# **ClearOne**

# **CONVERGE<sup>™</sup>PRO** 880

The successor to the industry-leading XAP 800. As the flagship product in professional audio conferencing product line, the 880 is a complete audio system audio performance, enhanced management, conferencing and sound reinforcement







- Conference Rooms
- Boardrooms

Courtrooms

**Distance Learning Facilities** 

Convention Centers and Hotels

**Training Rooms** 

**Telemedicine Facilities** 

Houses of Worships



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

# ClearOne



# 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 ±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**

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



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: < 10 KQ 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:  $< 10 \text{ K}\Omega$ Nominal Level: 0 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

Maximum Level: 20 dBu

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

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

### 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

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Dimensions (L x D x H)

7.5 lbs/3.3375 kg unit weight