

HD/SD Audio De-embedder



Model 520AD4-HD

The 520AD4-HD Audio De-embedder extracts embedded audio from 2 specified groups as defined by SMPTE 299M from a 1.5 Gb/s serial HDTV or as defined by SMPTE 272M from a 270Mb/s serial SDTV video signal.

Up to 8 selected channels may be optionally delayed up to 3 sec and re-embedded onto output video and/or directed to 4 AES outputs. Video output may be optionally delayed up to 5 frames to help with lip sync.

This device also handles the Dolby E Metadata. Metadata is optionally de-embedded from VANC and can be provided as an output for downstream devices (ie. Dolby E Encoders etc.).

VistaLINK™ enables control and configuration capabilities via Simple Network Management Protocol (SNMP). This offers the flexibility to manage the module status monitoring and configuration from SNMP enabled control systems such as Evertz VistaLINK™ PRO locally or remotely.

Features

- Adjustable video delay (up to 5 frames) and audio delay (3 sec)
- Headphone jack with monitoring stereo down-mix
- Card edge display for status & audio channel peak levels bargraphs
- VANC decode and output of Dolby Metadata

Controls:

- Audio group selection
- Audio channel selection

Inputs:

- SMPTE 292M - (1.5Gb/s serial digital), or SMPTE 259M

Outputs:

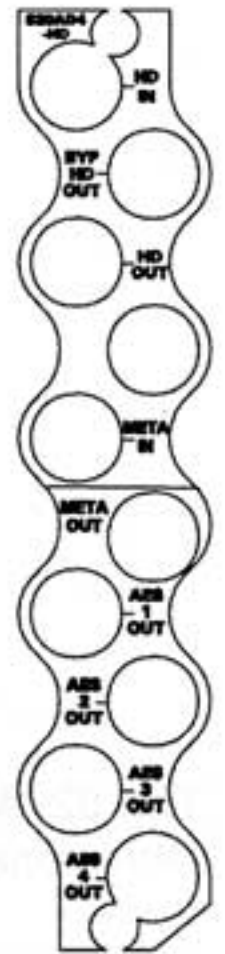
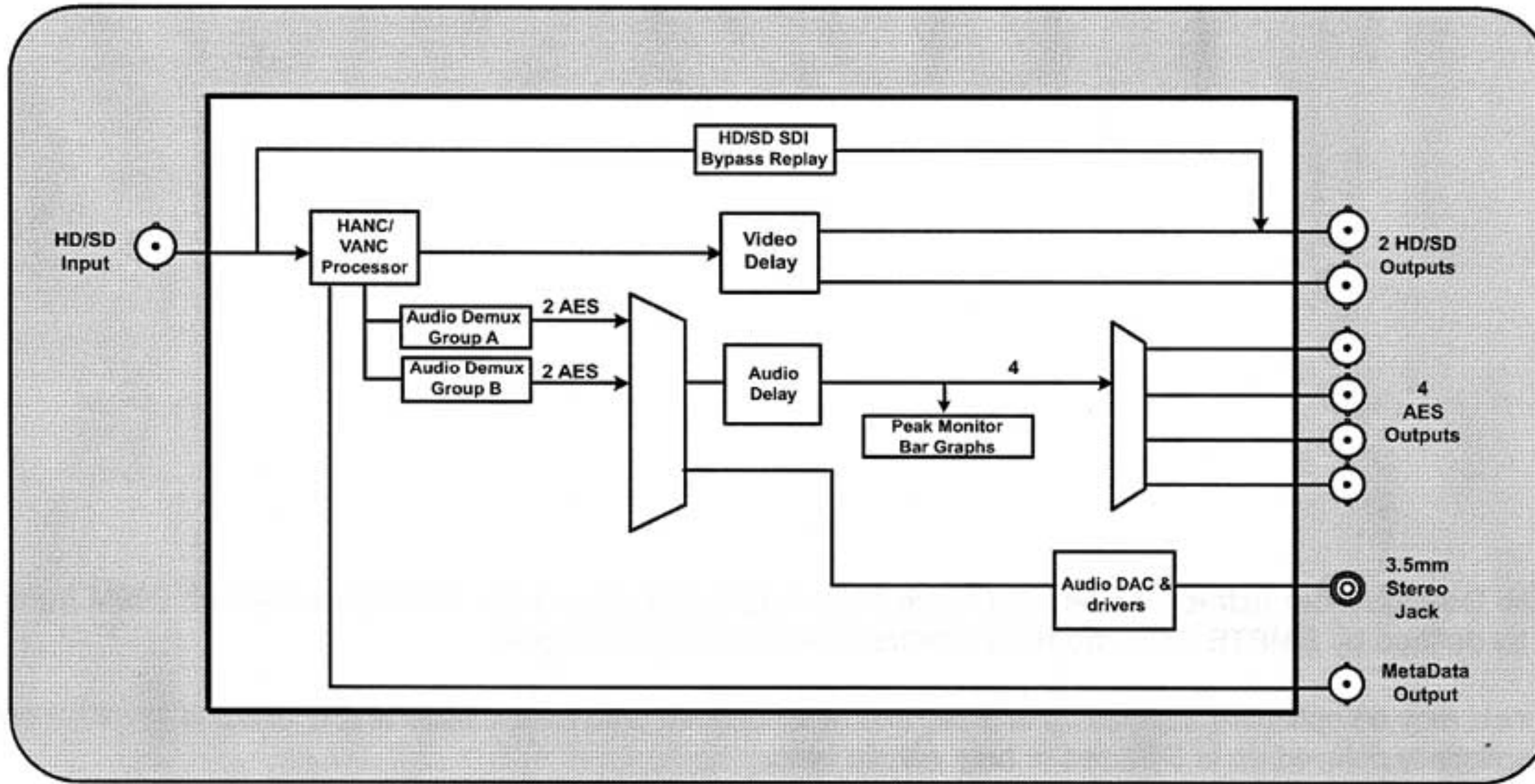
- 2 processed HD outputs (1 is relay protected)
- 1 BNC Dolby Metadata output (RS422/485)
- 4 AES de-embedded outputs (unbalanced)

Card Edge LED's:

- Module Status
- Video Signal presence
- Selected audio group presence/erros
- Genlock health/compatibility

- VistaLINK™ -enabled for remote monitoring via SNMP (using VistaLINK™ PRO) when installed in 500FR frame with 500FC VistaLINK™ Frame Controller

Model 520AD4-HD Block Diagram



Specifications

Serial Video Input:

Standard: SMPTE 292M, (1080i/60, 1080i/59.94, 1080i/50, 1080p/30(sF), 1080p/29.97(sF), 1080p/25(sF), 1080/24(sF), 1080/23.98(sF), 720p/60, 720p/59.94, 1035i/60, 1035i/59.94
SMPTE 259M-C (270 Mb/s) 525 or 625 line component

Connector: BNC per IEC 60169-8 Amendment 2

Equalization: Automatic 100m @ 1.5Gb/s with Belden 1694 (or equivalent), 25m with bypass relay installed

Processed Serial Video Output:

Standard: Same as input or user controlled

Number of Outputs: 2

Connector: BNC per IEC 60169-8 Amendment 2

Signal Level: 800mV nominal

DC Offset: 0V $\pm$ 0.5V

Rise and Fall Time: Per standard

Overshoot: <10% of amplitude

Wide Band Jitter: <0.2 UI

Metadata Output:

AES Audio Output:

Standard: SMPTE 276M, single ended AES

Number of Outputs: 4

Connector: BNC per IEC 60169-8 Amendment 2

Sample Rate: 48kHz

Impedance: 75 Ω

Delay: Up to approx. 3 seconds (user adjustable)

Resolution: Up to 24-bit

System Performance:

Deembedding Latency: 600 μ nominal

Audio Delay Range: 0 to 3 sec

Video Delay Range: 0 to 5 frames

Electrical:

Voltage: +12V DC

Power: 10 Watts

EMI/RFI: Complies with FCC Part 15 Class A, EU EMC Directive

Physical:

Number of Slots: 1

Ordering Information:

520AD4-HD HD/SD Audio De-embedder with 4 unbalanced AES outputs (2 audio groups)

Enclosures:

500FR Compact High Density Distribution Frame

S501FR Standalone enclosure