

MDR-Series

Portable Diversity Receive System

The MDR is Vislink's latest Diversity Receive system, capable of receiving multiple RF/Video channels. Each receiver operates using two or four way maximum ratio combining diversity reception in addition to ASI packet switching, for optimum performance. The MDR is available with the choice of COFDM DVB-T, LMS-T or ISDB-T demodulation (with Time Interleaving FEC). Designed for receiving multiple wireless cameras or links on TV OB sites, multi-car car "on-board" or city centre central receive ENG applications, the MDR is Vislink most advanced receiver in its range.



Key Features

- Equipped for 1 to 14 receivers according to customers' requirements, with plug and play upgrade
- Capability to support MPEG 2 and MPEG4/H.264 decoding with auto selection
- Available with the choice of COFDM DVB-T, LMS-T or ISDB-T demodulation (with Time Interleaving FEC)
- The multi-channel system only occupies 3U rack space
- Comprehensive control and signal monitoring is provided by PC GUI via TCP/IP interface

Typical Applications

- Event Coverage
- Newsgathering
- Sports Coverage
- Airborne Operations
- Maritime Reconnaissance

RF Parameters

Frequency Bands

- 1.3 - 7GHz band

(other frequency bands available on special order)

Tuning Range

- 400MHz standard bandwidth

Frequency Selection

- Via IP PC based remote control

Receiver Noise Factor

- 3dB (nom.)

Receive Antenna

- Compatible with all Vislink antennas including integral LNB

Demodulator Cards

- COFDM DVB-T 2k
- LMST
- ISDB-T with Time Interleaving (option)

Demodulation modes

- QPSK, 16QAM, 64QAM
- FEC:
 - 1/2, 2/3, 3/4, 5/6, 7/8
- Guard interval:
 - 1/32, 1/16, 1/8 and 1/4

Noise Figure and Receiver

- Threshold:
 - 92dBm to BER 10⁻⁵ (nom, QPSK)
- Data Rate:
 - 4.98 to 31.7Mbit/s

Bandwidth

- DVB-T:
 - 6, 7, 8MHz
- ISDB-T:
 - 6, 7MHz
- LMS-T:
 - 3, 4, 5, 6, 7, 8, 10, 12, 14, 16, 20 MHz

Video & Audio Parameters

Decoding (Factory options)

- SD/HD MPEG2
- MPEG4/H.264

Video Outputs

- SDI SD SMPTE-259M (272M)
- SDI HD SMPTE-292M (299M) (option)
- Analogue CVBS

ASI Output

- DVB ASI transport stream

Video Formats

- 1080p@1920 x1080 50Hz
- 1080i@1920 x1080, 25 and 29.5Hz
- 720p@1280 x 720, 50 and 59Hz
- 480i (NTSC)@720 x 480
- 576i (PAL)@720 x 576

Audio Output

- Digital:
 - AES/EBU, plus SDI embedded
- Analogue:
 - 4 x mono outputs

Data Output

- Auxiliary user data serial
- Optional TCP/IP multiplexing available

IF Frequencies

- 1st IF in the range:
 - 450-850 DVB-T & LMS-T
 - 470-850 ISDB-T

Latency

- Dependant on associated TX encoding configuration

Flexibility

Monitoring (Rx Control)

- Comprehensive remote control and monitoring via:
 - TCP/IP interface
 - COFDM demodulator / MPEG 2 decoder parameters RF
- Received signal level, C/N, MER, BER, PER
- C/N, MER, BER (dB and bar graph)

Antenna to RX Separation

- Up to 50m UHF coax cable, or with Fibre Optic interfaces for extended distances.

Power Supply

- Universal supply accepts:
 - 95 - 130VAC and 190-260VAC

Physical Environment

Size

- Multi-channel unit: 3RU rack mount

Weight

- Multi-channel unit:
 - 9kg (nominal depending on module count)

Environmental

- To spec:
 - 10° to +45°C
- Altitude:
 - 4500m
- Humidity:
 - 95% long term

