yellobrik

PDM 1383

yelloGUI compatible

Analog Audio Embedder / De-embedder

- Simultaneous embedding and de-embedding
- 3G SDI Level A and Level B support
- SDI video formats up to 3Gbit (1080p60)
- 4 x Analog audio inputs / outputs with selectable audio aroups
- Optional Fiber I/O
- Integrated 1 kHz test tone generator
- Bidirectional audio transport mode possible
- Auto black if no video present
- Selectable SDTV 24 bit mode
- Video and Audio present LED indicators
- yelloGUI compatible to access additional internal settings

The PDM 1383 is a versatile analog audio embedder and de-embedder designed for a wide range of SDI video formats up to 3Gbit. Analog audio I/O is connected using a 25 pin SubD connector. (screw terminal adapter provided)

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 "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.

SDI Fiber Transmitter Options				
Model	Description	Power		
OH-TX-1-LC / ST / SC	SFP Fiber TX - Singlemode - LC, ST or SC conn 10km	-5dBm (1310nm)		
OH-TX-0-850-MM	SFP Fiber TX- Multimode - LC conn 300m	-5dBm (850nm)		
SDI Fiber Receiver Options				
Model	Description	Sensitivity		
OH-RX-1-LC / ST / SC	SFP Fiber RX - Singlemode - LC, ST or SC connector	-16dBm		
OH-RX-0-MM	SFP Fiber RX- Multimode - LC connector	-15dBm		
SDI Fiber Transceiver Options				
Model	Description	Power	Sense	
OH-TR-1	SFP Fiber RX/TX - Singlemode, LC Connector - 10km	-5dBm	-18dBm	
OH-TR-0-850	SFP Fiber RX/TX - Multimode, LC Connector - 300m	-5dBm	-15dBm	
SDI CWDM Fiber Transmitter Options				
Model	Description	Power		
OH-TX-4-XXXX	CWDM SFP Fiber TX - Singlemode LC Conn 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-1dBm		
SDI CWDM Fiber Transceiver Options				
Model	Description	Power	Sense	
OH-TR-4-XXXX	CWDM SFP Fiber RX/TX - Singlemode LC Conn 40km XXXX=Wavelength. 18 according to ITU T G692.2 1270nm through 1610nm	-1dBm	-20dBm	



The module is also compatible with the yelloGUI software package, which provides access to a host of additional internal settings which includes 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.

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Technical	Specifications	
SDI Input	1 x SDI video on 75 Ohm BNC connector	
	SMPTE 424M, SMPTE 292M, SMPTE 259M 3G Level A & B-DL & B-DS according to SMPTE ST 425-1 with image formats1280 x 720 and 1920 x 1080	
	Multi-standard operation from 270Mbit/s to 3Gbit/s SDTV (525/625) 720p and 1080p (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)	
	Return Loss: > 15dB to 1.5Gbit/s and > 10dB up to 3Gbit/s	
	Automatic cable EQ (Belden 1694A cable) 250m @ 270Mbit/s, 140m @ 1.5Gbit/s, 80m @ 3Gbit/s	
Fiber I/O	(optional) 1 \times fiber optic input and output (see table)	
	SMPTE 297M - 2006	
SDI Output	1 x SDI video on 75 Ohm BNC connector	
	SMPTE 424M, SMPTE 292M, SMPTE 259M 3G Level A & B-DL & B-DS according to SMPTE ST 425-1 with image formats1280 x 720 and 1920 x 1080	
Audio Inputs	4 x analog audio inputs on 25 pin SubD Connector (10K Ohm)	
	AES group selection provided via rotary switch	
Audio Outputs	4 x analog audio outputs on 25 pin SubD Connector (150 Ohm)	
	AES group selection provided via rotary switch	
Power	+12VDC @ 4.8W nominal - (supports 8 - 15VDC input range)	
Physical	Size: $128mm \times 90mm \times 22mm$ (5.04" x 3.54" x 0.86") including connectors Weight: $200g$ (7.05oz)	
Ambient	5 - 40°C (41 - 104°F) 90% Humidity (non condensing)	
Model #	PDM 1383 - (EAN# 4250479359826)	
Includes	Module, AC power supply, SubD adapter PCB, transport case	

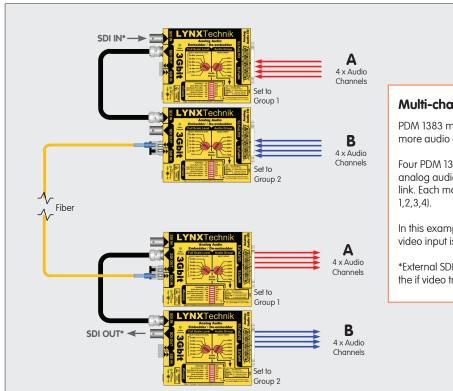
Specifications subject to change

VEIODITE PDM 1383 yelloGUI compatible

PDM 1383 Applications

The basic SDI embedding and de-embedding applications for the PDM 1383 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 multi-channel audio over fiber (or coax) without the need for dedicated audio A/D converters and external optical multiplexing. This when combined with the new "Bidirectional Master" functionality really expands the flexibility of the modules into dedicated audio applications.

Below are two examples of how the modules can be untilised for "audio only" transport over fiber.



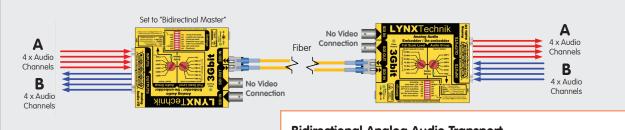
Multi-channel Analog Audio Transport

PDM 1383 modules can be cascaded as shown to add more audio channels.

Four PDM 1383 modules can be cascaded for up to 16 analog audio channels over a single fiber (or coaxial) link. Each module has a different AES group selected (AES

In this example "auto-black" mode is selected, so no SDI video input is required,

*External SDI video can be connected to the first module in the if video transport with embedded audio is required.



Bidirectional Analog Audio Transport

Two PDM 1383 modules can be configured for bidirectional audio transport. One module is switched to be a "Bidirectional Master"

This works for audio signals only, (no external SDI video) and "auto-black" mode is used. (Note: Cascading modules is not possible in bidirectional mode)

Specifications subject to change