

The MX1 is a professional grade receiver decoder providing high quality MPEG-2 4:2:0MP@ML and 4:2:2P@ML decoding. The MX1 is a single decoder member of the ADI family of DVB IRDs: MX1, MX2, MX4 and MX16. The MX1 is fully compliant with the DVB and ATSC standards, has multiple inputs, provides two outputs, and is available in a number of configurations.



Benefits

Flexibility is provided through a wide range of input interfaces that include QPSK, 8PSK, 16QAM, DVB/ASI, IP streaming, electrical E3 and DS3.

Secure Transmission

The MX1 supports a number of secure CA systems to meet the need for secure encrypted transmission of content.

- DVB Common Interface (CI)
- BISS (1&E)

Reduced Operational Cost

- Easy to use front panel control
- Remote control via user friendly NMS GUI

Transfer Private Data:

The MX1 can receive several data formats that include LSD over RS232 and HSD over Fast Ethernet.

Applications

A large number of features make this receiver ideal for highest quality reliable distribution of content.

- Multi-channel decryption
- Satellite and cable Digital Turnaround
- CATV head end distribution
- Distribution and contribution for Telecommunications operators – Electrical E3 and DS3
- DVB-CI Decryption for transport stream re-multiplexing and decoder cascading
- IP streaming over 10/100BaseT
- IP Tran-streaming, from any DVB inputs
- Program Identification (PID) filtering on ASI out and retransmission
- QUAD or PIP video monitoring
- Control and monitoring through IP
- TS recording (DVR)

The MX1 is an ideal solution for both CATV and Telco distribution markets with built in satellite and Telco interfaces.

Features and Options

- 4:2:0 MP@ML and 4:2:2 P@ML decoding providing maximum quality MPEG-2 video
- ASI I/O as default and second ASI I/O (option)
- Configuration and control through front panel, terminal and IP
- VBI for re-insertion in composite and SDI
- Closed caption
- Redundancy support, GPI dry contacts
- Two video – composite
- Two SDI with embedded audio (option)
- Two video outputs – one broadcast and on monitoring
- Monitoring or PIP or QUAD splitter channel
- Two Audio – Stereo, AES/EBU or S/PDIF
- Dolby Digital (AC-3) LT/RT downmixing (option)
- Dolby Digital (AC-3) Pass-through (option)
- Genlock
- Inputs — one of four QPSK, or one of two QPSK and two ASI, QAM IP streaming
- Outputs — Two ASI, two A/V channels

Computer Communication

- 2 RS232
- 1 Fast Ethernet for HSD and monitoring



MX1 Rear Panel

Video and Audio Formats

Video

Decoding:
4:2:2P@ML up to 50 Mbps
4:2:0MP@ML up to 15 Mbps

Audio

Decoding of two audio services
Musicam: Analog and digital output
Dolby Digital 5.1 Digital pass through
Dolby E: Digital pass-through only
All decompressed audio embedded in SDI
Dual composite and dual SDI video output
Extensive VBI support.
VBI inserted in both composite and SDI output

Inputs

QPSK L-Band

Connector: F-Type
1-4 DVB Satellite QPSK in and loop through with LNB control
Frequency range: 950 - 2150 MHz
Symbol rate range: 1 - 45 Msym/s

DVB DSNG

Connector: F-type
8PSK, 16QAM and QPSK
Frequency Range: 950-2150 MHz
Symbol rate Range: 1 - 45 Msym/s

DVB QAM for Cable Head End

Connector: F-type
QAM demodulation: 16/32/64/128/256
VHF/UHF input: 44 - 858 MHz
Symbol Rate Range: 1- 7 Msym/s

Telecom Interfaces: E3, DS3 and IP Streaming

Connector: BNC
10/100BaseT RJ-45

DVB ASI

Connector: BNC
180 Mbps transport stream

Outputs

Analog video Formats:

PAL, NTSC, Russian Secam BNC

S-video

Connector: DIN

QUAD or PIP MONITORING

Connector: BNC (option)

Outputs

SDI Embedded

Connector: BNC

AES/EBU

Connector: XLR

ASI

Connector: BNC

Data

RS232 or RS422
Connector: 9-pin D-type female

Fast Ethernet
Connector: RJ-45

GPI

Connector: 9-pin D-type female
RS232 or RS422

Conditional access

Conditional Access Options

DVB Common Interface
BISS mode 1&E
Support: Irdeto, Conax, Viaccess, MediaGuard, CriptoWork, NagraVision, TongFung, SECA

Control

Front panel keypad and LCD
Remote control via RS232 and Fast Ethernet

Dimensions

1RU (19" RACK)

Power

90/280 V ac

Environmental conditions

Operating temperature: 0°C to +50°C
Storage Temperature: -20°C to +60°C

Compliance

CE compliant

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