VISLINK

HDR-4000
Diversity Receiver

HDR-4000 Multi-Format Receiver & Decoder

Overview

The Vislink HDR-4000 Receiver is the highest-performing, feature-rich SD/HD diversity receiver available for Central Receive Site (ENG/OB) and Wireless Camera System (WCS) applications. Utilizing Vislink's core technologies, the HDR-4000 receiver combines leading-edge MaxRC digital signal processing, with highly configurable FPGA circuitry, providing an abundance of user selectable features, all in one streamlined half width 1 RU rack-mount chassis.

It accepts up to four RF signal inputs, with superior sensitivity and adjacent channel performance, producing reliable and comprehensive coverage for any ENG/OB or wireless camera venue. An optional packet switching feature permits additional HDR-4000 receivers to be "joined" together, thereby creating a diversity "cellular" network. This revolutionary concept for ENG and OB receive operations reduces the complexities and operating costs of today's economically challenged businesses.

A powerful, yet simple to operate, web-based graphical user interface (GUI) provides complete remote control and monitoring for the receiver by means of an integrated Ethernet/SNMP (RJ45) interface, further reducing capital equipment expenditures by eliminating the need for expensive third party remote control systems.

Additional, licensable options include MPEG-2 HD (high definition) 4:2:0/4:2:2 video, MPEG-4 (8/10-bit 4:2:0/4:2:2 video), and AES descrambling.

The HDR-4000 can also be configured as a diversity receiver/demodulator with ASI output, and as a MPEG-2/H.264 video/audio decoder.

The Vislink News & Entertainment HDR-4000 series is a complete suite of units aimed at high quality or versatile contribution links. The range includes HD and SD Video Encoders, DBV-S, DVB-S2, DVB-T and LMS-T Modulators, IP Satellite Modems, Diversity Receivers, IRDs and associated units. All HDR-4000 units utilise the versatile Vislink 19"x1RU half rack width housing for compactness and extremely light weight. This packaging has proved its worth in the portable applications where these type of units are typically deployed.

Features

- Direct conversion RF architecture for exceptional adjacent channel performance and excellent sensitivity

- 4 input RF diversity with maximum ratio combining (MaxRC)

- DVB-T: QPSK, 16QAM & 64QAM; 6, 7, & 8MHz

- Diversity chaining ASI input for packet diversity

- MPEG-2 4:2:0 & 4:2:2 SD & HD generic and ultra low delay decoding

- MPEG-4 AVC (H.264) Main Profile, High-profile and High 422 profile, SD & HD decoding including 10-bit (+)

- ASI over IP input and output

- ASI input and output

- Web browser and SNMP control

- Dual SDI / HD-SDI / CVBS outputs with independently selectable status overlay

- Field upgradeable

Specifications

Demodulator:
- DVB-T: QPSK, 16QAM & 64QAM; 6, 7, & 8MHz
- ASI Packet Switching

Decoder options:
- MPEG-2 4:2:0 & 4:2:2 SD & HD
- Low delay MPEG-2, 4:2:0 & 4:2:2
- H.264 4:2:0 MP, 8-bit
- H.264 4:2:0 HP, 8-bit
- H.264 4:2:2 HP, 10-bit
- Audio MPEG-2 Layer 1 & 2

Descrambling
- AES 128
- AES 256

Inputs:
- 4 x UHF inputs, 70-860MHz. Switchable LNB power.
- ASI input (ISO/IEC 13818-2 188 bytes)
- Frame Lock input (black/burst or HD tri-level)
- Camera Control interface and Alarm output on 6-pin Lemo
- Remote Control and MPEG data channel on 6-pin Lemo
- 10/100/1000 Ethernet connection for Video-over-IP connections
- 10/100 Ethernet connection for IP-based unit control
- USB connector for code updates and profile transfers

Outputs:
- 2 x Video outputs; individually selectable as SDI or CV (SD only), with or without status overlay
- ASI output (ISO/IEC 13818-2 188 bytes)
- Audio output on two 3-pin XLRs (channel 1) and 5-pin Lemo (channel 2)

Physical
- 1U height, half rack width
- 210mm [8.3"] x 350mm [13.8"] Deep (excluding connectors)
- Weight: 1.2kg/2.6 lbs. (approximate)

Power
- 100 to 240Vac; 75W (approximate, depending on configuration)

Environmental

Temperature (operating) . 0° to 50°C [32° to 122°F]

Humidity (non-condensing) 95%

Upgrade Options	HDR-4000 Receiver/ Demodulator/Decoder		HDR-4000 Receiver/Demodulator		HDR-4000 Decoder
	• 2-RF inputs, • RF to ASI Demodulation • MPEG-2 SD Video and Audio	• 4-RF inputs, • RF to ASI Demodulation • MPEG-2 SD Video and Audio	• 2-RF inputs • RF to ASI Demodulation	• 4-RF inputs • RF to ASI Demodulation	• MPEG-2 SD Video and Audio
HDR-4000 Diversity Receiver 2-RF input to 4-RF input option.	Option	N/A	Option	N/A	N/A
HDR-4000 HD MPEG-2 4:2:0/4:2:2 ultra-low delay decoding license option.	Option	Option	N/A	N/A	Option
HDR-4000 Diversity Receiver/Demodulator Deep-Interleaving option.	Option	Option	Option	Option	N/A
HDR-4000 ASI output to ASI input Packet Switching transport stream option.	Option	Option	Option	Option	N/A
HDR-4000 ASI over IP transport option.	Option	Option	Option	Option	N/A
HDR-4000 IP input to de-encapsulated ASI option.	Option	Option	Option	Option	N/A
HDR-4000 Decoder H.264 Main Profile SD/HD 4:2:0 8-bit, up to 1080p/30f license option.	Option	Option	N/A	N/A	Option
HDR-4000 Decoder H.264 High Profile SD/HD 4:2:0 8-bit, up to 1080p/30f license option. Requires prior purchase of H.264-MP-8 license.	Option	Option	N/A	N/A	Option
HDR-4000 Decoder H.264 High Profile SD/HD 4:2:2 8, 9, 10-bit, up to 1080p/30f license option. Requires prior purchase of H.264-HP-8 license.	Option	Option	N/A	N/A	Option

HDR-4000 Diversity Receiver Connections

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