

# CONVERGE® Pro 2 48VTD



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

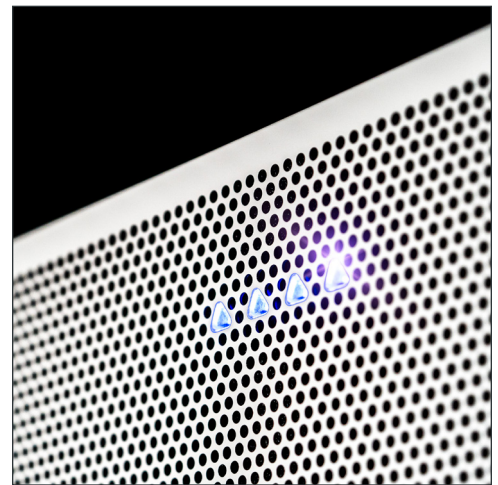
- > Built-in Native Camera Tracking for ClearOne Unite cameras and many 3rd party cameras using RS-232 and Ethernet VISCA over IP.
- > 4 mic/line inputs and 8 mic/line outputs.
- > Support for SIP-based conferencing up to 5 lines and 5 calls based on line configuration.
- > 16 Dante inputs and 16 Dante 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.

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<sup>®</sup> 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 $\Omega$ , 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 $\Omega$   
• Output Impedance: Balanced (line to ground), 95  $\Omega$ , 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

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- 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