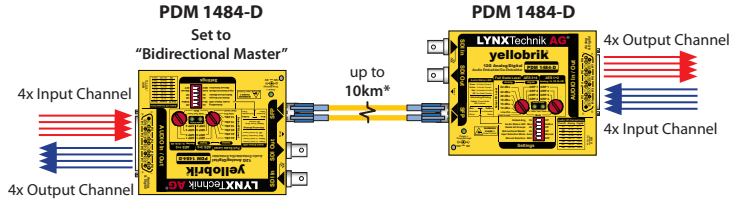


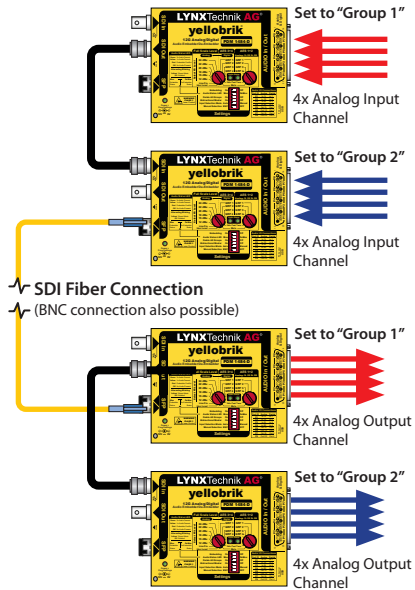
Bidirectional Master

A pair of modules can be used to transport audio (only) between two locations. Bidirectional functionality is possible when one of the two modules is set to "Bidirectional Master" using the dip switch. Please refer to the diagram.



Cascading for Additional Audio Channels

All yellobrik Embedders and Deembedders can be cascaded to add more audio channels. For the PDM 1484, up to four modules can be cascaded to support the full payload of 16 mono analog audio channels. The configuration below shows two modules cascaded to provide 8 audio channels. This example uses the "Auto Black" function without a video input for audio-only scenario.



When an SDI video signal is present at the input, it is passed through all cascaded yellobriks and appears at the output of the final unit.

Note: Cascading is not supported in bidirectional mode.

yellobrik[®]

PDM 1484-D

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				
	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
		270Mbit/s	1.5Gbit/s	3Gbit/s	6Gbit/s
Automatic cable EQ	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 on Duplex LC/PC				
	SMPTE 297M - 2006				
AES I/O	4 x AES3 balanced inputs on female 25 pin D-Sub Connector (110 Ohm)				
	4 x AES3 balanced outputs on female 25 pin D-Sub Connector (110 Ohm)				
Analog Audio I/O	10k Ohm differential balanced input mode with 24,22,20,18,15,12 dBu				
	Unbalanced mode with (line level) at -10 dBV				
Power	+12VDC @ 12.96W nominal - (supports 8 - 14VDC input range)				



WARNING
CLASS 1M LASER PRODUCT
LASER RADIATION

Do not view directly with
optical instruments

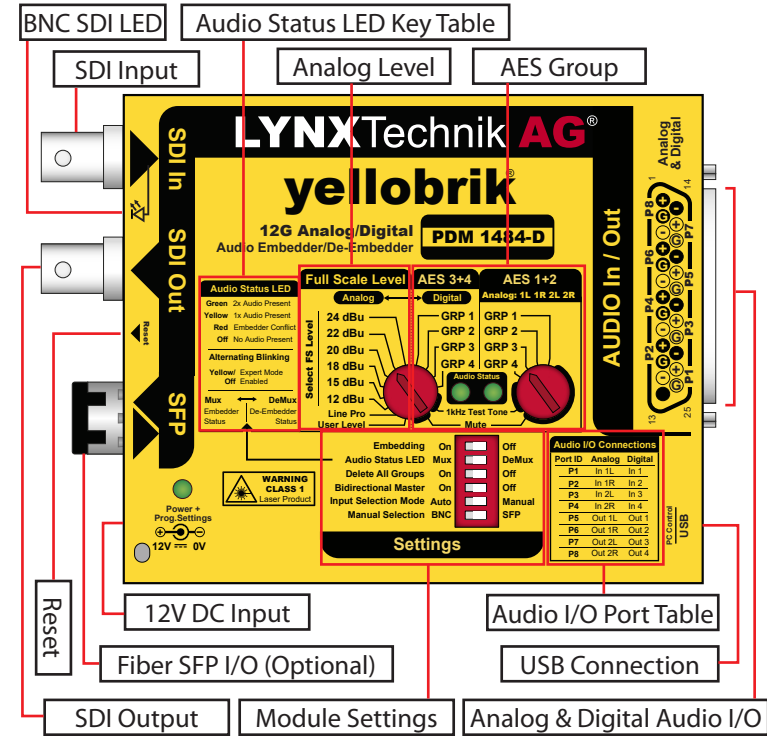
LYNXTechnik | Broadcast Television Equipment

yellobrik[®]

Quick Reference

PDM 1484-D

12G-SDI AES / Analog Audio Embedder / De-Embedder



Connections

All connections are clearly indicated on the module. Analog and AES audio I/O connections must be directly wired to a suitable male 25 pin D-Sub connector.

Note: The module is designed for balanced audio signals. If using unbalanced audio then the audio levels and full scale calibrations will not be accurate.

Fiber I/O Options

This yellobrik supports optional fiber SFP modules that can transmit and/or receive signals over fiber. LYNX Technik offers a wide range of SFP options, including standard 1310 nm single-mode, multi-mode, and CWDM solutions in 18 different wavelengths. The SFP plugs directly into the side of the module and can be selected to suit the required fiber application.

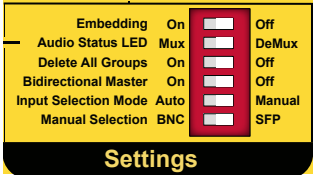
Operation

The PDM 1484-D functions as a 4 channel embedder and de-embedder. It supports simultaneous embedding and de-embedding, allowing audio from a selected audio group to be de-embedded and replaced with audio from one of the incoming channels.

An audio “group” consists of 2 × AES pairs, providing 4 audio channels. Rotary dials provide embedder / de-embedder audio group selection and analog audio mode along with Full Scale (FS) level selection. The FS Level can be set to a various levels for balanced audio (user definable level included), or to Consumer Line level for unbalanced audio.

Switch Settings

The integrated dip switch provides access to basic functions without the use of a control software. Switch core-features on or off, select between automatic or manual signal routing, or explicitly select the input source. More settings and automation options are available through the LYNX control software.



Module LEDs

The module has several LEDs included to indicate status:

SDI Present LED (electrical and fiber input have individual LEDs)

	Green	Valid SDI signal
	Off	No valid or missing SDI signal

Audio Status LED

Indicates Embedder or De-Embedder status for SDI connections

	Green	Two audio channels are present
	Yellow	One audio channel is present
	Yellow (blinking)	Expert Mode enabled
	Red	Embedder Conflict
	Off	No audio present

Power / Prog Setting LED

	Green	Power OK and no internal programmed settings are in use
	Yellow	Power OK; software-controlled settings are active*
	Yellow (blinking)	“Locate” functionality enabled via control software to identify physical module
	Red	Power OK and physical settings are overwritten by software settings
	Red (blinking)	Hardware malfunction (Fan Error, Overheating, etc.)
	Off	Power not present

* The module can be reset to factory defaults by using the reset switch

Central Control Interface via USB

The USB interface on the module is used for firmware updates and control of the module using LynxCentraal or yelloGUI. To update a yellobrik, power it and connect it to a PC or Mac running LYNX control software. If an update is available you will be informed in the “Update” section of LynxCentraal or via a pop-up in yelloGUI.



[www.lynx-technik.com/
software-applications/](http://www.lynx-technik.com/software-applications/)

Firmware updates are free of charge.

25-pin D-Sub accessories

LYNX Technik uses 25-pin D-Sub connectors to offer flexible audio wiring connections for AES and Analog audio throughout its product range.



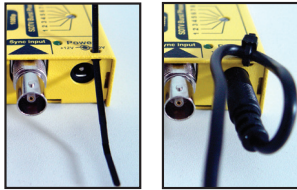
The RBO A025 is an optional multi-purpose breakout board adaptor with screw terminal for AES and Analog audio.



The RAC MF25-4/4 audio breakout cable is an optional 25 pin D-Sub to 4 Male / 4 Female XLR adapter.

Power Lead Strain Relief

A small hole in the case is located above the power connection. To prevent the power lead being accidentally pulled out, use a tie-wrap to secure the lead as shown here.



Mounting Solutions

LYNX Technik offers two optional solutions for mounting yellobriks.

- The RFR 1001 bracket is a simple solution for securing a single yellobrik module to any surface.
- The RFR 1200 rack frame can host up to 14 yellobriks in a standard 19” rack and provide fully redundant power to all installed modules.

