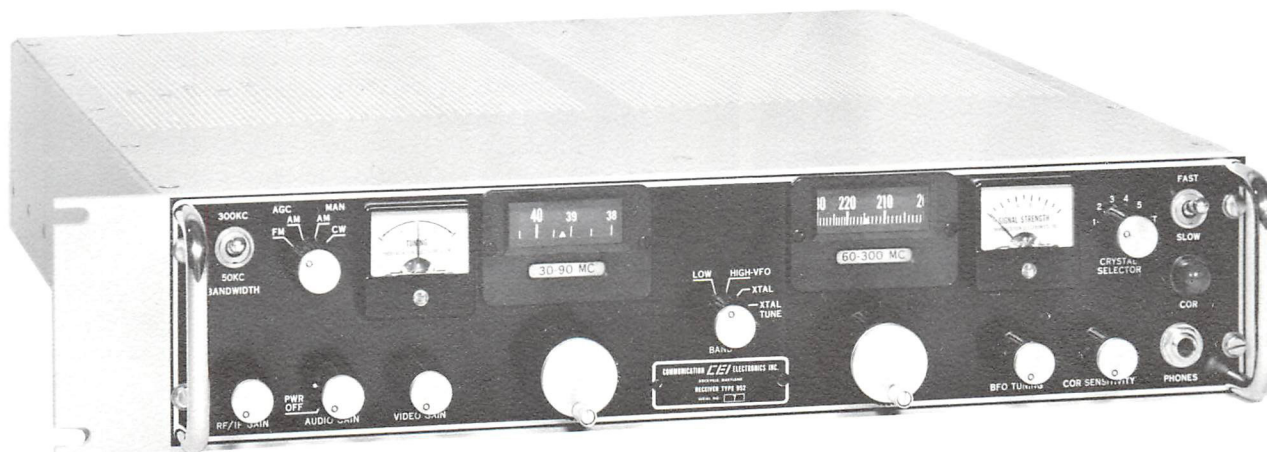




Technical Data

TYPE 952 VHF RECEIVER



The CEI type 952 VHF receiver is an AM-FM-CW superheterodyne covering the frequency range of 30 to 300 MHz in two bands: 30 to 90 MHz and 60 to 300 MHz. Separate RF tuners are used for each band with provision for a common or separate antennas. The unique feature of the 952 receiver is that one of six crystal-controlled channels in the 100 to 150 MHz range may be selected by a front-panel switch. An external oscillator may be used in place of the crystal oscillator by making a simple cable change on the main chassis. Two IF bandwidths are available: 50 kHz and 300 kHz. The desired bandwidth is selected by means of a front-panel switch. A beat frequency oscillator for CW reception is available in both bandwidth positions. Signal outputs from the receiver are audio output, video output, IF output, the local oscillator output, and an output to operate a signal monitor. A carrier operated relay (COR) is included in the receiver design. Tape recorders or other remote monitoring devices can be operated automatically by means of the COR in response to an input signal to the receiver. The audio output is available at a front-panel phones jack, and at a terminal strip on the rear apron of the receiver. Steel tape dials are used as frequency indicators for increased readability and resetability. Nuvistor-type tubes are used in the RF tuners. All other active elements are transistors.

SPECIFICATIONS

Type of Reception	AM-FM-CW
Frequency Range	30-300 MHz in two bands: Band A, 30-90 MHz Band B, 60-300 MHz
Dial Accuracy	±1%
Input Impedance	50 ohms, nominal
Noise Figure	Band A, 4.5 dB, maximum Band B, 6.5 dB, maximum
IF Frequency	21.4 MHz
IF Bandwidths	Two: 300 kHz or 50 kHz, selectable from front panel
IF Rejection	54 dB, minimum at 30 MHz 80 dB, minimum above 50 MHz

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SPECIFICATIONS - (Cont'd)

Image Rejection	Band A, 60 dB Band B, 50 dB
Local Oscillator Frequency	21.4 MHz above incoming signal
Oscillator to Antenna Conduction	15 μ V, maximum, below 260 MHz 25 μ V, maximum, above 260 MHz
Crystal Controlled Operation	Five internal and one rear-panel crystal sockets for the 100 to 150 MHz range are individually selected by a front-panel switch
Crystal Type	CR-82 (Received Frequency +21.4 MHz)/2
External Local Oscillator	May be used in place of the internal oscillator in the 60 to 300 MHz tuner
Sensitivity:	
300-kHz Bandwidth	AM: 4 μ V input modulated 50% produces 10 dB (s + n)/n, minimum FM: 6 μ V input, modulated at 1 kHz with 100-kHz deviation, produces 21 dB (s + n)/n, minimum
50-kHz Bandwidth	AM: 1.75 μ V input, modulated 50%, produces 10 dB (s + n)/n, minimum FM: 2 μ V input, modulated at 1 kHz rate with 18-kHz deviation, produces 21 dB (s + n)/n, minimum
Audio Output Power	100 milliwatts, minimum, into 600-ohm load, balanced or unbalanced
Audio Response	Within 3 dB from 100 Hz to 40 kHz
Video Output	5 volts, rms, across a 10k-ohm load
Response of Video Amplifier	Within 3 dB from 100 Hz to 150 kHz
Signal Monitor Output	21.4-MHz center frequency IF signal output
Special Outputs:	
Local Oscillator	50 mV, minimum, into 50-ohm load
IF (pre-detection) Output	21.4-MHz center frequency output provides 100 mV, minimum, into a 50-ohm load for input signal levels above AGC threshold
Carrier Operated Relay:	
Sensitivity	Less than 1 μ V
Range	Adjustable to operate over an input signal level range of 1 μ V to greater than 500 μ V
Release Time	Slow: 6 seconds \pm 20% Fast: less than 0.5 second
Output	SPDT contacts
Output Stability with AGC	AM: Output varies less than 5 dB for input range of 4-10,000 μ V FM: Output varies less than 2 dB for input above 1.5 μ V
BFO	Variable 20 kHz
Meters	Tuning and Signal Strength
Power Input	115 or 230 vac, 50-400 Hz
Power Consumption	20 watts, approximately
Weight	18 pounds, approximately
Size	19-inches wide, 3.5-inches high, and 16-inches deep

PRICE: \$2,400.00

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