

**SPECIFICATIONS**

**GENERAL**

Frequency Range..... 25,600 to 29,200MHz  
 Frequency Control..... Phase Locked Loop (PLL) synthesized circuitry  
 Frequency Tolerance..... 0.005%  
 Frequency Stability..... 0.001%  
 Operating Temp. Range..... -20°C to +50°C  
 Microphone..... Plug-in lock type; Amplified Noise Cancelling with push-to-talk switch and 6' coiled cord. DC power supplied from unit.

Input Voltage..... 11.7-15.9VDC (min.-max.) Nominal 13.8VDC. (positive or negative ground.)  
 Current Drain..... Transmit, maximum R.F. power. SSB 80W PEP  
 Output 10A.  
 Receiver squelched; 0.6A, maximum audio output 1.2A.

Cabinet Dimensions..... 24" H x 9" W x 12 1/2" L  
 Weight..... 8 pounds  
 Antenna Connectors..... UHF, (TX-RX SO-239). VHF/UHF, (RX Motorola Jack).  
 Meter..... Illuminated; indicates relative power output, received signal strength, modulation and standing wave ratio.

**TRANSMITTER**

Power Output..... AM-12W; SSB-25W, PEP. RF AMP Power: AM/FM-50W; SSB-80W PEP.  
 Intermod. Distortion.... SSB: 3rd and 5th order, more than -30db. 7th and 9th order, more than -40db.  
 SSB Carrier Suppression. More than -50db.  
 Unwanted Sideband..... AM and FM: 300-3KHz; SSB: 400-4KHz.  
 Frequency Response..... 50 ohm, unbalanced  
 Output Impedance..... 7.8KHz, crystal lattice type  
 SSB Filter..... 6db @ 4.2KHz; 60db @ 7.0KHz

**RECEIVER**

Sensitivity..... SSB: Less than 0.2 microvolt for 10db (S+N)/N at greater than 1/2 watt of audio output.  
 AM: Less than 0.65 microvolt for 10db (S+N)/N at greater than 1/2 watt of audio output.  
 FM: Better than 0.65 microvolt for 20db (S+N)/N at greater than 1/2 watt of audio output.  
 Better than 65db.  
 Image Rejection..... FM 1st: 7.8KHz; FM 2nd: 4.5KHz; AM/SSB: 7.8KHz. Better than 75db.  
 RF Frequency..... Adjustable for optimum signal reception. (AGC): Less than 10db change in audio output for automatic gain control.  
 Squelch..... Adjustable; threshold less than 0.5 microvolt.  
 Noise Blanker..... RF type, effective on AM and SSB.  
 Clarifier Range..... (Independent, shifts with 5KHz jump).  
 FINE: ± 2.0KHz (RX Only).  
 COARSE: ± 7.0KHz (RX and TX).  
 Audio Output Power..... 3.6W minimum into 8 ohms.  
 Frequency Response..... SSB: 400-4KHz; FM: 300-3KHz; AM: 300-2.1KHz.  
 Distortion..... Less than 10% at 3W output.  
 Built in Speaker..... 8 ohms, 4W, round.  
 External Speaker Jack..... 8 ohms; not supplied. Disables internal speaker when connected.

**SCANNER.....(WILSON MDL.)**

Channels of Operation.... 5-as determined by any of 5 crystals, (or) Varactor tuned oscillator circuits. (RF Oscillator, Oscilloscope, and Frequency Counter are required for tuning.)  
 Frequency Range..... 30-50MHz, 118.135MHz, 144.174MHz, 450-470MHz, 470-512MHz.  
 Frequency Coverage..... VHF LO: 6MHz for maximum sensitivity (40MHz ± 3MHz).  
 VHF AIRCRAFT: 6MHz for maximum sensitivity (127MHz ± 3MHz).  
 VHF HIGH: 8MHz for maximum sensitivity (153MHz ± 4MHz).  
 UHF: 30MHz for maximum sensitivity (460MHz ± 15MHz).  
 Better than 1 microvolt at FM Band and better than 2 microvolt at AM Band for (S+N)/N = 20db.  
 -4db ± 9KHz, -50db ± 15KHz.  
 Selectivity..... ± 7KHz  
 Modulation Acceptance... 10.7MHz and 455KHz  
 I.F. .... 10.7MHz Crystal Filter, and 455KHz Crystal Filter.  
 Filters..... Variable from less than 1 microvolt at FM Band and less than 2 microvolt at AM Band.  
 Squelch Sensitivity..... 5 Channels/second.  
 Scanning Speed..... 1-3 seconds.  
 Delay Time..... Standard TRM (Not supplied), HE-25/U 3rd Overtone.  
 Crystal Specifications..  
**SCRAMBLER..(TFT MDL.)**  
 Modes of Operation..... 3-selectable, with fine tuning adjustment for synchronization.  
 (Scramble module is sealed-no specifications are given.)

