ClearOne

CONVERGE® PRO | 880T

The CONVERGE Pro 880T combines the rich functionality of the CONVERGE Pro 880 with a built-in telephone interface and speaker amplifier for standalone conferencing applications. The 880T delivers enhanced management features, simplified configuration tools, and industry-leading expandability for virtually any venue or application.





Applications



Conference Rooms

Boardrooms

Courtrooms

Distance Learning Facilities

Convention Centers and Hotels

Training Rooms

Telemedicine Facilities

Houses of Worship

Features _



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

- + Built-in telephone interface and 10W power amplifier
- + Scalable link multiple CONVERGE/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



CONVERGE PRO 880T 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, 22 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

1 10W speaker amplifier 1 telco input/1 telco output

Assignable Processing Blocks

Filters

All pass Low pass High pass Low shelving High shelving Parametric EQ Notch CD Horn

Crossovers

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 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)

Line Inputs 9-12

Push-on mini-terminal block, balanced, bridging Impedance: < 10 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

Amplifier Output

Binding Post Connection 10 Watts @ 4 Ω Impedance THD + Noise: < 0.5%

Telco Line Port

RJ-11 POTS (plain old telephone service) or analog PBX extension A-lead supervision provided

Telco Set Port

Pass-though RJ-11 analog jack

Telephone Audio Performance

Conditions: Unless otherwise specified, all measurements are performed with Transmit Limiter and

Receive ALC disabled

Frequency Response: 250Hz to 3.3 kHz ±1dB THD+N: <0.3% re-max level 250 Hz to 3.3 kHz SNR: > 62 dB re-max level

Telco Line Echo Cancellation

Tail Time: 31 ms Null: 55 dB nominal

Telephone Noise Cancellation

Noise Cancellation 6-15 dB attenuation

Expansion Bus In/Out

Proprietary Network RJ-45 (2), 1.9 Mbps CAT-5 twisted-pair cable, 200' maximum cable length

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

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)

USB

Version 2.0 compatible Type: B-connector

Configuration & Admin 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

Operating Temperature

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

Approvals

See the Installation & Operation Manual for complete details
AES48-2005: AES standard on interconnections —
Grounding and EMC practices — Shields of connectors in audio equipment containing active circuitry (self certified)

Optional Accessories

CONVERGE Pro TH20 CONVERGE SR 1212

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