

## **AUDIO CONFERENCING**

# **CONVERGE®** Pro 2 120



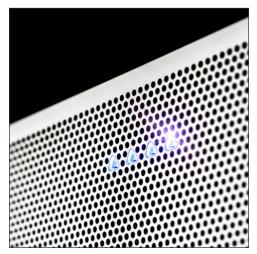
CONVERGE Pro 2 is the industry's most advanced professional audio DSP platform for conferencing and sound reinforcement applications. It outperforms in any size room, audio environment, and application.

- > 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.
- > Increased Mic/Line outputs for other CP2 units.
- > Inputs-only DSP mixer.
- > 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.
- > Standalone and daisy-chained system.
- > Expansion bus "C-Link" with 150 channels.
- > Stack up units up to 144 Mic/Line inputs.
- > Distributed Echo Cancellation® on every mic input.
- > 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.
- > Reduced footprint and power consumption.
- > Acoustic Intelligence with faster convergence.
- > Advanced microphone gating.
- > Noise Cancellation with Adaptive-Ambience.

## It's All About the Architecture!"



#### **Everything you need:** The 120 model mixer has 12 inputs with AEC, 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<sup>®</sup> 20 2-Channel Wireless Microphone System, and other peripheral devices through P-Link.

#### **APPLICATIONS**

- PC-based Conferencing
- Unified Communications
- Sound Reinforcement
- Video codec-based
- Conferencing
- Telemedicine theaters
- Courtrooms Auditoriums
- Board rooms
- Huddle rooms

WORKSPACES

Training rooms

Lecture halls

Conference rooms



### DSP MIXERS

## AUDIO CONFERENCING

# **CONVERGE® Pro 2 120**

PART NUMBER	• 910-3200-004
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 Orange 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, 1 kHz, &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> </ul>
USB AUDIO	<ul> <li>Port Type: USB-B connector</li> <li>Audio: Digital Audio, 2 x 2 bidirectional 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 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>
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>



### **DSP MIXERS**

## AUDIO CONFERENCING

# **CONVERGE® Pro 2 120**

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: 5 VDC 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>



**DSP MIXERS** 

## **AUDIO CONFERENCING**

# **CONVERGE®** Pro 2 120

• 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

Headquarters	US & Canada	International	Sales	Tech Support
5225 Wiley Post Way Suite 500 Salt Lake City, UT 84116	Tel: +1.801.975.7200	Tel: +1.801.975.7200	Tel: +1.801.975.7200 sales@clearone.com	Tel: +1.801.974.3760 audiotechsupport@clearone.com

Other product names and logos may be registered trademarks of their respective owners who do not necessarily endorse ClearOne or ClearOne's products. All rights reserved. Information in this document subject to change without notice. DST-0051-001-001 | V1-030123 | ©2023ClearOne.