

CONVERGE™ PRO | 880

Professional Conferencing System

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.



THE CLEAR
CHOICE FOR
PROFESSIONAL
AUDIO
CONFERRING

APPLICATIONS

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

ADVANTAGES

- 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



> 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

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 K Ω
 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: < 5 K Ω
 Nominal Level: 0 dBu
 Maximum Level: 20 dBu

Outputs 1-12

Push-on mini-terminal block, balanced
 Impedance: < 50 Ω
 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

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/3.3375 kg unit weight
 12 lbs/5.4kg shipping weight

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

Assignable Fader Blocks

> CLEARONE LOCATIONS

Headquarters:
Salt Lake City, UT USA
 5225 Wiley Post Way
 Suite 500
 Salt Lake City, UT 84116
 Tel: 801-975-7200
 Toll Free: 800-945-7730
 Fax: 801-977-0087
 sales@clearone.com

Latin America
 Tel: 801-974-3621
 global@clearone.com

EMEA
 Tel: 44 (0) 1189 036 053
 global@clearone.com

APAC
 Tel: 801-303-3388
 global@clearone.com

Ethernet

Operating Temperature