AUDIO PROCESSING

CONVERGE® Pro 2 128VTD



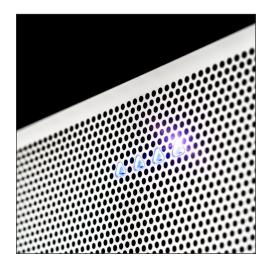
An advanced multi-channel microphone automixer with built-in support for Dante audio networking, a SIP interface, a Telco interface, and the latest audio DSP algorithms.

- > Built-in Native Camera Tracking for ClearOne Unite cameras and many 3rd party cameras using RS-232 and Ethernet VISCA over IP.
- > 12 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.
- > Built-in USB audio.
- > Built-in DARE™ algorithm for dynamic feedback elimination.
- > Native Audio based VISCA camera control.
- > 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.
- > Noise Cancellation with Adaptive-Ambience.



Everything you need Supports SIP, Dante®, 12 configurable mic/line audio inputs, 8 configurable mic/line audio outputs,

built-in USB audio, and a Telco interface for POTS calls.



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

It's All About the Architecture!





DSP MIXERS

CONVERGE® Pro 2 128VTD

PART NUMBER	• 910-3200-009-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 mini-terminal block • Frequency Response: 20 Hz $-$ 22 kHz @ +4 dBu, +/- 0.5 dBu • EIN (Equivalent Input Noise): 20 kHz BW, max gain, Rs = 150 Ω , -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 Impedance: Balanced (line to ground), 95 Ω , 1%
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 , +/- 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)
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)



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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 ft (45 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 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 ft (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 kΩ pull up Variable Voltage Control Inputs: 5 VDC max Ground Pin: GND
USB CONTROL	Port Type: USB-B connectorLocation: Front PanelCompatible: 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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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

 \bullet 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: $17 \times 10.7 \times 1.7$ " (431 x 273 x 44 mm) - With rack-ears: $19 \times 10.7 \times 1.7$ " (483 x 273 x 44 mm)

Unit Weight: 9.3 lbs (4.2 Kg) (Approximately)
 Shipping Weight: 13.9 lbs (6.3 Kg) (Approximately)

Shipping Weight: 13.8 lbs (6.3 Kg) (Approximately)

• 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

• 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

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