



All-in-One Audio Solution

The combination of a 4- or 8-channel amplifier, 8-in x 8-out sophisticated matrix mixing, and DSP signal processing brings a new level of simplicity. Ashly's PEMA™ has the features that let Systems Integrators replace a rack of amplifiers and signal processing equipment with a single two-rack unit.

Systems designers can select either 125W or 250W output units that are a perfect fit for your project based on ceiling height, loudspeaker sensitivity and ceiling speaker density.

This application uses the pema4250.70, a 4 x 70W power amplifier with an 8 x 8 mic/line matrix mixer and DSP on all inputs and outputs. Processing blocks include Gain-Sharing Automatic Mixing, Automatic Feedback Suppression, Stereo-Summed-to-Mono, Ambient Noise Control, Equalization, High-, Low- and All-Pass Filters (HPF/LPF/APF), Delay, Compressor/Limiter, Gate, Ducking, Gain and Signal Generators (sine wave, white and pink noise).

The full Matrix Mixer with assignable routing allows any input to drive any or all amplifier outputs. Connected directly to the pema4250.70 inputs might be a stereo satellite input, stereo cable TV input, a CD player, a hand-held wired or wireless microphone, and paging mic (or input from a telephone line). Individual channel controls assure the microphone will not sound "boomy" or that the music has the bass "pumped up".

The internal matrix routes inputs to the applicable power amplifier outputs. Each output has dedicated eq and limiter protection applied. 250W-70V is available on each of the four (4) powered outputs. Reconfiguring rooms is easy due to PEMA Sub-Presets, which allow changes only to certain parts of the system, leaving other parts undisrupted (as would be with most mixer "preset" changes)."

Power Amplification w/ Mic Mixing & DSP

- **Eight Mic/Line Inputs**
 - Priority input on Channel 1
 - EQ / Compressor
- **Input Mix Matrix**
 - Automatic Feedback Suppression
 - Event Scheduling
 - Stereo summed to mono
 - Ambient Noise Control
 - Ducking
- **Four-Channel Power Amplifier**
 - EQ / Delay / Limiter
 - 250W / 70V per channel
 - Ethernet control is standard
 - Extensive protection circuitry
- **WR-5 Remote Control**
 - Mute Cascade Seating
 - Select input(s)
 - Adjust input levels
- **Remote Power On/Off**
 - Disable power switch

Intuitive Remote Control

A WR-5 wall remote in each room provides user adjustments for microphone and music playback levels. Another WR-5 wall remote located in a secure location provides selection of room configuration (pre-set). A WR-5 wall remote gives the operator limited level control of each input from floor.

This system can support wireless remote control via **Ashly Remote Apple iPad®** app by simply adding a WiFi router. (iPad not included.)

Dante®-Enabled System

Dante allows interconnection with a wide array of available Dante-compatible devices. This keeps the wiring requirements simple (all CAT5 or CAT6) and realizes the benefits of an all-digital signal path- free from noise, EM interference and ground loops. All this can run on a single dedicated or existing Ethernet network, using standard network hardware. Ashly's Dante I/O cards now supports Dante v4.0 which is compliant with AES67 standards and offers greater flexibility and compatibility when configuring systems utilizing various digital audio transmission protocols. Dante end-points work with PoE (Power Over Ethernet).