

RECEIVER

UltraReceiver LD

Multi-Format Receiver





The UltraReceiver LD (ULRX-LD) is a 1RU half-width, rack mount chassis receiver that perfectly fits the requirements for broadcast sports and ENG news coverage with wireless cameras.

This versatile receiver features 4x dual pedestal UHF inputs with Maximum Ratio Combining LMS-T demodulation capability to ensure maximum signal robustness and best video quality.

In combination with Vislink's HCAM wireless camera transmitter, the UltraReceiver LD decoder delivers high quality 4k UHD video with end-to-end latencies as low as a single frame.

As a multi-format receiver, the UltraReceiver LD also provides decode capability for HD HEVC and HD MPEG-4 video decoding.

The UltraReceiver LD is typically used in conjunction with Vislink L3025 series Down-Converters.

Key Features

One-box, compact and lightweight solution

Used in conjunction with the Vislink L3025 series Down-Converters

Up to 4x UHF inputs RF with Maximum Ratio Combining diversity

4K UHD and HD decoding available

Capability to support HEVC and MPEG4/H.264 decoding

Available for DVB-T or LMS-T transmissions

HD HEVC Dual Decode capability in a single transport stream

Typical Applications

Event Coverage

News Coverage

Sports Coverage

UltraReceiver LD Datasheet



Technical Specifications	
RF Parameters	
Frequency bands	70MHz -860MHz* *Use in conjunction with the L3025-series down converters.
Frequency Selection	Up to 16 pre-set channels, or tuning in 1MHz steps via front panel control
Demodulation	• DVB-T • LMS-T
Demodulation Modes	 QPSK, 16QAM, 64QAM FEC: 1/2, 2/3, 3/4, 5/6, 7/8 Guard interval: 1/32, 1/16, 1/8, 1/4
Bandwidth	DVB-T bandwidths of 6/7/8 MHz LMS-T bandwidths of 3/4/5/6/7/8/10/12/14/16/20 or 24 MHz with dual pedestal
Receiver Threshold	Receiver threshold: -92dBm to BER 10-5 (nom. QPSK)
Video & Audio Parameters	
Video Decoder Profiles	HEVC (H.265) UHD & HD: Profile: Main 4:2:2 10 @ L5.1 Sampling: 8bit & 10bit Video rate: 1.0-40Mbps Video format: up to 2160p 60 MPEG-4 AVC (H.264) HD Profile: 422HP @ L4.2 Sampling: 8bit & 10bit Video rate: 1.0-40Mbps Video format: up to 1080p 60
Video Outputs	• 3G-SDI SMPTE-424M (UHD) • HD-SDI SMPTE-424M (HD)
Video Formats	• 480i @ 29.97 • 576i @ 25 • 720p @ 50, 59.94 & 60 • 1080i @ 50, 59.94 & 60 • 1080p @ 23.98, 24, 25, 29.97, 30, 50, 59.94 & 60 • 2160p @ 23.98, 24, 25, 29.97, 30, 50, 59.94 & 60
Audio Decoder Profiles	AAC (AAC-LC & HE-AAC)MPEG-1 (Layer 1 & Layer 2)Linear PCM Passthrough
Audio Outputs	Digital: Embedded audio over SDIAnalogue: 1x stereo pair (decoder 1 only)
Framelock	CVBS Black & Burst Tri-level sync
Latency	Single frame latency* *In combination with Vislink HCAM transmitter in HEVC mode and in combination with Vislink L1700 & Clip On-4 transmitters
De-Scrambling	BISS-1 BISS-E Injected (not available in dual decode mode)
Dual Decode (HEVC only)	Ability to decode dual services on a single multiplex

UltraReceiver LD Datasheet



Connectors	 UHF Input Connectors: 4× 75 Ω BNC (F) ASI Input Connector: 75 Ω BNC (F) Video Output Connectors: 4× 75 Ω Micro BNC (F) Monitor Output Connector: 75 Ω Micro BNC (F) GenLock Connector: 75 Ω Micro BNC (F) ASI Output Connector: 75 Ω Micro BNC (F) Audio Connectors: 2× 3-Pin XLR (M) Camera Control & MPEG Data Connector: 6-Pin LEMO Socket Alarm Connector: 6-Pin LEMO Socket Ethernet Control Connector: RJ45 10/100 TS over IP Connector: RJ45 10/100 (not used)
Flexibility & Power Supply	
Power	100 - 240VAC; 100W (approximate, depending on configuration)
ASI	Input for decoding or ASI Packet Switching (configurable) Output from demodulator or decoder (configurable)
User Interface	 Comprehensive front panel control and monitoring White backlit LCD display: Summary display detailing status and internal lock alarms RF Rx signal level (dBm bar graph) MER level (dB bar graph)
Remote Control	Comprehensive remote control and monitoring via Ethernet power/web browser interface and SNMP control
Software Upgrade	Unit upgrades via USB port
Physical & Environmental	
Size	 44 mm (H) x 210 mm (W) x 350 mm (L) (1.7" (H) x 8.2" (W) x 13.7" (L)) 1U Height, 1/2-rack width
Weight	1.2 kg (2.6 lb)
Environmental	Operating Temperature: 0°C to +50°C (32°F to 122°F) Humidity: 95% long term
Optional Licenses	ULRX-LICE-0001 - ULRX Licence 4K UHD Decode ULRX-LICE-0002 - ULRX Licence H.264 SD & HD Decode ULRX-LICE-0006 - ULRX Licence 4 Input Demod ULRX-LICE-0007 - ULRX License ASI Packet Switching ULRX-LICE-0008 - ULRX Licence 4 Input LMS-T (D) ULRX-LICE-0009 - ULRX-LD License Dual Channel Decode ULRX-LICE-0010 - ULRX License BISS De-Scrambling