

520AD4-HD

HD/SD Audio De-embedder with 4 Unbalanced AES Inputs

The 520AD4-HD Audio De-embedder extracts embedded audio from 2 specified groups as defined by SMPTE 292M (1.5Gb/s video HD signal) or, as defined by SMPTE 272M from a 270Mb/s SD video signal.

Up to 8 selected channels may be delayed up to 3 seconds and re-embedded onto the output video and/or directed to 4 unbalanced AES outputs. An extra AES input is provided as a backup channel, in case of the loss of primary, or as the source of voice-over. The video output may also be delayed up to 5 frames to achieve lip sync with the audio.

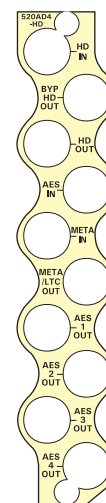
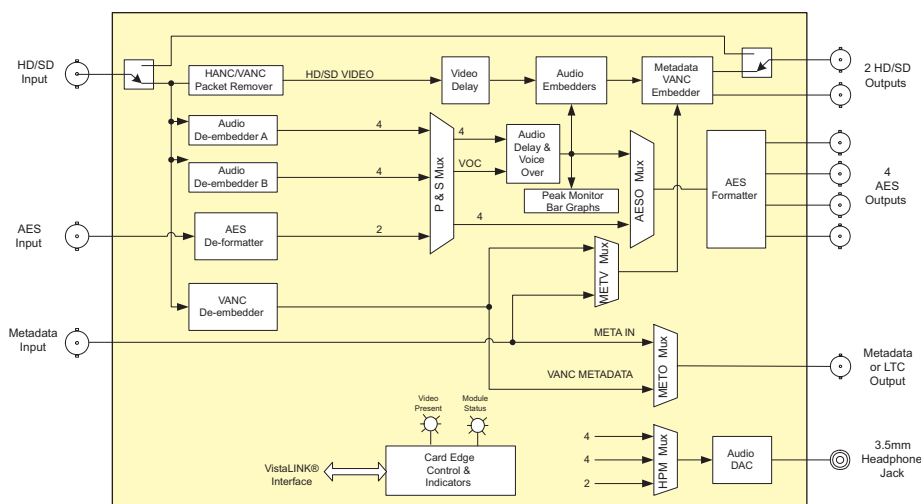
The 520AD4-HD also embeds Dolby-E™ Metadata in VANC. The module has multiple sources for this metadata including incoming VANC, and externally supplied metadata. The decoded or de-embedded Dolby-E™ Metadata can be provided as an output for downstream devices (i.e. Dolby-E™ Encoders etc.).

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.

The 520AD4-HD is housed in the 3RU 500FR **exponent** frame that will hold up to 16 modules.

►Features & Benefits

- Supports SMPTE 292M (1.5Gb/s) or SMPTE 259M (270Mb/s) serial digital video signals
- Video input relay bypass for power failure bypass protection.
- AES input for backup/voice-over source
- 2 processed video outputs
- 4 AES de-embedded and processed outputs
- 1 Dolby™ Metadata output (RS-422/485)
- De-embeds and re-embeds 2 audio groups - user-selectable
- Selectable audio sources for AES and embedded outputs
- Adjustable video (up to 7 frames) and audio delay (up to 3 seconds) to achieve lip sync at output
- Headphone jack with monitoring stereo down-mix
- Card edge LEDs for module status, Video and Audio present
- Card edge display for card status & audio channel peak levels bar graphs
- Configurable Dolby™ Metadata input and output
- VistaLINK® -capable for remote monitoring via SNMP (using VistaLINK® PRO) when installed in 500FR frame with 500FC VistaLINK® Frame Controller



►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/50, 720p/60, 720p/59.94, 1035i/60, 1035i/59.94
SMPTE 259M-C (270Mb/s) 525 or 625 line component

Number of Inputs: 1

Connector: BNC per IEC 61169-8 Annex A

Equalization: Automatic > 200m @ 270Mb/s with Belden 8281 (or equivalent), 25m with bypass relay installed

Processed Serial Video Output:

Standard: Same as input

Number of Outputs: 2

Connector: BNC per IEC 61169-8 Annex A

Signal Level: 800mV nominal

DC Offset: 0V ±0.5V

Rise and Fall Time: Per standard

Overshoot: < 10% of amplitude

Wide Band Jitter: < 0.2 UI

Metadata: SMPTE RP2020

AES Input:

Standard: SMPTE 276M

Number of Inputs: 1

Connector: BNC per IEC 61169-8 Annex A

Input Level: 0.1 to 2.5V p-p

Input Impedance: 75Ω

Return Loss: > 25dB 100kHz to 6MHz

Equalization: Automatic to 1000m with Belden 1694A (or equivalent) @ 48kHz

AES signal

Sample Rate: 48kHz ±100ppm

AES Audio Output:

Standard: SMPTE 276M, single ended AES

Number of Outputs: 4

Connector: BNC per IEC 61169-8 Annex A

Sample Rate: 48kHz

Impedance: 75Ω

Resolution: Up to 24-bit

Metadata Input:

Type: Dolby-E™ Metadata SMPTE RDD6

Connector: 1 BNC per IEC 61169-8 Annex A

Baud Rate: 115,200 baud

System Performance:

Embedding Latency: 600μs nominal

Audio Delay Range: 0 to 3 seconds

Electrical:

Voltage: +12V DC

Power: 10W

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

Physical:

Number of Slots: 1

►Ordering Information

520AD4-HD HD/SD-SDI Audio De-embedder with 4 Unbalanced AES Outputs

Enclosures
500FR
S501FR

exponent
Compact High Density Distribution Frame
Standalone enclosure