

CONVERGE® Pro 2 48VT



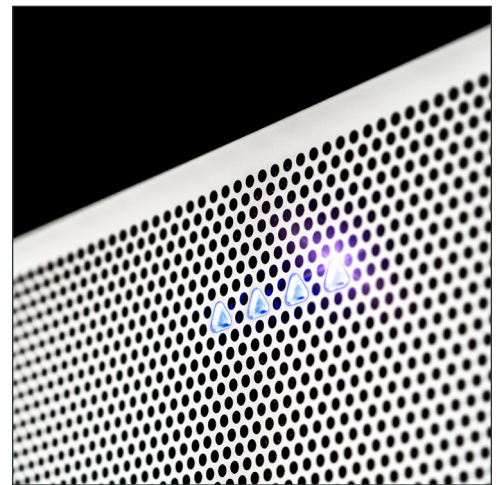
A CONVERGE® Pro 2 is the industry's most advanced professional audio DSP platform for conferencing and sound reinforcement applications. It outperforms in any size room, audio environment, and application.

- > 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.
- > Analog Telco interface.
- > Built-in USB audio.
- > Built-in DARE™ algorithm for dynamic feedback elimination.
- > Reduced foot-print and power consumption.
- > 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 Conference Controller, BYOD dialer apps or 3rd party control modules.



Everything you need

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



Easy Integration

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

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

It's All About the Architecture!®

CONVERGE® Pro 2 48VT

PART NUMBER • 910-3200-008

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 bi-directional 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, +/- 2 dB, 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)

VOIP • 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)

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- AMPLIFIER OUTPUT**
- Speaker Output Port: Dual binding posts
 - Audio: 2 Channels
 - Output Power: 10 W Max, 8 Ω load
 - Frequency Response: 20 Hz – 22 kHz @ +10 dBu, +/- 0.5 dBu
 - THD + N: 20 Hz – 22 kHz @ +10dBu, 1W, < 0.3 %
 - Dynamic Range: 20 Hz – 22 kHz @ 20 dB, > 102 dB, with 20 kHz digital low pass filter
 - Crosstalk: Channel to Channel, stimulus at 20 dBu, 10 W output to receptor 8 Ω load, 20 Hz – 22 kHz, < -70 dB
- C-LINK EXPANSION BUS**
- Ports Type: RJ-45 (Cat 5e or Cat 6)
 - C-Link In & Out: Proprietary Expansion Bus
 - Audio: 150 Expansion channels
 - Cable: Solid core, factory terminated Cat 5e or 6 cable
 - Distance: Up to 80 ' (24 m)
- P-LINK PERIPHERAL BUS**
- Ports Type: RJ-45 (Cat 5e or Cat 6)
 - P-Link Out: Proprietary Peripheral Bus
 - PoE In:
 - 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 Beamforming Microphone Array 2 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 ' (60 m)
- RS-232**
- Port Type: DB9 Female
 - Settings: 9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control
 - Support: Serial commands or VISCA camera control
- 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 k Ω 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

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- 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
- LOCATE BUTTON**
- Sensor Type: Capacitive Touch Button
 - Location: Front Panel
- 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 ft (1.8 m), 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 in (45.7 cm), Qty 1
 - VoIP 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

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