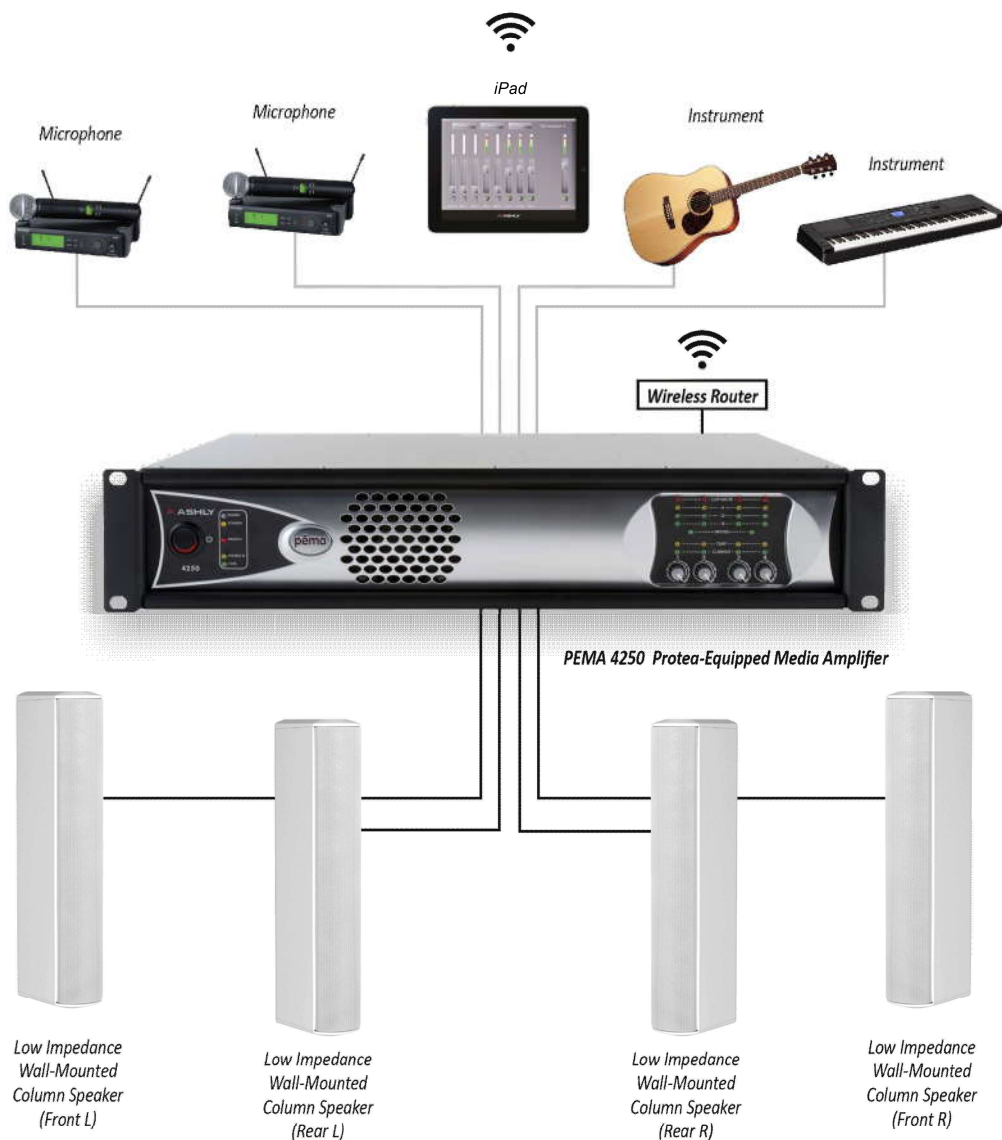




**INFINITY**  
AV & SECURITY

## Simple, 4-Input System (House of Worship, 150–300 Seats)



### All-in-One Audio Solution

Controlling a church service sound environment 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 amplifiers and signal processing equipment with a single two-rack unit.

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.

This application uses the Pema4250, a 4 channel power amplifier with an 8 input 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 (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.

Pema4250 has preamps/inputs adept at managing microphones and instruments. Input eq and compressors are set specifically for the individual inputs. The internal matrix sums inputs and routes them to the correct outputs. All outputs have dedicated eq and limiter protection applied.

### Power Amplification w/ Mic Mixing and DSP

- **Four Mic/Line Inputs**
  - EQ / Compressor
- **Input Mix Matrix**
  - EQ / Delay / Limiter
  - Feedback Suppressor
  - Ambient Noise Control
  - Ducking
- **Four Channel Power Amplifier**
  - EQ / Delay / Limiter
  - 250W / 70V per channel
  - Ethernet control is standard
  - Extensive protection circuitry
- **Remote Power On/Off**
  - Disable power switch

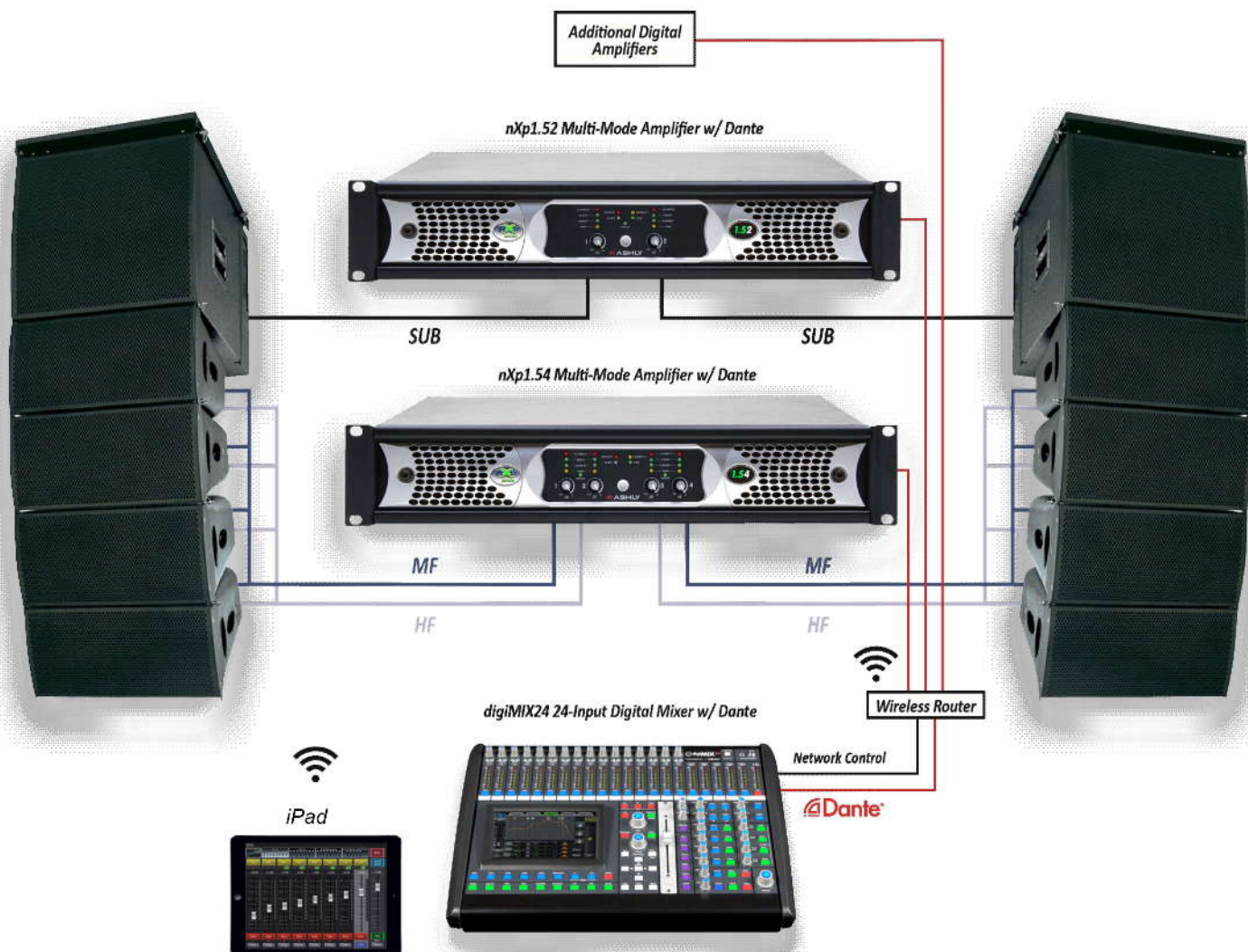
### Remote Control via iPad®

Design your own custom remote interface with **Ashly Remote** for iPad. (iPad not included.)

Each interface you design gives you custom control of your Ashly products—all from one place. Build your remote interface to fit a specific installation by adding components specific to your system with, faders with text labels, toggles, etc.

The following control functions are available, along with read-back labels for displaying status during use: Preset, Recall Gain, Attenuation Control, Mute Control, AB Source Select, Logic output, Meter, Amplifier Standby, to name a few.

## 3-Way Line Array System (House of Worship, 300-600 Seats)



### Ideal for Auditoriums and Worship Venues

This Line Array system is designed with a digiMIX24 mixing console and nXp Series power amplifiers. This application uses one digiMIX24 (w/ Dante-32) one nXp 1.52 (2 x 1500W), one nXp 1.54 (4 x 1500W), with a Dante® option (OPDC4).

### Live Digital Mixing Console

The digiMIX24 is a 24-Channel Digital Mixing Console with two performance modes: 24x8 AUX channels, or 24x4 AUX channels and 24x4 SUB-group channels with 6x DCA fader groups. Dante® network audio installed.

### DSP Processing and Power for Subs

The nXp1.52 is a two-channel amplifier and is configured as a subwoofer using the on-board DSP. Crossover, limiting and delay DSP are available for speaker system management. It can deliver up to 1250W into 8 Ohms, 1500W into 2 or 4 Ohms.

### DSP Processing and Power for Line Arrays

The nXp1.54 is a four-channel amplifier configured and drives the high-frequency and mid-frequency components. Crossover, limiting and delay DSP are available for speaker system management.

This system has four (4) array elements. Four 16 Ohm drivers would be a 4 Ohm load and four 8 Ohm drivers would be a 2 Ohm load.

The nXp 1.54 selectable outputs can be loaded to 2 or 4 Ohms and deliver up to 375W on each HF and MF component.

- Extensive protection circuitry
- Remote Power On/Off w/ Disable
- Euroblock Inputs/Outputs
- AUX Outputs
- FIR Filtering

### Digital Connectivity with Dante®

Audio transmitted over analog cables can be adversely affected by signal degradation due to electromagnetic interference, high-frequency attenuation, and voltage drop over long cable runs.

Using a stereo console with Dante, digital network output is connected to a router and distributed to the nXp power amplifiers. Digital audio provides several advantages over traditional analog audio distribution.

### Power Plus Intelligence

All controlled with our proprietary Protea™ Software Suite, 32-bit SHARC DSP processing is standard equipment for comprehensive audio processing in nX amplifiers. Extensive DSP includes:

- 48kHz / 96kHz sampling rates
- FIR Filtering
- Matrix Mixer
- Comp/Limiter
- Autoleveler
- Gate
- Feedback Suppressor
- EQ: 31-Band, Parametric, HP/LP,
- All Pass, Bandpass, FIR
- Crossover (2-way / 3-way / 4-way)
- Delay

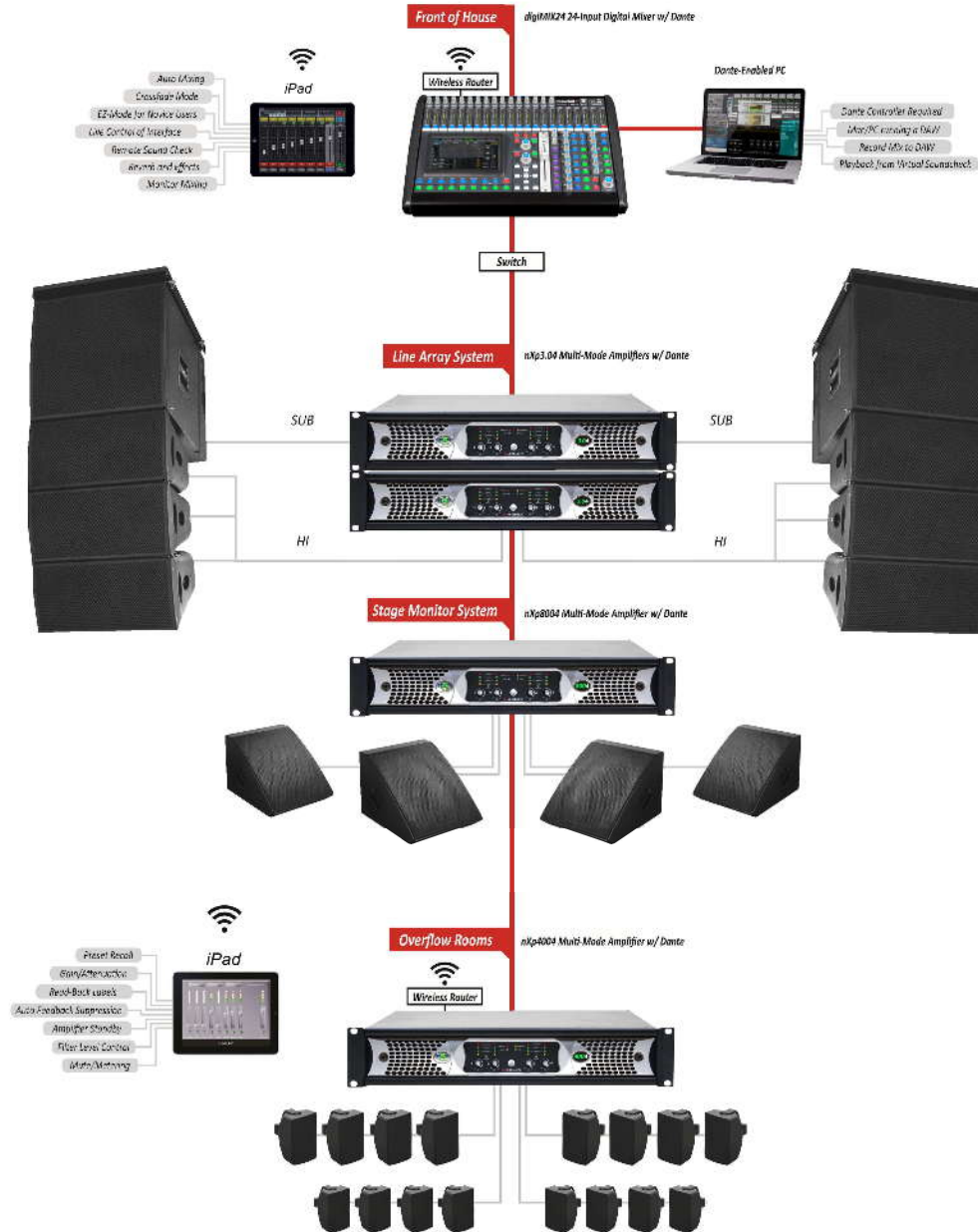
### digiMIX24 Remote App

Users can also have control of all amplifier inputs via the free Ashly Remote for iPad (shown) that allows control of digiMIX functions of the console (iPad not included. Requires additional wireless router. Not shown.)

### Additional notable features:

- Serial data control
- Aux preamp outputs
- Instant standby mode
- Preset recall
- Fault condition logic outputs
- Digital audio capability
- Network audio
- Built-in signal generator for test tone and noise-masking
- Precision load impedance monitoring on each amplifier channel output





## Ideal for Large Auditoriums and Worship Venues

This example shows a Dante-enabled solution for a multiple zones with global connectivity on various floors in a university or a church.

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, EMI interference and ground issues.

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).

## Live Digital Mixing Console

The digiMIX24 is a 24-Channel Digital Mixing Console with two performance modes: 24x8 AUX channels, or 24x4 AUX channels and 24x4 SUB-group channels with 6x DCA fader groups. With the Dante® network card installed, it can digitally connect to all Dante-equipped components.

### DSP Processing and Power for Subs

The nXp 3.04 is a four-channel amplifier and is configured for subs using the on-board DSP: EQ, Crossover, Limiting and delay DSP are available for speaker system management. It can deliver up to 4000W per sub into 8 Ohms in bridged mode.

### DSP Processing and Power for Line Arrays

The nXp 3.04 is a four-channel amplifier configured for driving the mid-frequency and high-frequency components of the line array. EQ, Crossover, limiting and delay DSP are available for speaker system management.

This system has four (3) array elements per side. Three 16 Ohm drivers would be a 6 Ohm load and 3 8 Ohm drivers would be a 3 Ohm load. The nXp 3.04 selectable outputs can be loaded down to 2 Ohms and can deliver up to 375W on each HF and MF component.

- Extensive protection circuitry
- Remote Power On/Off w/ Disable
- Euroblock Inputs/Outputs
- FIR Filtering

### Digital Connectivity with Dante®

Audio transmitted over analog cables can be adversely affected by signal degradation due to electromagnetic interference, high-frequency attenuation, and voltage drop over long cable runs.

Using a stereo console with Dante, digital network output is connected to a router and distributed to the nXp power amplifiers. Digital audio provides several advantages over traditional analog audio distribution. In this case, the stereo mains, 4 monitor (AUX) buses and four Overflow (AUX/Subs) can be transmitted over Dante using simple CAT5 or CAT6 wiring.

Additionally input sources such as mics and instrument may also be fed to the mixer using available Dante stage boxes or adapters.

### Power Plus Intelligence

All controlled with our proprietary Protea™ Software Suite, 32-bit SHARC DSP processing is standard equipment for comprehensive audio processing in nX amplifiers. Extensive DSP includes:

#### Protea DSP Includes:

- Matrix Mixer
- Comp/Limiter
- Auto-Leveler
- Auto-Mixing
- Feedback Suppressor
- Ambient Noise Control
- Ducker
- Gate
- Delay
- EQ: 31-Band, Parametric, HPF/LPF
- Crossover (2-way / 3-way / 4-way)



## Ashly Remote and digiMIX24 Remote Apps

Users can also have control of all amplifier inputs via the free Ashly Remote app for iPad and also control of digiMIX console using the Free digiMix app (iPad not included). Requires additional wireless router. Both apps are available for download from the Apple App Store.

### Additional notable features:

- Serial data control
- AUX processing outputs
- Instant standby mode
- Preset recall
- Fault condition logic outputs
- Digital audio capability
- Network audio
- Built-in signal generator for test tone and noise-masking
- Precision load impedance monitoring on each amplifier channel output