

ClearOne's CONVERGE MATRIX audio mixer and router opens new opportunities for large-scale pro audio installations. Featuring up to 512 x 512 audio channels, it seamlessly integrates with the CONVERGE product line and any other 3rd party products, using Dante™ audio-over-IP networking technologies. It is ideal for audio distribution applications like sound reinforcement, live announcements, pre-recorded audio, emergency information, background music, and paging.



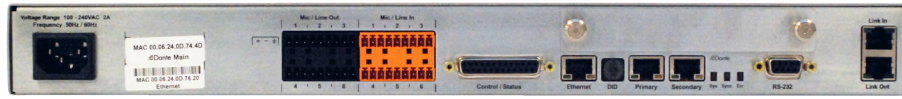
Applications

- + Government facilities
- + Corporate buildings
- + Transportation centers, Airports
- + Universities
- + Houses of Worship
- + Hospitality & Entertainment venues
- + Convention centers, Auditoriums
- + Healthcare centers
- + Cruise Ships

Features

- + CONVERGE MATRIX supports up to 512x512 audio channel matrix
- + Comes with multiple channel size: 512x512, 256x256, 128x128, 64x64
- + Expands using field upgradable Expansion Card
- + Distributes digital audio using Dante networking technology
- + Mixes and routes audio channels
- + Works with all CONVERGE units (840T, 880, 880T, 880TA, 8i, SR1212, SR1212A, TH20, VH20) & CONNECT Dante bridge and WS800 wireless mic system
- + Works with any 3rd party Dante products
- + Shows full matrix view, filtered matrix view based on groups/zones
- + Provides highly scalable, reliable, modular system adds flexibility
- + Offers complete system redundancy support for network and device

CONVERGE MATRIX BACK PANEL



CONVERGE MATRIX Rear Panel without Expansion Card (256 EX, 128 EX, 64 EX)



CONVERGE MATRIX Rear Panel with Expansion Card (512, 256, 128)

Functional Specifications

MIC/LINE INPUTS & OUTPUTS

6 inputs
6 outputs
Push-on mini-terminal block
Frequency Response: 20Hz – 22kHz @ +4dBu +/- 0.5dBu
Equivalent Input Noise (EIN): 20kHz BW, max gain, $R_s = 150\Omega$, -126dB
Dynamic Range: 20Hz – 20kHz @ 0dB, >105dB
Crosstalk (Mic/Line): Channel to Channel, stimulus at 20dBu to receptor at -56dBu, 1kHz, <-98dB
Input Impedance (Mic/Line balanced line to ground): 2.2k Ω , 1%
Nominal Input Level: Adjustable -56dB to 0dB, 7dB step coarse gain
Maximum Input Level: -65dBu to 20dBu
Phantom Power: Impedance: 6.81k Ω , 48V
Output Impedance (Mic/Line balanced): 95 Ω , 1%
Output Level: 0dBu(Nominal), 20dBu (Max), -40dBu (Selectable)

DANTE™

Audio channels: Up to 256x256 bidirectional @ 48kHz per pair of primary & secondary Dante ports
Sample rate: 48kHz/96kHz
Primary & Secondary network: Gigabit Ethernet RJ45 connector
Expansion card: Up to additional 256 x 256 bidirectional @ 48kHz

EXPANSION BUS INPUT/OUTPUT

Proprietary Link In & Out ports: RJ45 Cat5e/Cat6 connection for Redundancy setup

OTHER PORTS

Ethernet: 10/100 Ethernet Network Port RJ45, auto negotiation
Serial: RS-232, DB9 Female, Serial Command Protocol Only, 9600/19200/38400/115200
Baud; 8 bits, 1 stop, no parity
USB: Type B connector, USB 2.0 compatible
Control/Status: DB25 Female, 8 Open Collector Outputs, 12 Active High Inputs, 5VDC
Power Source
Device Identification: 8 pin DID switch

POWER

100-240V AC, 50/60 HZ, AC inlet

OPERATING TEMPERATURE

14°F/-10°C to 122°F/50°C

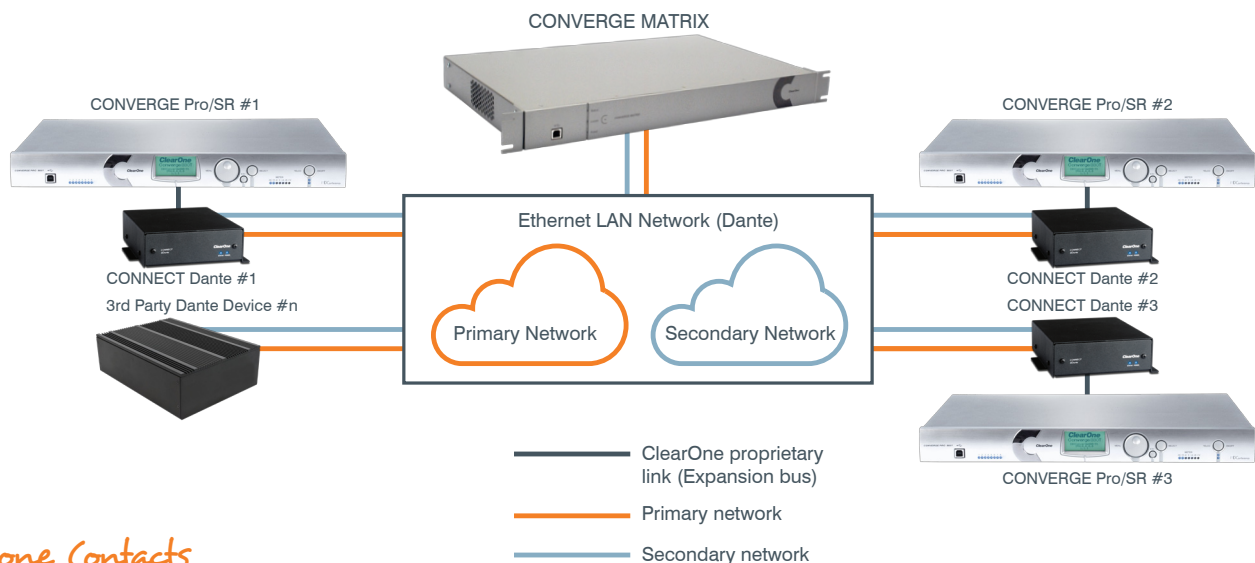
DIMENSION (W x D x H)

17" x 10.73" x 1.72", 43.2cm x 27.3cm x 4.4cm

PART NUMBERS

910-3000-001: CONVERGE MATRIX 256 EX
910-3000-002: CONVERGE MATRIX 512
910-3000-003: CONVERGE MATRIX 256 EXPANSION CARD
910-3000-004: CONVERGE MATRIX 128 EX
910-3000-005: CONVERGE MATRIX 128 EXPANSION CARD
910-3000-006: CONVERGE MATRIX 64 EX
910-3000-007: CONVERGE MATRIX 64 EXPANSION CARD

System Diagram



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