

CONVERGE™ PRO | TH20

Professional Conferencing Telephone Interface

The successor to the industry-leading XAP TH2. The TH20 enables conference call functionality for Converge™ Pro installations with its single telephone line connection. Up to 16 units can be linked for greatly expanded conferencing capability. It also adds two line-level inputs and outputs for increased system capacity.

ClearOne.



ADVANCED TELEPHONE INTERFACE FOR CONVERGE™ PRO PLATFORM

APPLICATIONS

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

ADVANTAGES

Advanced Telephone Feature Set

- + Signal Processing Improvements
 - > Telephone noise cancellation on RX channel
 - > ClearEffect speech enhancement
 - > Automatic level control on RX channel
 - > Caller ID
 - > Selectable ringers
- + Increased I/O capabilities
 - > 2-line level input/output
 - > Audio expansion bus
- + 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

Superior Audio Performance

- + Digital signal processing technology ensures crystal clear audio
- + Echo cancellation eliminates telephone line echo
- + Automatic level control
- + Digital anti-alias filter minimizes hum and Central Office switching noise

Configuration Flexibility & Scalability

- + Connects to ClearOne's Converge Pro products through expansion bus port
- + Conference up to 16 callers in a Converge Pro installation with multiple TH20s
- + Configure through included Console™ software

Ease of Use & Control

- + Speed dial stores 10 frequently dialed numbers
- + Incoming call ringing is heard through the loudspeaker
- + Selectable auto-answer and auto-disconnect
- + Users can dial telephone numbers, access voice mail, pagers, etc. without the use of a separate telephone device through integrated DTMF (touch-tone) dialing
- + Software-selectable country configurations

HDCConference

> CONVERGE™ PRO TH20 BACK PANEL



> SPECIFICATIONS



Telephone Audio Performance

Conditions: Unless otherwise specified, all measurements are performed with Transmit Limiter and Receive ALC disabled
 Frequency Response: 250Hz to 3.3 kHz ±1dB
 THD+N: <0.3% re-max level 250 Hz to 3.3 kHz
 SNR: > 62 dB re-max level

Telephone Noise Cancellation

Noise Cancellation 6-15 dB attenuation

Telco Line Echo Cancellation

Tail Time: 31 ms
 Null: 55 dB nominal

Telco Line

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

Telco Set

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

Audio Performance

Conditions: Unless otherwise specified, all measurements are performed with a 20 Hz to 20 kHz BW limit (no weighting)
 Frequency Response: 20 Hz to 20 kHz ±1dB
 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

Line Inputs 1, 2

Push-on mini-terminal block, balanced, bridging
 Impedance: < 5 kΩ
 Nominal Level: 0 dBu
 Maximum Level: 20 dBu

Line Outputs 1,2

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

Expansion Bus In/Out

Proprietary Network
 RJ-45 (2), 1.9 Mbps, 110 KΩ Impedance
 Category 5 twisted-pair cable, 200' maximum cable length between any two Converge Pro devices

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

USB

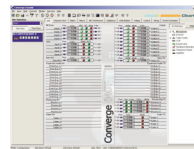
Version 2.0 compatible
 Type: B-connector

Control/Status Ports

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

Operating Temperature

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

Approvals

See Appendix D: Compliance

Optional Accessories

Converge Pro 880
 Converge Pro 8i
 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

910-151-820 Converge Pro TH20
 Telephone Interface for Converge Pro 880, 840T, 8i

> CLEARONE LOCATIONS

Headquarters:

Salt Lake City, UT USA
 5225 Wiley Post Way
 Suite 500
 Salt Lake City, UT 84116
 Tel: 801-975-7200
 Toll Free: 800-945-7730
 Fax: 801-977-0087
 sales@clearone.com

Latin America

Tel: 801-974-3621
 global@clearone.com

EMEA

Tel: 44 (0) 1189 036 053
 global@clearone.com

APAC

Tel: 801-303-3388
 global@clearone.com