

# 7707ADVR-HD

Analog, SD-SDI or HD-SDI Video with 4 Channel Analog or AES Audio Fiber Receiver



## ►Features & Benefits

- Single card fiber optic receiver for one composite Analog, SD-SDI or HD-SDI video and four analog or AES audio signals
- Auto sensing (analog or digital) video and audio outputs
- Supports 525/625 line component 4:2:2 SDI @ 270Mb/s
- Supports HD (SMPTE 292M) video @ 1.485Gb/s
- Supports both NTSC and PAL analog or 4:2:2 component digital video
- Supports Analog to Digital and Digital to Analog audio conversion
- Broadcast quality analog video and audio performance
- Meets or exceeds EIA/TIA RS250-C short haul specifications for analog video and audio transport
- Supports 32kHz, 44.1kHz, 48kHz AES audio
- Dolby-E® compatible
- Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK®
- VistaLINK® capability is available when modules are used with the 3RU 7800FR or 350FR portable frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame
- Adjustable gain, DC offset and pre-emphasis for analog video for driving up to 250m of Belden 1694A coaxial cable
- Fully hot-swappable from front of frame with no fiber disconnect/reconnect required
- Supports single-mode and multi-mode fiber optic cable (contact factory for multi-mode applications)
- Wideband optical input (1270nm-1610nm)

## ►Specifications

### Analog Video Outputs:

Standard: SMPTE 170M, (NTSC), ITU-R 624-2 (PAL)  
 Number of Outputs: 2 BNC per IEC 61169-8 Annex A  
 System bandwidth: > 5.5MHz  
 Output Level: 1V p-p (nominal), 2V p-p (maximum)  
 Gain: Unity gain nominal, adjustable 50% to 150%  
 Output Impedance: 75Ω  
 Return Loss: > 30dB to 5.5MHz  
 SNR: > 70dB  
 Differential Gain: < 1.0%  
 Differential Phase: < 0.7°  
 Pre-Emphasis: Adjustable cable loss compensation for up to 250m of Belden 1694A

### Passband Ripple:

NTSC: < ±0.1dB to 4.1MHz and < ±0.2dB to 5.5MHz  
 PAL: < ±0.1dB to 4.8MHz and < ±0.2dB to 5.8MHz

### Chroma/Luma Gain:

98%-103%  
 Chroma/Luma Delay:  
 NTSC: < 5ns  
 PAL: < 12ns

### Line Time Distortion:

1.2%

### Serial Video Output:

Number of Outputs: 2 regenerated  
 Standard: SMPTE 259M-C (525 or 625 line component), SMPTE 305M (SDTI), DVB-ASI (without separate audio), SMPTE 292M (HD)  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Signal Level: 800mV nominal  
 DC Offset: 0V ±0.5V  
 Rise and Fall Time: 900ps nominal @ 270Mb/s < 270ps @ 1.485Gb/s  
 Overshoot: < 10% of amplitude  
 Return Loss: > 15dB up to 1.485Gb/s  
 Wide Band Jitter: < 0.2 UI

### Analog Audio Outputs:

Number of Outputs: 4  
 Type: Balanced analog audio  
 Connector: 12-pin removable terminal block  
 Output impedance: 66Ω  
 Freq. Response: ±0.1dB, 20Hz to 20kHz  
 THD 20Hz-20kHz: < 0.005%  
 Channel Phase Diff. ±1°  
 SNR (weighted): > 85dB  
 Output Level Adj: -20dB to +3dB  
 Max Output Level: +24dBu into 10kΩ loads

### AES Audio Outputs:

Number of Outputs: 4 regenerated (selectable for balanced or unbalanced)  
 Standard:  
 Unbalanced AES: SMPTE 276M  
 Balanced AES: AES3-1992  
 Other: Dolby-E® compatible  
 Connector: 12-pin removable terminal block  
 Input Return Loss: > 15dB (1MHz to 6MHz)  
 Signal Level:  
 Unbalanced: 1V p-p ±0.1V p-p  
 Balanced: 2V p-p ±0.1V p-p  
 Resolution: Up to 24-bits  
 Sampling Rate: 32kHz, 44.1kHz, 48kHz  
 Output Jitter: < 0.1 UI  
 Impedance:  
 Unbalanced: 75Ω  
 Balanced: 110Ω

### Optical Input:

Number of Inputs: 1  
 Connector: Female SC/PC, ST/PC, FC/PC  
 Operating Wavelength: 1270nm to 1610nm  
 Max. Input Power: 0dBm  
 Optical Sensitivity: -23dBm  
 High Standard Sensitivity: -28dBm

### Electrical:

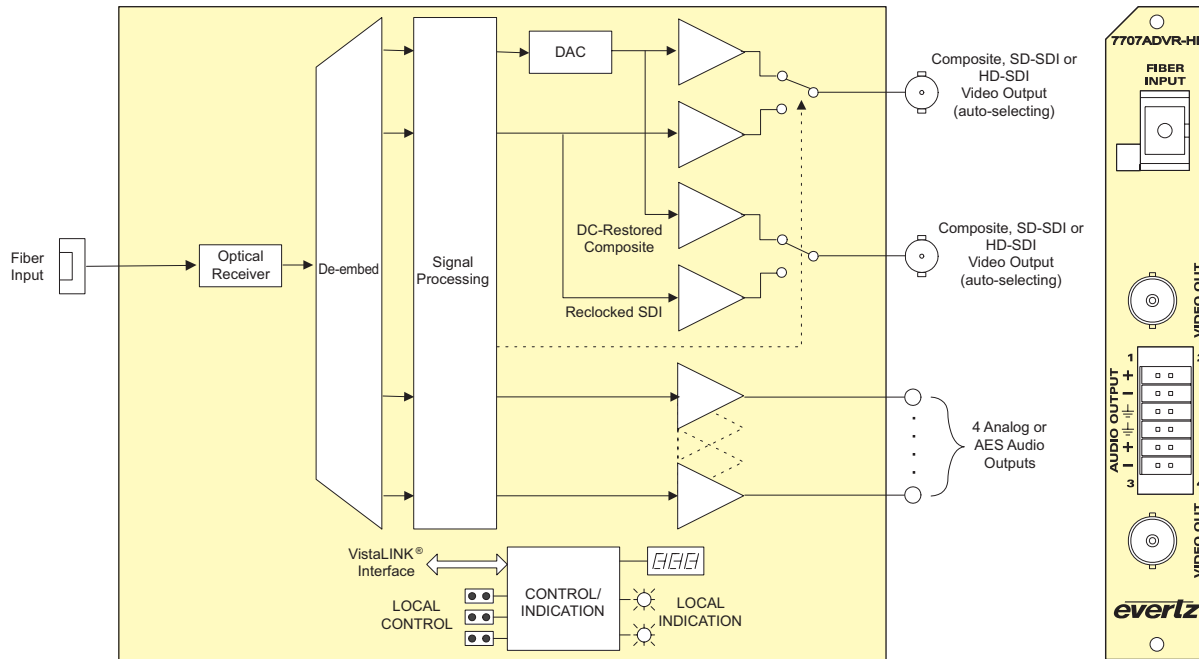
Voltage: +12V DC  
 Power: 13W  
 EMI/RFI: Complies with FCC Part 15, Class A EU EMC directive

### Physical (number of slots):

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

### Transmitter Compatibility Chart:

MODEL #	SD-SDI	HD-SDI
2405/7705/7707EO	x	
2405/7705/7707EO-HD	x	x
7705/7707EO-3	x	
7705/7707EO-3-HD	x	x
7707ADVT	x	
7707ADVT-HD	x	x
7707VAT-HD	x	x



### ►Ordering Information

**7707ADVR-HD** Analog, SDI or HD-SDI Video & Analog/AES Audio Fiber Optic Receiver

**Ordering Options** Rear Plate and Fiber Connector must be specified at time of order  
Eg: Model +SC +3RU

**Rear Plate Suffix**  
**+3RU** 3RU Rear Plate for use with 7800FR Multiframe

**Connector Suffix**  
**+SC** SC/PC  
**+ST** ST/PC  
**+FC** FC/PC

**Fiber Optic Patch Cable**  
See CWDM & DWDM Ordering Information Page

**Enclosures**  
**350FR** 3RU Portable 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  
**7701FR** 1RU Multiframe which holds up to 3 single or dual slot modules  
**7801FR** 1RU Multiframe which holds up to 4 single or 2 dual slot modules  
**S7701FR** Standalone Enclosure