

Collins AMATEUR GEAR



75S-3

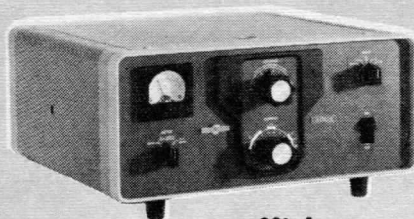
USE WRL'S CHARG-A-PLAN. No Down Payment, 36 Months To Pay, & EZ Add-Ons are available when you buy from World Radio. See page 63.



32S-3

MODEL 75S-3 RECEIVER Superior performance for SSB, CW, & RTTY. Quality in design, unexcelled frequency stability and other outstanding features. Covers each amateur band completely, 80 through 15 meters and a 200 Kc. segment on 10 with provisions for an additional 400 Kc. coverage. Also covers 15 Mc. WWV. Features: rejection tuning, variable or crystal BFO, 200 cps CW filter, 2.1 Kc. SSB filter, selectable AGC, spinner tuning knob, concentric gain controls, built-in calibrator. Provisions for optional filter in AM reception $\frac{1}{2}$ uv. sensitivity @10db SN+N. Built-in 115vac power supply. Less PM speaker. Size: $14\frac{1}{4} \times 6-9/16 \times 11\frac{1}{2}$ ". **100A002, Net (\$32.00 Monthly) 680.00**

MODEL 32S-3 TRANSMITTER Top performance on SSB & CW with frequency coverage similar to the matching 75S-3 receiver, except for the WWV range. Nominal output power of 100 watts selectable sideband & CW. Features newest circuitry for optimum CW operation, such as grid block keying, spotting control, keying hardness control, sidetone output. Includes VOX, anti-VOX for SSB. Carrier, unwanted sideband and mixer products 50db down. May be used in transceiver operation with the 75S-3. Requires hi-Z mike. Same size as 75S-3. Sh. wt. 20 lbs. Less power supply (516F-2 AC supply). **100A023, Net . . . (\$35.00 Monthly) 750.00**



30L-1



KWM-2



312B-5

MODEL 30L-1 LINEAR AMPLIFIER A compact, table top amplifier rated at 1,000 watts PEP (SSB) or CW input power, it may be driven by the 32S-3 or KWM-2, KWM-1 or most 75-100 watt output exciters. It is completely self contained and easily transported in the CC-2 carrying case. Dimensions are the same as the KWM-2 and of compatible styling. Other outstanding features are: automatic load control, R.F. inverse feedback, solid state rectifiers, self contained power supply, automatic antenna transfer with the on-off switch, comparator tuning meter. A grounded grid amplifier with four 811A's and bandswitching on the 80-10 meter amateur bands with provisions for limited general coverage. Matches 52 ohms unbalanced with not over 2:1 SWR. Sh. wt. 42 lbs. **100A001, Net (\$26.00 Monthly) 520.00**

MODEL KWM-2 TRANSCEIVER Fixed, Mobile, Portable Operation. All readily possible with KWM-2. Input power 175 watts PEP, SSB, or 160 watts, CW. Receiving and transmitting range is the same as the "S"

line units, as well as other general features. It lends itself to many types of operation. Less power supply, it uses either the standard 516F-2 or compact PM-2 (built-in speaker) AC supplies, or the MP-1 transistorized 12VDC mobile supply. May also be operated with the 312B-5 console for independent frequency control of trans-rec. Compact, $7\frac{1}{4} \times 14\frac{1}{4} \times 13\frac{1}{4}$ ". Sh. wt. 20 lbs. **100A005, Net . . . (\$50.00 Monthly) 1,150.00**

MODEL 312B-5 STATION CONSOLE & PTO Extends station flexibility and convenience with the built-in directional watt meter, phone patch, speaker and PTO for independent frequency control of reception and transmitting with the KWM-2. Size: $9 \times 10 \times 6-7/8$ ". Sh. wt. 10 lbs. **100A021, Net (\$17.00 Monthly) 350.00**

MODEL 312B-4 STATION CONSOLE Includes all the features of the 312B-5, except the PTO. Same style, size and other features. For use with either the "S" line units or the KWM-2. **100A020, Net . . . 195.00**

ADDITIONAL KWM-2 and "S" LINE ACCESSORIES (Not illus.)

312B-3 SPEAKER Styled to match "S" line or KWM-2, $9 \times 10 \times 6-7/8$ " and contains quality 5×7 " speaker with cable. **100A019, Net . . . 32.00**

516F-2 AC POWER SUPPLY Operates from 115vac source and delivers full power to 32S-3 or KWM-2. Same size as 312B-3 speaker. Space to mount speaker. Complete with cables. Sh. wt. 25 lbs. **100A018, . . . 115.00**

351D-2 MOBILE MOUNT Mounts KWM-2 in most autos. Complete with 20' cables. **100A010, Net (\$5.00 Monthly) 120.00**

MP-1 MOBILE SUPPLY Operates from 12VDC to power the KWM-2 or "S" line. Transistorized—Compact. Less cables. Sh. wt. 10 lbs. **100A008, Net (\$10.00 Monthly) 198.00**

CC-2 CARRYING CASE Samsonite Silhouette suitcase, specially fitted to hold Collins equipment. Will hold KWM-2/PM-2 combination or, individually, 32S-3, 75S-3 & 30L-1, with room for log, mike and other accessories. **100A006, Net 85.00**

PM-2 PORTABLE POWER SUPPLY Attaches to rear of KWM-2 and includes speaker. Operates from 115/220VAC, 50/400 cy. Sh. wt. 20 lbs. **100A004, Net (\$7.00 Monthly) 150.00**

MM1 DYNAMIC MICROPHONE. Hand held, push-to-talk, with 200-10K cycle response. Brushed satin chrome—die cast construction. 5' Koil-Kord with PL-68 plug. Sh. wt. 3 lbs. **80A041, Net 25.00**

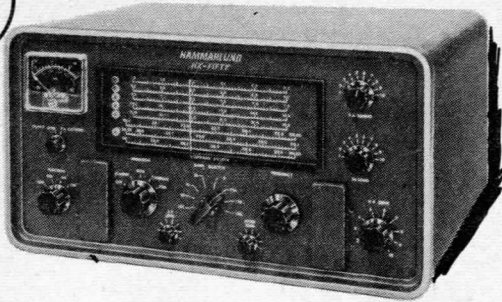
SM-1 DESK TOP MIKE High impedance dynamic mike with styling and output to match Collins equipment. Satin aluminum finish. 5 ft. coiled cord and plug (PL68) furnished. **80A042, Net 32.00**



62S-1

MODEL 62S-1 VHF CONVERTER Full 6 & 2 meter coverage, both transmitting and receiving, when used with the "S" line, KWM-2, or most other station equipment covering the range of 14.0—14.2 Mc. with transmitter power of similar ratings. Crystals provided for coverage of 49.6-54.2 Mc. and 143.6-148.8 Mc. System engineered for Collins exciters and completely self contained with no cables changes after initial set-up. Size: $6\frac{1}{2} \times 13 \times 14\frac{1}{4}$ ". Sh. wt. 29 lbs. **100A022, Net (\$40.00 Monthly) 895.00**

MECHANICAL FILTERS (75S-3) Optional filters for the AM position to obtain greater selectivity with steep sided response. Types available are: F455Y-31(3.1 Kc.), F455Y-40(4 Kc.), and F455Y-60(6 Kc.). Sh. wt. approx. 5 lbs. (overpacking) **Net ea. 764.00**



HX-50 SSB-CW-AM TRANSMITTER. Low in cost-high in performance, the HX-50 is full of outstanding features. Input power is 130 watts SSB (PEP), CW power 50-65 watts, AM power 25% of SSB/CW values. Internal VFO control for 3.2-4.2 Mc, 6.9-7.9 Mc, 13.8-14.8 Mc, 20.8-21.8 Mc, and 27-31 Mc. Switch for crystal control. Built-in VOX, antenna relay, PTT, filter type generation. Size: 17½x9½x9-1/8". Internal power supply for operation 105-125VAC, 50/60 cy, 250 watts. Sh. wt. 45 lbs.
104A010, Net (\$22.00 Monthly) 449.50



HQ-170A-C AMATEUR BAND RECEIVER. Outstanding performance on SSB/CW/AM/MCW in a neat, compact receiver. Full coverage of the 6, 10, 15, 20, 40, 80 and 160 meter bands. 17 tubes, triple conversion are highlights. Other features include; adjustable selectivity, slot filter, ANL, separate detectors for AM and SSB/CW, selectable sideband, 4 position AVC attack selection, 100kc calibrator, vernier tuning, "S" meter. Special dial scale calibration for external 2 meter converters. Converter power socket, hinged lid. Internal 115VAC, 50/60 cycle power supply; 120 watts. Requires external PM speaker. Special 24 hr. clock with timer to turn set on. Size: 10½x19x13". Sh. wt. 45 lbs. Use S-100 or S-200 speaker.
104A026, (\$20 Monthly) Net 379.00
MODEL HQ-170A Same as above, less clock-timer. **104A025, . . . 369.00**



HQ-180A-C GENERAL COVERAGE RECEIVER General coverage at it's SSB best, triple conversion, 18 tube receiver, covering continuously from 540Kc. to 30Mc. Bandsread calibration of 80,40,20,15,10 meters. Contains outstanding features of the HQ-170, but offering complete coverage. Operates from 105-125VAC, 50/60 cy., 120 watts. Physically same as HQ-170A. Includes clock-timer. Requires external PM speaker, S-200 or S-100. **104A016, (\$22 Monthly) Net 449.00**
HQ-180A RECEIVER Same as above, less clock-timer. **104A015, (\$22 Monthly) Net 439.00**



HQ-110A-C HAM BAND RECEIVER. A 12 tube, dual conversion superheterodyne receiver, covering 6,10,15, 20,40,80,160 meter amateur bands. 2 meter dial calibration for external converter. Dual dials for best calibration. Separate SSB detector, Q multiplier, "S" meter, 100Kc. calibrator, dial reset, AVC, ANL, accessory power socket. Operates from 105-125VAC, 50/60 cy., 80 watts. Size: 16½x9-7/16x9-1/8". Includes clock-timer. Sh. wt. approx. 35 lbs. **104A024, Net . . . 259.00**
HQ-110A RECEIVER. Same as above, less clock-timer. **104A023, (\$12 Monthly) Net 249.00**

WE WANT YOUR USED GEAR!

Yes World Radio will pay a premium for your used gear. Let us know what new equipment you want, & what you have to trade-in. We'll rush you the **BEST TRADE-IN ALLOWANCE, the same day.**



HXL-1 LINEAR AMPLIFIER. 1 KW PEP input, covers 80-10 meters, with provisions for addition of 160 meters. Efficient grounded-grid circuit uses high-dissipation output tube and adjustable 3 element pi-network. Has standby bias supply for complete cutoff during receive, relays for "exciter only" or amplifier operation. 9-1/8x17½x9½" Wt. 105 lbs.
104A027, (\$20.00 Monthly) Net 395.00



HQ-145X-C GENERAL COVERAGE RECEIVER Excellent general coverage and ham band performance. 11 tubes; dual conversion; crystal filter, slot filter, ANL, "S" meter. Covers 540 Kc to 30Mc. with electrical ham bandsread. Panel xtal socket for spot frequency xtal control. Physically same as HQ-170A. Includes clock-timer. Requires S-200 or S-100 speaker. **104A017, (\$14 Monthly) Net 289.00**
HQ-145X Same as above, less clock-timer. **104A012, (\$14 Monthly) Net 279.00**



HQ-100A-C GENERAL COVERAGE RECEIVER An excellent dollar value for the discriminating operator. Covers 540Kc to 30Mc, with electrical bandsread 80,40,20,15,10 meters. 10 tubes, ANL, Q multiplier, "S" meter, BFO. 105/125 VAC, 50/60 cy. 68 watts. Requires S-100 speaker. 16½x9-7/16x9-1/8". Includes clock-timer. Sh. wt. 30 lbs. **104A019, Net 199.00**
HQ-100A Same as above, less clock-timer. **104A018, (\$10 Monthly) Net 189.00**



24 HR. CLOCK-TIMER. Combination clock & automatic timer. Turns set on at preset time. Fits Hammarlund receivers having clock provisions. Sh. wt. 3 lbs. **86A051, . . 9.95**



XC-100 CALIBRATOR. Fits HQ-100A, HQ-145X and may be adapted to any receiver. External power required. Sh. wt. 3 lbs. **86A011, . . . 15.95**



S-100 SPEAKER. Matches HQ-100A, HQ-110A, HQ-105 TR. 3-6 ohm, 6x9" spkr. Size: 7x9-5/8x9-5/8". Sh. wt. 12 lbs. **104A003, . 14.95**

S-200 SPEAKER. Matches HQ-145X, HQ-170A, HQ-180A 3-6 ohm, extended range spkr. with 8 watt capacity. Size: 10½x11-7/8x9-1/8". Sh. wt. 14 lbs. **104A006, Net 19.95**

PL-42900-G1 NOISE SILENCER. Pulse blanking type noise limiter, designed for HQ-170A or HQ-180A receivers. **86A015, Net 33.50**



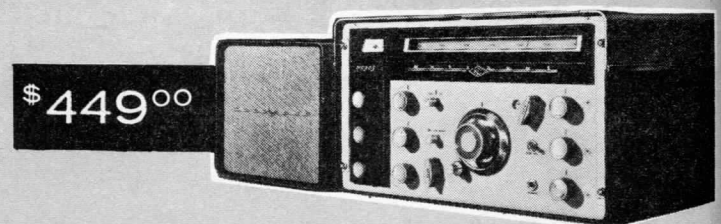
Precision - Made Receivers by NATIONAL



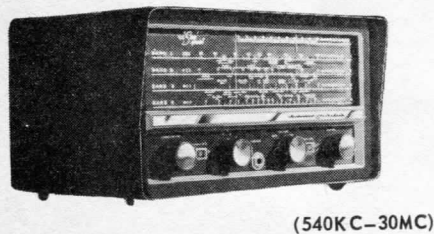
NCX-3 TRANSCEIVER. New from National. Complete SSB, AM & CW coverage of 80, 40 and 20 meters. Rugged and handsome this compact transceiver compliments both your car and Ham Shack. Offers a solid 200 watts P.E.P. of SSB input, 180 watts on CW & 100 watts on AM. Has every feature for relaxed Ham-band operation: operates upper SB on 20, lower SB on 80-40 meters, VOX/P.T.T., grid block break-in keying, crystal filter type SSB generation, SSB/CW AGC, S Meter, 45.1 main tuning ratio, separate product & diode detectors, & many other highlights. luv for 10db S/N sensitivity. 6x13-5/8x11-5/8". Wt. 22 lbs. Less matching power supplies (below).
108A022, Net (\$18.00 Monthly) **369.00**
NCXA Matching 115V. AC Power Supply with speaker
108A023, Net (\$6.00 Monthly) **110.00**
NCXD Transistorized 12V. DC Mobile Supply
108A024, Net (\$6.00 Monthly) **119.50**
XCU-27. Crystal Calibrator. See below for specs.
80A021, Net **26.60**



NC-270 RECEIVER. Fine precision double conversion receiver covering 80 through 6 meter SSB in its price class. Built-in "Ferrite Filter" provides five degrees of IF selectivity from 0.6 to 5 KC, including selectable upper or lower side band. Sensitivity better than 1.0 uv for 10 db S/N on all bands, including 6 meters! Separate product detector for SSB and CW, distortion-free automatic noise limiter, built-in 100 KC crystal calibrator with lateral dial set. Unique "Flip Foot" provides panel viewing. 8-5/8x15-5/8x9". Less speaker and xtal calibrator.
108A008, Net (\$14.00 Monthly) **279.95**
NTS-3B Matching Speaker. For NC-270. 3.2 ohms. 8-5/8x5-5/8x4-5/8". Wt. 5 lbs. **108A015, Net** **19.95**



NC-303 RECEIVER. Deluxe double-conversion receiver which offers sensitivity, stability, and SSB/AM/CW versatility in its price class. Covers the 10-through-160 meter Ham bands plus 11 Meters. Has 5 selectivity positions—sharp down to 400cps, to 8 Kc at 6 db down; instant USB/LSB selection; Q multiplier with 60 db tunable notch; separate CW/SSB product detector; AGC; etc. 11 1/4 x 19 1/2 x 15". For 110-120 v., 50-60 cycle AC. Wt. 64 lbs. VHF converters available on special order. Dial Marked 6-2-1/4 M. **108A010, Net** (\$22.00 Monthly) **449.00**
NTS-2 Matching Speaker. For NC-303. 11 1/4 x 9 1/2 x 8". Wt. 12 lbs.
108A001, Net **21.95**



NC-60B "SPECIAL". Perfect choice for the beginning SWL or novice amateur. Clear markings on slide-rule dial shows marine, aircraft, WWV, Amateur, standard and foreign broadcasts. Built-in 5" speaker, BFO for CW. 5 tubes plus rectifier. 7-5/8x13 1/2x8-5/8". Wt. 14 lbs.
108A017, Net **59.95**



NEW
NATIONAL
Model NC-121

All new feature packed general coverage receiver for the Amateur, SWL, HI-FI enthusiast. In standard metal case or oiled Walnut for the den or living room. Continuous coverage 550Kc-30Mc. In four bands, illuminated slide rule dial and "S" meter, Peaking Q multiplier. Built in 5" speaker and output for use with your hi-fi amplifier. Phone jack, RF & AF gain controls, BFO/product detector, AGC, noise limiter. Logging scale bandspread tuning. Gray-blue steel case and brushed aluminum trim. 7-5/8"H, 13 1/2" W, 9"D. Wt. 28 lbs.
108A009, NC121 (\$6.00 Monthly) **129.95**
108A025, NC121W (walnut enclosure) (\$7.00 Monthly) **149.95**

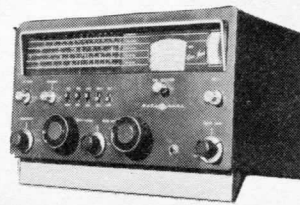
XCU-27
CRYSTAL
CALIBRATOR

USEABLE WITH NCX-3
 Plugs into the NC140, 155, 190, 303, 121, & HR060 without modification. May be adapted to others. With 100Kc crystal and tube. Includes extra socket to accept 1000Kc crystal installed by user to switch from 100Kc to 1000Kc.
80A021, XCU27. **26.60**



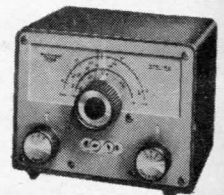
NC-140 RECEIVER New-outstanding value in a medium priced communications receiver. Instant choice of 80-10 Meter Ham Bands, plus 5 SW broadcast bands. Features luv sensitivity for 10db S/N, dual conversion above 4mc, Q multiplier, Product Detector, BFO, ANL, AGC. 8-5/8x15-5/8x9". Less spkr. & xtal. Wt. 28 lbs.
108A011, Net (\$10.00 Monthly) **189.95**

"DUAL
VERNIER DIAL"
CALIBRATED
HAM AND
SWL BANDS



NC-190 RECEIVER. Top SSB-AN-CW amateur band receiver. Offers double conversion & many other features. Covers 80-10 amateur bands & 6 international shortwave bands. Instant sideband selection, image rejection, luv for 10db S/N, product detector, AGC, S meter, & noise limiter. Less speaker & xtal calibrator. 8-5/8x15-5/8x9". Wt. 28 lbs. **108A006, Net** **219.95**

VHF-VFO



VFO-62" A deluxe, self powered 6 & 2 meter VFO designed for maximum stability & versatility. Use with any xmtr having 8mc oscillator circuits—full coverage of 50-144mc bands. Stability-0.1% cold, 0.005% after 30 min. warmup. Plugs into xtal socket of xmtr. Precise Vernier dial drive tuning. **108A003, Net** **49.95**

New

DRAKE 300 Watt Sideband Transceiver



\$550

DRAKE TR-3 FEATURES:

- * **FREQUENCY COVERAGE:** Full coverage 10-80 M.
- * **POWER INPUT:** 300 watts P.E.P. using 3-12JB6 output tubes.
- * **SSB UPPER and LOWER SIDEBAND** using two special 9Mc. crystal filters for sideband selection. Selectivity 2.1 Kc at 6 db.
- * **LINEAR PERMEABILITY TUNED VFO**
- * **SEPARATE RF and AF GAIN CONTROLS**
- * **SHIFTED CARRIER CW:** 260 watts input
- * **VOX or PTT - FULL AGC**
- * **100 KC CRYSTAL CALIBRATOR:** Built-in
- * **SEPARATE RECEIVER S-METER & TRANSMITTER PLATE AMMETER.**
- * **ONLY ONE DPDT RELAY USED - RF switching** limited to antenna.

GENERAL SPECIFICATIONS:

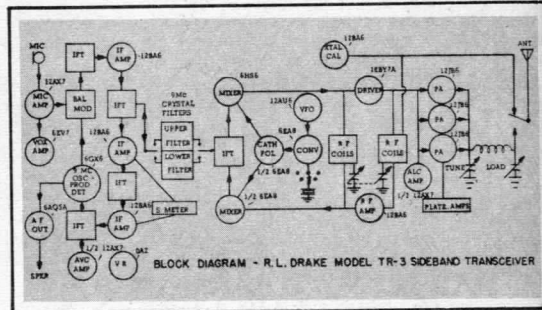
Frequency Coverage: Covers 10-80 meters, in seven 600 kc ranges: 3.5 to 4.1 mc, 7.0 to 7.6 mc, 13.9 to 14.5 mc, 21 to 21.6 mc, 28 to 28.6 mc, 28.5 to 29.1 mc, 29.1 to 29.7 mc.
Linear Permeability Tuned VFO
Dial Calibration: 10 kc divisions on main tuning and interpolation to 1 kc on tuning knob
Frequency Stability: Drift is less than 100 cycles after warm-up.
Modes of Operation: SSB Upper and Lower Sideband, CW and AM.
Meters: Separate receiver S-Meter and transmitter plate ammeter.
 20 tubes including voltage regulator; 6 diodes; 100 kc crystal calibrator built-in; mobile mounting bracket. 5½" high, 10¾" wide, 14-3/8" deep. Weight: 13½ lbs.

RECEIVER SPECIFICATIONS:

Sensitivity: Less than ½ microvolt for 10 db S/N. **I.F. Selectivity:** 2.1 kc at 6 db. 7.5 kc at 60 db. **AGC:** Full AGC. **AM:** Product detector reception of AM. **Audio Output Power:** 2 watts. **Audio Output Impedance:** 4 ohms. **Power Required:** 650 volts at 300 ma average & 500 ma maximum. 250 volts at 175 ma. -45 to -65 VDC adjustable filtered bias into 33K ohm load. 12.6 volt AC or DC at 5.5 amps.

TRANSMITTER SPECIFICATIONS:

Single Sideband: 300 watts P.E.P. input power, VOX or PTT. **Filter Selectivity:** Unwanted sideband suppression of more than 40 db and carrier suppression of 50 db. **CW:** Power input 260 watts. **AM:** Controlled carrier AM screen modulator is built-in. **Output Impedance:** Nominal 50 ohms, adjustable with pi-network. **Microphone Input:** High-impedance.



136A027, TR-3 . . . (\$26.00 Monthly) . . . 550.00

TR-3 ACCESSORIES

MATCHING SPEAKER MODEL MS-3. Contains 5x7" heavy magnet speaker and connecting cable. Matches TR-3 Transceiver. Space for mounting AC power supply in rear. 5-3/8x10¼x10¼". Wt. 5½ lbs. **136A028, Net . . . 19.95**

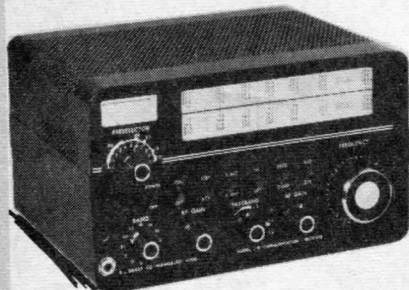
AC POWER SUPPLY MODEL AC-3. Supplies voltage and current requirements for TR-3. 120 volt 50/60 cycle. 5 ft. interconnecting cable. Mounts in rear of MS-3 and RV-3 cabinets. 5"x5"x10¼". Wt. 19 lbs. **136A029, Net (\$5.00 Monthly), 79.95**

DC POWER SUPPLY MODEL DC-3. Transistorized. Operates from 12 VDC. Supplies voltage and current requirements for TR-3. 5 ft. interconnecting cable and speaker connector. **136A030, (\$7.00 Monthly) . 129.95**

REMOTE RECEIVING VFO MODEL RV-3. Used with TR-3, permits reception on frequencies other than your transmitting frequency. Covers 10-80 meters. Uses same linear permeability tuned VFO, dial calibration, and tuning assembly as TR-3. 6AU6 VFO, 6EA8 Mixer/Crystal Oscillator, 6AB4 Cathode Follower. Cabinet matches TR-3, includes 5" speaker and space for AC power supply. 5-3/8x10¼x10¼". Wt. 6½ lbs. **136A024, Net . . . (\$5.00 Monthly) . . . 79.95**

MOBILE MOUNT MODEL MMB-3. **136A031, Net . . . 3.95**

Popular DRAKE 2B Communications Receiver



- Provision for 12 Crystal - Controlled Bands
- Continuously Movable 3-Step Selectivity
- Sensitivity, ½ uv for 10 db S/N
- Independently Tuned Preselector
- Fast and Slow AVC Circuit
- Triple Conversion
- 5 Extra 600-kc Ranges
- Series-Diode Noise Limiter
- Accurate Dial Calibrations

Improved version of the precision Drake 2-A. Has all of its qualities plus many more-including pass-band tuner with 3 switchable bandwidths, speeded-up AVC for CW monitoring and fast break-in operation, series-diode noise limiter for AM, power supply for 120VAC, 40W. Bandwidths of 0.5, 2.1 and 3.6kc. at 6db down offer peak SSB, AM & CW reception with full RF gain. Selectivity only 2.75kc at 60db down. Covers 3.5-4.1, 6.9-7.5, 13.9-14.5, 20.9-21.5 and 28.5-29.1mc with 3 crystals supplied. Low-frequency VFO and triple conversion circuit. Drift less than 400 cps, less than 100 cps after warmup. Sensitivity, ½uv for 10db S/N. Continuous sideband selection without retuning. Choice of slow or fast AVC and product or diode detector. 7x12x19". Less speaker, calibrator, Q multiplier. For 120VAC, 40W, 50-60 cycle. Wt. 15 lbs. Available on special order: crystals for 28.0-28.6, 29.1-29.7 & other 600 kc non-Ham ranges from 3.5 to 30 mc. **136A002, (\$14 Monthly) . . . 279.95**



Model 2-BQ Combination Q Multiplier & Deluxe 6" Speaker. Q multiplier provides single-signal CW reception, notches QRM. Wt. 5½ lbs. **136A011, Net . . . 39.95**

Model 2-BS Matching 6" Speaker. 4½ lbs. **136A010, Net . . . 16.95**



Model 2-AC 100-KC Crystal Calibrator. Plugs into Drake 2-B receiver-no soldering or wiring. Gives signal every 100 kc up to 30 mc. Controlled by front-panel slide switch on receiver. Wt. 5 oz. **86A013, Net . . . 16.95**

Crystals for Special Frequencies \$5.00 ea.

hallicrafters Complete Economy SSB-AM-CW Station



HT-37 SSB/CW/AM TRANSMITTER. Offers 70-100 watts PEP output on SSB & CW & 17-25 watts output on AM. Characteristics of the HT-32A. Covers 80-10 meters. Includes: high stability VFO; sideband suppression of 40 db at 1000 cps; calibration system permits CW CAL from any transmission mode; full VOX; 2-6146s in final; CW keying; dual-range meter; 52-ohm pi-network output. 9x19½x17½". For 105-125v., 50-60 cycle AC. Wt. 82 lbs. **101A027**, (\$24 Monthly) **Net** **495.00**

SX-111 RECEIVER. SSB/CW/AM dual conversion selectable-sideband receiver. Covers 80-10 meters. Includes: 1-uv sensitivity; 5 steps of selectivity from 500-5000 cps; crystal-controlled 2nd. conversion oscillator; separate detectors for SSB/CW & AM; Tee-notch filter; built-in 100-Kc crystal calibrator; 48:1 tuning ratio; S Meter. 12 tubes plus VR tube & rectifier. Less speaker. 8-13/16x8-11/16x10-3/16". For 105-125v., 50-60 cycle AC. Wt. 42 lbs. **101A028**, (\$14 Monthly) **Net** **279.50**

HT-41 LINEAR AMPLIFIER. Companion for HT-37, or can be driven by any SSB exciter delivering 20-100 watts. Covers 80-10 meters. SSB power input 1000 watts PEP thru 20 meters, less on 10 meters. AM phone input, 300 w.; CW input, 800 w. Uses Class B amplifier with 2-7094 tetrode tubes. Includes: adjustable pi-network, RF output meter, standby bias supply, overload protection, blower & built-in power supply. Coax input/output: 40-75 ohms. 9x19½x17½". For 105-125 v., 50-60 cycle AC. Wt. 97 lbs. **101A037**, (\$20 Monthly) **Net** **395.00**

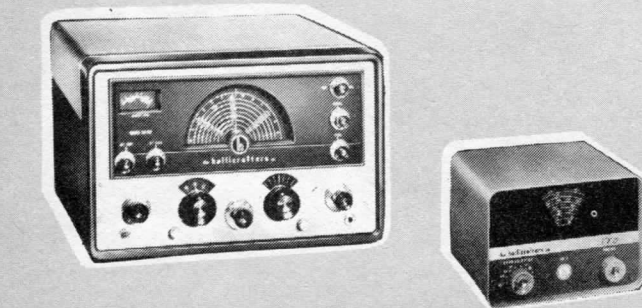
COMPLETE HIGH PERFORMANCE SSB-AM-CW STATION



SX-101A SSB RECEIVER. Dual-conversion with excellent mechanical and electrical stability, 1 uv sensitivity, and selectivity from 500-5000 cps. 80-10 meters, and 10-mc position for WWV. Dial calibrated for 6&2 meters; requires 6 or 2 mtr. Converter with 30-34 mc output. Has dual scale illuminated S meter. Includes: upper and lower sideband selection; crystal-controlled 2nd conversion oscillators; separate AM & SSB/CW detectors; Tee-notch filter; built-in 100-Kc marker crystal; direct-coupled series noise limiter; 40-to-1 tuning knob ratio; and many other extras. IFs are 1650 & 50.5 Kc. 13 tubes; rectifier and VR tube. 10½x20x16". Less speaker. For 105-125v., 50-60 cycle AC. Wt. 75 lbs. **101A024**, (\$22 Monthly) **445.00**

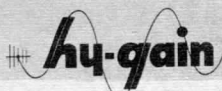
HT-32B TRANSMITTER. For SSB, CW & AM operation on 80-10 meters. Has 2. SSB. generation techniques: beam-deflection high-level modulator; 5-mc quartz crystal filter, sideband rejection of 50db or more. CTO allows reading of frequency within 1Kc. Two 6146 tubes run up to 144 watts input. Distortion products, at least 30db down; carrier suppression, 50db down. Built-in keying system for CW, push-to-talk & voice control system. Has separate phone patch input, 52 ohm pi-network output, sideband selection, and rear-chassis jack for RTTY frequency-shift keying circuit. 10-3/8x20x16". For 105-125v., 50-60 cycle AC. Wt. 86 lbs. **101A001**, (\$35 Monthly) **725.00**

HT-33B LINEAR AMPLIFIER. 1-Kw linear amplifier. Matching unit for HT-32B. Covers 80-10 meter ham bands.. Has single PL-172 pentode tube. Panel meters for RF output & cathode current permits fast & precise tuning. Variable pi-network loading for maximum harmonic suppression. Grid input circuit matches 50-75 ohms. Built-in power supply: screen voltage controlled by six OA2 regulator tubes; variable bias supply has front panel control for maintaining proper idling current. Circuit breaker protects high-voltage supply. Octal plug to apply cut-off bias. 10-3/8x20x16". For 105-125v., 50-60 cycle AC. Wt. 130 lbs. **101A022**, (\$45 Monthly) **Net** **995.00**

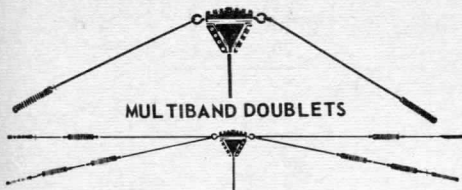


SX-115 RECEIVER. Triple-conversion for superb reception of Amateur SSB, CW, & AM. Band-pass filter front end offers equivalent of 4 tuned circuits before 1st. mixer for out-of-band rejection; signal and image rejection are 60 db. Covers 5 Ham bands and WWV. 1st. & 3rd. converters are crystal controlled. Selectivity variable in 5 steps from 500-5000 cps. Sensitivity, less than ½ uv on SSB/CW. Has separate ANL for SSB/CW and AM; product detector for SSB/CW; linear tuning with 1-Kc calibrations; USB/LSB selection; dual loop AVC; transmitter type VFO; 100-Kc calibrator; etc. 10½x16x16". Less speaker. 105-125v., 50-60 cycle A.C. Wt. 47 lbs. **101A012**, (\$28 Monthly) **Net** **599.50**

HA-5 DELUXE HETERODYNE-TYPE VFO
Self-powered heterodyne type VFO. Illuminated dial calibrated for 80-2 meters. 5.0-to-5.5 mc variable oscillator may be directly zero-beated with WWV. 30-to-1 tuning ratio. Cathode of mixer tube keyed for CW. Output: 3.5-4.0, 7.0-7.5, 7.8-8.3, 8.333-8.833 mc. 3 tubes; VR, silicon rectifiers. 5x7x8½". W/xtls for 80-10 mtrs. 105-125v., 60 cycle AC. 8 lbs. **101A044**, (\$5 Monthly) **Net** **79.95**



Leading Ham Antenna Manufacturer



MULTIBAND DOUBLET

Hy-Gain Multiband Trap Doublets feature slim line solid state traps. Heavy duty end and center insulators. Copper clad stranded steel wire elements. SWR less than 2:1 at resonance on every band. Install horizontally or as inverted V. 500 Watts AM; 1 KW P.E.P.

69A017 - Hy-Gain's 2BDT for 40 & 80 M. Length, 110' 6". Wt. 2 lbs. **Net 19.95**

69A037 - Hy-Gain's 3BDT for 10, 15 & 20 M. Length, 33'. Wt. 3 lbs. **Net 17.50**

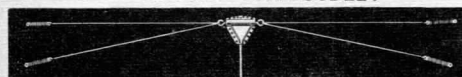
69A050 - Hy-Gain's 4BDT for 10, 15, 20 & 40 M. Length, 68' 6". Wt. 6 lbs. **Net 24.50**

69A051 - Hy-Gain's 5BDT for 10, 15, 20, 40 & 80 M. Length, 111' 6". Wt. 5 lbs. **Net 34.95**

TRAP DOUBLET KIT

26A068 - Hy-Gain's 2TD, kit of 2 matched traps for constructing 40 & 80 M doublet. Includes hardware and instructions. Wt. 1-1/2 lbs. **Net 12.95**

TRAPLESS FAN DOUBLET



69A067 - Hy-Gain's 2BDP trapless fan doublet delivers full efficiency on 40 & 80 M. SWR less than 2:1. Takes unlimited power. Mounts horizontally or as inverted V. 131' 6" overall. Wt. 2 lbs. **Net 19.95**

MULTIBAND VERTICALS WORLD FAMOUS HY-TOWER

(A) - Hy-Gain's 18HT for 10 thru 80 M. Completely trapless. Uses unique stub decoupling system for high efficiency band switching. Works well on 6 M and on 160 M by use of base loading coil. SWR less than 2:1. Completely self-supporting. Overall 55' height. Tower section hot dipped galvanized steel. Hardware iridite treated to MIL specs. Will take maximum legal power. Wt. 105 lbs. **69A049, Net 139.50**

ALL NEW HY-TOWER JUNIOR

(B) - Hy-Gain's 18 JR also for 10 thru 80 M operation. A smaller, economy version of the famous Hy-Tower. SWR less than 2:1. All aluminum construction. Lightweight and very easy to install. 38' overall height. Maximum power, 1 KW AM; 2 KW P.E.P. Wt. 30 lbs. **69A069, Net . . . 79.95**

(A) **26A027 - LOADING COIL** for 160 M operation with Hy-Tower or Hy-Tower Junior. Wt. 2 lbs. **Net 12.95**

INCOMPARABLE 14 AVS

(C) - The world's most popular self-supporting vertical for 10 thru 40 M. Easy to install on roof or ground. Uses Hy-Gain Solid State Traps. 20' overall. Wt. 10 lbs. **69A063, Net 29.95**

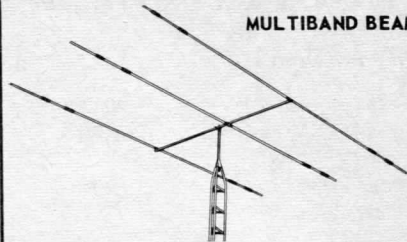
69A063 - ROOF MOUNTING KIT and radial system for 14 AVS. Wt. 5 lbs. **Net . . 11.95**

26A067 - LOADING COIL for 80 M operation with 14 AVS. Wt. 1/2 lb. **Net . . 7.95**

NEW ALL-BAND TRAPLESS VERTICAL

69A068 - Hy-Gain's 18V. A high performance, low-cost vertical for 10 thru 80 M. Completely self-supporting. 52 ohm coax fed. Easily installed on roof or ground. 18' overall. Tunes to any band by simple adjustment of feed-point on base inductor. Wt. 10 lbs. **Net 16.95**

MULTIBAND BEAMS



69A124 - Hy-Gain's TH3. A 3-element Thunderbird for 10, 15 & 20 M. Slim-line Solid State Traps. SWR less than 2:1. Longest element, 28'. Boom, 14'. Takes max. power. Wt. 36 lbs. **Net 99.75**

NEW THUNDERBIRD JUNIOR

69A156 - Lightweight, junior model of TH-3 Thunderbird. Easy to assemble and install. Rotates on a heavy duty TV rotator. Max. power, 300 Watts AM; 500 Watts P.E.P. Wt. 28 lbs. **Net 69.50**

4-ELEMENT THUNDERBIRD

69A072 - Hy-Gain's TH-4. The world's finest 3-band beam for 10, 15 and 20 M. Slim Line Traps deliver true full-size performance. Beta Match assures maximum gain and F/B ratio without compromise. Factory pretuned. SWR less than 2:1. Longest element, 34'. Boom, 16'. Takes max. legal power. Wt. 42 lbs. **Net 117.50**

NEW 20 & 40 METER DOUBANDER

69A020 - Hy-Gain's DB-24 with 3 full-sized elements on 20 M; 2 reduced-size elements on 40 M. Linear stub decoupling makes 2-band operation possible without use of inductance and capacity traps. Beta Match fed with 52 ohm coax. 3 KW AM; 5 KW P.E.P. Longest element, 43'. Boom, 24'. Steel hardware iridite treated to MIL specs. Wt. 64 lbs. **Net 169.50**

DUOBAND BEAM FOR 6 & 2 METERS

Hy-Gain's DB-62. Uses 4 elements on 6 M; 18 elements on 2 M. 8db gain on 6 M; 15db gain on 2 M. Automatic band-switching. F/B averages 15 to 20 db. 52 ohm coax fed. SWR below 1.5:1 on both bands. Longest element, 10'. Boom, 10'. Wt. 6 lbs. **69A036, Net 32.95**

HY-GAIN GROUND PLANES

Rugged, lightweight all aluminum construction for quick and easy installation. Beta Matched for 52 ohm coax. All are at DC ground potential for maximum lightning protection.

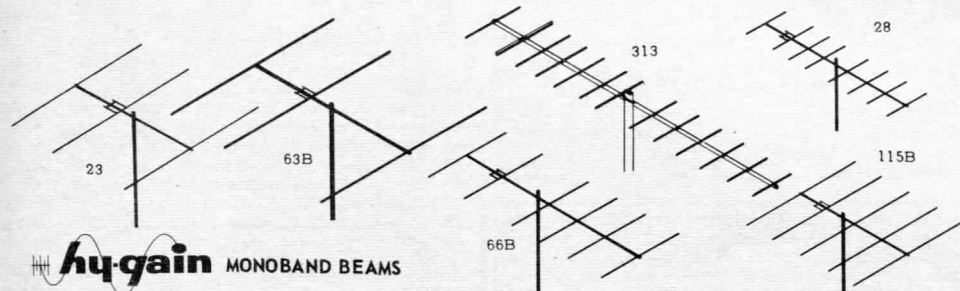
Cat No.	Type	Meters	Wt. Lbs.	Net
69A153	SGP-10	10	10	15.95
69A154	SGP-6	6	7	13.95
69A155	SGP-2	2	3	5.90

NEW COMBINATION 2 & 6 METER GROUND PLANE

Hy-Gain's GP-62 heavy duty all aluminum ground plane for 2 & 6 M operation. Fed with single 52 ohm coax. SWR less than 1.5:1 both bands. Wt. 10 lbs. **69A110, Net 19.95**

HY-GAIN'S NEW DOUBLET BALUN

80A018 - Hy-Gain's BN-48 for single or multi-band doublets - 10 thru 80 M. Handles 1-1/2 KW AM; 3 KW P.E.P. Serves as center insulator and coax termination. Perfect for inverted V installations. Wt. 3 lbs. **Net 15.95**



HY-GAIN MONOBAND BEAMS

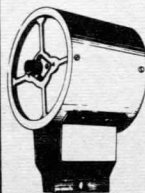
Hy-Gain single-band beams are ruggedly constructed of high strength, lightweight aluminum tubing. HF models are full-sized. VHF models are optimum spaced and at DC ground. Complete with Beta Match. Feed with 52 ohm coax. VHF models may also be fed with 300 and 450 ohm twin lead. Maximum power, 1 KW. 40 meter beam employs linear loading concept for high efficiency at 2/3 normal size.

Cat. No.	Type	Band	Elements	DB Gain	Boom Lgth.	Rad. Lgth.	Wt. Lbs.	Net
69A025	103B	10 M	3	8.0	8'	17'	12	32.95
69A026	153B	15 M	5	8.0	12'	23'	19	38.50
69A027	203B	20 M	3	8.0	16'	35'	35	65.95
69A125	402B	40 M	2	5.2	16'	43'	40	99.75
69A146	63B	6 M	3	10.0	8'	116"	5	16.95
69A147	64B	6 M	4	11.7	10'	116"	8	21.50
69A148	66B	6 M	6	15.0	24'	116"	17	38.50
69A149	611B	6 M	11	17.8	36'	116"	42	89.95
69A150	23	2 M	3	10.0	3'	42"	2	6.95
69A151	28	2 M	8	16.5	8'	42"	5	16.50
69A152	215	2 M	15	17.2	28'	42"	16	33.50
69A039	111	1-1/4 M	11	14.2	12'	42"	8	13.95
69A040	313	3/4 M	13	16.1	8'	42"	7	12.95

NEW HY-GAIN HY-LITE



Dramatic red on black "On-The-Air" indicator mounted in gray, high impact styron case. Mounts atop gear or on wall brackets. Internally illuminated. Bulb and 6' cord included. 4 x 8 inch oval. Wt. 2 lbs. Model HL. **80A012, Net 8.95**



HY-GAIN BEAM BALUNS

Hy-Gain's Beam Baluns mount easily on boom of any beam. Greatly improve transfer of RF energy and offer more uniform radiation pattern. Eliminates stray RF; reduces TVI. Handles full legal power. Wt. 3 lbs. **80A013, BN-12-10, 15 & 20 M Net . . 13.50**
80A014, BN-24-20 & 40 M Net . . . 13.50

ANTENNAS ARE AVAILABLE ON WRL'S CONVENIENT CHARG-A-PLAN

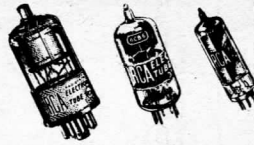


RECEIVING TUBES



- Finest Premium Quality Tubes - All Types in Stock
- Always Freshest Stocks - Full 1 Year Guarantee

SAVE 10% DEDUCT 10% FOR ANY ORDER OF 10 OR MORE TUBES



Take advantage of WRL's convenient Charge-A-Plan - Purchase all of your tubes from WRL on easy terms.....No Money Down.....Minimum order, \$20.00.

Tube Type	List Price	Net 50%
OZ4	\$2.40	\$1.20
OZ4G	2.60	1.30
1A3	6.55	3.28
1A5GT	4.25	2.13
1A7GT	5.75	2.88
1AD2	3.00	1.50
1AX2	3.05	1.53
1B3GT	2.90	1.45
Also see 1G3GT/ 1B3GT		
1C5GT	5.30	2.65
1DN5	3.65	1.83
1G3GT/1B3GT		
	2.90	1.45
	4.15	2.08
1H5GT		
	2.90	1.45
1K3	2.90	1.45
1L6	6.80	3.40
1L6A	6.20	3.10
1L8	8.65	4.33
1L6	8.30	4.15
1LE3	7.00	3.50
1LG5	6.80	3.40
1LH4	8.05	4.03
1LN5	8.15	4.08
1N2A	4.65	2.33
1N5GT	5.20	2.60
1R5	3.05	1.53
1S4	4.35	2.18
1S5	2.90	1.45
1T4	2.90	1.45
1U4	2.90	1.45
1U5	2.65	1.33
1V	5.85	2.43
1V2	2.10	1.05
1X2A	3.05	1.53
1X2B	3.05	1.53
2A3	10.50	5.25
2AF4B	4.05	2.03
2AH2	3.20	1.60
2AS2	3.20	1.60
2BN4	2.55	1.28
2BN4A	2.55	1.28
2CW4	4.45	2.23
2CY5	3.05	1.53
2DS4	4.45	2.23
2DV4	6.25	3.13
2DZ4	4.05	2.03
2EN5	3.40	1.70
2ER5	3.50	1.75
2FH5	3.05	1.53
2F55	3.10	1.55
2GK5	4.05	2.03
3A2	4.85	2.43
3A3	3.40	1.70
3AF4A	4.05	2.03
3AL5	2.05	1.03
3AT2	3.20	1.60
3AU6	2.35	1.18
3AV6	1.90	.95
3AW3	3.40	1.70
3B2	9.85	4.93
3BA6	2.50	1.25
3BC5	2.35	1.18
3BE6	2.25	1.13
3BN4A	3.05	1.53
3BN6	3.85	1.93
3BU8	3.10	1.55
3BY6	2.60	1.30
3BZ6	2.30	1.15
3CB6	2.30	1.15
3CE5	2.35	1.18
3CF6	2.70	1.35
3CS6	2.45	1.23
3CY5	3.05	1.53
3DG4	3.40	1.70
3DK6	2.40	1.20
3DT6A	2.20	1.10
3EA5	2.85	1.43
3EH7	3.80	1.90
3EJ7	3.80	1.90
3ER5	3.50	1.75
3GK5	4.05	2.03
3GS8	3.10	1.55
3HA5	4.05	2.03
3LF4	6.40	3.20
3Q4	3.55	1.78
3Q5GT	5.65	2.83
3S4	3.20	1.60
3V4	2.50	1.25
4AU6	2.35	1.18
4AV6	1.85	.93
4BC5	2.35	1.18
4BC8	4.05	2.03
4BL8	2.55	1.28

Tube Type	List Price	Net 50%
4BN6	\$3.85	\$1.93
4BQ7A	4.20	2.10
4BS8	3.85	1.93
4BU8	3.10	1.55
4BZ6	2.25	1.13
4BZ7	4.05	2.03
4CB6	2.30	1.15
4CS6	2.35	1.18
4CY5	2.85	1.43
4DE6	2.65	1.33
4DT6A	2.25	1.13
4EH7	3.80	1.90
4EJ7	3.80	1.90
4E58	4.60	2.30
4EW6	2.65	1.33
4GK5	4.15	2.08
4G58/4BU8	3.10	1.55
4GZ5	2.50	1.25
4HM6	2.40	1.20
4JC6	3.50	1.75
4JD6	3.50	1.75
5AM8	3.55	1.78
5AN8	4.00	2.00
5AQ5	2.20	1.10
5A54A	2.65	1.33
5AS8	4.15	2.08
5AT8	3.65	1.83
5AU4	3.40	1.70
5AV8	4.05	2.03
5AW4	2.80	1.40
5AZ4	5.65	2.83
5B8	5.30	2.65
5BC3	2.30	1.15
5BE8	3.30	1.65
5BK7A	3.40	1.70
5BQ7A	4.05	2.03
5BR8	3.65	1.83
5BT8	3.30	1.65
5BW8	3.40	1.70
5CG8	3.35	1.68
5CL8A	3.35	1.68
5CM8	3.80	1.90
5CQ8	3.95	1.98
5CZ5	4.35	2.18
5DH8	5.10	2.55
5DJ4	2.65	1.33
5EA8	3.15	1.58
5EU8	3.35	1.68
5EW6	2.65	1.33
5FG7	2.75	1.38
5FV8	3.15	1.58
5GH8	3.95	1.98
5GM6	2.65	1.33
5GX6	2.35	1.18
5J6	2.85	1.43
5KE8	5.05	2.53
5T4	12.10	6.05
5T8	3.40	1.70
5U4G	2.10	1.05
5U4GB	2.10	1.05
5U8	3.30	1.65
5V3A	3.85	1.93
5V4GA	3.50	1.75
5V6GT	2.40	1.20
5X4G	3.35	1.68
5X8	3.45	1.73
5Y3GT	1.75	.88
5Y4GA	2.60	1.30
5Y4GT	2.65	1.33
5Z3	3.30	1.65
5Z4	8.35	4.18
6A7	8.50	4.25
6A8	6.85	3.43
6A8G	8.60	4.30
6A8GT	8.60	4.30
6AB4	2.15	1.08
6AB5/6N5	8.05	4.03
6AB7	8.25	4.13
6AC5GT	6.25	3.13
6AC7	5.10	2.55
6AD7G	9.40	4.70
6AF3	2.90	1.45
6AF4	4.00	2.00
6AF4A	4.00	2.00
6AF6G	6.20	3.10
6AF11	5.00	2.50
6AG5	2.75	1.38
6AG7	6.20	3.10
6AH4GT	3.45	1.73
6AH6	4.70	2.35
6AK5	4.40	2.20
6AL3	2.75	1.38
6AL5	1.85	.93
6AL7GT	5.75	2.88
6AL11	4.40	2.20

Tube Type	List Price	Net 50%
6AM4	\$5.90	\$2.95
6AM8A	3.45	1.73
6AN4	6.55	3.28
6AN8A	4.00	2.00
6AQ5A	2.15	1.08
6AQ6	2.60	1.30
6AQ7GT	4.00	2.00
6AQ8	3.15	1.58
6AR5	2.65	1.33
6AR11	4.35	2.18
6AS5	2.40	1.20
6AS8	3.80	1.90
6AS11	5.00	2.50
6AT6	1.90	.95
6AT8A	3.80	1.90
6AU4GTA	3.60	1.80
6AU5GT	4.30	2.15
6AU6A	2.10	1.05
6AUA	3.50	1.75
6AV5GA	4.20	2.10
6AV6	1.65	.83
6AW8A	3.70	1.85
6AX3	2.70	1.35
6AX4GT	2.65	1.33
6AX4GTB	2.65	1.33
6AX5GT	3.10	1.55
6AX8	3.70	1.85
6AY3	2.75	1.38
6AZ8	5.55	2.78
6B8	7.30	3.65
6B10	3.50	1.75
6BA3	2.75	1.38
6BA6	2.00	1.00
6BA7	5.95	2.98
6BA8	3.85	1.93
6BC4	5.35	2.68
6BC5	2.55	1.28
6BC7	3.80	1.90
6BC8	4.00	2.00
6BD6	2.45	1.23
6BE3	3.00	1.50
6BE6	2.20	1.10
6BF5	3.55	1.78
6BF6	1.80	.90
6BG6G	6.80	3.40
6BH3	2.95	1.48
6BH6	2.70	1.35
6BH8	3.65	1.83
6BJ6	2.60	1.30
6BJ7	3.15	1.58
6BJ8	3.50	1.75
6BK4	8.00	4.00
6BK5	3.70	1.85
6BK7B	3.40	1.70
6BL7GTA	3.95	1.98
6BL8	3.95	1.98
6BN4A	2.50	1.25
6BN6	3.20	1.60
6BN8	3.05	1.53
6BQ5	2.40	1.20
6BQ6GTB/ 6CU6	4.35	2.18
6BQ7A	3.95	1.98
6BR8A	3.65	1.83
6BS8	3.75	1.88
6BU8	2.80	1.40
6BV8	3.15	1.58
6BW4	2.90	1.45
6BW8	3.50	1.75
6BX7GT	4.35	2.18
6BY5GA	5.10	2.55
6BY6	2.50	1.25
6BY8	2.65	1.33
6BZ6	2.25	1.13
6BZ7	4.00	2.00
6BZ8	4.45	2.23
6C4	1.85	.93
6C5	4.25	2.13
6C6	8.30	4.15
6C8G	8.55	4.28
6C9	5.80	2.90
6CA4	2.10	1.05
6CA5	3.15	1.58
6CB5A	8.25	4.13
6CB6A	2.25	1.13
6CD6GA	5.80	2.90
6CE5	2.35	1.18
6CF6	2.55	1.28
6CG7	2.45	1.23
6CG8A	3.30	1.65
6CH8	5.20	2.60
6CK4	3.00	1.50
6CL6	3.75	1.88
6CL8A	3.15	1.58
6CM6	3.30	1.65

Tube Type	List Price	Net 50%
6CM7	\$2.90	\$1.45
6CM8	4.25	2.13
6CN7	2.90	1.45
6CQ4	3.00	1.50
6CQ8	3.50	1.75
6CR6	2.40	1.20
6CS6	2.35	1.18
6CS7	2.95	1.48
6CU5	2.35	1.18
6CU6 see *		
*6BQ6GTB/6CU6		
6CU8	4.15	2.08
6CW4	4.45	2.23
6CX8	3.85	1.93
6CY5	2.85	1.43
6CY7	3.20	1.60
6CZ5	4.10	2.05
6D6	7.80	3.90
6DA4	2.70	1.35
6DB5	5.30	2.65
6DC6	3.40	1.70
6DC8	3.20	1.60
6DE4	2.85	1.43
6DE6	2.55	1.28
6DE7	3.40	1.70
6DG6GT	2.55	1.28
6DK6	2.35	1.18
6DM4	2.85	1.43
6DN6	7.45	3.73
6DN7	3.50	1.75
6DQ4	2.65	1.33
6DQ5	8.35	4.18
6DQ6A	4.15	2.08
6DQ6B	4.15	2.08
6DR7	3.40	1.70
6DS4	4.45	2.23
6DS5	3.20	1.60
6DT5	3.25	1.63
6DT6A	2.15	1.08
6DT8	3.80	1.90
6DV4	6.25	3.13
6DW4	3.70	1.85
6DW5	4.05	2.03
6DX8	3.10	1.55
6DZ4	4.00	2.00
6DZ7	8.45	4.23
6E5	4.90	2.45
6EA5	3.80	1.90
6EA7	3.80	1.90
6EA8	3.20	1.60
6EB8	4.00	2.00
6EH5	2.90	1.45
6EH7	3.80	1.90
6EH8	3.15	1.58
6EJ7	3.80	1.90
6EM5	3.40	1.70
6EM7	5.10	2.55
6EQ7	2.90	1.45
6ER5	3.50	1.75
6ES5	3.05	1.53
6ES8	5.80	2.90
6EU7	2.70	1.35
6EU8	3.30	1.65
6EV5	3.00	1.50
6EV7	2.50	1.25
6EW6	2.50	1.25
6EW7	3.90	1.95
6EX6	7.25	3.63
6EY6	3.40	1.70
6EZ5	3.60	1.80
6EZ8	3.80	1.90
6F5	4.60	2.30
6F6	5.85	2.93
6F6G	5.85	2.93
6F6GT	5.85	2.93
6F7	11.70	5.85
6F8G	8.95	4.48
6FA7	2.90	1.45
6FD7	5.05	2.53
6FG6 see *		
*EM84/6FG6		
6FG7	2.90	1.45
6FH5	2.55	1.28
6FH8	3.65	1.83
6FJ7	3.65	1.83
6FM7	3.45	1.73
6FM8	3.00	1.50
6FQ5A	4.05	2.03
6FQ7	2.30	1.15
6FS5	3.05	1.53
6FV6	3.55	1.78