

The successor to the industry-leading XAP 800. As the flagship product in ClearOne's next-generation Converge™ Pro professional audio conferencing product line, the 880 is a complete audio system that delivers rich functionality with improved audio performance, enhanced management, and simplified configuration for audio conferencing and sound reinforcement applications.



## Applications



- Conference Rooms
- Boardrooms
- Courtrooms
- Distance Learning Facilities
- Convention Centers and Hotels
- Training Rooms
- Telemedicine Facilities
- Houses of Worships

## Features



- Advanced Conferencing Feature Set
  - + 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-22 kHz bandwidth for full-range audio response
  - + ALC & AGC keep participants' audio balanced and consistent
- Configuration Flexibility
  - + Scalable – link multiple Converge Pro units for extensive microphone coverage and up to 16 phone lines
  - + Enhanced expansion bus, featuring 18 mix-minus audio buses for routing between units
  - + Ten mic gating groups (four internal & six 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
  - + Also link to Converge Pro system components for more inputs and outputs

## CONVERGE™ PRO 880 BACK PANEL



## Functional Specifications



### Audio Performance

Conditions: Unless otherwise specified, all measurements are performed with a 20 Hz to 22 kHz BW limit (no weighting)  
 Frequency Response: 20 Hz to 22 kHz  $\pm$  1 dB  
 Noise (EIN): -126 dBu, 20 kHz BW, max gain,  $R_s = 150 \Omega$   
 THD+N: < 0.02%  
 Dynamic Range: 100 dB (non 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

12 analog in/out  
 18 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: < 10 K $\Omega$   
 Nominal Level: adjustable -56 dBu to 0 dBu (7 dB step coarse gain adjustment)  
 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 K $\Omega$   
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

### Outputs 1-12

Push-on mini-terminal block, balanced  
 Impedance: < 50  $\Omega$   
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

### Expansion Bus In/Out

Proprietary Network  
 RJ-45 (2), 1.9 Mbps  
 Category 5 twisted-pair cable, 200' maximum cable length between any two Converge Pro devices

### Ethernet

Autoswitching with Quality of Connection (QoC)  
 10/100 Mbps Ethernet Network Port  
 10/100 Mbps Ethernet PC Port  
 RJ-45 Connectors

### RS-232

Serial Command Protocol Only (Console software 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 bit, no parity  
 Hardware flow control on (default)/off

### USB

Version 2.0 Compatible  
 Type: B-connector

### Control/Status Ports

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  
 +3.3 VDC pins (2) (300 mA over-current protected)



### Configuration & Administration Software

Converge™ Console

### Power Input Range

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

### Power Consumption

30 W Typical

### Dimensions (L x D x H)

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

### Weight

7.5 lbs/3.375 kg unit weight  
 12 lbs/5.4kg shipping weight

### Operating Temperature

14° F/-10 °C to 122° F/50° C ambient unit temperature

### Approvals & Compliance

AES48-2005: AES standard on interconnections — Grounding and EMC practices — Shields of connectors in audio equipment containing active circuitry (self certified)  
 U.S.A. & Canada  
 CSA safety listed  
 EU Countries  
 RoHS compliant  
 WEEE compliant  
 See product manual for additional details

### Optional Accessories



Converge Pro 880  
 Converge Pro 880T  
 Converge Pro 840T  
 Converge Pro 8i  
 Converge Pro TH20  
 Converge Pro 880TA  
 Converge SR 1212A  
 Converge SR 1212  
 Tabletop Controller

### Part Number

910-151-880 Converge Pro 880 – 8-channel AEC Microphone Mixer

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