yellobrik®

PDM 1484 B

LYNX | Centraal™ ✓ yelloGUI ✓

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

Shown with optional fiber SFP installed

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).

An SDI fiber input and output is also provided with a variety of plug in SFP options available.

Fiber I/O Options:

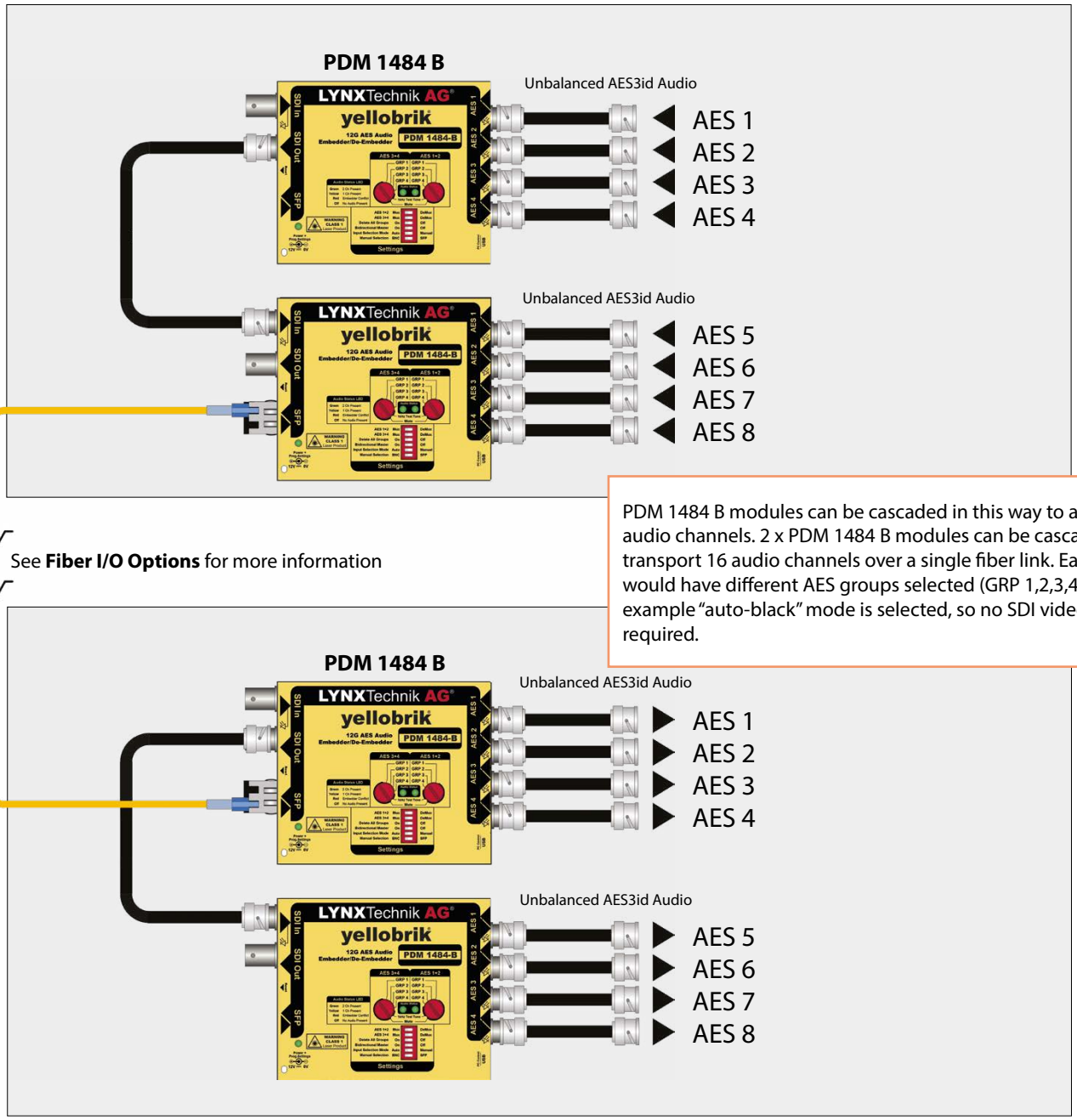
SDI Fiber Transceiver Options			
Model	Description	Power	Sense
OH-TR-12G-LC	SFP Fiber RX/TX - Singlemode, LC Connector - 10km	-5dBm	-10dBm
SDI CWDM Fiber Transceiver Options			
OH-TR-12G-XXXX-LC	12G CWDM Fiber RX/TX - Singlemode LC Conn. - 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-2dBm	-10dBm
OH-TR-8-XXXX-LC	3G CWDM Fiber RX/TX - Singlemode LC Conn. - 80km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	+1 ... +5 dBm	-26 ... -28 dBm

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	to 12GHz >4dB	
	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	to 12GHz >4dB	
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 - 14VDC 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					

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.



PDM 1484 B modules can be cascaded in this way to add more audio channels. 2 x PDM 1484 B modules can be cascaded to transport 16 audio channels over a single fiber link. Each module would have different AES groups selected (GRP 1,2,3,4). In this example "auto-black" mode is selected, so no SDI video input is required.