



## XAP™ 800 Audio Conferencing System

Gentner's new XAP™ 800 takes the revolutionary AP800 to the next level of functionality and becomes the new standard of audio conferencing performance.

The XAP 800 features Gentner's proprietary Distributed Echo Cancellation® and noise cancellation technology for dramatically reduced echo and noise; a proven software architecture for easy, reliable configuration; a 32x32 matrix with level control (in .5dB steps) at each cross point to simplify complex mixing operations; and 20Hz–20kHz bandwidth for full-range audio response.

The XAP 800's Distributed Echo Cancellation features 130ms of tail time, which provides highly effective echo cancellation while keeping reaction time short and additional noise from being created. A tail time of 130ms optimizes echo cancellation in the majority of room scenarios.

Basic functions such as volume and source selection can be controlled remotely with the optional Gentner Control Panel. It's available in two models—the Volume Control and Select Control—for flexible, seamless operation.

The XAP 800 can also be controlled via proven, reliable G-Ware™ software architecture, RS-232 port, presets, macros, logic in/out, and contact closure.



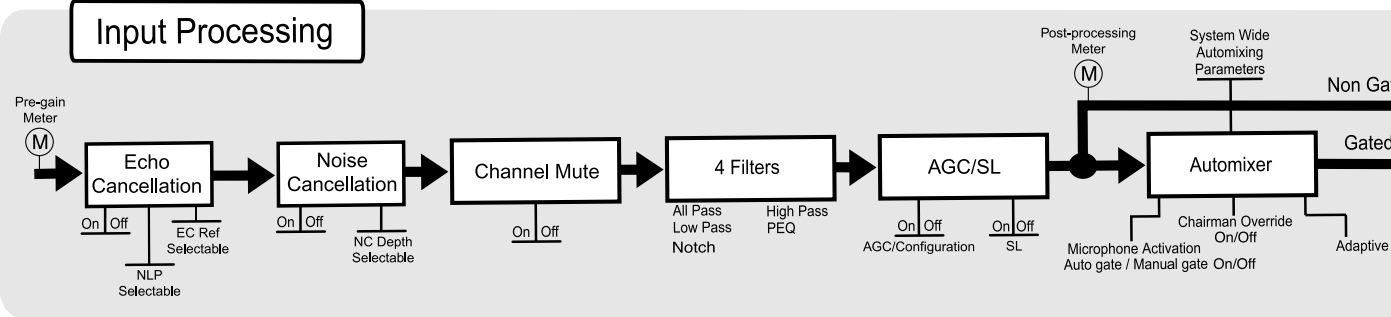
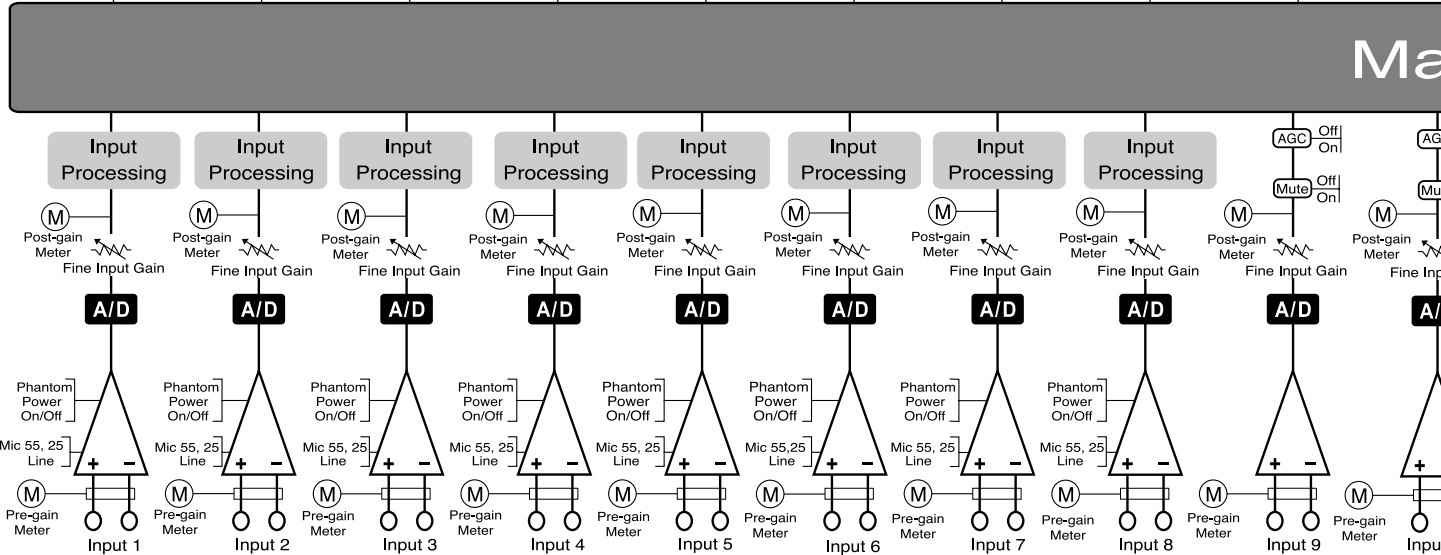
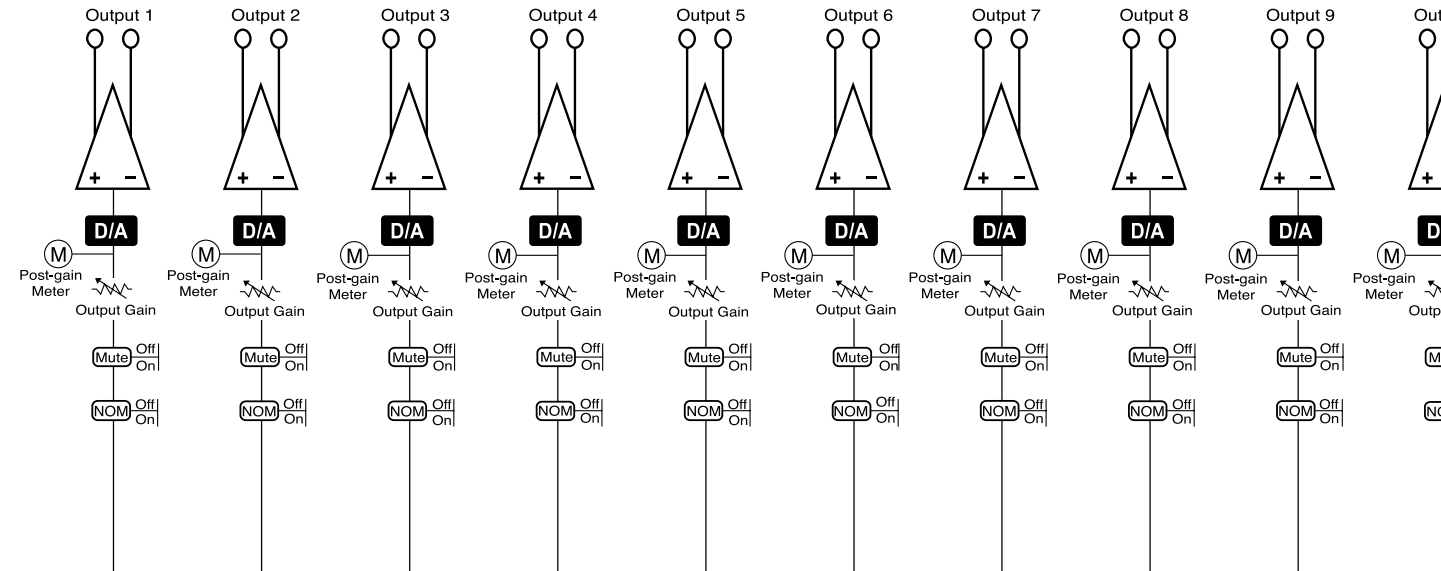
The XAP 800 features Distributed Echo Cancellation on each mic input.

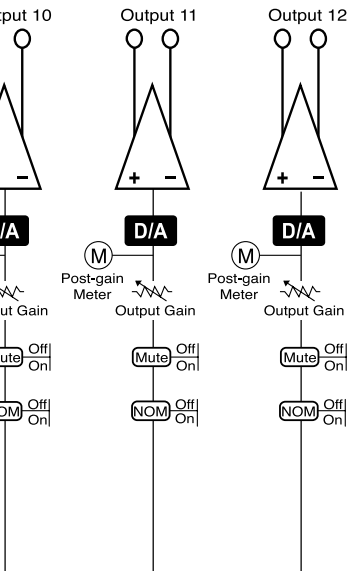
### Features and Benefits

- Noise cancellation on each mic/line input provides up to 15dB of noise attenuation
- Enhanced Expansion Bus, featuring 12 bi-directional audio buses
- Up to 80 feet (24 meters) between connected units
- Linkable—eight units can be linked for a total of 64 microphones
- Labels for all inputs, outputs, macros, and presets are saved within the unit
- Four input filters on each of eight mic inputs. Programmable as parametric EQ, notch, all pass, low pass, and high pass
- Eight independent processing blocks, each with 15 filters; delay; and compressors to provide pinpoint audio configuration
- Four internal and four global mic mixers, each with parameter adjustments
- 32 presets that can be executed on-the-fly without disturbing other ongoing preset operations
- Macro Pro scripting language simplifies macro creation with point-and-click convenience
- XAP 800 works in rooms with up to 12dB of room gain to handle the most challenging room environments
- Look-ahead gating ensures no audio clipping
- Internal signal generator for convenient, fast sound system calibration
- Adjustable minimum and maximum gain levels for each input, output, and processor to control the range of gain
- Compatible with the XAP TH2 telephone interface for teleconferencing capability

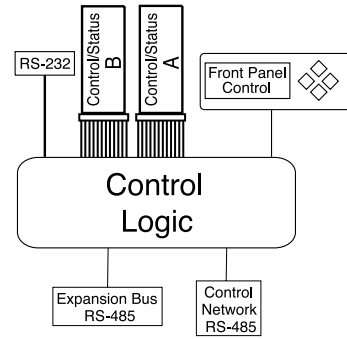
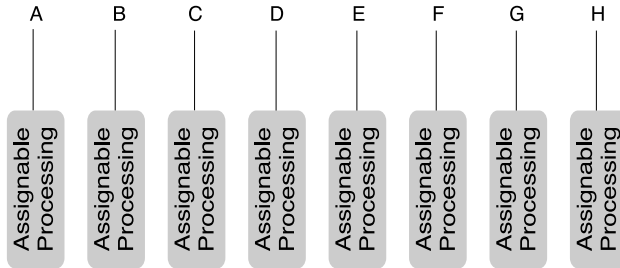
### Applications

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

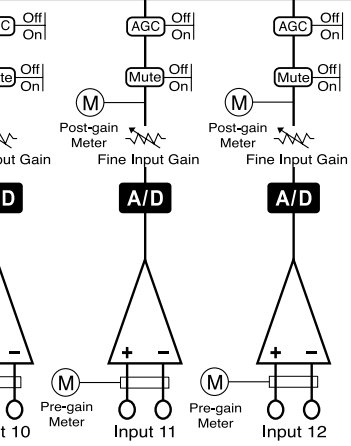




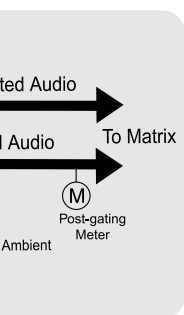
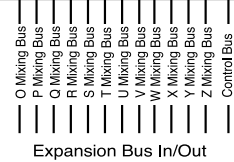
Processing outputs are looped back into the matrix.



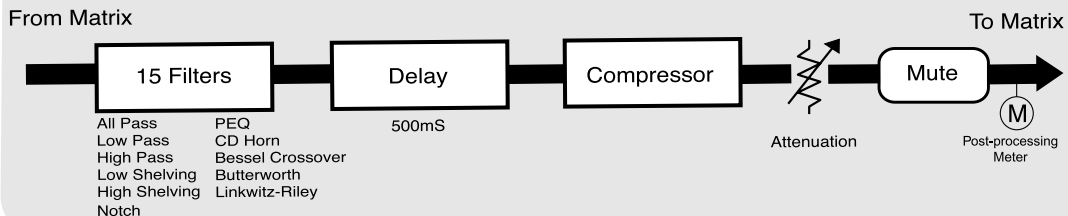
Matrix



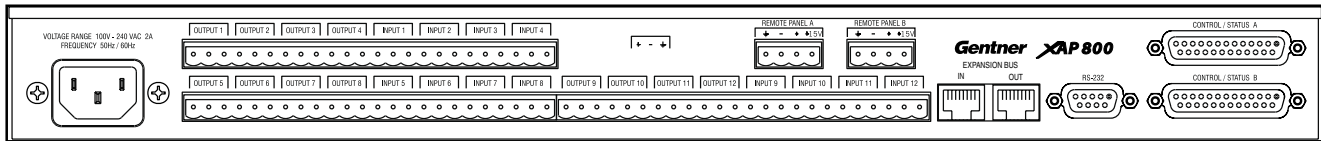
A B C D E F G H



### Assignable Processing



**(M)** = Meter Reference Point



## Specifications

### Dimensions (LxDxH)

17.25" x 10.25" x 1.75"  
43.8 x 26 x 4.5 cm

### Weight

7 lb/4.5 kg dry  
12 lb/5.9 kg shipping

### Operating Temperature

32–100° F/0–38° C

### Humidity

15% to 80%, non-condensing

### Power Input Range

Auto-adjusting  
100–240VAC; 50/60Hz

### Power Consumption

30W typical

### 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 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, 40VDC max,  
40mA each  
+5VDC pins (2) (300mA 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  
+15VDC (300mA over-current protected)

### Mic/Line inputs 1-8

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

### Line Inputs 9-12

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

### Outputs 1-12

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

### Audio Performance

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

### Approvals

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

### 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 500ms

### Matrix Mixing Parameters

32x32 matrix  
12 analog in/out  
12 Expansion Bus in/out  
8 assignable processing blocks in/out

### 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

### 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

### Set-up Software

G-Ware™