

HDX-2400

3G/HD/SD-SDI Digital Video Demultiplexer

The HDX-2400 is a 3G/HD/SD-SDI digital video demultiplexer which is used in i-MOD series frames. The HDX-2400 demultiplexer offers one 3G/HD/SD-SDI (2.97Gbps, 2.97/1.001Gbps, 1.485Gbps, 1.485/1.001Gbps, 270Mbps) digital video input, 1 fiber signal input, four AES-3id digital audio outputs and provides one fiber signal output and two 3G/HD/SD-SDI digital video outputs with audio embedded.

The HDX-2400 demultiplexer extracts digital video signal from 3G/HD/SD-SDI digital video signal with embedded audio. De-embedding channels are selectable and de-embedded audio can output to designated port. De-embedding modes are selectable, including L/R swap, copy and mix. Input audio gain is adjustable within ± 20 dB. The 3G-SDI input signal supports 328 ft (100 m)/656 ft (200 m)/984 ft (300 m) cable equalization compensation (Belden 1694A cable or equivalent cables).

Status presence indication and parameters manual adjustment are provided via the LED indicators, selector and paddle switches located on the module edge. 1RU and 2RU back modules are provided for HDX-2400 modules when used in 1RU and 2RU i-MOD series frames, respectively.

SPECIFICATIONS

Specifications are subject to change without notice.

DIGITAL VIDEO INPUT

| | |
|----------------------|--|
| Signal Format..... | 1080P/50,1080P/59.94,1080P/60; 1080I/50,1080I/59.94,1080I/60; 720P/23.98,720P/24,720P/25, 720P/29.97,720P/30,720P/50, 720P/59.94,720P/60; 1080P/25, 1080P/29.97,1080P/30; 525i/59.94,625i/50 |
| Signal Standard..... | SMPTE 259M, SMPTE 272M, SMPTE 292M, SMPTE 424M |
| Connector..... | BNC (x1) |
| Impedance..... | 75 ohms |
| Return Loss..... | SD > 18 dB @ 270 MHz HD > 15 dB @ 1.485 GHz/2.97 GHz |
| Cable EQ..... | SD<984 ft (300 m) HD<656 ft (200 m) 3Gbps<328 ft (100 m) (Belden 1694A or equivalent cables) |

DIGITAL VIDEO OUTPUT

| | |
|-----------------------|---|
| Signal Format..... | 1080P/50,1080P/59.94,1080P/60; 1080I/50,1080I/59.94,1080I/60; 720P/23.98,720P/24,720P/25, 720P/29.97,720P/30,720P/50, 720P/59.94,720P/60;1080P/25, 1080P/29.97,1080P/30; 525i/59.94,625i/50 |
| Signal Standard..... | SMPTE 259M, SMPTE 272M, SMPTE 292, SMPTE 424M |
| Connector..... | BNC (x2) |
| Impedance..... | 75 ohms |
| Return Loss..... | SD > 18 dB @ 270 MHz HD > 15 dB @ 1.485 GHz/2.97GHz |
| Amplitude..... | 800 mVp-p $\pm 10\%$ |
| Alignment Jitter..... | 100kHz~300MHz 3Gbps: < 0.3 UI HD/SD: < 0.2 UI |
| Rise/Fall Time..... | SD:400~1500ps; HD: <270 ps 3Gbps: < 135ps 3G: < 135ps |

FEATURES

- One 3G/HD/SD-SDI video input signal with embedded audio
- SMPTE 259M, SMPTE 272M, SMPTE 292M and SMPTE 424M standard
- 1 fiber input and output, selectable
- Four AES-3id digital audio outputs
- Output audio gain selectable within ± 20 dB
- De-embedding channel selectable; de-embedded audio can output to designated port
- De-embedded mode selectable, including L & R swap, copy and mixing
- Automatic detection of input video and audio loss
- Cable EQ for up to 328 ft (100 m) (2.97Gbps)/656 ft (200 m) (1.485Gbps)/984 ft (300 m) (270Mbps)
- Stores settings in non-volatile memory
- Hot-swappable
- Computer control supported

| | |
|----------------|----------------|
| Overshoot..... | <10% amplitude |
| Power..... | 7 W |

DIGITAL AUDIO OUTPUT

| | |
|--------------------|---|
| Signal Format..... | AES-3id |
| Connector..... | BNC (x4) |
| Level..... | 1Vp-p $\pm 10\%$ |
| Impedance..... | >75k Ω |
| Timing Jitter..... | 10 Hz 3Gbps: <2.0 UI HD: < 1.0 UI SD: < 0.2 UI |

FIBER INPUT

| | |
|----------------------|---|
| Connector..... | LC |
| Signal Format..... | 1080P/50,1080P/59.94,1080P/60; 1080I/50,1080I/59.94,1080I/60; 720P/23.98,720P/24,720P/25, 720P/29.97,720P/30,720P/50, 720P/59.94,720P/60;1080P/25, 1080P/29.97,1080P/30; 525i/59.94,625i/50 |
| Signal Standard..... | SMPTE 259M, SMPTE 272M, SMPTE 292M, SMPTE 424M |

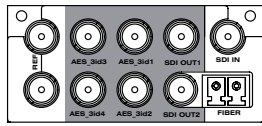
FIBER OUTPUT

| | |
|----------------------|---|
| Connector..... | LC |
| Signal Format..... | 1080P/50,1080P/59.94,1080P/60; 1080I/50,1080I/59.94,1080I/60; 720P/23.98,720P/24,720P/25, 720P/29.97,720P/30,720P/50, 720P/59.94,720P/60;1080P/25, 1080P/29.97,1080P/30; 525i/59.94,625i/50 |
| Signal Standard..... | SMPTE 259M, SMPTE 272M, SMPTE 292M, SMPTE 424M |

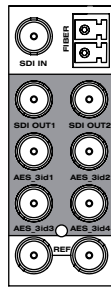
ENVIRONMENTAL

| | |
|----------------------------|---------------------------|
| Operating Temperature..... | 32° ~ 104° F (0° ~ 40° C) |
| Relative Humidity..... | 10% ~ 90% |

BACK MODULES



1RU



2RU

Note: Fiber connectors selectable.

BLOCK DIAGRAM

