

Linking
People
Together



PG32-AES

Key Features and Benefits

- Up to 32 AES/EBU channels (64 mono channels)
- Can use as AES/EBU inputs or outputs
- 4 x RS485 serial data connections
- Word Clock input and output
- Composite video input and output
- 2 x optical LINK interface with duplex LC connectors
- USB and RS232 ports for configuration and control
- Dual power supply for redundancy

High performance, low-latency signal transport solutions for transporting, routing and distributing audio, video, intercom and control data.

Description

The PG32-AES device offers four principal ports for connection and transport of a total of 32 AES/EBU digital audio channels, ie 64 mono channels. The 4 x DSub25 ports with eight channels can be assigned as AES/EBU inputs or AES/EBU outputs in groups of four. The PG32-AES can be used as an interface to all microphone pre-amps with AES3 outputs. It serves as I/O to the converter devices to PG-Audio FX devices or via SANE to PG-Audio TP devices. Using ProGrid microphone preamps, the PG32-AES enables direct gain control of the preamps from most digital consoles, including Yamaha, DiGiCo, Soundcraft, Studer, Lawo or SSL digital consoles. Devices include dual power supplies with automatic switchover.

Network

Redundant fiber connections can be established using the two provided Optocore Optical LINK interfaces. The PG32-AES device is equipped with either single-mode or multi-mode SFP fiber transceivers. Depending on the selected transceivers, distances from 2300ft (700m) up to 43.5mi (70km) can be covered. The dual redundant ring structure provides maximum safety in a network with low latency. Four RS485 ports allow the transport of a wide range of serial data standards, such as RS422, DMX and MIDI. In addition to the audio signals, video and data signals are transmitted by the fiber connection.

SANE

The PG32-AES device is equipped with two SANE ports, which enables send and receive of up to 56/64 audio channels via standard CAT5 cable. Use the SANE ports to expand the number of inputs and outputs on ProGrid FX devices. SANE ports can also be used to send Ethernet data. In addition, PG32-AES devices have two separate LAN ports for 100BaseT Ethernet transmission.

Word Clock

All ProGrid devices are equipped with a Word Clock IN and OUT to enable the synchronization of the devices to an external source and are used to pass on the Word Clock from one device to the next.

ProGrid Configuration Software

The ProGrid Configuration Application Software provides easy access to all configuration and control tools, including routing, naming, storage and recall of configurations on the computer, including an off and online mode with real-time level display.

Technical Specifications

AES Ports

Convention: EIA / TIA-422; DSub25 Connector
Number of AES/EBU Digital Data Channels: 32
Number of AES/EBU Audio Channels: 64
Impedance: Termination; 120Ohm
I/O Configuration: Software configurable in 8 channel blocks; 64 IN/0 Out to 0 IN/64 OUT

Auxiliary Ports

Convention: EIA / TIA-485, DB9 Connector
Number of Data Channels: 4
Data Channel Type: Digital control data
Impedance: Termination; 120Ohm

Word Clock

Hardware Standard: 75Ohm / BNC
Data Rate: 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz (Depending on used sample rate)
Impedance Input: 75ohm
Impedance Output: 75ohm

Video

Hardware Standard: 75Ohm / BNC
Channels: 1 x input, 1 x output
Format: Composite video

Optical Link

Input, Output, Dual: Full bandwidth
Connection: Duplex LC
Protocol: Optocore; up to 1024 audio channels
Transmission: Full-duplex
Data Rate: 2 x 2Gbps or 2 x 1 Gbps
Optical Wave Guide Cable Lengths: Multi-mode fiber 50µm; ≤700 m @ 1G; <350m @ 2G, Single-mode fiber 9µm; up to 70 km (on request)

SANE Link

Input, Output, Dual: Full bandwidth
Connection: RJ-45
Protocol: SANE; 64 audio channels and 100Mbps LAN
Transmission: Full-duplex
Data Rate: 200Mbps
Cable Lengths: CAT5, CAT5E, CAT6, CAT7; <100m for error free transmission

LAN Link

Switch function across Optocore and SANE Network

Connection:

RJ45
Protocol: 10/100Mbps LAN; Ethernet, Full-Duplex, Auto-MDIX

Power Supply

Number of Power Supplies: 2 (with function check and automatic switch-over)
Type: Switch-mode, universal input
Mains Voltage: 100 - 240VAC
Frequency: 50 - 60Hz
Power Consumption: 12W typical

Remote Control

Convention: EIA/TIA-232
RS232: Rx/D, Tx/D / 57.600 Baud
USB Port: Interface to PC

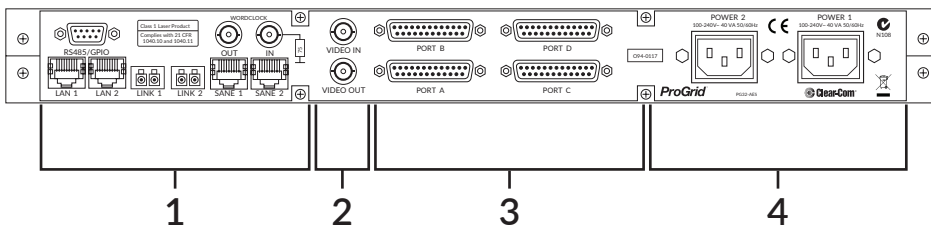
Dimensions

1.73 x 19 x 7.87 in (HxWxD)
 (44 x 483 x 20 mm)

Weight

6.0 lbs (2.7 kg)

Back Panel



Legend

1. Optocore Module
2. Composite Video I/O
3. 64 AES/EBU Channels
4. Dual Redundant PSU

Order Code

PG32-AES-FX