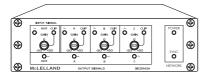
# McLELLAND<sup>®</sup>

# DIC2R43A

CSP / Dante Interface 4 Inputs x 4 Outputs



OWNERS MANUAL

## Description

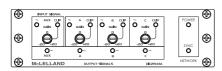
DIC2R43A is an excellent quality Dante interface box for converting three Dante channels to CSP products and fourth Dante Channel to Aux output. DIC2R43A also converts three pairs of CSP products to three Dante channels, and Aux input converts to fourth Dante Channel.

Simply use Cat5 cable to connect the RJ45 port to an Ethernet switch, and using "Dante controller" to route the low latency of signal to/from other devices which already connected on the same Dante network.

#### Features

- \* DIC2R43A provides Dante Interface and works with CSP products.
- \* Accepts CSP products and Aux Input signal, Converts to Dante Four Input Channels.
- \* One RJ45 Input accepts the signals from Three Pairs of CSP products.
- \* Aux Input Signal converts to Dante Fourth Channel.
- \* Selectable of Balanced or Unbalanced Input signal for Aux Input.
- \* Switchable Mic/Line/48V Phantom Power for Aux Input.
- \* Adjustable Gain from -20 dB to +20dB for Each Input Channel on Front Panel
- \* Converts Dante Four Signal Channels to CSP products and Aux Output.
- \* Three Dante Audio Signals go to Three RJ45 Output, correspond to Pair A, B and C of CSP products.
- \* Fourth Dante Audio Signal goes to Aux Balanced Line Output.
- \* LED indicators for Signal Level and Clip of Each Input Channel on Front
- \* LED indicators for Signal Level of Each Output Channel on Front Panel.
- \* LED Indicators Show the Status of Power and Network.
- \* High Resolution 24 Bit Converts Analog to Digital and Digital to Analog
- \* External 24VDC Provides the Power to All Connected CSP Products through RJ45 Input/Output Jacks.
- \* Normal Operation with PoE (Power over Ethernet) Enable Network Switch.

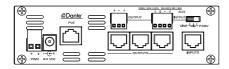
## Operation



 Gain Control: Adjust the level of input signal on each input channel.

Note: Input A, B, C corresponds to Pair A, B and C of CSP products.

- 2. Input signal level LED on each channel.
- 3. Signal CLIP LED on each input channel.
- 4. Output signal level LED on each output channel.
- 5. Power LED indicator.
- 6. SYNC LED indicates the status of Dante network.



- 7. RJ45 Input Jack: Three input channel, accepts the signal from Pair A, B, C of CSP products.
- 8. Aux Input: Fourth input channel, accept MIC or Line signal.

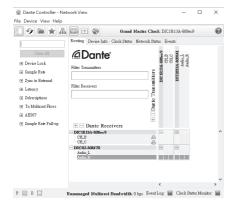
9. Input Selector

Line: Accepts Balanced or Unbalanced Line source.
MIC: Accepts the signal of Dynamic microphone.
P48V: Accepts the signal of Condenser microphone, also
provides 48V Phantom power for Condenser microphone.

- RJ45 Output Jacks: Three output channels to Pair A, B, C of each RJ45 output jack. These RJ45 output jacks must be connected to CSP receivers or distributor.
- Aux Output: Fourth output channel, converts Dante channel to analogue Line output.
- 12. RJ45 Dante port: Using Cat5 cable to connect to Dante network
  - Note: When using PoE enabled network switch, DIC2R43A could be powered and operation from PoE.
- 13. Power: Connect DC 24V to 2P terminal block or DC input jack. Note: 1. When DC 24V and PoE are both present to DIC2R43A, the unit will operate from DC 24V. And when DC 24V removed, the power will switch over to PoE power automatically.
  - When DIC2R43A powered from 24VDC power supply, the power will present at RJ45 input jack and RJ45 output jacks.
     Provides the power to all the CSP products connect to RJ45 input / output jacks.
  - 3. When DIC2R43A powered from PoE, it will only power up DIC2R43A for
  - normal operation. All the CSP products connected to RJ45 input / output jacks need to have separate power supply.

#### **Dante Controller**

DIC2R43A is built in Dante interface and compatible with the software "Dante Controller".



The software "Dante Controller" is free to download from the company of Audinate (the owner of Dante technology). To install the software on the computer, please visit the link:

https://www.audinate.com/products/software/da nte-controller And the "User Guide" of "Dante Controller" is available on the Audinate website:

https://www.audinate.com/resources/technical-d ocumentation

The tables below list the minimum system specifications for the computer to use Dante Controller:

Component	Minimum Requirement
Processor	1 GHz or better
Memory	512 Mbytes RAM
Network	Standard Ethernet network interface (100Mbps or Gigabit) or wireless LAN (Wi-Fi) interface
Operating	Windows 7 (SP1 and above), 8.1 and 10 NOTE: Both UTF-8 and Unicode are supported EXCEPT for host or device names; the DNS standard does not support Unicode for these
System	Mac OS X 10.11.6, 10.12.6 and 10.13  NOTE: Intel architecture only; PPC architecture is not supported

#### Specification

#### **Dante Network to CSP and Line Outputs**

CSP outputs

Outputs: RJ45 jack x 3

Frequency Response: 20 Hz to 20 kHz (± 0.5 dB)

THD+N: < 0.1% Noise: <-85dB

Crosstalk: < 80 dB (20 Hz to 20 kHz)

Aux Line Output

Output: 3P Detachable Terminal block

Output Level: +4 dBu

Output Voltage:  $\pm 20$ dBu (@ 0dB output gain) Output Impedance:  $150 \Omega$  balanced;  $75 \Omega$  unbalanced Frequency Response: 20 Hz to 20 kHz ( $\pm 0.5 \text{ dB}$ )

THD+N: < 0.1%

Noise: <-75dB

Crosstalk: < 85 dB (20 Hz to 20 kHz)

#### CSP and Mic/Line Inputs to Dante Network

**CSP Input** 

Input: RJ45 jack x 1

Frequency Response: 20 Hz to 20 kHz (± 0.5 dB)

THD+N: < 0.1%

Noise below +4 dBu: < -75 dB CMRR: > 90 dB (50 Hz to 120 Hz) Crosstalk: < 80 dB (20 Hz to 20 kHz)

Aux Mic Input

Input: 3P Detachable Terminal block, Balanced Gain: Condenser microphone : 40 dB

Dynamic microphone : 60 dB Input Impedance: 2.5K Ω Phantom Power: 48 V Frequency Response: 20 Hz to 20 kHz (± 0.5 dB)

THD+N: < 0.1%

Noise below +4 dBu: < -70 dB CMRR: > 70 dB (50 Hz to 120 Hz) Crosstalk: < 70 dB (20 Hz to 20 kHz)

Aux Line Input

Input: 3P Detachable Terminal block, Balanced/Unbalanced Input Level for +4 dBu: +4 dBu (Balanced); -10 dBV (Unbalanced)

Input Impedance: > 20K  $\Omega$ 

Frequency Response: 20 Hz to 20 kHz (± 0.5 dB)

THD+N: < 0.1%

Noise below +4 dBu: < -75 dB CMRR: > 60 dB (50 Hz to 120 Hz)

Crosstalk: < 75 dB (1 kHz, any line to any mic channel),

< 70 dB (20 Hz to 20 kHz)

Headroom above +4 dBu: > 18 dB

#### Dante channel

Transmitters/Receivers: 4/4 Transmission rate: 100 Mbps Resolution: 16/24/32 Bit Sampling rate: 44.1 kHz, 48 kHz.

Dante interface: RJ45 jack

Power Connections : 2 Pin Euro Terminal, Power Jack

Power Requirement: 24 Vdc @ 180 mA plus connected loads, or PoE

Dimensions: 146mm(W) × 41.6mm(H) × 96.9mm(D)

Weight: 0.56 Kgs