

ProGrid Analog Audio Devices

ProGrid™ Signal Transport Solution

Linking
People
Together



PG16-AUDIO



PG8-AUDIO

Key Features and Benefits

- Very low-latency (microseconds)
- Redundant self-healing fiber rings
- High capacity to 1024 ports
- Remote control of mic amp gains from other 3rd party equipment
- Audio and data in the same ring
- Distributed system for architectural simplicity
- Distributed Word Clock
- No IT network set-up required - plug-and-play
- Remote control of routing
- USB, RS232 and LAN ports for configuration and control
- Dual power supply for redundancy

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

Description

PG-AUDIO devices transport analog audio and data signals that can be customized to fit user needs.

PG16-AUDIO devices have four different rear types that enable the conversion of signals: 16 inputs, 16 outputs, 8 inputs, 8 outputs and 8 dual microphone inputs with two independent adjustable gains. PG8-AUDIO devices have three different rear types that enable the conversion of signals: 8 microphone inputs, 8 line inputs or 8 line outputs.

FX devices can add and/or extract up to 1024 audio channels from the ProGrid network and 64 audio channels to/from the SANE network. A single TP device can exchange up to 64 audio channels from the SANE network and two AES/EBU ports, each capable of 16 channels.

Network

Redundant fiber connections can be established using the two provided Optocore Optical LINK interfaces. All PG-AUDIO devices are 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 and data signals are transmitted by the fiber connection. Using the compatible MUX-22 Series interfaces, both audio and video can be included in the same fiber rings.

SANE

Each PG-AUDIO panel 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, PG-AUDIO devices have two separate LAN ports for 100BaseT Ethernet transmission.

Word Clock

All ProGrid 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.

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Technical Specifications

Analog Audio Mic Inputs

ADC Gain/Steps: 0dB to +70dB; 1dB steps

Maximum Input Level: @ 0dB gain: +22dBu;

@+70 dB gain: -48dBu

SNR: @ 0dB gain: 118.5dB(A);

@ +30dB gain: 116.5dB(A)

Dynamic Range: @ 0dB gain: > 118.5dB(A); gain + ADC: > 154dB

Analog Audio Line Inputs

ADC Gain/Steps: -5, 0 +4, +14dB; 4dB steps

Maximum Input Level: @ -5dB gain: +27dBu;

@+14dB gain: +8dBu

SNR: 118dB(A); @ +14dB gain: 118dB(A)

Dynamic Range: @ 0dB gain: > 118.5dB(A); gain + ADC: > 137dB

Analog Audio Line Outputs

ADC Gain/Steps: 0, -4, -10, -14dB; 4dB steps

Maximum Output Level: @ 0dB gain: +22dBu;

@-14dB gain: +8dBu

SNR @ 0dB gain: 119dB(A); @ -14dB gain: 118dB(A)

Dynamic Range: @ 0dB gain: > 119dB(A); gain +ADC: > 134dB

Word Clock

Hardware Standard: 750ohm / BNC

Data Rate: 44.1 / 48 / 88.2 / 96 / 176.4 / 192 kHz (Depending on used sample rate)

Optical Link (FX devices only)

Input, Output, Dual: Full bandwidth

Connection: Duplex LC

Protocol: Optocore

Transmission: Full-duplex

Data Rate: 2 x 2Gbps

Optical Wave Guide Cable Lengths:

Multi-mode fiber 50µm; ≤ 700 m

Single-mode fiber 9µm; <10km (70 km on request)

Power Supply

Number of Power Supplies: 2 (with function check and automatic switch-over)

Type: Switch-mode, universal input

Mains Voltage: 100 - 240VAC; 50 - 60Hz;

10VA-typ

Frequency: 50 - 60Hz

Remote Control

RS232/USB/Ethernet Port: Interface to PC

Dimensions

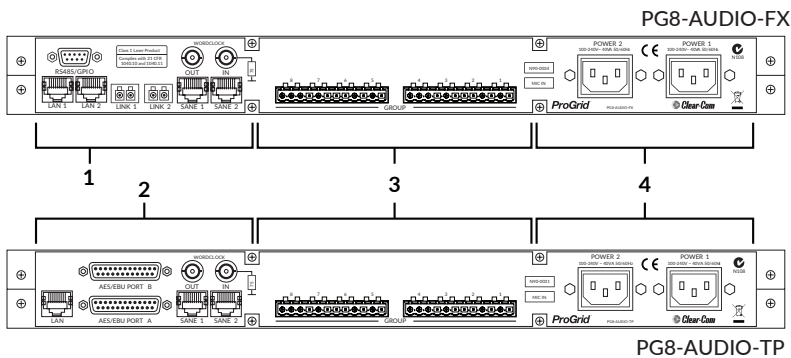
1.73 x 19 x 7.87 in (HxWxD)

(44 x 483 x 200 mm)

Weight

6.0 lbs (2.7 kg)

PG8-AUDIO Back Panels



Legend

PG8 Backs

1. Optocore Module
2. SANE Module
3. 8 Analog or AES3 Audio
4. Dual Redundant PSU

Order Codes

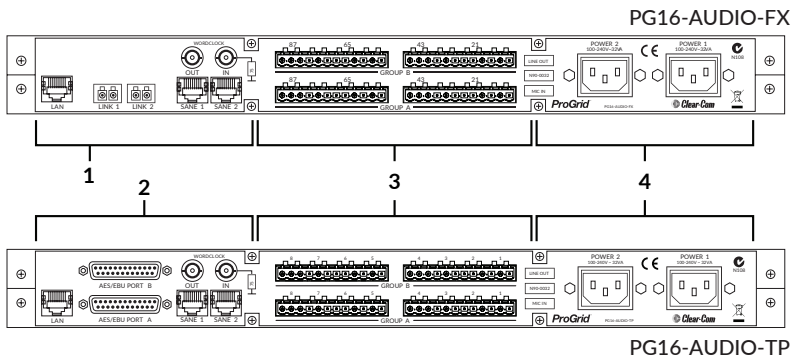
PG8-AUDIO

PG8-8MI-FX
PG8-8MI-TP
PG8-8LI-FX
PG8-8LI-TP
PG8-8LO-FX
PG8-8LO-TP

PG16-AUDIO

PG16-16MI-FX
PG16-16MI-TP
PG16-8MI-8LO-FX
PG16-8MI-8LO-TP
PG16-8LI-8LO-FX
PG16-8LI-8LO-TP
PG16-8DMPRE-FX
PG16-8DMPRE-TP
PG16-16LI-FX
PG16-16LI-TP
PG16-16LO-FX
PG16-16LO-TP
PG16-8MI-8LI-FX
PG16-8MI-8LI-TP
PG16-8AE-FX
PG16-8AE-SRC-FX
PG16-4AE-8MI-FX
PG16-4AE-8LI-FX
PG16-4AE-8LO-FX

PG16-AUDIO Back Panels



Legend

PG16 Backs

1. Optocore Module
2. SANE Module
3. 16 Analog or AES3 Audio
4. Dual Redundant PSU