

## Technical Data

DATA

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## TYPE 907 VHF RECEIVER



The CEI Type 907 VHF Receiver provides AM, FM, and CW reception in the frequency range of 30 to 300 mc. These frequencies are covered in two overlapping bands: 30 to 100 mc, and 60 to 300 mc. Separate RF tuners are used for each band. There are two IF bandwidths: 20 kc and 300 kc. The desired bandwidth is selected by means of a front-panel switch. A beat frequency oscillator for CW reception is available in both IF bandwidths. The outputs from the AM detector and FM discriminator are available as dc voltages at the rear of the receiver. Additional receiver outputs are audio, video, IF, and an output to operate a signal monitor. The audio output is available at a front-panel phones jack, and at a terminal strip on the rear apron of the receiver. Nuvistor-type tubes are used in the two RF tuners. All other active elements are solid state. Separate inputs are provided to permit using the optimum antenna for each band. Provision is also made for the use of a single antenna if desired. In this case the antenna is automatically switched to the RF tuner being used.

## **SPE CIFICATIONS**

Types of Reception	AM-FM-CW
Frequency Range	$30\mbox{-}300~\mbox{mc}$ in two bands: Band A, $30\mbox{-}100~\mbox{mc}$ ; Band B, $60\mbox{-}300~\mbox{mc}$
Input Impedance	50 ohms, nominal
Noise Figure	Band A, 5.5 db, maximum; Band B, 6.5 db, maximum
IF Frequency	21.4 mc
IF Bandwidths	Two: 300 kc or 20 kc, selectable from front panel
IF Rejection	Band A, 54 db minimum; Band B, greater than $80\ \mathrm{db}$
Image Rejection	Band A, 60 db; Band B, 50 db
Oscillator to Antenna Conduction	Band A, 15 $\mu v$ maximum; Band B, below 260 mc, 15 $\mu v$ maximum, above 260 mc, 25 $\mu v$ maximum

## Courtesy of http://BlackRadios.terryo.org

Sensitivity	
300-kc Bandwidth	AM: 4.0 $\mu$ v input modulated 50%, produces 10 db (s plus n)/n, minimum. FM: 6 $\mu$ v input, modulated at 1 kc with 100-kc deviation, produces 21-db (s plus n)/n, minimum
20-kc Bandwidth	AM: $1 \mu v$ input, modulated 50%, produces 10 db (s plus n)/n, minimum. FM: $2 \mu v$ input, modulated at 1 kc rate with 7-kc deviation, produces 21-db (s plus n)/n, minimum
Audio Output Power	100 milliwatts, minimum, into 600-ohm load, balanced or unbalanced
Audio Response	Within 3 db from 100 cps to 40 kc
Video Output	5 volts, rms, across a 10K-ohm load
Response of Video Amplifier	Within 3 db from 50 cps to 150 kc
IF Output	$21.4\text{-mc}$ center frequency output; output level $100~\mathrm{mv}$ into $50\Omega$ load for input signal levels above AGC threshold
Signal Monitor Output	21.4-mc center frequency IF signal output
Special Outputs	FM discriminator as a dc voltage AM detector as a dc voltage
Output Stability with AGC	AM: Output varies less than 3 db for input range of 4-10,000 $\mu v$ . FM: Output varies less than 2 db for input above 1.5 $\mu v$
BFO	Variable ±20 kc
Power Input	115 vac, 50-400 cps
Power Consumption	23 watts, approximately
Weight	15 pounds, approximately
Size	19 inches wide, 3.5 inches high, 15.5 inches deep

PRICE: \$1,975.00

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