E-MADI64 Interface Card

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One E-MADI64 card expands the functionality of the Eclipse Matrix system by providing up to 64 bi-directional channels to any AES10 compatible device.

DESCRIPTION

The E-MADI64 card can operate in any of the established MADI configurations, providing an Eclipse with 32, 56 or 64 channels of digital audio interconnect. Additionally, it can support all of the standard sample frequencies for professional use, including the 96kHz/32 channel option for high quality audio.

VOICE ACTIVATED SWITCHING (VOX)

Each MADI64 channel input has an audio detection circuit that can be used to tally panel keys with incoming audio. In this way the MADI card acts as a high density digital 4-wire interface for ease of set-up.

CONNECTIVITY OPTIONS

The E-MADI64 rear card comes with a removable small footprint Multi-Mode fiber LC transceiver. A Single-Mode fiber LC transceiver is optional. In addition to the fiber connection, BNC co-axial input and output connectors are provided.

WORD-CLOCK OPTIONS

The Eclipse MADI card can use any of AES word clock, SD Video black and burst (PAL or NTSC) or Tri-Level HD video.

CHANNEL LABELING

MADI sources such as 3rd-party audio consoles and routers can assign 4 character labels to the MADI channels and have the intercom panel users see them on their keys automatically. ECS can enable or disable this feature.

MATRIX LINKING

The 64 channel hi-density connection is ideal for local linking up to 64 conversations or conferences between adjacent systems using just two co-axial connections. The Optocore™ fiber audio interface system can distribute the MADI channels over a large venue or stadium to other users or matrix frames.

LED STATUS

The front card has LEDs to show sample frequency for input source and configured output. Two sample rate LEDs will flash to show an error if these are not identical. The front card also has two LEDs to show channel quantity and will flash if the incoming MADI channel quantity differs from the configured setting. Additionally there are LEDs for clock source and MADI audio active.

KEY FEATURES AND BENEFITS

- Up to 64 duplex channels per card
- Sample frequency choices of 44.1kHz, 48kHz and 96kHz
- Selectable Channel/Port quantity 32, 56 and 64
- VOX on all 64 inputs
- Fiber (MM) SFP Duplex LC removable transceiver module
- BNC MADI in and BNC MADI out
- Word clock derived from SD NTSC/PAL Video, Tri-Level HD or AES word clock
- Channel Labels can be derived from 3rd-party device
- MADI channels can be used for high capacity linking or audio distribution

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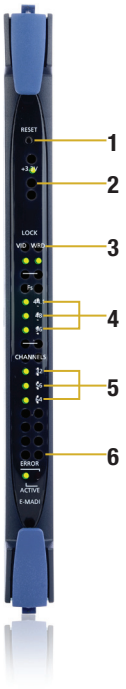
E-MADI64 Interface Card

FRONT PANEL



REAR PANEL

E-MADI64 Card Legend

1. Pin Reset
2. DC Power
3. Lock Source
4. Sample Rates
   44.1 kHz
   48 kHz
   96 kHz
   Note: If Rx is different to Tx two LEDs willl show indicating error.
5. Channel Quantity
   32
   56
   64
   Note: If Rx is different to Tx two LEDs willl show indicating error.
6. Active and Error Indications for Diagnostics
7. MADI Fiber
8. MADI Input Coax
9. MADI Output Coax
10. Video/Word Clock Input Coax

TECHNICAL SPECIFICATIONS

Channel settings:	32, 56 and 64
Sample rates:	44.1, 48 and 96 kHz
Clock sources:	AES word clock (conforms to Annex B of AES11-2009), PAL Video B & Burst, NTSC Video B & Burst, Tri-Level HD
Bit depth:	24 bits AES
Level control range:	For each channel the gain shall be configurable between -72dB and +18dB
VOX setting range:	Between -18dBFS and -63dBFS in 1dB steps
MADI BNC Connections:	75 Ohm single direction (pair)
Co-axial cable range:	50m (164 feet)
Fiber Connections:	LC Duplex SFP Multi-Mode (default)
Fiber range:	2Km (6,560 feet)
Operating Temperature Range:	0 to 45 degrees C, (32 to 113 deg F).
Storage Temperature Range:	-30 to +70 degrees C, (-22 to 158 deg F)
Operating Humidity:	90% non-condensing
Compliances:	CE, FCC Part 15. Class A UL60065 7th edition CAN/CSA C22.2 No. 60065-03 IEC60065 (2001) 7th edition Audio Engineering Society AES10-2008

Notice About Specifications

While Clear-Com makes every attempt to maintain the accuracy of the information contained in its product manuals, that information is subject to change without notice. Performance specifications included in this manual are design-center specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary.

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