

# EDR1 Encrypted Diversity Video/Audio Receiver

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



## EDR1 Series

AMP's EDR1 Series 10.5 cubic inch encrypted diversity video receivers offer high quality reception with many advanced features and high quality packaging and connectors. EDR1 models feature Micro-View /Audio-Lock II decryption for secure video and audio communications. Encryption keys may be programmed for maximum security.

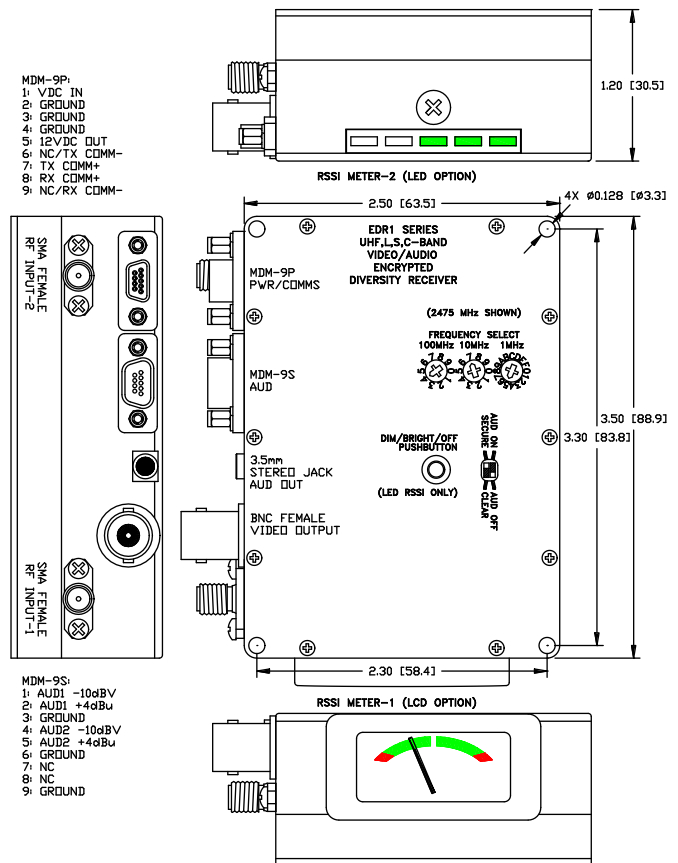
EDR1 receivers feature a proprietary diversity voting circuit that ensures reception of the strongest signal at all times. Innovative circuit designs are utilized to reduce power consumption for longer battery life and to reduce noise figure for better range and video quality.

Receiver carrier frequency may be selected locally with BCD rotary switches, remotely, and locally/remotely with a programmable binary switch. Slide switches allow selection between encrypted/clear video and audio on/off. Received signal strength is indicated with local displays (LCD meters or LED bars) and via remote query. If equipped with LED displays, intensity is controlled by a local pushbutton switch.

EDR1 encrypted diversity video receivers are ideal for law enforcement, surveillance, UAV, UGV, Military, and other applications requiring high quality, secure video reception in a compact, rugged package.

## Design Features

- 10.5 Cubic Inch Package (3.5"x2.5"x1.2")
- Integrated Micro-View/AudioLock II Decryption
- Programmable Encryption Key
- Full Frequency Band Channelized
- 3 Frequency Selection Modes
- Supports Composite Video (NTSC or PAL)
- Received Signal Strength Indication (Dual Chassis Displays and Remote Query)
- 12V Auxiliary Supply
- J-STD-001D Class 3 Assembly (Medical/Aerospace)



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## RF Characteristics

Frequency Range (Specify):	UHF:	340.0-399.9 MHz	100 kHz Channels
(Other Ranges Available)	Lower L-Band:	1435-1535 MHz	1 MHz Channels
	Upper L-Band:	1700-1850 MHz	1 MHz Channels
	Lower S-Band:	2200-2399 MHz	1 MHz Channels
	Upper S-Band:	2400-2499 MHz	1 MHz Channels
	Full S-Band:	2200-2499 MHz	1 MHz Channels
	Dual L/S-Band:	1700-1850/2200-2499 MHz	1 MHz Channels
	Lower C-Band:	4400-4900 MHz	1 MHz Channels
	Upper C-Band:	4900-4999 MHz	1 MHz Channels
	Full C-Band:	4400-4999 MHz	1 MHz Channels
Frequency Selection (Specify):	Full Band Channelized - Remote Control Only or Remote/Programmable Switch/Local BCD		
Maximum RF Input:	+10 dBm Without Damage		
Input Impedance:	50Ω Nominal, VSWR 2:1 Maximum		
Noise Figure:	< 3 dB		
Image Rejection:	> 60 dB		
Signal Strength Output:	Local Displays and Remote Query		
Voting Characteristics	RSSI Based, > 150 kHz Voting Rate		

## LO/IF Characteristics

LO Stability:	±5 ppm Over -20°C to +60°C
IF Frequency:	UHF: 153.6 MHz, L/S: 374 MHz, C: 480 MHz
IF Bandwidth:	17 MHz Nominal
Harmonic and Spurious Level:	-25 dB Maximum

## Video Characteristics

Decryption:	Micro-ViewLock II, Locally and Remotely Bypassable
Decryption Key:	256 bits, Remotely Programmable
Modulation Type:	Analog FM, Positive Sense
Frequency Response (Specify):	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 $\geq 75$ kHz
Output Impedance:	75Ω Nominal, Unbalanced

## Audio Characteristics

Decryption:	Micro-View/AudioLock II
Channels (Specify):	0 or 2 (stereo), Local and Remote On/Off Control
Frequency Response:	7 kHz, +1/-3 dB
Output Level:	-10 dBV and +4 dBu Line into 100Ω
Output Impedance:	100Ω Nominal, Unbalanced

## Configuration Interface Characteristics

Interface Type:	Two-Way UART
Signaling Type (Specify):	RS232, RS422, or 3.3V TTL
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)

## Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected
Current Draw (Typical at 12V):	350 mA
Auxiliary Supply Output:	+12 Vdc, 0.5 A Current Limit

## Mechanical

Material:	CNC Machined T6061-T6 Aluminum	
Finish (Specify):	Nickel Plated or Gold Iridite	
Dimensions:	2.50" W x 3.50" L x 1.20" H	
Weight:	6 oz. Maximum	
RSSI Display (Specify):	LCD Analog Bar Meters or LED Light Bars - Local Enable and Intensity Control (LED)	
Connectors:	RF Inputs:	SMA Female
	Video Output:	BNC Female
	DC Supply, 12V Out, Comms:	MDM-9P
	Audio Output	MDM-9S
	Audio Output:	3.5mm Stereo Jack

## Environmental

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