

AES Audio Embedder / De-embedder (unbalanced AES)

- Multifunction - use as an embedder or de-embedder
- Ideal as bidirectional master
- 3G-SDI Level A and Level B support
- SDI video formats up to 12Gbit (2160p60)
- 4 x AES inputs or outputs with selectable audio groups
- Fiber I/O option for long distance transmission
- Integrated 1 kHz test tone generator
- Automatic PCM / encoded audio detection
- Auto black if no video present
- Selectable SDTV 24 bit mode
- Video and Audio present LED indicators
- LynxCentraal & yelloGUI compatible for additional internal settings

The PDM 1484 B is a versatile AES audio embedder and de-embedder designed for a wide range of SDI video formats up to 12G-SDI. It supports unbalanced AES3id audio I/O using 75 Ohm BNC connections.

Audio groups are selected using the rotary switches, and its possible to embed and de-embed additional audio groups by cascading modules together. Simultaneous embedding and de-embedding means the module will de-embed and output the audio from the selected audio group before overwriting with new audio (if required). The module automatically detects audio formats and will deactivate the sample rate converters to preserve encoded bit streams such as DolbyE.

The "auto black" mode uses a black video frame if no SDI input is present. This allows the module to embed audio even when no video source is available. This mode is useful if the module is being used in an "audio only" application. A 1 kHz test tone generator is included for audio testing purposes.

The module is also compatible with LynxCentraal and yelloGUI software package, which provide access to a host of additional internal settings which include manual insertion of metadata (AFD,WSS,VI).

Fiber I/O Options:

SDI Fiber Transmitter Options			
Model	Description	Power	
OH-TX-12G-LC	12G SFP Fiber TX - Singlemode - LC conn. - 10km	-5 ... +0.5dBm	
OH-TX-12G-ST	12G SFP Fiber TX - Singlemode - ST conn. - 10km	-5 ... +2dBm	
OH-TX-12G-XXXX-LC	12G CWDM SFP Fiber TX - SM - LC conn.-10km	-2 ... +3dBm	
SDI Fiber Receiver Options			
Model	Description	Sensitivity	
OH-RX-12G-LC	12G SFP Fiber RX - Singlemode - LC Connector	-10dBm (12G) -14dBm (6G/3G) -16dBm (1.5G)	
OH-RX-12G-ST	12G SFP Fiber RX - Singlemode - ST Connector	-10dBm (12G/6G) -14dBm (3G/1.5G)	
SDI Fiber Transceiver Options			
Model	Description	Power	Sense
OH-TR-12G-LC	SFP Fiber RX/TX - Singlemode - LC Conn. - 10km	-5 ... 0.5 dBm	-10dBm (13G/6G) -14dBm (3G/1.5G)
OH-TR-12G-XXXX-LC	12G CWDM SFP Fiber RX/TX - SM - LC Conn. - 10km	-2 ... +3 dBm	-10dBm (13G/6G) -14dBm (3G/1.5G)

XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm

CAUTION: This is a high power module. If mounting the module in the RFR 1200 rack frame please leave an empty slot each side of the module to allow for adequate airflow to prevent the risk of overheating.



Shown with optional fiber SFP installed

Technical Specifications

SDI Input	1 x SDI video on 75 Ohm BNC connector				
	SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1				
	Multi-standard operation from 270Mbit/s to 12Gbit/s				
	SDTV	(525/625)			
	720p	(23.98/24/25/29.97/30/50/59.94/60 Hz)			
	1080psf	(23.98/24/25/29.97/30 Hz)			
	1080i	(50/59.94/60 Hz)			
	1080p	(23.98/24/25/29.97/30/50/59.94/60 Hz)			
	2160p	(23.98/24/25/29.97/30/50/59.94/60 Hz)			
		Electrical Return Loss:	to 1.5GHz >15dB	to 3GHz >10dB	to 6GHz >7dB
Automatic Cable EQ	270Mbit/s	1.5Gbit/s	3Gbit/s	6Gbit/s	12Gbit/s
	340m	200m	150m	100m	100m
	Belden 1694A			Belden 4794R	
SDI Output	1 x SDI video on 75 Ohm BNC connector				
	SMPTE 259M, SMPTE 292M, SMPTE 424M, SMPTE 2081-1, SMPTE 2082-1				
		Electrical Return Loss:	to 1.5GHz: >15dB	to 3GHz >10dB	to 6GHz >7dB
Fiber I/O	(optional) 1 x fiber optic input and output (see table)				
	SMPTE 297M - 2006				
AES I/O (switchable)	4 x AES3id unbalanced inputs or outputs on 75 Ohm BNC connectors AES group selection provided via rotary switch				
Power	+12VDC @ 10.87W nominal - (supports 8 - 24VDC input range)				
Physical	Size (incl. connectors): 140mm x 90mm x 22mm (5.51" x 3.54" x 0.86") Weight (excl. SFP): 195g (6.88oz)				
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)				
Model #	PDM 1484 B - (EAN# 4250479329058)				
Includes	Module, AC power supply				

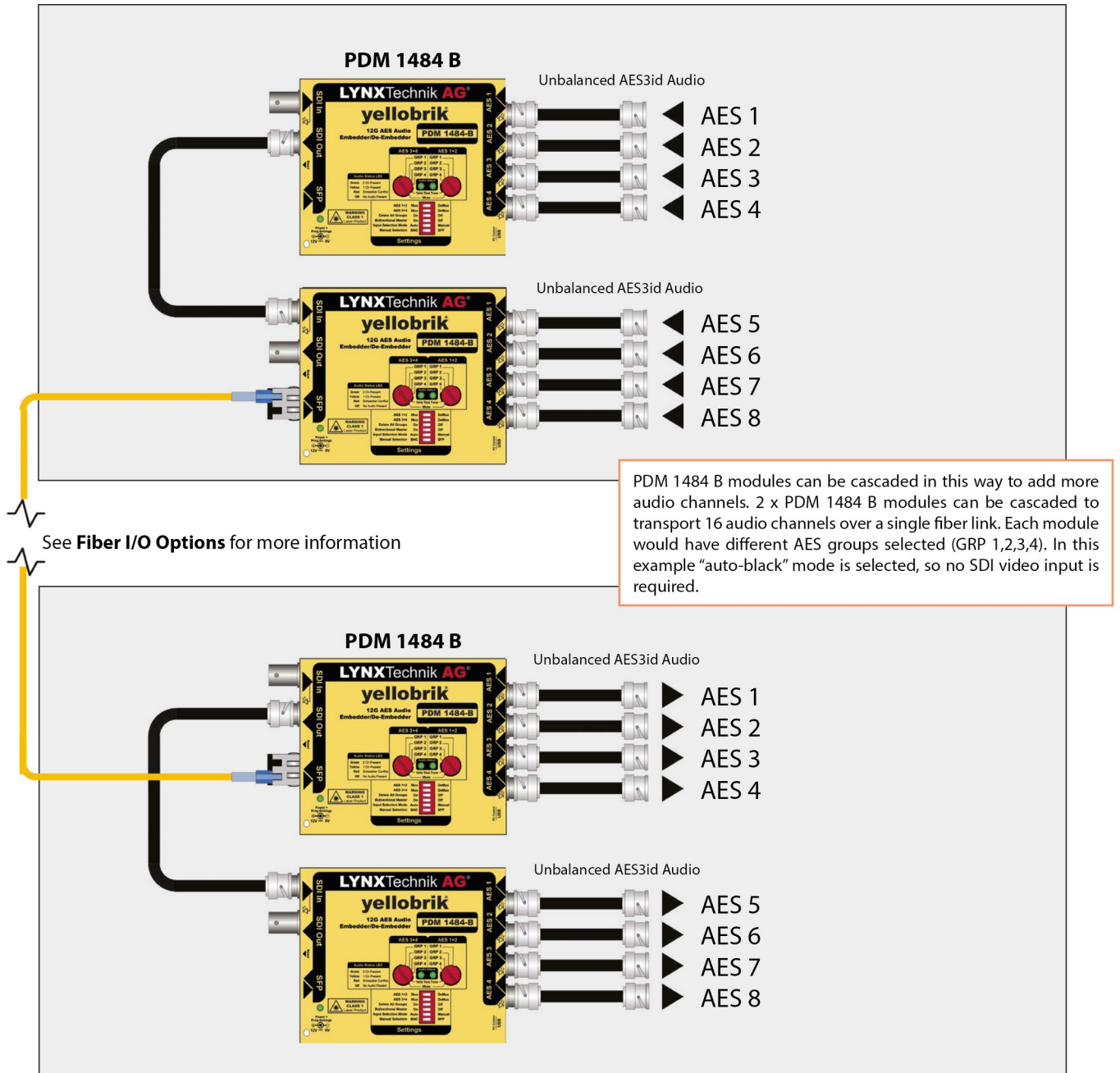
*Distance is an approximation. Actual distances achieved can be longer or shorter depending on the type of cable. Determine link losses and perform optical budget calculations to ensure correct operation.

PDM1484-B_DS_rev03 Specifications subject to change



PDM 1484 B Application

The basic SDI embedding and de-embedding applications for the PDM 1484 B are somewhat obvious, but with the “auto-black” mode the modules can be used to transport audio signals only. This provides a very cost-effective way to transport multichannel audio over fiber without the need for external optical multiplexing. The example below shows how two modules in each location can be used to transport 16 x digital audio signals between two locations over fiber.



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