

XAP[®] | 800

Professional Conferencing System

ClearOne

The most sophisticated, feature-rich system on the market. With unrivaled audio processing performance, XAP 800 is the ultimate audio management platform for conferencing and sound reinforcement in large-scale, installed audio applications.



THE CLEAR CHOICE FOR PROFESSIONAL AUDIO CONFERRING

XAP 800 APPLICATIONS

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

XAP 800 ADVANTAGES

Superior Audio Performance

- + Distributed Echo Cancellation[®] on every mic input
- + Noise cancellation on each mic/line input
- + Full-duplex sound enables participants to speak and listen at the same time without cutting in and out
- + First-mic priority eliminates hollow "tunnel" sound by activating only the microphone closest to the person speaking
- + Eight microphone/line inputs, with four additional line inputs
- + 12 outputs
- + 20 Hz-20 kHz bandwidth for full-range audio response
- + Automatic level control and automatic gain control
- + Four input filters on each of eight mic inputs; 15 filters on each of eight independent processing blocks

Configuration Flexibility

- + Scalable – link multiple XAP units (XAP 800, XAP 400, XAP TH2) for up to 64 microphones and 16 phone lines
- + 32x32 matrix with level control (in .5 dB steps) at each cross point to simplify complex mixing operations; Clear Matrix button easily clears cross points
- + Wide variety of system control options: ClearOne IR Remote, Volume Control, Select Control, 3rd-party control systems such as AMX, Crestron
- + Configuration control through included G-Ware[™] software, RS-232 port
- + Enhanced expansion bus, featuring 12 bidirectional audio buses
- + Four mic gating groups allow separation of mics into individual mixer gating groups for greater configuration flexibility

Ease of Use & Control

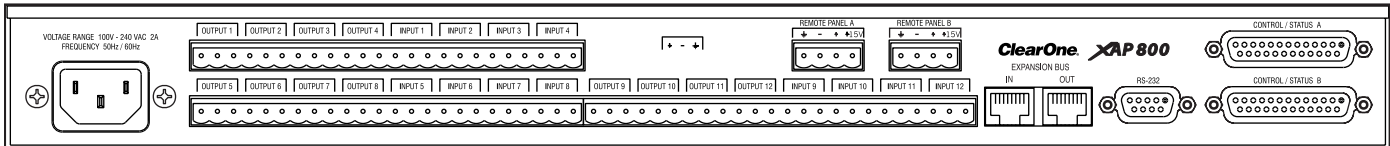
- + Labels for all inputs, outputs, macros and presets are saved within the unit
- + Front panel control of gain and mute
- + 32 presets that can be executed on-the-fly without disturbing other ongoing preset operations
- + Macro scripting language and recorder simplifies macro creation with point-and-click convenience
- + RAMP serial command for greater control over gain adjustments – no external volume card required

Conferencing Capability

- + Add teleconferencing with XAP TH2 or XAP 400
- + Link up to 16 XAP TH2s for 16-line capability

HDCConference

> XAP 800 BACK PANEL



> SPECIFICATIONS



Audio Performance

Conditions: Unless otherwise specified, all measurements are performed with a 22 Hz to 22kHz BW limit (no weighting)
 Frequency Response: 20 Hz to 20 kHz \pm 1 dB
 Noise (EIN): -126 dBu, 20 kHz BW, max gain, $R_s = 150 \Omega$
 THD+N: < 0.02%
 SNR: 80 dB re 0 dBu, (A-weighted)
 Dynamic Range: 100 dB (A-weighted)
 Crosstalk < -91 dB re 20 dBu @ 20 kHz channel to channel

Auto Mixer Parameters

Number of Open Microphones (NOM)
 PA Adaptive Mode
 First Mic Priority Mode
 Last Mic Mode
 Maximum # of Mics Mode
 Ambient Level
 Gate Threshold Adjust
 Off Attenuation Adjust
 Hold Time
 Decay Rate

Matrix Mixing Parameters

32 x 32 matrix
 12 analog in/out
 12 expansion bus in/out
 8 assignable processing blocks in/out

Assignable Processing Blocks

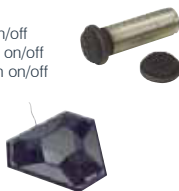
Filters:
 All pass
 Low pass
 High pass
 Low shelving
 High shelving
 Parametric EQ
 Notch
 CD Horn
 Crossovers
 Bessel
 Butterworth
 Linkwitz-Riley
 Compressor
 Delay adjustable up to 500 ms

Microphone Input Configuration

Input Gain Adjust
 Mic or Line Level
 Phantom Power on/off
 Echo Cancellation on/off
 Noise Cancellation on/off
 Filters

All Pass
 Low Pass
 High Pass
 Notch
 PEQ

Mute on/off
 Chairman Override on/off
 AGC on/off
 Speech Leveler on/off
 Auto Gate/Manual gate
 Adaptive Ambient on/off



Mic/Line Inputs 1-8

Push-on terminal block, balanced, bridging
 Impedance: 5 k Ω
 Nominal Level: adjustable -55 dBu, -25 dBu, 0 dBu
 Maximum Level: -35 dBu, -5 dBu, +20 dBu
 Echo Cancellation: 130 ms tail time (works with 12 dB of room gain)
 Noise Cancellation: 6-15 dB attenuation
 Phantom Power: 24 V, selectable

Line Inputs 9-12

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

Outputs 1-12

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

Expansion Bus In/Out

Proprietary Network
 RJ-45 (2), 115.2 kbps, 110k Ω impedance
 Category five twisted-pair cable 80' (24 meters)
 maximum cable length between any two XAP 800s, XAP 400s, or PSR1212s

RS-232

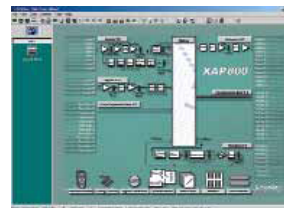
DB-9 female 9,600/19,200/38,400 (default)/57,600 baud rate; 8 bits, 1 stop, no parity Hardware flow control on (default)/off

Control/Status

DB25 female A/B (2) Inputs A/B: active low (pull to ground) Outputs A/B: open collector, 40 VDC max, 40 mA each +5 VDC pins (2) (300 mA over-current protected)

Remote Panels A/B

4-pin push-on terminal block
 RS-485 proprietary protocol Category five twisted-pair cable
 1 pair data, 1 pair power and ground +15 VDC (300 mA over-current protected)



Set-up Software

G-Ware

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 lb/3.2 kg dry
 12 lb/5.5 kg shipping

Operating Temperature

32 to 100° F/0 to 38° C

Humidity

15% to 80%, non-condensing

Approvals

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



Optional Accessories

XAP 400
 XAP Net
 XAP TH2
 IR Remote Control
 Volume Control Panel
 Select Control Panel
 Button Microphone - Omni-Directional
 Button Microphone - Uni-Directional
 Delta Microphone
 Tabletop Microphone - Uni-Directional
 JBL Wall-Mount Speakers
 Digital-to-Analog Telephone Converters

Part Number

910-151-101 XAP 800 - 8-channel AEC Microphone Mixer

> CLEARONE LOCATIONS

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