Enova® DGX Audio Insert / Extract Board

DGX-AIE (FG1058-705)

Overview

The DGX-AIE is an audio insert / extract board for the Enova DGX 8, 16, 32 and Enova DGX 64. The board provides insert or extract access to the first 16 video input or output positions. The Enova DGX 8, 16 and Enova DGX 32 enclosures both support one audio insert / extract board on the input side and one on the output side. The Enova DGX 64 supports 4 audio insert /extract boards on the input side and four on the output side. The audio insert /extract board simplifies system design by allowing audio from a source located near the Enova DGX to be plugged directly into the system. This can dramatically reduce the overall cost of the system by eliminating the need for additional Transmitters or Receivers. Extract embedded audio and send to a separate audio system to be distributed throughout an environment.

COMMON APPLICATIONS

The Enova DGX Audio Insert / Extract Board is ideal for applications when local sources such as computers with analog audio outputs are plugged directly into the Enova DGX. Inserted audio can be embedded onto any Enova DGX output. The board also allows de-embed audio from Enova DGX HDMI inputs to be sent to a separate audio system.

FEATURES

- **De-embed Audio** – Breakaway embedded audio from Enova DGX inputs and send to a separate audio system to distribute throughout an environment

- **Embed Audio** – Insert local analog audio into pre-switched digital video paths or post switched digital audio paths depending on audio insert/extract board location
- **Individually Configurable** – Each audio access point can be individually configured for insertion or extraction functionality
- **Hot Swappable –** Easily add or replace I/O boards at any time after deployment - the system automatically recognizes the new configuration and activates the boards

SPECIFICATIONS

ANALOG AUDIO – AUDIO INSERTION	
Audio Signal Type	Analog stereo, up to 16 channels per enclosure
Analog Input Level (Max)	+3 dBu, unbalanced
Input Impedance	10 kΩ
Analog to Digital Conversion	48 kHz Sample Rate, 24-bit
Analog to Digital Reference Level	+3 dBu = 0 dBfs
Optimal Analog Audio Operating Range	-30 dBu to +2 dBu
Input Connectors	8 pluggable, dual three-position, terminal blocks each containing two single-ended stereo contacts (supports 28 to 18 AWG)

ANALOG AUDIO – AUDIO EXTRACTION	
Audio Signal Type	Analog stereo, up to 16 channels per enclosure
Audio Extraction Signal Type Support	Requires 2 CH L-PCM (32, 44.1, 48, 88.2, 96, 176.4 and 192kHz at bit depths of 16, 20 and 24)
Analog Output Level (Max)	+2.8 dBu, unbalanced
Output Impedance Drive	>= 5 kΩ
Output Frequency Response	<± 0.3 dB, 20 Hz to 20 kHz
Audio Output THD+N	<0.04%, 1 kHz, -10 dBu to +2.8 dBu
Audio Out SNR	>95 dB, 20 Hz to 20 kHz Vin=+3 dBu
Digital to Analog Resolution	24 bit, 2 Channel
Digital to Analog Reference Level	0 dBfs = +3 dBu
Optimal Digital Audio Operating Range	-30 dBfs to -2 dBfs
Audio Synchronization	TBA
Output Connectors	8 pluggable, dual three-position, terminal blocks each containing two single-ended stereo contacts (supports 28 to 18 AWG)