# CONVERGE™ PRO | 880

# **Professional Conferencing System**

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

# Clear One.



THE CLEAR
CHOICE FOR
PROFESSIONAL
AUDIO
CONFERENCING

# CONVERGE™ PRO 880 APPLICATIONS

Conference Rooms

Boardrooms

Courtrooms

Distance Learning Facilities

Convention Centers and Hotels

Training Rooms

Telemedicine Facilities

Houses of Worship

# CONVERGE™ PRO 880 ADVANTAGES

# Advanced Conferencing Feature Set

- + Next-generation Acoustical Echo Cancellation
  - > Full bandwidth (20Hz to 22Khz) 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 (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





# **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 ±1dB Noise (EIN): -126 dBu, 20 kHz BW, max gain, Rs=150 Ω

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

36x36 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 Ressel

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

All Pass Low Pass High Pass Notch PFQ

Mute on/off Chairman Override on/off AGC on/off Automatic Level Control on/off Auto Gate/Manual gate Adaptive Ambient on/off Pre AFC 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 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 KΩ Nominal Level: 0 dBu Maximum Level: 20 dBu

# Outputs 1-12

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

#### Ethernet

Autoswitching with Quality of Connection 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) DR-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

7.5 lbs/3.3375 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 SR 1212 Tabletop Controller Button Microphone – Omni-Directional Button Microphone – Uni-Directional Delta Microphone Tabletop Microphone – Uni-Directional JBL Wall-Mount Speakers

# **Part Number**

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

# **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