

ER75 Encrypted Video/Audio Receiver

UHF, L-Band, S-Band, C-Band

Encrypted Video Receiver in a Small Package. Ideal for Covert Operations, UAVs, and UGVs!



AMP's ER75 Series 7.4 cubic inch encrypted video receivers offer high quality reception with many advanced features, including miniature packaging, low power consumption, Micro-View/AudioLock II Decryption, and low noise figure. All receivers utilize a robust machined aluminum chassis and high quality connectors designed to withstand harsh environments.

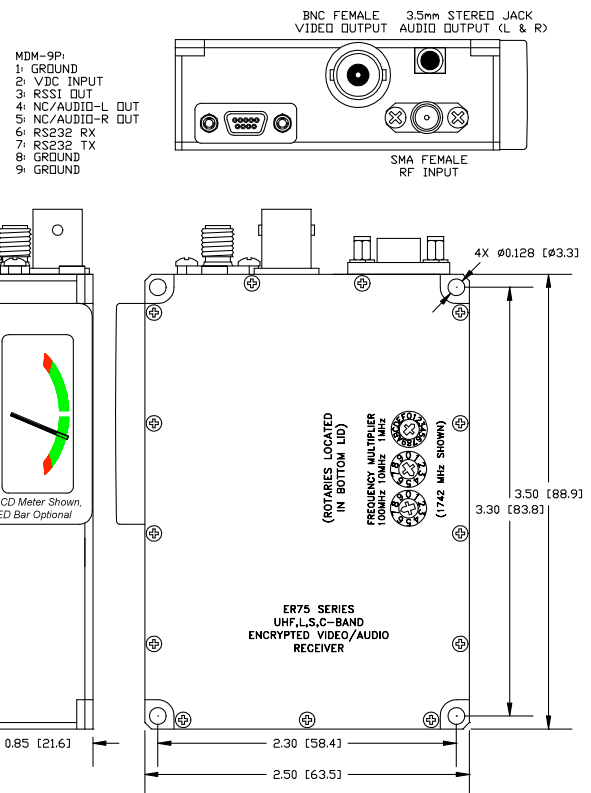
ER75 Series receivers feature innovative circuit designs to reduce power consumption for significantly longer battery life and to reduce noise figure for more range. Lower noise figure improves video quality and reduces the required transmitter output power thereby reducing transmitter battery requirements.

Receiver carrier frequency may be selected locally with BCD rotary switches, remotely with RS232 interface, and locally/remotely with a programmable binary switch. Received signal strength is indicated with a local display (LCD meter or LED bar) and an output pin on the I/O connector. Dual audio outputs are provided for simultaneous monitoring and recording.

ER75 Series encrypted video receivers are ideal for law enforcement, surveillance, UAV, UGV, Military, and other applications requiring high quality video reception in a compact, rugged package.

Design Features:

- 7.4 Cubic Inch Package (2.5" x 3.5" x 0.85")
- Weighs <6 oz.
- Integrated Micro-View/AudioLock II Decryption
- Secondary Encryption Key Programming
- Low Current Draw (Longer Battery Life)
- Low Noise Figure (More Range)
- Full Frequency Band Channelized
- Three Frequency Selection Modes (BCD Switches, RS232, Programmable Switch)
- Dual L/S-Band (1.7-1.85 GHz / 2.2-2.5 GHz)
- NTSC or PAL Video (Bandwidth & De-Emphasis)
- Dual Audio Outputs (Monitor & Record)
- Received Signal Strength Indication (Local Display and Connector Output Pin)
- J-STD-001D Class 3 Assembly (Medical/Aerospace)



** NOTES:

- 1) NC = No Connection
- 2) Models with no audio have 3.5mm Stereo Jack omitted



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AMP ER75 Series Encrypted Video/Audio Receiver

RF Characteristics

Frequency Range (Specify): (Other Ranges Available)	UHF: 340.0 – 399.9 MHz Lower L-Band: 1435 – 1535 MHz Upper L-Band: 1700 – 1850 MHz S-Band: 2200 – 2399 MHz ISM S-Band: 2400.00 – 2499.75 MHz Dual L/S-Band: 1700–1850/2200–2500 MHz C-Band: 4400 – 4999 MHz Public Safety C-Band: 4940 – 4990 MHz	Steps: 100 kHz Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other Steps: 250 kHz Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other Steps: 1 MHz BCD, 250 kHz Other
Frequency Selection (Specify):	Fixed or Channelized (Full Band - BCD Rotary Switches, RS232 Remote Control, and Programmable Binary Switch)	
Maximum RF Input:	+10 dBm Without Damage	
Input Impedance:	50 Ω Nominal, VSWR 1.5:1 Maximum	
Noise Figure:	UHF, Dual L/S: 4.5 dB Typical L/S/C-Band: 4.0 dB Typical ISM S-Band: 2.5 dB Typical	
Image Rejection:	UHF/L/S/Dual: 60 dB Minimum C-Band: 50 dB Minimum	
Signal Strength Output:	0.3 Vdc @ -90 dBm to 5.0 Vdc @ -20 dBm, Monotonic, Dual RSSI	

LO/IF Characteristics

LO Stability:	± 4 ppm Over -20°C to +60°C	
IF Frequency:	UHF: 140 MHz L/S/C-Band, Dual: 480 MHz	
IF Bandwidth:	UHF: 18 MHz L/S/C-Band, Dual: 20 MHz	
Harmonic and Spurious Level:	-50 dB Maximum	

Video Characteristics

Decryption:	Micro-ViewLock II, Line Cut and Rotate, 256 Points	
Secondary Key (Optional):	256 bits, RS232 Programmable	
Modulation Type:	Analog FM, Positive Sense	
Frequency Response (Specify):	10 Hz to 4.2 MHz (NTSC) or 5.0 MHz (PAL), ± 1.5 dB	
De-Emphasis:	525-Line (NTSC) or 625-Line (PAL)	
Output Level:	1 Vpk-pk / ± 4 MHz @ Crossover Frequency, into 75 Ω Load	
Output Impedance:	75 Ω Nominal, Unbalanced	

Audio Characteristics

Decryption:	Micro-View/AudioLock II, Digital Audio Over Video, ADPCM X4 Compression	
Channels (Specify):	0, 1 (mono), or 2 (stereo)	
Frequency Response:	30 Hz to 7 kHz (stereo), 14 kHz (mono), +1/-3 dB	
Output Level:	-10 dBV (Line) into 600 Ω Load	
Output Impedance:	100 Ω Maximum, Unbalanced	

Power Requirements

Input Voltage:	+9 to +16 Vdc, Reverse Polarity Protected	
Current Draw:	325 mA Maximum	

Mechanical

Material:	CNC Machined T6061-T6 Aluminum	
Finish (Specify):	Nickel Plated or Black Plated	
Dimensions:	2.50" W x 3.50" L x 0.85" H	
Weight:	6 oz. Maximum	
RSSI Display (Specify):	LCD Analog Bar Meter or LED Light Bar	
Connectors:	RF Input: SMA Female Video Output: BNC Female Audio Output: 3.5mm Stereo Jack (If Applicable) DC Supply, Audio, RSSI, RS232: MDM-9P	

Environmental

Temperature (Operating):	-20°C to +60°C	
Acceleration:	100 g, 3 Axes	
Altitude:	Unlimited	
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation	