

# C2DR DVB-T COFDM Video Receiver

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

DIVERSITY

## Excellent Digital Video Receiver for Urban Multipath Environments!



AMP's C2DR Series COFDM DVB-T video receivers are designed for secure, high quality video reception in high multipath and urban environments.

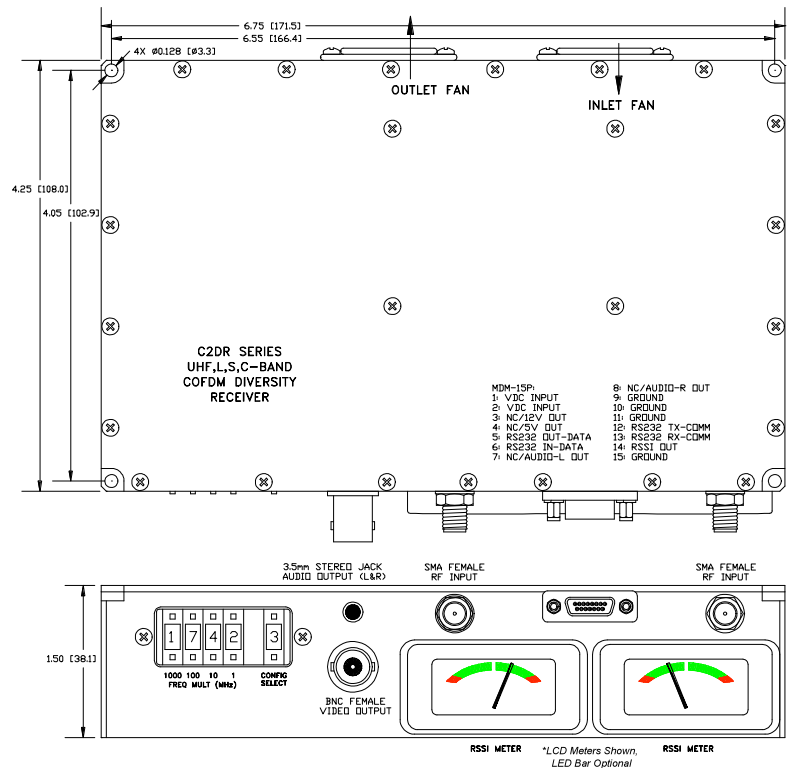
The C2DR has low power draw, excellent sensitivity, and features such as full frequency band channelization, selectable MPEG2 or MPEG4 video decoder, selectable DVB-T or narrow or ultra-narrow bandwidth settings, selectable QPSK or 16QAM or 64QAM modulation, selectable 128 or 256 Bit AES decryption, and stereo audio.

Frequency may be selected locally with BCD pushbutton switches, remotely with RS232 interface, and locally/remotely with a programmable BCD switch. Eight pre-programmed COFDM configurations are also locally selectable with a pushbutton switch and re-programmable with RS232 interface.

C2DR Series receivers are designed to withstand harsh environments and are ideal for law enforcement, surveillance, UAV, UGV, military, and other applications requiring high quality video receiver in a compact, rugged package.

## Design Features:

- 43 Cubic Inch Package (4.25"x6.75"x1.5")
- Low Power Draw
- Full Frequency Band Channelized
- Three Frequency Selection Modes (BCD Switches, RS232, Programmable Switch)
- 6/7/8 MHz DVB-T Bandwidths
- Optional 1.25 / 2.5 MHz Bandwidths
- MPEG2/MPEG4 Selectable Video Encoder
- NTSC or PAL Video
- QPSK / 16QAM / 64QAM Selectable Modulation
- AES 128/256 Bit Selectable Decryption
- Diversity Antenna Configuration
- Dual Chassis Mounted RSSI Displays
- Optional Stereo Audio



### \*\* NOTES:

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



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# AMP C2DR Series Diversity DVB-T COFDM Video/Audio Receiver

## RF Characteristics

Frequency Range (Specify): (Other Ranges Available)	340 – 400 MHz 1000 – 1400 MHz 1700 – 1850 MHz 2280 – 2500 MHz 2700 – 2900 MHz 3100 – 3460 MHz 4900 – 4999 MHz 5700 – 5900 MHz	250 kHz Channels 1 MHz Channels 1 MHz Channels 1 MHz Channels 1 MHz Channels 1 MHz Channels 1 MHz Channels 1 MHz Channels
Frequency Selection (Specify):	Fixed or Channelized (Full Band – BCD Rotary Switches, RS232 Remote Control, and Programmable BCD Switch)	
Frequency Stability:	±0.002% Over -20°C to +50°C	
Input Impedance:	50 Ω Nominal, VSWR 2:1 Maximum	
Maximum RF Input:	0 dBm Without Damage	
Noise Figure:	3 dB Maximum	
Image Rejection:	50 dB Minimum	
Signal Bandwidth (Specify):	6/7/8 MHz (DVB-T), 2.5 MHz (Narrow), 1.25 MHz (Ultra-Narrow) - Selectable	
Signal Strength:	Dual Chassis Mounted RSSI Displays	
Configuration:	Diversity Antenna	

## COFDM Video/Audio Characteristics

Modulation Type:	QPSK or 16QAM or 64QAM - Selectable	
Input Impedance:	75 Ω Nominal, Unbalanced	
Video Encoding:	MPEG2 (DVB-T, Narrow) or MPEG4 (Ultra-Narrow)	
Frame Rate:	30 FPS (NTSC) or 25 FPS (PAL)	
Horizontal Resolution:	704, 528, 480, or 352 Pixel - Selectable	
COFDM Carriers:	2K or 8K DVB-T (Selectable), Approximately 400 Narrow and Ultra-Narrow	
Guard Interval:	1/4 to 1/32 - Selectable	
Latency:	<100 msec to approx 500 msec, End to End – Configuration Dependent	
Audio Channels (Specify):	Zero, One, or Two (Stereo)	
Audio Bandwidth:	16 kHz	
Audio Output Level:	-10 dBV Line	
Decryption (Specify):	ABS 32-bit or AES 128/256-bit	

## COFDM Auxiliary Data Channel Characteristics

Interface Type:	RS232 One-Way
Supported Data Rates:	Up to 115,200 Baud Selectable
Connection:	RS232 OUT-DATA (MDM-15P pin 5)

## Configuration Interface Characteristics

Interface Type:	RS232 Two-Way
Interface Parameters:	9600/8/1/None/None (Baud/Data Bits/Stop Bits/Parity/Handshake)
Connection:	RS232 RX/TC-Comm Ports

## Power Requirements

Input Voltage:	+11 to +16 Vdc, Reverse Polarity Protected	
Current Draw:	UHF: 1.0A, Typical @ 12 Vdc	All Other Bands: 1.2A, Typical @ 12 Vdc
Monitor Supply Output (Specify):	None, +5 Vdc, +12 Vdc, or Both, 1.6A Current Limit	

## Mechanical Characteristics

Material:	CNC Machined T6061-T6 Aluminum	
Finish:	Nickel Plated	
Dimensions:	4.25" W x 6.75" L x 1.5" H	
Weight:	26 oz. Maximum	
RSSI Display (Specify):	LCD Analog Bar Meter or LED Light Bar	
Connectors:	RF Inputs:	SMA Female
	Video Output:	BNC Female
	DC Supply, Audio Out (If Applicable), RS232, RSSI, Monitor Supply (If Applicable):	MDM-15P
	Audio Output:	3.5mm Stereo Jack (If Applicable)

## Environmental Characteristics

Temperature (Operating):	-20°C to +50°C
Acceleration:	100 g, 3 Axes
Altitude:	Unlimited
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation