

1/1/69 - 151.50

RECEIVER TYPES 501A AND 504A



TYPE 504A RECEIVER

FEATURES

The CEI Types 501A and 504A Receivers provide AM, FM, and CW reception in the 54 to 260-MHz frequency range. The units tune this frequency range in a single band. The 501A and the 504A differ only in the fact that the 504A includes a Crystal Marker Oscillator (CMO) which is not included in the 501A. The CMO allows the operator, by means of front panel controls, to accurately adjust dial calibration to the nearest 1-MHz or 5-MHz mark on the dial. Two IF bandwidths are included, either 300 kHz or 10 kHz as determined by a front-panel switch setting.

These receivers include both audio and video outputs on the rear apron. The audio output is designed to operate into a 600-ohm load while the video is designed to work into a high-impedance load. The video bandwidth is adjustable from 1 kHz to 150 kHz by means of a five-position front-panel switch.

Both receivers have been designed using solid-state devices exclusively. The result is high reliability, low power requirements (approximately 6 watts), and a compact package which mounts in a standard 19-inch rack with a panel height of only 3.5 inches.

In addition to the transistorized design, the 501A and 504A also feature a tape dial which offers excellent readability and smooth, trouble-free operation. Other features include a power supply which will operate on either 115 Vac or 230 Vac at line frequencies from 50 Hz to 400 Hz, a built-in BFO and Squelch, an output to drive a signal monitor, an IF output, and a local oscillator output.

SPECIFICATIONS

Type of Reception	AM, FM, and CW
Frequency Range	54-260 MHz
Input Impedance	50 ohms, nominal
Noise Figure	6.5 dB, maximum
Oscillator Radiation at Antenna Input	15 mV, maximum
Image Rejection	50 dB, minimum
IF Rejection	70 dB, minimum
IF Frequency	21.4 MHz

IF Bandwidths	300 kHz or 10 kHz, selectable by front panel switch
Sensitivity:	
300-kHz Bandwidth	AM: 4- μ V input produces at least 10 dB (s plus n)/n, with 50% modulation at 1 kHz
	FM: 6- μ V input produces at least 21 dB (s plus n)/n, with 100-kHz deviation and 1-kHz modulation
10-kHz Bandwidth	AM: 0.75- μ V input produces 10 dB (s plus n)/n, with 50% modulation at 1 kHz
FM Output Stability	Output varies less than 2 dB for inputs above 1.5 μ V
AM Output Stability	Output varies less than 3 dB for an input level change from 4 μ V to 10 mV
Video Response	10 Hz to 150 kHz
Video Bandwidth Control	5 positions: 1, 3, 10, 30, and 150 kHz
Video Output Level	Adjustable by front panel control. Capable of 5 volts, rms, across 10 k Ω load
Beat Frequency Oscillator	Crystal controlled at 21.4 MHz; operates with 300-kHz or 10-kHz bandwidths in CW mode.
Audio Output	100 mW into 600 ohms
Predetection (IF) Output	21.4-MHz output provides 100 mV minimum into a 50-ohm load for input levels above AGC threshold
Local Oscillator Output	50 mV, minimum, into 50-ohm load
Signal Monitor Output	21.4-MHz center frequency
Crystal Marker Oscillator (Type 504A only)	Outputs: 1.0 MHz or 5.0 MHz (harmonics to 300 MHz)
Size	Frequency Stability: \pm 0.005% from 0°F to 120°F
Weight	19 inches wide, 3.5 inches high, and 15.5 inches deep
Power Input	15 lbs.
Power Consumption	115/230 volts, 50-400 Hz
	6 watts, approximately

PRICES: 501A - \$1,600.00
 504A - \$1,750.00

FOB Rockville, Maryland. Taxes extra where applicable.

NOTE: The Type 501A-1 Receiver is available with AFC. PRICE: \$1,700.00.

Please contact us or our representative in your area for further information. Specifications and prices subject to change without notice