

CONVERGE® Pro 2 48VTD



An advanced multi-channel microphone automixer with built-in support for Dante audio networking, VoIP conferencing, a Telco interface, and the latest audio DSP algorithms.

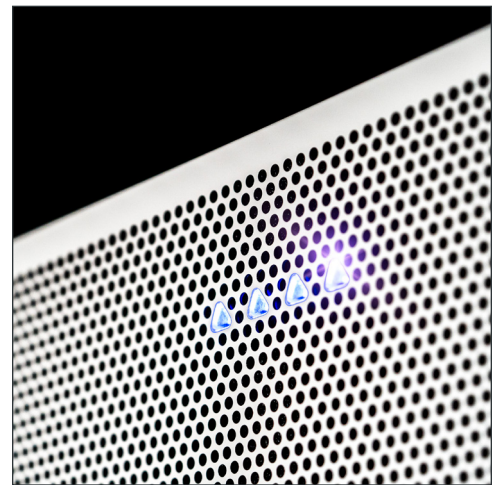
- > Built-in Native Camera Tracking for ClearOne Unite cameras and many 3rd party cameras using RS-232 and Ethernet VISCA over IP.
- > 4 mic/line inputs and 8 mic/line outputs
- > Next-gen Acoustic Echo Cancellation (AEC) on every mic input.
- > Support for SIP-based conferencing up to 5 lines and 5 calls based on line configuration.
- > 16 Dante inputs and 16 Dante outputs for audio networking.
- > Analog Telco interface.
- > Native Audio based VISCA camera control
- > Built-in USB audio.
- > Reduced foot-print and power consumption.
- > Built-in DARE™ algorithm for dynamic feedback elimination.
- > C-Link and P-Link enable easy addition of DSPs and peripherals.
- > Configure an entire system of C-linked DSPs with CONVERGE CONSOLE® AI software.
- > Flexible control options include Touch-Panel Controller, BYOD dialer apps or 3rd party control modules.
- > Noise Cancellation with Adaptive-Ambience.

It's All About the Architecture!®



Everything you need:

Supports SIP, Dante®, 4 configurable mic/ line audio inputs, 8 configurable mic/line audio outputs, built-in USB audio, and a Telco interface.



Easy Integration

Daisy-chain the CONVERGE Pro 2 with the BMA 360, DIALOG® 20 USB 2-Channel Wireless Microphone System, and other peripheral devices through P-Link.

APPLICATIONS

- SIP Conferencing
- POTS conferencing
- Audio recording
- Pre-recorded digital audio
- Audio networking over a LAN
- Web conferencing
- UC audio conferencing
- Sound reinforcement
- Bridge web conferences

WORKSPACES

- Conference rooms
- Training rooms
- Lecture halls
- Courtrooms
- Telemedicine theaters
- Houses of Worship

CONVERGE[®] Pro 2 48VTD

- PART NUMBER** • 910-3200-008-D
- CAMERA TRACKING** • Supported Cameras: Unite 150, Unite 200, Unite 160, Unite 260 (One Camera per DSP)
• Communication Protocol: VISCA
• Communication options: Serial (RS-232) or Ethernet (VISCA over IP)
- MIC/LINE INPUTS & OUTPUTS** • Inputs: Balanced audio inputs, 3.81 mm Orange color Phoenix/Euroblock type male header, Push-on miniterminal block
• Outputs: Balanced audio outputs, 3.81 mm Black color Phoenix/Euroblock type male header, Push-on miniterminal block
• Frequency Response: 20 Hz – 22 kHz @ +4 dBu, +/- 0.5 dBu
• EIN (Equivalent Input Noise): 20 kHz BW, max gain, $R_s = 150 \Omega$, -126 dBu
• THD + N (Total Harmonic Distortion + Noise):
- 20 Hz – 22 kHz @ +4 dBu, line level, 0.006%
- 20 Hz – 22 kHz @ -56 dBu, mic level, < 0.04%
• Dynamic Range: 20 Hz – 20 kHz @ 0 dB, >105 dB
• Crosstalk (Mic/Line): Channel to Channel, stimulus at 20 dBu to receptor at -56 dBu, 1 kHz, < -98 dB
• Input Impedance: Balanced (line to ground), 2.2 k Ω , 1%
• Nominal Input Level: Adjustable -56 dB to 0 dB, 7 dB step coarse gain
• Maximum Input Level: -65 dBu to 20 dBu
• Phantom Power: 48 V, Impedance 6.81 k Ω
• Output Impedance: Balanced (line to ground), 95 Ω , 1%
• Output Level: 0 dBu (Nominal), 20 dBu (Max), -40 dBu (Selectable)
- USB AUDIO** • Port Type: USB-B connector
• Audio: Digital Audio, 2 x 2 bidirectional channels
• Sample Rate: 48 kHz
• Sample Bit Depth: 24-Bit
• Compatible: USB 2.0, USB 3.0
- TELEPHONE** • Port Type: RJ-11
• Frequency Response:
- Mic/Line Input to Telephone Out: 250 Hz – 3.4 kHz, +/- 2dB, 4 dBu
- Telephone In to Mic/Line Out: 250 Hz – 3.4 kHz, +/- 2 dB, -15 dBu
• THD + N:
- Mic/Line Input to Telephone Out: <0.1% @ 4 dBu
- Telephone In to Mic/Line Out: <0.3% @ -15 dBu
• Dynamic Range:
- Mic/Line Input to Telephone Out: > 67 dBu
- Telephone In to Mic/Line Out: > 87 dBu
• REN: Ringer Equivalent Number 0.2
• Transhybrid Balance: 30 dB (1 kHz, all AC terminations)
- SIP** • Port Type: RJ-45, 10/100 Mbps Ethernet Network, Auto Negotiation
• Audio: 5 Lines
• Codec: G.711 uLaw, G.711 ALaw, G.722
- ETHERNET** • Port Type: RJ-45, 10/100 Mbps Ethernet Network, Auto Negotiation
• IP address: IPv4 (IPv6 upgradeable through future s/w, f/w upgrade)

CONVERGE® Pro 2 48VTD

- DANTE™ and AES67 AUDIO**
 - Port Type: RJ-45 Gigabit Ethernet connectors for Primary and Secondary Ports
 - Audio: Digital Audio, 16 x 16 bidirectional channels
 - Sample Rate: 48 kHz / 96 kHz
 - Sample Bit Depth: 24-Bit
 - AES67 Mode: Enabled through Dante controller software
- C-LINK EXPANSION BUS**
 - Ports Type: RJ-45 (Cat 5e or Cat 6)
 - C-Link In & Out: Proprietary Expansion Bus
 - Audio: 64 Expansion channels
 - Cable: Solid core, factory terminated Cat 5e or 6 cable
 - Distance: Up to 150' (45 M)
- P-LINK PERIPHERAL BUS**
 - Ports Type: RJ-45 (Cat 5e or Cat 6)
 - P-Link In & Out: Proprietary Peripheral Bus
 - PoE In:
 - P-Link In Port
 - PoE 802.3 af Mode B, Midspan
 - Power on "spare pairs" 4, 5 and 7, 8
 - Input voltage range: 48 V to 56 V
 - Audio: Up to 3 BMA CT units + up to 3 DIALOG 20 USB Wireless Receiver units + Up to 3 USB Expander units + Up to 3 GPIO Expander units
 - Cable: Solid core, factory terminated Cat 5e or 6 cable
 - Distance: Up to 200' (60 M)
- RS-232**
 - Port Type: DB9 Female
 - Settings: 9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control
 - Support: Serial commands
- GPIO**
 - Port Type: 5.08 mm Green color Phoenix/Euroblock type male header
 - Support: Control, Status, Variable Voltage Control
 - Power Pin: 5 VDC @ 350 mA Power Source
 - Pin 1 to 4:
 - Open Collector Outputs: 40 VDC @ 250 mA
 - Active Outputs (Source/Sink): 5 VDC @ 25 mA
 - Logic Inputs: 40.2 kΩ pull up
 - Variable Voltage Control Inputs: 5 VDC max
 - Ground Pin: GND
- USB CONTROL**
 - Port Type: USB-B connector
 - Location: Front Panel
 - Compatible: USB 2.0, USB 3.0
- LEDs**
 - Location: Front Panel
 - Status LED:
 - Off: Unit still initializing
 - Blue - Fast Blinking: Stack Syncing in progress
 - Blue - Slow Blinking: Unit not configured
 - Blue - Solid: Configured unit
 - Red - Fast Blinking: Stack Sync error
 - Locate LED: Blue - Blinking: Unit "Locate" command received
 - Power LED: Blue - Solid: Unit is powered on

CONVERGE® Pro 2 48VTD

- POWER & THERMAL**
- Port Type: AC Inlet
 - Mains Voltage: 100-240 VAC, 50/60 Hz
 - Power Consumption: 50 Watts Typical
 - Thermal: 170 BTU/Hr Typical
 - Operating Temperature: 14 °F (-10 °C) to 104 °F (40 °C) Ambient Temperature
- DIMENSION & WEIGHT**
- RU size: 1 RU
 - Width x Depth x Height:
 - Without rack-ears: 17 x 10.7 x 1.7 " (431 x 273 x 44 mm)
 - With rack-ears: 19 x 10.7 x 1.7 " (483 x 273 x 44 mm)
 - Unit Weight: 9.3 lbs (4.2 Kg) (Approximately)
 - Shipping Weight: 13.8 lbs (6.3 Kg) (Approximately)
- PACKAGE**
- Power Cord: 6' (1.8 M), Grounded, Qty 1
 - Input Connectors: Terminal Block Connector, 4 Position (Orange), Qty 4
 - Output Connectors: Terminal Block Connector, 3 Position (Black), Qty 8
 - GPIO Connector: Terminal Block Connector, 6 Position (Green), Qty 1
 - C-Link Cable: RJ-45 To RJ-45 Cable, 18" (45.7 cm), Qty 1
 - Network Cable: RJ-45 To RJ-45, 7' (2 M), Qty 1
 - USB Cable: USB Type A to Type B, 6' (1.8 M), Qty 1
 - Rack Ears: Pre-installed, Qty 2
 - Screw/Washer Kit: Rack Decor, Qty 4

SALES AND INQUIRIES

Headquarters

5225 Wiley Post Way
Suite 500
Salt Lake City, UT 84116

US & Canada

Tel: +1.801.975.7200

International

Tel: +1.801.975.7200

Sales

Tel: +1.801.975.7200
sales@clearone.com

Tech Support

Tel: +1.801.974.3760
audiotechsupport@clearone.com