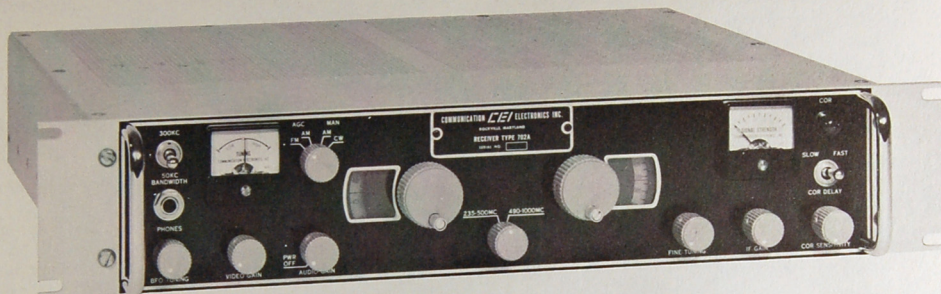


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RECEIVER TYPE 702A



FEATURES

The Type 702A Receiver was designed to meet the highest possible performance requirements for a UHF receiver in critical reconnaissance work. It features extremely low oscillator radiation, low noise, small size, light weight, and low power consumption.

The receiver tunes the range of 235 to 1000 MHz in two bands. Three IF bandwidths are provided: 50 kHz, 300 kHz and 2 MHz. The 2-MHz bandwidth IF strip operates continuously and provides simultaneous AM and FM outputs.

The 702A is designed to handle either amplitude modulated, frequency modulated, or continuous wave signals. A beat frequency oscillator is provided for the reception of CW signals. The receiver is equipped with a transistorized carrier operated relay used to control external devices as a function of the received carrier level. It has been designed using both solid state and vacuum (Nuvistor type) devices for compactness, efficiency, and high performance.

SPECIFICATIONS

Types of Reception	AM, FM, and CW
Frequency Range	235 to 1000 MHz in two bands: Band A, 235-500 MHz; Band B, 490-1000 MHz
Dial Accuracy	±1%
Fine Tuning	Front panel control provided for vernier tuning
Input Impedance	One input for each band at 50 ohms, type N connectors
Noise Figure	Band A, 10 dB, maximum; Band B, 12 dB, maximum
Image Rejection	Band A, 65 dB, minimum; Band B, 75 dB, minimum
IF Rejection	Band A, 80 dB, minimum; Band B, 90 dB, minimum
Oscillator Radiation at Antenna Input	Band A, 8 μ V, maximum; Band B, 75 μ V, maximum
Local Oscillator Frequencies	
First Local Oscillator	Incoming signal plus 60 MHz
Second Local Oscillator	81.4 MHz, crystal controlled

Intermediate Frequencies	60 MHz and 21.4 MHz
IF Bandwidths	2 MHz operating continuously, and either 300 kHz or 50 kHz, selectable from front panel
Sensitivity:	
2-MHz Bandwidth	AM: 22 μ V, modulated 50% at 1 kHz rate, produces at least 10 dB (s plus n)/n FM: 24 μ V, modulated at 1 kHz rate with 750 kHz deviation, produces at least 21 dB (s plus n)/n
300-kHz Bandwidth	AM: 8 μ V, modulated 50% at 1 kHz rate, produces at least 10 dB (s plus n)/n FM: 8 μ V, modulated at 1 kHz rate with 100 kHz deviation, produces at least 21 dB (s plus n)/n
50-kHz Bandwidth	AM: 3.5 μ V, modulated 50% at 1 kHz rate, produces at least 10 dB (s plus n)/n FM: 4 μ V, modulated at 1 kHz rate with 15 kHz deviation, produces at least 21 dB (s plus n)/n
Output Stability:	
2-MHz Bandwidth	AM: Output varies less than 4 dB for an input range of 8 μ V to 1 mV FM: Output varies less than 4 dB for input levels greater than 8 μ V
300-kHz Bandwidth	AM: Output varies less than 4 dB for an input range of 4 μ V to 1 mV FM: Output varies less than 2 dB for input levels greater than 3 μ V
50-kHz Bandwidth	AM: Output varies less than 4 dB for an input range of 4 μ V to 1 mV FM: Output varies less than 2 dB for input levels greater than 3 μ V
Manual Gain Control Range	Greater than 100 dB in AM/MAN and CW modes
Video Output:	
2-MHz Bandwidth	AM: 0.7 volt, rms, across 93 ohms. Amplifier response, less than 3 dB variation from 30 Hz to 2 MHz FM: 0.7 volt, rms, across 93 ohms. Amplifier response, less than 3 dB variation from dc to 2 MHz
300-kHz and 50-kHz Bandwidths	5 volts, rms across 10 k Ω . Amplifier response, less than 3 dB variation from 50 Hz to 500 kHz
Audio Output	100 mW into 600 ohms. Amplifier response, 100 Hz to 40 kHz at 3 dB points
FM Deviation Sensitivity:	
2-MHz Bandwidth	Less than 175-kHz deviation produces 0.1 volt, rms
300-kHz Bandwidth	50-kHz deviation produces 5 volts, rms with maximum Video Gain
Beat Frequency Oscillator	Crystal-controlled at 21.4 MHz; operates with 300 kHz or 50-kHz bandwidths in CW mode
Signal Monitor Output	21.4 MHz center frequency output signal provided for use with CEI Signal Monitors
Meters	Tuning and Signal Strength
Carrier Operated Relay:	
Sensitivity Range	Less than 1 μ V 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
Power Input	115/230 volts, 50-400 Hz
Power Consumption	63 watts nominal
Weight	21 lbs.
Size	3.5 inches high, 19 inches wide, and 15 inches deep

PRICE: \$3,000.00

FOB Rockville, Maryland. Taxes extra where applicable.

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