



## Description

The VIM-1832 is normally used in connection with the VIS-1832 or VIS-4832 to achieve a 32x8 fiber-optic transport system. This system is normally the “tail” end for Stage to FOH or drive snake applications. This device contains 32 analog line level AND 32 AES digital outputs (sends), and 8 analog line level OR 8 AES digital inputs (returns). The VIM-1832 is supplied with a pair of transmit/receive LC fiber connectors (other connector types possible). It also contains a single LC fiber “thru” connector (transmit only) allowing all data coming into the device to be output on fiber and transported to another location. The VIM-1832 contains the system clock. This clock can be switched to operate at 48k or 96k. The VIM-1832 has an external word clock input on a BNC connector, a word clock output on a BNC connector, and super clock output on a BNC connector. The VIM-1832 can “slave” to an external word clock. There are “sync” status LED’s on the front and rear of the unit. These LED’s will be solid green when in sync, flashing red and green while looking for sync, and solid red when no sync is present.

The “control” connection is a TTL data port which appears on an EtherCon® connector. It allows LightViper accessory devices such as the DMX4i (DMX lighting control) or MD3 (RS422/232/MIDI) to be connected to the unit. The EtherCon® output of the DMX4i or RJ45 on the MD-3 is input to the VIM-1832 via the “control” EtherCon® connector, combined with the audio input data, and transported via fiber to the VIS-1832 or VIS-4832. This data is then output from the “control” EtherCon® connector on the these devices and input into a DMXo or MD-3 where the TTL data is translated back into the original format. AC power is via a standard IEC connector. The unit can operate at any voltage 50-60Hz, 90-250v AC.

## Features & Benefits

- Fiber runs up to 2km (Multimode), 20km (Single mode)
- Lossless optical “THRU” for distributed systems
- 32 simultaneous analog & digital outputs
- 48k or 96k operation
- System can distribute clock

## Applications

- “Tail end” interface into mixer (main snake) or amplifiers (drive snake)
- Live Sound
- Broadcast Sports
- Churches
- Performing Arts Centers
- Theme Parks
- Mobile (remote) Recording

## Ordering Information

VIM-1832 - S - O2

### Optical Connector

LC  
O2 = Neutrik OpticalCon Duo  
O4 = Neutrik OpticalCon Quad

### Fiber Type

M = 62.5/125µm Multimode (1310)  
E = 50/125µm Multimode (1310)  
W = 62.5/125µm Multimode (850)  
S = 9/125µm Singlemode (1310)

## Architect’s Specifications

The device shall be a 1U rack mount unit with venting on the front panel and on the reversible rack ears. It shall be fan cooled. The device shall provide 32 analog line level outputs on 4 DB25 connectors AND 32 AES digital outputs on 2 DB25 connectors, 8 analog line level inputs on 1 DB 25 connector OR 8 AES digital inputs on 1 DB25 connector. The device shall contain multi mode optics utilizing an SFP transceiver, with single mode SFP optics available as an option. There shall be a transmit/receive fiber optic pair presented on LC connectors (other connector types possible). There shall be a single LC fiber optic “thru” connector (transmit only) allowing all data coming into the device to be output on fiber and transported to another location. There shall be no limit to the number of units which can be connected via the fiber “thru” to achieve a distributed system. The device shall contain the system clock which can be set via a manual toggle switch selecting whether the device operates at 48k or 96k. The device shall be capable of slaving to an external clock. The device shall have an external word clock input on a single BNC connector, a word clock output on a single BNC connector, and a super clock output on a single BNC connector. The device shall contain LED sync indicators on the front and rear of the unit. These LED’s will be solid green when in sync, flashing red and green while looking for sync, and solid red when no sync is present. There shall be a TTL data port labeled “control” presented on an EtherCon® connector. The device shall operate at any voltage 50-60Hz, 90-250v AC utilizing a standard IEC connector. The device shall contain a 5x20 mm, 1A Slo-Blo power fuse. The device shall be the LightViper VIM-1832.

### General Specifications

Total Harmonic Distortion + Noise <sup>1</sup>	Less than 0.01%	1 KHz @ +4 dBu
Frequency Response	± 0.5 dB	20-20kHz @ +16 dBu
Analog Dynamic Range	102 dB	
Crosstalk	5 dB above noise floor	
Sampling Rate	24 bit / 96kHz or 24 bit / 48 kHz	
Latency	630 μs, analog input to analog output. 20μs digital input to digital output.	
Operating Temp	0 to +50°C ambient temperature.	
Cooling	Fan cooled	
Sync LED	LED (green) indicates optical link OK, LED (red) indicates problem with optical link, LED (off) indicates no power.	
AC Power	Universal 90-250 VAC, 50/60 Hz, IEC connector with fuse	
Max Current Rating	0.473 mA @ 90V	
On / Off Control Date + MIDI	RJ-45 connector for logic level control, CMOS or TTL at 2 MHz max per channel.	
Dimensions	1 Rack Unit X 6.5" Deep	
Weight	6.5 lbs	

*\*1-Hum & Noise are measured with an AES17 compliant filter at 20 kHz. Temperature condition @+10 - +25° C.*

### Input Characteristics

Connection	Gain Setting	Voltage Gain <sup>2</sup>	Sensitivity <sup>3</sup>	S/N ref +0dBu	Overload	Clipping	Input Impedance
Analog Inputs 1-8	n/a	0(0 dB)	1.65 mVrms	-83 dBu	+16 dBu	+19 dBu	2 KΩ
Digital Inputs 1-8	AES3 Digital						

*\*1-Hum & Noise are measured with an AES17 compliant filter at 20 kHz. Temperature condition @+10 - +25° C.*

*\*2-0dBu is referenced to 0.775Vrms.*

*\*3-Sensitivity is the lowest level that will produce an output of +4dBu (1.23V).*

### Output Characteristics

Connection	Actual Source Impedance	For Use With Nominal	Output Level <sup>1</sup> Nominal	Max Before Clip	Connector
Analog Outputs 1-32	150 Ω	600 Ω Lines	+4 dBu (1.23 V)	+19 dBu (7 V)	DB-25, Tascam™ DA-88 pinout, 8 channels per connector
Digital Outputs 1-32	AES3 Digital				DB-25, 16 channels per connector

*\*1-0 dBu is referenced to 0.775 Vrms.*

### Fiber Connection Characteristics

Connection	No. of Fibers	Optical Type	Optical Device	Connector Type
Primary Tx/Rx	2	Multimode. Singlemode optional.	Optical SFP transceiver	Dual LC. ST or Neutrik optional
"Thru"Tx only	1	Multimode. Singlemode optional.	Optical SFP transceiver	Single LC. ST or Neutrik optional

