

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.

- > 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.
- > Built-in Skype for Business client.
- > Built-in USB audio.
- > 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.
- > Reduced foot-print and power consumption.

APPLICATIONS:

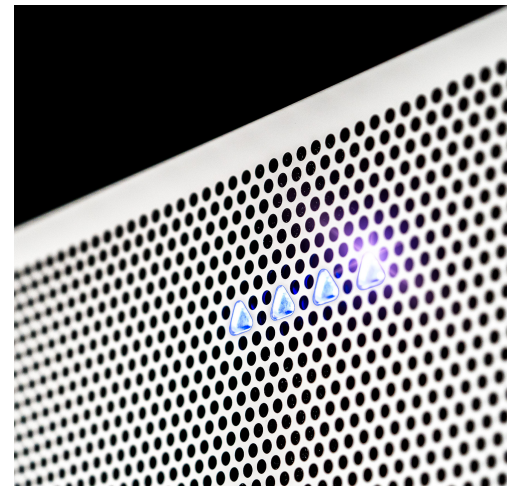
- VoIP Conferencing
- POTS conferencing
- Audio recording
- Pre-recorded digital audio
- Audio networking over a LAN
- Web conferencing
- UC audio conferencing
- Sound reinforcement
- Bridge web conferences

WORKSPACES:

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

Everything you need:

Supports SIP or Skype for Business, 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 CT, DIALOG® 20 2-Channel Wireless Microphone System, and other peripheral devices through P-Link.

It's All About the Architecture!®

CONVERGE Pro 2 48VTD

MIC/LINE INPUTS & OUTPUTS

- Inputs: Balanced audio inputs, 3.81mm Orange color Phoenix/Euroblock type male header, Push-on mini-terminal block
- Outputs: Balanced audio outputs, 3.81mm Black color Phoenix/Euroblock type male header, Push-on mini-terminal block
- Frequency Response: 20Hz – 22kHz @ +4dBu, +/- 0.5dBu
- EIN (Equivalent Input Noise): 20kHz BW, max gain, $R_s = 150\Omega$, -126dBu
- THD + N (Total Harmonic Distortion + Noise):
 - 20Hz – 22kHz @ +4dBu, line level, 0.006%
 - 20Hz – 22kHz @ -56dBu, mic level, <0.04%
- Dynamic Range: 20Hz – 20kHz @ 0dB, >105dB
- Crosstalk (Mic/Line): Channel to Channel, stimulus at 20dBu to receptor at -56dBu, 1kHz, < -98dB
- Input Impedance: 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: 48V, Impedance 6.81k Ω
- Output Impedance: Balanced (line to ground), 95 Ω , 1%
- Output Level: 0dBu (Nominal), 20dBu (Max), -40dBu (Selectable)

USB AUDIO

- Port Type: USB-B connector
- Audio: Digital Audio, 2 x 2 bidirectional channels
- Sample Rate: 48kHz
- Sample Bit Depth: 24-Bit
- Compatible: USB 2.0, USB 3.0

TELEPHONE

- Port Type: RJ11
- Frequency Response:
 - Mic/Line Input to Telephone Out: 250Hz – 3.4kHz, +/- 2dB, 4dBu
 - Telephone In to Mic/Line Out: 250Hz – 3.4kHz, +/- 2dB, -15dBu
- THD + N:
 - Mic/Line Input to Telephone Out: <0.1% @ 4dBu
 - Telephone In to Mic/Line Out: <0.3% @ -15dBu
- Dynamic Range:
 - Mic/Line Input to Telephone Out: >67dBu
 - Telephone In to Mic/Line Out: >87dBu
- REN: Ringer Equivalent Number 0.2
- Transhybrid Balance: 30dB (1kHz, all AC terminations)

VOIP

- Port Type: RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation
- Audio: 5 Lines
- Codec: G.711 uLaw, G.711 ALaw, G.722
- Skype for Business (S4B):
 - Microsoft Skype for Business support (1 client)
 - Choose either regular VoIP or S4B through configuration

ETHERNET

- Port Type: RJ-45, 10/100Mbps Ethernet Network, Auto Negotiation
- IP address: IPv4 (IPv6 upgradeable through future s/w, f/w upgrade)

DANTE™ AUDIO

- Port Type: RJ-45 Gigabit Ethernet connectors for Primary and Secondary Ports
- Audio: Digital Audio, 16 x 16 bidirectional channels
- Sample Rate: 48kHz / 96kHz
- Sample Bit Depth: 24-Bit

C-LINK EXPANSION BUS

- Ports Type: RJ-45 (Cat5e or Cat6)
- 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' (45M)

P-LINK PERIPHERAL BUS

- Ports Type: RJ-45 (Cat5e or Cat6)
- P-Link In & Out: Proprietary Peripheral Bus
- PoE In:
 - P-Link In Port
 - PoE 802.3af Mode B, Midspan
 - Power on "spare pairs" 4,5 and 7,8
 - Input voltage range: 48V to 56V
- Audio: Up to 3 BMA CT units + up to 3 DIALOG 20 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' (60M)
- Long Distance P-Link:
 - Increases P-Link distance from 200 Ft to 650 Ft
 - 650 Ft (200M) maximum cable distance between any two units
 - Cat6, 550 MHz, 23 AWG, solid conductor cable

CONVERGE Pro 2 48VTD

- Do not use Copper Clad Aluminum (CCA) cable
- Available only for BFM2 peripheral units
- 48V PoE Midspan Mode B power injector for 1 BFM2 unit
- 56V PoE Midspan Mode B power injector for 3 BFM2 units

RS232

- Port Type: DB9 Female
- Settings: 9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control
- Support: Serial commands

GPIO

- Port Type: 5.08mm Green color Phoenix/Euroblock type male header
- Support: Control, Status, Variable Voltage Control
- Power Pin: 5V DC @ 350mA Power Source
- Pin 1 to 4:
 - Open Collector Outputs: 40VDC @ 250mA
 - Active Outputs (Source/Sink): 5VDC @ 25mA
 - Logic Inputs: 40.2kΩ pull up
 - Variable Voltage Control Inputs: 5VDC 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

TOUCH SENSOR

- Sensor Type: Capacitive Touch Button
- Location: Front Panel

POWER & THERMAL

- Port Type: AC Inlet
- Mains Voltage: 100-240V AC, 50/60Hz
- 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:
 1. Without rack-ears: 17"W x 10.73"D x 1.72"H (43.2cmW x 27.3cmD x 4.4cmH)
 2. With rack-ears: 19"W x 10.73"D x 1.72"H (48.3cmW x 27.3cmD x 4.4cmH)
- Unit Weight: 9.3 lbs (4.2 kg) (Approximately)
- Shipping Weight: 13.8 lbs (6.3 kg) (Approximately)

PACKAGE

- Power Cord: 6' (1.8M), Grounded, Qty 1
- Input Connectors: Terminal Block Connector, 4 Position (Orange), Qty 12
- 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" (45.7cm), Qty 1
- VoIP Cable: RJ-45 To RJ-45, 7' (2M), Qty 1
- USB Cable: USB Type A to Type B, 6' (1.8M), Qty 1
- Rack Ears: Pre-installed, Qty 2
- Screw/Washer Kit: Rack Decor, Qty 4

PART NUMBER

- 910-3200-008-D CONVERGE Pro 2 48VTD

SALES AND INQUIRIES

Headquarters

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

US & Canada

Tel: +1 801.975.7200
Fax: 801.303.5711

International

Tel: +1 801.975.7200
global@clearone.com

Sales

Tel: +1 801.975.7200
sales@clearone.com

TechSupport

Tel: +1 801.974.3760
tech.support@clearone.com