



Technical Data

TYPE 501 VHF RECEIVER



The CEI Type 501 Receiver is a compact, highly stable unit designed for the reception of AM, FM, and CW signals in the frequency range of 54 to 260 megacycles. The unit is useful as a general purpose laboratory receiver, and in telemetry and monitoring applications.

Two IF bandwidths are provided: 300 kc for AM, FM, and CW reception, and 10 kc for AM and CW. Receiver gain is AGC controlled for FM reception. For AM reception, gain may be controlled manually or by AGC. When the receiver is in the CW mode, gain must be manually controlled.

Features of the 501 are low power consumption (less than 30 watts), reduced size (3.5" panel height) and weight (less than 18 lbs). The 501 can be operated on 50-60 or 400 cps without modification. No blower for forced cooling is required.

Solid state plug-in circuits are employed for the audio amplifier, video amplifier, and audio squelch circuit. A crystal-controlled BFO and fine-tuning control are provided for maximum operational performance.

An output is provided for connection to a CEI signal monitor, for visual display of signals in a band around the received signal.

SPECIFICATIONS

Frequency Range	54-260 mc in one band
Input Impedance	50 ohms
Noise Figure	6 db, maximum
Oscillator Radiation	40 μ v, maximum
Image Rejection	50 db, minimum
IF Rejection	70 db, minimum
IF Frequency	21.4 mc
IF Bandwidths	300 kc: FM, AM, CW 10 kc: AM, CW

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Sensitivity

FM (300-kc bandwidth)	6 μ v input modulated at 1-kc rate with 100-kc deviation produces at least 23 db (s plus n)/n
AM (300-kc bandwidth)	3 μ v input modulated 50% at 1-kc rate produces at least 10 db (s plus n)/n
AM (10-kc bandwidth)	2 μ v input modulated 50% at 1-kc rate produces at least 21 db (s plus n)/n
FM Output Stability	Varies less than 2 db for inputs above 1.5 μ v
Video Response	10 cps to 150 kc
Video Bandwidth Control	5 positions: 1, 3, 10, 30 and 150 kc
Video Output Level	Adjustable by front-panel control
Beat Frequency Oscillator	Operates in both bandwidth positions
Squelch	On audio channel
Monitor	Audio amplifier and speaker
Provision for Signal Monitor	21.4 mc output frequency
Size	19-inches wide x 3-1/2-inches high x 15-1/2-inches deep
Weight	18 pounds
Input Power	115 or 230 vac, 50-400 cps
Power Consumption	30 watts

PRICE: \$1,600.00

FOB Rockville, Maryland. Taxes extra where applicable. Price and specifications subject to change without notice.