

Audio System Requirements

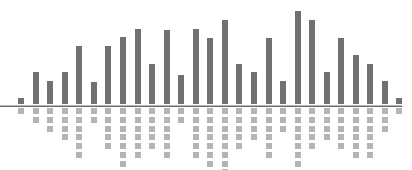
1. Operating room, control room and external VTC require echo-free audio conferencing among them.
2. 2 exclusive modes of hands-free conferencing while in the operating room: “Headset mode”, or “Room mic mode”.
3. 2 gooseneck mics and 2 boundary mics in control room connect to DSP via Dante™ network.
4. Non-verbal signaling system between both rooms using a push-button wall panel in each area.
5. Volume control, preset and privacy mute triggering within both areas.
6. Secured comprehensive system control from within the control room.
7. Automatic ducking of operating room music when the operator from the control room speaks.

Symetrix Components

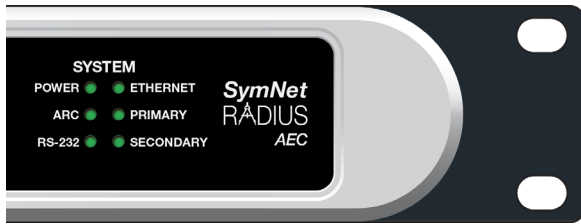
Qty	Description	Notes
1	Radius AEC	DSP with 8 dedicated AEC channels, 4 Line inputs, 8 outputs, and expansion card slot.
1	ARC-3	Capacitive touch wall panel controller with graphic display.
1	ARC-SW4e	Programmable 4 push-button wall panel.
1	ARC-K1e	Wall panel with 2 volume controls in the space of 1.
1	ARC-EX4e	4 push-button wall panel combined with ARC-K1e to create Modular ARC.
1	Composer	Windows software - design & configure all items.
1	SymVue	Windows runtime control interface software - generated from Composer.

Solution Overview

Requirement	Notes
Echo-free conferencing among all areas	The Radius AEC has dedicated DSP processing reserved exclusively for echo cancellation.
The ability to switch between “headset mode” or “room mic mode” in the operating room	Two presets were created in the main routing matrix in Composer. These are easily triggered via the ARC-3 in the operating room and the SymVue panel in the control room.
4 Dante-enabled mics in the control room	Audio-Technica ATND971 and ATND8677 Dante-enabled mics are natively supported in Composer, allowing for seamless integration.
Non-verbal signaling system	A push-button wall controller in each room is used to trigger logic modules which control the LEDs in both ARCs, as well as the SymVue control screen.
Control of volume, preset-triggering, and privacy mutes in the system	Accomplished with an ARC-3 in the operating room and an ARC-K1e with SymVue in the control room. All programmed using Composer.
Secured control of the entire system from within the control room	A password-protected SymVue control screen generated within Composer.
Automatic ducking of operating room music	The Radius AEC programmed from Composer with a Ducker module in-line with the operating room music.



Digital Signal Processor - Radius AEC



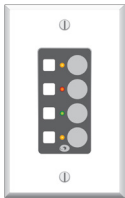
- Dedicated AEC processing, with 8 AEC inputs, 3 aux inputs, 8 outputs.
- Universal DSP building block with a 64x64 channel Dante network audio port.
- Configurable input/output option card slot reduces total system cost.
- Add an Analog Telephone Interface card, or a VoIP card for an all-in-one conferencing solution.
- Industry-leading audio performance specifications.

Menu-driven Wall Panel Controller - ARC-3



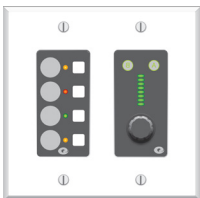
- 32 menus, each with up to 32 items for controlling basic audio functions or complex logic-based events including volume, preset and source selection, room combining and more.
- Bright, crisp 256x64 pixel OLED display is graphic and multi-lingual capable.
- Capacitive touch user interface with LED side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

Push-button Wall Panel Controller - ARC-SW4e



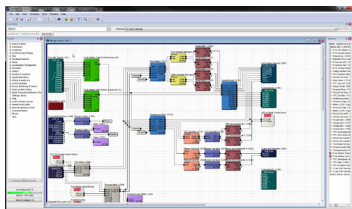
- Modular user wall panel with four buttons that are programmed as momentary, latched or radio.
- Well-suited for control of mute, source selection and presets.
- Tri-color LEDs provide user feedback. LEDs and buttons may be linked or programmed independently.

Push-button Wall Panel Controller - Modular ARC (ARC-K1e + ARC-EX4e)

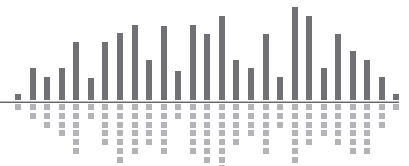


- Single volume knob with two encoders.
- An 8-segment LED ladder shows the volume level.
- Power and signal arrive and depart via CAT-5/6.
- Supports "idle" mode for light-sensitive environments.
- Modular user wall panel with four push-buttons that are programmable as momentary, latched or radio.
- 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.

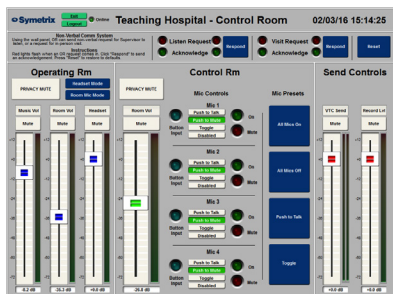
Windows Design Program - Composer



- 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.

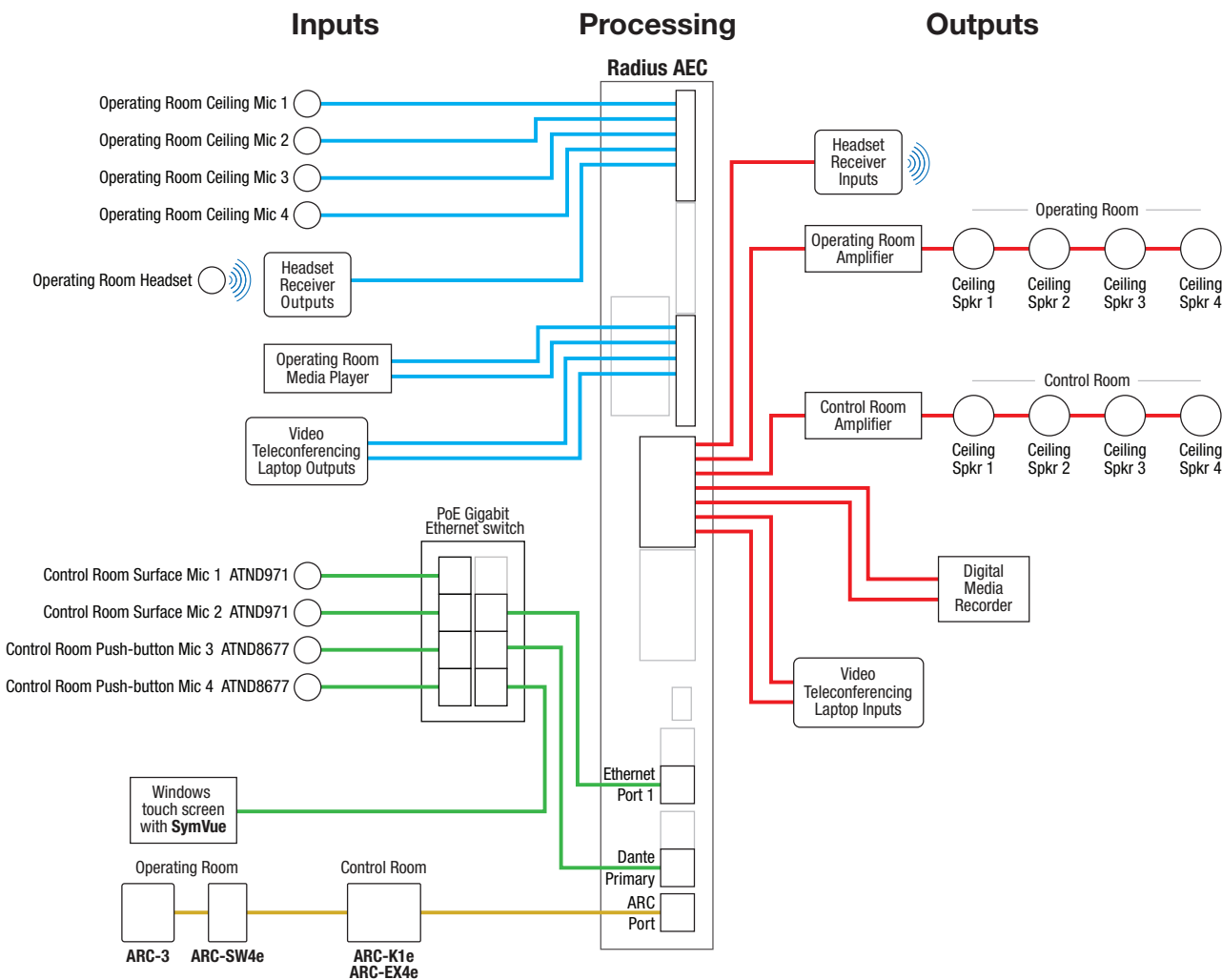


Windows Control Program - SymVue



- Easily generated using Composer, a SymVue control screen is used to control audio levels, engage privacy mutes and trigger presets in both the operating room and control room.
- LEDs and buttons are used to control the non-verbal communication system between both areas.
- Real-time meters are used as a visual indication of level for each fader.
- 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

- Hospital Operating Theater - [Composer file](#)
- Hospital Operating Theater - [SymVue file](#)
- Hospital Operating Theater - [System Hookup Diagram](#)
- Questions? / Comments? - [Symetrix Tech Support](#)

