service 346 S Main VA 3-7713
Sonoret Tele-Radio Co 36 Woodbury St VA 2-2431
Wall R B 16 E Union St VA 4-2411
WILLIAMSPORT
Alvo Electrs Distrs Hdgrs State College
General Radio & Refrig Hdgrs Scranton
Westinghouse Electric 465 Hepburn St 2-6184
\*Williamsport Radio 518 W 3 St 7696
YORK UNK Eshelman Supply 10 Broad St Ndgrs Lancaster °J R S Distr 646 W Market 2-8624 Westinghouse Elec Ogantz St & 6 Ave WO 5556 °York Radio & Refrig 263 W Market St 8-1586

### RHODE ISLAND

PROVIDENCE ROVIDENCE
Dandreta & Co Wm 129 Regent Ave UN 1-2800
\*DeMambro Radio 90 Broadway
Eddy & Co 43 Hospital St GA 1-2045
Edwards & Co W H 94 Broadway GA 1-6158
General Electric Supply 241 Harris Ave GA 1-6523
Graybar Electric 194 Richmond DE 1-8100
Rimaco Sales Co 488 Friendship St DE 1-9199
Television Access House 41 Broadway JA 1-7515
Westinghouse Elec 233 Harris GA 1-6484

SOUTH CAROLINA ANDERSON

A & S Electronics 205 W River St CA 5-826D

Dixle Radio Supply Hdgrs Columbia

CHARLESTON Reneral Electric Supply 287 E Bay St 2-0220 Radio Labs 215 King St 3-5328 Wholesale Radio 78½ Calhoun St COLUMBIA OLUMBIA
Associated Distr 822 Gervais St
Carolina Sales Hddrs Greenville N C
\*Dixie Radio Supply 1700 Laurel St 4-0383
General Electric Supply 107 Berea Rd
Graybar Electric 710 Lady St CO 2-2125
Horlacher & Barrett 1909 Main
Perry-Mann Electric 901 Taylor St 2-4375
Southeastern Radio Parts Hddrs Atlanta
Westlinghouse Electric 915 Lady 8145
NWAY CONWAY
Southern Electronics 208 Elm 9-3621
FLORENCE

Dixie Radio Supply Hdgrs Columbia
\*Florence Radio Supply 355 N Irby St 2-1446
GREENVILLE REENVILLE
Carolina Radio 221 W Wash 2-6740
Dixle Radio Supply Hdgrs Columbia
General Electric Supply 111 Welborn St 2-2881
Gillam Radio 802 Buncombe St 5-0438
Graybar Electric 302 W Washington St 9-1338
Perry-Mann Electric 400 Rhett St 5-1677
Westinghouse Electric 205 Airport Rd 3-6201
ARTANRIUS SPARTANRURG

Hemcor-McElhenney Co 481 Union St 6308

Southern Electronics 8 E Hampton Ave SP 3-8060

### SOUTH DAKOTA

ABERDEEN
Burghardt Radio Supply Hdgrs Watertown
RAPID CITY
Burghardt Radio Supply Hdgrs Watertown
Power City Radio Hdgrs Sloux Falls
SIOUX FALLS
Graff Motor Supply 122 W 7 St 4-6911
Graybar Electric 300 N Phillips St SI 4-5621
Lippert 1 C 506 Seliff Ave 4-7577
\*Power City Radio 209 S 1 Ave 4-4077
\*Warren Radio Supply 105 S Indiana Ave 8-6051
WATERTOWN
\*Burghardt Radio Supply Roy 746 5740 Burghardt Radio Supply Box 746 5749

\*Roden Electrical Sopply Hdgrs Knoxviiie
CHATTANOMGA
Curle Radio Supply 439 Broad St 6-4720
General Electric Supply 112 W 13 St 5-4571
Graybar Electric 210 N Highland Park Ave CH 4-3351
Radio & Appliance Distr 323 W Main St 7-6541
Radio Sales 401 Broad St 7-4581
Specialty Distributing Hdgrs Atlanta Ga
Standard Appliances 618 Broad St JACKSON
Carlton Wholesale Radio 312 S Shannon 7-0816
"Rush L K 425 N Royal St 2-4731
JOHNSON CITY
General Elec Supply 114 Ashe St 3117 KINGSPORT

Radio Electris Supply 245 E Market St Ci 5-1471 Radio Electris Supply 249 E mainet 3, 00 941. KNOXVILLE
Chemeity Radio & Elec 12 Emory Pt 4-3641
General Electric Supply 701 W Jackson Ave 5-2104
Graybar Elect Henley & Union KN 3-6171



McClung Appliances 310 Georgia St 4-1811 \*Roden Electrical 808 N Central 3-0491 MEMPHIS \*Noden Electrical 808 N Central 3-0-991
MEMPHIS

\*Bluff City Distr 234 East St BR 6-4501
Electronic Supply 1100 Union Ave 7-0366
Fulmer Co Arthur 296 Monroe Ave JA 3-5711
General Electric Supply 500 S Front St 37-5531
Graybar Electric 1474 Lamar Ave ME 7-7150
\*Lavender Radio Supply 180 S Gasper BR 6-2757
McGregor's 1071 Union Ave 36-3301
Mills-Morris 171 S Dudley 36-3351
Shobe Inc 1195 Union Ave BR 2-3411
Uffer Co Frank G 1318 Madison Ave BR 6-4555
Westinghouse Elect 845 N Main 37-9431
Woodson & Bozeman 733 S Sommerville 32-2445
W & W Distr 644 Madison JA 7-4628
MORRISTOWN
Clark Radio Supply Hdgrs Bristol MORRISTOWN
Clark Radio Supply Hdgrs Bristol
NASHVILLE
Braid Elee 1100 Demonbreum St CH 2-6511
Currey's 1600 McGavock St AL 5-7331
Electra Distr 1914 West End Ave 5-8444
General Elect Supply 90 Peabody St 4-7661
Graybar Electric 125 16 Ave N NA 4-6501
Keith Simmons 14 Cummins Sta 4-1761
Radio & Appliance 4 Commins Station
Randolph & Cole 1213 McGavock St CH 2-5426

### TEXAS

ABILENE
General Electric Supply 190 Locust 2-2827
Graybar Elec Co 1601 S Treadaway AB 2-2861
AMARILLO

AMARILLO
Alitronic Supply Inc 1401 W 7 Ave DR 4-0031
General Electric Supply 701 E 5 Ave DR 6-7254
Graybar Electric 601 E 2 St AM 2-6778
\*R & R Electronics 707 Adam DR 2-3255
Westinghouse Electric 99 Taylor 2-6536
\*West Texas Radio Supply 1026 W 6 2-3179
AUSTIN

AUSTIN

Electronic Hdgrs 310 Willow St GR 6-6818
Graybar Electric 214 E 3 St AU 8-5674

"Hargis Co 410 Baylor St GR 8-6618
Standard Radio 309 Lavaca St 7-9241

BEAUMONT
General Electric Supply 1295 Pearl St 4-6435
Graybar Electric 1070 Fannin St BE 2-8484
Hall Inc RC & LF Hdgrs Houston
"Montague Radio 760 Laurel 4-5697
Reed Co 200 Fannin St 4-7431
"Sterling Radio Hdgrs Houston
Westinghouse Electric 265 Cypress 4-8635
BROWNSVILLE
Electronic Equip Hdgrs Corpus Christi

BROWNSYILLE

Electronic Equip Hdgrs Corpus Christi

\*\*CORPUS CHRISTI

\*\*Electronic Equip 805 S Staples 3-9271

General Electric Supply 1134 E Port Ave TU 2-9237

Graybar Electric 1311 Agnes TU 4-6374

Hayes Radio Sup 1116 S Staples St 4-1991

Westinghouse Elect 110 N Staples St 2-3351

\*\*Wicks Radio Equip 513 S Staples St TU 4-8285

ALLAS
Adleta Co 1914 Cedar Springs PR 7576
Alleta Co 1914 Cedar Springs PR 7576
All State Distr 2411 Ross Ave RI 1295
Budrow Radio Supply 3400 Oakland Ave HA 8-9015
\*Crabtree Whole Radio 2608 Ross ST 5361
Dallas Electric 1800 Magnolia RI 5396
Engineering Supply 6000 Denton Dr FL 7-2861
General Electric Supply 1811 N Lamar St RA 2201
Graybar Elect 717 Latimer RA 6452
\*Industrial Electronic 134 Lesile 3-8122
\*Southern Radio 3137 Ross Ave VI 6396
\*South West Radio 1820 N Harwood RI 6272
Wanslow & Co 912 N Peak St TA 9836
Westinghouse Electric 601 Latimer St RA 2401
Wholesale Electronic 2800 Ross Ave ST 5736
\*Wilkinson Bros 2406 Ross Ave PR 1571
ENISON

DENISON

Denison Radio Supply 310 W Woodard 45

\*Wilkinson Bros 2406 Ross Ave PR 1571
DENISON
\*Denison Radio Supply 310 W Woodard 45
EL PASO
Elee & Mech Supply 2000 Texas St 2-4614
General Electric Supply 300 Dallas St 3-3407
Graybar Electric 3513 Ross St EL 3-7561
\*McNicol C C 811 N Estrella 5-3992
Midiand Specialty 425 W San Antonio 3-2401
Momsen-Dunnegan-Ryan 800 E Overland 3-1621
Reeves Radio Supply 720 N Stanton 3-5752
Sunland Supply 1200 E Missouri 3-7409
Walz Co W G 500 San Francisco St 3-1677
FORT WORTH
\*Electronic Equip 917 Florence St ED 5407
General Electric Supply 409 Jones St FA 5385
Graybar Electric 1107 Foeh St ED 4525
\*H & L Radio Supply 1608 Commerce St ED 2-7311
\*Scoteori-s' Radio 509 Commerce St F0 7448
\*Sutton's Electronics 104 S Main St ED 5-9515
\*Swleco Co 1518 E Lancaster ED 2-7157
\*United Electronics 403 Jones ED 9295
Westinghouse Elec 205 NE 7 F0 5611
GALVESTON
Hall R C & L F Hdgrs Houston
GRAND PRAIRIE
All-State Distr 100 Jackson CA 0261
Beyer & Co A R 1318 Polk Ave CA 8-7491
Busacker Electric 1721 Waugh Dr JU 5546
City Radio & TV Parts Co 2321 Milam JA 2-1556
Covington Distr 34 N Hamilton CA 2-0326
Crumpacker Distr 1200 National CH 9366
Electrotex Electronics 2401 Taft St JA 9-3211
Electro-Mechanical Prods 4811 Gulf Freeway WA
6-6411
Electronic Distrs 419 Caroline CA 2-9961
Franklin Co R E 1905 Chartres St CA 0194
General Fletctic Sandra

6-6411
Franklin Co R E 1905 Chartres St CA 0194
General Electric Supply 1312 Live Oak FA 3121
Geophysical Supply 1311 Dallas Ave BL 0561
Graybar Elect 1701 Cullen AT 4571

Guif Coast Electronic 1110 Winbern St JA 8-1551

\*Hall Inc R C & L F 1301-Polk CA 2-9731
Harrison Equip 1422 San Jacinto AT 6315
Houston Radio Supply Clay at La Branch CA 6261
Lenert Co 2213 Congress Ave CA 4-2663
Moore Bros 3401 Milam St JU 4175

\*Radio Parts 902 Crawford CA 5-0137
Sound Sales & Engineering 2005 La Branch

\*Sterling Radio P O Box 1746 CA 5-1321
Straus-Frank 4000 Leeland CA 1201
Tele-Radio 1721 Waugh Dr JA 3-8151
Wals & Co JA 4301 Guif Freeway CA 3-4281
Westinghouse Elect 1903 Ruiz CA 7272
AREDO

LAREDO
Guarantee Radio 1314 iturbide St 3-6913
Pan American Electronic 1015 iturbide St 3-6242
LONGVIEW
Wholesale Electronic Hdgrs Dallas
LUBBOCK

LUBBOCK

\*B & L Radio & TV Supply 2424 Texas Ave PO 5-6352

General Electric Supply P 0 Box 1361 PO 3-8271
Graybar Electric 905 Ave F PO 3-656

\*R & R Supply 1607 Ave G PO 5-5737
Westinghouse Electric 605 Main St 3-0425
West Texas Radio Supply 1009 Ave Hdgrs Amarillo
LUFKIN
Stellag Particular Particular Programments Poster Programments Progr

LUFKIN
Sterling Radio Products Hdgrs Houston
McALLEN
Guarantee Radio Parts & Equip Hdgrs Laredo
\*Rio Radio Supply 608 S Broadway MU 6-5781
ODESSA

Midland Specialty 2101 Andrews Hwy Hdgrs El Paso Midland Specialty 2101 Ardrews Hwy Hdgrs El Paso
PORT ARTHUR
Diehl Radio & TV Supply 1927 7 St 2-6311
Radio Parts Co Hdgrs Houston
SAN ANGELO
Gunter Wholesale Co 606 S Irving St 9182
SAN ANTONIO
Amateur Headquarters & Supply 828 Brooklyn GA
7388

7388
Electronics Inc 512 Broadway CA 4-8381
General Electric Supply 1801 Broadway CA 7-1261
Graybar Elec 1401 N Hackberry FA 6274
Lamp's Lectronics 828 Brooklyn Ave CA 7-7388
\*Mission Radio 1229 S St Marys St CA 7-8323
Modern Radio Supply 635 Soledad St CA 6-0175
Olsen Radio Supply 412 Pereida St
Radio & Television Parts Co 118 7 St CA 6-5329
Sherman Electronics 722 San Pedro CA 6-0247
South Texas Appl 641 S Flores St
Straus-Frank Box 600 CA 6-0101
Westinghouse Electric 1211 E Houston GA 9271
EMPLE

TEMPLE Central Radio & Supply 410 E Ave A

TEXARKANA

McCulloch Whsie TV Supply 811 W 13 St 32-8411

TYLER

TYLER
Bryan Radio Service Sup 110 University 4-4441
General Electric Supply 416 N Broadway 2-1673
\*Lavender Radio Supply 503 E Oakwood St
4-6315
VICTORIA

VICTORIA

L & G Electronic 1412 N Main HI 3-2272
WACO
Best Electronics 122 N 18 St 4-3100
General Elec Supply 217 S 4 St 2-1611
\*\*Hargis Co 1205 Washington Ave 4-5667
L & M Sales 1307 Austin Ave 2-3391
Wholesale Electronic Supply Hdgrs Dallas
\*\*Clark & Gose Radlo 1203 Indiana St
\*\*Mooney Radio 1300 12 St 2-0731
Wholesale Electronic Supply Hdgrs Dallas

### UTAH

Ballard & Carter 3109 Washington Blvd 3-8604 Iverson Radio 265 25 St ST 6286
Tri-State Electronic 2217 Klesel Ave 4-3438
SALT LAKE CITY
Ballard & Carter 1486 Major St Hdqrs Ogden Central Supply 60 47 E 5th St 3-2631
Filint Distr Co Box 1470
General Electric Supply 312 W 2 S St 3-3911
Glenn Earl 245 S 1st West 3-7601
Graybar Electric 336 N 3 St W SA 9-8771
Kimbail Distr Co 350 Plerpont Ave EM 3-5813
Lloyd Co W B 51 S 2nd W 3-3825
Moore Radio Supply 157 Motor Ave
O'Loughlin's Radio Supply 113 E 3 S St EM 4-4051
Ross S R 1212 S State St 6-8607
Standard Supply 225 E 6 St EL 5-2971
Stravell-Paterson 126 S W Temple DA 2-5795
Westinghouse Elec 210 Rio Grande 22-2441

### VERMONT

BURLINGTON
General Electric Supply 316 Pine St 3-3424
Oakman Elec Sup Hdgrs Rutland
Radio Service Lab Hdgrs Manchester N H
Vermont Hdw 180 Flynn Ave 4-6835
Westinghouse Electric 208 Flynn Ave 4-9885
RUTLAND
Oakman Electric Supply 12 Wales St PR 5-5 Oakman Electric Supply 12 Wales St PR 5-5558

### VIRGINIA

ALEXANDRIA
Certified Radio 1330 Powhatan St KI 8-5115
Suburban Distr 222 S Henry St Ki 9-6804
ARLINGTON ARLINGTON
Rucker Electronic Hdgrs Wash D C
BRISTOL
Bristol Radio 31 Moore St N-3544
CHARLOTTESVILLE
Virginia Radio 715 Henry Ave 2-4124

DANVILLE DANVILLE

\*Womack Radio 502 Craghead 4622

HAMPTON
General Elec Supply 1247 39 St Hgwy 3:6526

LYNCHBURG
Eastern Electric Co 920 Commerce St 2-3497

Lynchburg Battery 406 5 St 2-1236

NEWPORT NEWS
General Supply 4215 Huntington 2-4007

NORFELIK NORFOLK
Crump Co B T Granby & Plume Hdgrs Richmond
General Electric Supply 709 E 26 St 2-7183
Graybar Electric 1081 W 35 St NO 5-7441
\*Radio Equip 821 W 21 St MA 7-4534
\*Radio Parts Distr 128 W Olney MA 2-5711
\*Radio Supply 711 Granby St MA 7-9211
Schultz Inc G J 639 W 24 St PH 2-7985
Trant Inc R F 924 W 21st St MA 2-2683
Westinghouse Elec 2600 Hampton 5-0525
Wyatt-Cornick 919 W 21 St Hdgrs Richmond
PETERSBURG
Virginia Battery 21 E Bank St RE 2-5051
RICHMOND
Cottrell Jr W C 408 E Main St 3-2402 NORFOLK RICHMOND
Cottrell Jr W C 408 E Main St 3-2402
Crump Co Benj T 1332 E Franklin 7-1941
Duval Distr Co 1221 Admlral St
General Elect Supply 1505 Sherwood 6-4941
Graybar Electric 10 S 6 St Ri 7-3491
Johnson Co D R 1315 E Cary St 7-3617
Johnston-Gasser Co 3023 W Marshall 6-9405
Mattson's Electronics 2224 Chamberlayne 6-6719
Meridan Electronic 1001 W Broad 5-2834
\*Radio Supply 3302 W Broad St 6-5565
Richmond Electronic 1001 W Grad 5-787
Tiller Inc A R 957 Myers St
Trant Dist R F 1221 Admiral St 2-2805
Westinghouse Electric 511 E Boyd St 3-0111
Wyatt-Cornick 1705 Brook Rd Hdgrs Norfolk
ROANOKE
\*Baksr Sales H C 19 Franklin Rd 4-9209 ROANOKE

\*\*Baksr\*\* Sales H C 19 Franklin Rd 4-9209
General Elec Supply 515 Norfolk Ave SW 3-1564
Graybar Elec 601 Salem Ave R0 3-3615

\*\*Leonard Electronic 131 Center Ave NW 3-9339
Peoples Radio & TV 1015 Moorman Rd NW 5-8900

\*\*Radio Supply Hdgrs Richmond
Roanoke Electronic 1322 Williamson 4-6612
Westinghouse Electric 732 1 St SE 7771

STAUNTON
Hartley & Co 327 N Central 5-2333
Radio Electric Products 114 N Central 5-3061
Southern Electric 818 Greenville Ave 5-2313
WHITE STONE
Channel Electric Products HE 5-5255

Channel Electric Products HE 5-5255

### WASHINGTON

ABERDEEN 9 C & G Radio Supply Co Hdgrs Tacoma BELLINGHAM BELLINGHAM
Waitkus Supply 110 Grand Ave 274
BREMERTON
C & G Radio Supply Co Hdgrs Tacoma
CENTRALIA
C & G Radio Supply Co Hdgrs Tacoma
ELLENSBURG
Geiger Radio W A 1101 Columbia 2-7701
EVERETT
Pringle Padt With Communication Pringle Radio Whole 2514 Colby Ave "Pringle Radio Whole 2514 Colby Ave KENNEWICK Wible Radio Supply Hdgrs Tacoma OLYMPIA C & G Radio Supply Co Hdgrs Tacoma PASCO C & G Radio Supply Co Hdqrs Tacoma
PASCO
Lay & Nord Hdqrs Yakima
SEATTLE
Central Electronics 2023 7th Ave
Coast Radio 110 University St MA 9133
Conneily Co C F 1015 Republican St SE 4155
Electronic Supply 5601 Calif Ave AV 4500
Fidelity Electric 960 Republican St SE 5100
Garretson Radio Supply 2416 2 Ave MU 4380
General Elect Supply 1212 1 Ave SE 6400
"General Radio 100 Wall St EL 4784
Graybar Elec King & Occidental MU 0123
Pacific Electronic Sales 1201 1 Ave MU 5390
"Radio Tv & Appl 500 Westlake Ave N MA 0787
"Seattle Radio Supply 2117 2 Ave SE 2345
"Western Electronic 717 Dexter Ave SE 3200
Westlayhouse Elec 1051 1 Ave SE 7001
Westlake Electronic 511 Westlake N MA 6601
"Zodrist Co H E 2121 Westlake MU 2121

SPOKANE
Columbia Electric E 3420 Ferry Ave KE 0611
Frank's Radio Supply 161 S Adams St MA 8108
General Electric Supply E 1805 Trent Ave KE 0431
Graybar Electric 1033 W Gardner Ave EM 6611
Johnson Co E M W 615 1 Ave Rt 5432
\*Northwest Elect N 102 Monroe MA 9289
Prudential Distr 318 W Trent Ave MA 6002
Spokane Radio Supply 301 W 2 Ave Rt 8441
Standard Sales 1219 W 1 Ave Rt 7196
Taylor Distributing E 206 Augusta EM 3301
Westinghouse Elec N 1023 Monroe EM 3371
TACOMA

Westinghouse Elec N 1023 Monroe EM 3371
TACOMA
C & G Radio Supply 2502 Jefferson Ave BR 3181
General Electric Supply 2316 A St BR 8454
Graybar Electric 2112 A St MA 0164
Stewart Co A T 711 Broadway BR 3174
Westinghouse Elec 1930 Pacific BR 8417
"Wible Radio Supply 2360 S Fawcett St BR 8395
VANCOUVER
States Cardio Moore Portland

NACLOVER
Saelens Radio Hdgrs Portland
WALLA
Kar Radio & Electric 12 & Pine Sts 4572
WENATCHEE Mid-State Radio 6111/2 N Wenatchee Ave 510 YAKIMA Lay & Nord 112 S 2 St 3-5591

Westinghouse Elec 210 W B YA 3-4701 Yakima Wholesale Radio 506 S 1st 4670

### WEST VIRGINIA

BECKLEY

\*\*Chemelty Radio & Elec 1708 S Kanawha St 2-5353
BLUEFIELD Chemeity Madio & Elec 1708 S Kanawha St 2-535
Bluefield Supply 6121
Dixle Appliance 222 Bluefield Ave
Meyers Electronics 813 Bluefield Ave
CHARLESTON
Charleston Elec 914 Kanawha 6-0321
"Chemeity Radio & Elec 103 Clendenin ST 2-8151
Graybar Electric Kenawha & Capitol St 6-0411
Hicks Radio Supply 10 Virginia St 3-5583
Mountain Electronics 708 Bigley 3-9582
Virginian Electric P 0 Box 2833 6-0631
CLARKSBURG
Mountain Electronics 433 Clark St 4-5559
Trenton Radio Co Hdgrs Morgantown
Westinghouse Electric 315 N 4 4-6311
White Electric 903 W Pike St 4-5591
HUNTINGTON
"Electronic Supply 422 11 St 8779 | NTINGTON | Selectronic Supply 422 11 St 8779 | King & Irwin 314 11 St 3-8414 | Mountain Electronics 1127 3 Ave 2-0339 | TV Supply 1226 3 Ave 6639 | Van Zandt Supply 1123 4 Ave JA 5-5193 | PTINGRIPG MARTINSBURG Plummers Radio 526 W King St 3821 MORGANTOWN Trenton Radio 507 Beechurst Ave 5637 PARKERSBURG

Cox Radio Supplies 554 7 St
General Electronics Hdgrs Wheeling
Randle & Hornbrook 536 7 St 8-3391
WHEELING General Electric Supply 1818 Eoff St WH 2555
General Electronics 735 Main St 5738
Hamburg Bros 360 National Rd 727
\*\*Radio Parts Co 1312 Main St
Westinghouse Electric 1803 Eoff St 3980
Wheeling Radio Supply 924 Market St WH 1077

WISCONSIN

APPLETON
Appleton Radio Supply 1217 N Richmond St 3-3345
Electronic Expeditors Hdgrs Milwaukee
General Electric Supply 1307 S Spencer St AP 4-7155
Valley Radio Distr 518 N Appleton St 3-6012
CHIPPEWA FALLS
Bushland Radio Specialties PA 3-6052
EAU CLAIRE
Brekland Radio Specialties PA 3-6052

Bushland Radio Specialties Hdgrs Chippewa Falls Larson Electrical J H Hdgrs Minneapolls FOND DU LAC "Marris Radio 289 N Main St 8204 GREEN BAY

IEEN BAY
Electronic Expediters Hdgrs Milwaukee
Graybar Elec Co 1140 N Irwin Ave HE 7-3284
Neslo Electronic 308 N Chestnut HE 5-4881
"Northern Radio & TV 708 S Broadway HE 5-3789
Westinghouse Electric 619 Main HE 5-3751

Larson Elec Co J H Hdgrs Minneapolis
JANESVILLE

Goodenough Radio 111 N Jackson St PL 4-7033 KENOSHA

KENDSHA
Chester Electronic 2012 52nd St OL 2-8607
Midwest Electronics Hdgrs Chicago
LA CROSSE
General Electric Supply 222 Pearl St 2-7802
Lew Bonn Co 115 Pearl St 4-7378
Southern Minn Supply Hdgrs Mankato Minn
\*Stark Radio Supply Hdgrs Minneapolis
MADISON

ADISON
Graybar Elec Co 103 N Park St MA 5-0005
Radio Dist 701 E Johnson St AL 6-6801
"Satterfield Electronics 326 W Gorham AL 6-0267
Superior Radio Parts Hdgrs Racine
Westinghouse Elec 1022 E Washington 5-4868 MANITOWOC

Radio Corp Hdgrs Fond du Lac MARINETTE

Popkey Co 6 M Main & 9 Sts

Popkey Co G M Main & 9 Sts

MILWAUKEE

\*\*Ackermann Radio N 3861 N 35 HI 5-1860

\*\*Acker Radio 1009 N Water St BR 1-0641

\*\*Central Radio 1723 W Fond du Lac Ave WE 3-2982

Dykro Distrs 340 N Milwaukee St BR 6-4400

Electronic Expediters 2205 W Vilet WE 3-5804

Electronic Expediters 2205 W Vilet WE 3-5804

Electro-Pilance Distr 2458 W Lisbon Ave DI 2-9240

General Electric Supply 540 S I BR 6-7730

Graybar Elec 180 N Jefferson BR 6-8400

Juneau Radio Sup 311.0 W Lisbon Ave DI 4-2266

\*\*Marsh Radio Supply 838 N 4 St BR 6-1320

Mid-City Electronic 2327 W Wells WE 3-8304

Pritzafi John Hdw 333 N Plankinton Ave BR 1-1965

\*\*Radio Parts Co 940 N 27 St WE 31-5131

Roth Appl 647 W Virginia BR 1-1111

Seemuth Distr 2406 W Lisbon St DI 2-9240

State Distr Co 3500 W Pierce St EV 3-6200

Stolz-Wicks 4120 W Fond du Lac Hdyrs Chicago

Taylor Elec 4080 N PT Wash Rd WO 4-4321

Television Parts 714 W State BR 2-6111

Westinghouse Elec 546 N Bway DA 8-1800

OSHKOSH

Electronic Expeditors Hdgrs Milwaukee

Electronic Expeditors Hdgrs Milwaukee Nesto Electronic Dist Hdgrs Green Bay RACINE

Allen's Merchandising 1206 N Wissonsin St 3-8589 Badger Electronic 856 Washington 3-4024 "Standard Radio Parts 1244 State St 4-3634 Superior Rasine 908 State St ME 2-5142

SHEBOYGAN Neopsell Co J J 1010 S 9 St GL 7-3646 Nitze's 1129 N 8 St GL 7-9531 STEVENS POINT AMCO Electronics N 2nd & Franklin 3351

Radio Service & Supply 615 3 St 3272

WYOMING

Fleming Supply 328½ East A St 3-6056 General Electric Supply 428 S Elm St 2-7333 CHEYENNE \*Houge Radio & Supply 4012 Central 2-6474
SHERIDAN

Barton Battery & Electric Co. 102 Grinnell St 59

TECHNICIAN BUYERS DIRECTORY

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> > ALASKA

ANCHORAGE Yukon Radio Supply Box 406 2-7964

CANADA

ONTARIO, NEW TORONTO Vanderhout Assoc Victor 70 14 St

HAWAII

HONOLULU Radio-TV Corp 777 Ala Moana Rd 50-2901 Radio Wholesale & Supply 817 Alakea St 6-3996

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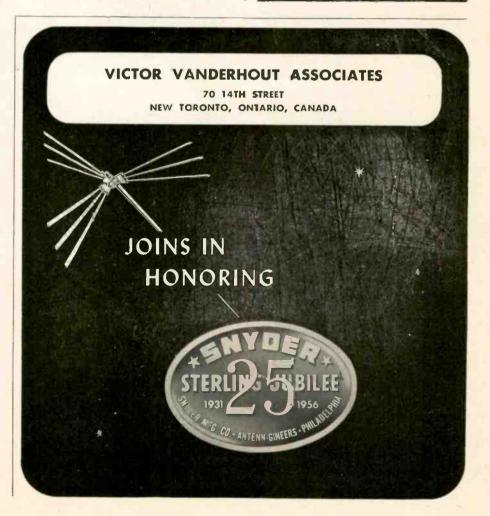
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### TECHNICIAN BUYERS DIRECTORY

# Representatives ("Reps")

This section of the 1956 Technician Buyers Directory lists those representatives operating as independent "reps" who handle two or more lines. They do not include factory staff salesmen. "Reps" are listed alphabetically under states and cities. Asterisks (\*) indicate membership in "The Representatives" of Electronic Product Manufacturers, Inc. Telephone numbers are given to speed contacts.

### ALABAMA

#### BIRMINGHAM

Hayden Associates Paul Hdgrs E Point Ga Smith Co Maitland K Hdgrs Atlanta Ga

Moore Sales Co Harry A Box 7245 AM 5-4662 Neely Enterprises Hdgrs N Hollywood Shefter Co H George Box 1587 AL 8-7893 TUCSON

Marshall Co G S Hdgrs Pasadena

CALIFORNIA LOS ANGELES AREA
Alderson Co Wes 10422 National Blvd TE 0-1030

\*Appleton Co Harry 136 San Fernando CA 5-5513

\*Barron-Jur Co 817 S Hoover St DU 3-5248

\*Barstow & Doran 1406 S Grand Ave R1 6191

Baughman E J 1914 N Cogswell (El Monte) F0
0-7586

\*Backer Co Herb 1140 Crenshaw Blvd WE 1-1257 0-7586

Becker Co Herb 1140 Crenshaw Blvd WE 1-1257

Berman Co J 1141 La Clenega St OL 5-8921

Brazan P L 3257 W Pico Blvd RE 1-2186

\*\*Cochrane-Barron Co 408 S Alvarado St DU 5-1715

Cohn S H 1769 S Holt Ave TE 0-4398

\*\*Costello J D 1917 S Bronson Ave RE 3-6322

Craig Raigh P 715 N Harper Ave WE 0468

Davldson & Assoc J 2803 LosFlores (Lynwood)

NE 6-2245

\*\*Davls Sales Co George 5259 E Beverly Blvd UN \*Davis Sales Co George 5259 E Beverly Blvd UN 3-3594 Davis Sales Co George 5259 E Beverly Blvd UN 3-3594
Detsch & Co Hdgrs San Francisco
Dudek & Co R C 407 N Maple Dr (Beverly Hills)
BR 2-8097
Dunkle B 3257 W 6 St
\*Ealy Co M D 633 S La Brea WE 5-0771
\*Edwards & Co Jackson 6047 Hollywood Blvd H0 5-1141
Elecnair Co 3903 Warner Blvd (Burbank) VI 9-2874
\*Emmett F A 2837 W Pico Blvd RE 1-8211
Engineering Sales 406 S Main St MA 6-9159
Erlanger Sales 4217 W Jefferson Blvd RE 1-2238
\*Feldman Co Henry 1244 S Grand RI 9-8803
Fox Associates 5401 Santa Monica Blvd H0 3-7194
Gelst Co W K 3177 Glendale Blvd M0 5-8910
Graham Sales 1200 Sycamore Ave (Hollywood) H0
2-3552
Hansen C A 1406 S Grand Ave Rt 8-6191

2-3552

Hansen C A 1406 S Grand Ave RI 8-6191

Hardie Co R M 901 S Manhattan PL RE 4-2752

"Harmon Co W S 121 N Robertson Bird (Beverly Hills) BR 2-3321

"Harris A W PO Box 1116 (Gardena) OR 8-4817

Hast Nate 301 S Reeves Dr (Beverly Hills) CR 5-2652

"Hastings Salar Co 40400 William

\* Hastings Sales Co 4942 Vineland Ave (N Holly-

Meeger Inc 1011 Venice Bivd DU 9-6775

\*\*Hill Sales Co J T 420 S Pine St (San Gabriel)
AT 7-9633

King-Moon Co 15044 Ventura (Sherman Daks) ST
4-5404

\*\*A-5404\*\*

\*Kittleson Co 416 N La Brea WE 3-7371

\*Knight Co W Bert 10373 W Pico Bivd BR 2-5647

\*Koessler Sales 6907 Meirose Ave WE 6-6271

La Moree G D 1325 San Julian RI 8-7341

Larshan Inc 1409 Wilshire (Santa Monica) TE

0-8489

\*Lasure Co Harry A 9041 W Pico Bivd BR 2-7805

\*Loukota Co Douglas 1052 W 6 St MA 6-4505

Lynch & Son C R 3307 Glendale Bivd NO 3-8236

Lynn & Brooks 3055 Wilshire Bivd DU 2-2255

Mann Associates Martin 14751 Keswick St (Yan

Nuys)

\*Marsh Co J W 4216 W Jefferson RE 2-0145

\*Marsh Co J W 4216 W Jefferson RE 2-0145 \*Marshall Co G S 40 S Los Robles (Pasadena) SY

5-2022

\* Marshank Sales 7422 Meirose Ave WE 8-2591
Maynard Sales Ce 6214 W Manchester OR 8-3150

\*Miller G B 1550 N Highland (Hoilywood) H0
2-1195

Mitchell C H 256 S LaPeer (Beverly Hills) BR
2-0183

\*Meely Enterprises 3939 Lankershim Bivd (N Hollywood) ST 7-0721

\*Olander & Co Roland 7225 Beverly Bivd WE 5-1211

\*Osborne R E 1044 S Park View DU 8-1039

\*Owens Co Lee H 2331 W Washington RE 5-0230

\*Perlmuth Electronic Assoc 2419 S Grand Ave RI
7-4321

\*Possner Co 1223 Venice Rivd DU 8-0508

Possner Co 1223 Venice Bivd DU 8-0508

\*Power Ralph L 767 Castetar St MU 5277
Renz Roy E 1406 S Grand Ave RI 7-3893
\*Rissl Al J 2724 S Peck Rd (Monrovia) DO 6-2135
\*Roberts & Assoc E V 5068 W Washington WE 8-2541
\*Rupp Co V T 2230 W 11 St DU 3-4197
\*Saul & Assoc H M 5015 San Vincente Blvd WE 8-3591 8-3591

\*Schoenduve H W 7407 Metrose Ave WE 3-7276

\*Selgel Co Samuel 1133 S LaClenega Blvd OL 5-8870

Slevers Edward S 1662 Hillhurst Ave NO 2-1105

Skahill Ed A 933 N Kenmore Ave NO 3-4453

Smedley A B Box 67-C (Pasadena) SY 8-1174

Snitzer T Louis 5777 W Pico Blvd WE 8-2074

Snyder L G 1418 N Highland (Hollywood) NO 9-6278

Start Edwin E 410 Shoder Ave (N Hollywood) ST Starr Edwin E 4101 Rhodes Ave (N Hollywood) \$7 7-5879 7-5879
Stern & Co I R 4109 Burbank Blvd (Burbank) VI 9-1195
\*Stolaroff Co M A 4622 W Slauson Ave AX 3-6219
\*Stone Sales Co R L 9548 W Pico Blvd BR 2-8103
\*Stone Sales Co R L 9548 W Pico Blvd BR 2-4916
\*Strassner Co Conrad R 1865 N Western Ave H0 7-7086 7-7086
Tivy George S 1148 S Grand Ave RI 7-7553
\*Tubergen Assoc 2234 W 11 St DU 9-3173
Uecke E H 4938 Neola Pl CL 7-9611
Van Groos Co 14515 Dickens St (Sherman Oaks)
ST 7-9615

\*\*Wallace & Wallace 1206 Maple Ave RI 7-0401
\*\*Weber Co Wedge 1217 Venice Bivd DU 7-2111
\*\*Weightman H G 4104 Burbank Bivd (Burbank) VI 9-2435
\*\*Watters 5-1-1-1-1

9-2435

Western Electronic Enterprises 3348 W Compton Blvd (Gardena) OR 8-4817

Wiley Paul F 1632 Silverlake Blvd NO 3-8028

Wood Co A M Box 150 (Elmonte) CU 3-1201

SACRAMENTO

\*Wiley Paul F 1632 Silveriake Blvd NO 3-8028
\*Wood Co A M Box 150 (Elmonte) CU 3-1201
SACRAMENTO
Neely Enterprises Hdgrs N Hollywood
SAN DIEGO
Neely Enterprises Hdgrs N Hollywood
SAN FRANCISCO AREA
\*Ault C E 625 Laurel Ave (Menlo Park) DA 5-4983
\*Barstow & Doran 248 9 St UN 3-2079
\*Belehamber P A 1401 Middle Harbor Rd (Oakland) GL 1-4460
\*Berman Co E L 780 Natoma St UN 3-0317
Brainard W V 1010 Grosvenor Pl (Oakland)
\*Brandt E W 1355 Market St UN 1-2367
Cochrane-Barron (Palo Alto) Hdgrs Los Angeles
Detsch & Co 341 10 St MA 1-2788
Elehorn & Metchlor 749 Bryant St
Electronic Eng'g Assoc 1040 Brittan Ave (San Carlos)
\*French S P 721 Garland Dr (Palo Alto) DA 3-0597
Harriss Sales Co L H 383 Brannan St VU 6-1084
Held Herman E 147 10 St UN 3-4250
Jewett S D 13537 Addison St (Sherman Oaks) ST
9-6027
Kitleson Co 2166 Market St HE 1-5304
\*Lebell Frank 195 2 Ave SK 1-7298
\*Lewis Assoc Dean 219 9 St UN 3-1414
\*Logan Assoc Les S 154 8 St HE 1-0692
\*Logan Sales Co 150 8 St HE 1-0692
\*Moutthrop & Hunter 165 11 St HE 1-2624
Movan Sales G E 422 Lajolla Ave (San Mateo) Fl
5-2866
\*Neely Enterprises 2830 Geary Blvd Hdgrs N Molly-wood

5-2866
\*Neely Enterprises 2830 Geary Blvd Hdqrs N Molly-wood
\*Newman H L 420 Market St YU 6-3897
\*Nlckerson & Rudak 381 Brannan St YU 2-2982
\*Nott & Co L A 1061 Howard St HE 1-4738
\*Purdy Co W J 312 7 St UN 3-4321
\*Ross Co D H 534 El Camino Real (San Carios)
LY 3-8224
\*Sylnal Arnold A 65 9 St UN 1-6259
\*Tompkins & Co W W 941 Newell Rd (Palo Alto)
DA 3-3270

3-3270 milya R H 1258 Fitzgerald Ave VA 4-6714 Vermilya R H 1258 Fitzgerald A STOCKTON Detsch & Co Hdgrs San Francisco

### COLORADO

BOULDER \*Golliher W B 1003 Grandview Ave H1 2-7899 COLORADO SPRINGS \*Peyser & Co 1501 N Weber St ME 4-3401

ENVER

\*Bowen Co Ronald G 446 Broadway SH 4-2501

Bower Co C R 2759 W 33 Ave GR 7292

Cluphf & Assoc Stan 7825 W Colfax Ave BE 3-6025

\*Connors Co W H 375 Birch St DE 3-7628

\*Halliday Gail 2576 S Milwaukee St PE 2650

\*Hyde Sales Co 3250 S Oexter SK 6-7151

Koether-Cox Co 120 W 13 Ave MA 3-3544

\*Mcloud & Raymond 5528 E Colfax FR 3067

\*Mel-Pearson & Co 1011 S Josephine St SP 7-7878

Mueller Mark G 1644 Blake St AC 2-3515

\*Nelson Co A J Box 5502 KE 6751

O'Brien Sales A J Box 1681 BE 3-4845

\*Williams Co Allen I 124 W 12 Ave MA 3-0343

T COLLINS DENVER \*Leeper & Assoc Wilson 123 Fishback St 3-04441 Moss Gordon G Box 428 Phone 770

### CONNECTICUT

ANDOVER

"Seyd Ernest K Long HIII Rd Pligrim 2-6604

BRIDGEPORT AREA
Hannigan Co W T 1115 Main St ED 3-2772
Perron & Co Ray (Trumbull) Hdgrs Boston
Reynolds Co Harrison 211 State St BR 5-9634 Holliday-Hathaway Co Hdgrs Cambridge

DARIEN
Jacobson Leo 3 Belleval Rd ST 3-0828
HARTFORD AREA
Akeroyd Co A E (Kensington) Hdgrs Boston
Gates A W 46½ Summer St (Manchester) MI 9-7761
Cibson Engineering Co 141 Washington St CH 7-6919
Hatton A T 1000 Farmington (W Hartford) AD 3-3613 Pettigrew R S 62 La Salle Rd (W Hartford) HA 3-8533

White Sales Co (Berlin) Hdgrs Needham Mass NEW HAVEN AREA Abbett & Hustis Hdgrs Boston Abbett & Hustls Hdgrs Boston
Feldman & Co George 525 Norton Pkwy SP 6-9823
Gerber Sales Co Hdgrs Brookline
Hasco Sales 880 Eim St UN 5-2806
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7-7498

\*\*Hicks W M 4 Spruce Dr (Roslyn NY) PI 7-0110

\*\*Holliday-Hathaway Co 270 Park Ave MU 8-5858

\*\*Hughes Co Kenneth E 4808 Bergenline (Union City
NJ) UN 7-3204

\*\*Hy-Art Co 53 N Park Ave (Rockville Centre NY)
R0 6-6500 NU 6-6500
Instrument Center 55 Ronde St WO 4-1290
Jacobs & Assoc Jack 1800 E 12 St (Brooklyn NY)
DE 9-4374
Joseph Ben 521 5 Ave MU 2-0815
Kaelber & Mack 1 Park Ave (Manhasset NY) MA
7-1459
Kabasa Jack 1 3661 Rondews MAR \*Kahgan Jack J 1261 Broadway MU 4-7772
Kahant Assoc 11 Park PI CO 7-5326
\*Kopple Assoc J J 9 W Prospect Ave (Mt Vernon NY) 4-5577 Kubrick Dave 200 W 34 St BR 9-6517
\*Land-C-Air Sales 42 Oak Ave (Tuckahoe NY) WO
1-4700 "Landis Sales Cliff 81-11 Roosevelt Ave (Jackson Hts NY) IL 8-7900 Lerman Leonard S 1093 Salem Rd (Union NJ) MU 8-9406 L & M Assoc 253 Boulevard (Hasbrouck Heights NJ) 8-2665 b-2665

Cevison Melvin S 5 Waverly Pl OR 4-4464

Clichter Wm 26 Teakwood Lane (Roslyn NY) 3-2(

Cuce & Co R P 7 Beechwood Rd (Summit NJ) 7-3550 7-3550
Masin Co O F 1 Wolf's Lane (Pelham) PE 8-4510
Merican J C 1 Christopher St AL 5-6387
\*Miller Ben 401 Broadway WA 5-3964
\*Miller Co Harry 27 Mechanic St (Red Bank NJ) 6-9300 \*Mingins Sales 107-37 71 Ave (Forest Hills NY) BO 3-1643
Minthorne L I Hdgrs Portland Ore

\*Morse Sales Irv 150 Broadway to 7-2913
Moyer H A PO Box 14 (Haddonfield NJ) 9-6347
\*Newhope Corp 6 E 39 St EE 2-7372
\*Nichols Paul 42 Oak Ave (Tuckahoe NY) TU 3-5500
Nief Assoc Paul W 7 Greenridge Ave WH 8-1454
\*Pickett James M 205 E 66 St TR 9-9520
RMC Assoc 170 E 80 St TR 9-2023
Rockbar Corp 215 E 37 St VA 6-3463
\*Rosk Milton 550 5 Ave IN 6-0653
\*RSA Go 15 Park Ave (Rutherford NJ) GE 8-4200
\*Ryan Assoc J L 263 Edgemont PI (Teaneck NJ) TE
6-1075

\*Saftler Perry 157 W 57 St CI 7-3855 Sanford L C 202 Woodland (Rutherford NJ) WE 9-0979 9-0979 Scheffer Co Charles 1124 Douglas PI (Seaford NY) SU 1-4656 Schmitt Co F Edwin 136 Liberty St WO 2-6550 Schwartz Adolph 15 Exchange PI (Jersey City NJ) DE 3-2424 Schwartz Mei 39-16 Tierney PI (Fair Lawn NJ) FA 4-3435 \*Shaw Co S A 444 Kneeland Ave (Yonkers NY) YO 3-5700 Shulan & Co Wally 880 Bergen Ave (Jersey City NJ) SW 5-2220 Silver Assoc Lou 1665 Warwick Rd (Hewlett NY) FR Sliver Assoc Lou ADD9 Warwing in School NJ)
4-2093
\*Simberkoff Sales Co 68 Hudson St (Hoboken NJ)
H0 2-5211
\*Smith Howard F 259 W 14 St CH 2-2398
\*Sonkin David 10 Fiske PI (Mt Vernon NY) M0 \*Spellman Co Fred 200 Plandome Rd (Manhasset NY) MA 7-3399 \*Sprung Joseph 254 W 31 St LO 5-1820
\*Stang Sales 1 Crestwood Lane (New Rochelle NY)
NE 6-6622 NE 6-6622

\*Sussman & Co Jules 130 Lafayette St WD 2-7766

\*Taylor Co BB 241 Sunrise Highway (Rockville Ctr
NY) RO 6-1014

Technical Representatives 69-10 140 St (Flushing
NY) LI 4-5058

\*Tobias & Co D F 30 Church St CO 7-4350

Tursney & Beale 214-27 Northern Blvd (Bayside NY)
4-4000

Tursney & 4-4000 Varrelman-Gorman Co Box 503 (Hicksville NY) WE 1.7452

1-7452
Verter Sales Co 1195 Sherman Ave CY 3-0211
Weber Assoc Jack Lake & Main Sts (Tuckahoe NY)
W0 1-4044
\*\*Welland G H 77-43 166 St (Flushing NY) 0L
8-4061

8-4061
Welnberg Co H L 1 Lois Pi (Merrick NY) VA
5-3677
Welss & Assec: W W 1780 Broadway Cl 6-5777
Willigold Electronic Sales 350 5 Ave L0 4-2525
Willigold Electronic Pi (Mt Vernon NY) 4-3216 \*Wolfe Michael 136-52 71 Rd (Flushing NY) BO 3-1400

\*Woolf Assoc Irving W 135 Liberty St RE 2-9673 Ziowe Leonard 764 6 Ave CH 3-3142



### NORTH CAROLINA

CHARLOTTE
Cartwright & Bean Hdgrs Memphis
Furman & Assoc C M Jr PO Box 2624 ED 4-7855
Highsmith & Co James L Box 1011 FR 5-6436
\*\*Howard Co Fay M 2908 Avondale Ave FR 5-6646
Ranson Wallace & Co 116½ E 4 St ED 4-4244
Wallace Assoc Stanley K Hdgrs Lutz Pla
GREENSBORO
\*\*Attheses & Adwar 601 M Elm St Pla 2-6839 \*Atcheson & Adams 601 N Elm St Bidg 2-6838 Butters J T 4923 Oleander Dr 5749 NSTON-SALEM Holliday-Hathaway Co Hdgrs New York NY

CHARLOTTE

AKRON

### OHIO

Clancy & Co Joe Hdgrs Angola Ind CANTON

Conrad & Assoc E T 516 38 NW 2-5450 Henger-Fairfield Co Hdgrs Cleveland CINCINNATI \*\*CINCINNATI \*\*Baehr Albert M 3916 St Johns Terr TW 3827
Beedle Equip Co Roselawn Center Bidg JE 1-2640
Clark Sales Co Hdgrs Cleveland
Henger Fairfield Co Hdgrs Cleveland
Laing Co W C 3253 Lambert PI EA 1-1435
Wahl Co A C 416 W Benson St VA 1-3270
Whitesell & Assoc R O Hdgrs Indianapolis Ind
CLEVELAND AREA
APPLOS LORGE CO 1953 Lam PM SK 2-3030 Whiteself & Assoc R O Hdqrs Indianapolis Ind LEVELAND AREA
Ambos Jones Co 3951 Lee Rd. SK 2-3030
Baebr Afbert M 14700 Detroit Ave
Baier & Co Arthur H 12429 Cedar Rd FA 1-5644
Brandes C 0 4900 Euclid Ave HE 1-0414
\*\*Brauer & Assoc W J 15631 Lakewood Hts LA 1-7268
Clark Sales Box 708 Warrensville Br PR 1-2241
Dannemiller Assoc J R 4606 MacKale Rd
\*\*Daugherty Co FA 1120 Croyden Rd HI 2-3311
\*\*Doffuss Jr Chas H 2108 Payne Ave PR 1-1270
\*\*Edwards-Lohse & Co 2123 E 9 St T0 1-5753
Elliot Co Howard C 2637 E 130 St CE 1-0225
\*\*Goory J 19555 Henry Rd CL 1-1500
\*\*Hounger-Fairfield Co 1812 Columbus Rd CH 1-1018
Jay Eng'g Co Hdqrs Dayton
Jubell Assoc PO Box 762 WA 1-1490
\*\*Landfear Co J M 12429 Cedar Rd FA 1-4533
\*\*Levin & Assoc Sid 4217 Okalona Rd EV 2-2734
\*\*Midwest Sales Co 3219 W 117 St VI 1-2700
\*\*Morrow Co Les A 3123 W 117 St CL 1-5700
\*\*Nace A S 7601 Parkview Rd (Breckville) JA 6-4323

Odell Co M P 2536 Euclid Ave PR 1-6171

\*Olsen Co John O 16201 Shaker Blvd WY 1-2624
Rosenwasser Sales F A 1581 Coventry Rd FA 1-0463
Roth Sales Co Mike 13947 Cedar Rd YE 2-4262

\*Rauer Frank W 4144 Marvin Ave ME 1-8350

Satulio Co Hddrs Royal Oak Mich
Schenck Assoc Earl W Hdgrs London

\*Scott & Steffen 1836 Euclid Ave MA 1-2626
Silverman Lou 2300 Payne Ave CH 1-7559

Sterling Co S Hddrs Detroit
Weller-Rabe Co Hddrs Worthington

COLUMBUS

\*Perr Co Norbert F 937 S Ashburton Rd BE 1-2603

NUMBUS

\*Oper Co Norbert F 937 S Ashburton Rd BE 1-2603

Henger-Fairfield Co Hdurs Cleveland

\*Lehner Co J W 367 Brynhild Rd AM 8-5260

\*McFadden William E 150 E Broad St CA 1-3363

\*Pugh Co C L 2144 Riverside Dr HU 8-4855

\*Walter-Rabe Co Box 212 (Worthington) FR 2-7819 DAYTON

AYTON

\*Bear Corp Neal Hdgrs W Richfield
Beedle Equipment Hdgrs Cincinnati
Boehme Associates B-4 Talbott Bidg FU 8188
Bruno L D Far Hills Branch PO Box 61 WA 8703
Burtner R K Far Hills Branch PO Box 529 0X 3980
Crossley & Assoc Altred Hdgrs Chicago III
Epps & Fedotin 1434 Vancouver Dr TA 9345
Grimm A N 1731 Ruskin Rd 0R 1496
Henger-Falfreid Co Hdgrs Cleveland
Jay Eng'g Co 1721 E 3 St KE 2151
Klein Wm 1472 Earlham Dr RA 0943
Magee Edward E 5845 Paddington Rd 0X 2333
Mace Co Alten Hdgrs Brecksville
Odell Co M P Hdgrs Cleveland
Ohmer George H 235 Southern Rd WA 3761
Satullo Co Hdgrs Royal Oak Mich Hecht Co Fred J 1832 Wendell Ave 9-4378

Schenck Assoc Earl W PO Box 223 LO 1555 MAUMEE Henger Fairfield Co 1130 Key St 3-3211 WEST RICHFIELD \*Bear Corp Neal 3435 Streetsboro Rd OL 9-3331 WORTHINGTON •Weller-Rabe Co PO Box 212 TU 5-7819

#### OREGON

PORTLAND BOWERS Robert S Hdgrs Seattle Wash
\*Burcham Co Don N 510 NW 19 Ave CA 7-3830
Carlson Co Fred W Hdgrs Seattle Wash
Eckersley James W3150 SW Hamilton St CA 8-0308
Hawthorne Electronics 700 SE Hawthorne Bivd Fi 9375 Page Co D M Hdgrs Seattle Wash
\*Legg Co Richard 3834 SE Milwaukee Ave BE
6-8918
\*Minthorne Co L L 7521 NE Glisan St KE 3-0010
Stroum Co S N Hdgrs Seattle Wash
\*Weber Co Dale 234 Sherlock Bldg AT 5403

PENNSYLVÁNIA PHILADELPHIA AREA

\*Andress P M 3823 Oak Rd VI 4-9100

\*Benge J R 25 S Easton Rd (Glenside) TU 7-1325

\*Biggs & Co J Alan Box 450 (Doylestown) 9457

Blumenstein Assoc 14 Trent Rd MI 9-9523

\*Boenecke Assoc 238 Penn St (Camden MJ) WO
4-8650 4-8650
Braddock Edward (Haddonfield NJ) HA 9-0087
\*Brookfield R F 55 Cricket Ave (Ardmore) MI 2-6911
Burlingame Assoc (Upper Darby) Hdgrs New York City
Cert & Co Art Hdgrs Newark NJ
\*Cooper Richard 3507 Wellington MA 4-5486
\*Cordray W Henry 18 W Chelton Ave VI 8-0447
\*Danco Corp (Fairview Village) BR 5-2600
Densham Harry W 250 S 17 KI 5-1947
Dienes Co H L 1505 Papermill Rd (Erdenhelm) CH
7-3454 7-3452 Charles St CU
9-7525 9-7525 Egan M J 237 Kenliworth Ave Ll 8-8491 Edmunds E J 102 N Lexington (Havertown) Estersohn Harry 395 E Cliveden St VI 8-2836 Fairbanks H J 1615 Darby Rd (Havertown) GR 2-2467 Foley Andrew A 640 Federal St (Camden NJ) W0 6-2550
 Friedman Martin 1006 Western Sav Fund Bldg PE 5-4778 Fryburg Charles H 111 S 22 St Rt 6-5699
Gatty Sidney 11 N Clermont Ave (Margate NJ) \*Fryoury Control of the Control of t

6-2266
Hilliard Assoc 1125 Old York Rd (Abington) TU
4-6100 4-6100

\*Humes Ir David 7416 Shisler Ave F1 2-5348

\*Jeffrles S A 105 Forrest Ave (Narberth) M0 4-8500

\*Keefe Electronic Sales 228 E Kings Hwy (Haddonfield NJ) 9-4650

Kriegner Sales 300 S Broadway (Camden NJ) W0
3-5951 \*Leban & Graham 1412 Manoa Rd MI 9-9822 Lewis Herman 1622 68 Ave LI 8-1281 \*Clowery Inc L D 50 E Wynnewood Rd (Wynnewood) MI 2-9100

\* Macdonald Inc S K 1531 Spruce St KI 5-1205
\* Maguire & Co J A 116 N 7 St (Camden NJ) W0 6-3118

Massey Assoe 529 Brookhurst Ave (Narberth) MO 4-4200

\*Moyer H A PO Box 14 (Haddonfield NJ) 9-6347
\*Muckenfuss T F 8 Tanner St (Haddonfield NJ) 9.8533

orth J C 324 Hadden Ave (Coilingswood NJ)

\*Muggelworth J C 324 Hadden Ave (Coilingswood NJ) 5-7200

\*Maudain L Parker Suburban Sta Bidg RI 6-3185

\*Newson Jr C H 150 Terminal Ave CH 8-0282

\*Nolan J J 314 W Sparks St WA 4-1595

Oral Co John F Box 346 (Bryn Mawr) LA 5-6212

Paragon Sales Co 111 S 22 St RI 6-5699

Pearl Eng'g & Tool Co 8056 Rodney St LI 8-4103

Perna Co Frank J 2015 Chestnut St L0 4-3954

\*Ouminan D G 4700 Frankford Ave JE 3-0650

\*Randail Co Ken 121 N Broad St L0 4-2151

Relinger Co A R 3617 N 8 St SA 2-0500

Robinson I E 7404 W Chester Pike (Upper Darby)

FL 2-7017

\*Shelps George A 1625 Spruce St KI 6-1066

Slubin & Co Lewis 2305 Fahrmount Ave ST 7-2072

\*Stinson J T 219 Sagamore Rd (Havertown) HI
7-0922

\*Stobbart A J 56-14 Revere Rd (Drexel Hill) CL

\*Stobbart A J 56-14 Revere Rd (Drexel Hill) CL 9-3881

Stratton Co C H 7852 Montgomery Ave MA 5-2231
Taylor Co Morris F Hdgrs Silver Springs Md
\*Tech Representation 25 S Easton (Glenside) TU

\*Trinkle Wilmer S PO Box 40A (Hatfield) SO 3-9425 Weber Linz Assoc 238 Sholmire St CH 3161J \*White H J 1839 W Albanus St MI 4-1880 \*Williams V W 5 Circle Dr (Margate NJ) AT 2-7859

Williams V W 5 Circle Dr (Margate NJ) AT 2-785
PITTSBURGH
Clark Co Russell F 1404 Clark Bldg AT 1-8089
Levine Albert 11 Jonquil Pl L0 1-7027
\*Lips E C 1565 McFarland Rd F1 1-5100
Lowry-Dietrick Co 1404 Swantok St WA 1-2959
MacDonald Inc Samuel K Hdgrs Philadelphia
Odell Co M P Hdgrs Cleveland
Disen Co John 0 104 E Lathan Dr CA 27298
Podolbyn James H 4716 Coleridge St H1 1-0800
Squires Co M B 1 Cedar Bivd F1 1-6673
Stover & Co S H 5495 Penn Ave EM 1-7533
\*Tanner & Covert 300 Mt Lebanon Bivd L0 1-5067
Taylor Co Morris F Hdgrs Silver Springs Md
READING

Bell Thomas H 3623 Jacksonwald Ave Esterly 5-6837 Loose & Co W L 646 Gordon St RE 2-7094

#### TENNESSEE

CHATTANDOGA Johnson Jesse P 413 Dome Bldg 5-3463 KNOXVILLE Hough Co A R 3601 Chapman Hwy 7-6660 MEMPHIS Cartwright & Bean 1336 Madison Ave BR 5-1914 Engelman Co A S 3205 Crump Ave 48-6263 Moody Co Joe 1215 Central Ave BR 5-1067

#### TEXAS

ALLAS

Anderson Co Geo E 1901 Grimn St RI 5931

Antie G M 2154 W Amherst DI 7982

Aymond Co Edward F 4312 Maple Ave LO 5233

Berthold Sales Co 4411 Maple Ave LO 8329

Beranum Co PO Box 10204 RI 4743

\*\*Camplon Sales Co 9002 Chaneellor Row FL 7-4095

Communication Service 3209 Canton St PR 1852

\*\*Corry Co Hal E 6315 Hillerest Ave JU 9172

\*\*Crockett-Land & Co 2204 Grimn St RA 5764

\*\*Delzeli-Maynard Sales 3409 Oaklawn Ave JU 2411

\*\*Guenther J B 4533 N Central Expressway JU 6286

\*\*Heidenreich Co 6115 Denton Dr DI 3389

\*\*McKinney Sales J F 1330 N industrial Bivd ST 1997

\*\*Schoonmaker Co J Y 2011 Cedar Springs ST 3335 DALLAS

1997
\*Schoonmaker Co J Y 2011 Cedar Springs \$T 3335
\*Smith Co J Earl 505 N Ervay St RA 2966
\*Smith Wm Jr 7614 Kaywood Dr D1 4519
\*Texport Co 726 Meadows Bldg F0 8-4422
\*Wilks Co Ernest I 1212 Camp St PR 2637
\*Yount Jack 1431 Pleasant Dr EX 1-0988
\*WORTM

FT WORTH
Harris Co 716 Dan Waggoner Bldg 0738 HOUSTON

Anderson Co Geo E Hdors Dallas Anderson Co Geo E Hdgrs Dallas
Delzell-Maynard Sales Hdgrs Dallas
Kliepera Co M F Box 3113 JA 8459
McKinney Sales Jack E Hdgrs Dallas
Packard J & D 770 M & M Bldg CA 7349
"Smith Co J Earl Hdgrs Dallas
"Willison Co G G 1821 W Alabama JU 1634 WACD

Brockenbrough & Sanders 500 Professional Bldg

### UTAH

SALT LAKE CITY
Cluphf & Assoc Stan Hdgrs Denver
Gates Co 200 S Main St 9-1101

#### VIRGINIA

ALEXANDRIA American Eng'g Equip PO Box 186 TE 6-1718 Brown & Assoc W A 3610 Mt Vernon Ave 0V 3-6100 Martin Ed 102 E Beal St (Highland Springs) FA

RICHMOND
Ranson Wallace & Co Hdgrs Charlotte
Simpson & Son P M 717 Byrd Park Ct 4-0287

### WASHINGTON

EATILE
Backer Co Jas J 221 W Galer AL 6470
Burcham Co Don H Hdgrs Portland
Carlson Co Fred W 120 Dexter Ave EL 6630
\*Dooley J R 3606 Magnolla Blvd AL 3208
\*Drake Rush 1806 Bush PI EA 1737
\*Halght Co Fred H 3212 Eastiake EA 1818
Jensen Co Vernor 0 2616 2 Ave MU 2929
Johnston Co Ray 11009 Evanston Ave EM 0956
\*Lee Co Dave M 2517 2 Ave MA 5512
Legg Co Richard Hdgrs Portland
Levinson Co Harry 1117 2 Ave MA 5317
\*Marsh Agencles 2601 1 Ave MA 8761
\*Merritt Co Ron 120 W Thomas GA 6644
Norris Co George D 3010 1 Ave EL 1344
\*Northwestern Agencles 4130 1 Ave SE L 8882
\*Parsons & Co C B 3028 1 Ave MU 3933
\*Porter Co Burt C 4310 Roosevelt Way ME 6828
\*Stroum Co S N 1612 Broadway FR 7515
\*Weddel Co Frank 3215 Western Ave GA 0222
\*Wilddekind Co M K 2161 Ave NEL 6981
\*POKANE
\*Quinn I P PO Bay 7051 FM 6621 SEATTLE Quinn J P PO Box 7051 EM 6621

### WISCONSIN

MILWAUKEE ILWAUNKE
\*\*Aaron & Assoc | 1 829 N Marshall St BR 6-8515
Diekinson & Assoc E A 744 N 4 St BR 2-0517
Laub Co Niek J Hdgrs Minneapolis
Loeb Sales E R 5052 N Shoreland Ave WO 4-2155 Darnold D H 914 Kentucky St ME 2-9644

### CANADA

MONTREAL
Pound H 5093 Randali Ave WA 3402
TORONTO \*Armstrong Allen Jr 700 Weston Rd R0 2-7535
\*Pointon C G 6 Alcina Ave OL 7984

VANCOUVER

\*McLennan Ltd D Eldon 2191 W 1 Ave BA 2898

### HAWAII

HONOLULU \*Brenna & Browne Inc PO Box 2098 26-5275
\*Plety Gene 2030 Home Rule St 8-3105

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(MAC)













### 1956 TECHNICIAN BUYERS DIRECTORY

## Alphabetical Listing of Manufacturers

### WITH THE NEW, EXCLUSIVE

### LOCALIZER INDEX

A complete listing of the names and addresses of manufactur ers of service and replacement products, component parts, equipment, instruments and materials as well as technical publishers. In the LOCALIZER INDEX listings a number of manufacturers have listed such data as home office telephone numbers, exocutive personnel, brand names, products, branch and regional offices as well as local reps. The LOCALIZER IN-

DEX provides the shortest means of contacting any manufacturer. Symbols show type of sales:

BO branch office

D distributor

IDS indus & distr sales IS industrial sales

DS distributor sales

R representative

GV government sales

SE sales engineer

Indented listings are advertisements.

ABT Mig Co 715 N Kedzle Ave Chicago 12 III
Accerate Electronics Corp 169 S Abbe Rd Elyria Ohio
Accerate Insulated Wire 25 Fox St New Haven 1 Conn
Acme Battery Corp 59 Pearl St Brooklyn NY
Acme Electric Corp 8812 Water St Cuba NY
Acoustic Research 23 Mt Auburn St Cambridge 38 Mass
Acromark Co 9 Morrell St Elizabeth 4 NJ
Acro Products Co 369 Shurs Lane Philadelphia 28 Pa
Acro Tool & Die 4554 N Broadway Ave Chicago 40 III
Advance Electronics 8510 North End Ave Oak Park Mich
Advance Relay Div Elgin Nati Watch Burbank Calif
Advance Relay Div Elgin Nati Watch Burbank Calif
Acro Instrument 11423 Vanowen N Hollywood Calif
Acro Instrument 11423 Vanowen N Hollywood Calif
Acro-Tone Mig Co 4836 Joy Rd Detroit 4 Mich
Acrowox Corp Distr Div 740 Belleville New Bedford Mass
Affton industries 8300 Flex-O-Lite Dr St Louis 23 Mo
Aids for Goodhousekeeping 21 Plandome Manhassett NY
Airdesign Inc 241 Fairfield Ave Upper Darby Pa
Air-E-O Electronics 374 N 27 St Milwankee 8 Wis
Airflyte Electronics Co 21 Cottage St Bayonne NJ
Alax Condenser Co 932 W Wrightwood Ave Chicago 14 III
A-K Mig Co 115 S Northwest Hwy Barrington III
A-K Mig Co 115 S Northwest Hwy Barrington III
A-K Mig Co 115 S Northwest Hwy Barrington III
A-K Mig Co 115 S Northwest Hwy Barrington III
A-K Mig Co 115 S Northwest Hwy Barrington III
A-K Mig Co 126 S 2 St Miswaukee Wise
Alli Channel Antenna Corp 47-39 49 St Woodside 77 NY
Allegro Electronics 226 New York Ave Huntington L1 NY
Allen-Bradley Co 1326 S 2 St Miswaukee Wise
Allide Mig & Sales Co 201 N Wells St Chicago 6 III
Allied Mig & Sales Co 201 N Wells St Chicago 6 III
Allied Mig & Sales Co 201 N Wells St Chicago 6 III
Allied Mig & Sales Co 201 N Wells St Chicago 60 III
Allied Mig & Sales Co 201 N Western Ave Chicago 80 III
Allied Agado Corp 100 N Western Ave Chicago 80 III
Allied Mig & Sales Co 201 N Wells St Chicago 6 III
Allied Mig & Sales Co 201 N Wells St Chicago 6 III
Allied Mig A Sales Co 201 N Wells St Chicago 6 III
Allied Mig A Sales Co 201 N Wells St Chicago 6 III
Allied Mig Corp Manner St Myers Ir
VP—Eos

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Eostern Soles Rep: Lee Doneker 281 Glenwood Ave
Burlington N J
Alonge Products Inc 163 W 23 St New York 11 NY
Alonge Products Inc 163 W 23 St New York 11 NY
Alpert Co. Ned 2878 N Holton St Milwaukee 12 Wise
Alpha Metals Inc 56 Water St Jersey City 4 NJ
Alpha Metals Inc 56 Water St Jersey City 4 NJ
Alpha Wire Corp 200 Varick St New York 14 NY
Alprodeo Inc Kempton Ind
Altec Lansing 9356 Santa Monica Beverly Hills Calif
Aluminum Mfg Co 1629 Portland Ave Louisville 3 Ky
Amarlte Inc 1884 Pitkin Ave Brooklyn 12 NY
American Condensor 4410 Ravenswood Chicago 40 III
American Electrical Heater 6110 Cass Ave Detroit 2 Mich
American Electrical Heater 6110 Cass Ave Detroit 2 Mich
American Electrical 1203 Bryant Ave New York NY
American Microphone Div Eigin Nati Watch 370 S Fairoaks Pasadena Calif
American Molded Products 2727 W Chicago Chicago III
American Molded Products 2727 W Chicago Chicago III
American Phenolic Corp 1830 S 54 Ave Chicago 50 III
American Radio Hdw 152 MacQuesten Pkwy Mt Vernon NY
American Scientific 336 S Main St Ft Atkinson Wise
American Scientific 336 S Main St Ft Atkinson Wise
American Scient Flux 19 & Williand Philadelphia Pa
American Standard TV Tube 94-50 158 St Jamaica NY

American Tower Co Shelby Ohio
American TV & Radio 300 E 4 St StPaul 1 Minn
American TV & Radio 300 E 4 St StPaul 1 Minn
American Vacuum 2242 S Colby Los Angeles Callif
American Vacuum 2242 S Colby Los Angeles Callif
American Volume Control 554 W 168 St New York NY
Ames Mfg Corp 4320 Park Ave New York 57 NY
AMI inc 1500 Union Ave S E Grand Rapids 2 Mich
Amperex Electronic Corp 230 Duffy Ave Hicksville LI NY
Amprex Corp 934 Charter St Redwood City Callif
Amplifler Corp of America 398 Bidwy New York NY
Amprex Corp 18 America 398 Bidwy New York NY
Amplifler Lor 342 W 40 St New York 18 NY
Ampro Corp 2835 N Western Ave Chicago 18 III
Amy Aceves & King 11 W 42 St New York 36 NY
Anchor Helectronics Inc 717 Sip St Union City NJ
Anchor Metal Co 244 Boerum St Brooklyn 6 NY
Anchor Metal Co 244 Boerum St Brooklyn 6 NY
Anchor Metal Co 244 Boerum St Brooklyn 6 NY
Anchor Wire Corp 183-16 Jamaica Ave Jamica 3 NY
Andrea Radio 27-01 Bridge PI N Long Island City NY
Anko Mfg Co 5042 W State St Milwaukee 8 Wisc
Ansley Mfg Co Arthur Doylestown Pa
Ansonia Wire & Cable Co 111 Martin St Ashton RI
Antenna Products 3628 N Lincoin Ave Chicago 13 III
Antenna Specialists 12435 Euclid Ave Cleveland 6 Ohio
Antennex Co 4060 Ocean Park Venice Callif
Anton Electronic 1226 Flushing Ave Brooklyn NY
A P Electro Lab Box 862 Chestnut Station Union NJ
Applegate & Co C J 1816 Grove St Boulder Colo
Arbor Mfg Co Depew NY
Arbuck Inc 116 Troutman St Brooklyn 6 NY
Arbuck Inc 116 Troutman St Brooklyn 10 NY
Arco Transformer 1602 S Hanna St Ft Wayne Ind
A R F Products 7627 Lake St River Forest III
Argos Products Co Genoa III
Argos Products Sol St Brooklyn 12 NY
Arco Transformer 1602 S Hanna St Brooklyn 12 NY
Argos Products Co Genoa III
Argos Products Co Genoa III
Argos Products Co Sol St Brooklyn 12 NY
Argos Hart & Regemena 103 Hawthorn Hart

Bache Semon & Co 636 Greenwich St New York 14 NY Baker Mfg Co 133 Enterprise Evansville Wiss Band-It Co 2550 Walnut St Denver 5 Colo Barb City Industries 1150 S 4 St DeKaib III Barber-Colman Co PO Drawer 99 Rockford III Barco Chemicai Products 701 S LaSaile St Chicago 5 III Barjay Co 145 W 40 St New York 18 NY Barker & Williamson 235 Fairfield Ave Upper Darby Pa Barrett Electronics 22319 Kathryn Ave Torrance Calif Barry Electronics 512 Broadway New York 12 NY Baumker Mfg Co 3826 Summit St Toledo 11 Ohio Beacon Corp 2846 Milwaukee Ave Chicago 18 III Beam Industries Inc 624 S Michigan Ave Chicago 5 III Beam Instruments Corp 350 5 Ave New York NY Becker Electronics 1091 Rockaway Valley Stream NY

Becks Inc 298 E 5 St St Paul 1 Minn
Beede Electrical Instrument Co West St Penacook NH
Behr-Manning Corp 2054 Selfert St Troy NY
Belden Mig Co 4647 W Van Buren St Chicago 44 Ill
Bel Fuse Inc 311 Mountain Rd Union City NJ
Bell & Howell 7100 McCormick Rd Chicago 45 Ill
Bel Fuse Inc 311 Mountain Rd Union City NJ
Bell & Howell 7100 McCormick Rd Chicago 45 Ill
Bell Seand Systems 555 Marion Rd Columbus 7 Ohio
Belinord & Co 481 Sterling Pl Brooklyn NY
Bendix TV & Broadcast Receiver Div Bendix Aviation
Corp E Joppe Rd Towson 4 Md
Bennett Labs Inc 2700 Bay Rd Redwood City Calif
Bennett & Co Paul 230 E Ohio St Chicago 11 Ill
Bennus Watch Co 50 W 44 St New York NY
Berlatey Harris Lime & Hector Sts Conshohocken Pa
Bergen Labs 11 Godwin Ave Fair Lawn NJ
Berger Communications 109-01 72 Rd Forest Hills NY
Bersma Bros 1000 36th St SE Grand Rapids 8 Mich
Berkshire Laboratories 692 Bank Village Greenville NH
Berkshire Recording 150 W 90 St New York 24 NY
Berlant Instruments Audio & Recordata Div 4917 W Jefferson Blvd Los Angeles 16 Calif
Besteraft Products Co 626 Broadway New York 12 NY
Best Electronics 617 19th St Manhattan Beach Calif
Birnbach Radio Co 145 Hudson St New York 13 NY
Be & K Mig Co 3726 N Southport Chicago 13 Ill
Blackburn Electronic Corp 55 W 7 St Wyoming Pa
Black & Decker Towson 4 Md
Blaco Mig Co 6541 Euclid Ave Cleveland 3 Ohio
Billey Electric Union Station Bldg Erie Pa
Blonder-Iongue Labs 526 North Ave Westfield NJ
B & M Electric Corp 838 4 Ave Brooklyn 32 NY
Boetsch Bros 115 Cedar St New Rochelle NY
Boene to David 29 9 Ave New York 14 NY
Bogue Electric Mig Co 52 Iowa Ave Paterson 3 NJ
Bohn Sound Eng'g Lincoln Rwy E Fort Wayne Ind
Bolain Bending Co 1702 N Milwaukee Ave Chicago 47 Ill
Bomac Labs Salem Rd Beverly Mass
Bong Eicetrle Div Olin Ind 505 Park Ave New York NY
Bogae Eicetrle Div Olin Ind 505 Park Ave New York NY Bohn Sound Eng'g Lincoln Rwy E Fort Wayne Ind
Bolain Bending Co 1702 N Milwaukee Ave Chicago 47 III
Bomac Labs Salem Rd Beverly Mass
Bond Eigetrle Div Olin Ind 505 Park Ave New York NY
Bozak Co R T PO Box 966 Darlen Conn
Brach Mtg Div Genl Bronze 200 Central Ave Newark NJ
Bradley Laboratorles 168 Columbus Ave New Haven Conn
Brady Co W H 727 W Glendale Ave Milwaukee 12 Wis
Brainaro Electronics 8586 Santa Monica Los Angeles
Brand & Co Wm North & Valley Sts Willimantle Conn
B & R Electronics 1701 Boone Ave New York 60 NY
Bridgepurt Brass Aerosol Div Bridgeport Conn
Bright Star Industries 600 Getty Ave Clifton NJ
British Industries 80 Shore Rd Port Washington NY
Brochenz Electronics Corp 344 E 32 St New York 16 NY
Brodney A I 351 Atlantic Ave Brooklyn 17 NY
Browning Labs Inc 750 Main St Winchester Mass
Bruno Tools 9330 Santa Monica Bivd Beverly Hills Calif
Brush Electronics 3405 Perkins Ave Cleveland Ohio
Buchan Co R J PO Box 9 Bricelyn Minn
Budelmam Radio Corp 375 Fairfield Ave Stamford Conn
Bud Raelo Inc 2118 E 55 St Cleveland 3 Ohio
Bullet Electronics 2637 S Lowell Springfield III
Bulova Watch Co Bulova Park Fushing 70 NY
Burgess Battery Co Freeport III
Burlington Instrument Co 203 N 3 St Burlington Iowa
Burton-Rogers Co 42 Carleton St Cambridge 42 Mass
Bussman Mfn Co University at Jefferson St Louis 7 Mo
Butler Mrg Co B B 3150 Randolph St Bellwood III

Caddell-Burns 40 E 2 St Mineola NY
Calbest Electronics 4801 Exposition Blvd Los Angeles
Calcon Mfg Co 100 Oakland Ave Washington 1 Pa
Calder Mfg Co Lancaster Pa
Caldwell-Clements Manuals 480 Lexington New York NY
Califone Corp 1041 N Sycamore Ave Hollywood 38 Calif
Calif Cabinet 522 S San Pedro St Los Angeles 13 Calif
Callif Mfg Co 15 Union St Lawrence Mass
Cal-Lee Mfg 5653 W Adams Blvd Los Angeles Calif
Calvideo Tube Corp 5232 W 104 St Los Angeles 45 Calif
Camburn Inc 32-40 57 St Woodside 77 NY

Campbell Industry 3806 St Elmo Chattanooga Tenn Campbell X-Ray 110 Cummington St Boston 15 Mass Cannon Co C F Springwater NY Cannon Electric 3208 Humboldt St Los Angeles 31 Call's Capcon Inc 25 Willett St New York 2 NY Capehart-Farnsworth 3700 Pontiac St Ft Wayne Ind Captol Incerods Inc 1730 Broadway New York 19 NY Capps & Co Frank L 20 Addison Pl Valley Stream NY Carbonneau Ind 100 Lexington SW Grand Rapids Mich Carboroundum Co Globar Div Niagara Falls NY Cardwell Electronics Productions A D Plainville Conn Carling Electric 505 New Park W Hartford Conn Carlen Mort Co 2644 N Maplewood Ave Chicago 47 Ill Carder Parts Co 213 W Institute Pl Chicago 10 Ill Carder Parts Co 213 W Institute Pl Chicago 10 Ill Carder Parts Co 213 W Institute Pl Chicago 10 Ill Carder Parts Co 260 N Howard St Phila Ph Cass Machine Co. 691 Antoinet St Detroit 4 Mich Cayo TV Eng's 1204 Michigan Hwy Benton Harbor Nich C86 Electronics Co 2601 N Howard St Phila Ph C88-Golumbia Inc 3400 47 Ave Long Sisand City 1 NY C88-Hyron LOC Electronics Co 2601 N Howard St Phila Ph C88-Golumbia Inc 3400 47 Ave Long Sisand City 1 NY C88-Hyron LOC 241 N Belmont Ave Chicago 13 Ill Centrold Transforner 1877 Eastern Pkwy Brooklyn 33 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Tabe Co 16 & Luzerne St Sh Philadelphia 40 Pa C8 Electronics 201 Ill Roosevert Ave Mineola NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Certified Radio Labs 5507 13 Ave Brooklyn 19 NY Charley 19 Labs 19 NY Collega Call Call Call Call Call Call Call C Co-Operative Industries 100 Oakdale Rd Chester NJ Cooper Electronics Inc 5637 Tulip St Philadelphia 24 Pa Cooper Electronics Inc 5637 Tulip St Philadelphia 24 F Copperweld Steel Co 322 Frick Bldg Pittsburgh 19 Pa Cornell-Dubiller Electric Corp S Plainfield NJ Corning Glass Works Corning NY Cornet Electronics 1313 N State St Chicago III Corson Electric Mfg Corp 540 39 St Union City NJ Cousino Inc 2326 Madison Ave Toledo Ohio Crawford Door Co 20263 Hoover Rd Detroit 5 Mich Creative Plastics Corp Rt 25A Stony Brook NY Crescent Industries 5900 W Touthy Chicago 30 III Crosley Radio & TV 1329 Arlington Cincinnati Ohio Crowley Co Henry L 1 Central Ave W Orange NJ

Crown Controls 40 S Washington New Bremen Ohlo Cryco Inc 1138 Mission St S Pasadena Calif Cummins-Chicago 4740 N Ravenswood Chicago III Curtiss-Wright Corp Electronic Div Carlstadt NJ Cutler-Hammer Inc 315 N 12 St Milwaukee 1 W

Cummins-Chicago 4740 N Ravenswood Chicago III Curtiss-Wright Corp Electronic Div Caristadt NJ Cutler-Hammer Inc 315 N 12 St Milwaukee 1 Wisc Dage Electric Co 67 N 2 St Beech Grove Ind Dale Electronics 31 Somerset Pl Cliffton NJ Dale Products Inc PO Box 136 Columbus Nebr Dane Electronics 31 Somerset Pl Cliffton NJ Dale Products Inc PO Box 136 Columbus Nebr Dane Electronics Labs PO Box 209 Salem Mass Danforth Mfg Co 1003 S 8 St Monmouth III Daven Co Route 10 Livingston NJ Davis & Co J W 9212 Denton Drive Dalias 9 Texas Davis Electronics 4002 W Burbank Burbank Calif Daystrom Inc 200 Elmore Ave Elizabeth NJ Davis & Co J W 9212 Denton Drive Dalias 9 Texas Davis Electronics 4002 W Burbank Burbank Calif Daystrom Electric Corp 887 Main St Poughkeepsie NY Deal Products Hellertown Rd (MR 37) Easton Pa Dean Sales Co 425 Devoe Ave Bronx 60 NY Deeca Records Inc 50 W 57 St New York NY Dee Electric Co 1101 N Paulina St Chicago 22 III DeJur-Amsco 45-01 Northern Blvd Long Island City 1 NY Delognaman Corp Tobe Providence Howy Norwood Mass DeWald Radio 35-15 37 Ave Long Island City 1 NY Deltron Inc 2905 N Lelthgow St Philadelphia 33 Pa Deutschmann Corp Tobe Providence Howy Norwood Mass DeWald Radio 35-15 37 Ave Long Island City 1 NY Dictograph Products 1 Drobe Providence How Norwood Mass DeWald Radio 35-15 37 Ave Long Island City 1 NY Dictograph Products 1 Drobe Providence How Norwood Mass DeWald Radio 35-15 37 Ave Long Island City 1 NY Dictograph Products 1 Drobe Providence How Norwood Mass Dewald Radio 35-15 37 Ave Long Island City 1 NY Dictograph Products 1 Drobe Providence How Norwood Mass Dewald Radio 35-15 37 Ave Long Island City 1 NY Dictograph Products 1 Drobe Providence How Norwood Mass Dewer Ruphilatelphen Corp 88 Broad St Boston 1 Omass Dover Publications 920 Broadway New York 10 NY Drake Electric 5 Hadley St Cambridge Mass Dorn Equipment Corp 88 Broad St Boston 10 Mass Dover Publications 920 Broadway New York 10 NY Drake Electric 5 Hadley St Cambridge Mass Dorn Equipment Corp 88 Broad St Boston 10 Mass Dover Publicati

Dynamu Magnetics Dlv Maleo 21 N 3 St Minneapolis Dynavox Corp 40-05 21 St Long Island City 1 NY

Eagle Electronics Corp PO Box 775 Meriden Conn Eagle Speaker Co 15 S Fairview Park Ridge III Easy-Up Inc 908 State St Racine Wisc Eboor Electronics Co 87 Merrick Rd Baldwin NY
Ebert Electronics 212-26 Jamaica Queens Village NY
Eby Co Hugh H 4700 Stenton Ave Philadelphia 44 Pa Eby Sales 130 Latayette New York 13 NY
Eddy Stoker Corp PO Box 458 Wheeling III
Eder Eng'g Co 1568 S 1st St Milwaukee Wisc Edison Inc Thomas A Lakeside Ave W Grange NJ Edu-Craft Sales Corp 150-45 12 Ave Whitestone NY Electronic Co 1902 N 3 St Temple Texas Ettel-McCullough 798 San Mateo San Brunn Calif Elastic Stop Nut Corp 2330 Vauxhall Rd Union NJ Eloc Corp M St Below Erie Ave Philadelphia 24 Pa Electratic Electronics 32-28 49 St Long Island City NY Electric Motors & Specialties Garrett Ind Electric Motors & Specialties Garrett Ind Electric Edusors Inno Co W Elm St Deep River Conn Electrical Service 1271 Mission San Francisco 3 Calif Electro-Eng'g Prods Co 609 W Lake St Chleago 6 III Electronic Chemical B13 Comminiay Ave Berwyn III Electronic Chemical B13 Comminiay Ave Berwyn III Electronic Chemical B13 Comminiay Ave Berwyn III Electronic Chemical B13 Comminiay Ave Bersyn III Electronic Chemical B13 Comminiay Ave Bersyn III Electronic Chemical B13 Comminiay Ave Jersey City NJ Electronic Communications 1249 W Loyola Chicago III Electronic Chemical B13 Comminiay Ave Jersey City NJ Electronic Pabricators 682 Broadway New York 12 NY Electronic Hardware 2420 W Cermak Rd Chicago B III Electronic Instrument 84 Withers St Brooklyn 15 NY Electronic Pabricators 682 Broadway New York 12 NY Electronic Hardware 2420 W Cermak Rd Chicago B III Electronic Instrument 84 Withers St Brooklyn 15 NY Electronic Hardware 2420 W Cermak Rd Chicago B III Electronic Instrument 84 Withers St Brooklyn 15 NY Electronic Pabricators 679 F3 St St Long Island City NY Electronic Pabricators 679 F3 St St Long Island City NY Electronic Devices Inc 82 State St Boston 20 Mass Elect Elgen Corp 2900 Cormany Ave Cincinnati 25 Ohio
Eltran Corp 109 W Station St St Anne III
E M C Recordings 806 E 7 St St Paul Minn
Emerson Radio & Phono 14 & Coles Jersey City NJ
Enco Mfg Co 4520-26 W Fullerton Chicago 39 III
Engineered Instruments DV Controls Div Hayward Calif

Eng'g Laminating 506 S Central Baltimore 3 Md
Epco Electronics 140 Liberty St New York 6 NY
Equipto Aurora III
Erle Resistor Corp 644 W 12 St Erle 6 Pa
Erwood Inc 1770 W Berteau Ave Chicago 13 III
Esco Mig Co Box 344 Summit III
Esoteric Records 238 E 26 St New York 10 NY
Espey Mig Co 200 W 57 St New York 19 NY
Essex Wire Corp 1601 Wall St Ft Wayne 6 Ind
Executone Inc 415 Lexington Ave New York 17 NY
E-Z Way Towers 5901 E Broadway Tampa Fia

Fada Rædlo & Electric Co 525 Main St Belleville 9 NJ
Falrbanks Co 393 Lafayette St New York NY
Falrchild Recording Equip Whitestone NY
Falrmer Mfg Co 312 N Walnut St Youngstown 2 Ohlo
Fanon Electric Co 150-09 South Rd Jamalea 33 NY
Farrington Mfg 76 Atherton St Boston Mass
Federal Anti Capacity Switch 72 Kingsley Buffalo 8 NY
Federal Electronics Rockville Centre NY
Federal Screw Prods 3917 N Kedzle Chicago 18 III
Federal Telephone & Radio 100 Kingsland Rd Clifton NJ
Federal Telephone and Radio Company A Division of
International Telephone and Telegraph Corporation 100
Kingsland Road Clifton New Jersey
President, Components Division—S J Powers
Selenium Product Line Monoger—J E Von Wogenen
Dielectric Product Line Monoger—A A Segal
Vacuum Tube Product Line Monoger—W C Schmitt
Rectifier Equipment Product Line Monoger—J A
Curtis

Curris
Transformer Product Line Manager—R A Felmly
General Sales Manager—Components Div J G Solori
Distributor Sales Manager—E L Shaw

Germanium Diodes Only
Columbus-IDS—Jack W. Lehner 367 Bryhild Raad
Covers Ohio-West Virginia-Pennsylvanio (that
partion of the State lying West of but not including the Counties of Tiaga, Lycoming, Northumberland, Dauphin, and York)
Atlanta-IDS-DS—Cartwright & Bean 3223 Cains Hill
Rd NW Exchange 2273 Covers Alabama-Florida-Georgio-Mississippi-North Carolina-South Carolina-Tennessee

roling-Tennessee

Atlantic City-IDS—Victor W Williams 5 Circle Drive Margate ATlantic City 2-7859 Covers Maryland-District of Columbia-Delaware (Counties of Kent and Sussey)-Virginia

Alburquerque IDS—Hyde Sales Company 2220 Utah Street Covers Nebrosko-(panhandle territory of the western section of the state including Scottsbluff Nebrasko) New Mexico-Utah-Wyoming

Boston-DS—Abbett & Hustis 1105 Commonwealth Avenue ALgonquin 4-8100 Covers Maine-New Hampshire-Vermont-Mossachusetts-Rhode Island-Connecticut

Connecticut

Boston-1DS—Robert W. Groy Inc 572 Washington
Street Wellesley 81 WEllesley 5-5296, 5-0191
Covers Connecticut (except Counties of Foirfield, New Haven and Middlesex) Maine-Massachusetts-New Hampshire-Rhade Island-Vermant

Buffolo-1DS—R W Mitscher 487 Ellicott Square
Building WAshington 2517 Covers New York
(except Counties of Bronx, Kings, Nassau, New
York, Queens, Richmond, Rockland, Westchester, Suffolk) York, Queer ter, Suffolk)

Charlotte-North Carolina-IDS—Cartwright & Bean 625 Harwyn Drive FRanklin 6-8648 Covers Ala-bama-Florida-Georgia-Mississippi-North Caro-lina-South Carolina-Tennessee

Lina-South Carolina-Tennessee
Chicago-IDS—Ringland M Krueger 5306 W Lawrence Avenue PEnsacola 6-3107 Covers Illinais-Wisconsin (South of an East-West Line through La Crosse but not including the City of La Crosse and East of a North-South Line through Ironwood, Michigan)
Chicago-DS—William J Doyle Company 7002 N Western Avenue Rogers Park 1-3130 Covers Illinois-Wisconsin (South of an east-west line through LaCrosse, but not including the city of LaCrosse and East of a north-south line through Ironwood Michigan)
Dollars IDS-DS—Branum Sales Inc PO Box 10204

Dallas-IDS-DS-Branum Sales Inc PO Box 10204 Riverside 4995 Covers Arkansas-Louisiana-Okla-homa-Texas

\*Dayton-IDS—Neal Bear Corp 136 W 2nd Street FUlton 2555 Covers Ohio-West Virginio-Pennsylvania (that partian of the State lying West of but not including the Counties of Tiaga, Lycoming, Northumberland, Dauphin and York)

and York)

Denver-IDS—Hyde Sales Company 3250 South Dexter

Street Skyline 6-7151 Covers Colorado-Idaho
ISouthern half of state including counties of
Washington-Gem-Boise-Custer-Clark- and Fremont—Montono-Jeostern half of stale to the
boundaries of Hill-Chouteau-Judieth-Basin
Wheatland-Sweetgrass and Park

Detroit-IDS—K C Burcaw and Company 22128 Grand
River Avenue KEnwood 3-7700 Covers Michigan
Indianapolis-IDS—Quinn Cunningham & Associates
6101 College Avenue GLendale 3222, 0225
Covers Indiano-Kentucky

Kansos City-IDS—F C Somers 18th and Grand Avenue Office GRand 11355 Covers Iowa-NebhaskaMissouri-Konsas

Los Angeles-IDS—J W Morsh Company \$216 W Jef-

Los Angeles-IDS-J W Morsh Company 4216 W Jef-

(Listings continued next page)

#### (federal Continued)

ferson Blvd REpublic 2-0145 Covers California-Nevado-Arizana

Memphis-IDS—Cartwright and Bean 1336 Madison Avenue MEmphis 2-1914 Covers Alabama-Flori-da - Georgia - Mississippi - North Carolina -South Carolina-Tennessee

South Carolina-Tennessee

Minneapolis-IDS—H M Richardson® 9 East 22nd
Street GEneva 4078 Covers Minnesoto-North
Dakota-Sauth Dakoto-Wisconsin (the Section
North of an East-West Line through LoCrosse
including the City of LoCrosse and West to a
North-South Line to Ironwood Michigan)
New York-DS—Mingins Sales Company 107-37 71
Avenue Forest Hills Island BOulevard 3-1643
Covers New Jersey- except the city of Trenton
and all area south of the city of Trenton—New
York counties of Branx-Kings-Nossou-QueensRichmond-Rockland-Westchester-Suffolk
Oakhyn-New Jersey IDS-DS—Victor W Williams-1100

Oaklyn-New Jersey IDS-DS—Victor W Williams-1100 White House Pike Collingswood 5-6332 Covers

Virginia

Philadelphia-IDS—J R Benge Technical Representation 25 S Easton Road Suite 200 Glenside Pa TUrner 1325 and 1326 Covers Delaware-District of Columbia-Maryland (New Costle County)-New Jersey (Radio Corp of America at Princeton the City of Phillipsburg the City of Trenton, and all area south of the City of Trenton; Pennsylvania (all the area West to and including the Counties of Tiagga, Lycoming, Northumberland, Dauphin, and York)

Phoenix-IDS—J W Marsh Company 1011 West Whitton Athleris 6-9124 Barney Schlecht Covers California-Nevada-Arlzona

fornia-Nevada-Arizona

Ridgefield-Conn-DS—Abbett & Huslis 52 Main St Covers Connecticut - Maine - Massachusetts - New Hampshire-Rhode Island-Vermont

San Francisco-IDS—J W Marsh Company 1258 Fitz-gerald Avenue VAlencia 4-6714 Covers Cali-fornia-Nevada-Arizona-Hawaii Santa Fe-NM-DS—Hyde Sales Co 206 Lugar De Monte Vista Santa Fe 3-7884 Covers New Mex-ico-Texas (El Paso Caunty)-Uloh-Wyoming

ico-lexas (El Paso County)-Uloh-Wyoming
Seattle-IDS—Fred H Haight Company 3212 East
Lake Avenue EAst 1818 Covers Oregon-Woshington-Idaho (Northern half of the State including Counties of Adams, Walley, Lemhi)Montona (Western half of State including Counties of Hill, Chateau, Judieth Basin, Wheatland, Sweetgross, and Park)

Tampa-IDS—Cortwright & Bean 4525 S Lois Street
Covers Alabama-FlorIdo-Georgia-MississippiNorth Caroline-South Carolina-Tennessee

West Hattland-Counties—Robert W. Grov Lee 121

West Hartford-Conn-IS—Robert W Groy Inc 121
Loomis Drive ADams 3-5629 Covers Connecticut
[except Counties of Fairfield, New Hoven and
Middlesex]-Maine-Massachusetts-New HampshireRhode Island-Vermont

West Richfield Ohio-IDS-DS—Neal Bear Corporo-tion\* 3435 Streetsboro Rd WEst Richfield Oliver 9-3331 Covers Ohio, West Virginia; Pennsyl-vania (that partion of the State lying West of but not including the Counties of Tioga, Ly-coming, Northumberland, Douphin, and York)

vania (indi parrion of the state lying west of but not including the Counties of Tiega, Lycoming, Northumberland, Douphin, and York) Federated Metals 120 Broadway New York 5 NY Federated TV Mart 313 Rogers Ave Brooklyn 25 NY Federated TV Mart 313 Rogers Ave Brooklyn 25 NY Federated TV Mart 313 Rogers Ave Brooklyn 25 NY Federated TV Mart 313 Rogers Ave Brooklyn 25 NY Federated TV Mart 313 Rogers Ave Brooklyn 25 NY Federated TV Mart 318 Rogers Ave Brooklyn 25 NY Federated TV Mart 318 Rogers Ave Brooklyn 25 NY Ferris Business Equip Inc 45 Seymour St Stratford Conn Ferris Instrument Co 110 Cornella St Boonton NJ Fideliton Inc 6415 Ravenswood Ave Chicago 26 III Fidelity Chemileal 470 Frelinghusen Ave Newark NJ Filtron Co 131-15 Fowler Ave Flushing 55 LI NY Finney Co 4612 St Clair Ave Cleveland 3 Ohio Fisher Co Oscar 1000 N Division St Peekskiil NY Fisher Eng's Co Huntington Ind Fisher-Pierce Co 170 Pearl St So Braintree 85 Mass Fisher Radio Corp 21-21 44 Dr Long Island City 1 NY F K B Option Co 173B Calvert St South Bend Ind Fisher-Pierce Co 170 Pearl St So Braintree 85 Mass Fisher Radio Corp 1037 Custer Dr Toledo 12 Ohio Fieming Inc Edward Broad St Westport Conn Fiewo Int'l Co 3245 W Lake St Chicago 24 III Flexo Wire Div Copperweid Steel Co Oswego NY Float-Lock Corp 261 Madison Ave New York NY Fondalk Corp 11 S LaSaile St Chicago III Forbes & Wagner 345 Central Ave Silver Creek NY Forest Electric Co 7216 Circle Ave Forest Park III Fored Electronics & Controls 200 Hudson New York 13 NY Freed Transformer Co 1718 Weirfield St Brooklyn 27 NY Frequency Standards Box 504 Asbury Park NJ Freto Inc 406 N Cralg St Pittsburgh 13 Pa President—Joseph V Fisher Vice President—Fronk H Robinson

President-Joseph V Fisher Vice President-Frank H Robinson Sales Manager—C D Hall

Products: TV ontennas & occessories; Open wire lead-in; Semi-conductor products

Brand Names: Super Spectrum; Victoria; Fretaray; Spectrum; Customliner; 3-D Dimension; Mi-tee-Ray; Silver Arrow; Fretline; Soucerline; Bo-Ti; Strata-Ray

### Representatives:

CALIF—David Ellis David Ellis Co 919-D East Cali-fornia St Pasadeno Ryan 19108 Territorys South-ern Colif-Ariz & Las Vagas Nevada

CALIF.—F J Morchuk F J Marchuk Co 261 E Colorado St Pasadena Sycamore 30240 Territorys Northern California
D C.—L H Leiher International Buyer Service 217
Bond Bldg Washington D C Sterling 30623
Territory: Cubo
ILL.—George E Lewis G E Lewis Inc 5420 W
Fullerton Ave Chicaga National 20708 Territory: Illinois-Winn
IND.—Paul B Fishman 4440 N Campbell Ave Indianapolis Liberty 65477 Territory: Indiana & Kentucky

apolis Liberty 65477 Territory: Indiana & Kentucky
KAN—C L Omer Inland Associates 6047 Howe Dr
Mission Territory: Iowa-Neb-Missouri-Kansas
MASS—Ray Bridge The Ray Bridge Co 100 Memorial
Dr Cambridge University 43696 Territory:
Maine-Vt-Mass-Rhode Island-New HampshireConn (Represents for Transistors only)
N Y—Henry Vitarelli H V Associates 1047 Mc
Donald Ave Wantagh L 1 Territory: New YorkN Jersey down to Trenton
N C—Poul E Moore Paul Moore Co P O Box 6003
—Five Points Station Roleigh 37533 Territory:
North & South Carolina
TEXAS—Hal F Corry Hal F Corry Co 6313 Hillcrest
Ave Dallas Territory: Ark-Lo-Texas-Okla-Miss
CANADA—Mike Rasen Active Radio & TV Distrs 58
Spadina Ave Toronto Empire 42755 Territory:
Conada

Fretz Gross Co 22 St & Sedgley Ave Philadelphia 32 Pa Furst Electronics 3322 W Lawrence Chicago 25 111

Gahagan Inc 11 W 4 St Bethlehem Pa
Gard Industries Inc Green Bay Rd Wilmette III
Garde Mfg Co 588 Eddy St Providence 3 RI
Gardo Radio 70 Washington St Brooklyn 1 MY
Garrard Sales Corp 80 Shore Rd Port Washington NY
Garrard Sales Corp 80 Shore Rd Port Washington NY
Garrard Sales Corp 80 Shore Rd Port Washington NY
Ge-C Electronics Mfg Co 919 Taylor Ave Rockford III
Gee-Lar Mfg Co 418 S Wyman St Rockford III
General Aluminum Products 287 5 Ave New York NY
General Apparatus 344 E 32 St New York 16 NY
General Cement Mfg Co 919 Taylor Ave Rockford III
General Crystal Co Burlington Wisc
General Dry Batterles 13000 Athens Cleveland 7 Ohio
General Electric Apparatus Sales Div Schenectady 5 NY
General Electric Co Syracuse NY
General Electric Co Syracuse NY
General Electric Co Syracuse NY
General Instrument Corp 829 Newark Ave Elizabeth 3 NJ
General Instrument Corp 829 Newark Ave Elizabeth 3 NJ
General Insulated Wire 69 Gordon Ave Providence RI
General Phones Corp 5711 Howe St Pittsburgh 32 Pa
General Products Corp Webb St Union Springs NY
General Transistor 95-18 Sutphin Bivd Jamaica Li NY
Germanium Products 26 Cornelison Ave Jersey City 4 NJ
Gernsback Library 154 W 14 St New York 11 NY
Gerrard & Co A J 1950 Hawthorne Ave Meirgse Park III
G & H Wood Products Co 75 N 11 St Brooklyn 11 NY



Girard-Hopkins 1000 40 Ave Dakland 1 Calif
Gits Moulding Corp 4600 W Huron St Chicago 44 III
G & M Equip Co 7315 Varna Ave N Hollywood Calif
Gonset Co 801 S Main St Burbank Calif
Gond-All Elec Mfg Co Ogailaia Nebr
Good-All Elec Mfg Co Ogailaia Nebr
Good-All Elec Mfg Co Ogailaia Nebr
Good-All Elec Mfg Co Ogailaia Nebr
Gotham TV Corp 123 W Pulaski Chicago III
Gramer-Haldorson 2734 N Pulaski Chicago III
Gramco Products inc 36-07 20 Ave Long Island City NY
Gramtham School 821 19 St NW Washington DC
Gravely Novelty Furniture Ridgeway Va
Graybar Electric Co 420 Lexington Ave New York NY
Grayhine Eng'g Co 12243 Ave 0 Chicago 33 III
Gray Research & Devel 658 Hilliard Manchester Conn
Great Eastern Mfg Co 165 Remsen Ave Brooklyn 12 NY
Greene L Charlton 314 Washington Newton 58 Mass
Greeniec Tool Co 1887 Columbia Ave Rockford III
Grobet File Co of America 421 Canal St New York 13 NY
Guardian Electric 1621 W Walnut Chicago 12 III
Gudenan Co 340 W Huron St Chicago 10 III
Guild Radio TV 460 N Eucalyptus Inglewood 3 Calif
Gusdorf & Son 6900 Manchester Ave St Louis 17 Mo

Hallicrafters Co 4401 W 5 Ave Chicago 24 III
Hamilton Electronics 2726 Pratt Ave Chicago 45 III
Hammarlund Mfg Co 460 W 34 St New York 1 NY
Hansen Mfg Co 1111 S Hart St Princeton Ind
Harman-Kardon 520 Main St Westbury LI NY
Harnett Electric 138 Haven Port Washington NY
Harret Electric 138 Haven Port Washington NY
Harrety Broducts Co 521 E 162 St New York NY
Hartley Products Co 521 E 162 St New York NY
Hartley Products Co 521 E 162 St New York St
Harvey-Wells Electronics Southbridge Mass
Haskey Co 29 E Madison St Chicago 2 III
Hastings Products 161 Newbury St Boston 16 Mass
Haydon Foldety Inc 30 Huntington Ave Boston Mass
Haydon Mfg Co 245 E EIm St Torrington Conn
Haydon Switch Inc 536 S Leonard St Waterbury Conn
Haydon Switch Inc 536 S Leonard St Waterbury Conn
Haydon Bros of N J Box 1226 Plainfield NJ
Heath Co 305 Territerial Rd Benton Harbor Mich

Hedco Mfg 161 W Huron St Chicago 10 III
Heiler Co 2135 Superior Ave Cieveland 14 Ohio
Heppner Mfg Co Box 608 Round Lake III
Hevi Buty Electric 4212 W Highland Milwaukee 1 Wise
Hexacon Electric Co 161 W Ciay Ave Roselle Park NJ
Hewlett-Packard Co 481 Page Mill Rd Palo Alto Calif
H & H Prods PO Box 2333 Term Annex Les Angeles Calif
Hickok Electrical Instr 10514 Dupont Cleveland Ohio
Hilburn Electronic Products 55 Nassau Ave Brooklyn NY
HI-Lo TV Antenna 3540 N Ravenswood Chicago III
Hindle Transformer Co Woods Church Rd Flemington NJ
Hinners-Galanek Radio 25-14 Bdwy Long Island City NY
HI-Par Products Co 347 Lunenburg St Fitchburg Mass
Hitemg Wires Inc 26 Windsor Ave Mineola Li NY
HMH TV Industries 746 N Pickering Whittier Calif
Hobbs linc Guy Dallastown Pa
Hobson Bros 4940 W Lawrence Ave Chicago 30 III
Hoffman Electronics 3761 S Hill St Los Angeles Calif
Holloway Electronics Corp Fort Lauderdale Fla
Hollow Industries 413 Dekalb Ave Sycamore III
Hotel Gadio Corp 601 W Fort St Detroit 26 Mich
Howell Mfg Co 7199 Hasbrook Ave Philadelphia 11 Pa
Hubbell Inc Harvey State & Bostwick Bridgeport Conn
Hubbell Mfg Co H L Rte 21 Zeeland Mich
Hudson Lamp Co Arlington NJ
Hudson Wire Co Winsted Div Winsted Conn
Hughes Aircraft Int'l Airport Los Angeles Calif
Hunt Co Philip A Palisades Park NJ
Hunter Sales 6608 S Gretna Whitter Calif
Hyon Electronics 321 S Arroyo Pkwy Pasadena Calif
Hydro-Aire Inc 3000 Winona Ave Burbank Calif
Hydro-Aire Inc 242 E 137 St New York 51 NY

Ideal Industries 3316 Park Ave Sycamore III
IE Mfg 325 N Hoyne Ave Chicago 12 III
I G Textile Co 30 E 21 St New York NY
IIIInois Condenser Co 1616 N Throop St Chicago 22 III
IIIInois Transformer Co 412 S Green St Chicago 7 III
IIIInois Transformer Co 412 S Green St Chicago 7 III
IIIII GENERAL STANDAY IIII GENERAL STANDAY
Industrial Condenser 3243 N California Chicago 18 III
Industrial Devices 22 State Rd Edgewater NJ
Industrial Devices 22 State Rd Edgewater NJ
Industrial Devices 22 State Rd Edgewater NJ
Industrial Instruments 89 Commerce Rd Cedar Grove NJ
Industrial Test Equip Co 55 E 11 St New York 3 NY
Industrial Tv Inc 359 Lexington Ave Clifton NJ
Inet Div Leach 4441 Santa Fe Ave Los Angeles Calif
Ingalis Electronics 30 W Putnam Ave Greenwich Conn
Injection Moiders Supply 3514 Lee Rd Cleveland Ohio
Inst-X Sales Co 26 Rittenhouse PI Ardmore Pa
Instrument Labs 315 W Waiton PI Chicago 10 III
Instrument Resistors Co 1036 Commerce Ave Union NJ
Insuline Corp of America 186 Granite St Manchester NH
Interlectronics Corp 2492 Grand Concourse New York
Int'l Pacific Rec'd'8 858 N Vine St Hollywood 38 Calif
Int'l Resider Rec'd'8 858 N Vine St Hollywood 38 Calif
Int'l Resister 2620 W Washington St Chicago 12 III
Int'l Resistance 401 N Broad St Philadelphia 8 Pa
Int'l Scientific Industries 3101 42 St Minneapolis Minn
Interstate Photo Supply 17 w 17 St New York 11 NY
Irvington Varnish & Insulator Div Minn Mining & Mfg
Co 6 Argyle Terrace Irvington 11 N J
ISolantite Mfg Corp Warren Ave Stirling NJ
ITE Circuit Breaker 19 & Hamilton Philadelphia Pa

Jackson Electr Instrument 18 S Patterson Dayton Ohio Jacobson Mfg Co S I 1414 S Wabash Ave Chicago 5 III Jamac Products Co 8845 NE Sandy Bivd Portland Ore James Instrument Labs 9110 S 52 Ct Oak Lawn III James Instrument Labs 9110 S 52 Ct Oak Lawn III Jamestown Table Co Jamestown NY Jarno Mfg Co 75 N 11 St Brooklyn 11 NY Jarno Mfg TV Hush Div 16 Howard Ave Brooklyn NY Jarno Mfg TV Hush Div 16 Howard Ave Brooklyn NY Jarno Mfg TV Hush Div 16 Howard Ave Brooklyn NY Jarvis Electronies Corp 6058 Fullerton Chicago 39 III Javex PO Box 646 Rediands Calif Jay Cee Corp 475 Cosgrove St Philadelphia Pa Jayeli Mfg Co 1379 Washington Ave New York 56 NY J-B-T Instruments 441 Chapel St New Haven 8 Conn Jefferson Electric Co 900 25 Ave Bellwood III Jennings Radio Mfg Co PO Box 1278 San Jose 8 Calif Jensen Industries Inc 7333 W Harrison Forest Park III Jensen Mfg Div Muter 6601 S Laramie Chicago III Jerod Electronics Corp 2222 Chestnut Philadelphia Pa Jersey Specialty Co Burgess Pl Mountainview NJ Jetron Mfg Co 1665 Milwaukee Ave Chicago 47 III Jewell Inc A W Elyria Ohio JFD Mfg Co 6101 16 Ave Brooklyn 4 NY Johns-Manville Dutch Brand Div 7800 Woodlawn Chicago Jones Apparatus Co Walter M PO Box 277 Sheffield Mass Jones Electronics Co M C Bristol Conn Jones Div Cinch Mfg 1026 S Homan Ave Chicago III Jones & Lasghiln Steel Corp 3 Gateway Pittsburgh 30 Pa Jontz Mfg Co 1101 E McKlinley Ave Mishawaka Ind Jordon Mfg Co Morrice Mich

Karlson Assoc 1483 Coney Island Ave Brooklyn 30 NV Karyall Body Inc 8221 Clinton Rd Cleveland 9 Ohlo Kato Engineering Co 1415 1 Ave N Mankato Minn Kay Electric Co Pinebrook NJ May Lab 5725 Kearney Villa Rd San Diego 12 Calif Kay-Townes Antenna Co 1511 Dean Ave Rome Ga Kedman Co 233 S 5th St West Salt Lake City 1 Utah Kellogg Switchboard 79 W Monroe St Chicago II Utah Kellogg Switchboard 79 W Monroe St Chicago II Nemode Mfg Co 161 W 18 St New York 11 NY Kematron Electron Prods 14 Prince Pl Newburyport Mass Kendall Co Polyken Sales 222 W Adams St Chicago 6 III Kenwood Ene'g Co 265 Colfax Ave Colfax NJ Kenyon Transformer Co 840 Barry St New York 59 NY Kepco Labs 131-38 Sanford Ave Flushing 55 NY

Kerden Chemical Co 6400 Herman Ave Cleveland 2 Ohlo Kester Solder Co 4201 Wrightwood Ave Chicago III Keystone Electronics 423 Broome St New York NY K & G Electronics 2738 N Sheffield Ave Chicago 14 III Klingdom Products 23 Park Pl New York NY King & Sons J E Perm Ind Kings Electronics Co 40 Marbledale Rd Tuckahoe NY Kirby Co 13000 Athens Ave Cleveland Ohlo Kleer-Vue Mfg Co PO Box 10304 Pittsburgh 34 Pa Klein & Sons Mathias 7200 McCormick Chicago 45 III Klipsch & Associates PO Box 64 Hope Ark Knights Co James Sandwich III Kech Sons Geo 10 S 11 Ave Evansville 4 Ind Kraeuter & Co 563 18 Ave Newark 3 NJ Kraft Bros 148-12 94 Ave Jamalca 52 NY Kral Products 1704 Walnut St Philadelphia 3 Pa Kriss Electronics Inc 191 Oraton St Newark 2 NJ Krohn-Hite Instrument 580 Mass Ave Cambridge Mass Krylon Inc Ford & Washington Sts Norristown Pa Kushne Mfg Co 19 & Olive Sts Mattoon III Kurman Electric Co 35-18 37 St Long Island City 1 NY Kwikheat Mfg 3732 San Fernando Rd Glendale Calif

Lab of Electronic Eng'g 413 L St NW Washington 1 DC Laine Electronics & Mrg 91 Industrial Little Ferry NJ Lampkin Labs Bradenton Fia Langevin Mrg 47-37 Austell Pl Long Island City 1 NY Lansing Sound J B 2439 Fletcher Dr Los Angeles Calif LaPointe Electronics 155 W Main St Rockville Conn Larson Co C D PO 805 S58 Sterling III
LaSalle Tube Mrg Co 155 E Grand Ave Chicago III
Lacach Relay Co 5915 Avalon Blvd Los Angeles 3 Calif Leach Relay Co 5915 Avalon Blvd Los Angeles 3 Calif Leach Relay Co 5915 Avalon Blvd Los Angeles 3 Calif Leetrohm Inc 5560 Northwest Hwy Chicago 30 III
Lee Radio-TV 1001 E Elm Macomb III
Lee-Hi Electric Co 115 Colt St Irvington NJ
Leltch Eng'g Corp 326 Lincoln St Manchester NH
LEL Inc 380 Oak St Copiague NY
Leland Inc G H 123 Webster St Dayton 2 Ohio
Lenk Mrg Co 30-38 Cummington St Boston 15 Mass
Lenz Electric Mrg Co 1751 N Western Ave Chicago 47 III
Lerco Electronics Inc 501 S Varney St Burbank Calif
Lindgren & Assoe E A 4515 N Ravenswood Chicago III
Lindgren & Assoe E A 4515 N Ravenswood Chicago III
Link Avlation Inc Binghamton NY
Lipps E A 5485 W Washington Los Angeles 16 Calif
Littelfuse Inc 1865 Miner St Des Plaines III
Livingston Electronic Corp Livingston NJ
Loge Sound J M 2171 W Washington Los Angeles Calif
London Chemical Co 1535 N 31 St Melrose Park III
London Records Inc 539 W 25 St New York 1 NY
Lowell Mrg Co 3030 Laclede Station Rd St Louis 17 Mo
L-S Heating & Eng'g 900 W Lycoming St Phila 40 Pa
Lugate Assoe John P 351 5 Ave Pittsburgh 22 Pa
Lugante Assoe John P 351 5 Ave Pittsburgh 22 Pa
Lugenite Electronic Co 407 S Dearborn St Chicago 5 III
Lymmar Engrs 1432 N Carlisle St Philadelphia 21 Pa
Lyrichord Discs Inc 619 W 54 St New York 19 NY
Lytle Eng'g & Mrg Co 105 W Monroe St Chicago 3 III

McColpin-Christle 3410 W 67 St Los Angeles 43 Calif McCoy Electronics Co Mt Holly Springs Pa McGohan Inc Don 3700 W Roosevelt Rd Chleago 24 III McGraw-Hill Book Co 330 W 42 St New York 36 NY McGregor Electronic Industries McGregor lowa McIntosh Eng'g Labs 320 W Water St Binghamton NY McKee Door Co 85 Hankes Ave Aurora III MacMillan Co 60 S Ave New York 11 NY Masson Co 3260 Motor Ave Los Angeles 34 Calif Magnavox Co 2131 Bueter Rd Ft Wayne 4 Ind Magnayne Co 84 S Water St Port Chester NY Magnayne Hig 5546 Satsuma Ave N Hollywood Calif Magnavision Electronics Garwood NJ Magneord Inc 1101 S Kilbourn Ave Chlcago 24 III Major Electronics 42 Meserole St Brooklyn 6 NY Maleo Tool & Mfg Co 4025 W Lake St Chicago 24 III Malin Enterprises 3733 E Olymple Los Angeles Calif Mallory & Co P R 3029 E Wash Indianapolis Ind Manco Mfg Washington & Locust Bradley III Mancor Co 5831 S Green St Chicago 8 III Manfredi Wood Products 226 NY Ave Huntington NY Marantz Co 44-15 Vernon Blvd Long Island City 1 NY Maranton Battery Co 840 Herrietta St Wausau Wise Marine Electrical Instrument Co Manchester NH Marjo Technical Prods 1150 E Henry St Linden NJ Markell Electrice Instrument Co Manchester NH Marjo Technical Prods 1150 E Henry St Linden NJ Markell Electrice Instrument Co Manchester NH Marjo Technical Prods 1150 E Henry St Linden NJ Markell Estertic Products 147 Seneca St Buffalo NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 11 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 11 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6 Ave New York 10 NY Markell Associates Jeff 764 6

Marko TV Supplies 441 Summit St Toteou 4 onlow
Arma Electronic Div Fidelity Amplifier 703 W Willow
Chicago III
Martin & Co H S 1916 Greenleaf Ave Evanston III
Martindale Electric Box 617 Edgewater Br Cleveland Ohio
Masco Mfg 1319 N Market St St Louis Mo
Master Appliances Inc 1600 Factory Ave Marion Ind
Master Electronics & TV Rt 1 Box 36 Libertyville III
Master Mobile Mounts 1306 Bond Los Angeles Calif
Mastra Co 2104 Superior Ave Cleveland 14 Ohio
Matchless Electric 1700 Washington Chicago 12 III
Mattison TV & Radio 10 W 181 New York 53 NY
Mesaurements Corp Boonton NJ
Mesaurements Corp Boonton NJ
Mechanical Steel Tubing 500 Barry St Bronx 59 NY
Meck Industries John Plymouth Ind
Medal Mfg Co 194 E Silver St Sharon Pa
Memco Aerial Ladder 1007 NW 36 Oklahoma City Okia
Mercury Marine Electric 2905 Jones San Francisco Calif
Mercury Record Corp 35 E Wacker Dr Chicago III
Merit Coil & Transformer 4427 N Clark Chicago III
Meritenna Mfg Co 120 W Thomas St Seattle 99 Wash

Nagel-Chase Mfg Co 2811 N Ashland Ave Chicago 13 III Nameplates Inc 425 E 101 St Brooklyn 36 NY Mat'l Aircraft Corp Electronics Div Burbank Calif Nat'l Capacitor Co 60 Washington St Quincy Mass Nat'l Carbon Co 30 E 42 St New York 17 NY Nat'l Co 61 Sherman St Malden 48 Mass Nat'l Electric Products 140 Stanwix St Pittsburgh 22 Pa Nat'l Tel-Tronics Corp 52 St Casimir Ave Yonkers NY Nat'l Tel-Tronics Corp 52 St Casimir Ave Yonkers NY Nat'l Union Electric Corp Orange NJ Neal Electronic Co 1307 Hunt Ave Huntsville Aia Network Mfg Corp 213 W 5 St Bayonne NJ Newastle Fabrics Corp 153 W 23 St New York 11 NY Newcastle Fabrics Corp 153 W 23 St New York 11 NY Newcastle Fabrics Corp 153 W 23 St New York 11 NY Newcastle Fabrics Corp 153 W 23 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 33 St New York 11 NY Newcastle Fabrics Corp 153 W 35 Main St Lisbon NH

### LOCALIZER SYMBOLS

The following symbols after the name of each city indicate the type of representative in a particular area.

DS	Distributor Sales
	Industrial Sales
IDS	Indus & Distr Sales
D	Distributor
	Branch Office
	Government Sales
	Representative
SE	Sales Engineer

New London Instrument 82 Union New London Conn New York Coil Co 40 2 Ave Phoenixville Pa Nicholas Equip Co Bellevue Ohio Nichols Products Co 325 W Main St Moorestown NJ Nichols Wire 1725 Rockligham Rd Davenport Iowa Nikoh Tube Co 5000 S Whipple St Chicago 32 III Non-Linear Systems Del Mar Airport Dei Mar Calif Norco Mfg Co 392 Bleecker St New York 14 NY North American Philips Co 100 E 42 St New York NY North Hills Electric Co 203-18 35 Ave Bayside 61 NY Northern Products Co 2210 N Clark St Chicago 14 III Nwelconic Co of America 196 Degraw St Brooklyn 31 NY Nylok Corp 14 & Grand Central Elmira Hts NY Nyt Electronics Inc 2979 N Ontario St Burbank Calif

Oak Electronies Co 150 Oak St Buffalo NY
O'Brien Electric 6514 Santa Monica Hollywood Calif
Oelrich Publications 4308 Milwaukee Ave Chicago 41 III
Ohmite Mfg Co 3601 Howard St Skokle III
Olin Industries 655 Madison Ave New York NY
Olin Mathieson Chemical Electrical Div New Haven Conn
Olympic Instrument Labs Cove Wash
Olympic Radio-TV 34-01 38 Ave Long Island City NY
Onan & Sons D W 2525 University SE Minneapolis
Optron Mfg Co 3223 N Sheffield Ave Chicago 13 III
Orradio Industries 120 Marryn Rd Opelika Ala
Ortho Filter Corp 196 Albion Ave Paterson 2 NJ
Oryx Sales Co 9015 Wilshire Blvd Beverly Hills Calif
Overhead Door Corp Hartford City Ind
Oxford Electric Corp 556 W Mourge St Chicago 6 III

Pacific Electricord 3217 Exposition PI Los Angeles Calif Pacific Mercury 8345 Havenhurst Supulveda Calif Pacific Mercury 8345 Havenhurst Mercury 8345

Proto Tools 2209 S Santa Fe Los Angeles 54 Calif Pyramid Electric Co 1445 Hudson Blvd North Bergen NJ Telephone UNion 5-1776 VP-Gen Sls Mgr—Arnold R Andrews

Vr-Gen Sis Mgr—Arnold & Andrews
Sis Mgr—Jobber Div-Jock K Poff
Brand Names—Cartrij-Dry; Glosseal; IMP; Metl can;
Twist-Mount; Tynee-Dry; Kool-Sel
Calif—Jack Berman Co 1141 So LaCienega Blvd
Los Angeles 35 Calif Phone—Bradshow 2-9138
Territory: Ariz-S Calif-Clark Co-Nev [Ind & Jobber] Jobber)

Calif—E L Berman Co 758 Natama St San Fran-cisco 3 Calif Phone—Underhill 3-0317 Territary; N Calif-Nev except Clark Caunty (Ind & Jobber)

cisco 3 Calif Phone—Underhill 3-0317 Territarys
N Colif-Nev except Clark Caunty (Ind &
Jobber)
Colo—McLoud & Raymond Ca 5528 E Calfax Ave
Denver Cala Phone-Freemant 7-3067 Territarys
Cala-N M-Utah-Wyo-El Paso Texas (Ind & Jobber)
W Montana & S Idaha (Jabber Only)
Ga—Frank C Nickerson & Ca 1150 Zonalite Rd
NE Atlanta Ga Phone—Emerson 8908 Territarys
Flo-Ga-S Carolino (Ind & Jobber) North Carolina (Jobber only)
III—Earl Chompion 6459 N Sheridan Road Chicago
26 Illinois Phone—Amherst 2-3565 Territory: E
Wisc-N III (Jobbers only)
III—John G Twist & Co 2800 No Milwaukee Ave
Chicago 18 III Phone—Humboldt 9-2550 Territory: E Wisc-R Nill (Ind only)
Ind—Kenneth G Reinhardt R R 10 Box 319L Indianapolis Ind Phone—Blackstone 6341 Territory: Ind & Ky (Jobber only)
Ind—William Meily 4017 So Garrison Ft Wayne
Ind Phone—Kemmore 2461 Territory: Ind &
Ky & Berrien City-Mich (Ind only)
Mo—William G Kelly 9106 Central Kansas City 1
Mo Territory: Iawa & Neb (Ind & Jobber)
Moss—Mosher & Peyser Co Inc 1116 Great Plain
Ave Needham Mass Phone—Needham 3-3773
Territory: New England (Ind & Jobber)
Mich—Tri-Onic Sales Ca Inc 13331 Livernois Detroit 38 Mich Territory; Michigan Except Berrien City for Ind (Ind & Jobber)
Minn—Don V Hamilton & Ca 6516 Normandale
Road Minneapolis 10 Minn Phone—West 98286 Territary Minn-N D-S D-W Wisc (Ind &
Jobber)
Mo—Theodare & Lowell P O Box 21 Narmondy
Micharys 7802

8286 Territary: Minn-N D-S D-W Wisc Lina a Jabber)

0—Theodare B Lowell P O Box 21 Narmandy Branch St Louis 21 Ma Phone—Mulberry 7803 Territary: S III-Kan-Mo [Ind & Jabber]

J—Art Cerf & Ca 744 Braad St Newark 2 New Jersey Phone—Milchell 2-6734 Territory: D C-Del-Md-N J-N Y-E Po-Va (Jabber anly)

J—Electronic Soles Assoc Inc 107 Broodway E Paterson N J Territory: N New Jersey (Ind only)

only)

N Y—William A Franklin 3 Holly Road North Syracuse New York Phone—Syr 543383 Territory:
New York State (except Met Area-Ind only)

N Y—Fred Spellman 200 Plandome Rd Manhasset
LI NY (Industrial only) covering Metropolitan
NY

LT NY (Industrial only) covering Metropolitan NY
Ohio—Mike Roth Sales Co 13947 Cedar Road Cleveland 18 Ohio Phone—Vellowshone 2-4262 Territory: Ohio-W Pa-W Va (Ind & Jobber)
Po—Howard Fairbanks 1615 Darby, Raad Havertown Pa Phone—Granite 2-2467 Territory: E Pa-S N J (Ind anly)
Md—R B Barnhill & Assoc 412 Woodbine Ave Towson 4 Md Phone—Valley 5-3431 Territory: Md—Del-D C-Va-N Carolina (Ind anly)
Tenn—Al Engelman Co 3205 Crump Ave Memphis Tenn Phone—48-6263 Territory: Ala-Miss-Tenn (Ind & Jobber)
Texas—J Earl Smith 505 Na Ervay St Dallas 1 Texas Phone—Randolph 2966 Territory: Ark-La-Okla-Texas except El Pasa (Ind & Jobber)
Wash—Fred H Haight Co 3212 Eastlake Ave Seattle 2 Washington Phane—East 1818 Territory: Oregan-Idaho-Montana-Br Col-Washington (Ind anly)

only Wash—Frank Wedel Co 3215 Western Ave Seattle

1 Washington Territory: Br Cal-WashingtonOregon-N Idoho-E Montana-Alaska (Jabber

Pyramid Instrument Corp 630 Merrick Rd Lynbrook NY

Q-Line Mfg Corp 1562 61 St Brooklyn 19 NY Quaker Industries 2140 W 60 St Kenosha Wise Quam-Nichols Co 234 E Marquette Rd Chicago 37 III Quietrole Co 395 St John St Spartanburg SC Quincy Speaker Mfg Corp 221 Oak St Quincy III

Racon Electric Co 1261 Broadway New York 1 NY
Rada-Phone Corp 609 W Fulton St Chicago 10 III
Radiart Corp 3455 Vega Ave Cleveland 13 Ohio
Radio City Products Co Centre & Glendale Sts Easton Pa
Radio Condenser Co Davis & Copewood Sts Camden NJ
Radio Corp of America Camden NJ
Radio Corp of America Camden NJ
Radio Corp of America RCA Tube Div Harrison NJ

Radio Corp of America RCA Tube DIv Harrison NJ
D Y Smith—Vice President and General Manager
L F Holleran—General Marketing Manager
L F Holleran—Sales Manager (Acting)
D M Branigan—Manager Distributor Sales
Distributor Sales Regional Sales Offices:
Northeastern District—RCA Room 2301 200 Berkeley
St Boston Mass HUbbard 2-1700
Eastern District—RCA 36 W 49th St New York NY
JUdson 6-3800
Southeastern District—RCA 522-33 Forsyth Bldg
Farsyth and Luckie Sts NW Atlanta Ga LAmar
7703
East Central District—RCA 1600 Keith Bldg 1621
Euclid Ave Cleveland Ohia CHerry 1-3450
Central District—RCA Merchandise Mart Room 1186
Chicago Illinois DElaware 7-0700

West Central District—RCA 340 Dierks Bldg 1006
Grand Ave Kansas Gity Mo HArrison 6480
Southwestern District—RCA 1907-11 McKinney Ave
Dollas Texas Riverside 1371
Western District—RCA 1560 N Vine St Hollywood
Colid Hollywood 9-2154
Radlo Carltsmen 4400 N Ravenswood Ave Chicago 40 III
Radlo Devel & Research 26 Cornelison Jersey City 4 NJ
Radlo Eng'g Labs 36-40 37 St Long Island City 1 NY
Radlo Eng'g Labs 36-40 37 St Long Island City 1 NY
Radlo Music Corp 84 S Water St Port Chester NY
Radlo Music Corp 84 S Water St Port Chester NY
Radlo Music Corp 84 S Water St Port Chester NY
Radlo Supply & Eng'g Co 85 Selden St Detroit 1 Mich
Radlo Supply & Eng'g Co 85 Selden St Detroit 1 Mich
Radlo Kupply & Eng'g Co 85 Selden St Detroit 1 Mich
Radlo Kupply & Eng'g Co 85 Selden St Detroit 1 Mich
Radlo Kupply & Eng'g Co 85 Selden St Detroit 1 Mich
Ramsey Radlo & TV Co 925 St Louis Ave Vandalia III
Rangertone Inc 73 Winthrop St Newark 4 NJ
Rapid Electric Co 2881 Middletown Rd Bronx 61 NY
Rare Earths Inc Box 488 Pompton Plains NJ
Rason Mfg Co 3050 W 21 St Brooklyn 24 NY
Rauland-Borg Corp 3515 W Addison St Chicago III
Rauland Corp 4245 N Knox Ave Chicago III
Raylenom Mfg TV-Radlo 5921 W Dickers Chicago
III
Raytheon Mfg TV-Radlo 5921 W Dickers Chicago
III
Raytheon Mfg Co 55 Chapel St Newton 58 Mass (Recelving and Cathode Ray Tube Operations)
Albuquerque-R—Ronald G Bowen Co C T Carlberg
210 Cogyua Drive NE PO Box 3177 Station D
Phone 5-4603
Allonta-R—F C Nickerson Co 1150 Zanolite Rd
Emerson 8908 Covers N & S Cor-Go-E Fla
Birminghom-R—G O Jesse 919 Polmetto Street
TRemont 1-5316 Covers Tenn-Ala-Miss-NW-Fla
Boston-R—Arthur E Akeroyd John Hancock Bldg
Rm 2313 HAncock 6-2433 Covers Me-NH-V1Conn-Mass-RI
Buffalo-R—Art Cerf & Ca L J McTaggart 116 Eisemgan Ave Kennewere 17 NY-8uffalo Riverside 1009

Rm 2311 HAncock 6-2433 Covers Me-NH-V1-Conn-Mass-RI
Buffalo-R—Art Cerf & Ca L J McTaggart 116 Eiseman Ave Kenmore 17 NY-Buffalo Riverside 1009
Covers Western NY State
Chicaga-R—E Ralph Haines 949 Lake St Ook Park
111 EUclid 6-4476 Cavers E Wis-III
Cleveland-R—Neal Bear Corp 3435 Streetsbara
Road West Richfield Ohio OLiver 9-3331 Covers
Ohio W Pa-W Va
Dallas-R—Campian Sales Ca 9002 Chancetor Raw
Fleetwaad 7-4095 Cavers Texas-Lauisiana
Daytan-R—Neal Bear Carp R E Whelan 136 W
Second Street

Second Street
Denver-R—Ronald G Bowen Co 446 Braadway
SHermon 4-2501 Cavers E Mont-Wyo-Utah-ColaN Mex

N Mex
Des Maines-R—Kay Sales Co Ralph Sharp 3807
Adoms St DEs Maines 5-4584
Detroit-R—K C Purcaw Suite 207 22128 Grand
River Ave KEnwood 3-7700 Covers Michigan

TECHNICIAN BUYERS DIRECTORY

Kons City-R—Kay Soles Co 2600 Grand Ave BAltimore 3800 Covers Neb-lawa-Mo-Kan-Ark-Okla Los Angeles-R—J J Perlmuth 2419 S Grand Ave Richmand 7-4321 Covers S Cal-Ariz-Howaii Louisville -R—Cabb Soles Ca 1629 Portland Ave Clay 9406 Cavers Ind-Ky Miami-R—F C Nickerson Ca W B Brown 723 NE 112th St Biscayne Park Plaza 7-4452 Minneapolis-R—Fred B Hill Co 6110 Excelsiar Blvd WEst 9-6727 Covers N & S Dak-Minn-W Wis Philadelphia-R—L D Lowery Inc 50 E Wynnewood Rd Wynnewood Pa Midway 2-9100 9101 9102 Covers E Pa-NJ-Md-Dist Cal-Del-Va Partland-R—Don H Burcham Ca 510 NW 19th Ave CApitol 7-3830 Cavers Wash-Ore-Idaho-W Mont-Alaska-Br Calumbia St Louis-R—Kay Sales Ca E H Murty 3505 Ridgedale Ave

Research Inventions 617 F St NW Washington 1 DC
Resistance Products Co 914 S 13 St Harrisburg Pa
Resistance Products Co 914 S 13 St Harrisburg Pa
Resistance Inc 5226 W 26 St Chicago 50 III
Revere Corp 697 N Lake Ave Pasadena 6 Calif
Revere Camera Co 320 E 21 St Chicago III
Revere Corp of America Wallingford Conn
Rhodes & Sons M M 12 Porter St Taunton Mass
Richardson-Allen Corp 116-15 15 Ave College Point NY
Richard-Wilcox Mig Co Aurora III
Rider Publisher John F 480 Canal New York 13 NY
Rinchart & Co 232 Madison Ave New York 16 NY
Ripley Co Middletown Conn
Ristauerat Inc 1216 E Wise Ave Appleton Wise
Rite-Litte Mig Co 3243 W Lawrence Ave Chicago 25 III
River Edge Sale 80 Shore Rd Port Washington NY
R J Audlo Products 80 Shore Rd Port Washington NY
R J Audlo Products 80 Shore Rd Port Washington NY
R J Audlo Products 80 Shore Rd Port Washington NY
R J Mudlo Products 80 Shore Rd Port Washington NY
R J Mudlo Products 80 Shore Rd Port Washington NY
R J Mudlo Products 80 Shore Rd Port Washington NY
R K Mig Co 70 Box 112 Marion III
Roanwell Corp 662 Pacific St Brooklyn NY
Robertson & Roth Box 534 Elmhurst III
Robins Industries Corp 214-26 41 Ave Bayside 61 NY
Rochester Iron & Medal 335 St Paul St Rochester NY
Rochester Iron & Medal 335 St Paul St Rochester NY
Rochester Iron & Medal 335 St Paul St Rochester NY
Rochester Iron & Medal 335 St Paul St Rochester NY
Rochester Iron & Medal 335 St Pown North 16 NY
Rogal Tube Bending 3543 S Normal Blud Chicago III
Rogans Bros 8031 N Monticello Ave Skokle III
Rogans Prostics Inc 1311 E Maln St St Charles III
Roland Radio 716 S Columbus Ave Mt Vernon NY
Romar Plastics Inc 1311 E Maln St St Charles III
Romete Accoustical 135 Front St New York NY
Ross Mig Co 5031 Broadway Chicago 40 III
Rowe Industries 1702 Wayne St Toledo 9 Ohio
Royal Diamond Tool Co 172 Green St Boston 3 Mass
Royal Electric Co 95 Grand Ave PawTucket RI
Runzel Cord & Wire 4727 Mont

Russell Spraker Co 6158 S Kedzie Ave Chicago 41 III Russell Spraker Co 6158 S Kedzie Ave Chicago 111 Ryan Industries 10910 S Vermont Ave Los Angeles Calif S K A Electronics 1025 Nevada St Toledo 5 Onio Safety Nail Drive Corp Clifton NJ Sams 4 Co Howard W 2201 E 46 St Indianapolis 5 Ind Sangamo Electric Co Marlon III Sargent-Rayment 1401 Middle Harbor Rd Oakland Calif Saxonburg Ceramies Saxonburg Pa Saxtom Products Inc 2101 Grand Concourse Bronx 53 NY Scala Radio Co 2814 19 St Sam Francisco Calif Schauer Mfg Co 45 Alpine St Cincinnati 36 Onio Schupack Supply 7331 Cottage Grove Ave Chicago 19 III Scientifie Book Publ Vincennes Ind Scientifie Coil Co 5619 Broadway Chicago 40 III Scientifie Coil Co 5619 Broadway Chicago 41 III Seco Broadway Chicago 40 III Scientifie Coil Co 5619 Broadway Chicago III Seco Regore Coil Droma 42 Shinneagolis 19 Minn Seeburg Corp J P 1510 N Dayton Chicago III Seco Regore Corp J P 1510 N Dayton Chicago III Seco Regords 39 W 60 St New York NY Self-Lifting Plano Track Co Findlay Ohlo Sel-Soa Electronic Tube Corp Darby Pa Sentinal Radio Corp 2100 Dempster St Evanston III Sequola Process Corp 871 Willow St Redwood City Calif Service Instruments Co 171 Official Rd Addison III Service Parts Sys 13380 E 9 Mile Rd E Detroit Mich Service Welding Co Cedar Grove Wise Sessions Clock Co 61 E Main St Forestville Conn Setchell-Carlson 330 5 Ave N New Brighton Minn Shallacos Mfg Co 520 Pusy Ave Collingdale Pa Shallite Inc 10 Mill St Paterson 1 NJ Shata Div Beckman Instruments Inc Richmond Calf Shart Products 86-11 Sancho St New Hyde Park NY Shrader Sound Inc 2803 B St NW Washington 7 OC Shura-Tone Products Inc 440 Adelphi St Brooklyn NY Shrader Sound Inc 2803 W Kinc Mgg St Peckville Pa Shylina Mfg Tool Co 3135 W Grand Ave Chicago 22 III Sittler Corp 18 N Ada St Chicago 7 III Smith Heat Treating 5869 Wilmington Los

Stancil-Hoffman 921 N Highland Ave Hollywood 38 Calif Standard Coil Prods 2085 N Hawthorne Meirose Park III Standard Electrical Products 2240 E 3 St Dayton 3 Ohlo Standard TV Tube 706 Dryades St New Orleans 12 La Standard Winding Co 44 Johnes St Newburgh NY Standard Winding Co 44 Johnes St Newburgh NY Standard Wood Products 47 W 63 St New York 23 NY Stanley Works How Div 195 Lake St New Britain Conn Stanwyck Winding Co 137 Walsh Ave Newburgh NY Star Expansion Products 142 Liberty St New York 6 NY Star Expansion Products 142 Liberty St New York 6 NY Star Expansion Products 142 Liberty St New York 6 NY Star Expansion Products 142 Liberty St New York NY Stark Mfg P0 Box 489 Tuscaloosa Ala Star Record Co 243 W 72 St New York NY States Co 19 New Park Ave Hartford 6 Conn Steelman Piono & Radio 230 Anderson Mt Vernon NY Stephens Mfg Co 7201 Wentworth Ave Cleveland Ohlo Stevens Products 86 Main St E Grange NJ Stevens Walden Inc 467 Shrewsbury St Worcester Mass Stone Machine & Tool Co Bedford Ind Stratford TV 2555 W 21 St Chicago 8 Ili Streamline Wood Prods 4849 N Cleero Chicago III Stromberg-Carlson Co 100 Carlson Rd Rochester NY Strubhers-Dunn Lamb's Rd Pitman NJ Summit Eng'g co 3324 Main St Hartford Conn Super Ear Products Co 675 Mercick Rd Lynbrook NY Superior Instituted Wire W Haverstraw NY Superior Instituted Co 424 W Short St Lexington Ky Switcheraft Ine 1328 N Halsted St Chicago 22 III Sylvania Electric Products 1740 Bdwy New York 19 NY Telephone JUdson 6-2424 Soles Monoger—H H Rainer

Telephone JUdson 6-2424
Sales Manager—H H Rainner
Special Sales Rep—W J Hopkins
Eostern Region—Sylvania 1740 Broadway New York
19 New York JU 6-2424 G C Isham Regional Eostern Region—Sylvanio 1740 Broadway New York
19 New York JU 6-2424 G C Isham Regional
Manager
Metropolitan District—Sylvania 1000 Huyler St Teterboro NJ Hasbrouck Heights 8-9484 J J Mc.
Carthy District Manager
Mid-Atlantic District—Sylvania 4700 Parkside Avenue Philadelphia Pa GReenwood 7-5000 R C
Hoffman District Manager
Mid-Eastern District—Sylvania 300 Mt Lebanon
Blvd Pittsburgh 34 Pa LEhigh 1-4975 J 8
Pomeroy District Manager
Ortheastern District—Sylvania 100 Sylvan Road
Woburn Moss Woburn 2-3500 S J McDonald
District Manager
Southeostern District—Sylvania 660 Murphy Ave S
W Atlanta Georgia Amherst 1673 W T Buschmann District Manager
Midwest Region—Sylvania 2001 N Cornell Ave Melrose Park III Estebrook 9-2525 E B McEvoy
Regional Manager
East Central District—Sylvania 4848 West 130th St
Cleveland Ohio Clearwater 2-0500 J P Voil
District Manager
Central District—Sylvania 2001 N Cornell Ave Melrose Park III Estebrook 9:3535 R L McNelis
District Manager
Central District—Sylvania 100 Fordyce Street
Dallas Texas Riverside 4836 J A Still District
Manager
Western District—Sylvania 450 Funston Road Kansas

Manager
Western District—Sylvania 450 Funston Road Kansas
City Kansas Drexel 3773 E J Haase District

City Kansas Drexel 3773 E J Haase District
Manager
Pacific Coast Region—Sylvania 215 Market St Rm
1200 S Francisco Cal GArfield 1-1846 W G
Patterson Regional Manager
Northwestern District—Sylvania 3466 Eost Marginal
Way Seattle Wash Main 6888 R P Guion District Manager
Northern California District—Sylvania 6450 Hollis
St Emeryville Calif Olympic 3-0457 W L Wroy
District Manager
Southern California District—Sylvania 2936 East
4614 St Los Angeles Calif Logan 5-8121 E A
Larson District Manager
Symphonic Radio 160 Washington St N Boston 8 Mass

Tables Inc 5105 W Lawrence Ave Chicago III
Talley Electronic Devel 800 Schmidt Bidg Cinclinnatl 0
Talk-A-Phone Co 1512 S Pulaski Rd Chicago 23 III
Tampa Video Service 6105 Interbay Bivd Tampa 9 Fla
Tannoy (America) Ltd 38 Pearl St New York 4 NY
Tape Recorders Inc 1501 W Congress St Chicago 7 III
Tarzian Inc Sarkes 415 N College Ave Bloomington Ind
Tatu Inc Albert J 85 Columbia Dr Williamsville 21 NY
Talkmaster Inc 534 Laurel St San Carlos Calif
Taylored Corp 3 Rutter St Rochester 6 NY
Taylored Corp 3 Sutter St Rochester 6 NY
Taylor Mfg Co 302 S Union St Lima Ohlo
Taylor Tubes Inc 2313 Wabansia Ave Chicago 47 III
Tech-Master Corp 75 Front St Brooklyn 1 NY
Technicraft Co 1156 Commonwealth Ave Boston 34 Mass
Tech-Ohm Resistor 36-11 33 St Long Island City NY
Technical Appliance Corp 1 Taco Ave Sherburne NY
Phone—Sherburne 7-2211
President—H H Brown

Phone—Sherburne 7-2211
President—H H Brown
Vice Pres Soles—Tore Lundahl
Vice Pres Commercial Div—Kendrick Lippitt
Sales Pro Mgr—Fred R Voorhaar
Chief Engineer—Robert T. Leitner
Credit Mgr—William H Resch
Purchasing Agent—Harold Senkel
Buffalo—Leonard D Allen Inc 109 Easton Ave Humboldt 6551

Casselberry (Fla)—John C Wagner Atcheson & Adams Box 105 Fern Park Post Office Winter Park 27-2562

Park 27-2562 Chicago—A H Bruning Co 2215 Wilson Ave EDge-water 4-0989, 4-0990, 4-0991 Cincinnati—John O Olsen Co 6225 Joyce Lane JEf-ferson 1-3998

Cleveland—John O Olsen Co 16201 Shaker Blvd
WYoming 1-2624
Dallos—John B Guenther 4533 No Central Expressway JUstin 6286
Detrait—R C Merchant & Ca Inc 4829 Waadward
Ave TEmple 1-1677
Denver—Koether-Cox Ca 120 W 13th Ave MA 3-3544
Greensboro—Atcheson & Adams Suite 315 601 North
Elm St Bldg Phone 2-6838
Kansas City—W E Fry & Co 406 North 34th St
JEfferson 1-5236
Os Angeles—Lee H Owens Co 2331 W Washington
Blvd REpublic 5-0203
Minneapolis—The Heimann Co 1711 Hawthorne Ave
FEderal 2-5457
Nashville—E E Scott Atcheson & Adoms PO Box 157
DOnelson 6-2429

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DOnelson 6-2429
Needham (Moss)—Stonley A Harris Ca 317 Chestnut
St. Phone 3-4780
New York—Cliff Landis Sales Co 81-11 Roosevelt
Ave Illinols 8-7900
Philadelphia—Somuel K Macdonald Inc 1531 Spruce
St Kingsley 5-1205
Pittsburgh—John O Olsen Co 3552 Wallace Drive
TUxedo 4-0472
San Corlos (Col)—David H Ross Co 534 El Camino
Real Lytell 3-8224
Seattle—James J Backer Co 221 West Goler St
Alder 6470
Alder 6470
St Louis—W E Fry & Co 4378 Lindell Blvd Jefferson
5-1434

Syracuse—Leonard D Allen Inc 2401 South State

Seattle—James J Backer Co 221 West Goler St
Alder 6470
St Louis—W E Fry & Co 4378 Lindell Blvd Jefferson
5-1434
Syracuse—Leonard D Allen Inc 2401 South Stote
St Phone 4-4195
Toronto—Hockbusch Electronics Ltd 23 Primrose Ave
Melrose 2453
Washington—Samuel K Macdonald Inc 217 Riggs
Bank Bldg 3308-14th St NVV Columbia 5-3938
Technical Tape Corp 177 St & Harlem River Bronx NY
Techniques Inc 178 Central Ave Hackensack NJ
Tektronix Inc PB 80x 831 Portland 7 Ore
Tel-A-Ray Enterprises 335 Clay St Henderson Ry
Telenbeam Industries 6 & Soscol Ave Napa Calif
Telectrone Inc 88 Merrick Rd AmRyville L1 NY
Tele-Clear Corp 185 N Wabash Ave Chicago 60 III
Telecens Inc 183 Nerrick Rd AmRyville L1 NY
Tele-Clear Corp 185 N Wabash Ave Chicago 60 III
Telecens Inc 1019 Admiral Blvd Kansas City 8 Mo
Telectro Industries 35-16 37 St Long Island City NY
Tele-Diagnosis Co 155 W 72 St New York 32 NY
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Tele-Ray Tube Co 984 Sawmill River Rd Yonkers NY
Telesine Antenna Corp 3421 Terry Rd Jackson 3 Miss
Teletenan Co 1033 Indiana Ave La Porte Ind
Tele-Test Instrument 92-24 Queens Blvd Rego Park NY
Telesine Antenna Corp 3421 Terry Rd Jackson 3 Miss
Teletevas Co 46 Lakeview Ave Yonkers NY
Televis Corp 1415 Golf Rd Des Plaines III
Tele-Vue Towers 701 49 St St St Febersburg 7 Fla
Telex Inc 1633 Eustis St St Paul Minn
Tel-Instrument Electronies 728 Garden St Carlstadt NJ
Televis Corp 1415 Golf Rd Des Plaines
III Tele-Vue Towers 701 A9 St St Petersburg 7 Fla
Telex Inc 1633 Eustis St St Paul Minn
Tel-Instrument Bectronies 728 Garden
Tel-Telex Labs Hww 35 Asbury Park NJ
Televis Corp 140 Golf Rd Des Plaines
III Tempa Record 8540 Swnset Blvd Hollywood Calif
Tennalab 417 S 10 St Quincy III
Tenna Mig Co 7580 Garfelle Blde Gleveland 25 Ohlo
Tensitron Inc 28 Depot Rd Harvard Mass
Tensilte Insulated Wire Co Tarrytown NY
Televis Corp 160 Carlsew One Cleveland 10
Tennal Roy 170 Carlsew One Carlse St Carlst NJ
Televis Corp 60 St May St New York 17 NY
Tertano Corp 60 St May St New York 17 NY
Tertano Corp 60 St Ray St New

Triumph Mfg Co 1829 S 55 St Chicago 50 III Triwec Transformer 3261 N Milwaukee Ave Chicago III Trojan Electronics 3706 N Halsted St Chicago 13 ili Truckaradio Nati Sales 228 E Park Ave Wheaton Ili

Tru-Ohm Products DIv Model Eng & Mfg Co 2800 N Milwaukee Ave Chicago 18 III

Tru-Pine Co 7638 S Vinvennes Ave Chicago 20 III Trutone Electronics 812 N Highland Ave Hollywood Calif Truvox Mfg Co 575 3 Ave New York 16 NY Tube Service Corp 2 Gaston Ave Garheld NJ Tung-Soi Electric Inc 95 8 Ave Newark 4 NJ

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Eastern Div—95 8th Ave Newark a NJ W-R Onisen Mgr

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Calumbus—755 W Goodale Blvd J N Hoover Mgr
Culver City—8575 Washington Blvd Charles Silvey Mgr
Dallos—The Branum Co 1518 Slocum St Mose

Branum
Denvar—The James H Blinn Co 1140 Speer Blvd
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Seattle—Ron Merritt Co 120 W Thomas St Ron Mer-

Seattle—Ron Merritt Co 120 W Thomas St Ron Merritt Co 120 W Thomas St Ron Merritt Co 120 W Thomas St Ron Merritt Ross Works 821 Park St Sycamore III Turner Co 909 17 St NE Cedar Raplds lowa TV Accessorles Co Box 368 Scottsdale Ariz TV Development 2024 McDonald Ave Brooklyn 23 NY TV Enginers 3325 Bryn Mawr Ave Chlcago 45 III TV Equipment Mfg Co 17 & Sherman Sts Wausau Wisc TV Hdw Mfg Co 919 Taylor Ave Rockford III TV Products 145-68 228 St Springfield Gardens 18 NY TV Remote Control 820 N Fairfax Ave Los Angeles Calif TV Tuner Co 40-09 82 St Jackson Heights NY TV Wire Products Co 119 Prospect Ave Burbank Calif

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Ultra HI-FI Co 709 Sip St Union City NJ
Ultra-HI TV Mfg Co 69 Hammond St Worcester Mass
U M & F Mfg 10929 Vanowen St N Hollywood Calif
Union Plastics Corp Wire & Cable Div Secaucus NJ
Unique Ventilation Co 615 Tiffany St Bronx 59 NY
United Audio Prods 202 E 19 New York NY
United Catalog Publ 106 Lafayette New York 13 NY
United Condenser Corp 3400 Park Ave New York 56 NY
United Electric Controls 85 School Watertown Mass
United Electronic Mfg Corp 542 39 St Union City NJ
United Mfg Div W L Maxson 41 Haig St Hamden Conn
United Screw & Bolt 2513 W Cullerton St Chicapo 8 III
United Technical Labs Morristown NJ
United Transformer Co 150 Varick St New York 13
United Transformer Co 150 Varick St New York 13
Universal Circuit Controls 3610 Oakton St Skokle III
Universal Microphone 424 Warren Lane Inglewood Calif
Universal Products 4100 Taylor Ave Racine Wisc
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Valor Electronic 5808 Marilyn Culver City Calif
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Van Nostrand Co D 120 Alexander St Princeton NJ
Varflex Corp 512 W Court St Rome NY
Varloon Corp 65 Hope St Brooklyn 11 NY
Vector Electronic 3352 San Fernando Los Angeles Calif
Vemaline Products Co PD Box 222 Hawthorne NJ
Victor Insulators Inc Maple Ave Victor NY
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Video Accessory Mfg Co Box 223 Tulsa 1 Okta
Video Corp of America 229 W 28 St New York 1 NY
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Video Electronic Lab 304 Rodgers Des Molnes Iowa
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Vineta Mfg 2738 N Sheffield Chicago III
Viselite Co 423 Broome St New York NY
V-M Corp 280 Park St Benton Harbor Mich
Vocar Corp 7300 Huron River Dr Dexter Mich
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Vulcan Electric Co 88 Holten St Danvers Mass
Vulcan TV Mast & Tower 1224 National Birmingham Ala
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Walsco Electronics 3602 Crenshaw Los Angeles Calif
Ward Leonard Electric Co Mt Vernon NY
Ward Prods Div Gabriel 1148 Euclid Cleveland Ohlo
Monufacturers of antennas for
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Atlanto—Mailland K Smith Co 317 Forrest Ave WAlnut 6094 Covers Alabama; Florida; Georgia;
North Carolina; South Carolina
Boston—Anderson Sales Co 177 State St Capitol
7-2980 Covers Connecticut; Maine; Massachusetts; New Hampshire; Rhode Island; Vermont
Charlen-Ga-N C-S C
Chicago—William M Linz Co 7115 North Mobile
RO 3-3326 Cavers Illinois; East Wisconsin

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