

CONVERGE™ PRO | 8i

Professional Conferencing Input Expansion System

ClearOne

An input-only expansion box for the Converge / Converge Pro platform. The 8i delivers new economical configuration flexibility. It can be added to 880, 880T, and 840T systems for additional mic and line inputs, allowing customers to match the number of inputs and outputs required for audio conferencing and sound reinforcement applications.



AFFORDABLE
INPUT EXPANSION
BOX FOR THE
CONVERGE /
CONVERGE PRO
PLATFORM

CONVERGE PRO 8i APPLICATIONS

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

CONVERGE PRO 8i ADVANTAGES

- Advanced Conferencing Feature Set**
- + Economical Mic/Line only mixer for large configurations where additional output channels are not required
 - + 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 conditions
 - + 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/Converge Pro units (880, 880T, 840T, 8i, TH20, SR 1212) 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

HDConference™

> CONVERGE PRO 8i 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 ± 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

36x24 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:
 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: < 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

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 products

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, no parity
 Hardware flow control on (default)/off

USB

Version 2.0 compatible
 Type B connector

Control/Status

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

Operating Temperature

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

Approvals & Compliance

AES48 compliant (audio equip grounding)
 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 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

910-151-810 Converge Pro 8i – 8-channel AEC Microphone Mixer (no outputs)

> CLEARONE LOCATIONS

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