

# RMR-X6-II-D

## 50 MHz to 7 GHz 6-Way Diversity Receiver with HD Decoder for HD/SD Applications

### FEATURES:

- High-quality central/portable COFDM SD/HD receive solution
- Six input maximum ratio combining for outstanding sensitivity
- Ultra-sensitive reception via remote block down converters (BDCs)
- Auto-detects all encoded MPEG2 parameters
- Local, Web and remote—controllable (via external third party interface)
- Intuitive menu structure and navigation
- Unit outputs composite, SDI, (HD) SDI and ASI video formats and HD down conversion
- Available analog, AES digital and embedded audio outputs
- OLED chassis display, OSD display of basic parameters
- AC or DC Operation (110/240 VAC or 9 to 36 VDC)
- Multi-band flexibility through available external block down converters (2.0 GHz, 4.5 GHz and 5.8 GHz bands)
- 6, 7, 8 MHz COFDM bandwidths
- Integrated BDC power insertion
- Other frequencies available upon customer request

### OPTIONS:

- Available decryption
- Available AES decryption



The RF Central RMR-X6-II-D software-defined, six-input digital diversity receiver provides maximum ratio combining, DVB-T receive capabilities, ASI output for forwarding the stream, UDP streaming over IP (Ethernet) and an internal MPEG2 SD/HD decoder.

The unit is controllable via the front panel, RS232, or Ethernet. Stream monitoring capability is provided for network management. The sophisticated monitoring of the X6-II-D allows viewing of RF parameters such as SNR and transport stream functions for continuity and stream identification. A local CVBS on screen display in addition to the front panel OLED gives the operator all the vital characteristics of the incoming signals with a Data and Spectrum Viewer Screen.

The RMR-X6-II-D has six antenna UHF RF inputs that interface with external Block Down Converters (BDCs) to provide superb maximum ratio combining capabilities. The maximum ratio combining function automatically chooses the best signals from the six antennas and then combines them to improve the SNR. This advanced process of combining multiple weighted and received SNR values enables the unit to provide seamless 360 degree coverage, without the need for sophisticated GPS tracking systems. This type of coverage is ideal for mobile vehicle and aircraft receive applications, where traditionally a steerable dish was required to receive the moving transmitted signal. The RMR-X6-II-D helps to rewrite the rules on this type of receive application.

The unit is powered by either 9 to 36 VDC or an external 110/240 VAC power supply. The 2 RU x half rack configuration of the RMR-X6-II-D maximizes space efficiency in busy control rooms/command centers.

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### Specifications

<b>Inputs:</b>	6 RF inputs 50-850 MHz (BNC) with DC insertion for BDC signals and power RS232 Control(DB9) (Status and Control) RS232 External Data 1 (Customer Date;i.e . GPS) (DB9) DC Power (4 pin XLR) 9 to 36VDC Genlock (BNC)
<b>Outputs:</b>	ASI output (BNC) HD(SDI) (BNC) Composite(BNC) OSD CVBS Presentation of receiver (BNC) Ethernet (RJ45) (UDP Video, Web Browser control) Audio outputs: 4 (XLR), 2 analog, 2 digital
<b>Status Indicators:</b>	Spectrum: SNR, BER, RSL Packet Error, Continuity Error, PID List, PID Rate
<b>IP Streaming:</b>	UDP Multicast up to 30 Mb/s
<b>Video OSD:</b>	Format NTSC/PAL, CVBS
<b>Control:</b>	All Parameters of control and viewing of metadata via web browser and RS232 interface
<b>Power Requirement:</b>	Less than 32 Watts
<b>Physical:</b>	
Size:	3.5" H x 8.5" W x 12.38" D (8.9 x 21.6 x 31.4 cm)
Weight:	4.75 lbs (2.16 kg)

<b>Environmental:</b>	
Operating Temperature:	-10 to +50°C
Humidity:	95% long term

### MPEG Performance

<b>Video:</b>	
Format:	1080i @ 23.98/24/25/29.97/30 fps 1080p @ 23.98/24/25/29.97/30 fps 720p @ 23.98/24/25/29.97/30 fps NTSC: 720 x 480 (4:2:0) / 720 x 525 (4:2:2) PAL: 720 x 576 (4:2:0) / 720 x 625 (4:2:2) SD: MP @ML (4:2:0) / 422 @ML (4:2:2) HD: MP @HL (4:2:0) / 422p @HL (4:2:2) ISO/IEC 13818-2 Variable IPB support.
Profile:	SD: 75 Ohms, 1Vp-p, NTSC/PAL HD: monitoring grade SD down-convert.
GOP:	0.25 dB (10 Hz to 5MHz)
Composite Output:	SD: ANSI/SMPTE 259M HD: 292M With 4 channels of embedded audio
Frequency Response:	
SDI Output	
Audio:	
Audio Coding:	ISO/IEC 11172-3 (Layer I and II)
Audio Bit Rate:	up to 384 kbps (Layer II), 448 kbps (Layer I)
Audio Sample Rate:	48 KHz
Audio Channels:	2 Stereo, 4 Mono
Audio output:	4 x line, Gain (0 to -9 dB), 600 Ohms (18 dBm = 0dBFS) 2xAES/EBU, 150 Ohms Balanced Embedded SDI (4 Channels)
Frequency Response:	40 Hz – 20 KHz: ± 0.5 dB
Audio THD:	0.25% @ 1 KHz, +8 dBm

