

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.



Applications



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

Features



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
- + 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
- + Requires linking with Converge Pro 880, 840T, or TH20 for output & telephone interface capabilities

CONVERGE PRO 8i 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 ± 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

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

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)
 Noise Cancellation: 6-15 dB attenuation
 Phantom Power: 24 V, selectable

Line Inputs 9-12

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

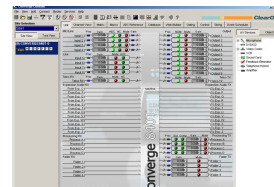
Version 2.0 compatible
 Type B connector

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 8i
 Converge SR 1212
 Converge SR 1212A
 Converge Pro 840T
 Converge Pro TH20
 Tabletop Controller



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