

# 7821AD8-3G, 7821AD8-3G-AESD, 7821AD8-B-3G, 7821AD8-LTC-3G

## 3G/HD/SD-SDI 8 AES Audio De-embedder with Dolby® Metadata Extractor

The 7821AD8-3G Audio De-Embedder de-embeds up to 8 AES audio signals, on up to 4 groups, from a SMPTE 424M (3Gb/s), ST 292-1 (1.5 Gb/s HD-SDI) or SMPTE 259M (270Mb/s SD-SDI) video signal as specified in ST 299-1 or 272M respectively. The companion 7821AE8-3G Audio Embedder facilitates audio re-embedding at the destination.

The 7821AD8-3G come equipped with a full 16x16 audio channel router for audio channel mixing and/or shuffling. With the -AESD suffix applied (7821AD8-3G-AESD), the rear plate comes equipped DIN connectors for direct

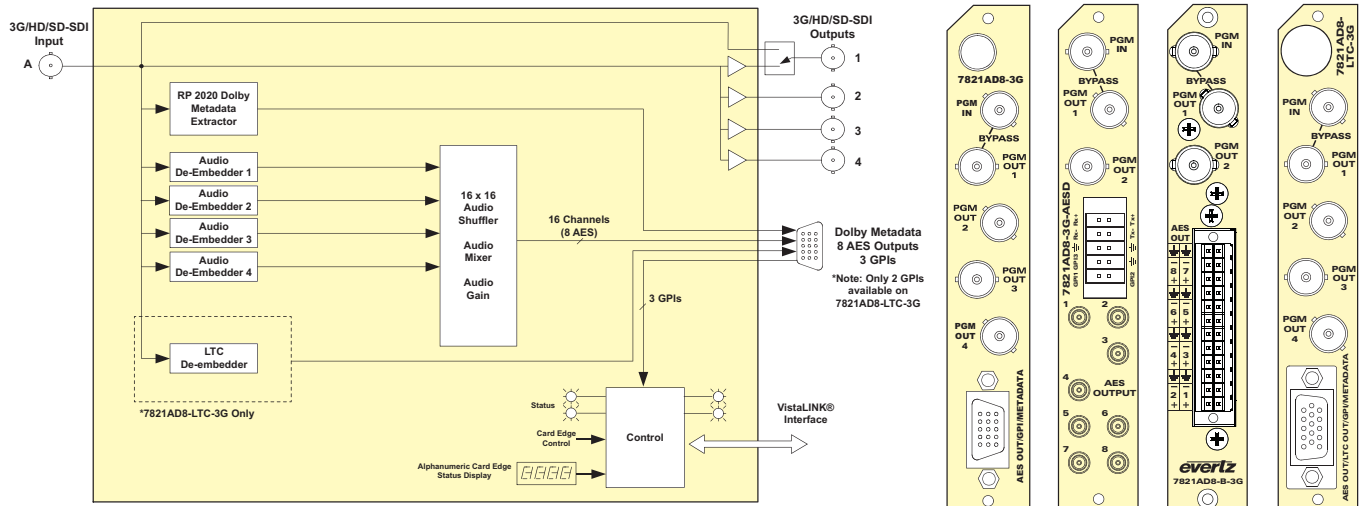
AES connections eliminating the use of a break out cable. The module is designed to properly handle the de-embedding of all Dolby audio streams including extraction of any preset Dolby Metadata encoded in the upstream video signal. The 7821AD8-LTC-3G will de-embed Ancillary Time Code (ATC) or DVITC in SD to generate Linear Time Code (LTC).

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.

### ► Features & Benefits

- Audio De-embedding from a 3G/HD/SD-SDI video signal
- Automatic detection of input video standard
- Four serial video outputs (same standard as input)
- Bypass relay protection from main program output
- Flexible 16x16 audio channel routing for channel shuffling and mixing
- Dolby Metadata extraction via serial interface (not available on 7821AD8-B-3G)

- Card edge LEDs indicate video and audio signal presence and module fault
- LTC de-embedding (7821AD8-LTC-3G only)
- 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



I/O of 7821AD8-3G shown

### ► Specifications

#### Serial Video Input:

Number of Inputs: 1  
 Standard: SMPTE 424M (3Gb/s) 1080p  
 ST 292-1 (1.5Gb/s), 1080i, 1035i, 720p  
 SMPTE 259M (270Mb/s) 525i, 625i  
 Connector: BNC per IEC 61169-8 Annex A

#### Input Equalization:

3G: Automatic to 80m @ 3Gb/s with Belden 1694A or equivalent cable  
 HD-SDI: Automatic to 100m @ 1.5Gb/s with Belden 1694A or equivalent cable  
 SD-SDI: Automatic to 300m @ 270Mb/s with Belden 1694A or equivalent cable

#### Return Loss:

3G: > 10dB up to 3.0GHz  
 HD: > 13dB up to 1.5GHz  
 SD: > 15dB up to 270MHz

#### Serial Video Outputs:

Number of Outputs: 4 (1 output bypass relay protected)  
 2 (1 output bypass relay protected on -AESD model & -B model)  
 Standard: Same as input  
 Connectors: BNC per IEC 61169-8 Annex A  
 Wideband Jitter: < 0.20 UI HD  
 < 0.30 UI 3G

#### AES Audio Outputs:

Number of Inputs: 8 AES outputs  
 Standard: SMPTE 276M, single-ended AES  
 Connector: BNC per IEC 61169-8 Annex A (with DB15 to BNC 6ft Breakout cable)  
 8x miniDIN connectors (-AESD model)  
 Terminal blocks (-B model)  
 up to 24 bits  
 Resolution: 48kHz  
 Sampling Rate: 75Ω unbalanced, 110Ω balanced  
 Impedance: (-B model)  
 Signal Level: 1V p-p ±0.1V @ termination load

#### Metadata Output (Not available on -B model):

Type: Dolby-E® Metadata  
 Standard: RS-422  
 Baud Rate: 115,200 baud  
 Connector: DB15 breakout connector  
 Terminal block (-AESD model)

#### LTC Output (Only available on -LTC model):

Standard: SMPTE ST 12 LTC  
 Connector: DB15 breakout connector  
 Termination: 75Ω unbalanced  
 Output Level: 1v p-p nominal unbalanced

#### Electrical:

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

#### Physical (Number of slots):

350FR: 2  
 7700FR-C: 2  
 7800FR: 1

### ► Ordering Information

<b>7821AD8-3G</b>	3G/HD/SD-SDI 8 AES Audio De-Embedder with Dolby® Metadata Extractor(Requires 7700FC for full module control)
<b>7821AD8-3G-AESD</b>	3G/HD/SD-SDI 8 AES Audio De-Embedder with Dolby® Metadata Extractor(Requires 7700FC for full module control)
<b>7821AD8-B-3G</b>	3G/HD/SD-SDI 8 AES Audio De-Embedder (Requires 7700FC for full module control)
<b>7821AD8-LTC-3G</b>	3G/HD/SD-SDI 8 AES Audio De-Embedder with Dolby Metadata Extractor and LTC De-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 7700FR-C and 7800FR Multiframe

#### Accessories

**7700FC** VistaLINK® Frame Controller  
**CP-2116E-H** Remote Control Panel  
**CP-2232E** Remote Control Panel

#### Enclosures:

**350FR** 3RU Multiframe which holds up to 7 single slot modules  
**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