

information

about . . .



The basic concept of A O C (Add On Circuit), is to have each unit a primary circuit in itself. By interconnecting several of these units a complete piece of electronic equipment may be made. This piece of equipment so constructed may be changed at a later date to include different circuits for better performance or to increase its functions.

The scope of A O C is almost unlimited and every attempt will be made to cover requirements in all fields of electronics. If however, you do not find the A O C unit you require please write International Crystal describing your needs and we will cooperate with you in every way that we can to supply you with a suitable circuit unit.

A data sheet is enclosed with each A O C unit describing its function, power requirements, and interconnecting points. All A O C units are designed to mount in multiples of one-half inch. Plug-on power leads with molded connector shielded cable for RF and audio signals give A O C versatility. All circuits are designed for noncritical operation to insure a minimum of alignment problems. Although a basic knowledge of circuits is desirable, it is not necessary. International will

supply lists of recommended groups of A O C units for constructing various receivers, transmitters, etc.

Hookup wire is supplied with each of the various cases available. To complete the assembly, you will require a small soldering iron (60 to 100 watts), rosin core solder, a pair of long nose pliers, a pair of cutting pliers, and a screwdriver (approx. 4-in. size).

When using A O C data sheets note the voltages, and currents required for each unit. Add these for the total power requirements for your complete circuit. Add the lengths of each A O C unit to determine the size case required.

When designing your equipment it is recommended that you provide circuit isolation by mounting the various sections in different cases and interconnecting them with the shielded cables available. For example, when constructing a receiver, mount the RF and mixer circuits in one case, oscillator in another, IF amplifier, detector and audio in another.

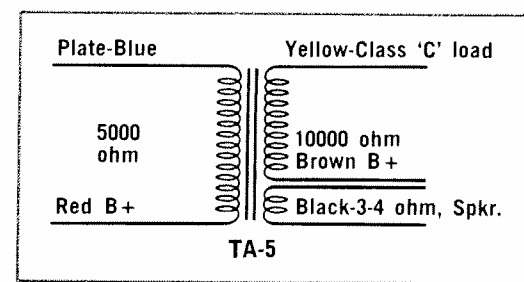
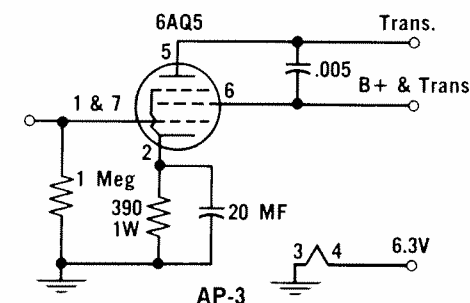
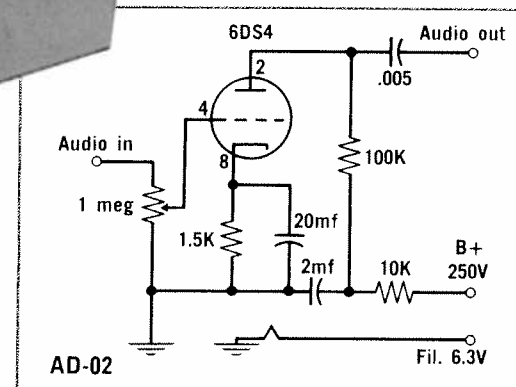
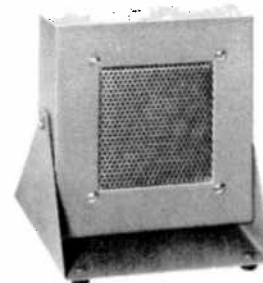
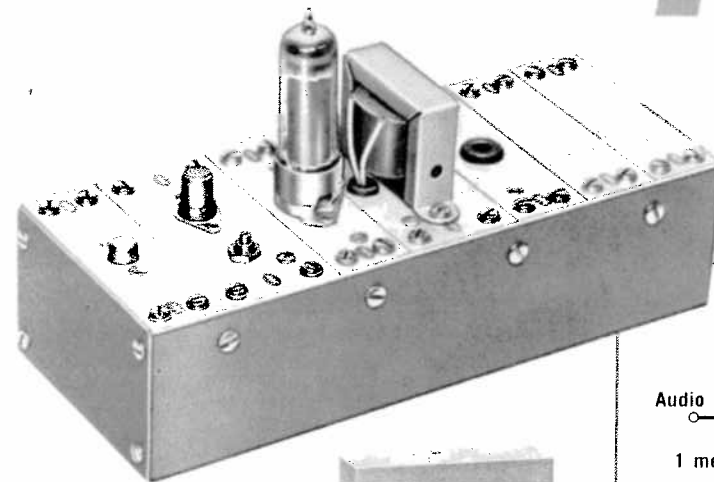
International Add-On-Circuits are also available as completely assembled converters, oscillators, transmitters, etc.

ARRANGEMENT OF CATALOG

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18 NORTH LEE
OKLA. CITY, OKLA. 73102



AUDIO AMPLIFIER

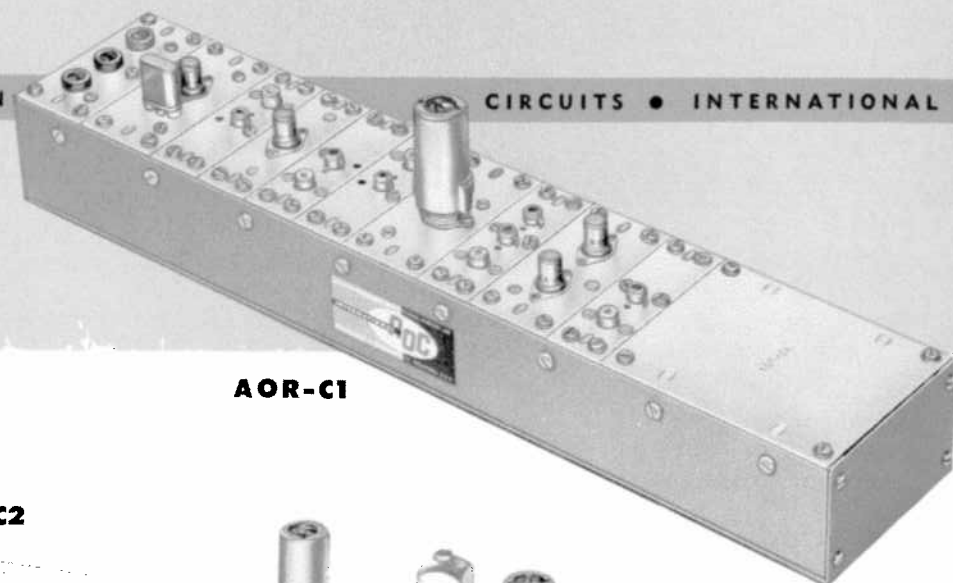
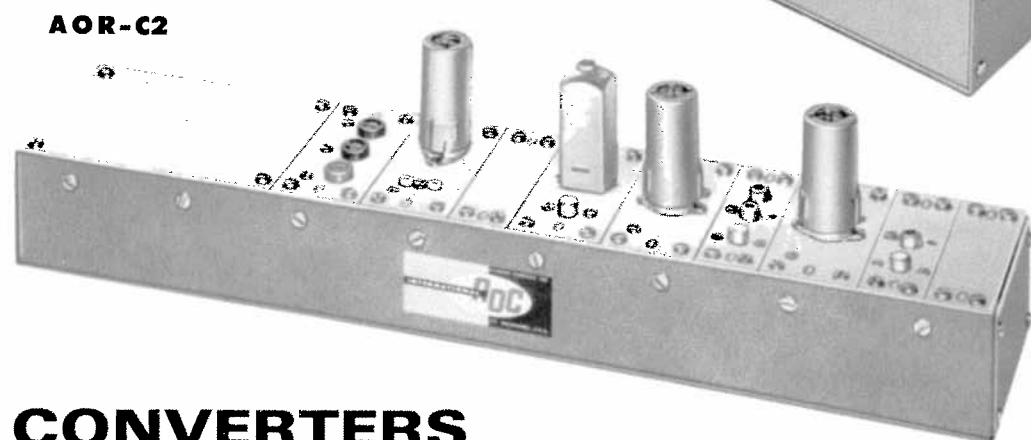
The AOR-A3 is a 3-watt Audio Amplifier which has a response of 400 to 6,000 cps \pm 3 db. Output has 3-4 ohm speaker winding, 10,000 ohm hi-impedance winding for modulating low power transmitter. Requires approximately .1 volt audio input. Specifications: AD-02 driver (6DS4 nuvistor), AP-3 amplifier (6AQ5), and TA-5 transformer. All units mounted in natural aluminum finish case. Wired. Shipping weight: 5 lbs.

Cat. No. AOR-A3.....\$19.00

Matching 4" speaker with ferrite magnet. Complete with natural aluminum finish case.

Swivel mount. Shipping weight: 2 lbs.....\$8.95

AOC

**AOR-C1****AOR-C2**

CONVERTERS

AOR-C1

The **AOR-C1** is a crystal controlled RF converter using one stage of RF amplification. Cascode nuvistor RF amplifier/driver, 6BH6 mixer. Output IF 10.7 mc. The input range may be ordered to cover any 200 kc range between 30 mc and 200 mc. Oscillator uses 6BH6 and 6DS4 multiplier. Natural aluminum finish case. Wired. Crystal tuned for customer specified input signal. Shipping weight: 5 lbs. Cat. No. AOR-C1..... **\$47.00**

AOR-C2

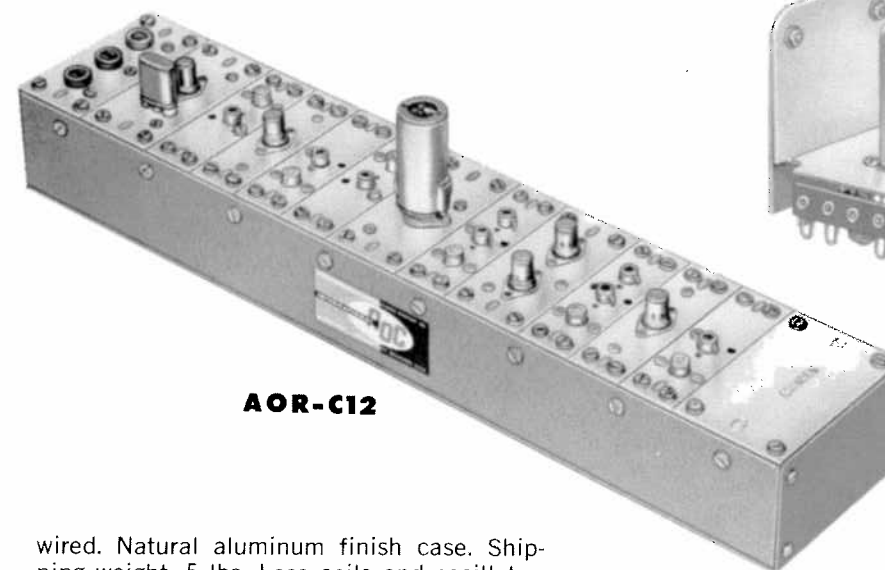
The **AOR-C2** is a medium frequency converter which may be used for antenna input or as a first IF and second converter in dual conversion circuits. Input may be ordered to cover any 200 kc range between 2 mc and 30

mc. Output IF 455 kc. Tube lineup: 6BH6 RF amplifier, 6BH6 mixer, and 6BH6 oscillator. Completely wired. Natural aluminum finish case. Shipping weight: 5 lbs.

Cat. No. AOR-C2..... **\$37.00**

AOR-C3

The **AOR-C3** is an RF converter with plug-in coils which may be ordered separately to cover the range 180 kc to 30 mc. Eight sets of coils are required to cover entire range. Specifications: 6BA6 RF amplifier and 6BA6 mixer. IF output 455 kc. Intended to drive the AOF series of IF strips. Sensitivity is useful to 1 microvolt. Selectivity through the AOR-F21 will have 6 db at 6 kc and down to 40 db at 20 kc. Oscillator injection may be obtained from the AOR-OT-1 or a suitable crystal controlled oscillator. Completely

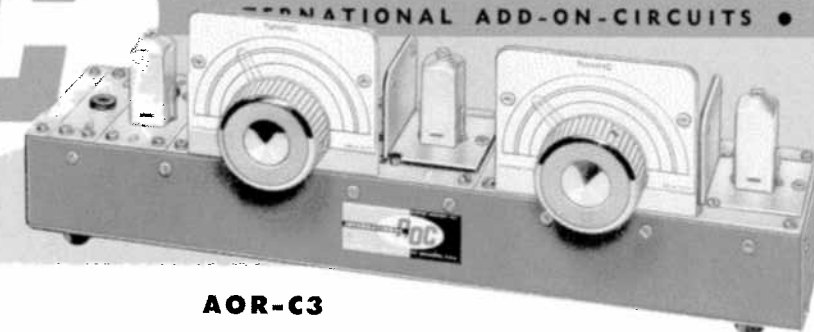
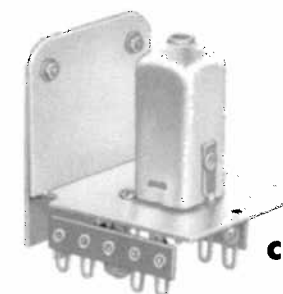
**AOR-C12**

wired. Natural aluminum finish case. Shipping weight: 5 lbs. Less coils and oscillator. Cat. No. AOR-C3..... **\$27.50**

AOR-C12

The **AOR-C12** is a crystal controlled RF converter using two stages of RF amplification. Specifications: First nuvistor grounded grid and second cascode nuvistor. These two stage drive a 6BH6 mixer. Output IF 10.7 mc. The input range may be ordered to cover any 200 kc range between 30 mc and 200 mc. Oscillator uses a 6BH6, and 6DS4 multiplier where required. Completely wired. Natural aluminum finish case. Shipping weight: 5 lbs. AOR-C12 with crystal tuned for customer specified input signal.

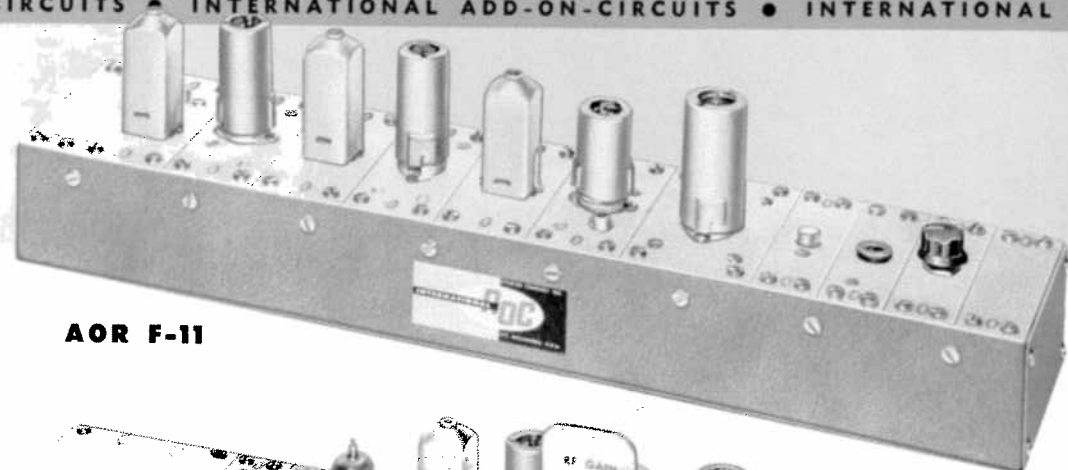
Cat. No. AOR-C12..... **\$54.00**

**AOR-C3****CPR COILS**

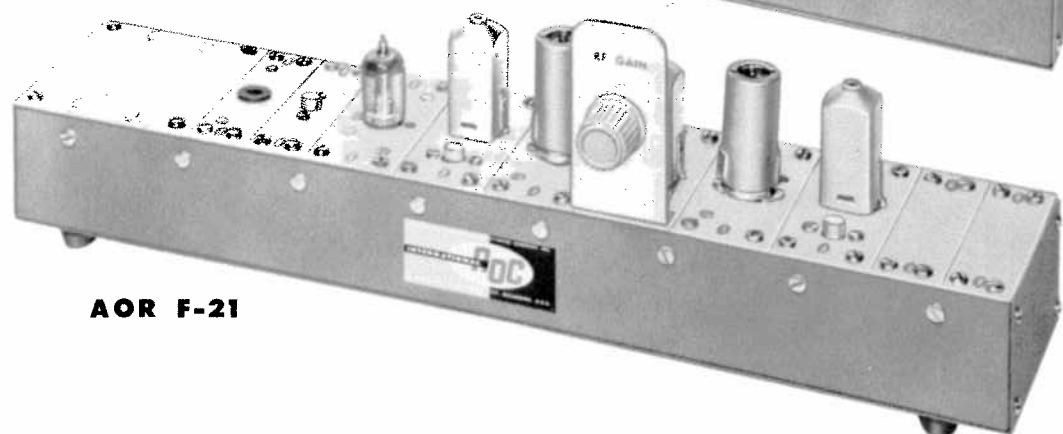
CPR COILS

Plug in coil for use with the AOR-C3 converter. Each set consists of two coil units (antenna input and RF/mixer coupling). Shipping weight: (1 to 5 sets) 2 lbs. Order by coil number. **\$11.00 per set.**

Coil No.	Range
CPR-1	180 — 350 kc
CPR-2	350 — 600 kc
CPR-3	600 — 1,100 kc
CPR-4	1,100 — 2,300 kc
CPR-5	2,200 — 4,500 kc
CPR-6	4,500 — 12,600 kc
CPR-7	12,000 — 21,500 kc
CPR-8	19,500 — 30,500 kc



AOR F-11



AOR F-21

IF Amplifiers and Detectors

International AOC IF Amplifiers are available for AM, FM, SSB, or DSB reception. The five units described on this page are shipped completely wired and tested.

AOR F-11

The **AOR F-11** IF Amplifier is designed for the reception of FM signals. Specifications: IF amplifier, noise limiter, discriminator, first audio and squelch. 455 kc for 5 to 10 kc deviation signals. Shipping weight: 5 lbs.

Cat. No. AOR F-11.....\$37.50

AOR F-12

Same as **AOR F-11**, except 10.7 mc for 75 kc deviation signals. Shipping weight: 5 lbs.

Cat. No. AOR F-12.....\$37.50

AOR F-21, AOR F-22

IF amplifier units for reception of AM signals. Specifications: Two stage IF amplification, detector, noise limiter, first audio, and squelch. Shipping weight: 5 lbs.

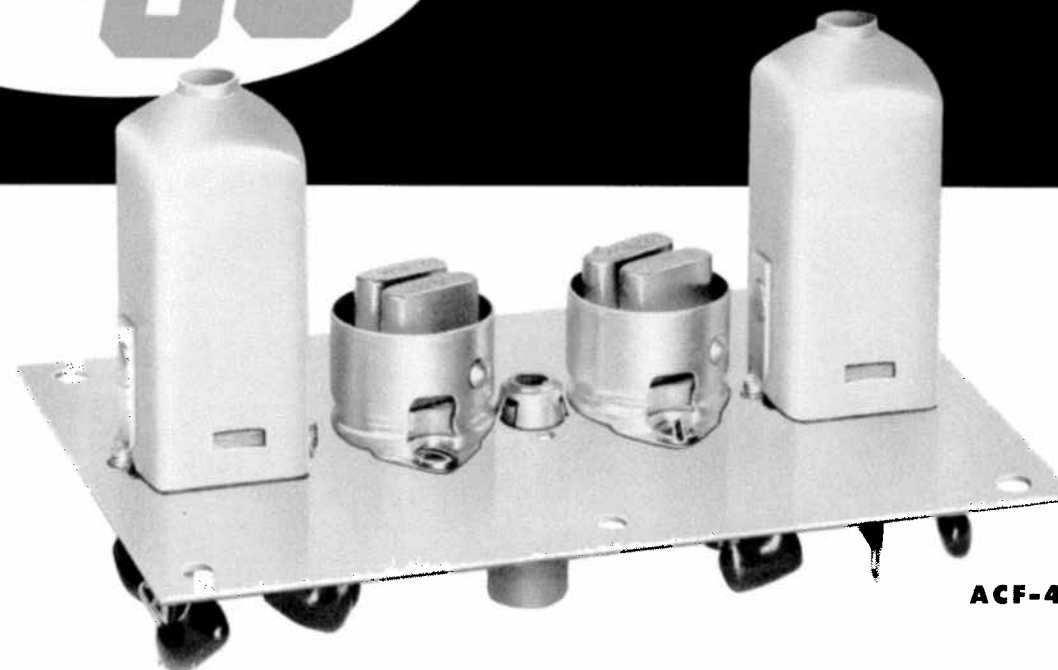
Cat. No. AOR F-21 (455 kc IF).....\$42.00

Cat. No. AOR F-22 (1700 kc IF).....42.00

AOR F-23

IF Amplifier for SSB or DSB signals. Specifications: Two 9 mc IF, product detector, BFO, first audio. Shipping weight: 5 lbs.

Cat. No. AOR F-23.....\$57.50



ACF-4

Single Sideband Filters

AOC Crystal filter units are designed for 3 kc bandpass and may be used for receiver or transmitter application in single sideband construction. Filters are complete with input and output transformers thus eliminating the match and tune-up problem. Inputs may be connected for balanced or unbalanced feed. Rejection of sideband increases with the number of crystals in filter. For example, 30 db for two crystals to 55 db or better with six crystals. Input may be fed from single or balanced plate circuit. Output feeds single high impedance grid. All units are wired and tested.

ACF-2

Two-crystal filter circuit using low impedance link input and 2K resistive output load. Unwanted sideband rejection greater than 30 db. Mounting space 1½". Shipping weight: 2 lbs.

Cat. No. ACF-2.....\$9.95

ACF-4

Four-crystal filter circuit using nominal 600 ohm input and output. Unwanted sideband rejection greater than 40 db. Mounting space 2". Shipping weight: 2 lbs.

Cat. No. ACF-4.....\$18.95

ACF-6

Six-crystal filter circuit using nominal 600 ohm input and output. Unwanted sideband rejection greater than 40 db. Shipping weight: 2 lbs.

Cat. No. ACF-6.....\$27.95

Matching oscillator crystals for the ACF filter series. Recommended for use in OS-4 or OS-42 oscillators. See complete unit, AOT SS9 (page 11).

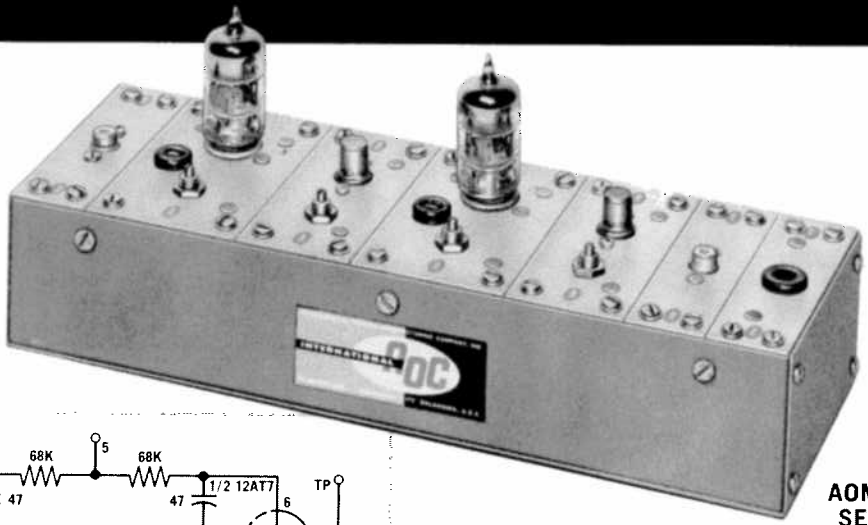
Cat. No. CY-6-9LO.....\$4.40

Cat. No. CY-6-9HI.....4.40

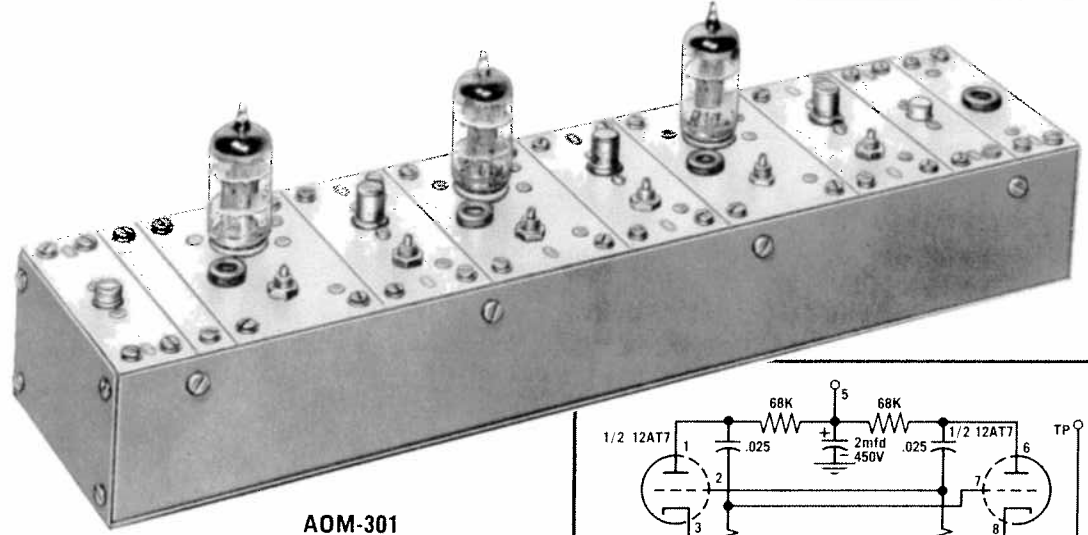


AOM-100 SERIES

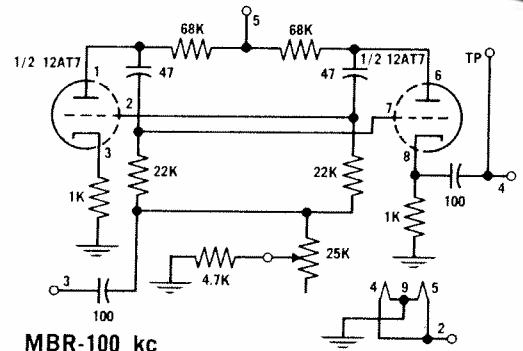
AOM-100X



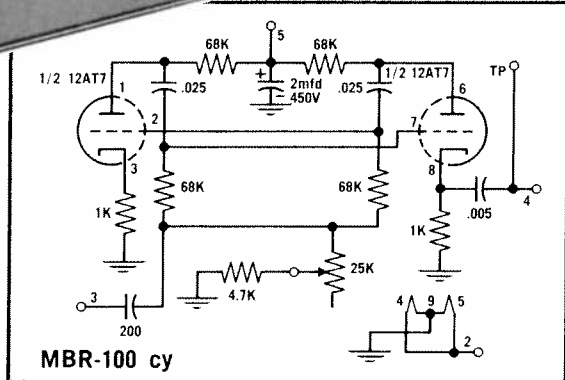
AOM-200 SERIES



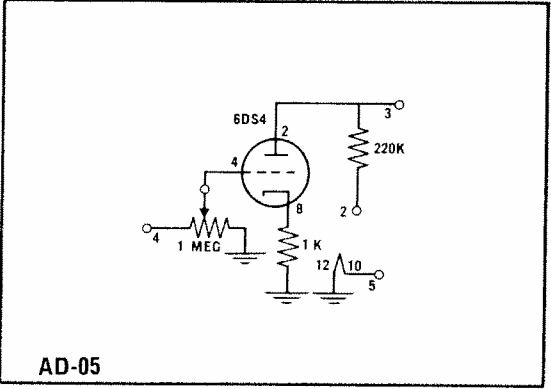
AOM-301



MBR-100 kc



MBR-100 cy



AD-05

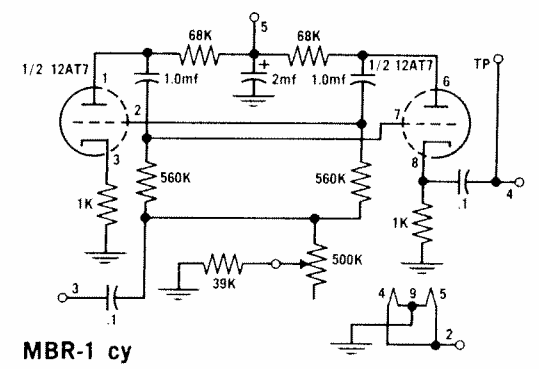
Multivibrators

AOC Multivibrators are free running sawtooth oscillators designed to lock on a stabilized signal source for division of 10.

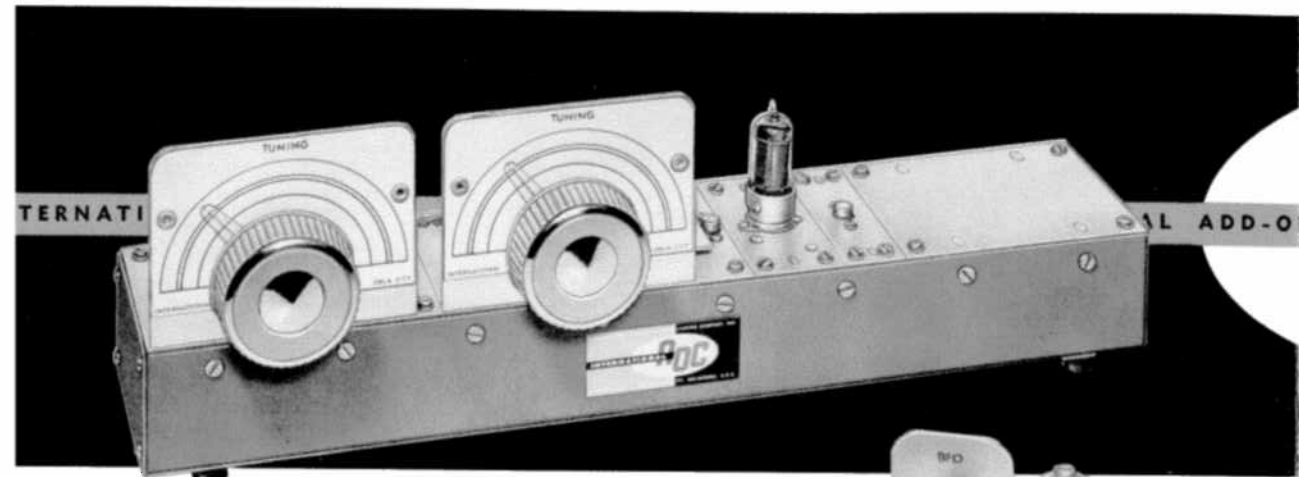
Multivibrator units may be obtained in a number of combinations or single units. Each multivibrator has isolation amplifier to stabilize lock. Complete series allows 1,000 kc crystal to produce a 1 cycle per second pulse. Both 1,000 kc and 100 kc crystal oscillator units are available.

Crystal oscillators AOM-100X and AOM-1000X provide a stabilized signal source to drive the multivibrator chain. Each oscillator has regulator tube and crystal oven to insure maximum stability. Short term stability, 1 part in 10⁸.

UNIT	DESCRIPTION	PRICE
AOM-101	100 kc	\$19.95
AOM-102	10 kc	19.95
AOM-103	1 kc	19.95
AOM-104	100 cps	19.95
AOM-105	10 cps	19.95
AOM-106	1 cps	19.95
AOM-201	100 kc and 10 kc	35.00
AOM-202	10 kc and 1 kc	35.00
AOM-301	100 cps, 10 cps, 1 cps	49.50
AOM-100X	100 kc oscillator	32.50
AOM-1000X	1,000 kc oscillator	32.50



MBR-1 cy



AOR OT-1

Oscillators

AOR OT-1

Variable frequency oscillator using 15 plug-in coils to cover the range 180 kc to 20 mc. Oscillator has both coarse and fine tuning controls. Each coil comes with calibrated dial card. Calibration marks vary between 10 kc and 50 kc depending on the range. It is resetable to .1% or better. Short term stability .01% or better. Uses electron-coupled circuit with voltage regulator tube on oscillator section. Shipping weight: 5 lbs.

Complete, wired less coils.

Cat. No. AOR OT-1.....\$24.50

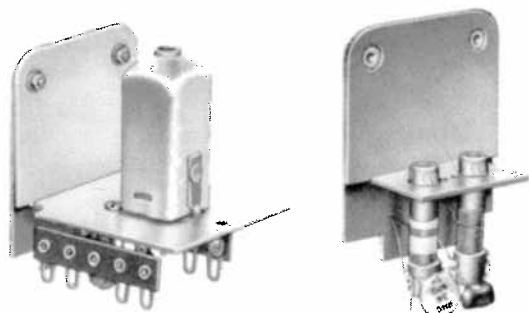
CPO Coils for AOR OT-1 oscillator with calibration card.

\$4.50

COIL NO.	FREQUENCY RANGE
CPO-1	180 - 350 kc
CPO-2	350 - 600 kc
CPO-3	600 - 1,100 kc
CPO-4	1,100 - 1,800 kc
CPO-5	1,800 - 2,300 kc
CPO-6	2,300 - 3,300 kc
CPO-7	3,300 - 4,500 kc
CPO-8	4,500 - 6,200 kc
CPO-9	6,200 - 9,900 kc
CPO-10	6,900 - 9,900 kc
CPO-11	9,900 - 12,200 kc
CPO-12	12,200 - 14,500 kc
CPO-13	14,500 - 17,000 kc
CPO-14	17,000 - 19,500 kc
CPO-15	19,500 - 21,500 kc



BFO-14 / BFO-17

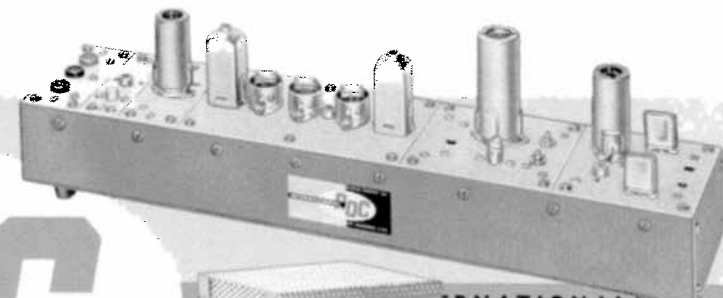


CPO COILS

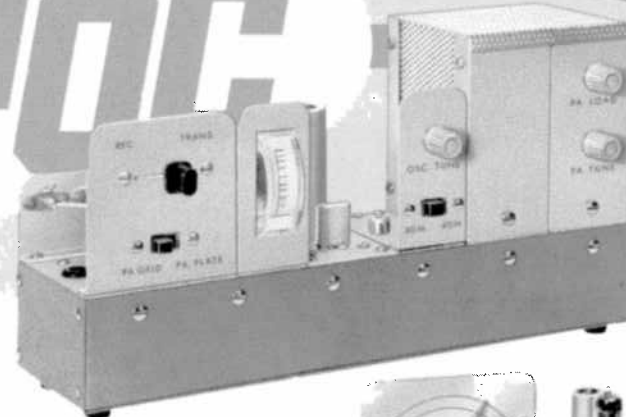
BFO-14 / BFO-17

Fixed frequency oscillators with vernier tuning. Designed for beat frequency injection to AM and SSB IF strips such as the AOR-F21 and AOR-F22. Order by unit number.

UNIT	DESCRIPTION	PRICE
BFO-14	455 kc	\$9.95
BFO-17	1,700 kc	9.95

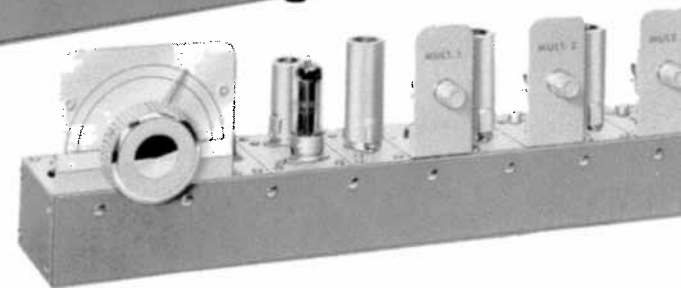


AOT-559



AOT-50

AOF-91 VFO



Transmitters / Exciters

AOT-50

The AOT-50 CW transmitter is a 50 watt plate input transmitter with metering and switching circuits to operate the receiver. Circuit uses 12BY7 crystal oscillator and 6DQ6 power amplifier with pi-network in the final tank circuit. The transmitter includes coil switching for operation on either 80 meters or 40 meters. Shipping weight: 5 lbs. Complete with key and one 40 meter novice band crystal. Less power supply (use AOP-100).

Cat. No. AOT-50.....\$35.00

AOT-559

Exciter unit for single sideband transmitter. Produces 9 mc upper or lower sideband signal for converting to other frequencies. Has low impedance output and provides 50 db or better of carrier and sideband suppression. Contains ACF-6 crystal filter. Shipping weight: 5 lbs. Complete, wired.

Cat. No. AOT-559.....\$57.50

AOF-91 VFO

Variable frequency oscillator complete with driver unit for use with 6 meter and 2 meter transmitters. Approximately .5 watts of power is available on both 6 meters and 2 meters. Specifications: 6BH6 oscillator tuning 8 mc-9 mc with OB-2 voltage regulator; 12BY7 buffer amplifier-multiplier. Shipping weight: 5 lbs. Complete, wired.

Cat. No. AOF-91.....\$36.00

AOF-90 VFO

Variable frequency oscillator complete with driver unit for 6 meters. Approximately .5 watts of power. Specifications: 6BH6 oscillator tuning 8 mc-9 mc, OB-2 voltage regulator; 12BY7 buffer multiplier. Shipping weight: 5 lbs. Complete, wired.

Cat. No. AOF-90.....\$29.00

AOF-89 VFO

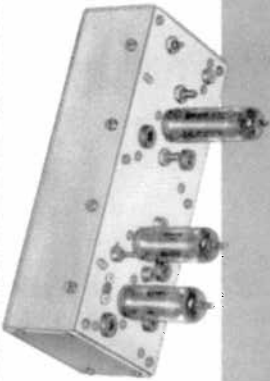
Variable frequency oscillator complete with driver unit. Specifications: 6BH6 oscillator tuning 8 mc - 9 mc; 12BY7 buffer. Multipliers can be added. Shipping weight: 5 lbs. Complete, wired.

Cat. No. AOF-89.....\$22.50

NEW FROM INTERNATIONAL

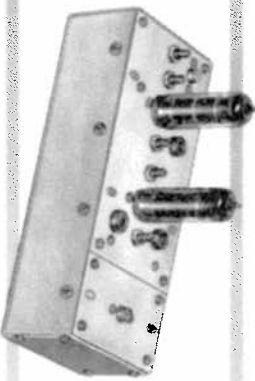
VHF/UHF UNITIZED TRANSMITTERS 50 mc — 420 mc

International's new unitized VHF/UHF transmitters make it extremely easy to get on the air in the 50-420 mc range with a solid signal. Start with the basic 50 or 70 mc driver. For higher frequencies add a multiplier-amplifier. All units are completely wired. Plug-in cables are used to interconnect the driver and amplifier.



AOA-144
MULTIPLIER / AMPLIFIER FOR 144 mc
The AOA-144 uses two 6360 tubes providing 6 to 10 watts output. Requires AOD-57 for driver. Heater power: 6.3 volts @ 1.64 amps. Plate power: 250 vdc @ 180 ma.
AOA-144 complete \$39.50

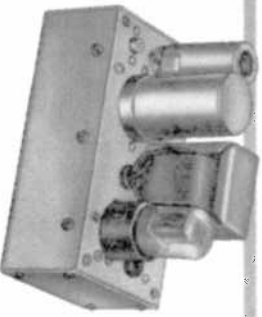
AOD-57
DRIVER / TRANSMITTER FOR 50 OR 70 mc
The AOD-57 completely wired with one 6360 tube, two 12BY7 tubes and crystal (specify frequency). Heater power: 6.3 volts @ 1.2 amps. Plate power: 250 vdc @ 50 ma.
AOD-57 complete \$69.50



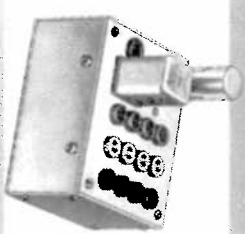
AOA-220
MULTIPLIER / AMPLIFIER FOR 220 mc
The AOA multiplier / amplifier uses two 6360 tubes providing 6 to 8 watts output on 220 mc. Requires AOD-57 for driver. Heater power: 6.3 volts @ 1.64 amps. Plate: 250 vdc @ 150 ma.
AOA-220 complete \$39.50



AOA-420
MULTIPLIER / AMPLIFIER FOR 420 mc
The AOA-420 multiplier / amplifier uses two 6939 tubes providing 4 to 8 watts output on 420 mc. Requires AOA-57 plus AOA-144 for drive. Heater: 6.3 volts @ 1.2 amps. Plate: 220 vdc @ 130 ma.
AOA-420 complete \$69.50

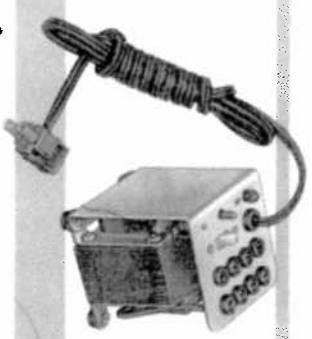


AMD-10 MODULATOR:
The AMD-10 modulator is designed as a companion unit to the AOA series of transmitters. Uses 6AN8 speech amplifier and driver, 1635 modulator. Output: 10 watts. Input: crystal microphone (High Impedance). Requires 300 vdc 20 ma, no signal; 70 ma peak; 5.3 vac @ 1.05 amps.
AMD-10 Modulator complete \$24.50



APD-610
FILAMENT SUPPLY
The APD-610 provides 6.3 vac @ 10 amperes.
APD-610 complete \$9.50

ARY-4
RELAY BOX
Four circuit double throw. Includes coil rectifier for 6.3 vac operation.
ARY-4 Relay Box complete \$12.50



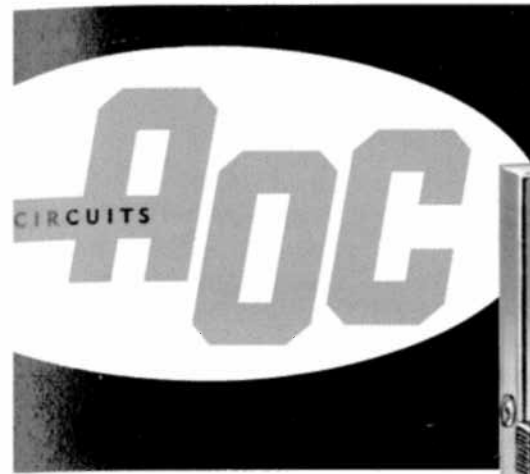
COMPLETE TRANSMITTER

6 METERS	50 mc	AOD-57			
2 METERS	144 mc	AOD-57 PLUS AOA-144			
	220 mc	AOD-57 PLUS AOA-220			
	420 mc	AOD-57 PLUS AOA-144 PLUS AOA-420			



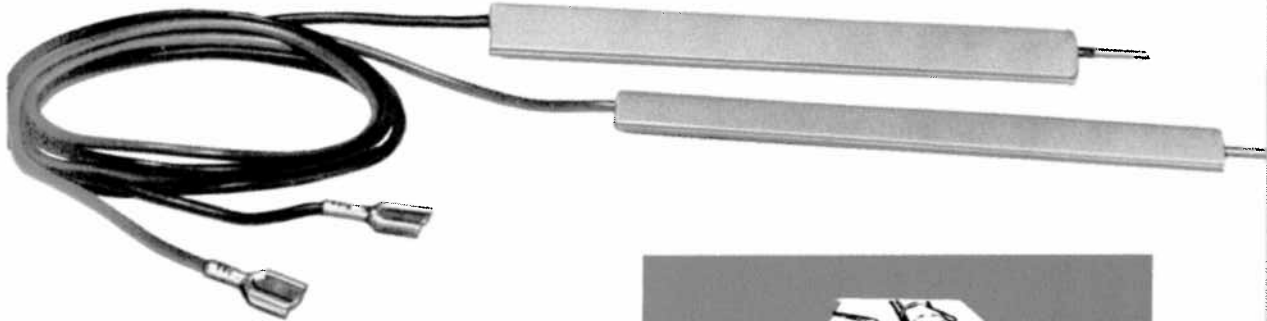
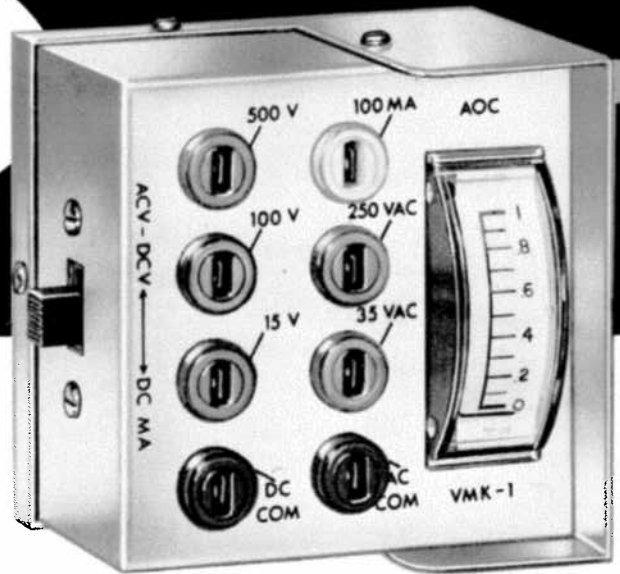
Order Direct
from International

18 NORTH LEE — OKLA CITY, OKLA.



N-CIRCUIT

*Prevent
Equipment Failure
from
Incorrect Voltages*

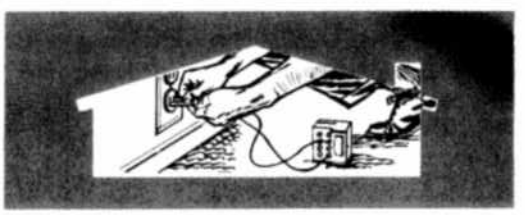
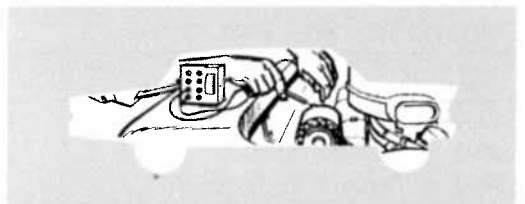


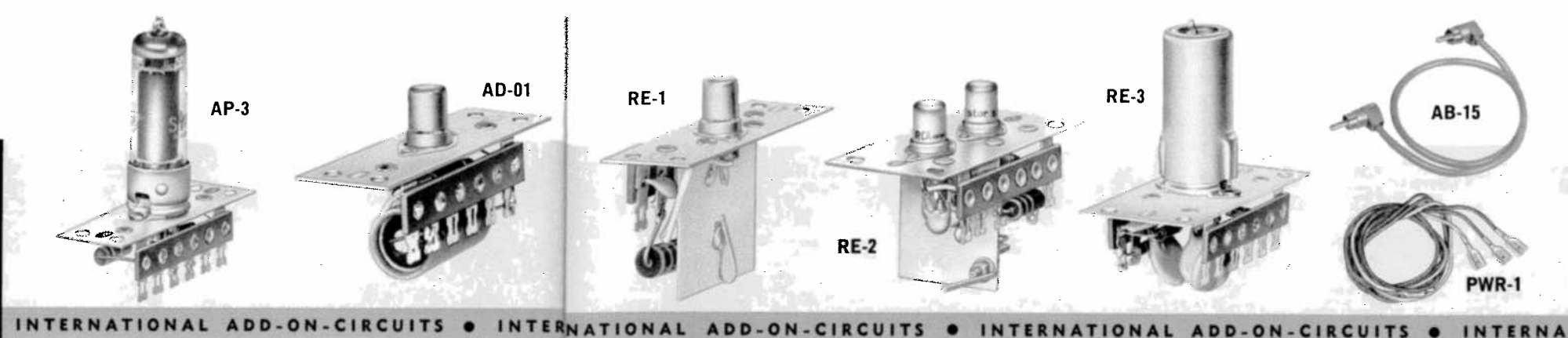
Voltmeter

VMK-1

This compact test instrument will measure DC voltages from 0 to 500 volts, AC voltages from 0 to 250 volts, DC milliamperes from 0 to 100 milliamperes. Accuracy within ± 10 percent. Dimensions 3" x 3" x 2". Check voltages from batteries, generators, AC power sources, etc. This handy VMK-1 voltmeter will be a welcome addition to the home, workshop, office, boat or car. Shipping weight: 2 lbs.

Kit, complete with test probes \$7.95
Wired, complete with test probes 9.95





AMPLIFIER, AUDIO POWER

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
AP-3	Audio Power Amplifier 3 Watt Class A	Audio	6AQ5	250/50	6.3/.45	SE/1"	\$2.95
AP-5	Audio Power Amplifier 5 Watt Class A	Audio	6BQ5	250/45	6.3/.76	SE/1½"	3.40
AP-10	Audio Power Amplifier 10 Watt Class B	Audio	1635	300/60	6.3/.6	SE/1½"	4.25

AMPLIFIER, AUDIO VOLTAGE

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
AD-01	Audio Driver	Audio	6DS4	250/1.6	6.3/135	SE/1"	\$4.25
AD-02	Audio Driver with Vol. Control	Audio	6DS4	250/1.6	6.3/135	SE/1½"	4.95
AD-03	Two Stage Pre-Amp/Driver	Audio	12AX7	250/1.0	6.3/300	SE/1½"	5.25
AD-04	Driver, Two Stage with Pre Amplifier	Audio	6AN8	250/10	6.3/450	SE/1½"	5.25
AD-05	Audio Isolation for use with Multivibrators	1 cy-100 kc	6DS4	150/1	6.3/135	SE/1½"	6.50

AMPLIFIER, RF POWER

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
RP-25	Final Amp 50 Watt Input	30 mc	6DQ6	350/140	6.3/1200	SE/2"	\$3.95

AMPLIFIER, RF VOLTAGE

NOTE — For tuned circuits to be used with these amplifier circuits see COILS and TRANSFORMERS IF

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
RE-1	Grounded Grid Nuvistor	450 mc	6DS4	250/5	6.3/135	SE/1"	\$3.95
RE-2	Cascode Nuvistor	170 mc	6DS4	250/7	6.3/270	SE/1½"	5.95
RE-3	Pentode for RF and IF	30 mc	6BA6	250/7	6.3/300	SE/1½"	4.15

CABLES

CATALOG NO.	DESCRIPTION	PRICE
AB-6	6-inch shielded with molded phono plugs each end for RF and audio	\$.95
AB-15	15-inch shielded with molded phono plugs each end for RF and audio	1.05

CABLE, POWER HARNESS

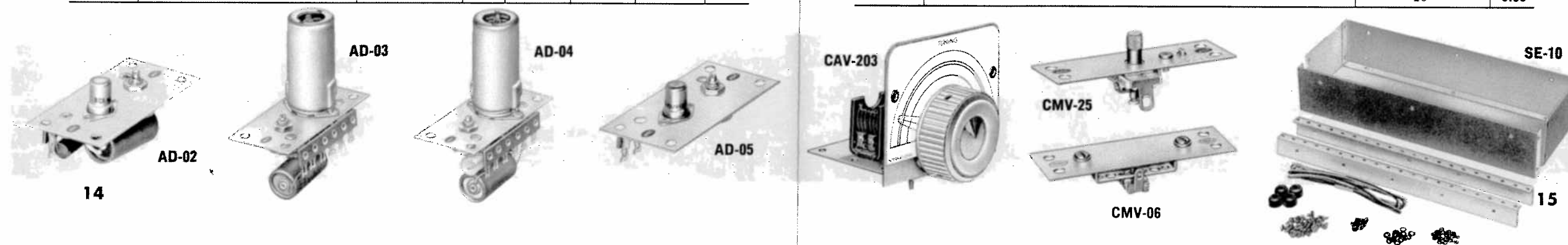
CATALOG NO.	DESCRIPTION	PRICE
PWR-1	Three sets of interconnecting wires with plug-on terminals each end. For connecting power between AOC units.	\$1.45

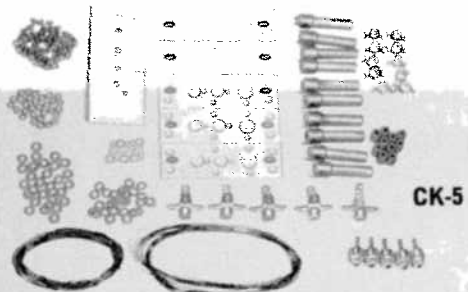
CAPACITORS, VARIABLE

CATALOG NO.	DESCRIPTION	MOUNTING	PRICE
CAV-203	Dual Section, Variable Capacitor 2.9-18 pfd, Planetary drive complete with panel, scale, pointer and knob.	SE/2"	\$7.80
CAV-230	Dual Section, Variable Capacitor 10-270 pfd, Planetary drive complete with panel, scale, pointer and knob.	SE/2"	7.80
CMV-25	Mica compression capacitor 50 to 380 pfd with knurl ¼" shaft and screw drive slot.	SE/1"	1.60
CMV-06	Mica compression trimmer on plate and bracket 8-60 mfd. Screwdriver adjust.		1.60

CASES

CATALOG NO.	DESCRIPTION	USABLE MOUNTING SPACE IN INCHES	PRICE
SE-4	All SE style cases are complete with mounting rails, hardware and hook-up wire. The SE case mounts plates having a width of 3⅞ inch and mounting hole centers of ½ inch or multiples thereof.	4	\$4.45
SE-6		6	5.20
SE-8		8	5.95
SE-10		10	6.70
SE-12		12	7.45
SE-14		14	7.90
SE-16		16	8.95

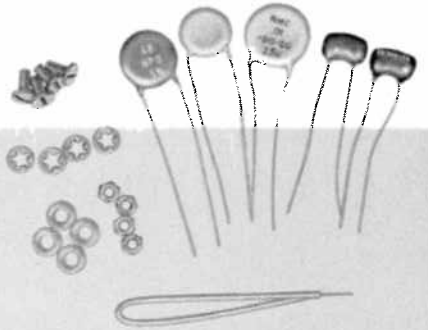




CK-5



C-10



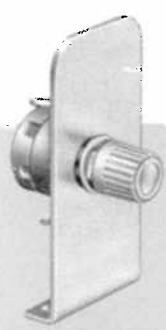
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COIL, KIT

CATALOG NO.	DESCRIPTION	PRICE
CK-5	Contains five double coil plates with output jack and shield; ten 1/4-inch slug tuned coil forms; two sizes wire for winding coils; fifteen capacitors and ten iron core slugs. Kit contains sufficient parts for making five double coil AOC units in the range of 3mc to 200mc.	\$8.60

COILS

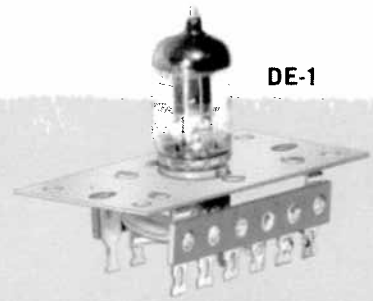
TYPE	DESCRIPTION	MOUNTING	FREQUENCY RANGE	CATALOG NO.	PRICE
"10" Series Single Coil	Single slug tuned coil and plate with shield. Includes coupling link and jack. Comes complete with fixed capacitors as required to cover the specified range. May be used for input, output or interstage.	SE/1"	.5 mc-2 mc	C-8	\$2.85
		SE/1"	2 mc-5 mc	C-10	2.65
		SE/1"	5 mc-20 mc	C-12	2.65
		SE/1"	20 mc-50 mc	C-14	2.65
		SE/1"	50 mc-100 mc	C-16	2.65
		SE/1"	100 mc-200 mc	C-18	2.65
"200" Series Double Coil	Two slug tuned coils, plate, and shield. Includes coupling link and jack on one coil. Comes complete with fixed capacitors as required to cover the specified range. May be used for input, output or interstage.	SE/1"	.5 mc-2 mc	C-208	\$4.15
		SE/1"	2 mc-5 mc	C-210	3.95
		SE/1"	5 mc-20 mc	C-212	3.95
		SE/1"	20 mc-50 mc	C-214	3.95
		SE/1"	50 mc-100 mc	C-216	3.95
		SE/1"	100 mc-200 mc	C-218	3.95
Transmitter Pi-Network 50 Watt Plate Input 700 VDC Working	Includes coil, input and output capacitors, choke, blocking capacitor and shield. Designed to operate with the RP series of RF power amplifier plates.	SE/2"	1,800 kc-2,000 kc	CTP-302	\$9.50
		SE/2"	3,500 kc-4,000 kc	CTP-304	9.50
		SE/2"	7,000 kc-7,300 kc	CTP-306	9.50
		SE/2"	14 mc-15 mc	CTP-308	9.50
		SE/2"	21 mc-22 mc	CTP-310	9.50
		SE/2"	26 mc-30 mc	CTP-312	9.50
		SE/2"	50 mc-54 mc	CTP-314	9.50
		SE/2"	144 mc-148 mc	CTP-316	9.50



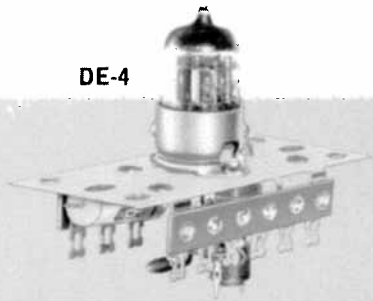
VC-1



CY-6



DE-1



DE-4

CONTROL, VOLUME

CATALOG NO.	DESCRIPTION	MOUNTING	PRICE
VC-1	1 meg. Volume Control with mtgng bracket and knob	SE/1"	\$1.95

CRYSTALS

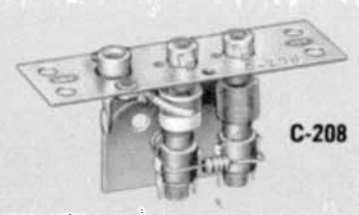
CATALOG NO.	DESCRIPTION	TOLERANCE	FREQUENCY	PRICE
CY-6	Quartz crystal for use in AOC units. Include the following information with your order: (1) frequency (2) type AOC unit in which used	± .005%	200 kc-999 kc	\$15.00
CY-6-1	6 meter converter crystal for 7 mc IF	± .01%	1,000 kc-2,000 kc 2,000 kc-60 mc	7.50
CY-6-2	2 meter converter crystal for 7 mc IF	± .01%	45.666 mc 43 mc	5.75 4.40

DETECTORS

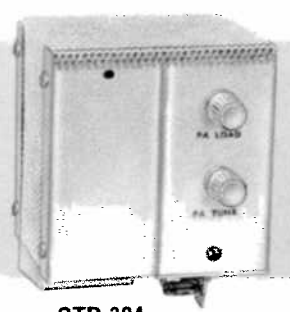
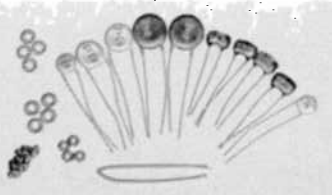
CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	FILAMENT VOLTS/MA	MOUNTING	PRICE
DE-1	AM Diode detector with AVC output	30 mc	9006	6.3/150	SE/1 1/2"	\$3.65
DE-2	Grid Leak Detector	30 mc	6BH6	6.3/150	SE/1 1/2"	4.15
DE-3	Regenerative Detector/1st Audio Amplifier with Volume Control	30 mc	6U8	6.3/450	SE/1 1/2"	5.95
DE-4	FM Discriminator	30 mc	6AL5	6.3/300	SE/1 1/2"	4.25
DE-5	FM Ratio Detector	30 mc	6AL5	6.3/300	SE/1 1/2"	3.65
DE-6	AM Detector with noise limiter	30 mc	6AL5	6.3/300	SE/1 1/2"	4.50

HARDWARE

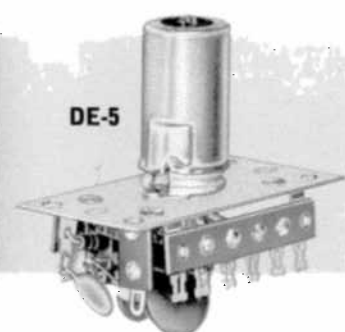
CATALOG NO.	DESCRIPTION	PRICE
HW-1	100 4-40x1/4 MCH screw, 100 4-40 hex nut, 100 #4 lock washer spare mounting bolts for AOC units.	\$1.45
HW-16	Two pieces extruded aluminum angle 16 inches long with punch holes 1/2 inch center one side and tapped #6 holes on 2 inch center other side. Same as used in AOC cases to hold AOC units.	2.95



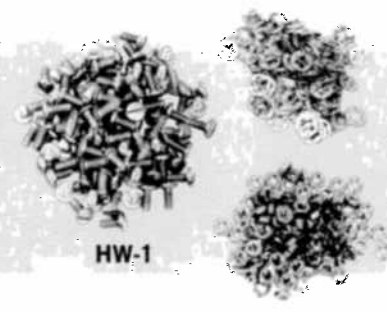
C-208



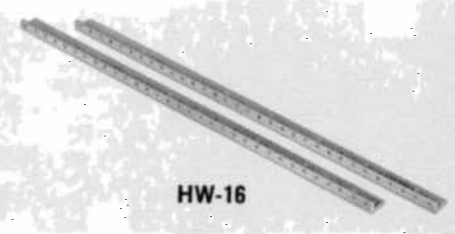
CTP-304



DE-5

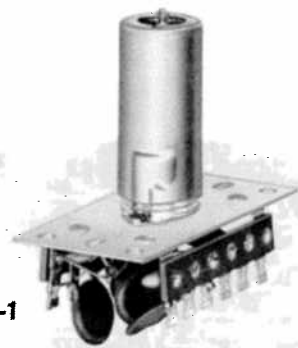


HW-1

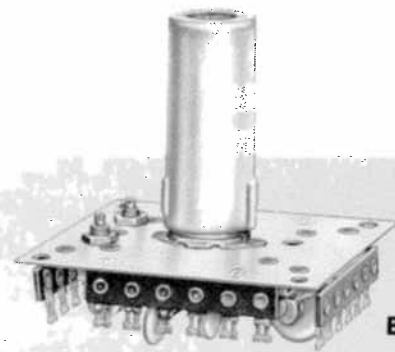


HW-16

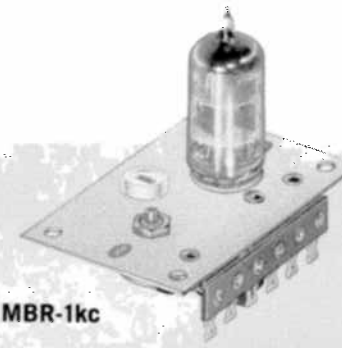
LM-1



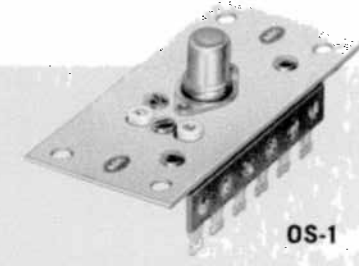
BLD-1



MBR-1kc



OS-1



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LIMITER, RF VOLTAGE

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
LM-1	Limiter Amplifier RF Voltage	30 mc	6BA6	250/3	6.3/300	SE/1½"	\$4.15

MODULATOR

CATALOG NO.	DESCRIPTION	PRICE
BLD-1	Balanced modulator circuit for reducing carrier and producing AM Sidebands. Designed to operate into ACF filter with crystal driver from OS-4 or OS-42 oscillators. Carrier suppression can be adjusted to better than 50 db.	\$9.95

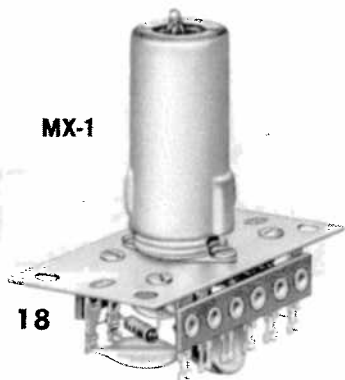
MIXERS

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
MX-1	RF low level signal mixer designed for link injection into grid coil.	200 mc	6BH6	250/1	6.3/150	SE/1½"	\$4.15
MX-2	RF low level signal mixer designed for cathode injection.	200 mc	6BH6	250/1	6.3/150	SE/1½"	4.15
MX-3	Pentagrid Converter		6BE6		6.3/300	SE/1"	4.15

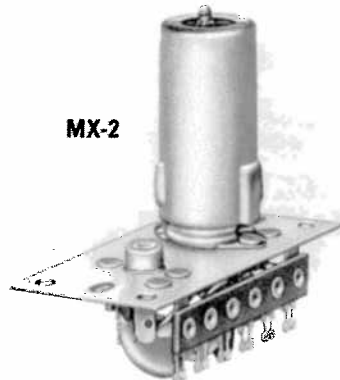
MULTIPLIERS

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
MU-1	RF Frequency Multiplier Recommended for doubling or tripling.	200 mc	6DS4	250/11	6.3/135	SE/1"	\$3.40
MU-2	RF Frequency Multiplier ½ Watt Output	150 mc	12BY7A	250/15	6.3/600	SE/1½"	3.80

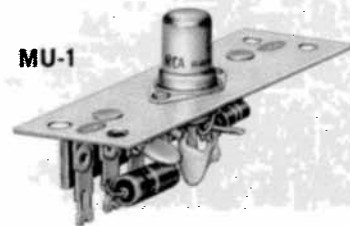
MX-1



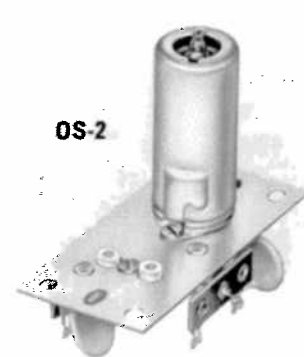
MX-2



MU-1



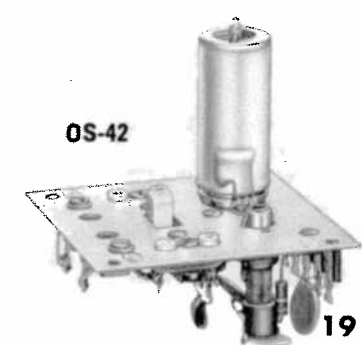
OS-2



OS-3



OS-42

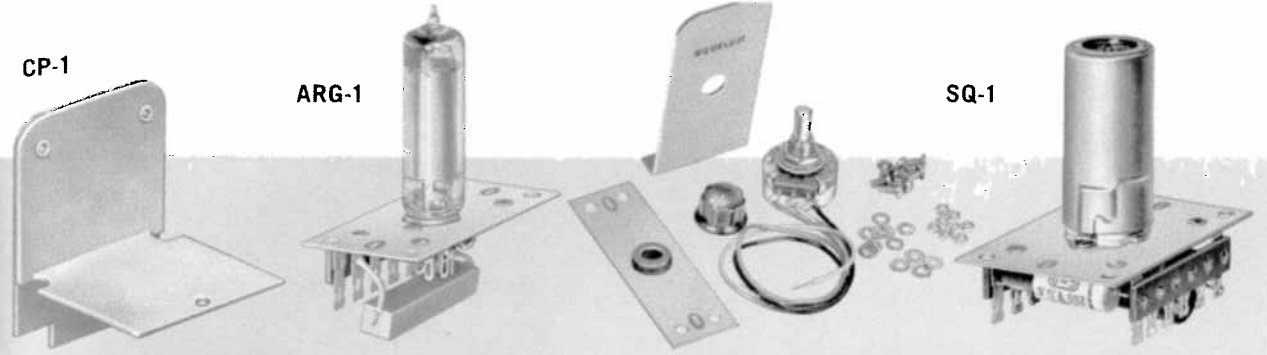
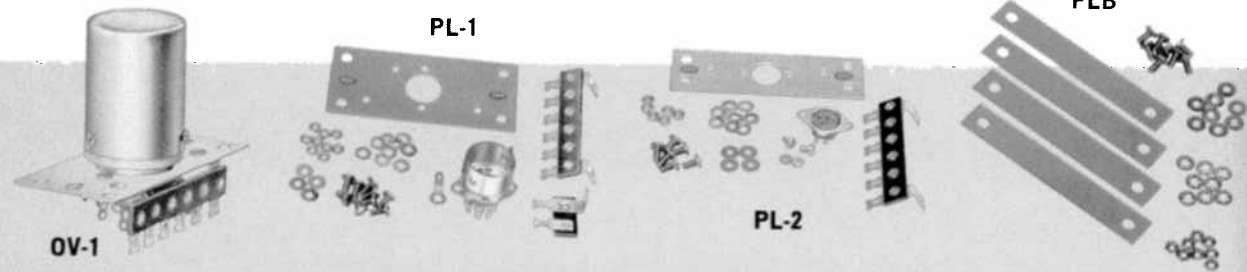


MULTIVIBRATORS

CATALOG NO.	DESCRIPTION	FREQUENCY	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
MBR-1cy	1 cy Multivibrator	1 cycle	12AT7	150 reg/5	6.3/300	SE/2"	\$8.95
MBR-10cy	10cy Multivibrator	10 cycles	12AT7	150 reg/5	6.3/300	SE/2"	8.95
MBR-100cy	100cy Multivibrator	100 cycles	12AT7	150 reg/5	6.3/300	SE/2"	8.95
MBR-1kc	1kc Multivibrator	1 kc	12AT7	150 reg/5	6.3/300	SE/2"	8.95
MBR-10kc	10kc Multivibrator	10 kc	12AT7	150 reg/5	6.3/300	SE/2"	8.95
MBR-100kc	100kc Multivibrator	100 kc	12AT7	150 reg/5	6.3/300	SE/2"	8.95

OSCILLATORS, CRYSTAL (For use with CY-6 Crystals)

CATALOG NO.	DESCRIPTION	FREQ RANGE	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
OS-1	Plate tuned oscillator requires coil plate of appropriate range.	To 60 mc	6DS4	250/5	6.3/135	SE/1½"	\$4.15
OS-2	Electron coupled, oscillating crystal between grid and screen. Uses fundamental cut crystal. Tuned circuit may be added in plate for doubling.	200 kc to 20,000 kc	6BH6	250/5	6.3/150	SE/1½"	4.15
OS-3	Modified Colpitts Crystal Oscillator. Use fundamental cut crystal. Tuned circuit may be added in plate for doubling.	2 mc-15 mc	12BY7A	250/12	6.3/600	SE/2"	4.35
OS-4	Electron coupled oscillating crystal between grid and screen. With trimmer capacitor for zero adjustment of frequency.	80 kc to 10,000 kc	6BH6	250/5	6.3/150	SE/1½"	6.95
OS-5	VFO with tuning capacitor and dial and panel scale.	8 mc-9 mc	6BH6, OB2	250/15	6.3/150	SE/2"	14.95
OS-42	Similar to OS-4 but contains two crystal sockets and switch for selecting either crystal. Individual trimmers for exact adjustment of each crystal. Uses CY-6 type crystal.						8.95



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OVENS, CRYSTAL

CATALOG NO.	DESCRIPTION	HEATER VOLTS/AMP	MOUNTING	PRICE
OV-1	Oven houses two CY-6 crystals. Operating temperature 85° C. Complete with plate and socket.	6.3/1.5	SE/2"	\$8.50

PLATES

CATALOG NO.	DESCRIPTION	MOUNTING	PRICE
PL-1	AOC plate with 7-pin tube socket and terminal strip for building your own circuit.	SE/1½"	\$1.50
PL-2	AOC plate with one nuvistor socket and terminal strip for building your own circuit.	SE/1"	1.50
PLB	Blank ½" plate for case fillers. Pkg. of 4.	SE/½"	1.35
PLB-A	Blank plate assortment consisting of two each 1", 1½" and 2" plates with hardware.		2.95
PLB-1	Four 1" blank plates with hardware.		2.25
PLB-1.5	Two 1½" blank plates with hardware.		1.95
PLB-2	Two 2" blank plates with hardware.		2.25
PLO	Octal socket plate and terminal strip.		1.95

PLUG-IN COIL ASSEMBLIES

CATALOG NO.	DESCRIPTION	PRICE
	AOC plate with socket, phono jack and grounding clip. For use with printed circuit plug-in units. Coil or other circuits may be mounted on blank plate of plug-in unit.	
CJ-1	Socket Unit	\$ 2.95
CP-1	Plug-In Unit — each	1.50
CP-10	Plug-In Unit — pkg. 10	10.50

POTENTIOMETER

CATALOG NO.	DESCRIPTION	PRICE
P-1M	1 meg ½ watt control with flat panel mounting.	\$1.95

REGULATOR, VOLTAGE

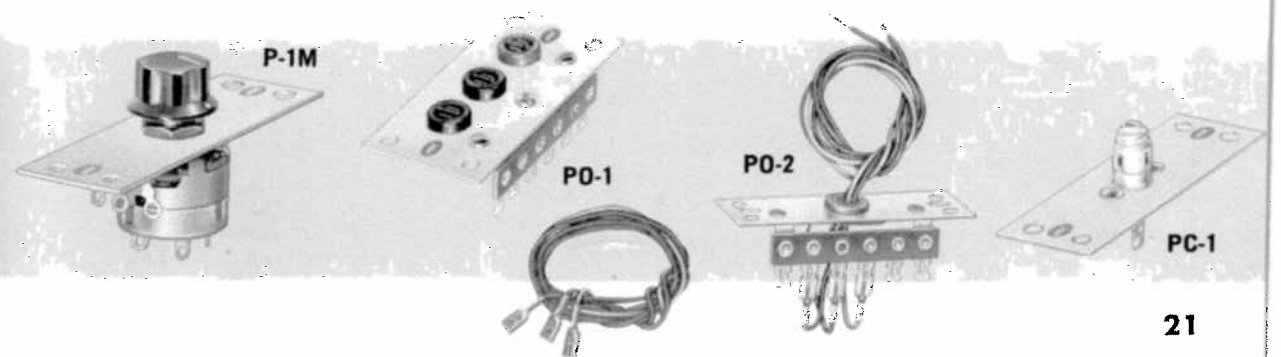
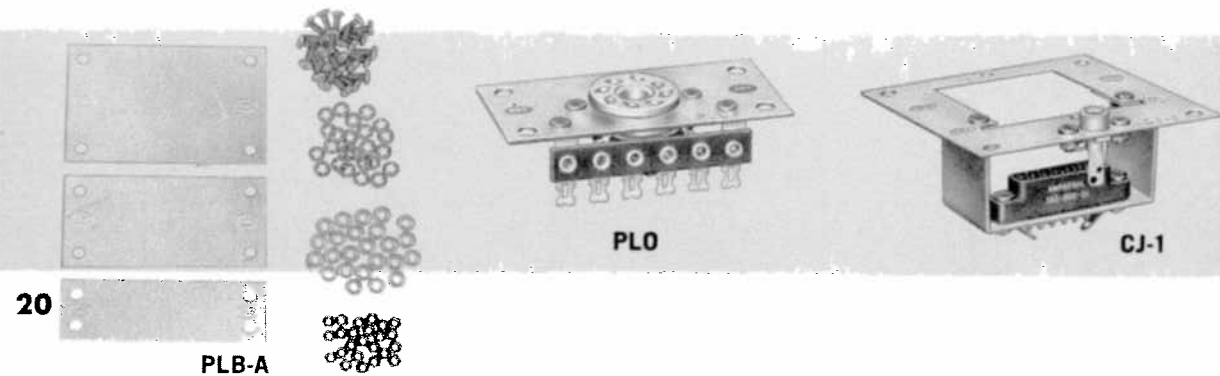
CATALOG NO.	DESCRIPTION	TUBE	MOUNTING	PRICE
ARG-1	150V Regulator with resistor	OB2	SE/1½"	\$2.60

SQUELCH, AUDIO AMPLIFIER

CATALOG NO.	DESCRIPTION	MAX FREQ RECOMMENDED	TUBE	PLATE VOLTS/MA	FILAMENT VOLTS/MA	MOUNTING	PRICE
SQ-1	Squelch circuit with amplifier	Audio	7199	250/5	6.3/.45	SE/2"	\$5.95

TERMINALS

CATALOG NO.	DESCRIPTION	MOUNTING	PRICE
PO-1	Three dual plug-on jacks mounted on plate with tie strip. Comes with three power leads—connectors attached on one end. For use in connecting power or high level audio.	SE/1½"	\$1.95
PO-2	1½" plate with power connecting terminal strip. Fits wire end plugs.		1.65
PC-1	Phono jack on 1-inch plate for use with RF or audio.	SE/1"	1.05





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