Audio System Requirements

1. 6 combinable rooms, with 2 mic and 2 line inputs per room.
2. Combinable audio-mixing of each room's microphones.
3. 8 BGM sources selectable in all areas.
4. Source selection using wall panel controllers located in each room.
5. Inputs and outputs for rooms A and B must be connected using Dante™ network.
6. Support for mobile device control of source selection, volume control and combining for all rooms.
7. Audio system "MUTE ALL" function triggered from a fire/emergency alarm system.
8. Comprehensive loudspeaker management including EQ, high and low pass 48dB/octave filters and comp/limiting.

Symetrix Components

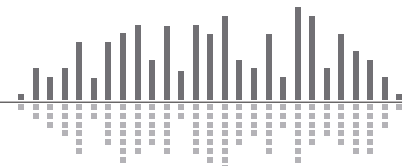| Qty	Description	Notes
1	Prism 16x16	16 mic/line in, 16 line out DSP, 64x64 Dante (uses Dante network for expansion).
1	xIn12	12 channel analog input expander. (uses Dante network to link to DSP).
2	xIO 4x4	4 mic/line in, 4 line out analog expander (uses Dante network to link to DSP).
6	ARC-3	Capacitive touch wall panel controller with graphic display.
1	ARC-PSe	Rack mount wall panel power supply for ARC's.
1	ARC-WEB	Control interface running on a mobile or desktop device to control audio via an embedded web server running on the Prism 16x16.
1	Composer	Windows software - design & configure system.

Solution Overview

Requirement	Notes
Room Combining, BGM selection and volume control	An ARC-3 wall panel is installed in each of the six 6 rooms.
Rooms A and B connected using Dante network	An xIO 4x4 is used for the inputs and outputs of rooms A and B, connected via Dante network.
Mobile BYOD browser-based control of music source and volume in each room	The Prism embedded ARC-Web server is programmed from Composer to control source selection and volume in parallel with the ARC-3 wall panels in each room.
Comprehensive Loudspeaker Management	The Prism is programmed using Composer to include Speaker Manager and Compressor Modules.
Fire/emergency audio MUTE ALL	Third-party alarm system logic wired to a Prism external control input triggers a "MUTE ALL" state.

Digital Signal Processor - **Prism 16x16**

Prism 16x16

- 16x16 analog I/O with 64x64 Dante and powerful Symetrix DSP processing.
- Industry leading analog mic-pre and A/D/D/A performance, 48 volt phantom mic power.
- Configured using award winning Composer software. Controlled via ARC wall panels, ARC-WEB browser, 3rd party touchscreens.
- Dante™ Network Audio Protocol. No audible latency. Uses standard IT infrastructure.
- Front panel OLED displays configuration and metering. Embedded web server enables remote metering and diagnostics.
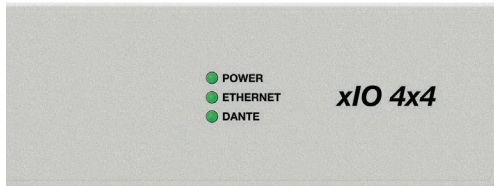
Input Dante™ Expander - **xIn12**

- 12 channel analog input expander with a 12 channel Dante network audio output.

- Programmed using Composer.

- Industry leading audio performance specifications.

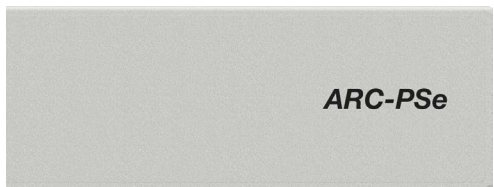## Input and Output Dante Expander - **xIO 4x4**

- 4 channel analog input and 4 channel analog output expander with a 4 channel Dante network audio output and input.

- Programmed using Composer

- ½ rack form factor. PoE injector included. Options for surface or rack mounting.

Menu-driven Wall Panel Controller - **ARC-3**

- 32 menus, each with up to 32 items for controlling basic audio functions or complex logic-based events including volume, preset and source selection, room combining and more.
- Bright, crisp 256x64 pixel OLED display is graphic and multi-lingual capable.
- Capacitive touch user interface with LED side lighting provides instant operational feedback.

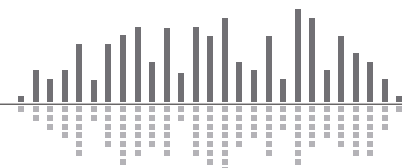## ARC Wall Panel Power Supply - **ARC-PSe**

- Versatile half-rack power supply distributes power and data to multiple ARC wall panels via eight RJ-45 connectors over long distances.
- Connects directly to Edge, Radius, Prism and Jupiter DSP's using standard CAT5/6 cables.
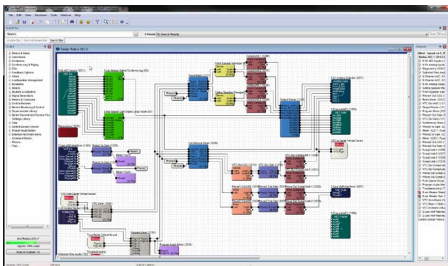- Supports flexible 'star' configuration, 'daisy-chain' or a hybrid of the two.

Browser Based Mobile or Desktop Control - **ARC-WEB**

- Use a web browser running on a mobile and desktop device to control audio via embedded web servers running on Edge, Radius, Prism and Jupiter DSP's.

- End users control volume, mute, source selection and other parameters of their sound systems using favorite browsers.

- Flexible and secure. Up to four users can be assigned a different ARC-WEB with unique privileges and security.

- Installation is simple. Just connect the DSP to a low cost wireless access point.

- Using a mobile device, management can roam between zones to adjust source and volume, matching the functionality of the local ARC-3 wall panels in each zone.
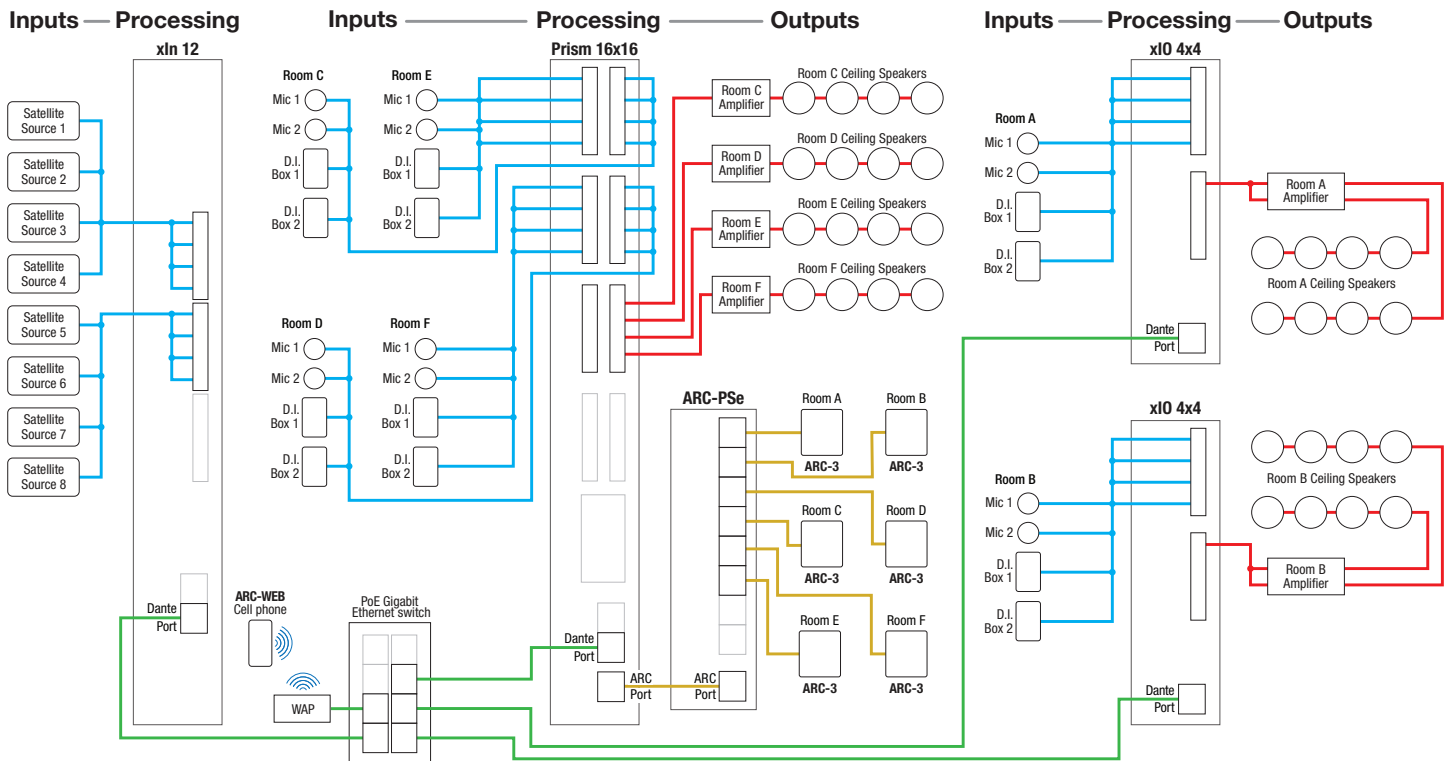
Windows Design Program - **Composer**

- Composer is an award winning CAD program used to create site file designs perfectly suited to each and every application.
- Management of all aspects of audio routing, processing, mixing, user control and security for Edge, Radius, and Prism series DSP's and accessories.
- Native configuration and control of select Dante third-party endpoints.
- Over 600 DSP modules and dozens of control and logic modules.

System Hookup Diagram

Downloads and Links

Banquet Hall - Composer Site File
Banquet Hall - System Hookup Diagram
Questions? / Comments? - Symetrix Tech Support