

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

> 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

SALES AND INQUIRIES

Headquarters

5225 Wiley Post Way,
 Suite 500
 Salt Lake City, UT 84116

US & Canada

Tel: 801.975.7200
 TollFree: 800.945.7730
 Fax: 801.303.5711

International

Tel: + 1.801.975.7200
 global@clearone.com

Sales

Tel: 801.975.7200
 sales@clearone.com

TechSupport

Tel: 801.974.3760
 tech.support@clearone.com