

UltraReceiver LD

Multi-Format Receiver

The UltraReceiver 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



datasheet

at the heart of the action

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 SDI
- Analogue:
 - 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.

Connectors

UHF Input Connectors:

- 4x 75 Ω BNC (F)
- ASI Input Connector:
 - 75 Ω BNC (F)
- Video Output Connectors:
 - 4x 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:

- 2x 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 Licences

- 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

Some features specified are available via optional licenses.