



All-in-One Audio Solution

Creating and controlling a court room or conference chamber sound system has now been simplified with Ashly's PEMA™ Series multi-channel power amplifier. PEMA has the features that let Systems Integrators replace a rack of equipment with a single two-rack unit.

This application uses the **PEMA 4125.70 4 x 70V power amplifier** with an 8 x 8 mic/line matrix mixer and DSP on all inputs and outputs. 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. 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.

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 (sinewave, white and pink noise).

The full Matrix Mixer with assignable routing allows any input to drive any or all amplifier outputs. Presets can be used to store and retrieve system configurations. Connected directly to the PEMA 4125.70 inputs are seven (7) wired podium microphones and a stereo wall input for aux sound sources (laptop computer, etc). Input eq and compressors are set specifically for the individual inputs. The internal matrix sums all inputs and routes them to the correct outputs and power amplifier channels. Each output has dedicated eq and limiter protection applied. 125W-70V is available on each powered output.

This design uses microphones with a push-to-mute button (for private discussion). AUX outputs are routed to a recorder and/or video broadcast. The audience microphone has a dedicated speaker.

All inputs except the audience mic are routed to this speaker. There are speakers over the council members and over the seating area (audience).

Power Amplification w/ Mic Mixing and DSP

- **Eight Mic/Line Inputs**
 - EQ / Compressor
- **Input Mix Matrix**
 - Gain-Sharing Automatic Mixing
 - Automatic Feedback Suppression
 - Priority Ducking for Judge
 - Fader control option (RD-8C)
 - AUX outputs for the court recorder and broadcast
- **PEMA Four Channel Power Amplifier**
 - Available as Low impedance (2/4/8 Ohms), 25/70 or 100V version to suit various installation types
 - EQ / Delay / Limiter
 - 250W / 70V per channel
 - Ethernet control is standard
 - Extensive protection circuitry
- **FR-8 Remote Input Control**
 - Select Room Combinations
 - Adjust input levels
- **Remote Power On/Off**
 - Disable power switch

Intuitive Remote Control

The clerk has level control of all inputs **FR-8 Network Remote**. AV playback can have boom/sizzle. Unattended microphone inputs are seamlessly mixed using gain-sharing automatic mixing.

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.