

## AUDIO PROCESSING

## **CONVERGE®** Pro 2 128

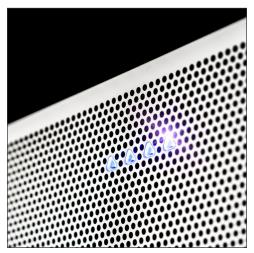


CONVERGE Pro 2 is the industry's most advanced professional audio DSP platform for conferencing and sound reinforcement applications. It outperforms in any size room, audio environment, and application.

- > Built-in Native Camera Tracking for ClearOne Unite cameras and many 3rd party cameras using RS-232 and Ethernet VISCA over IP.
- > 12 mic/line inputs with AEC.
- > Built-in USB for PC-based conferencing.
- > Configure and manage entire system with New CONSOLE® software, Auto-discovery of devices, MatrixView<sup>™</sup> for entire system, FlowView<sup>™</sup> for visualized audio signal paths and System monitoring and troubleshooting.
- > DARE<sup>™</sup> feedback elimination.
- > Advanced microphone gating.
- > Standalone and daisy-chained system.
- > Expansion bus "C-Link" with 150 channels.
- > Stack up units up to 144 Mic/Line inputs.
- > Reduced footprint and power consumption.
- > Next-gen Acoustic Echo Cancellation processing.
- > "P-Link" bus to connect peripheral devices.
- > Flexible control options include Touch-Panel Controller with tabletop and wall mount options, Dialer app for Windows, Mac, iOS, Android, and 3rd party control modules.
- > Acoustic Intelligence with faster convergence.
- > Distributed Echo Cancellation® on every mic input.
- > Noise Cancellation with Adaptive-Ambience.



#### Everything you need The 128 model mixer has 12 inputs with AEC, 8 outputs, USB audio; GPIO, RS-232, IP control interfaces; and P-Link and C-Link expansion buses.



#### **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**

- PC-based Conferencing
- Unified Communications
- Sound Reinforcement
- Video codec-based
- Conferencing

### WORKSPACES

- Conference rooms
- Training roomsLecture halls
- Courtrooms
- Telemedicine theaters
- Auditoriums
- Board rooms
- Huddle rooms



### DSP MIXERS

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PART NUMBER	• 910-3200-001
CAMERA TRACKING	<ul> <li>Supported Cameras: Unite 150, Unite 200, Unite 160, Unite 260 (One Camera per DSP)</li> <li>Communication Protocol: VISCA</li> <li>Communication options: Serial (RS-232) or Ethernet (VISCA over IP)</li> </ul>
MIC/LINE INPUTS & OUTPUTS	<ul> <li>Inputs: Balanced audio inputs, 3.81 mm Black color Phoenix/Euroblock type male header, Push-on miniterminal block</li> <li>Outputs: Balanced audio outputs, 3.81 mm Black color Phoenix/Euroblock type male header, Push-on miniterminal block</li> <li>Frequency Response: 20 Hz – 22 kHz @ +4 dBu, +/- 0.5 dBu</li> <li>EIN (Equivalent Input Noise): 20 kHz BW, max gain, Rs = 150 Ω, -126 dBu</li> <li>THD + N (Total Harmonic Distortion + Noise): <ul> <li>20 Hz – 22 kHz @ +4 dBu, line level, 0.006 %</li> <li>20 Hz – 22 kHz @ -56 dBu, mic level, &lt; 0.04 %</li> </ul> </li> <li>Dynamic Range: 20 Hz – 20 kHz @ 0 dB, &gt; 105 dB</li> <li>Crosstalk (Mic/Line): Channel to Channel, stimulus at 20 dBu to receptor at -56 dBu, 1kHz, &lt; -98 dB</li> <li>Input Impedance: Balanced (line to ground), 2,2 kΩ, 1%</li> <li>Nominal Input Level: Adjustable -56 dB to 0 dB, 7 dB step coarse gain</li> <li>Maximum Input Level: -65 dBu to 20 dBu</li> <li>Phantom Power: 48 V, Impedance 6.81 kΩ</li> <li>Output Impedance: Balanced (line to ground), 95 Ω, 1%</li> <li>Output Level: 0 dBu (Nominal), 20 dBu (Max), -40 dBu (Selectable)</li> </ul>
USB AUDIO	<ul> <li>Port Type: USB-B connector</li> <li>Audio: Digital Audio, 2 x 2 bi-directional channels</li> <li>Sample Rate: 48 kHz</li> <li>Sample Bit Depth: 24-Bit</li> <li>Compatible: USB 2.0, USB 3.0</li> </ul>
ETHERNET	<ul> <li>Port Type: RJ-45, 10/100 Mbps Ethernet Network, Auto Negotiation</li> <li>IP address: IPv4 (IPv6 upgradeable through future s/w, f/w upgrade)</li> </ul>
C-LINK EXPANSION BUS	<ul> <li>Ports Type: RJ-45 (Cat 5e or Cat 6)</li> <li>C-Link In &amp; Out: Proprietary Expansion Bus</li> <li>Audio: 150 Expansion channels</li> <li>Cable: Solid core, factory terminated Cat 5e or 6 cable</li> <li>Distance: Up to 80 ' (24 M)</li> </ul>
P-LINK PERIPHERAL BUS	<ul> <li>Ports Type: RJ-45 (Cat 5e or Cat 6)</li> <li>P-Link In &amp; Out: Proprietary Peripheral Bus</li> <li>PoE In: <ul> <li>P-Link In Port</li> <li>PoE 802.3 af Mode B, Midspan</li> <li>Power on "spare pairs" 4, 5 and 7, 8</li> <li>Input voltage range: 48 V to 56 V</li> </ul> </li> <li>Audio: Up to 3 Beamforming Microphone Array 2 units + up to 3 DIALOG 20 USB Wireless Receiver Units + Up to 3 USB Expander units + Up to 3 GPIO Expander units</li> <li>Cable: Solid core, factory terminated Cat 5e or 6 cable</li> <li>Distance: Up to 200 ' (60 M)</li> </ul>



### **DSP MIXERS**

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RS-232	<ul> <li>Port Type: DB9 Female</li> <li>Settings: 9600/19200/38400/57600/115200 Baud; Serial Echo; Flow Control</li> <li>Support: Serial commands</li> </ul>
GPIO	<ul> <li>Port Type: 5.08 mm Green color Phoenix/Euroblock type male header</li> <li>Support: Control, Status, Variable Voltage Control</li> <li>Power Pin: 5 VDC @ 350 mA Power Source</li> <li>Pin 1 to 4: <ul> <li>Open Collector Outputs: 40 VDC @ 250 mA</li> <li>Active Outputs (Source/Sink): 5 VDC @ 25 mA</li> <li>Logic Inputs: 40.2 kΩ pull up</li> <li>Variable Voltage Control Inputs: 5VDC max</li> </ul> </li> <li>Ground Pin: GND</li> </ul>
USB CONTROL	<ul> <li>Port Type: USB-B connector</li> <li>Location: Front Panel</li> <li>Compatible: USB 2.0, USB 3.0</li> </ul>
LEDs	<ul> <li>Location: Front Panel</li> <li>Status LED: <ul> <li>Off: Unit still initializing</li> <li>Blue - Fast Blinking: Stack Syncing in progress</li> <li>Blue - Slow Blinking: Unit not configured</li> <li>Blue - Solid: Configured unit</li> <li>Red - Fast Blinking: Stack Sync error</li> </ul> </li> <li>Locate LED: Blue - Blinking: Unit "Locate" command received</li> <li>Power LED: Blue - Solid: Unit is powered on</li> </ul>
TOUCH SENSOR	<ul> <li>Sensor Type: Capacitive Touch Button</li> <li>Location: Front Panel</li> </ul>
POWER & THERMAL	<ul> <li>Port Type: AC Inlet</li> <li>Mains Voltage: 100-240 VAC, 50/60 Hz</li> <li>Power Consumption: 50 Watts Typical</li> <li>Thermal: 170 BTU/Hr Typical</li> <li>Operating Temperature: 14 °F (-10 °C) to 104 °F (40 °C) Ambient Temperature</li> </ul>
DIMENSION & WEIGHT	<ul> <li>RU size: 1 RU</li> <li>Width x Depth x Height: <ul> <li>Without rack-ears: 17 x 10.7 x 1.7 " (431 x 273 x 44 mm)</li> <li>With rack-ears: 19 x 10.7 x 1.7 " (483 x 273 x 44 mm)</li> </ul> </li> <li>Unit Weight: 9.3 lbs (4.2 Kg) (Approximately)</li> <li>Shipping Weight: 13.8 lbs (6.3 Kg) (Approximately)</li> </ul>



## **CONVERGE®** Pro 2 128

• Power Cord: 6 ' (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 " (45.7 cm), 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

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