

The 7721AE8-HD Audio Embedder inserts 8 AES audio signals into 1.5Gb/s HD or 270Mb/s SD video signals as specified in SMPTE 299M or 272M respectively. The companion 7721AD8-HD Audio De-embedder facilitates audio demultiplexing at the destination.

The 7721AE8-HD embeds up to 8 AES audio signals into four groups on the HD/SD outputs enabling support for dual 5.1 audio applications. The module supports 24-bit AES audio embedding for HD and 20-bit audio embedding for SD. In addition, a full 16x16 audio channel router is available for channel re-mapping.

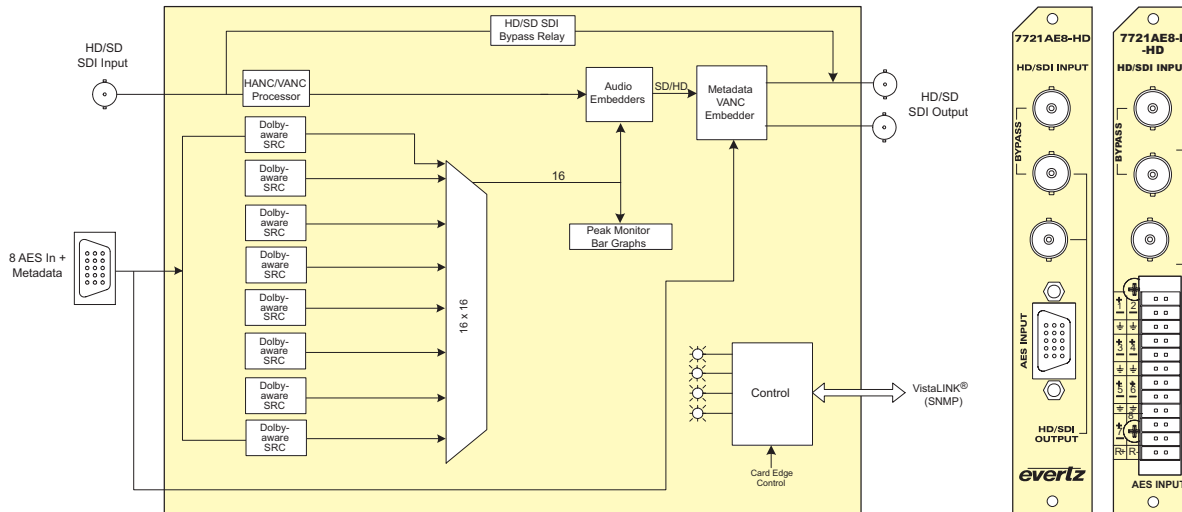
Features & Benefits

- Audio embedding into 1.5Gb/s HD or 270Mb/s SD video
- Automatic detection of input video standard
- Two 1.5Gb/s HD or 270Mb/s SD serial video outputs
- By-pass relay protection for main program output
- Supports 24-bit AES audio embedding for HD and 20-bit AES audio embedding for SD
- Flexible 16x16 audio channel routing for channel re-mapping
- Dolby compliant with automatic sample rate conversion disable on AES inputs to permit seamless Dolby embedding
- Dolby Metadata insertion via serial interface
- Miniature bargraph display to monitor audio content activity

The 7721AE8-HD is Dolby compliant and automatically disables sample rate conversion on AES inputs to permit seamless Dolby embedding.

VistaLINK® enables control and configuration capabilities via Simple Network Management Protocol (SNMP). This offers the flexibility to manage the module status monitoring and configuration locally or remotely.

- Numerous signal monitoring aids
- Ancillary packet cleaner removes any interfering audio groups prior to embedding
- User control to force removal of additional audio groups
- Embeds audio on internally generated black or blue video when there is no video input
- Card edge LEDs indicate video and audio signal presence and module fault
- VistaLINK® capable for remote monitoring, control and configuration capabilities via SNMP; using VistaLINK® PRO, CP-2116E or CP-2232E Control Panels. VistaLINK® is available when modules are used with the 3RU 7800FR frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame



Specifications

Serial Video Input:

Standard: SMPTE 292M (1.5Gb/s), (1080i/60, 1080i/59.94, 1080i/50, 1080p/30sF, 1080p/29.97sF, 1080p/25sF, 1080p/24sF, 1080p/23.98sF, 720p/60, 720p/59.94), 1035i/60, 1035i/59.94, 1080p/30, 1080p/29.97, 1080p/25, 1080p/24, 1080p/23.98, 720p/50
SMPTE 259M (270Mb/s), 525 or 625 line

Connector: 1 BNC per IEC 61169-8 Annex A

Serial Video Outputs with Embedded Audio:

Standard: Same as input
Number of Outputs: 2 (1 output bypass relay protected)
Embedded Audio: SMPTE 299M - 24-bit 48kHz synchronous/SMPTE 272M - 20-bit
Connectors: BNC per IEC 61169-8 Annex A
Return Loss: > 15dB to 1.5Gb/s
Wideband Jitter: < 0.20 UI

AES Audio Inputs:

Number of Inputs: 8
Standard: SMPTE 276M, single-ended AES
Connector: BNC per IEC 61169-8 Annex A (with DB15 to BNC 6ft Breakout cable)
Resolution: 24 bits
Sampling Rate: 48kHz synchronous or asynchronous (48kHz synchronous AES required when sample rate converter is disabled)
Impedance: 75Ω unbalanced, 100Ω balanced
Signal Level: 1V p-p ±0.1V @ termination load

Metadata Input:

Type: Dolby-E™ Metadata, SMPTE RDD6
Standard: RS-422
Baud Rate: 115,200 baud
Vanc Embedding: SMPTE 2020

System Performance:

SRC THD+N: -140dB
Embedding Latency: 0.3ms (HD), 0.7ms (SD), 3ms (with SRC)

Electrical:

Voltage: +12V DC
Power: 7W
EMI/RFI: Complies with FCC Part 15, Class A EU EMC Directive

Physical (number of slots):

350FR: 1
7700FR-C: 1
7800FR: 1

Ordering Information

7721AE8-HD	HD/SD-SDI 8 AES (16 Channel) Audio Embedder
7721AE8-B-HD	HD/SD-SDI 8 Balanced AES (16 Channel) Audio Embedder

Ordering Options Rear Plate must be specified at time of order
Eg: Model +3RU

Rear Plate Suffix

+3RU 3RU Rear Plate for use with 350FR, 7700FR-C & 7800FR Multiframe
+1RU 1RU Rear Plate for use with 7701FR Multiframe
+SA Standalone Enclosure Rear Plate

Accessories

7700FC
CP-2116E-H
CP-2232E

VistaLINK® Frame Controller
Remote Control Panel
Remote Control Pane

Enclosures

350FR
7700FR-C
7800FR
7701FR
S7701FR

3RU Portable Multiframe which holds up to 7 single slot modules
3RU Multiframe which holds up to 15 single slot modules
3RU Multiframe which holds up to 15 single slot modules
1RU Multiframe which holds up to 3 single or dual slot modules
Standalone enclosure



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7700 Series Modular - Embedders & De-embedders