

# 7707ADVR

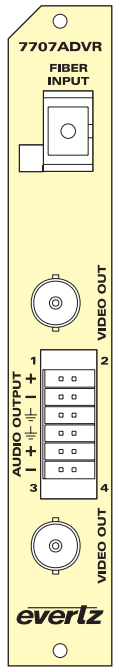
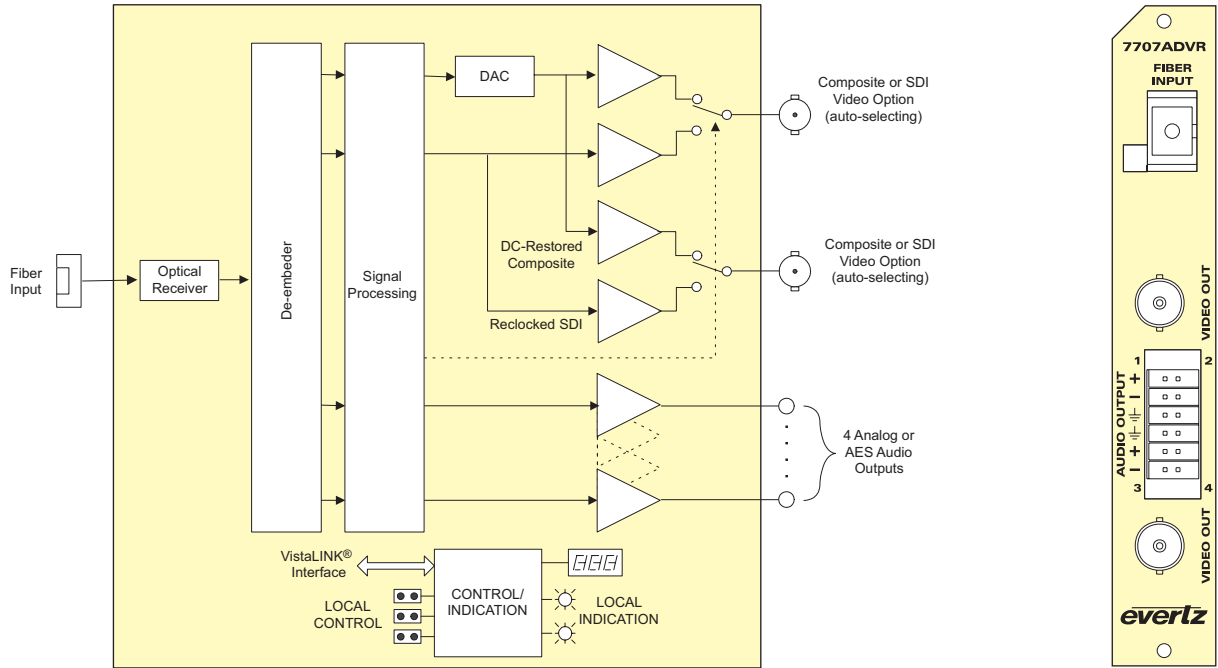
## Analog or SDI Video with 4-Channel Analog or AES Audio Fiber Receiver



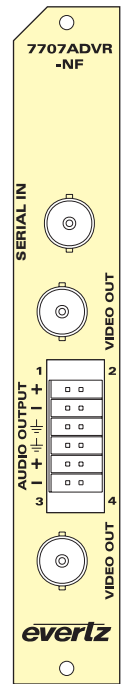
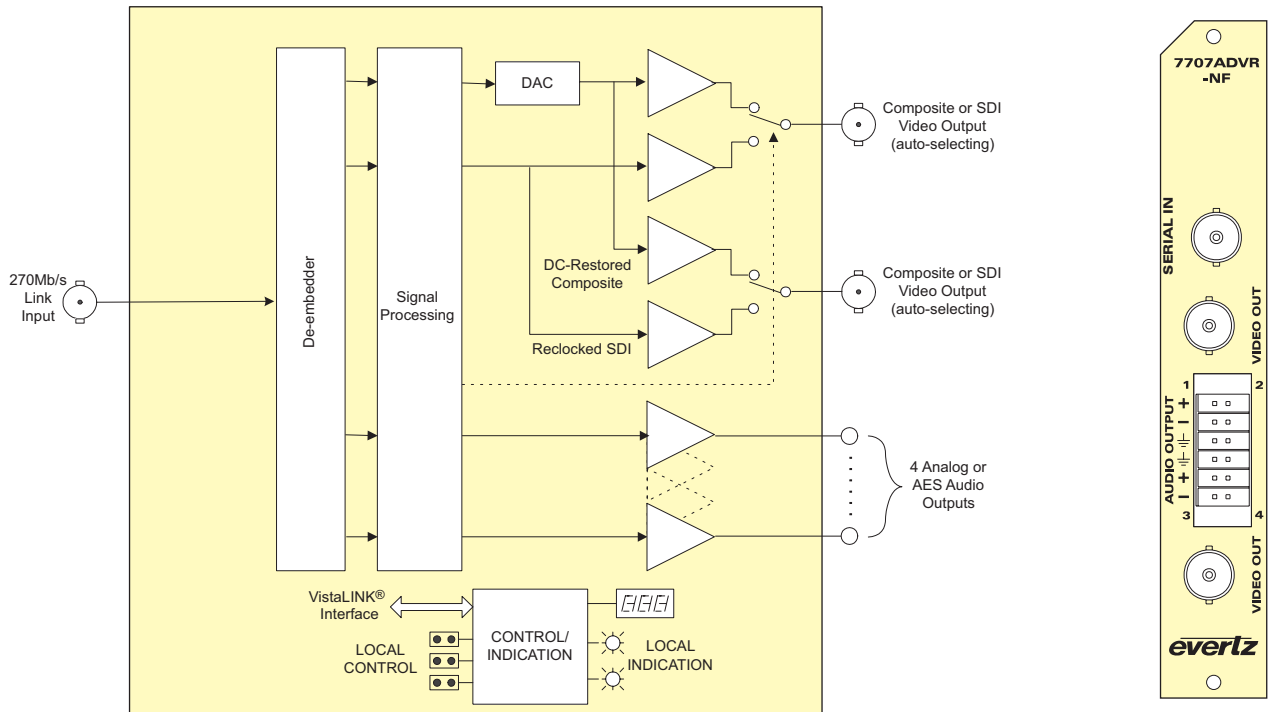
### ► Features & Benefits

- Single card fiber optic receiver for one composite Analog or SDI video and four analog or AES audio signals
- Auto sensing (analog or digital) video and audio outputs
- 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
- Comprehensive signal and card status monitoring via four digit card edge display or remotely through SNMP and VistaLINK®
- Dolby-E® compatible
- Audio de-embedding capability for digital video and Analog or AES Audio
- -NF version converts copper 270Mb/s link input back to video & audio
- VistaLINK® capability is available when modules are used with the 3RU 7800FR or 350FR frame and a 7700FC VistaLINK® Frame Controller module in slot 1 of the frame
- Adjustable gain, DC offset and pre-emphasis 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)
- Input available with fiber optics or BNC (-NF version)
- Wideband optical input (1270nm-1610nm)
- Passes embedded and/or external audio for digital video

### ► 7707ADVR Block Diagram



### ► 7707ADVR-NF Block Diagram





## ► 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 components)  
 SMPTE 305M (SDTi), DVB-ASI (without separate audio)  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Equalization: Automatic to 300m with Belden 1694A (or equivalent)  
 Signal Level: 800mV nominal  
 DC Offset: 0V ±0.5V  
 Rise and Fall Time: 900ps nominal  
 Overshoot: < 10% of amplitude  
 Return Loss: > 15dB at 270Mb/s  
 Wide Band Jitter: < 0.2 UI

### Serial Input:

Number of Inputs: 1  
 Connector: 1 BNC per IEC 61169-8 Annex A  
 Signal Level: 800mV nominal  
 DC Offset: 0V ± 0.5U  
 Rise & Fall Time: 900ps nominal  
 Overshoot: < 10% of amplitude  
 Return Loss: > 15dB at 270Mb/s  
 Wideband 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: -30 dBm

### 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  
 7701FR: 1  
 7800FR: 1

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

### Transmitter Compatibility Chart:

## ► Ordering Information

<b>7707ADVR</b>	Analog or SDI video with 4-channel analog or AES audio fiber optic receiver
<b>7707ADVR-NF</b>	Analog or SDI video with 4-channel analog or AES electrical input only receiver

### Connector Suffix

<b>+SC</b>	SC/PC
<b>+ST</b>	ST/PC
<b>+FC</b>	FC/PC

### Enclosures

<b>350FR</b>	3RU Portable Multiframe which holds up to 7 single slot modules
<b>7700FR-C</b>	3RU Multiframe which holds up to 15 single slot modules
<b>7800FR</b>	3RU Multiframe which holds up to 15 single slot modules
<b>7801FR</b>	1RU Multiframe which holds up to 4 single or 2 dual slot modules
<b>7701FR</b>	1RU Multiframe which holds up to 3 single or dual slot modules

**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