



XAP™ TH2 Telephone Interface

ClearOne's XAP™ TH2 telephone interface routes caller audio from a single telephone line into the XAP 800 audio conferencing system. Up to 16 callers can be added to a conference by using 16 XAP TH2s.

The XAP TH2 features an expansion bus port that enables it to be linked to the XAP 800, which can then pass control to the XAP TH2. The XAP TH2 is configured with the G-Ware™ software, which greatly simplifies setup and operation. You can also control the XAP TH2 externally through a direct connection to the RS-232 port, or through contact closures using the Remote (DB-25) port.

DTMF (touch-tone) dialing is accessed through the expansion bus or RS-232 connection, which allows you to dial telephone numbers or issue tones to access voice mail. The XAP TH2 will also store 10 speed dial numbers.

The XAP TH2 has audible ring indication which, when used in conjunction with the XAP 800, allows participants in the conference room to hear the phone ringing. It also features 100 percent digital signal processing (DSP), which ensures crystal-clear audio with the deepest, most reliable hybrid null; full-time telco echo cancellation with 31 milliseconds tail time; selectable caller automatic level control (ALC); balanced input and output; Phoenix push-on blocks for easy pin-for-pin wiring; and a digital anti-alias filter, which minimizes hum and Central Office switching noise.

G-Ware software is used to configure settings for Receive ALC, Auto-Answer, Auto-Disconnect, Disconnect on Loop or Loop and Call Progression, Self Adapt or Noise Adapt, DTMF level, Dial Tone level, and momentary or latching control. The device ID is set via a four-position DIP switch on the back panel.



The XAP TH2 provides the highest possible audio quality for telephone line conferencing.

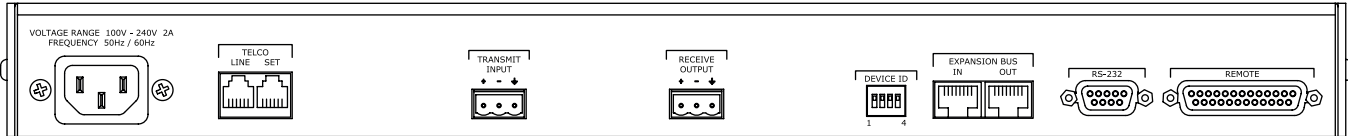
Features and Benefits

- ClearOne's digital signal processing (DSP) technology—ensures crystal clear audio with the deepest, most reliable hybrid null
- Audible ring indicator—the ringing of incoming calls is heard through the loudspeaker
- Conference up to 16 callers (16 XAP TH2s) in a XAP 800 system—allows extreme flexibility in meeting customer requirements
- Receive automatic level control—ensures consistent receive audio level in every call
- Compatible with XAP and PSR products
- Selectable auto-answer and auto-disconnect—allows users to select auto-disconnect without auto-answer and vice versa
- Integrated DTMF (touch-tone) dialing—allows users to dial telephone numbers, access voice mail, pagers, etc., without the use of a separate telephone set
- Occupies a single rack space
- Adjustable dial tone and DTMF levels
- Software set up for country configuration of interface
- Adjustable audible connect/disconnect tones

Applications

- Conference Rooms
- Boardrooms
- Distance Learning
- Hotels
- Courtrooms
- Houses of Worship
- Teletraining
- Telemedicine

The XAP TH2 is manufactured and marketed by ClearOne, formerly Gentner.



Specifications

Dimensions (LxDxH)
 17.25" x 10.25" x 1.75"
 43.8 x 26 x 4.5 cm

Weight
 7 lb/3.18 kg dry
 12 lb/5.4 kg shipping

Operating Temperature
 32 to 100° F/0 to 38° C

Humidity
 15% to 80%, non-condensing

Power Input Range
 Auto-adjusting
 100–240VAC; 50/60Hz

Power Consumption
 15W typical

Device ID
 4-position DIP switch

Expansion Bus In/Out
 Proprietary Network
 RJ-45 (2), 115.2kbps,
 110kΩ Impedance
 Category five twisted-pair cable
 80' (24 meters) maximum cable
 length between any two PSR1212s,
 XAP 800s or XAP 400s

RS-232
 DB-9 female
 9,600/19,200/38,400 (default)/57,600
 baud rate; 8 bits, 1 stop, no parity
 Hardware flow control on (default)/off

Control/Status
 DB-25 female
 Inputs: active low (pull to ground)
 Outputs: open collector, 40VDC max,

40mA each
 +5VDC (300mA over-current protected)

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

Telco Set
 RJ-11
 Connect analog telephone set
 A-lead supervision provided

Transmit Input
 Push-on terminal block, balanced,
 bridging
 Impedance: > 10kΩ
 Nominal Level: 0dBu
 Maximum Level: 15dBu

Receive Output
 Push-on terminal block, balanced
 Impedance: < 50Ω
 Nominal Level: 0dBu
 Maximum Level: 19dBu

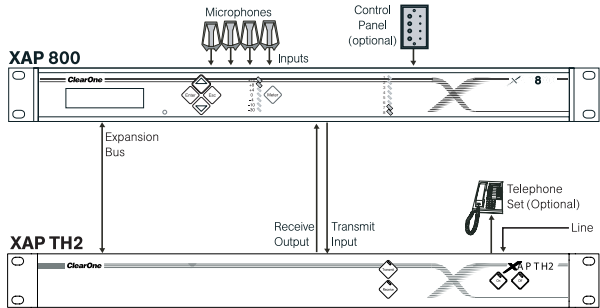
Audio Performance
 Conditions: Unless otherwise specified,
 all measurements are performed with
 a 22Hz to 22kHz BW limit (no
 weighting). Transmit limiter and
 Receive ALC disabled
 Frequency Response: 250Hz to
 3.3kHz ±1dB
 THD+N: <0.2% re max level
 SNR: >62dB re max level

Telco Echo Cancellation
 Tail time: 31ms
 Null: 55dB nominal

Approvals
 FCC, CSA, IC, CE, NOM, ACA, SABS,
 JATE

Set-up Software
 G-Ware

Typical Installation in XAP 800 System



Typical installation in XAP 800 system