

## Audio System Requirements

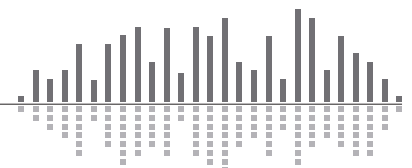
1. Multi zone speech reinforcement routing and control.
2. Concert quality audio and multimedia capabilities for special events and recording.
3. Calendar controlled automatic preset selection of source and routing for prescheduled events.
4. Microphone automixing with priority selection.
5. Speech processing for each microphone including EQ and automatic feedback elimination.
6. Comprehensive loudspeaker management in all congregation zones to include EQ, limiting, high and low pass filters, delay and mute.
7. Remote wall mount volume control for balcony, foyer and exterior.
8. Tablet-based control system with real time adjustment and mixing capabilities.
9. Zone volume control from multimedia/rack room.
10. Integration with current Crestron control system.

## Symetrix Components

Qty	Description	Notes
2	Prism 12x12	12 mic/line in, 12 line out DSP (uses Dante network for expansion).
1	Modular ARC	ARC-K1e + (2) ARC-EX4e's – Select and set volume control from rack room.
3	ARC-K1e	Remote wall mount volume control for balcony, foyer and exterior.
1	Composer	Windows software - design & configure system.
1	SymVue	Windows runtime control interface software - generated from Composer.

## Solution Overview

Requirement	Notes
Speech reinforcement & processing	Each microphone connected to a Prism 12x12 will be routed through a high pass filter, EQ and feedback fighter. Each input can be routed to any output via a matrix mixer.
Multimedia Input	CD and DVD players are connected to the line inputs of a Prism 12x12. Audio is then processed via an AGC (Auto Gain Control) module to ensure multimedia signal levels are consistent regardless of program material.
Prescheduled events	Input and output routing options for prescheduled events are stored in the Composer site file as presets. Composer's event scheduler recalls these presets at the programmed date and time. The presets include: morning service, evening mass, prayer and choir rehearsal.
Automixing with priority	Each group of inputs are routed to gain-sharing automixers. Each automixer has individual channel faders and a master. Each individual channel can be set to either manual or auto mix mode. Channels also have priority level adjustments. Input groups include: service microphones (ambo, altar, lectern and wireless), multimedia (CD and DVD) and choir (director, solo, choir, piano, guitar, bass and drums). The automixer level and function are all adjustable via SymVue remote control.
Loudspeaker management	Each Prism 12x12 is programmed using Composer to include speaker manager and limiter modules for every output.
Wall mount volume control	(1) ARC-K1e will be installed in the balcony to provide volume control of balcony. (2) ARC-K1e's will be installed in the foyer to provide volume control of foyer and exterior.



## Solution Overview - continued

Requirement	Notes
Tablet based control system	Composer generated SymVue file for use with Windows-based tablet for remote control.
Volume control from rack room	Modular ARC (ARC-K1e + (2) ARC-EX4e) is installed into the equipment rack providing individual volume control of each output zone.
Crestron Integration	Prism 12x12 uses a UDP connection to the Crestron control system.

## Digital Signal Processor - Prism 12x12



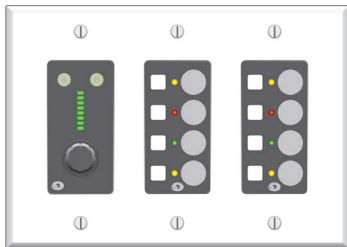
- 12x12 analog I/O with 64x64 Dante™ and Powerful Symetrix DSP processing.
- Industry leading analog mic-pre and A/D/D/A performance, 48 volt phantom mic power.
- Configured using award winning Composer software. Controlled via ARC wall panels, ARC-WEB browser and 3rd party touch-screens.
- Dante™ Network Audio Protocol. No audible latency. Uses standard IT infrastructure.
- Front panel OLED displays configuration and metering. Embedded web server enables remote metering and diagnostics.

## Wall Mounted Volume Control - ARC-K1e

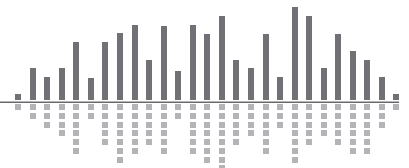


- Single volume knob with two encoders. Can be used to control one or two volume faders.
- An 8-segment LED ladder shows the volume level.
- Power and signal arrive and depart via CAT-5/6.
- Supports “idle” mode for light-sensitive environments.

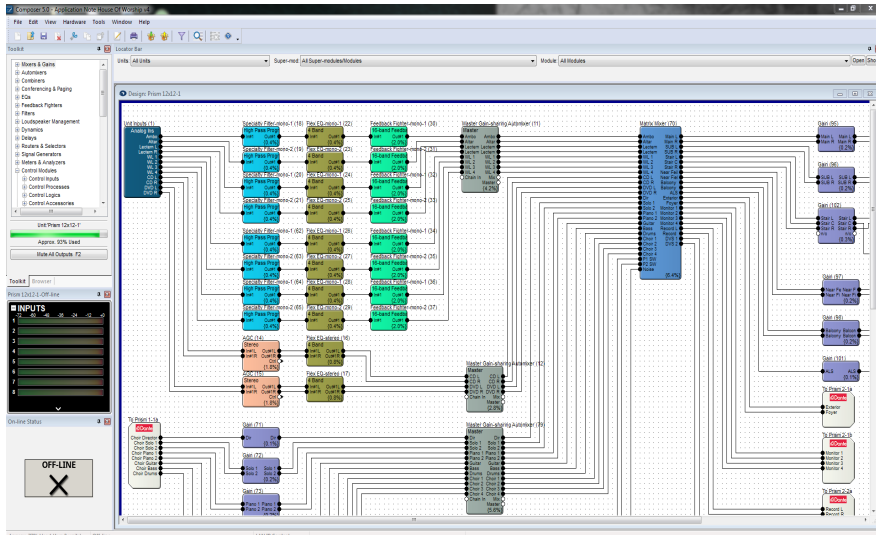
## Rack Mount Volume Control: - Modular ARC (ARC-K1e + (2) ARC-EX4e)



- Single volume knob with two encoders.
- An 8-segment LED ladder shows the volume level.
- Power and signal arrive and depart via CAT-5/6.
- Supports “idle” mode for light-sensitive environments.
- Modular user wall panel with four buttons that are programmable as momentary, latched or radio.
- Well-suited for control of mute, source selection, and presets.
- Tri-color LEDs provide user feedback. LEDs and buttons may be linked or programmed independently.
- Select and set mode allows each button to select a different volume fader to be controlled by the knob encoder.

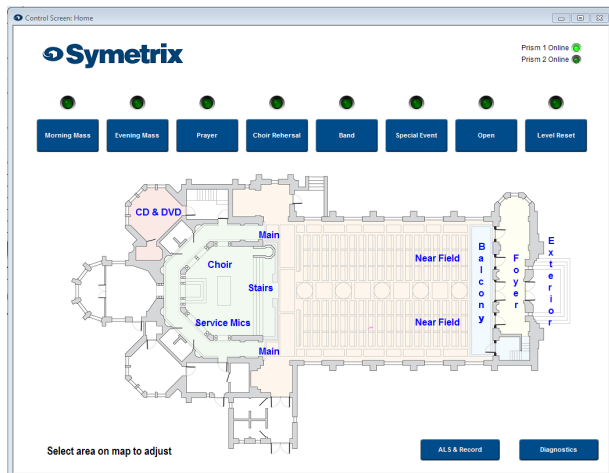


## Windows CAD Design Program - Composer

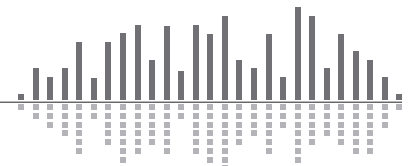
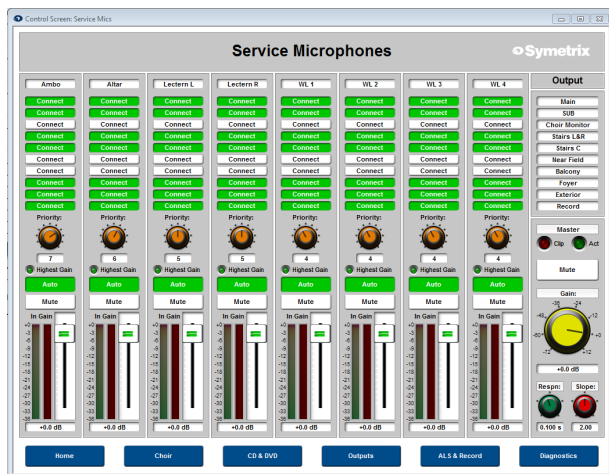


- Composer is an award winning CAD program used to create site file designs perfectly suited to each and every application.
- Management of all aspects of audio routing, processing, mixing, user control and security for Edge, Radius, and Prism series DSP's and accessories.
- Native configuration and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

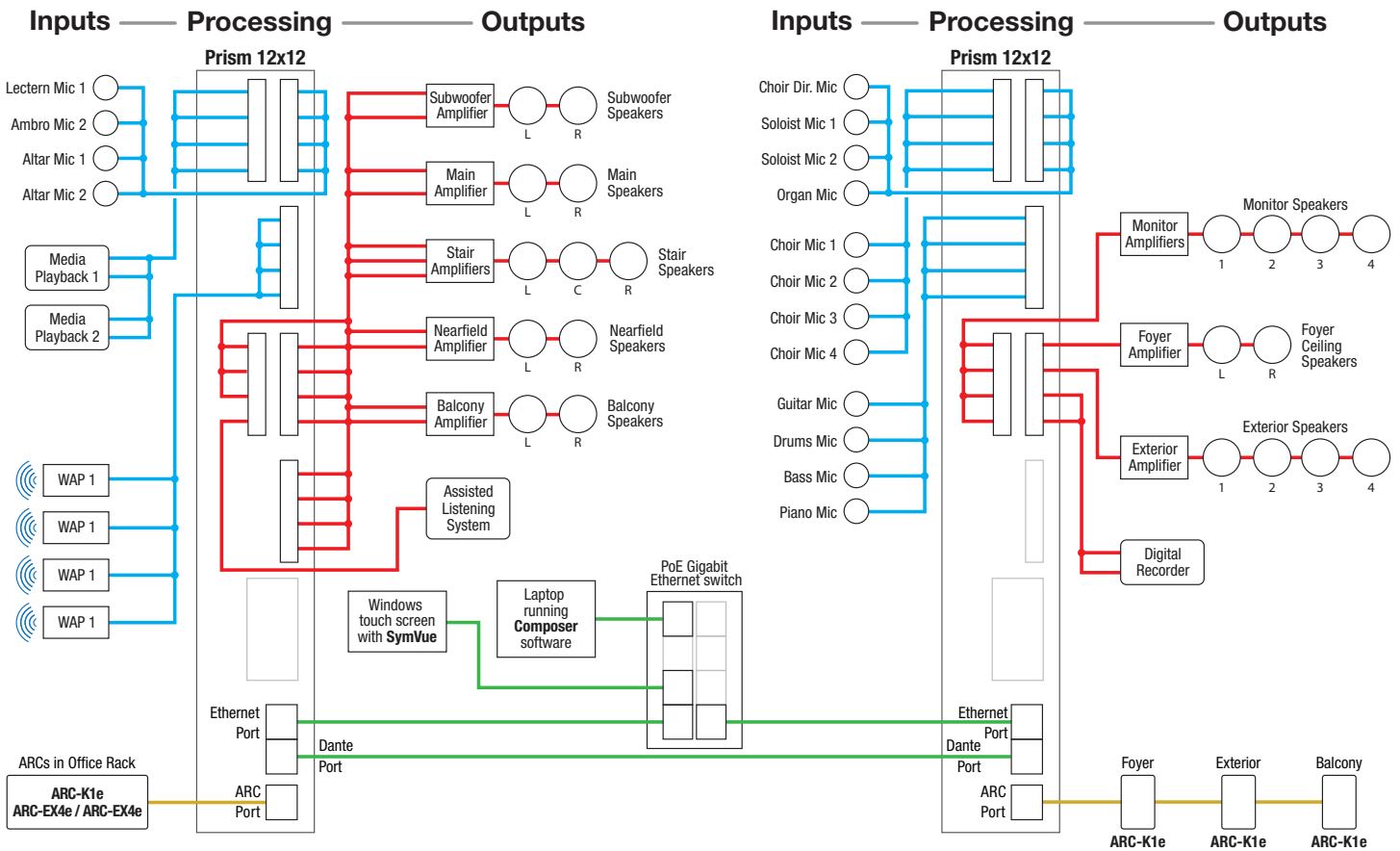
## Windows Control Program - SymVue



- Easily generated using Composer, SymVue control screens are used for control of source selection, volume and mute in each zone, as well as volume and mute adjustment for service mics.
- LED indicators are used as a visual indication of level for each zone and page mic.
- A SymVue Logout button, Exit button and Preset button for system reset is integrated into this control screen. A SymVue Online LED indicates live connection to the system.



## System Hookup Diagram



## Downloads and Links

- [House of Worship - Composer Site File](#)
- [House of Worship - SymVue Windows File](#)
- [House of Worship - System Hookup Diagram](#)
- [Questions? / Comments? - Symetrix Tech Support](#)

