



Technical Data

TYPE 354 RECEIVER



The CEI Type 354 Receiver is a newly-developed unit based on the popular CEI 351 Receiver. It differs from the 351 primarily in that it has a calibrated metal tape for the tuning dial rather than an internal digital counter. The 354 Receiver has an unusually wide tuning range, variable IF bandwidths, and high tuning accuracy. It tunes from 1 kHz to 600 kHz in a single band, thus spanning the ELF band through the VLF and LF bands into the MF band. A front-panel switch allows the selection of a 150 Hz, 1 kHz, 3 kHz, or 6 kHz IF bandwidth. Crystal bandpass filters are used to determine all IF bandwidths. The receiver's 600-kHz tuning range is spread over 25 inches of dial tape.

The low incidental FM of the local oscillator and extremely versatile BFO section makes the 354 Receiver suitable for FSK and SSB, as well as AM and CW reception. There are five separate beat frequency oscillators. One has a variable frequency which may be shifted 7 kHz each side of the 2-MHz IF center frequency. The other four oscillators are crystal controlled and provide outputs which zero beat with the IF frequency, give a 5.5-kHz beat note, and give upper or lower sideband reception of SSB signals (depending on the sideband transmitted) when used with the 3-kHz IF bandwidth.

This extremely versatile receiver has been designed using solid-state devices exclusively as active elements. It, therefore, exhibits high reliability and low power requirements.

SPECIFICATIONS

Frequency Range	1 kHz to 600 kHz (lower Band limit 500 Hz)
Types of Reception	AM, SSB, CW, MCW, and FSK
Noise Figure	Less than 5 dB
Sensitivity (50-ohm input impedance and 1-kHz IF bandwidth)	CW and FSK, 1 kHz to 10 kHz: 5 microvolts for 20 dB (s plus n)/n CW and FSK, 10 kHz to 600 kHz: 0.5 microvolt for 20 dB (s plus n)/n MCW and AM, 50 kHz to 600 kHz: 1 microvolt for 10 dB (s plus n)/n

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SPECIFICATIONS - (Cont'd)

Input Impedance	50 ohms or 1000 ohms, selectable by rear-panel switch
Input Attenuator	0 dB, -20 dB, -40 dB, or -60 dB, selectable by front-panel switch
Maximum Input Level	1 volt, rms, with input attenuator in -60 dB position
IF Bandwidths	150 Hz, 1 kHz, 3 kHz, or 6 kHz, selectable by front-panel switch
Image Rejection	70 dB, minimum
IF Rejection	60 dB, minimum
Dynamic Range	AGC or Manual: 55 dB, minimum
BFO	Five separate BFO's: One variable ± 7 kHz by front-panel control and four crystal controlled to provide zero beat with IF frequency, a 5.5-kHz beat note, and upper or lower sideband reception of SSB signals
Incidental FM	Less than 10 Hz peak deviation
Outputs	Six: front-panel phone jack (2000 ohms, nominal); rear-apron audio, 6 milliwatts (600 ohms, balanced); local oscillator output; IF output; AM detector output; and signal monitor output
Audio Bandwidths	Normal (100 Hz to 7 kHz) or narrow (825 Hz to 1175 Hz), selectable by front-panel switch
Input Power.	115/230 Vac, 50-400 Hz, approximately 5 watts
Size	19-inches wide, 3.5-inches high, and 19.5-inches deep
Weight	20 lbs., approximately

PRICE: \$2,500.00

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