CONVERGE™ PRO | 8i

Professional Conferencing Input Expansion System

An input-only expansion box for the Converge™ Pro platform. The 8i delivers new economical configuration flexibility. It can be added to 880 or 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 installations.

ClearOne®

AFFORDABLE INPUT EXPANSION BOX FOR CONVERGE™ PRO PLATFORM

HDConference

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
  > 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

Conferencing Capability
+ Link with multiple Converge Pro TH20s for up to 16-line capability
+ Requires linking with Converge Pro 880, 840T, or TH20 for output & telephone interface capabilities

> **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 ±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
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 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

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 840T
Converge Pro TH20
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**