

# Converge™ Pro

## Converge™ Pro 8i Professional Conferencing System

An input-only expansion box for the Converge™ Pro platform. The 8i delivers new economical configuration flexibility. It can be added to 880 or 840T systems for additional mic and line inputs, allowing customers to match the number of inputs and outputs required for audio conferencing and sound reinforcement installations.

**ClearOne.**



AFFORDABLE  
INPUT EXPANSION  
BOX FOR  
CONVERGE™ PRO  
PLATFORM

### CONVERGE™ PRO 8i APPLICATIONS

- Conference Rooms
- Boardrooms
- Courtsrooms
- Distance Learning Facilities
- Convention Centers and Hotels
- Training Rooms
- Telemedicine Facilities
- Houses of Worship

### CONVERGE™ PRO 8i ADVANTAGES

#### Advanced Conferencing Feature Set

- + Economical Mic/Line only mixer for large configurations where additional output channels are not required
- + Next-generation Acoustical Echo Cancellation
  - > Improved duplex performance
  - > Push-to-talk microphone compatibility
- + Next-generation Noise Cancellation
  - > Adaptive modeling to room ambient noise condition
- + Increased resolution on Microphone Preamp stage
  - > 0-56 dB in 7 dB increments
- + Pre-AEC routing for Sound Reinforcement Applications
  - > Maximum of 4 millisecond processing delay
- + Management Improvements
  - > Integrated Ethernet and USB connections
  - > SNMP and HTML remote management agents
  - > Event scheduler
  - > Diagnostic console
- + Simplified Configuration Software
  - > Drag & drop A/V and channel objects
  - > Selectable views—unit, matrix, channel
- + Expanded Serial Command List

#### Superior Audio Performance

- + Next-generation Distributed Echo Cancellation® on every mic input
- + First-mic priority delivers clear audio to the far end
- + 20 Hz-20 kHz bandwidth for full-range audio response
- + ALC & AGC keep participants' audio balanced and consistent

#### Configuration Flexibility

- + Scalable – link multiple Converge Pro units (880, 840T, 8i, TH20) for extensive microphone coverage and up to 16 phone lines
- + Enhanced expansion bus, featuring 12 mix-minus audio buses for routing between units
- + Eight mic gating groups (four internal & four global) allow separation of mics into individual mixer gating groups for greater configuration flexibility
- + 32 presets can be executed on-the-fly without disturbing other ongoing preset operations
- + 255 Macros for customized audio control/configuration with single command execution

#### Conferencing Capability

- + Link with multiple Converge Pro TH20s for up to 16-line capability
- + Requires linking with Converge Pro 880, 840T, or TH20 for output & telephone interface capabilities

**PRELIMINARY**

> CONVERGE™ PRO 8i BACK PANEL



> SPECIFICATIONS



**Audio Performance**

Conditions: Unless otherwise specified, all measurements are performed with a 20 Hz to 20 kHz BW limit (no weighting)  
 Frequency Response: 20 Hz to 20 kHz ±1dB  
 Noise (EIN): -126 dBu, 20 kHz BW, max gain, Rs=150 Ω  
 THD+N: <0.02%  
 Dynamic Range: 100 dB (A-weighted)  
 Crosstalk <-91 dB re 20 dBu @ 20 kHz channel to channel

**Auto Mixer Parameters**

Number of Open Microphones (NOM)  
 PA Adaptive Mode  
 First Mic Priority Mode  
 Last Mic Mode  
 Maximum # of Mics Mode  
 Ambient Level  
 Gate Threshold Adjust  
 Off Attenuation Adjust  
 Hold Time  
 Decay Rate

**Matrix Mixing Parameters**

36x24 matrix  
 12 analog in/out  
 12 expansion bus in/out  
 8 assignable processing blocks in/out  
 4 assignable fader blocks in/out

**Assignable Processing Blocks**

Filters:  
 All pass  
 Low pass  
 High pass  
 Low shelving  
 High shelving  
 Parametric EQ  
 Notch  
 CD Horn  
 Crossovers:  
 Bessel  
 Butterworth  
 Linkwitz-Riley  
 Compressor  
 Delay; adjustable up to 250 ms

**Assignable Fader Blocks**

Gain/Mute

**Microphone Input Configuration**

Input Gain Adjust  
 Mic or Line Level  
 Phantom Power on/off  
 Echo Cancellation on/off  
 Noise Cancellation on/off  
 Filters  
 All Pass  
 Low Pass  
 High Pass  
 Notch  
 PEQ



Mute on/off  
 Chairman Override on/off  
 AGC on/off  
 Automatic Level Control on/off  
 Auto Gate/Manual gate  
 Adaptive Ambient on/off  
 Pre AEC channel

**Mic/Line Inputs 1-8**

Push-on mini-terminal block, balanced, bridging  
 Impedance: 5 kΩ  
 Nominal Level: adjustable -56 dBu to 0 dBu (7 dB steps)  
 Maximum Level: -65 dBu to +20 dBu  
 Echo Cancellation: 130 ms tail time (works with 12 dB of room gain)  
 Noise Cancellation: 6-15 dB attenuation  
 Phantom Power: 24 V, selectable

**Line Inputs 9-12**

Push-on mini-terminal block, balanced, bridging  
 Impedance: >10 kΩ  
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

**Expansion Bus In/Out**

Proprietary Network  
 RJ-45 (2), 115.2 kbps, 110 kΩ impedance  
 Category five twisted-pair cable 100' maximum cable length between any two Converge Pro products

**Ethernet**

10/100 Ethernet Network Port  
 10/100 Ethernet PC Port  
 RJ-45 Connectors

**RS-232**

Serial Command Protocol Only (Console Configuration application not supported on RS-232 port)  
 DB-9 female  
 9,600/19,200/38,400/57,600/115,200 baud rate; 8 bits, 1 stop, no parity  
 Hardware flow control on (default)/off

**Control/Status**

DB-25 female A/B (2)  
 Inputs A/B: active low (pull to ground)  
 Outputs A/B: open collector, 40 VDC max, 40 mA each  
 +5 VDC pins (2) (300 mA over-current protected)

**Set-up Software**

Converge Console™



**Power Input Range**

Auto-adjusting  
 100-240 VAC; 50/60 Hz

**Power Consumption**

TBD

**Dimensions (L x D x H)**

17.25" x 10.25" x 1.75"  
 43.8 x 26 x 4.5 cm

**Weight**

TBD dry  
 TBD shipping

**Operating Temperature**

32 to 100° F/0 to 38° C

**Approvals**

Pending



**Optional Accessories**

Converge Pro 880  
 Converge Pro 8i  
 Converge Pro TH20  
 Tabletop Controller  
 Button Microphone - Omni-Directional  
 Button Microphone - Uni-Directional  
 Delta Microphone  
 Tabletop Microphone - Uni-Directional  
 JBL Wall-Mount Speakers

**Part Number**

910-151-810 Converge Pro 8i - 8-channel AEC Microphone Mixer (no outputs)

# PRELIMINARY

> CLEARONE LOCATIONS

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