ClearOne®

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.

Applications

Conference Rooms

Boardrooms

Courtrooms

Distance Learning Facilities

Convention Centers and Hotels

Training Rooms

Telemedicine Facilities

Houses of Worship

Features

Advanced Telephone Feature Set
+ Signal Processing Improvements
  > Telephone noice 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

CONVERGE PRO TH20 BACK PANEL

Functional 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 22 kHz BW limit (no weighting)
Frequency Response: 20 Hz to 22 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: < 10 KΩ
Nominal Level: 0 dBu
Maximum Level: 20 dBu

Line Outputs 1,2
Push-on mini-terminal block, balanced
Impedance: < 50 Ω
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
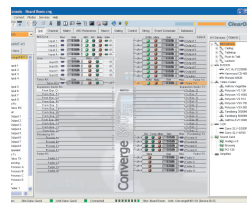RJ-45 Connectors

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 weight

Operating Temperature
14° F/-10° C to 122° F/50° C ambient unit temperature
Approvals & Compliance
AES48-2005: AES standard on interconnections — Grounding and EMC practices — Shields of connectors in audio equipment containing active circuitry (self certified)
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

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