

The world class solution for delivering and processing sound in virtually any commercial application including convention centers, airports, nightclubs, shopping malls, corporate boardrooms, classrooms, and worship environments ...just to name a few!

Advanced Digital Signal Processing is at the core of SymNet. Our solutions simplify system design, deliver superb fidelity, and add value for designers, integrators and end users. Only from the engineers at Symetrix.

**Only SymNet.**



**Engineered by Symetrix**



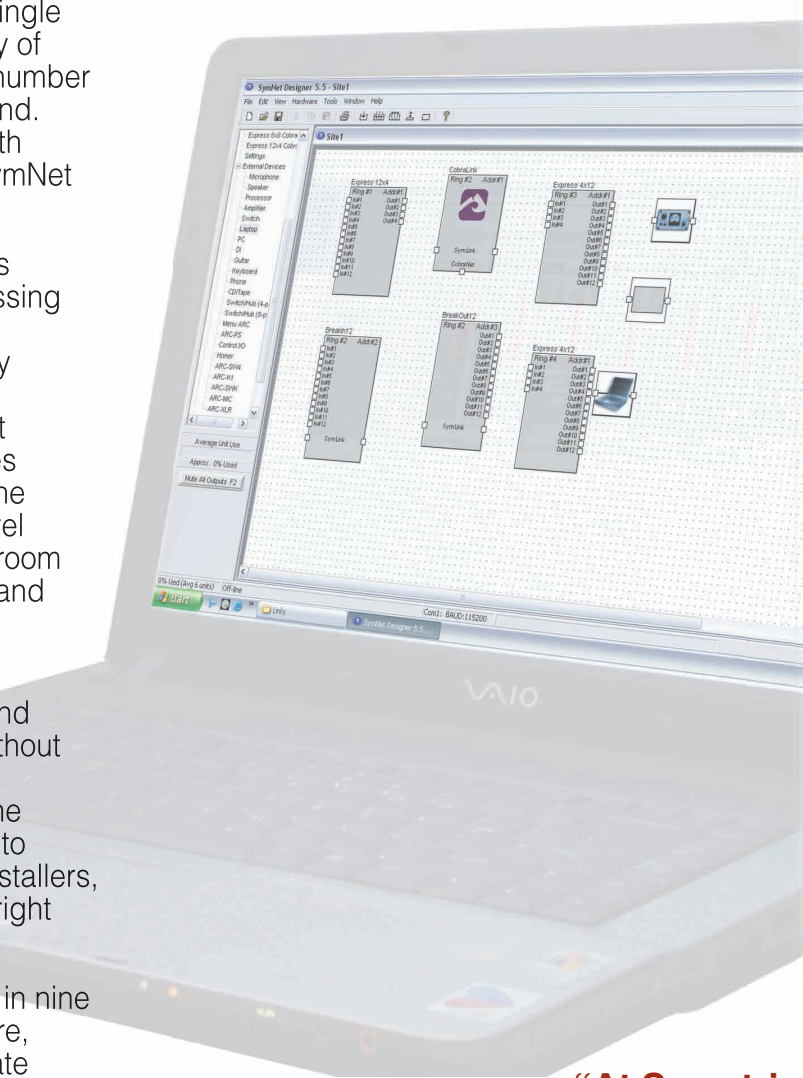
This prospectus presents a collection of SymNet success stories that illustrate some of the many applications of our integrated digital signal processing (DSP) solution.

Throughout this document you'll find customer comments that include words like 'flexible', 'powerful', and 'intuitive' amplifying the fact that a single product can work so well in a variety of circumstances. You'll also notice a number of positive comments about the sound. First rate audio quality combined with comprehensive functionality make SymNet best of breed.

SymNet can perform many functions simultaneously. It is an audio processing platform that can expand – both in system size and capability. Currently those capabilities include all the necessary processing functions that take place between the microphones and the speakers. These include tone control for microphones and line-level sources, dynamics control, mixing, room equalization, feedback elimination, and speaker protection – among others.

At Symetrix, meticulous design and aggressive technical support go hand in hand. We understand that one without the other is only half the solution. In order to maintain our standing as the professional's choice our mission is to understand the needs of dealers, installers, and consultants, and to deliver the right solution at the right price.

So please read on and see SymNet in nine different applications. There are more, of course, but these nine demonstrate SymNet's versatility and capabilities in the real world.



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**“At Symetrix, meticulous design and aggressive technical support go hand in hand.”**

*Dane Butcher, President, Symetrix, Inc.*

# Sound Reinforcement

▶ House of Worship • Theater • Auditorium • Government Chambers

The purpose of any sound reinforcement system in a worship environment is to deliver the desired content, the message, in such a way that everyone in the congregation can hear and understand it. While there are many factors involved in achieving this goal, proper signal processing is key.

**The Choice.** SymNet was chosen for Our Lady of Guadalupe Parish in Sacramento, CA, by local integrator Art of Sound. In this, as in any 700-seat venue, the problem of delivering the spoken word in such a way that it can be readily understood – what audio professionals call “intelligibility” – was the largest single challenge. SymNet’s diverse collection of audio tools allowed system designer Alonso Camacho to optimize the vocal reinforcement in the room, offset acoustical factors that would impair system performance, and maintain aesthetic considerations in speaker placement.



SymNet sales and technical support staff work on your behalf during planning, installation and throughout the life of the product.

**It’s Automatic.** “The unit’s automatic mixing feature, combined with additional signal processing for microphones and line arrays, gave the church the ability to easily manage and control the sound system. This was an important consideration given the varied demands,” says Camacho.

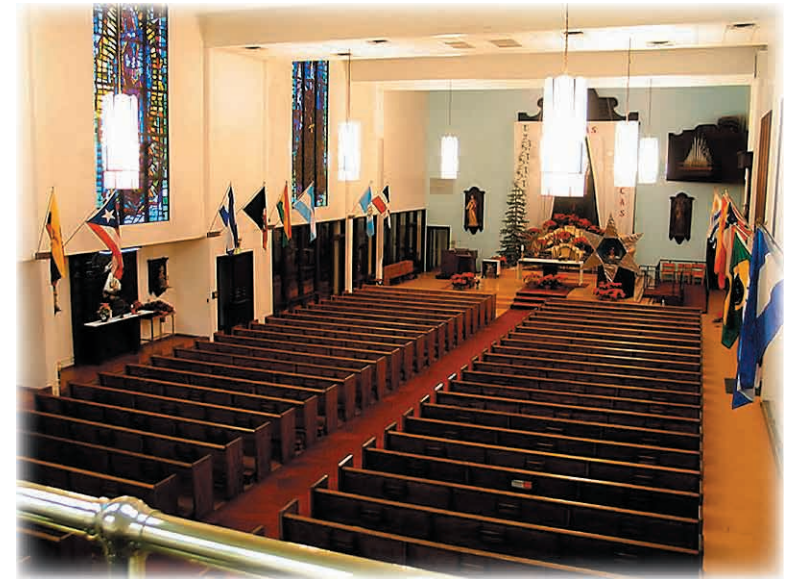
**Control.** To answer the varied needs of different services throughout the week, the Symetrix Adaptive Remote Control (ARC-2) was utilized as a straightforward user interface. Using this control, settings for weekday masses, weekend masses, and live radio broadcasts are instantly recallable at the touch of a button. In addition, volume control for the narthex and transept areas were incorporated into the ARC.

The proof is in the performance. “Many congregation members have noted how much easier it is to understand the message since the improvements in the sound system were made” stated Camacho.

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The ARC-2 offers complete system control in a simple, easy to operate package.



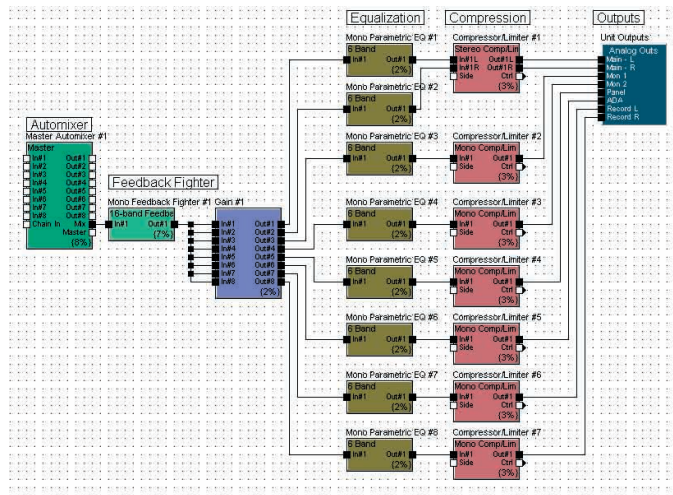
Proper control of sound in a room like this is assured through the use of multiple speakers, each with individual control over volume and equalization.

Item	Qty	Ext. Price
8x8 DSP	1	\$3,999
ARC-2	1	\$ 359
<b>TOTAL</b>		<b>\$ 4,358</b>

(All prices MSRP in US Dollars)

### Bottom Line Benefits:

- Microphone preamplification and tone control
- Automatic mic mixing
- Room equalization and feedback elimination
- Routing, distribution, and speaker management
- Instant control of system presets via ARC wall panel



Along with input processing for equalization and auto mixing of microphones and other sources, SymNet includes matrix mixing and comprehensive speaker management of stereo house speakers, monitor speakers, an assisted listening system, a broadcast output, and a stereo recorder. Each independent signal path includes filtering, equalization, and limiting. Monitor mixes also include feedback fighting modules.

**“Many congregation members have noted how much easier it is to understand the message since the improvements in the sound system were made.”**

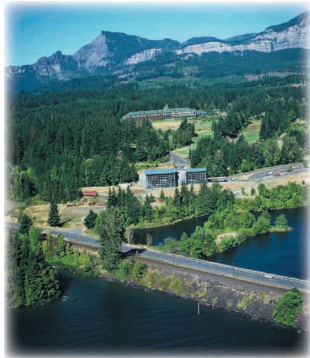
*Alonso Camacho, Art of Sound*

# A/V Presentation & Conferencing

▶ Hotel • Conference Center • Boardroom • Courtroom

When the Dolce Skamania Lodge hired Delta A/V Systems, Inc. to design a new A/V system as part of an extensive facility addition and remodeling effort the objective was to equip the hotel's meeting spaces with flexible audio/visual systems that allowed clients to leverage presentation technology rather than manage it. The Milwaukie, OR-based firm chose SymNet when outfitting the three brand new meeting rooms and two redesigned large ballrooms.

**New Users.** "One of the major challenges in this job, is that these meeting facilities have new users all the time," said Delta A/V president Mark Gottwig. "So it was imperative that we design a system that's both user-friendly and highly intuitive. Our intent was to make it so that a presenter could easily operate the system from a lectern in a room or the stage of the ballroom with very little instruction. This allows users to focus on their presentations and not on the technology that makes it all happen."

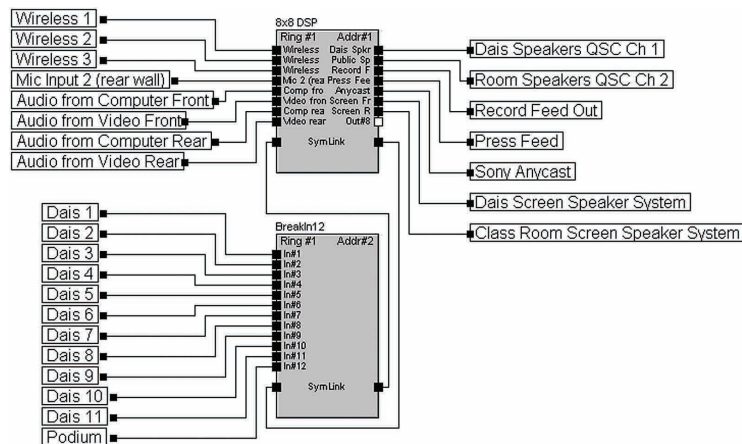


The Dolce Skamania Lodge offers views, air, and ambiance as only an out-of-the-way resort can.

**How it Flows.** Multiple microphones from the meeting rooms are fed into SymNet where they are routed through an automatic mic mixer before being matrixed for delivery to different zones. "The front end of the mixer automatically controls which microphones turn on and when, while it manages the number of mics allowed on at any one time," said Jeff Overbo, Delta project engineer. "This helps control unwanted ambient noise and stray audio that can be picked up by mics in an un-managed system."

**Total Recall.** In the ballroom areas SymNet manages both the speech reinforcement and program audio. "Routing of the mic inputs to the speaker zone outputs is pre-set in the SymNet software matrix," Overbo said. "The matrix may be changed by the setup staff to handle different room configurations through the recalling of presets. The destinations, also controlled by the system, include all ceiling speaker zones, wall-mounted press feeds and the assisted listening system. Throughout the system, clients and staff turn to simple touch panels to convey commands to SymNet from an AMX Axcnt III control system."

[www.SymNetAudio.com](http://www.SymNetAudio.com)



SymNet offers different types of modular hardware that can be linked together to build large matrix processing systems. This is made possible by the SymLink bus, a proprietary high speed interconnect that facilitates routing throughout the system. Channel count is not an obstacle thanks to this modular philosophy.



State-of-the-art A/V capabilities are seamlessly integrated into the comfortable facilities and natural surroundings.

### ***Bottom Line Benefits:***

- Voice reinforcement
- A/V program reinforcement
- Automatic mixing and matrixing
- Speaker management and delay

<i>Item</i>	<i>Qty</i>	<i>Ext. Price</i>
8x8 DSP	5	\$19,995
<b><u>TOTAL</u></b>		<b><u>\$19,995</u></b>

(All prices MSRP in US Dollars)

**"It was imperative that we deliver a system that's both user-friendly and highly intuitive."**

*Mark Gottwig, President, Delta A/V Systems, Inc.*

# Background Music

▶ Shopping Mall • Hotel • Casino • Restaurant

Savvy mall operators use background music in common areas and retail spaces of shopping centers as an effective tool for enhancing the customer experience. The background music reinforcement system also provides an excellent vehicle for advertising messages interspersed with music. SymNet was chosen for this scenario in a number of malls around New England.

**Constant Input.** Continuous background music and periodic commercial spots were delivered over separate telephone lines and brought into SymNet as line-level inputs. Within the unit they were both lightly equalized and mixed, with the music passing through a ducking module prior to input to the mixer. The ducker quickly reduced the background music level when a voice announcement played, increasing the impact of the message by temporarily muting the music. At the conclusion of the spot, the music would smoothly ramp back up, continuing playback until the next scheduled ad insertion.

**Multiple Zones.** Multiple zones such as upper and lower shopping floors, and the food court have simultaneous access to both sources, but are equipped with independent output processing to optimize the sound in each area. Zone outputs are individually filtered and equalized to compensate for less than ideal acoustic conditions.



**Michael Worona**  
SymNet Product Specialist

**The Test of Time.** SymNet's Event Manager, a scheduler within the SymNet Designer software, helped consistently maintain optimal program levels during the day. "The Event Manager automatically changed volume levels at specific times throughout the day," stated Mike Worona, SymNet Product Specialist. "The mall operators understood their customer traffic patterns through the week. Based on these patterns, a series of volume level presets was created and recalled four times each weekday, and three times a day on weekends." Each night the music levels were radically lowered at 9:30 pm to reduce echoing of music through the empty mall. In the morning levels would assume their predetermined starting point for the enjoyment of mall walkers and early-bird shoppers.

**Repeat Performance.** The portability of designs was an additional benefit of SymNet. The original mall site file, including timed presets, could then be easily loaded into other SymNet units. This greatly simplified the task of programming for subsequent mall systems, and allowed the integrator more time to concentrate on optimizing the system for the highest quality sound.

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Event Manager			
Operation	Day	Time	Special Days
Change to Preset #1 'M-F 9:30a - 12:30p'	M-F	9:30 am	None
Change to Preset #2 'M-F 12:30p - 3:00p'	M-F	11:45 am	None
Change to Preset #3 'M-F 3:00p - 5:00p'	M-F	3:00 pm	None
Change to Preset #4 'M-F 5:00p ->'	M-F	5:00 pm	None
Change to Preset #5 'Sa-Su 9:45a - 1:00p'	Sa, Su	9:45 am	None
Change to Preset #6 'Sa-Su 1:00p - 4:00p'	M-F	1:00 pm	None
Change to Preset #7 'Sa-Su 4:00p ->'	Sa, Su	4:00 pm	None
Change to Preset #8 'Daily 9:35p'	Daily	9:34 pm	None

The Event Manager allows scheduling of presets on a daily, weekly, or calendar day basis. System parameters such as volume and routing choices are assigned to any of the 1000 presets available in SymNet Designer.



Background music distribution enhances the customer experience and serves as a perfect vehicle for in-store advertising.

### **Bottom Line Benefits:**

- Background music distribution
- Commercial message distribution
- Mixing the ad spots for maximum impact
- Timed level changes each day

<u>Item</u>	<u>Qty.</u>	<u>Ext. Price</u>
8x8 DSP	1	\$3,999
<b><u>TOTAL</u></b>		<b><u>\$ 3,999</u></b>

(All prices MSRP in US Dollars)

**“The Event Manager automatically changed volume levels at specific times throughout the day.”**

*Michael Worona, SymNet Product Specialist*

# Facility Routing

► Convention Center • Office Complex • Municipal Building

At 81,000 square feet, The Three Rivers Convention Center in Kennewick, WA presented a formidable challenge for the Michael R. Yantis Associates design firm. The audio needs of the facility were vast and sophisticated. Because of its modular architecture, CobraNet compatibility, and cost-effective control options, SymNet was able to fulfill those needs.

**Modular Design.** The three main areas of the convention floor are each divisible into four smaller spaces. In rack rooms corresponding to the footprint of the hall, SymNet DSP and BreakIn12 units were installed as three networked groups, called rings. Each ring would handle a third of the input and output processing load for the meeting areas. The three SymNet rings were then interconnected via CobraNet, the industry standard protocol for audio over Ethernet. This connection enabled full matrix capability within the hall.

**System Control.** Overall system control was managed from a central computer capable of accessing any and all SymNet units in the facility. Each meeting room included a SymNet Adaptive Remote Control (ARC) for user control. The ARCs provide a broad range of remote control functions, including audio source selection, zone volume control, and room combining capabilities, in a straightforward user interface.



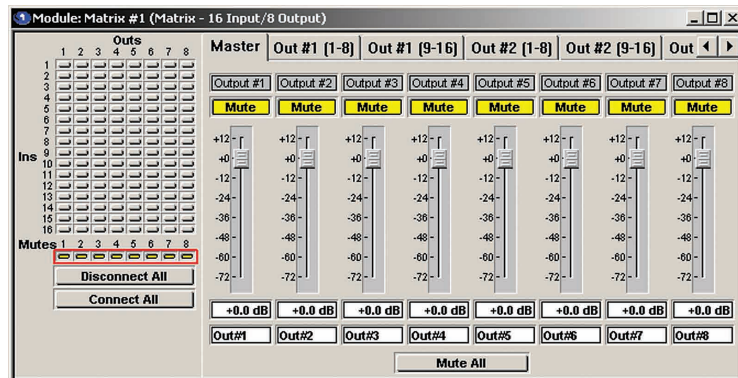
Thousands of SymNet systems have been installed world wide backed by 'legendary' customer support.

**Complexity.** The input and output demands were extreme. Microphone and A/V source inputs located in each meeting space comprised the largest block of inputs. Output routing was almost as extensive. Selected sources had to be delivered to speakers in each of the east and west meeting rooms, as well as the main ballroom, hallways, common areas, kitchen, office spaces, public entries, restrooms, and even the loading dock. Every area of the convention center had different needs and acoustical considerations

**One Page at a Time.** Equally important was the center's need for page announcements on to the convention floor. SymNet interfaced with a telephone paging system, and four dedicated push-button paging stations located in various parts of the building. Steve Goegebuer, senior AV systems consultant with Yantis said "SymNet was able to handle the paging system logic, something other control and processing systems would have difficulty with."

**Versatility.** Goegebuer continues, "The overall challenge was to distribute quality sound throughout a convention center that is zoned and user-configurable. We needed an overall audio control system with strong routing and processing capabilities that would allow individual room sound systems to be linked together or separated as needed. SymNet does a great job of handling that kind of traffic, completely in the digital realm."

[www.SymNetAudio.com](http://www.SymNetAudio.com)



SymNet Designer includes a variety of mixers including mono, stereo, auto-mixers, and matrix mixers. This allows integrators an enormous amount of flexibility when establishing signal paths and routing choices.



Three Rivers Convention Center in Kennewick, WA offers a large space, flexible floor plan, and a sophisticated SymNet system.

### Bottom Line Benefits:

- Audio distribution throughout the convention center using CobraNet
- Room combining
- Page announcement
- Logic-based routing

Item	Qty	Ext. Price
8x8 DSP	12	\$47,988
CobraLink (8 channel)	3	\$5,097
8in DSP	4	\$14,396
BreakIn12	8	\$17,192
ARC-2	40	\$14,360
ARC-2 Power Supply	5	\$1,795
<b>TOTAL</b>		<b>\$100,828</b>

(All prices MSRP in US Dollars)

**"We needed an audio control system that would allow individual room sound systems to be easily combined. We chose SymNet."**

Steve Goegebuer, Michael R. Yantis Associates

# Public Address

► School • Sports Venue • Factory

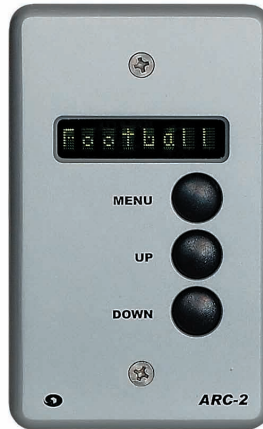
Carson High School in Carson City, NV had a problem. The school had been steadily growing for years, on pace with the Reno suburb it served. As sporting events, rallies, and graduations also grew to attract thousands of people, it became obvious that the antiquated public address system in its outdoor stadium couldn't handle the load. That was the problem. SymNet was an important part of the solution.

**The Goal.** Quantum Audio and Video, a Reno-based design/build integrator, set out to determine the best way to adequately cover a large grandstand seating area on either side of the field, and the field surface itself. Equally important was the need to design an audio system that was easy to setup and use, and could be readily tailored to the stadium's unique and frequently changing functions. Quantum utilized a single SymNet 8x8 DSP which is housed in the stadium's press box, along with an Adaptive Remote Control (ARC).

**Inputs and Outputs.** Inputs include microphones for announcements from the press box or the field, and program audio from sources such as a CD player. Audio output can be designated for four main areas: the home and visitor sides of the playing field, the playing field itself and monitor speakers placed on the field for live performances or graduation ceremonies. SymNet plays a central role in the audio mixing, processing and routing tasks. The ARC-2 allows for ready adjustments, and simplifies the job of tailoring and setting up the system to handle different stadium events.

**Student Operators.** "Being PC-based, SymNet is very easy to work with because you can simply configure your audio on a laptop and download it into the system," Quantum principal Joe Ness said. "Its ability to take all the inputs and convert them from analog to digital, adjust for EQ, delays and so forth, and then correctly route the audio is a powerful feature. We created ten user presets and loaded them into the ARC-2 so high school students can configure the system for different needs in seconds."

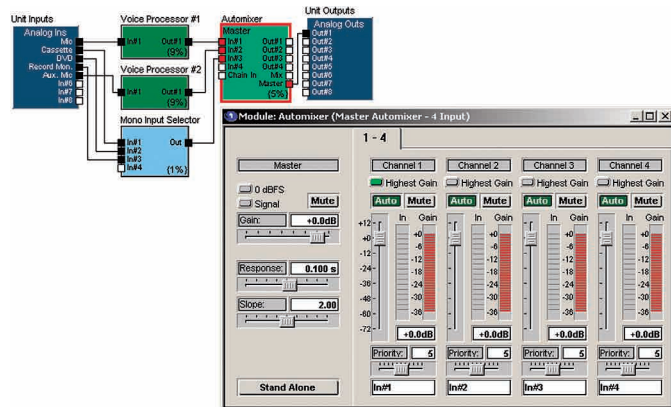
[www.SymNetAudio.com](http://www.SymNetAudio.com)



Located in the press box, the ARC-2 handles system setup for events in seconds.



Carson City High School's SymNet controlled outdoor stadium hosts a variety of athletic and other school events.



In this straightforward design SymNet processes and automatically mixes a pair of announce mics along with source inputs to maintain consistent volume levels. It then offers complete control over speakers covering the seating on both sides of the field, the field itself, and a set of monitor speakers that can be used by performers on the field.

### **Bottom Line Benefits:**

- Sweetening of announce microphones
- Automatic mixing of mics and line sources
- 4 speaker zones with real-time control
- Complete recall of setups via ARC wall panel

<u>Item</u>	<u>Qty.</u>	<u>Ext. Price</u>
8x8 DSP	1	\$3,999
ARC-2	1	\$ 359
<b><u>TOTAL</u></b>		<b><u>\$ 4,358</u></b>

(All prices MSRP in US Dollars)

**“High school students can configure the system for different needs in seconds.”**

*Joe Ness, Quantum Audio and Video*

# Nightclubs

► Dance Club • Sports Bar • Lounge

High energy music, recorded and live, presents unique problems in sound reinforcement, not the least of which is the size of modern sound systems. This can be observed nightly at The Docks, Toronto's indoor-outdoor entertainment complex with a capacity of 12,000 fun lovers. The system in the Main Room boasts extraordinary fidelity, at extreme volume levels. Any inequities in the signal chain will be instantly recognizable. SymNet was chosen as a component in this system because its audio performance and signal-to-noise ratio were up to the task.

**Join Together.** While SymNet can easily handle speaker management and sound reinforcement, its function in the 28-zone entertainment complex extends well beyond the dance floor. Three SymNet rings, strategically located in the facility, comprise the complete audio backbone for this sprawling landmark. Each ring consists of multiple SymNet hardware units, networked to each other via SymNet's high speed SymLink bus. This modular architecture allows each ring to support a healthy number of inputs and outputs. The rings are pulled into a single system by using CobraNet, the industry standard protocol for audio transport over Ethernet

**Home or Away.** The demands on SymNet are great. Controlling and operating such a large matrix routing was crucial. Peter Lima, system designer with PA Plus, explains. "External control was a priority. This allows the manager to dial in and see what any room in the facility is playing. Local control is provided by a large number of SymNet ARC-2 (Adaptive Remote Controls). They have backlit displays that actually show what zones they are affecting. That's very important, because it's a confirmation for the operator. Because every room has one, it allows for consistency."

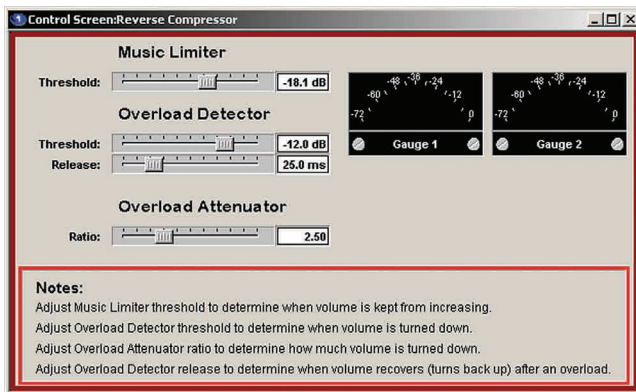


SymNet provides a completely networked audio backbone for this sprawling entertainment complex.

control for DSPs" Lima continues. "Because of its magnitude and technical demands, this system is a true test. SymNet was up to that test."

[www.SymNetAudio.com](http://www.SymNetAudio.com)

**Changing Landscape.** The number of individual venues, and the variety of events held within them complicated the design. Rooms that host corporate events by day become vibrant nightclubs after dark. Each room has access to up to seven different sources, including satellite, microphone, band/DJ, even Power Point. "The Docks is the poster child for audio transport and external



SymNet features onboard logic functions in addition to a full palette of dynamics processors. Used together, they can automatically limit the maximum volume level allowed to go to the speakers – by actually turning the levels down temporarily. Not only does this make listening more comfortable, it prevents blown speakers.



SymNet routes signals in and out of the Main Room where the extreme volume levels would instantly expose any weaknesses in its audio performance.

## Bottom Line Benefits:

Item	Qty	Ext. Price
8x8 DSP	4	\$15,996
CobraLink-8	1	**\$1,699
Express Cobra 12x4	1	\$3,799
Express Cobra 4x4	1	\$2,799
ARC-2	16	\$5,744
ARC-2 Power Supply	2	\$718
<b>TOTAL</b>		<b>\$30,755</b>

(All prices MSRP in US Dollars)

- SymNet provides complete matrixing of A/V sources, live performers and presenters, page announcements, and life safety announcements throughout the facility over a CobraNet network.
- The nightclub system benefits from onboard logic in SymNet that can regulate volume levels and protect speakers from damage.

**“Because of its magnitude and technical demands, this system is a true test. SymNet was up to that test.”**

*Peter Lima, PA Plus*



# Room Combining

▶ Hotel • Convention Center • School

The Hilton Garden Inn/Thelma Keller Convention Center in Effingham, IL recently came back online after being sidelined by a major fire. The refurbished convention center includes an entirely new A/V system based around the SymNet Audio Matrix platform.

**The Layout.** Deployed in two locations within the hotel, and interconnected via CobraNet, a total of eleven SymNet devices provide high quality audio with maximum flexibility for the hotel. The primary task of the system is to handle processing and combining of audio moving in and out of various meeting areas. These include a large convention center ballroom that can be separated into four smaller areas, seven other meeting rooms, ancillary and common areas.

**Tied Together.** Michael McNeil of St. Louis, Missouri's AVI Systems noted "SymNet ties about 25 areas together, controlling all the audio inputs and outputs across the entire facility. A control system identifies which rooms are in use and configures the system appropriately." SymNet easily integrated into a system that would handle background music, wired and wireless microphones, CD players, various video playback devices, and local computer inputs for presentations.

**The Heart of it All.** The underlying requirements for the A/V system in general, and for SymNet specifically, were flexibility and ease of operation for the end-user. Business clients and hotel staff were going to need to easily configure rooms, assign inputs and sources, and be able to conduct their meetings without the benefit of dedicated, in-house technicians. The control scheme that ultimately filled the bill combined the efforts of Symetrix and Pacific Interactive. Adaptive Remote Control (ARC) units from Symetrix were installed in various areas of the venue to provide local control over source selection, volume control, and other immediate needs within the rooms. Pacific Interactive provided a touch screen interface that served as a comprehensive control center not only for SymNet, but for the multimedia aspects of the system as well.

McNeil continues "The magic with this pairing of SymNet and Pacific Interactive is the ability, through 'broker' software in the Pacific Interactive system, to have more than 2,000 control points managed by SymNet discretely and reliably," McNeil says. "SymNet is very user friendly and easy to manage because the interface is intuitive and follows common sense. It is the ideal processing system for this link up with Pacific Interactive."

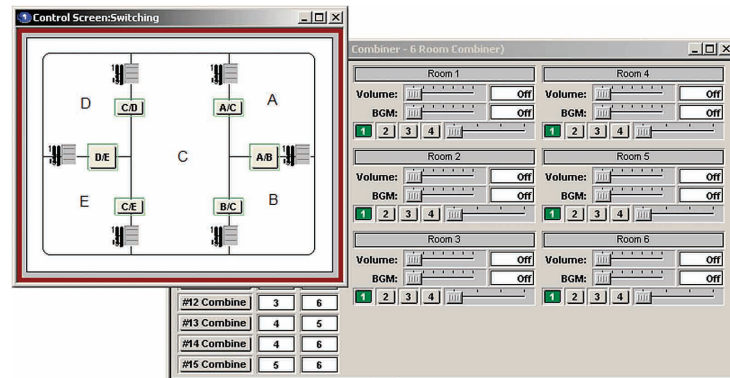
[www.SymNetAudio.com](http://www.SymNetAudio.com)



The ARC-2 provides quick and easy control of room combining, music sources, and volume.



The combination of touch screens from Pacific Interactive and Adaptive Remote Controls from Symetrix offer the hotel and their business clients enormous flexibility in a very short time.



SymNet Designer includes four different types of room combiner modules, each capable of handling up to sixteen rooms. The BGM Combiner shown here supports selection and level control for up to four background music sources. The control screen shown on the left provides a graphic representation of the rooms to be combined.

## Bottom Line Benefits:

- Volume control and source selection in meeting rooms via ARC-2
- Automatic mixing of microphones and multimedia sources
- Room Combining
- Feedback elimination

Item	Qty	Ext. Price
8x8 DSP	3	\$11,997
DigIO12x12DSP	1	\$2,799
HomerLink TOSLINK 4x4 Breakout	1	\$499
ARC-2	5	\$1,795
ARC-2 Power Supply	1	\$359
<b>TOTAL</b>		<b>\$17,449</b>

(All prices MSRP in US Dollars)

**"SymNet is very user friendly and easy to manage..."**

Mike McNeil, AVI Systems

# Ambient Noise Compensation

Casino • Lounge • Transportation Terminal • Factory

The all new Argosy Casino in Kansas City, MO, incorporates state-of-the-art technology in its gambling, entertainment, and especially its audio routing system. Stationed behind the scenes of the 62,000 square foot facility, SymNet provides the casino with unprecedented system control capabilities. It also handles ambient noise compensation for optimal delivery of background music and paging in gaming areas.

**It's Automatic.** Background music on the casino floor helps keep gamblers excited, but as more players square off against slot machines, the music can easily be drowned out. To counteract this effect SymNet automatically adjusts background music levels as guests ebb and flow through the rows of game machines. This function, often referred to as Ambient Noise Compensation (ACN), is accomplished by placing dedicated microphones in the room that communicate the noise levels to SymNet. "As the background noise increases, the system automatically compensates," says Mark Schultz of TSI, an integration firm based in St. Charles, MO. "A total of 19 ambient noise-sensing mics are deployed in strategic areas of the casino."

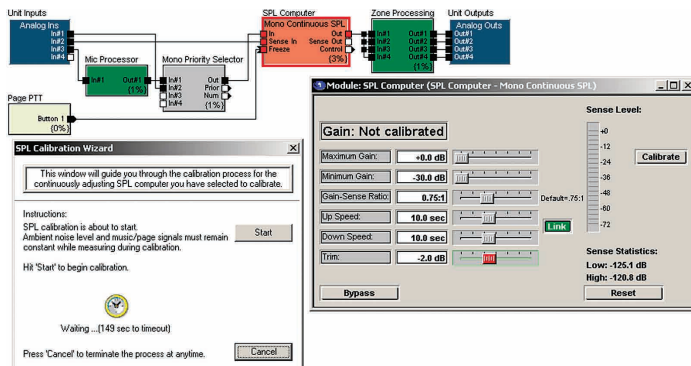


**"We're not happy 'til you're happy" says Symetrix customer liason Lori Henderson.**

**The System.** Consisting of one 8x8 DSP; one 8out DSP; three BreakIn 12 and two BreakOut12 units, the SymNet configuration addresses the casino's current audio processing needs, and has enough muscle to handle the demands of an expected hotel addition in the near future. The system takes audio inputs from music DVDs, paging and casino floor microphones, and satellite television receivers. These sources are processed and delivered to approximately 400 speakers across the main casino floor, VIP areas, entryways and on-site restaurants. It is also tied in with the casino's fire alarm system, shutting down the audio when a fire alarm is activated.

**The Choice.** Schultz, the design specialist who helped coordinate the Argosy project said "As we began designing the system, we realized we were going to need something with more flexibility and control over the audio system than the old casino facility provided. With SymNet, we have a much more powerful and user-friendly system that stayed within the owner's budget."

[www.SymNetAudio.com](http://www.SymNetAudio.com)



Ambient noise compensation is a powerful feature where rapidly changing noise levels can interfere with program material such as music or page announcements. SymNet not only provides this function, it will walk you through setup and calibration to achieve optimal results.



Missouri-based integrator, TSI, outfits the all-new Kansas City Argosy Casino with Symetrix' SymNet to merge multiple audio sources in a vast array of combinations.

Item	Qty	Ext. Price
8x8 DSP	1	\$3,999
8out DSP	1	\$3,399
BreakIn12	3	\$6,447
BreakOut12	2	\$3,898
<b>TOTAL</b>		<b>\$ 17,743</b>

(All prices MSRP in US Dollars)

### Bottom Line Benefits:

- Automatic Ambient noise compensation to maintain desired mood and environment for players and guests
- Music source selection and distribution
- Page announcement distribution
- Life-safety system integration allows the fire alarm system to take priority over the SymNet system when the fire alarm sounds.

**"As the background noise increases, the system automatically compensates."**

Mark Schultz, TSI

# Sound Masking

▶ Open Plan Offices • Medical Offices • Law Offices • Financial Centers

The modern, open plan office setting may encourage teamwork, facilitate workflow, and reduce operating overhead – but it also creates noisy, distracting environments that can reduce privacy and impact productivity. The cure for this condition is to subtly inject filtered noise into the room, increasing the overall ambient noise levels. Ironically, adding more noise to the environment helps obscure, or mask, specific conversation and voices emanating from elsewhere the room. SymNet includes all of the necessary processing tools for sound masking.

**Why We Need It.** Sound masking has become much more common in today's workplace. The aggregate sounds from nearby conversations, printers, copiers, and telephones creates an environment that increases stress and fatigue while lowering morale, and making it more difficult for workers to stay on track. Studies have shown that once a person's concentration is broken, ten minutes may elapse before he or she can fully regain their train of thought. By avoiding this, retention and productivity are dramatically improved.

**How It Works.** Noise generators are assigned to one or more output zones, each corresponding to areas of the office. The noise is equalized and/or filtered in specific ways based on acoustic conditions. The equalization curve of a medium sized call center, for example, would be quite different than that of an intimate reception area. These signals are then sent to amplifiers and speakers for audio distribution throughout the facility. When properly set up, a masking system is very unobtrusive. It's designed to sound like typical office air conditioning noise. In other words, a gentle "whooshing" sound.

**It Takes a Little Time.** Timers are sometimes employed to adjust noise levels automatically at the beginning or end of the workday. Manual controls to adjust levels might also be included to tailor the system to the changing needs of a busy office. These control functions can be handled by the SymNet line of Adaptive Remote Controls (ARC), analog controls, or a third party touch screen-based control system.

**Multitasking.** Of course SymNet can handle a variety of tasks in addition to sound masking. Many offices have distributed background music or page announcements available in various locations. SymNet's full compliment of virtual mixers can easily be invoked to blend music, voice, and sound masking noise together, to create an environment that is both functional and enjoyable.

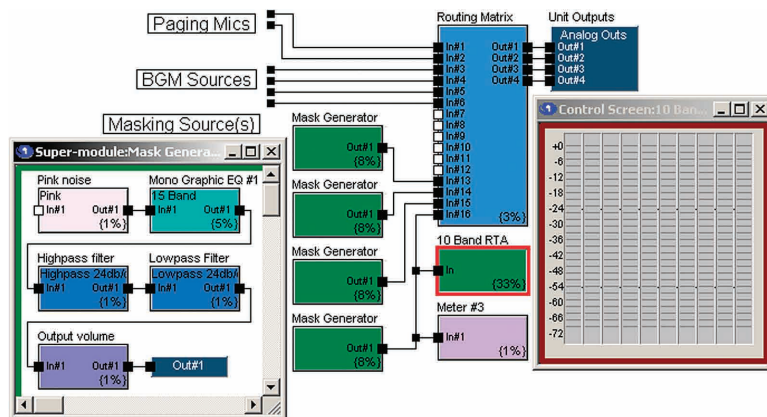
[www.SymNetAudio.com](http://www.SymNetAudio.com)



The ARC-SW4 provides quick and easy control over source selection.



Modern open plan offices are often noisy and can be disruptive to workers. A sound masking system supplies low levels of filtered noise to diffuse specific noises and reduce distractions.



A typical office scenario might include a couple of paging sources, a number of background music sources, and a number of masking sources. These are all mixed and assigned to zones as required by the conditions in the office. Real time control is available through a variety of external control means.

## Bottom Line Benefits:

Item	Qty.	Ext. Price
Express 4x4	1	\$ 2,599
ARC-SW4	1	\$ 379
<b>TOTAL</b>		<b>\$ 2,978</b>

(All prices MSRP in US Dollars)

- Improved productivity and enhanced privacy due to introduction of filtered noise that obscures conversations coming from other areas of the office
- Automated or manual level control of masking noise
- Mixing of masking noise with background music and paging

**“Properly designed masking systems improve communication while ensuring privacy within an open plan office setting.”**

*Jim Latimer, National Sales Manager, Symetrix, Inc.*



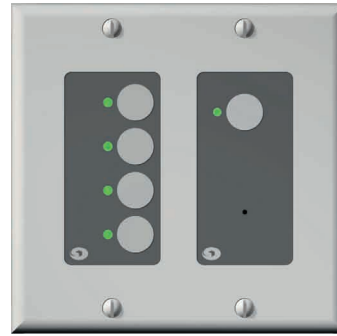
The **ARC-2** simultaneously controls functions such as volume, source selection, preset recall, and room combining, or more complex logic-based control events. **\$359 MSRP\***.



The **ARC-SWK** is a complete solution for switched controls like preset recalls and room combining, or variable controls like microphone and background music volumes. **\$549 MSRP\***.



The low cost **ARC-K1** provides the user with simple control of 1 or 2 parameters (volume and source, for example) while providing an LED display to visually confirm settings. **\$379 MSRP\***.



The **ARC-MIC** includes an onboard microphone to function as a simple paging station for a SymNet system. The four switches, with associated LEDs, provide zone selection capability as well. **\$649 MSRP\***.



The **ARC-SW4** includes 4 switches with bi-color LEDs to indicate the state of the associated switch. The SW4 is typically used for preset recall or source selection, but the buttons can be assigned to any applicable SymNet function. **\$379 MSRP\***.



With the addition of a microphone, the **ARC-XLR** functions as a simple paging station for SymNet. The four switches with associated bi-color LEDs function as zone select buttons. The Push-to-Talk button and XLR connector make this wall remote an easy add-in where paging functionality is required. **\$649 MSRP\***.



**8x8 DSP** • 8 analog audio inputs and outputs expandable using the BreakIn12 and BreakOut12. **\$3,999 MSRP\***.



**BreakIn12** • 12 analog mic or line audio inputs. **\$2,149 MSRP\***.



**BreakOut12** • 12 analog line audio outputs. **\$1,949 MSRP\***.



**CobraLink-8™** • Used to interconnect multiple SymNet components over long distances in larger systems. **\$1,699 MSRP\*\***.



**Express 8x8** • Part of a flexible series of aggressively priced, high performance audio DSPs. **\$3,599 MSRP\***.

Represented by:

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