



The 7720AE4 Audio Embedder inserts AES audio signals into a 270Mb/s SDI video signal as specified in SMPTE ST 272. The companion 7720AD4 Audio De-embedder facilitates audio demultiplexing at the destination.

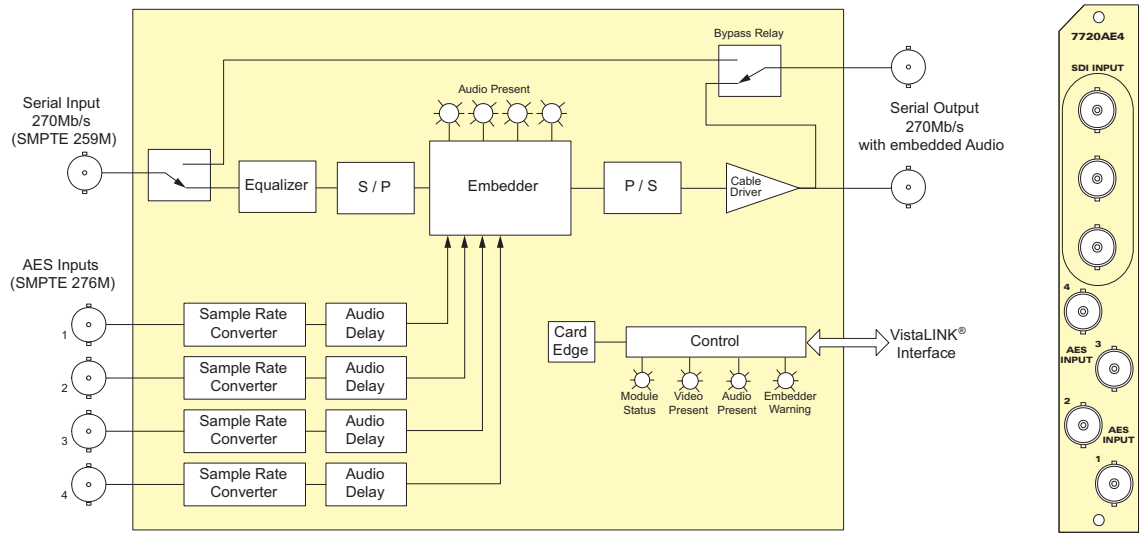
SMPTE ST 272 allocates four groups of four audio channels that can be embedded into the SMPTE ST 259 bitstream. The 7720AE4 embeds up to four AES audio signals into two groups on the SDI outputs for discrete 5.1

audio applications. The 7720AE4 is Dolby-E® compliant when the sample rate converters are turned off.

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 & Benefits

- Automatic detection of 525 line and 625 line input
- Bypass relay protection on one SDI output for power failures
- 20-bit AES input and audio embedding
- Individual audio group assignment for each group
- Group lock mode maintains phase relationship between the groups for 5.1 audio applications
- Sample rate conversion disable on AES inputs to permit Dolby-E® embedding
- Programmable audio delays (up to seven frames in ½ video field increments using DIP switches or up to 1.35 seconds in one sample increments with VistaLINK® control)
- Ancillary packet cleaning mode removes all audio before embedding
- Ancillary packet reformatting mode left justifies and removes unused packets before embedding
- 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

<p>Serial Video Input: Standard: SMPTE ST 259-C (270Mb/s) 525 or 625 line component Connector: 1 BNC per IEC 61169-8 Annex A Equalization: Automatic 210m @ 270Mb/s with Belden 8281 or equivalent cable Return Loss: > 15dB up to 540Mb/s</p> <p>Serial Video Outputs with Embedded Audio: Standard: Same as input Number of Outputs: 2 (1 output bypass relay protected) Embedded Audio: SMPTE ST 272 - 20 bit 48kHz synchronous Connectors: BNC per IEC 61169-8 Annex A Signal Level: 800mV nominal DC Offset: 0V ±0.5V Rise and Fall Time: 900ps nominal Overshoot: < 10% of amplitude Return Loss: > 15dB up to 540Mb/s Wide Band Jitter: < 0.2 UI</p>	<p>AES Audio Inputs: Number of Inputs: 4 Standard: SMPTE 276M, single ended AES Connector: BNC per IEC 61169-8 Annex A Resolution: 20 bits Sampling Rate: 32 to 96kHz synchronous or asynchronous (48kHz synchronous AES required when sample rate converter is disabled) 75Ω unbalanced Impedance: 75Ω Signal Level: 1V p-p ±0.1V</p>	<p>System Performance: Embedding Latency: 1.3 to 3 ms Audio Delay: DIP Switch Control: Up to 7 frames, ½ frame increments (delay applied to all AES channels) VistaLINK® or Serial Port Control: Up to 1.35 seconds in 1 sample increments (independent control of delay for each channel)</p> <p>Electrical: Voltage: +12V DC Power: 9W EMI/RFI: Complies with FCC Part 15, Class A EU EMC Directive</p> <p>Physical (number of slots): 350FR: 1 7700FR-C: 1 7800FR: 1</p>
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►Ordering Information

7720AE4	SD-SDI 4 AES Audio Embedder	Accessories	
Ordering Options	Rear Plate must be specified at time of order (Eg: Model +3RU)	7700FC	VistaLINK® Frame Controller
Rear Plate Suffix		CP-2116E-H	Remote Control Panel
+3RU	3RU Rear Plate for use with 7700FR-C & 7800FR Multiframe	CP-2232E	Remote Control Panel
+SA	Standalone Enclosure Rear Plate	Enclosures	
		7700FR-C	3RU Multiframe which holds up to 15 single slot modules
		7800FR	3RU Multiframe which holds up to 15 single slot modules
		7801FR	1RU Multiframe which holds up to 4 single or 2 dual slot modules
		S7701FR	Standalone enclosure