

NEW!

## CONVERGE™ PRO | 880TA

Digital Matrix Mixer with Four Channel Power Amplifier

The Converge Pro 880TA is a complete conferencing solution with four power amplifiers. The Converge Pro 880TA delivers enhanced management features, simplified configuration tools and industry-leading expandability for use in virtually any venue and application.

**ClearOne**®



THE INTELLIGENT  
CHOICE FOR  
PROFESSIONAL  
AUDIO  
CONFERENCING

### APPLICATIONS

Boardrooms  
Training Centers  
Municipal Rooms  
Courtrooms  
Houses of Worship  
Telemedicine  
Presentation Systems  
Zoned Paging  
Masking Systems

### ADVANTAGES

#### Advanced 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
- + Increased resolution on Microphone Preamp stage
  - > 0-56 dB in 7 dB increments
- + Management Improvements
  - > Integrated Ethernet and USB connections
  - > SNMP and HTML remote management
  - > 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

- + DARE™ (Dynamic Automatic Resonance Elimination) for control of feedback
- + 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

- + Four built-in 35 Watt amplifiers, 8Ω or 70V/100V
- + Up to 96 microphones
- + Link multiple Converge/Converge Pro units (Converge Pro 880, 880T, 880TA, 840T, 8i, TH20, Converge SR 1212 and SR 1212A) 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
- + No space required between rack mounted units

HDCConference™



> CONVERGE PRO 880TA BACK PANEL



> SPECIFICATIONS

**Audio Performance**

Conditions: Unless otherwise specified, all measurements are performed from 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  
 Rs = 150Ω  
 THD+ Noise: <0.02%  
 Dynamic Range: >105 dB (non A weighted)  
 Crosstalk: <-91 dB re 20 dBu full band.

**Mic/Line Inputs 1-8**

Push-on mini-terminal block, balanced, bridging  
 Impedance: > 10 KΩ  
 Nominal Level: adjustable -56 dBu to 0 dBu (7dB step coarse gain adjustment)  
 Maximum Level: -65 to +20 dBu  
 Phantom Power: 24V, selectable

**Line Inputs 9-12**

Push-on mini-terminal block, balanced, bridging  
 Impedance: > 10 KΩ  
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

**Output 1-8**

Push-on mini-terminal block, balanced, bridging  
 Impedance: < 50 Ω  
 Nominal Level: 0 dBu  
 Maximum Level: 20 dBu

**Auto Mixer Parameters**

Number of Open Microphones (NOM)  
 PA Adaptive Mode  
 First Mic Priority Mode  
 Maximum # of Mics  
 Ambient Level  
 Gate Threshold Adjust  
 Off Attenuation Adjust  
 Hold Time  
 Decay Rate  
 Chairman Override  
 96 Total Microphones per site  
 6- Global Gating Groups  
 4- Internal Gating Groups

**Matrix Mixing Parameters**

8- Microphone Analog Inputs  
 4- Analog Line Inputs  
 8- Analog Line Outputs  
 4- Power Amplifier Outputs  
 18- Expansion Bus in/out  
 8- Assignable Processing Blocks in/out  
 1- Telco in/out

**Assignable Processing Blocks**

Filters  
 All Pass  
 Low Pass  
 High Pass  
 Low shelving  
 High shelving  
 PEQ  
 Notch  
 Crossovers  
 CD Horn  
 Compressor  
 Delay: adjustable up to 250 ms

**Power Amplifier Output Processing**

FeedBack Elimination w/ring cancellation  
 10-band EQ filter  
 4-node filter bank for Crossover  
 Delay Block  
 Compressor/Limiter  
 Noise Gate for Hiss Control  
 Sound Masking Generator per channel  
 Adaptive Volume Control  
 Multi Channel Control

**Microphone Processing**

4-node filter bank  
 AGC/ALC  
 Wideband AEC with NLP  
 Tail-time: 130 msec  
 Noise Cancellation

**Power Amplifiers**

Channels: 4  
 Amplifier Output: 4x35 Watts into 8Ω  
 Impedance: Selectable 8Ω, 70V, 100V  
 THD + Noise: <0.2% (1/3 Power)  
 Crosstalk: <-68 dB

**Telco Line Port**

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

**Telco Set Port**

Pass-through RJ-11 analog jack

**Telephone Audio Performance**

Conditions: Unless otherwise specified, all measurements are performed with ALC disabled, referenced @ -15dBm on/off telephone line  
 Frequency Response: 250 Hz to 3.3 kHz +/-1 dB  
 THD+N: <0.3% kHz  
 SNR: > 62 dB

**Telephone Processing**

LEC: 31 msec tail-time  
 Null: >55 dB  
 Noise Cancellation: 6-15 dB  
 ALC

**Expansion Bus**

Connection: CAT 5, RJ45  
 Mix Minus Structure  
 18 Audio Buses  
 6 Gating Buses  
 8 Reference Buses

**Network**

10/100 Auto Switching (PC and Network Port)  
 HTTP Server  
 Telnet Client  
 SNMP Agent  
 SMTP Client  
 DNS  
 DHCP

**RS-232**

DB-9  
 9.6k – 115k baud  
 8/1/0  
 Hardware Flow Control

**USB**

Version 2.0 compatible  
 Type: B-connector

**GPIO**

DB 25 female (A/B)  
 Inputs: Active Low  
 Outputs: Open Collector, 40Vdc, 40 mA

**Power**

100-240VAC; 50/60 Hz,  
 300 Watts (maximum)  
 Idle: 139 BTU/hr  
 Full Load: 779 BTU/hr  
 Efficiency: >80%

**Humidity**

15 to 80%

**Mechanical**

Dimensions: 2RU  
 3.5" H x 17.25" W x 15.92" D  
 Weight: < 30 lbs.

**Environmental**

Operating temperature:  
 32-122 degrees F

**Compliance**

FCC  
 Industry Canada  
 CE  
 RoHS  
 Class 2 Wiring Required

**Part Number**

910-151-882 Converge Pro 880TA

> CLEARONE LOCATIONS

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