Eliminate the Variables

Television Installation with the TRANSVISION FIELD STRENGTH METER

Do not depend on pictures-Use absolute measurements-Direct Meter Readings!



Improves Installations!! Saves 1/2 the Work!!

Has numerous features and advantages, including — (I) Measures actual picture signal strength . . (2) Permits actual picture signal strength . . (3) Permits actual picture signal measurements without the use of a complete television set . . (3) Antenna orientation can be done exactly . . (4) Measures losses or gain of various antenna and lead-in combinations . . (5) Useful for checking receiver re-radiation (local oscillator) . . (6) 12 CHANNEL SELECTOR . . (7) Amplitudes of interfering signals can be checked . . . (8) Weights only 5 lbs. . . . (9) Individually calibrated . . . (10) Housed in attractive metal carrying case . . . (11) Initial cost of this unit is covered after only 3 or 4 installations . . . (12) Operates on 110V . 60 Cycles, AC.

Model FSM-1, complete with tubes . . .

Model FSM-1, complete with tubes . . . Net



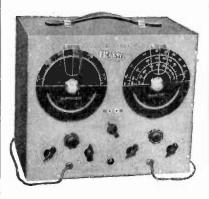
TRANSVISION "SERVICE **NOTES"**

The Key to Successful Television Servicing

Transvision's "Service Notes" is a compilation of confidential Television Notes and Information, the product of experience with over 20,000 television receivers, now made available to the public.
"Service Notes" is complete with photographs and diagrams. The information is worth a small fortune. The cost is low.

TRANSVISION TELEVISION and FM

SWEEP SIGNAL GENERATOR



Complete frequency coverage from 0-227 MC with no band switching. . . . Sweep width from 0-12 MC completely variable. . . Accurately calibrated built-in marker generator.

ADDITIONAL FEATURES: (1) Dial calibrated in frequency. . . . (2) Self-contained markers readable directly on the dial to .5% or better. (No external generator required to provide the marker signals.) . . (3) Crystal controlled output makes possible any crystal controlled frequency from 5-230 MC. . . . (4) Plenty of voltage output—permits stage-by-stage alignment. . . . (5) Output impedance 5-125 ohms. . . . (6) Directly calibrated markers 20-30 MC for trap, sound and video IF alignment. (7) RF for alignment of traps for IF channels when a DC volt meter is used as the indicating medium. . . . (8) Unmodulated RF signals to provide marker pips simultaneously with the main variable oscillator. . . . (9) Markers can be controlled as to output strength in the pip oscillator. . . . (10) Power supply completely shielded and filtered to prevent leakage. . . . (11) All active tubes are the new modern miniature type. (12) Phasing control incorporated in the generator.

TRANSVISION **ALL-CHANNEL TELEVISION BOOSTER**

CONTINUOUS TUNING



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

Model B-1

TRANSVISION Complete Line of TELEVISION COMPONENTS

Essential units for building a quality tele vision set . . . Transvision makes available a complete line of high quality parts competitively priced. Included in this line are Filter Chokes, all types of Transformers, Focus Coils, Deflection Yokes, Coils—and of course major units such as Picture Tubes, Antennas, Lenses, etc., etc.

WRITE FOR COMPONENTS FOLDER P-I

TRANSVISION'S NEW REMOTE CONTROL UNIT -- for use with ANY TELEVISION SET

OPERATES ANY TELEVISION SET from a DISTANCE up to 50 feet.

Now you can sit back in your easy chair, a comfortable distance away, and operate your TV set. This new Transvision REMOTE CONTROL UNIT turns ANY SET on, tunes in stations, controls contrast and brightness, turns set off. Especially ideal for commercial installations where the TV set is inaccessible.



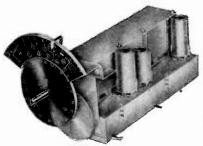
TUNER UNIT is a high gain, all-channel, CONTINUOUS TUNING UNIT (about 50 microvolt sensitivity).

All Prices on Application =

TV-FM TUNERS ANTENNAS



DE LUXE TV/FM INPUTUNER MODEL IT-1



Distributed nationally, exclusively by Transvision

The finest TV/FM Tuner on the market today!

Continuous Tuning on All Channels Covers all 12 channels, entire FM

range.

 Continuously tunes from 44 to 216 mc without a break. Requires no band switching for tuning from channel to channel.

· Complete with tubes and escutcheon.

Accessory kit available.

12-CHANNEL TV TUNERS CONTINUOUS TUNING

tube size.

Model TT-2 TV/FM Tuner.....Net

TRANSVISION 12 - Channel TV/FM TUNER, Model TF-13

Complete 12 channel TV/FM tuner. Covers all television stations and complete FM radio range from 88-108 MC. Has I stage of RF, three tubes (6BH6, 6AG5, 9002).

TRANSVISION TELEVISION PICTURE TUBES



108P4 Magnetic Deflection 10" picture tube. 121P4 Magnetic Deflection 12" picture tube. 15AP4 Magnetic Deflection 15" picture tube.

TRANSVISION PICTURE **ENLARGING LENSES**

Enlarge and Clarify the Pictures



15" Picture Enlarging Lens



10" Lens (52 sq. in. picture) 12" Lens (75 sq. in. picture) 15" Lens (125, sq. in. picture)

All lenses are provided with mounting brackets.

TRANSVISION All-Angle LENSES for ALL TV SETS



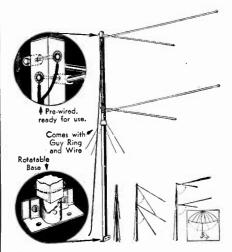
All-Angle Lens for 10" tubes (gives 150 sq. in. picture)...

TRANSVISION "SOLDETRON"



FEATHERWEIGHT SOLDERING IRON 3 Ounces—Does Job of 200 Wath Iron—Interchangeable Tips; No Cleaning or Filing; Easy to Use for Every Type of Filing; East Soldering.

''*Flip - Up''* TV ANTENNA



- PRE-ASSEMBLED, ready for use. "flip-up" (like an umbrella) and install.
- PRE-WIRED—just connect your lead-in to the two terminals.
- RECEIVES ALL CHANNELS.
- · ALL-DIRECTIONAL; can be oriented for the weakest station in an area with assurance that all other channels will be brought in equally well.
- · EXTREMELY SENSITIVE. Unusual high gain on upper channels. Ideal for fringe areas.

Completely assembled with rotatable base, 7-ff. mast, guy ring and guy wire.

Additional 7-ft. masts, to build antenna up to 19 ft., at small extra cost.

INDOOR TV **ANTENNA**

For Ideal Reception on All Channels - - All-directional Transvision's sensational new



Transvision's sensational new "Telebird" is the ideal indoor antenna. Excellent reception on all channels. Eliminates "ghosts". Install it in a jiffy; place it on window sill or anywhere in the room. Will out-perform many outdoor antennas. When not in use, just fold it up and put if away. antennas. V put it away.

VISION FILTER

For 7", 10" or 12" sets. For 10BL or 15" sets.

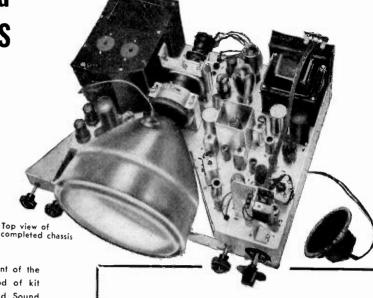
MAGIC EYE KIT

Magic eye kit—for 12/15" deluxe kits only. Includes eye, assembly, escutcheon, instruc-

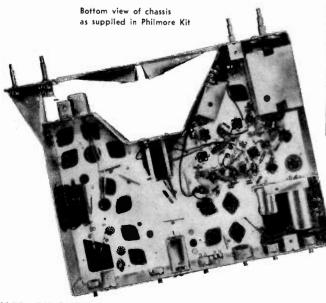
Philmore Pre-Aligned TELEVISION KIT

TUNER, VIDEO and SOUND CHANNELS are completely wired and PRE-ALIGNED by Philmore

All components are mounted by Philmore



Experience has canvinced us that pre-alignment of the vital channels is the only satisfactory method of kit assembly. That is why the Tuner, Video and Sound channels are completely wired and fully aligned in our labaratory. We also assemble to the chassis transformers, electrolytic candensers, tubes, high voltage shields, voltage divider shield, chokes. Sockets and other parts are riveted to the chassis which insures good contacts and eliminates any possibility of loose connections.



Similar to famous RCA 630TS and 830TS Circuits

Designed for 10" 12" 15" 16"
PICTURE TUBES

SIMPLIFIED STEP-BY-STEP INSTRUCTIONS 36 page manual of instructions on assembly and operation generously illustrated. Six full scale lithographed schematic and pictorial diagrams. All small parts packaged in individual envelopes, clearly numbered and identified on blueprints.

When balance of simple wiring is completed, no further alignments are necessary.

Features:

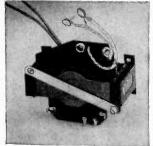
- New, WIDER-SCREEN television for BIGGER pictures on all size tubes.
- 30 RCA tubes (inc. rect. and video).
- New, improved daylight viewing.
- Increased voltage power pack.
- Long range reception.
- Complete ALL-channel tuning.
- PM Speaker with choke (better tone and volume—no hum).
- Special mounting bracket for 16" tube available.
- Ideal for custom-built installations.

(Philmore TV receivers also available completely wired and assembled.)

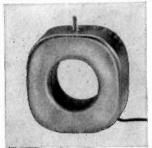
MFD. BY PHILMORE MANUFACTURING COMPANY, INC.

When ALIGNMENT is BUILT-IN trouble is built out

Philmore TV Replacement Parts



TII8 — Horizontal Deflection Output Transformer



T122 - Focus Coil



T121 - Deflection Yoke



Ti20 - 12 Channel Tuner

COILS AND TRANSFORMERS

Part No.	Description	List Price
T100-1st and 2	and Sound I.F. Tra with RCA type 201K Transformer, Interc 02K2 Transformer, Interc 02K3 Triminator Transform RCA type 203K1 (Sypeh) Discrimina	nsformers.
Interchangeable	with RCA type 201K	l 2.00 ea.
with RCA type 2	02K2	2.20 ea.
Ti02-2nd Pix I.F.	Transformer. Interc	hangeable
With KCA Type 2	UZK3	1.70 ea.
changeable with	RCA type 203KI	2.60 ea.
T104—Horizontal	(Synch.) Discrimina	tor Trans-
T105-3rd and 41	th Pix Coils. Interc	hangeable
with RCA type 2	02L1	50 ea.
RCA type 202K4	th Pix Coils. Interc 02L1 ap Coil. Interchang	eable with
T107-Video Peak	ing Coil, 180 MH.	Shunt Re-
sistance 39,000	ing Coil, 180 MH. Ohms. Interchange cing Coil, 250 MH. gohms. Interchange cing Coil, 120 MH. Ohms. Interchange	able with
TIME_Video Post	ing Cail 250 MH	35 ea.
sistance 10 Med	gohms. Interchange	able with
RCA type 203L2		30 ea.
TIO9—Video Peak	ing Coil, 120 MH.	Shunt Re-
RCA type 203L3	Omms. Interchange	.30 ea.
TIIO-Video Peal	king Coil, 93 MH.	Shunt Re-
RCA type 20314	king Coil, 93 MH. gohms. Interchange hokes, 8 MH. Interchange trol Coil. Interchang	able with
TIII—Filament C	hokes, .8 MH, Interd	hangeable
with RCA type 20	14L1	
RCA type 20181	trol Coil, Interchang	eable with
TII3—Horizontal	Linearity Control C	Coil. Inter-
changeable with	RCA type 201R3	75 ea.
TII4—Audio S	ingle Output T 6 Tubes ansformer, 295 N	ransformer
TIIS—Power Tr	ansformer 295 N	1.35 ed.
Shielded. Interch	angeable with RCA	type 20116
TILL Variant D	affaatiaa Oosaas Ti	26.50 ea.
Interchangeable	eflection Output Tr with RCA type 2047;	anstormer. 2 4.75 ea.
T117-Vertical C	Scillator Transform leable with RCA	er (Block-
ing). Interchang	eable with RCA	type 208T2 2.25 ea.
TII8—Horizontai	Deflection Output To	ransformer.
Interchangeable	Deflection Output To with RCA type 2117	Ti or 211T3
		9.00 ea.
Interchangeable	Yoke, 8.3 MH, Verti with RCA type 2011	Ol 7.50 ea.
T122—Focus Coi	l, 247 Ohms D.C. with RCA type 2021	Resistance.
Interchangeable	with RCA type 2020	01 6.00 e a.
Magnet), Interd	Beam Bender P.M hangeable with F	CA types
203D1 or 203D3		1.90 ea.

CERAMIC TUBULAR CONDENSERS TYPE GP

						٠.
Part No.		Desc	cription		List F	rice
C137-10	Mmfd.	%01	Tolerance	e	20	ea.
C197-51	Mmfd.	10%	Tolerance	9	20	ea.
C181-56	Mmfd.	10%	Tolerance	9		ea.
C16682	Mmfd.	10%	Tolerance	9	20	ea.
C164-120						
Rated Ca	pacity) ea.
C112-150						
Rated Ca	pacity					ea.
C200680						
Rated Ca	pacity				20	ea.

MICA CONDENSERS

MIC	A COMPENSERS	
Part No.	Description	List Price
C116—270 Mmfd.	500 W.V.—1000 D.C.	.20 ea.
	500 W.V.—1000 D.C	.∠∪ ea.
	500 W.V.—1000 D.C.	.zu ea.
	500 W.V.—1000 D.C	.25 ea.
Test	d. 500 W.V.—1000	55 ea.
Filter Condenser	I. 10,000 W.V.—Hig	1.10 ea.
NOTE: All Con Operation.	densers are rated	for 85°C

ELECTROLYTIC CONDENSERS

Part No.	Description	
C220—40+10+80 With Cardboard C221—40+40+10	Mfd. — 450—41 Insulated Tube	50—150 Volts — 2.75 ea.
C222—80+50 Mf Cardboard Insul C223—40+10+10	ated Tube	Volts — With 3.00 ea. 450—350 Volts
C224—20+80 Mfc C-225—250+1000 H125—Bakelite Ir	Mfd. — 10—6 sulating Plates	Volts 2.25 ea. for above con-
densers (set of a NOTE: All Con Operation.		

VOLUME CONTROLS

Part No.					
R131—Pict Megohm	ure and Dual C	Sound- Control	-10,000 with	Power	Switch 2.00 ea,
R152—Brig					
R168-Vert	ical and	Horizor	tal Ho	ld—I N	1egohm
and 50,000 R169—Heid					
R178—Vert					
					.65 ea.
RI81-Vert	ical Ce	ņtering	Conti	·ol20	Ohms,
Tapped C					
R184—Foci	is Contr	01—1200	Onn	15, 44 11	1.80 ea.
R187-Hor	izontal I	Drive C	Control-	—20,000	Ohms
R211—Hor	izontal C	enterin	a Conf	rol-20	
Wirewound	d				1.30 ea.

WIREWOUND RESISTORS AND VOLTAGE DIVIDERS

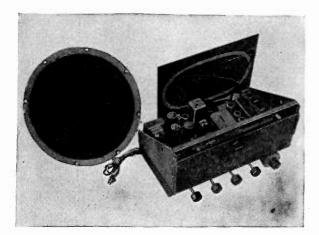
Part No.	Description	List Price
	Ohms, 5 Watt	
	Ohms-17 Watt and 2	
R 209—5300	Ohms-20 Watt, 500 Ohr	ms—2 Watt
	Ohms 3.2 Watt 12 Ohm	
and 93 Ohm	Ohms 3.2 Watt, I2 Ohm ns—4 Watt	

TUNER UNITS, KNOBS AND ESCUTCHEONS
Part No. Description List Price
1120—13 Channel Tuner, complete with 3—6J6
Tubes. Pre-Aligned 60.00 ea.
KN101-R—Tuner Knob with Springs (set of two knobs) .70 Set
KN102-R—Picture and Sound Knobs with Springs (set of two knobs) .40 Set
KN103-R—Vertical Hold and Horizontal Hold
Knobs with Springs (set of two knobs) .40 Set
KN104-R—Brightness Knobs with Springs (set of two knobs) .40 Set
KN105-R—13 Channel Escutcheon Plate and
Spring .10 ea.
NOTE: Above knobs are to be used with the
RCA 13 Channel Tuner.
KN106—Set of Decals for either the 12 Channel
or 13 Channel Tuner .20 Set

Additional Items not listed are available. Please write for prices.

MANUFACTURING CO. INC. NEW YORK 2I, NEW YORK

ESTABLISHED 1928



Model 511 — AM-FM RADIO CHASSIS

A Low-Priced Replacement Chassis. Fits All Types of Console Cabinets.

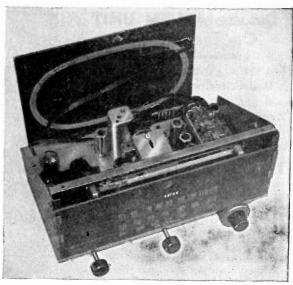
- L Model 511 is a Superheterodyne AM-FM Radio Receiver chassis designed to operate on: 105/125 volts AC; 50/60 cycles. Power consumption: 85 watts.
- I. FEATURES: 1. AC Superheterodyne AM-FM receiver. 2. Improved Frequency Modulation Circuit. Drift Compensated. 3. 12 Tubes plus Rectifier and Tuning Indicator. 4. 3 Dual Purpose Tubes give added performance. 5. Treble Tone Control. 6. 6-Gang Tuning Condenser. 7. Full-range Bass Tone Control. 8. High-Fidelity AM-FM Reception. 9. Automatic Volume Control. 10. 13-watt (maximum) Push-Pull Audio Output. 11. 12-inch PM Speaker with Alnico V Magnet, 25 watts. 12. Indirectly Illuminated "Siide-Rule" Dial. 13. Antenna for AM and Folded Dipole Antenna for FM reception. 14. Provisions for external antennas. 15. Wired for Phonograph Operations. 16. Licensed under RCA patents. 17. RMA listed. 18. Multi-tap Output Transformer, 3.2, 8 and 500 ohms.
- II. DESCRIPTION: Model 511 receiver features the latest in postwar engineering design. The FM circuit includes a tuned RF Amplifier stage, 2 stages of high gain Intermediate Frequency Amplification and an advanced design Ratio Detector circuit which provides low noise level between stations, freedom from AM interference, ease of tuning and ample gain for satisfactory operation with an indoor antenna in most urban locations. The AM circuit includes a Tuned RF Amplifier for improved selectivity and freedom from spurious responses. High Fidelity reproduction on FM and AM is insured through well-engineered circuits and the use of high quality parts. The tuning ranges are: Standard Broadcast 535 to 1720 kc. FM Band 88 to 108 Mc.

The large easy-to-read "slide-rule" type dial is illuminated by two pilot lights which also provide illumination for the red plas-tic dial pointer. A high ratio flywheel drive on the tuning con-denser provides smooth tuning throughout the range of the

denser provides smooth tuning throughout the range of the receiver.

The receiver has two antennas; a Loop antenna for Standard Broadcast and a Folded Dipole antenna for the FM band. Provision is made for connecting an external Phonograph Pickup to the high-fidelity audio amplifier system of the receiver. The Multi-tap output transformer will permit the use of Most Popular Type Hi-Fidelity Speakers and dividing networks, or to match a standard 500-ohm line for Remote installations.

- IV. TURE COMPLEMENT: 1 AM-RF Amplifier tube. 1 FM-RF Amplifier tube. 1 AM Oscillator, Mixer tube. 1 IF Amplifier tube. 1 FM Detector Driver tube. 1 FM Detector tube. 1 FM Oscillator tube. 1 FM Mixer tube. 1 AM Detector, Audio Amplifier tube. 1 Audio Amplifier-Inverter tube. 2 Push-Pull Power Amplifier tubes. 1 Rectifier tube. 1 Electron Ray Tuning Indicator tube.
- ACCESSORIES: The Model 511 chassis is supplied ready to operate, complete with tubes, antennas, speaker and all necessary hardware for mounting in a table cabinet or console, including
- I, CHASSIS DIMENSIONS AND WEIGHT: Chassis Dimensions: 13½" wide x 8½" high x 10" deep. Carton Dimensions; (2 units) 20" x 14¼" x 10¾". Net Weight: 16½ lbs. each.



Model 512 — AM-FM TUNER

Outstanding AM-FM TUNER, self-powered for use with all types of Audio Amplifiers.

DEALER - SERVICEMAN......Net \$82,15

- Model 512 Superheterodyne AM-FM Radio Tuner chassis is designed to operate on: 105/125 volts AC; 50/60 cycles. Power Consumption: 66 watts.
- Consumption: 66 watts.

 II. FEATURES: 1. AC Superheterodyne AM-FM tuning circuit.

 2. Improved Frequency Modulation Circuit, drift compensated.

 3. 9 Tubes plus Rectifier and Tuning Indicator. 4. 3 Dual Purpose Tubes give added performance. 5. Automatic Volume Control. 6. 6-Gang Tuning Condenser. 7. High-Fidelity AM-FM Reception. 8. Indirectly Illuminated "Slide-Rule" Dial. 9. Antenna for AM and Folded Dipole Antenna for FM Reception. 10. Provisions for external antennas. 11. Wired for Phonograph Operations. 12. Licensed under RCA patents.

 13. RMA listed. 14. High and Low Level Audio Output. 15. Utility Socket provides power for magnetic reluctance pickup pre-amplifier. pre-amplifier.
- III. DESCRIPTION: Model 512 Tuner features the latest in post-war engineering design. The FM circuit includes the tuned RF Amplifier stage, 2 stages of high-gain Intermediate Frequency Amplification, and an advanced design Ratio Detector circuit which provides low noise level between stations, freedom from AM interference, ease of tuning and ample gain for satisfactory operation with an indoor antenna. The AM circuit includes a Tuned RF Amplifier for improved selectivity and freedom from spurious responses. High-Fidelity reproduction on FM and AM is insured through well-engineered circuits and high-quality parts.

is insured through well-engineered circuits and nign-quanty parts.

Line Voltage is made available at two outlets at the rear of the tuner; these are actuated by the tuner on-off switch To facilitate custom installations, B+ and Henter Voltages are made available at a utility socket mounted in the tuner. This is suitable for powering auxiliary pre-amplifiers as used with variable reluctance type pickups. Holes for 2 additional controls are available for the convenience of the user. The tuning ranges are: Standard Broadcast — 535 to 1720 Kc. FM Band — 88 to 108 Mc. The receiver has two antennas: a Loop antenna for Standard Broadcast and a Folded Dipole antenna for the FM Band.

Provision is made for connecting an external phonograph pick-up to the tuner audio system, for use with all types of amplifier installations. Two audio output channels are provided, one at high level, the other at low level; both are controlled by the tuner volume control.

- 7. TUBE COMPLEMENT: 1 AM-RF Amplifier tube. 1 FM-RF Amplifier tube. 1 AM Oscillator, Mixer tube. 1 FM Detector Driver tube. 1 IF Amplifier tube. 1 FM Detector tube. 1 FM Oscillator tube. 1 FM Mixer tube. 1 AM Detector, Audio Amplifier tube. 1 Electron Ray Tuning Indicator tube. 1 Rectifier tube.
- ACCESSORIES: Model 512 chassis is supplied ready to operate, complete with tubes, antennas, and all necessary hardware for mounting in a table cabinet or console, including escutcheon.
- VI. CHASSIS DIMENSIONS AND WEIGHT: Chassis Dimensions: 13½" wide x 8½" high x 9" deep. Carton Dimensions: (2 units) 20" x 14¼" x 10¾". Net Weight: 14 lbs.

Lowest Priced **DeLuxe AM-FM UNIT** On the Market!

Model 513 - AM-FM DeLuxe TUNER Dealer-Serviceman Net \$ 78.63

Model 514 - DeLuxe Audio Amplifier, 25 Watts

Dealer-Serviceman Net \$ 38.60

Alnico V PM Speaker, 12", 25 Watts

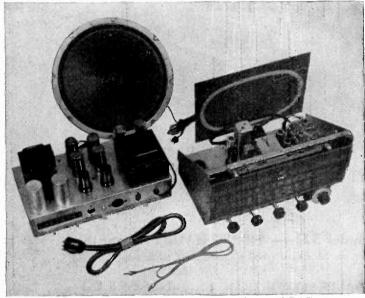
Dealer-Serviceman Net \$ 10.35

TOTAL—Dealer-Serviceman Net \$127.55

Model 513

I. FEATURES:

- 1. Superheterodyne AM-FM circuit.
- 2. Improved Frequency Modulation Circuit, stabilized against drift.
- 3. 10 Tubes plus Tuning Indicator.
- 4. Tuned RF Circuits on AM and FM.
- 5. 6-Gang Variable Tuning Condenser.
- 6. Automatic Volume Control.
- 7. Full Range Bass Boost Control.
- 8. Full Range Treble Control.
- 9. Indirectly Illuminated "Slide-Rule" Dial.
- 10. Fly Wheel Tuning Drive.
- 11. Antenna for AM and Folded Dipole Antenna for FM.
- 12. Provision for external antennas.
- 13. Wired for Phonograph Operation.
- 14. Utility Socket provides power for magnetic reluctance pickup pre-amplifier.
- 15. Licensed under RCA.
- 16. RMA listed.
- II. Model 513 AM-FM Tuner employs 10 tubes plus a tuning indicator tube in a superheterodyne circuit. It is designed to operate from an external power supply and feed into an external audio amplifier. (Model 514 DeLuxe Power Supply-Audio Amplifier is specifically designed to work in conjunction with the Model 513 Tuner.) The power requirements for the tuner are 6.3 volts AC or DC at 3.5 amperes, and 200 volts DC at 60 milliamperes.
- III. DESCRIPTION: The Model 513 Tuner incorporates the latest developments in engineering design. It is intended for the discriminating listener. Separate, Tuned RF stages are employed on both the AM and FM bands to provide extreme sensitivity and minimize spurious responses. The FM circuit also includes two stages of high-gain intermediate frequency amplification to drive a ratio detector circuit of advanced design. AM: 535 Kc. - FM: 88 Mc. to 108 Mc. to 1720 Kc. -
- IV. TUBE COMPLEMENT: 1 6BA6 AM-RF Amplifier tube. - 1 6BA6 FM-RF Amplifier tube. -1 6BE6 AM Converter tube. — 1 6BE6 FM Mixer tube. — 1 6C4 Oscillator tube. — 1 6SG7 AM-FM IF Amplifier tube. - 1 6SH7 FM-Ratio Detector Driver tube. - 1 6J5 AM-Detector AVC tube. — 1 6SQ7 AM-FM 1st Audio tube. — 1 6AL5 FM Ratio Detector tube. — 1 6U5 Tuning Detector tube.
- V. CHASSIS DIMENSIONS: 131/2" wide x 81/2" high x 9" deep. Weight: 91/2 lbs.



Model 514 Amplifier & Power Supply.

Model 513 AM-FM Tuner.

Model 514

1. Model 514 DeLuxe Power Supply and Audio Amplifier contains 6 tubes, plus 2 rectifiers in a high gain push-pull amplifier circuit. It is designed specifically for use in conjunction with the Model 513 Tuner, but may be used wherever a high quality audio amplifier may be required. Power requirements are: 105/125 volts AC; 50/60 cycles; power consumption: approximately 150 watts.

II. FEATURES:

- 1. Parallel Push-Pull Output Circuit.
- 2. Self-Balanced Phase Inverter System.
- 3. Extended Range High-Fidelity Response.
- 4. Inverse Feedback Circuit.
- 5. 6 Tubes plus 2 Rectifiers Output Impedance selective for any speaker requirement (4 to 500 ohms). License under RCA.
- 8. RMA listed.

III. DESCRIPTION: Model 514 Power Supply-Audio Amplifier employs the best in proven engineering design. Six tubes are incorporated in a balanced phase inverter parallel push-pull amplifier. By the use of an inverse feedback circuit. high-fidelity performance is obtained.

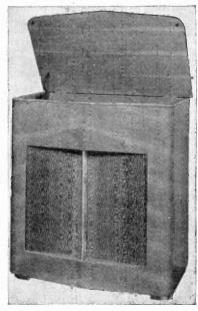
IV. TUBE COMPLEMENT: 2 6J5 Audio Driver tubes. 4 6V6 Audio Output tubes. -2 5Y3 Rectifier tubes.

V. 131/2" wide x 71/2" high x 7" deep. Weight 18 lbs.

Model 243 Console Cabinet

Dealer-Serviceman ... Net \$53.50

Modernistic, exquisitely finished limed walnut Console Cabinet. Furnished with panels to house ESPEY chassis and standard record changers.



Model 243 - Open



Exclusive T.A.C. "VIVIDeo" feature!

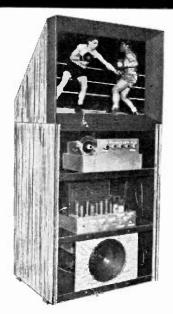
Prewired, pretuned and tubed I.F. sound and video strip (patents pending). An exclusive T. A. C. feature developed by our own research. All on one chassis.

Super-Simplified wiring and assembly INSTRUCTIONS!

-The most explicit, easiest-to-follow, most elaborately detailed instructions in televisionthat even the layman can follow.

CABINETS AND STANDS available with all direct view units. Write for literature.

MODEL P-520 . . . 520 SQ. IN. PICTURE PROJECTION TELEVISION ASSEMBLY



Bausch & Lomb F: 1.9 Lens . Eastman * Bausch & Lomb F; 1.9 Lens * Eastman Kodák Screen * Dulhont Inputuner * 37 R.C.A. Tubes * Pre-Wired & Pre-Tuned Picture I.F. & Sound I.F. * Pre-Wired 30 K.V. Tripler Fly Back Power Supply * Automatic Gain Control * Aluminum Cooted Top Mirror * Metal ack * Specially Designed Hood and Picture Frame Supplied * STP4 Projec-tion Tube * 12" R.C.A. High Fidelity Specker * Two Low Voltage Power Supplies

MODEL P-520

\$76950*

MODEL P-520W

\$89500*

The above unit completely wired and ready to install.

Front and rear panels optional at additional cost.

TELEVISION ASSEMBLY CO

540 BUSHWICK AVE., BROOKLYN 6, N. Y.

Champion Models 20" DIRECT-VIEW MODEL with DuMont Inputuner and 20" DuMont Tube

213 SQUARE INCH PICTURE! Prewired Voltage Doubler 14KV power supply, Pre-wired "VIVIDeo" I.F. picture and sound strip (Pat. Pending). ALL channels TV plus ALL FM radio. Continuous tuning. DuMont Inputuner is Prewired. Delivered complete with all components and 30 RCA tubes plus 20-inch DuMont C.R. tube.

MODEL F-201C

Dealer's net \$56675*

"M" SERIES STANDARD and CHAMPION Direct-View Models for 10" CR TUBES

STANDARD MODEL

29 tubes, including 13-tube "VIVIDeo" I.F. picture and sound strip (Pat. Pending). This portion completely wired, tested and aligned. Prewired, standard tuner ready to use. Handles ALL channels.

MODEL M-1015 Less C.R. Tube

\$16950* Dealer's net

CHAMPION MODEL

Same as above except that DuMont Inputuner replaces Standard Tuner. Gets ALL channels TV

—PLUS all channels of FM radio

MODEL M-101C Less C.R. Tube

\$20950*

Write for literature on our complete line of 10" standard and champion assemblies.

T. A. C. GUARANTEE

All components are of the finest quality and are fully quaranteed under the Standard RMA Guarantee. All TAC Assemblies are guaranteed to operate when assembled according to directions.

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INCORPORAT

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LEFFERTS 87-50 RICHMOND HILL . NEW YORK

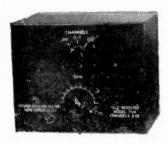
TELEVISION SPECIALISTS IN



TELEVISION ANTENNA **AMPLIFIER** Model TVA

For improved television reception in fringe areas and indoor antenna installations. Model TVA contains two type 6AK5 special high

frequency tubes in a unique dual amplifier circuit. Antenna connects through automatically when booster is turned off thus providing normal reception. Supplied complete with tubes in attractive walnut or mahogany cabinet \$28.50 List*



TELEVISION ANTENNA AMPLIFIER Model TVX

Similar to Model TVA except for extra stage of amplification on the high frequency channels. Model TVX is popular for installations

that require unusual gain in the high frequency TV channels (7-13). Complete with instructions.

\$37.50 List*



DE LUXE **TELEVISION PREAMPLIFIER** Model TVZ

A three stage gang tuned booster for special installations. Especially useful in extreme fringe areas where quiet noise conditions prevail.

Model TVZ contains 3 type 6AK5 tubes in a special patent applied for inductance-capacity tuning system. Housed in walnut or mahogany cabinet with illuminated dial \$54.50 List*

SWEEP GENERATOR **TSW-50**

One of the first popularly priced broad band sweep generators on the market. The TSW-50 employs an electro mechanical type of sweep circuit providing for ex-



cellent linearity and wide sweep width. Frequency range from 4 to 220 mc, sweep width range 500 kc to 12 mc. Supplied complete with tubes and cables, housed in an attractive grey crackle cabinet with \$68.50 Net etched aluminum front plate



TELEMARKER Model TM-100

An absorption type marker unit for use in conjunction with the TSW-50 or similar sweep signal generators, as a frequency

marker on the visual alignment trace.

Model TM-100 is connected externally to the sweep generator output lead, covers a frequency range of from 9.5 to 28 mc. Each telemarker is individually calibrated, housed in an attractive grey crackle cabinet with etched aluminum dial and furnished complete with connecting cables \$12.50 Net

FM TELETUNER

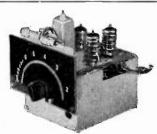
A novel converter unit that adds FM reception to your TV receiver. The FM Teletuner connects in series with the TV antenna providing FM reception when receiver is tuned to an unused TV channel (2 or 3). Antenna connects through when tuner is off so as not to effect normal



TV reception. Will work on any TV set that does NOT use an intercarrier circuit \$29.95 List*

FRONT END TUNER Model TF 701

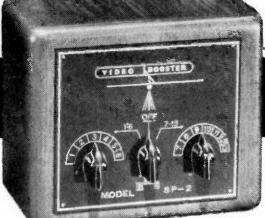
A unique and compact continuous type television front end tuner featuring a revolutionary method of inductancecapacity variation. Model TF-701 may be



used whenever application requires a continuous type tuning system. Contains 6AK5 RF amplifier, 6AK5 mixer, 6C4 oscillator. Each unit supplied completely aligned with calibrated illuminated dial, complete with technical data but less 6AG5 and 6AK5.

• ENGINEERS • JOBBERS • SERVICEMEN

all agree: RMS VIDEO ANTENNA



BOOSTER

gives

OUTSTANDING PERFORMANCE

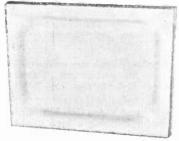
MODEL SP-2 \$ 7 50 for ALL CHANNELS

- ★ Just plug in to work, it has a self contained power supply.
- ★ For most local installations any simple indoor aerial in conjunction with RMS VIDEO AN-TENNA BOOSTER will give you Television Picture reception as clear as that obtainable with an outdoor antenna!

★ Boosts weak station to give you clear, easy to look at pictures.

- ★ Pulls in distant stations with a gain of SIX to TEN TIMES in signal strength!
- ★ Cuts down off-channel interference.

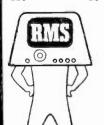
RMS TELEVISION ACCESSORIES



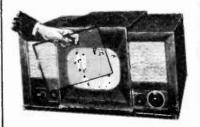
TRANSPARENT UNBREAKABLE PLASTIC MASKS

for Television Tubes

No.	For Picture Tubes	Each
210	10"	9.00
212	12"	9.85
213	121/2"	9.85
2 5	15''	16.00
216	(for new 16" metal picture tube)	26.85
220	20''	35.60



Unbreakable plastic, one piece construction. Crystal clear for perfect vision, contour-designed to fit all types of television picture tubes.



GLAREPROOF TRANSPARENT FILTERS

for Television Sets no glare - no headache no eyestrain

Can be mounted in any television cabinet, in front of the picture tube. It positively reduces glare and gives image much sharper, clearer definition

Available in Blue or smoke transparency. Specify when ordering.

	chey, opening when	
		List Price
No.	For Picture Tubes	Each
307	7''	\$1.13
310	10''	1,38
312	12''	1.88
315	15"	3.14
	No. 307 310 312	No. For Picture Tubes 307 7" 310 10" 312 12"



TELEVISION IMAGE ENLARGER LENS

Universal Enlarger for 7" and 10" picture tubes. Can be mounted on table and console models.

- Shallow Concave Surface—for minimum image distortion
- Extremely High Magnification of any television picture

Sturdily mounted on adjustable brass tubing. Can be moved back and forth, up or down with greatest ease. Does not have to be attached to television receiver. No tools required to set up.

Model ML-710 Clear \$24.25 list Model ML-710B Blue Plastic 24.85 list

You are invited to write for catalog #215-U, illustrating complete line of outstanding RMS antennas and associated accessories.



RADIO MERCHANDISE SALES, INC. NEW YORK, N. Y.



RCA ELECTRONIC COMPONENTS

TELEVISION PARTS

			** 1 . 10 . Di i i	
CONTRO	DLS	#208T8	Horizontal Sync-Discriminator Transformer Provides automatic horiz sweep freq contro	
#201R1	Width Control. Screwdriver-adjusted variable reactor. Powdered iron core. For use with RCA 211T1 where kinescope anode po-	#211T1	Couples horiz-sweep oscillator to horiz-sync discriminator\$2.30 Horizontal Output Transformer. For use	
#201 D 2	tential not over 9 KV	# 21111	with RCA 201D1 and directly-viewed kine-	
#201R2	201R1. For use with RCA 211T2 in circuits with kinescope anode potentials up to 27 KV		scopes requiring 50° magnetic deflection using typical circuits\$9,50	
	design center\$2.20	#211T2	Horizontal Output Transformer. Designed for use in recommended circuits employing	
#201R3	Horizontal Linearity Control. Features spring clip mounting. For deflection circuits using RCA 211T1 and 201D1\$0.80		projection kinescope RCA 5TP4. Powdered iron core\$19.00	
#203R1	Horizontal Oscillator and Synchronizing Control-Coil. A permeability tuned center-			
	tapped oscillator coil for use in Television receivers employing a 6SN7-GT as a com-	YOKES		
	bination horizontal blocking oscillator and synchronizing control tube\$1.80	#201D3	Deflection Yoke. For use with directly- viewed kinescope requiring 50° magnetic de- flection such as RCA 7DP4 and 10BP4 \$14.90	
TRANSF	ORMERS	#201D2	Deflection Yoke. For use with projection	
#201 T 6	Power Transformer. For use in 30-tube TV receivers requiring rectified current of 295 ma. at voltage of approx. 385 volts\$26.00		kinescopes requiring 50° magnetic deflection such as RCA 5TP4\$13.00	
#201 T 7	For 24-Tube Receivers\$21.00	COILS		
#201 T 8	For 21-Tube Receivers\$19.00	COILS		
#201 T 9	For 27-Tube Receivers\$21.00	#202D1	Focus Coils. For magnetically focused kinescopes with deflection angles up to 50°, such	
#201T10	For 27-Tube Receivers\$21.00		as 10BP4. Utilizes large conductor size for long life	
#204T1	Horizontal Output Transformer. Moisture-resistant. For deflection circuits with 50° mag. deflection kinescopes using RCA 201D1 or 201D2\$20.00	#204 L 1	Filament Choke. Eliminates undesirable RF currents from filament circuit. Consists of self-supported 16-turn coil on ¼" inside	
#204 T 9	Vertical Output Transformer. Quiet operation. For use with RCA 201D1 or 201D2	#204X1	diameter\$0.20 Television I-F and Video Coil Kit. Contains	
	where kinescopes require 50° magnetic deflection\$4.50	# 201211	all the coils for building a high quality receiver. 15 individual items \$19.50	
#204 T 3	Horizontal Output Transformer. Powdered iron core. For use where electro-magnetic deflection kinescopes with RCA 201D1 yokes are employed	MISCEL	LANEOUS	
#208T1	Horizontal Blocking-Oscillator Transformer.	11115022		
<i>n</i>	Powdered iron core. For use where electromagnetic deflection kinescopes with RCA 201D1 yokes are employed\$3.90	#201E1	Television Tuner incorporating RF amplifier, converter and heterodyne oscillator, with 13-channel station selector and fine tuning control. Includes 3 RCA 6J6 tubes\$64.00	
#208 T 9	Vertical Blocking-Oscillator Transformer. Generates 60 cps pulses required to drive the grids of horizontal discharge tubes\$2.50	#201X1	Yoke Mounting Hood. Holds deflection yoke RCA 201D1 on kinescopes such as RCA 7DP4, 10BP4\$1.30	
#208T3	Horizontal Blocking-Oscillator Transformer. Similar to 208T1 except that bracket mounting is used in place of potted can construction\$2.75	#203D1	Iron-Trap Magnet. (Coil Type). Required for RCA 7BP4 and 10BP4. Eliminates ion spot on kinescope screen\$6.50	

All prices in effect 5/15/49.

FOR COMPLETE INFORMATION ON RCA TELEVISION PARTS, ASK YOUR RCA DISTRIBUTOR FOR FORM 3F602.

All prices shown are suggested list prices.

Thank You!

When writing for additional information or when ordering from sources of supply listed in this book, please mention

RADIO'S MASTER

PRODUCTS

TELEVISION-FM ANTENNAS — ACCESSORIES



ALL-CHANNEL ANTENNA KIT

Designed for INDOOR use. Combination of low band and high band antennas of the flexible dipole type. Includes bakelite double pole double throw knife switch. Each antenna may be separately oriented for the maximum reception of either high or low band. Knife switch permits quick changing from antenna to antenna without disconnecting.

No. 6095.....List \$6.95



ALL-CHANNEL ANTENNA KIT

An outdoor television antenna kit of the flexible an outdoor television antenna kit of the nextified dipole type, featuring simplicity of installation. May be placed on roof or other convenient location. Yields effective reception of all television channels. Complete with generous 60 ft. 300 ohm twin lead; special weather-resistant nylon supporting strings; insulated screw eyes.

No. 6096 List \$5.95



ANTENNA INSTALLATION KIT

A handy compact assortment of components to facilitate the installation of any type of outdoor antenna. Especially suitable for relevision antenna installations. Includes: 60 ft. 300 ohm twin lead—3 Universal Screw Eyes—for either twin lead or coaxial cable—Heavy gauge steel Antenna Base Mount—heavy gauge steel extension mast Coupler—100 ft. sturdy Guy Wire—Lightning Arrester with ground strap.

No. 6159......List \$6.95



The New ICA TELEVISION FILTER

A sensational improvement that adds to the enjoyment of television reception. A scientifically compounded Filter . . . easy to install . . . suitable for every type of receiver.

The ICA Filter offers these outstanding television viewing features: Dissolves fuzzy grays . . . snaps up blacks . . . sharpens detail . . restful tinting cuts down eyestrain . . . eliminates glare and roomlight interference . . reduces flickering and picture grain . . . unbreakable. Excellent for daylight reception.

No. 6176- 7"	tube	size	List	\$1.45
		size		
		size		2.95
		size		3.95
No. 6180-20"	tube	size	List	5.95



ICA TURNBUCKLES

, steel turnbuckles that afford balanced tension of supporting Especially suitable for antenna guy wires. Assure slack-free, wires. Especially suital rigid support. No. 6150—3" (closed) No. 6151—5" (closed)

ICA U-BOLTS



Offer a firm and rigid clamping action for affixing antenna or supporting masts to metal or wooden surfaces. Nuts and washers included. Overall measurements: width 1"; length 2 ½".

No. 6153 List \$.30



PIPE STRAPS

A useful accessory for supporting antenna masts, etc., against Chimneys, gables, walls or other flat surfaces. Suitable for all masts up to 1" in

No. 6152

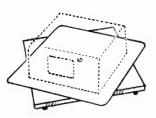
.....List \$10.00 C



GUY WIRE CLAMP

Ideal for set-ups requiring guy-wire support. May be located at any position on antenna mast for maximum rigidity. This rugged adjustable steel clamp is suitable for masts ranging from 34" to 1 ¼" diameters. Includes nuts and lockwashers.

No. 6144 List \$.50



TELEVISION RECEIVER TURNTABLE

Designed for table model receivers. Permits multi-angle television viewing without lifting or disconnecting set. Eliminates furniture moving, re-connecting of set, etc.

Set is merely placed on turn-table-ready for operation. Finger-tip pressure. Makes complete circle for all-angle viewing. Heavy gauge steel in beautiful "hammered-tone" finish. Finely engineered swivel base unif

No. 6184 List \$16.50



ICA TELEVISION SERVICING KIT

A compact handy kit containing 13 of the newest servicing tools especially engineered for general television installation and servicing. Neatly packed in leatherette case. Includes high voltage test prods, dual-bladed trans-aligning tool; coil and trimmer aligner-slim diam. TV "Channel Tuner"; spring-controlled Safe-T-Tester; 4 in 1 Aligning tool; narrow shaft trimmer aligning tool; flexible screw driver and socket wrench; thin-bladed neut. tool for "Admiral," etc., TV sets: slim flexible tuning wand for Zenith, etc., TV sets; tuning wrench for Zenith, etc., TV sets; slim, dual-bladed aligner for "Admiral," etc., TV sets.

No. 6160 List \$16.95

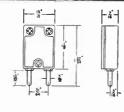
PREMIER CRYSTALS

for

Communications
Laboratories
Broadcast Stations

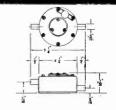
Diathermy Aircraft Service Men Amateurs Equipment Manufacturers





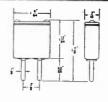
PL-7 3,000 to 11,000 kc.
Pressure-mounted crystal.





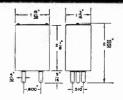
157 85 to 10,000 kc.
Variable air gap.





PL-247 700 to 11,000 kc.
Also with .093" pins ta
fit actal sacket.

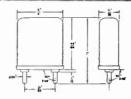




PL-258 80 to 10,000 kc.

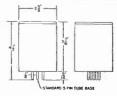
Available as either single unit or dual unit.





PL-261 1,000 to 20,000 kc., Alsa available in holder 9/16" high.





501 90 to 10,000 kc.
Temperature controlled crystal aven;
with or without thermometer.

The above units are typical of the wide range of standard and special Premier crystals available for every frequency need. Your inquiry is invited.

ULTRASONIC CRYSTAL UNITS



Crystals . . . Blanks . . . Mounts . . . Transducers

Premier ultrasonic crystal blanks, flat or curved, round or square, can be manufactured to your specifications. Consult us on your crystal problems in connection with experimental work in ultrasonics. No obligation; strictest confidence observed.



PREMIER CRYSTAL LABORATORIES, INC.

MANUFACTURERS OF RADIO AND ELECTRICAL APPARATUS
OPTICAL AND PIEZO CRYSTALS—PRECISION CRYSTAL HOLDERS
89 SEVENTH AVENUE NEW YORK 11, N. Y.



Bliley CRYSTALS AND CRYSTALS AND CRYSTAL CONTROLLED OSCILLATORS



CCO - CRYSTAL CONTROLLED OSCILLATOR - MODEL 2A

For 2-6-10-11 Meters

With this basic oscillator, employing a 6AG7 tube, the advantages of VHF crystal control are easily achieved. Has direct output on 6-10-11 meters and ample output to drive tripler stage on 2 meters. Single tuning control, bandswitch and crystal socket are mounted on outside of painted metal subchassis with power and output terminals at back. Uses Bliley AX2 20meter crystals for output on 10 and 11 meters, new Bliley AX3 crystals for 6 and 2 meter operation. Ideal as nucleus for new construction or conversion of existing equipment.

Supplied less tube and crystal \$9.95

AMATEUR FREQUENCY CRYSTALS

TYPE AX2

These high stability advanced design crystals are plated to insure long term precision and reliability. Cali-brated to ±.002% with drift less than .0002% per degree Centigrade. Holder pins spaced on .486" centers.

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		1	T	

Supplied	Range	Price
\pm 2 Kc	3500— 4000 Kc	\$2.80
\pm 2 Kc	7000- 7425 Kc	2.80
\pm 30 Kc	12500—13500 Kc	3.95
\pm 30 Kc	13580—13714 Kc	3.95
±30 Kc	14000-14850 Kc	3.95

TYPE AX3



A new third overtone crystal unit produced for use in the Bliley CCO-2A. Has exceptionally high activity at operating frequency. Calibration accurate to ±.003% in CCO-2A with drift less than .0002% per degree Centigrade. Plated crystal is mounted in gasket sealed holder with pins spaced .486" centers.

Supplied	Range	Price
\pm 5 Kc	24000—24333 Kc	\$3. 9 5
\pm 5 Kc	25000-25500 Kc	3.95



TYPE CF6 455 Kc

Single signal filter crystal unit. Exceptionally low holder capacity permits sharp signal discrimination in filter network of general communications receivers. Frequency 455 Kc free from spurious responses within ±7 Kc.

Price \$4.50



TYPE CF3 455 Kc

Single signal filter crystal unit. Frequency 455 Kc, ±5 Kc—free from spurious responses within ±7 Kc of fundamental. Designed for inter-mediate frequency filter in general communications receivers.



TYPE MC9 3105 Kc

This unit is suggested for use in priat 3105 Kc. The crystal is guaranteed to be within ±.02% of 3105 Kc at any temperature between 0°C and 50°C and is factory tested for performance over this temperature range. Plug-in type holder is gasket sealed against moisture and humidity.

Price \$5.50



TYPE VX2 3105 Kc

Designed for applications where space besigned for applications where space is at a premium, this unit is recommended for private aircraft communication at 3105 Kc. Guaranteed to maintain frequency within ±.02% at any temperature between 0° C and 50° C. Solder lug connections permit mounting under chassis and assembly is applied and agricult most transfer. bly is gasket sealed against moisture and humidity.

Price \$5.00



TYPE KV3 100 Kc

A precision crystal designed for use in secondary standards. Crystal is silver plated and mounted between wire supports which are soldered to the plated surfaces. Exceptionally low drift crystal is adjustable to exactly 100 Kc at 25° C when used in recommended oscillator circuit.

Price \$6.95



TYPE SMC100 100-1000 Kc

Dual frequency crystal provides either 100 Kc or 1000 Kc frequency source. When used in recommended oscillator circuit 1000 Kc frequency is within ±.05% at 25° C and 100 Kc frequency can be adjusted to zero beat at 25° C. Suggested for signal generators used in alignment of radio receivers.

Price \$8.75



For complete dimensional information consult Bulletin 35 available at any Bliley distributor.

Bliley CCO CRYSTAL CRYSTAL CONTROLLED OSCILLATOR

For instant channel selection and frequency accuracy, radio service techni-cians use this Bliley test instrument. It provides direct crystal control for i-f alignment. Write for descriptive Bulletin 32.

Complete with 7 Bliley crystals, tubes and concentric output cable..... \$69.50

ELECTRIC BLILEY COMPANY

PR Precision CRYSTALS



COMMERCIAL TYPES - SPECIFICATIONS

	Туре	Frequency Range	Pin Spacing	Pin Diameter	Height Above Pins	Width	Depth
Z-1	Fundamental	900 Kc. to 12000 Kc.	.486"	.093"	1-3/16"	13/16"	7/16"
Z-1	Harmonic	12000 Kc. to 30000 Kc.	.486"	.093"	1-3/16"	13/16"	7/16"
*Z-1A	Fundamental	425 Kc. to 12000 Kc.	3/4"	.125"	1 3/8"	1 3/8"	1/2"
*Z-1A	Harmonic	12000 Kc. to 30000 Kc.	3/4"	.125"	13/8"	13/8"	1/2"
Z-1B	Fundamental	1000 Kc. to 12000 Kc.	3/4"	.125"	13/8"	1-3/16"	l/2"
Z-1B	Harmonic	12000 Kc. to 30000 Kc.	3/4"	.125"	138"	1-3/16"	1/2"
Z-1D	Same as Z-1	Same as Z-1	1/2"	.125"	1-3/16"	13/16"	7/16"
Z-1E	Same as Z-1	Same as Z-1	1/2"	.125"	11/4"	11/8"	7/16"
Z-1H	Single or dual unit Fundamental	100 Kc. to 5000 Kc.	3-Pin W.E.	.157"	2-1/16"	1-19/32"	1-3/16"
Z-1K	Same as Z-1A except has .157" dia. pins	Same as Z-1A					
Z-1M	Fundamental	1000 Kc. to 5000 Kc.	7/8′′	Std. Banana	2-3/32"	1-19/32"	3/4"
†Z-1 R	Fundamental	175 Kc. to 475 Kc.	1/2"	.093"	11/4"	1-3/32"	7/16"
Z-4	Fundamental	1500 Kc. to 12000 Kc.	3/4"	.125"	.650"	Diameter	.995"
Z-4	Harmonic	12000 Kc. to 30000 Kc.	3/4"	.125"	.650"	Diameter	.995"
Z-7	Fundamental	1000 Kc. to 12000 Kc.	3/4"	Std. Banana	1.660"	1.192"	.518"
Z-8	Fundamental	400 Kc. to 5000 Kc.	3/4"	1/8"	13/4"	1-9/16"	1-11/16"
Z-6	Fundamental	100 Kc. to 325 Kc.	3/4"	1/8"	11/2"	Diameter	1-25/32"
E-1	Fundamental	100 Kc. to 7000 Kc.	Intercl	nangeable w	ith FT-164 and	AC-95	
FT-171-B	Fundamental	1000 Kc. to 8000 Kc.	3/4"	Std. Banana	21/4"	11/2"	13/16"

^{*} Can be Supplied with Standard Banana Pins.

For Signal Generator Use. Not recommended for Transmitter Freq. Control.





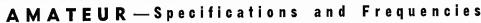




PETERSEN RADIO Company, Inc., 2800 W. Broadway, Council Bluffs, Iowa

PR Precision CRYSTALS







TYPE Z-2

- 160 meter band for VFX-680 Narrow Band FM in Sonar Exciter.
- 1699.2 to 1710 Kc. for 11 meter band.
- 1750 to 1812 Kc. for 10 meter band.
- 1828 and 1844 Kc. These 2 frequencies cover entire 10 meter FM band in Sonar VFX-680.
- 1562.5 to 1687.5 Kc. for 6 meter band.
- 1778 to 1827 Kc. for 2 meter band.
- 3395 to 3428.5 Kc. for 11 meters.
- 3500 to 4000 Kc. for 80, 40, 20 and 10 meters.
- 6250 to 6750 Kc. for 2 meters.
- 6790 to 6857 Kc. for 11 meters.
- 7000 to 7425 Kc. for 40, 20 and 10 meters.
- 8000 to 8222 Kc. for 2 meters.
- 8334 to 9000 Kc. for 6 meters.
- 9000 to 9250 Kc. for 2 meters.

TYPE Z-3

- 12000 to 12333 Kc. for 2 meters.
- 12500 to 13500 Kc. for 6 meters.
- 13580 to 13715 Kc. for 11 meters.
- 14000 to 14850 Kc. for 20 and 10 meters.

TYPE Z-5

- 25000 to 27000 Kc. for 6 meters.
- 27160 to 27430 Kc. for 11 meters.
- 28000 to 29700 Kc. for 10 meters.

CHECK SUPERIORITY OF PA Crystals

Stability . . .

Drift characteristics of PR Crystals limited to less than 2 cycles per MC per degree. You get low drift, combined with high output, dependable frequency control. X-Ray orientation guarantees uniform cut for maximum low-drift performance.

Accuracy . . .

Guaranteed accurate within .01 per cent of specified frequency or better. When doubling and quadrupling accuracy is absolutely essential. You KNOW where you are with PRs.

Power Output . . .

PRs are designed to give maximum power output from the exciter stage when operating at the highest permissible voltages. PR Crystals can "take it."

Activity . . .

PRs give you high activity. They "come in" instantly on phone... key without chirps, even at high bug speeds, without excessive "backing off."

Unconditional Guarantee . . .

Every PR Precision CRYSTAL is guaranteed unconditionally, by the makers of fine crystals since 1934.

PETERSEN RADIO Company, Inc., 2800 W. Broadway, Council Bluffs, Iowa

PR Precision CRYSTALS



PRICE LIST SUBJECT TO CHANGE WITHOUT NOTICE

COMMERCIAL

Type		Frequency Range		Schedule		
	.170	rrequency hunge	.005%	.01%	.02%	Schedu
Z-1	Fundamental	900 to 12000 Kc.	\$12.50	\$11.00	\$10.00	A
Z-1	Harmonic	12000 to 20000 Kc.	15.00	12.50	11.00	A
Z-1	Harmonic	20000 to 30000 Kc.	18.00	15.00	13.00	A
Z-1 A	Fundamental	425 to 900 Kc.	15.00	12.50	11.00	A
Z-1 A	Fundamental	900 to 12000 Kc.	12.50	11.00	10.00	A
Z-1 A	Harmonic	12000 to 20000 Kc.	15.00	12.50	11.00	A
Z-1 A	Harmonic	20000 to 30000 Kc.	18.00	15.00	13.00	A
Z-1B	Fundamental	1000 to 12000 Kc.	12.50	11.00	10.00	A
Z-1B	Harmonic	12000 to 20000 Kc.	15.00	12.50	11.00	A
Z-1B	Harmonic	20000 to 30000 Kc.	18.00	15.00	13.00	A
Z-1D	Same as Z-1	Same as Z-1				A
Z-1E	Same as Z-1	Same as Z-1				Ā
Z-l H	Fundamental	100 Kc. Standard		(Exact Frequency)	12.00	В
Z-l H	Fundamental	101 to 900 Kc.	18.00	15.00	13.00	Ā
Z-1H	Fundamental	901 to 5000 Kc.	15.00	12.50	11.00	A
Z-1H	Dual Unit	901 to 5000 Kc.	30.00	27.50	25.00	A
Z-1 K	Same as Z-1 A	Same as Z-1A				A
Z-1M	Fundamental	1000 to 5000 Kc.	15.00	12.50	11.00	A
Z-1 R	Fundamental	175 to 475 Kc.	18.00	15.00	13.00	A
Z-1R	Fundamental for Signal Generators	{ 175, 200, 262, 370, } { 455, 456, 465 Kc. }		6.00		В
Z-1R	Fundamental	475 to 1000 Kc.	15.00	12.50	11.00	_
Z-4	Fundamental	Same as Z-1	10.00	12.50	11.00	A
Z-4	Harmonic	Same as Z-1				A
Z-7	Fundamental	Same as Z-1				A
Z-8.	Fundamental	400 to 900 Kc.	18.00	15.00	13.00	A
Z-6	Fundamental	100 Kc. Standard		(Exact Frequency)	9.00	A
Z-6	Fundamental	101 to 175 Kc.	18.00	15.00	13.00	A B A
E-1	Fundamental	100 to 900 Kc.	20.00	19.00	18.00	B
E-1	Fundamental	900 to 7000 Kc.	19.00	18 00	17-00	В
FT-171-B	Fundamental	1000 to 8000 Kc.	12.50	11.00	10.00	, B A

AIRCRAFT

Туре	Frequency	Price	Schedule
Z-1, Z-1A, Z-1B	3105 and 6210 Kc.	\$5.00	С

MARINE

Type	Transmitter	Receiver	Schedule
Z-1	\$10.00	\$10.00	A
Z-1 A	10.00	10.00	A
Z-1 B	10.00	10.00	A
Z-1D	10.00	10.00	A
Z-1H	12.50	12.50	A
Z-1H Dual	25.00	25.00	A
Z-1K	12.50	12.50	A
Z-1M	12.50	12.50	A

AMATEUR

Note: Crystals Within Amateur Bands Supplied INTEGRAL KILOCYCLES Only.

Type	Tolerance	Price	Schedule
Z-2	.01%	\$2.75	R
Z -3	.01%	3.75	В
Z-5	.01%	5.00	B

Crystals for amateur service other than frequencies listed on Catalog Sheet can be supplied as follows:

	Range			Tolerances				
Туре				Plus or Minus 5 Kc.		Plus or Minus		
Z-2, Fundamental	1500	to	10000	K.	Price	Sched.	Price	Sched.
Z-3, 3rd Harmonic	10000	to	20000	Kc.	\$2.75	B	\$11.00	A
Z-5, 3rd Harmonic	20000	to	30000	Kc.	7.50	B	13.00	Ä

NOTICE

Prices on Commercial Crystals are based on quantities of 1 to 10 of the same frequency. For larger quantities write for prices.

Price on crystals below 100 Kc. furnished on request. Tolerance can be guaranteed only when oscillator or circuit diagram is furnished.

To facilitate the handling of your order, please order by type number and indicate permissible tolerance.

PETERSEN RADIO Company, Inc., 2800 W. Broadway, Council Bluffs, Iowa



Crystals

for

Commercial ~ Aircraft ~ Marine
Amateur ~ Police ~ Mobile
Ultrasonic ~ Filter ~ Blanks

Precision Engineered ~ Complete Testing Facilities

GET OUR QUOTATION FOR QUALITY CRYSTALS



Crystal Research Laboratories, Inc. has complete facilities for research and development of Crystal applications for Communication and Frequency Controls . . . Filters . . . Supersonic Delay Lines . . . Ultrasonic . . . as well as for Scientific Instrumentation.

THE ULTRA-SONORATOR — Models SL520 and LB501 500-Watt Ultrasonic Generators with Associated Network . . . Write for Catalog.



TECH-MASTER PRODUCTS COMPANY

AMERICA'S FINEST TELEVISION KITS

The Only TV Kits with "Circuit-Aligned" Components

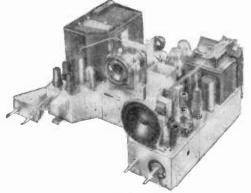
- ★ 3 TIMES PICTURE AREA OF 10-INCH TUBE
- ★ 31 Tubes Voltage Doubler
- ★ Ultra-Simplified Wiring Instructions
- ★ Easily Wired Over a Week-End
- ★ Tech-Master Integrity (Only Perfection Is Acceptable)

Tech-Master, pioneer in the TV kit field, scoops the industry again with this "Super-16" TV kit that produces big, BIG pictures of superlative quality. Our engineers utilized our famous 630-TK De Luxe kit as a basis. An 11T5 flyback transformer, a 2D2 focus coil, a 1R4 width control and other fine components PLUS our new Universal Brackets to accommodate kinescopes up to 16 inches have been

A clever, and thoroughly sound, voltage double circuit using two 1B3's has been designed by our engineers to provide full voltage and current to drive up to 20-in kinescopes with excellent brilliance, definition and sweep. Ultra-simplified instructions make it possible for practically anyone to wire this kit over a week-end. The famous "Circuit-Aligned" components supplied with our kits keep final adjustments down to a negligible minimum, and these can be performed without additional equipment.

"SUPER-16" 630-TK De Luxe TV Kit, complete with all tubes, parts and instructions.

. . . . Net \$177.50 Less Kinescope .



Super 16"

630-TK DE LUXE TV KIT Build your own duplicate of the famous RCA 630-TS with this superfine, 1949 model Tech-Master 630-TK television kit. You will enjoy television at its finest - and save plenty. The Tech-Master kit is complete in all details - major components, all controls, all sockets and terminal strips are mounted in place. Only the interesting and instructive wiring remains to be done from the ultra-simplified wiring diagrams - easily accomplished over a week-end. Furnished with RCA 13-channel front end tuner completely wired, aligned and tested. "Circuit-Aligned" components mean all final adjustments can be made without additional equipment.

630-TK De Luxe TV Kit, all components mounted, complete with all tubes, parts, instructions, less kinescope.

Net \$163.50

630-TK STANDARD TV KIT

The 630-TK Standard 10" TV kit is identical with the De Luxe, described above, except that it is offered at a low, economy price because no components are mounted. In every other respect it is the same as the De Luxe model, same quality front end and components, complete instructions. 630-TK Standard TV Kit, complete with all tubes, parts, in-

structions; less kinescope Net \$144.50

TECH-MASTER TELEVISION CABINETS

10" Table Model Cabinet (illustrated at right), for either 630-TK TV kit. Handsome, sturdy, mahogany finish. With safety glass and Kinescope mounting slides. Completely drilled, ready for installation. $24\frac{3}{4}$ " x 20" x 14" high. Net \$42.50

121/2" Table Model Cabinet Net \$47.50 15" or 16" Table Model Cabinet Net \$54.50
15" or 16" Mahogany Console Cabinet Net \$98.50

15" or 16" Formica Console Cabinet in Blonde, Mahogany, Wal-

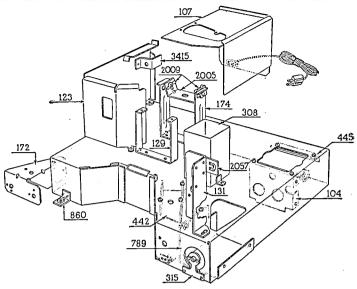
nut or Ebony Finish Net \$98.50



TECH-MASTER PRODUCTS COMPANY

630-TK TELEVISION **COMPONENTS KITS**

ELECTROLYTIC CONDENSER KIT Consists of our part numbers 338, 367	268
369, 370, 371 listed below.	, 000,
EK Kit	\$7.98
BLEEDER RESISTOR KIT Consists of our part numbers 439, 458	459
876 listed below.	,, 100,
BK Kit	\$4.25
IF & VIDEO COIL KIT	9171
Consists of 2 1K1s, 2K2, 2K3, 2K4, 2 2L1s, 3L1, 3L2, 2 3L3s, 2 3L4s, 5	
listed below.	
4X2 IF & Video Coil Kit	12.00
MICA CAPACITOR KIT Consists of the 14 mica capacitors us	ni bo
the 630-TS circuit.	eu m
MK Kit	\$3.95
CERAMICON CAPACITOR KIT	, oitoma
Consists of the 25 ceramicon capacins used in the 630-TS circuit.	citors
CK Kit	\$5.89
TUBULAR BY-PASS KIT	
Consists of the 38 by-pass moulded capacitors used in the 630-TS circuit.	BASI
TK Kit \$8.85	Cons
RESISTOR KIT	129,
Consists of the 107 ½, 1 and 2-watt resistors used in the 630-TS circuit.	No. 5
RK Kit \$8.48	"SUP
COMPLETE METAL CHASSIS KIT	struc
Consists of our part numbers 1SC,	TV r
104, 107, 115, 116, 123, 129, 131, 172, 174, 308, 442, 445, 789, 4 860s, 2004,	kine
2009, 3415, listed below. (Less cord.)	widt
No. 1950 Metal Kit \$29.50	sock



630-TK Chassis Assembly (No. 1950 Metal Kit) BASIC METAL CHASSIS KIT Consists of our part numbers 1SC, 129, 172, 174, 308, listed below.

No. 500 Metal Kit. . "SUPER-16" CONVERSION KIT

Consists of all components and instructions for converting 630 type TV receivers for use with 15" or 16" kinescopes. Includes 11T5 flyback transformer, 2D2 focus coil, 1R4 width control, DS2 voltage doubler socket, UB universal mounting

brackets, 1B3 rectifier, all necessary resistors, condensers, etc., and instructions.

16CK Conversion Kit . . . \$33.30 Conversion Instructions, separately, 25c **UB ADJUSTABLE MOUNTING BRACKETS** Kinescope mounting brackets for tubes from 121/2" to 16". Mounts on 630 chassis so that face of all tubes up to 16" is in line with front controls. **UB** Brackets

630-TK TELEVISION REPLACEMENT PARTS

Part N		Part N		Net	Part No. Description Net
1SC	Stamped Chassis \$5.50	457		\$.96	11.8 Vert. & Horiz. Hold
104	Electrolytics Bracket . 1.50	525	Kinescope Socket with		50K/1 Meg. (72758) \$2.50
107	H.V. Shield Cover 3.75		leads	1.32	11.15T Horiz.Drive .25 Meg44
123	H.V. Compartmt. Shield 3.75	532	H.V. Anode Cap and		1D1 Deflection Yoke 4.50
115	Bleeder Case Cover . 1.90		Lead	.66	1D3 Deflection Yoke 8.94
116	Bleeder Case 2.20	533	Knob, Fine Tuning	.24	1R1 Width Control42
129	Yoke Mtg. Bracket99	534	Knob, Station Selector	.33	1R3 Hor. Linearity Control .48
131	Speaker Bracket 1.95	535	Knob, Pic, Brightness		1R4 Width Control
157	Power Transformer . 15.60		Vert. Hold	.21	1R5 Hor. Linearity Control .72
172	Bracket for Controls . 1.65	536	Knob, Hor. Hold, Vol.		2D1 Focus Coil 4.50
174	Focus Coil "U" Bracket 1.65		Control	.18	2D2 Focus Coil 6.60
308	Cathode Trap Shield . 1.65	537	Knob, Dummy Brightnes	ss .18	3D3 Ion Trap Magnet
315	R.F. Unit Shaft Support .65	598	Escutcheon Plate &		(PM type) 1.26
338	250/10V, 1000/6V Cond.		Spring	1.10	4T2 Vert. Defletn. Xfmr . 3.00
	(71436) 1.25	789	R.F. Unit Shield.	1.50	8T2 Vert. Block Osc. Xfmr 1.65
367	40-10/450V, 80/150V,	853	Corona Ring	.21	8T8 Synchrolock Trnsfmr. 1.38
	Cond. (71431) 1.53	860	Mounting Foot (4 req.) e	a33	11T1 Horiz. Deflection Output
368	40-40-10/450V Cond.	2005	Focus Coil Support	.65	& H.V. Transformer. 5.70
	(71432) 1.72	2009	8/32 Stud Assembly &		11T3 " " " " 5.70
369	80/450V, $50/50V$ Cond.		Wing Nuts	.18	11T5 " " " " " 7.50
	(71433) 1.61	3415	Width Control Bracket	.33	DS2 Voltage Doubler Socket 2.65
370	40-10/450V, 10/350V	11.5	Height Control 2.5 Meg.		KRK2 RCA Front End Tuner 38.40
	Cond. (71434) 1.39		(71440)	.44	1K1 Sound IF Transformer 1.32
371	20/450V, 80/350V Cond.	11.4	Vert. Lin. Control 5K		2K2 1st PIX IF 1.41
	(71435) 1.48		(71441)	.73	2K3 2nd PIX IF 1.08
439	6300 ohm WW 50 watt	11.11	Focus Control 1500	., •	
	Bleeder 1.47	1	(71442)	.97	
458	1590 " " " 1.18	11.16	Vert. & Horiz. Centering		3K1 Discriminator Trnsfmr. 1.65
459	6855 " " " 1.06		Control 20 WW (Two)		2L1 3rd and 4th PIX IF39
876	5000 ohm WW 10 watt		(71443)	.97	3L1 Peaking Coil
	Bleeder	11.9	Brightness50K(71444)	.44	3L2 Peaking Coil
442	Detector Shield		Volume—On/Off 10K/	•	3L3 Peaking Coil
445	Transformer Bracket65	1	1 Meg (71446)	2.50	3L4 Peaking Coil
450	500 mmf. H.V. Cond 1.03	11.15	Hor. Dri. 20K (71447)	•44	41.4
		1		•77	4L1 Filament Choke