ETC

Unison Mosaic Audio/Timecode Module

Integration Series

Type(s)

Project

Date

Notes

GENERAL INFORMATION

The Mosaic Remote Audio/Timecode Module expands the advanced show-control capabilities Mosaic to allow analog audio or linear timecode signals from a remote source to trigger a Mosaic Controller. As an accessory to the Mosaic Controllers, the Audio/Timecode Module provides an interface for stereo-audio spectrum analysis or Linear Timecode (LTC) synchronization with third-party equipment. The module also offers integrated MIDI input and output to interface with external devices using MIDI Timecode (MTC).

APPLICATIONS
- Manipulation of intensity, color, and timeline playback for sound-to-light effects
- Use Linear Timecode (LTC) formats including film, PAL/EBU, NTSC, and SMPTE to synchronize lighting with audiovisual or show-control equipment playback

FEATURES
- Stereo balanced audio input with auto or manual gain adjustment (software adjustable)
- Per channel spectrum analysis with configurable 3-30 band configurable analyzer
- Linear Timecode (LTC) input with automatic format detection
- MIDI Timecode (MTC) input
- Software fly-wheel with error-correction routines and jump support routines for smooth, responsive timecode playback
- Power-over-Ethernet (PoE) powered
- Programmed and configured using Mosaic Designer Software

REGULATORY AND COMPLIANCE
- cETLus Listed
  - Conforms to UL-60950-1
  - Certified to CAN/CSA-C22.2 No. 60950-1
- CE Compliant
- California Title 20/24 compliant

ORDERING INFORMATION

Audio/ TimeCode Module

MODEL	DESCRIPTION
MRIO-A	Mosaic Audio/Timecode Module

Note: Multiple MRIO-A may be used per system; up to 4 for audio input and up to 6 for timecode input.

RRelated Show Controllers

MODEL	DESCRIPTION
MTPC	Tessera Panel Controller
MSC_[1]	Mosaic Show Controller
MSCX	High-capacity Show Controller
MALC	Mosaic Atlas
MALCP	Mosaic Atlas Pro

[1] Available with one(1), two(2) or four(4) DMX universe output(s)

Related Products

MODEL	DESCRIPTION
M108-__	Button Station
M-TS	Mosaic Touchscreen
MRIO-D	DALI Remote Device
MRIO-I/O	Input/Output Remote Device w/ Serial
MSC-NET	Five-port Ethernet Switch w/ PoE

SPECIFICATIONS

FUNCTIONAL

- Allows one or more networked Mosaic controllers to provide synchronized control of lighting playback from audio or timecode to create sound-to-light effects
- Multiple MRIO-A are supported per system
  - Up to 4 RIO-A devices may be used for audio triggering
  - Up to 12 RIO-A devices may be used for timecode triggering
- Audio Input Mode
  - Stereo balanced line level audio input with automatic or manual gain control
  - Per channel, 3 -30-band (software configurable) spectrum analyzer with peak decay rate control
  - Per channel, or combined volume level analysis
- Linear Time (LTC) Mode
  - Linear TimeCode (LTC) or MIDI TimeCode (MTC) input
  - Linear TimeCode support on either audio channel
  - User Configurable fly-wheel, error correction and jump support
  - LTC format detection with support for 24fpx (film), 25fps (EBU), 29.97fps (NTSC), or 30fps (SMPTE)
- MIDI Mode
  - MIDI input and output of user-configurable short messages (notes), MIDI Show Control, or Extended Messages using built in message composer
- Wiring connectors use plug-able rising clamp terminals unless otherwise noted
- Five year warranty

MECHANICAL

- Four-unit wide DIN enclosure complies with DIN43880 and EN60715 (35/7.5 rail)
- Audio/ TimeCode wiring connections made using three-position plug-able 0.2 in (5.08 mm) rising clamp terminals
- Five-pin DIN connectors for MIDI input and output connection
- Rugged aluminum enclosure
- Rotary switch for selecting network address

ELECTRICAL

- RJ45 connection supports 10/100Base-TX Ethernet
  - Link and data LEDs
  - Static and DHCP addressing support
- PoE powered (IEEE 802.3af, class 1) 1.5 W typical draw
- Audio input supported balance/ un-balanced input (0dBV)

THERMAL

- Ambient temperature: 0°–50° C (32°–122° F)
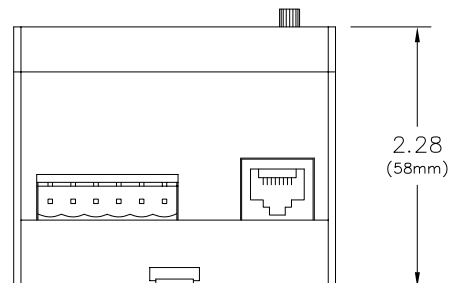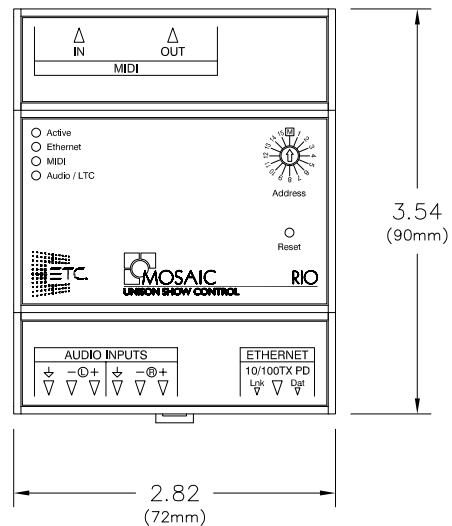- 10–50% relative humidity, non-condensing

PHYSICAL

Remote Module Dimensions*

MODEL	HEIGHT		WIDTH		DEPTH	
	in	mm	in	mm	in	mm
MRIO-A	3.54	90	2.82	72	2.28	58

Remote Module Weight*

MODEL	WEIGHT		SHIPPING WEIGHT	
	lb	kg	lb	kg
MRIO-A	1.0	0.23	1.1	0.50

*Weights and dimensions typical

Copyright©2022 ETC. All Rights Reserved. All product information and specifications subject to change. Rev K 2022-09
*Trademark and patent info: etcconnect.com/IP

etcconnect.com