Description | Additional Product Specs | Extended Information

The HD4040 is Tiernan's newest High Definition & Standard Definition Decoder. It uses the latest advancedTiernan Technology to offer both video and audio front panel confidence monitors. Through advances in integration, the HD4040 is able to offer an unprecedented combination of features, performance and reliability at an industry-leading price. The HD4040 is available in several different configurations designed to suit any decoding requirement. The HD4040 is a perfect complement for the HE4000 encoder and can be ordered with a complete set of the most advanced features available today, including a DVB-S2 receiver module, or ordered in a cost effective minimal configuration. The advanced monitoring features of the HD4040 guarantee the most cost-effective solution by eliminating the need for additional monitoring equipment.

- Input Interfaces:
- QPSK L-band Receiver:
- • Four selectable L-Band Inputs
- • DVB®-Compliant FEC Decoding, Deinterleaving, and Descrambling
- • LNB Power Supplied Through the L-Band Feed Cable, 18V, 13V or Off
- • Selectable, 350 mA Maximum Current
- ASI with active ASI output
- Standard Def. Video Processing:
- • MPEG-2 4:2:0 Main Profile @ Main Level (1 to 15 Mbps)
- • MPEG-2 4:2:2 Studio Profile @ Main Level (2.5 to 50 Mbps)
- • Horizontal Resolutions: 720, 544, 480, and 352
- • Vertical Resolutions: 480/240 (NTSC) and 576/288 (PAL)
- Standard Def. Video Output:

- • Composite Analog NTSC (525) or PAL (625)
- • Serial Digital Component Video (SMPTE 259M)
- Standard Def. VBI Data:
- • Proprietary Passage of NTSC Line 21 Closed Captions
- • DVB 4:2:2 Expanded Windows Carries WSS, VPS, VITC, CC, AMOL, XDS, etc.
- • ATSC Closed Captioning, DVB Teletext & VITC
- Audio:
- • Eight Audio Channels (4 pairs) (Analog, Digital or Embedded)
- • MPEG or AC-3 2.0 decode
- • Linear PCM, and Dolby® AC-3 and E Pass-Through
- Front Panel
- • Rugged Pushbuttons, Illuminated LCD, Bright Indicator LEDs, Special function Buttons
- • Analog Audio on Mini-Phono Jack (For Monitoring Purposes Only)
- • Full color LCD monitor
- Auxiliary Data Processing: • One Async: 1200 - 115200 bps EIA-232; on DB-9 Connector
- • One Sync: 1 - 20 Mbps, EIA-422; on DB-9 Connector
- Conditional Access:
- • PGCA Proprietary Conditional Access
- • BISS (Basic Interoperable Scrambling System) Modes 1, and E
- Optional Interface Modules:
- • QPSK/8PSK/16QAM Receiver
- • DVB-S2 QPSK, 8PSK & 16APSK Receiver
- • DS-3 / E3
- • 100/1000 Base-T with COP3 FEC Ethernet
- Management & Control:
- • Embedded Web Browser Interface For Command and Control
- • RS-232 Proprietary Command Line Monitor & Control
- • Fully functional Front Panel control
- • SNMP

SIMULTANEOUS DECODE (OPTIONAL)

Video production today is increasingly done in both Standard and High Definition. The HD4040 is the first true simultaneous high and standard definition decoder. The HD4040 receives an MCPC program stream and will decode both HD and SD programs at the same time.

VIDEO

The HD4040 Decoder supports all common HD and SD video formats. Video output formats supported include both composite analog and serial digital SDI for Standard Definition, and HD-SDI and Component video for High Definition. Video processing is automatically sensed by the HE4040 and processed at either 4:2:2 or 4:2:0.

AUDIO

The HD4040 Decoder decodes up to eight audio channels (4 pairs)

with analog and digital outputs, and embedded in the SDI or HD-SDI.

AUXILIARY DATA

In its basic configuration, the HD4040 supports two independently programmable auxiliary data channels, asynchronous or synchronous.

INPUT INTERFACES

The HD4040 Decoder is highly flexible and offers various input interfaces including: ASI and QPSK standard, and 8PSK, 16QAM, DS-3, E3, DVB-S2, and 100/1000 Base-T Ethernet with COP3FEC optional.

OPERATOR CONTROL

The HD4040 Decoder supports an embedded Web Browser Interface to allow for easy command and control programming. It also offers RS-232 proprietary command line M&C or SNMP control. As with all Tiernan products, the HD4040 also has a fully featured control front panel.

Features

- Front Panel Video and Audio Confidence Monitors
- Full Front panel control
- Extra rugged construction – Built to travel!
- Genlock Option*
- MPEG 4:2:0 or 4:2:2 Formats
- QPSK and ASI inputs standard, 8PSK & 16QAM Optional
- Active ASI output
- DVB-S2 Demodulator option
- DS3 / E3, and 100/1000 Base-T IP and COP3FEC interfaces
- HD-SDI, HD-Component, SDI and Composite Video Outputs
- Four Audio pairs supported
- AES/EBU, Analog and Embedded audio in SDI and HDSDI
- Linear PCM, AC-3 and Dolby E Pass-through
- MPEG and AC3 audio decoding standard
- Various Conditional Access Options
- RS-232 remote control standard, SNMP included
- Simple Browser based Remote Control
- Other input interfaces available*

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