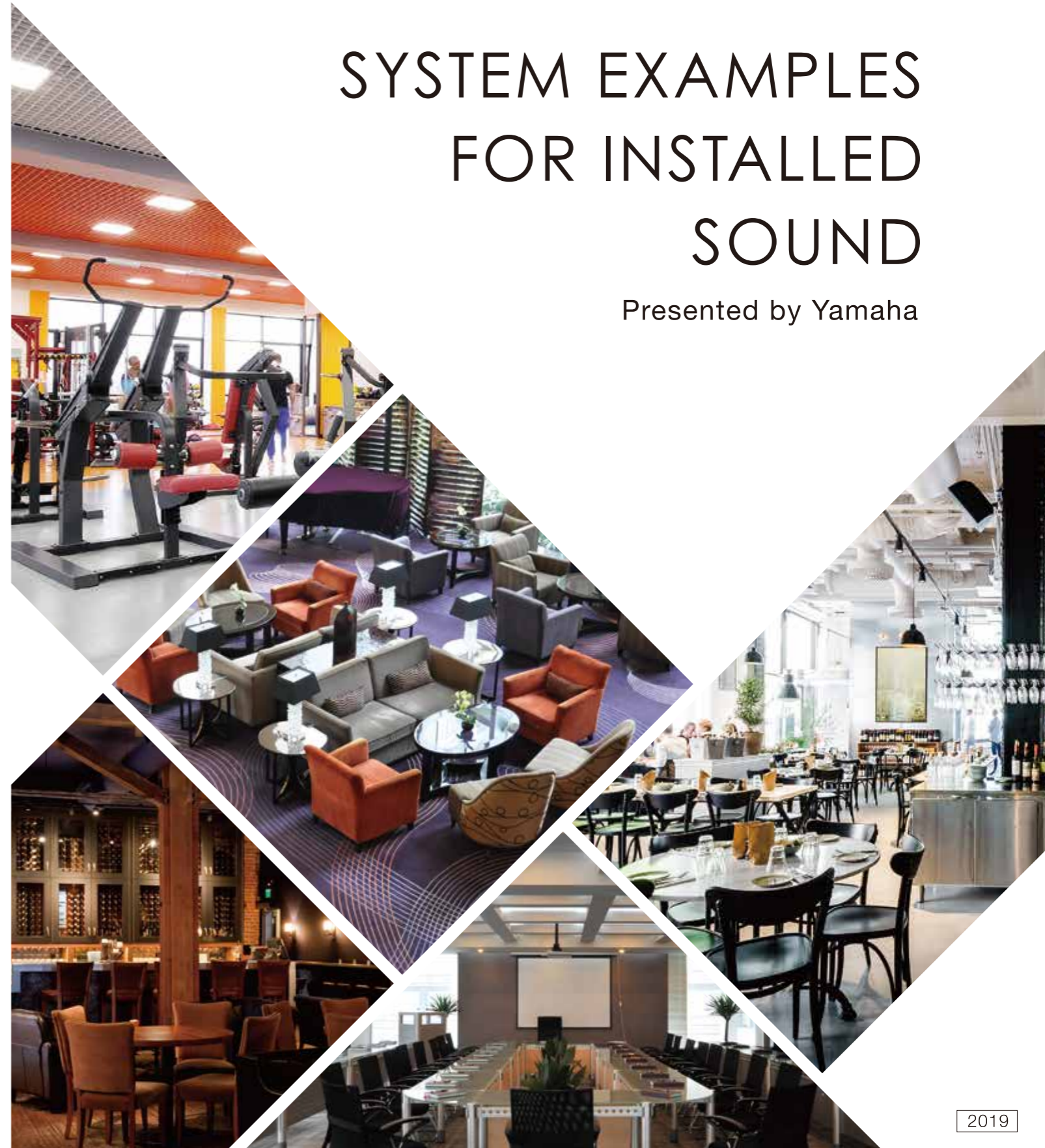


# SYSTEM EXAMPLES FOR INSTALLED SOUND

Presented by Yamaha



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### Yamaha - The Sound Business Choice

Improving sound quality of foreground / background music and the clarity of announcements while offering ease-of-use for day-to-day operation that is the goal of Yamaha installed sound solutions. Like lighting and aroma, audio has a huge impact on the mood of any room. Creating a high-quality sonic environment makes the space more pleasant and has a positive influence on per-customer spending and repeat business. As sound professionals, Yamaha is dedicated to helping our customers create the most appealing, effective sonic environments for their needs. Commercial Installation Solutions was established for just that purpose, offering the most elegant, and convenient sound systems available for commercial and public spaces. With more than a century of musical instrument design and manufacturing expertise, as well as extensive experience in the field of professional audio, Yamaha is renown for developing industry-leading audio electronics and technologies that are used and highly valued by distinguished engineers in professional audio and broadcast applications worldwide. That same background and dedication is behind the system solutions we offer for commercial installations, giving our customers sound that is ideally tailored to their individual needs.



INTERCONTINENTAL HOTEL DAVOS (Davos, Switzerland)



INSTALLED PRODUCTS: VXS SERIES, VXC SERIES, XMV SERIES, MTX SERIES, DME SERIES, LS9 SERIES

SHANG XIA (Shanghai, China)



INSTALLED PRODUCTS: VXS SERIES, VXC SERIES, MA/PA SERIES, XMV SERIES, MTX SERIES

ITO-YA (Tokyo, Japan)



INSTALLED PRODUCTS: VXS SERIES, VXC SERIES, MA/PA SERIES, XMV SERIES, MTX SERIES, EXo8

STONE HARBOR MUNICIPAL COURTHOUSE (New Jersey, USA)



INSTALLED PRODUCTS: VXS SERIES, VXC SERIES, XMV SERIES, MTX SERIES, DCP SERIES

BILLUND AIRPORT (Billund, Denmark)



INSTALLED PRODUCTS: VXC SERIES (VA version)

CENTRAL HALL WESTMINSTER (London, UK)



INSTALLED PRODUCTS: VXS SERIES, XMV SERIES, MRX SERIES, MTX SERIES, QL SERIES, and more

USINE (Stockholm, Sweden)



INSTALLED PRODUCTS: VXS SERIES, XMV SERIES, MTX SERIES, DCP SERIES, and more

FONDAZIONE BANCO DI NAPOLI (Napoli, Italy)



INSTALLED PRODUCTS: VXS SERIES, XMV SERIES, MRX SERIES, EXi8, DCP SERIES

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## 1

# Restaurants & Retail Shops

Yamaha PA solutions blend state-of-the-art technology with unmatched Yamaha experience and know-how, to create commercial audio systems that optimize speech reinforcement and accurately reproduce every nuance and subtlety of the original music composition. With more than a century of musical instrument design and manufacturing expertise, Yamaha applies technologies and best practices gleaned from our decades of involvement in professional audio to ensure that optimum performance can be achieved with the simplest possible set-up and operation. With an understanding of the importance that aesthetics play in an installed sound system, Yamaha designers have crafted public facing equipment to blend seamlessly into any decor.



## Restaurants & Retail Shops

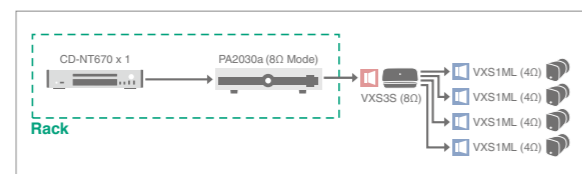
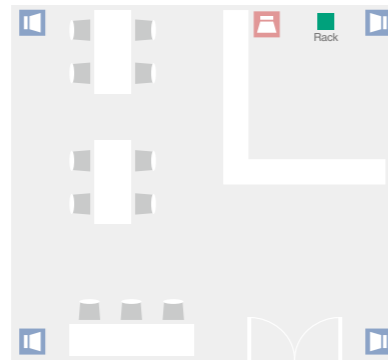
- ◆ 1. Cafe & Restaurant 1
- ◆ 2. Cafe & Restaurant 2
- ◆ 3. Retail Outlets

### System Overview

This system features a music player source connected to a compact amplifier with the amplifier outputs connected to a speaker system, resulting in a well-balanced high performance background music system that contributes greatly to the overall atmosphere.

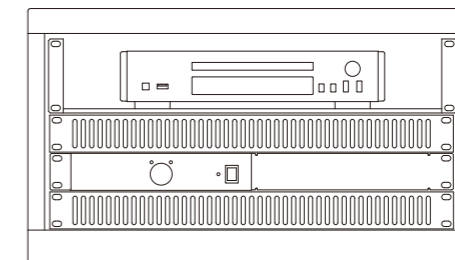
### Key features

- VXS1ML combines sophisticated sound and design in a compact surface-mount speakers that will make a significant contribution to the most refined, and elegant spaces.
- VXS3S delivers low-end performance in a unit that is no larger than a compact surface-mount full-range speaker.
- PA2030a power amplifiers offers powerful features in compact, durable metal housing. They are designed for easy, intuitive operation that makes specialized training or audio experience unnecessary.



### Rack Diagram

CD-NT670  
1U Ventilation Panel  
PA2030a  
1U Ventilation Panel



5U Rack

### Component List

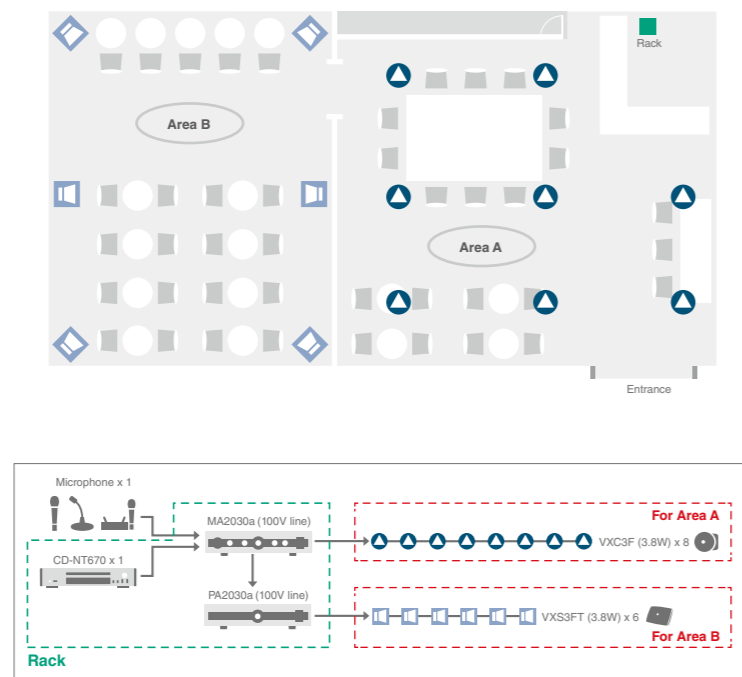
Name	PA2030a Power Amplifier	VXS1ML Speaker	VXS3S Speaker	CD-NT670 Network CD Player
				
QTY	1	4	1	1

### System Overview

In this application, the space is divided into two zones. Volume can be individually adjusted for each zone so that their sound levels can reflect and accommodate the number of customers or the acceptable noise floor in each zone.

### Key features

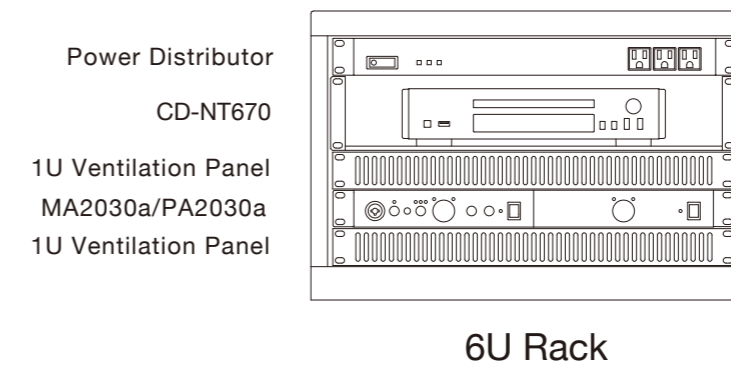
- Yamaha speaker systems are specially tuned for music applications and are the best solution for background music delivery, even when only low volume levels are required.
- The MA2030a is a compact amplifier designed for small applications that offers a range of powerful features, such as the capability to maintain constant volume levels across different sources. In addition, an MA2030a can be combined with a PA2030a to cover two service areas with volume zoning.
- The MA2030a features a builtin Priority Ducker function that automatically reduces the volume of background music when an announcement is being made.



### Component List

Name	MA2030a Power Amplifier	PA2030a Power Amplifier	VXC3F Speaker	VXS3FT Speaker
QTY	1	1	8	6
Name	CD-NT670 Network CD Player			
QTY	1			

### Rack Diagram





### System Overview

This system is ideal for paging and public announcements while still being able to deliver different background music to different zones. The Ducker function found on the MA2120 automatically reduces the volume of the background music whenever a microphone is being used so that announcements can be heard without the need to manually adjustment volume levels. In addition to different music sources and volume levels set up for the first and second floor area, source selection and volume level can be controlled from a conveniently located controller according to the products being displayed, number of customers in the store, and special events.

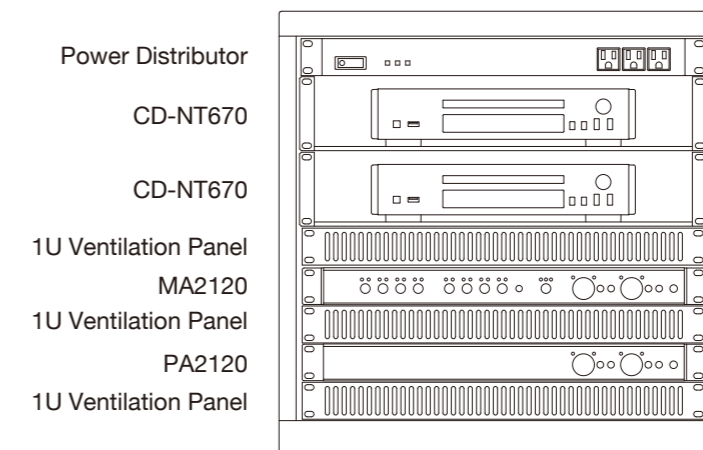
### Key features

- Yamaha VXS and VXC series speakers provide high quality playback that delivers the full emotional impact of the music to the listening area, making a major contribution to overall atmosphere. Furthermore the power and excitement of rhythmic music can be enhanced by adding VXS10S subwoofers.
- Anti-drop tabs on the VXC loudspeakers ensure enclosures will not fall through ceiling cutouts during installation while, paintable VXC Series loudspeaker grilles and VXS Series loudspeaker grilles and enclosures ensures they can be stylized to match any decor.
- Independent source selection and volume adjustment for different zones can be accomplished via the MA2120 and PA2120, while basic day-to-day operation can be easily carried out via DCP control panels installed in the separate areas to allow remote control of background music volume and other operations.
- The MA2120 features a builtin Priority Ducker function that automatically reduces the volume of background music when an announcement is being made.

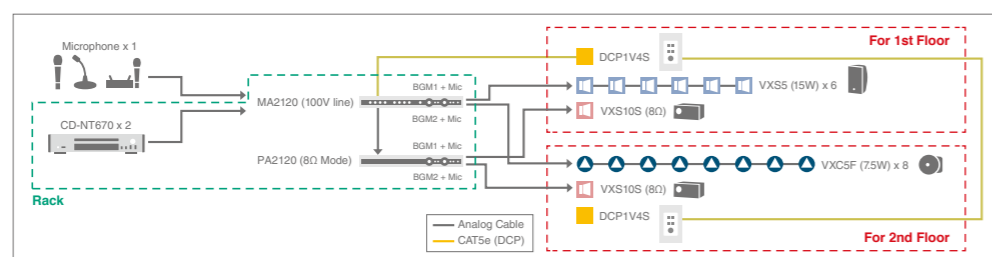
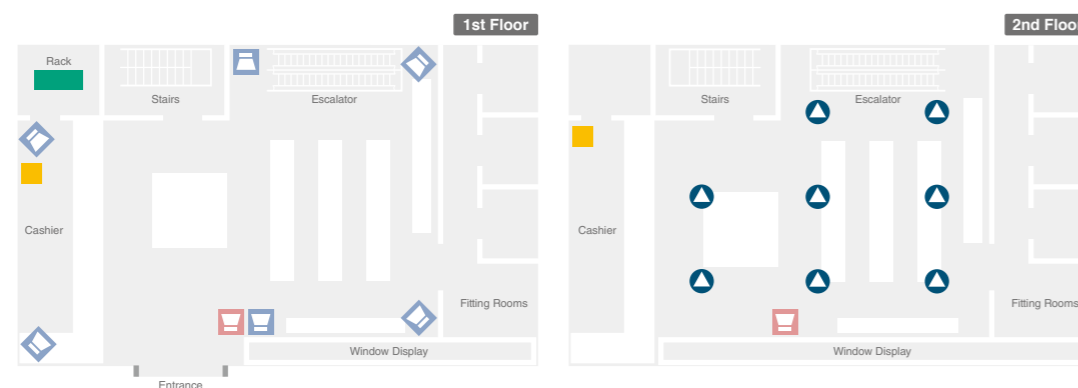
### Component List

Name	MA2120 Power Amplifier	PA2120 Power Amplifier	VXS5 Speaker	VXC5F Speaker
QTY	1	1	6	8
Name	VXS10S Speaker	DCP1V4S Digital Control Panel	CD-NT670 Network CD Player	
QTY	2	2	2	

### Rack Diagram



10U Rack



## 2

## Hospitality

Since its founding over 125 years ago, Yamaha has built an enviable reputation for developing and manufacturing the world's finest musical instruments, home audio, and professional audio products. With defining influences in a variety of fields, when top-quality sound is required for a hospitality based, commercial sound applications, Yamaha has the solution to meet most any need.



## Hospitality

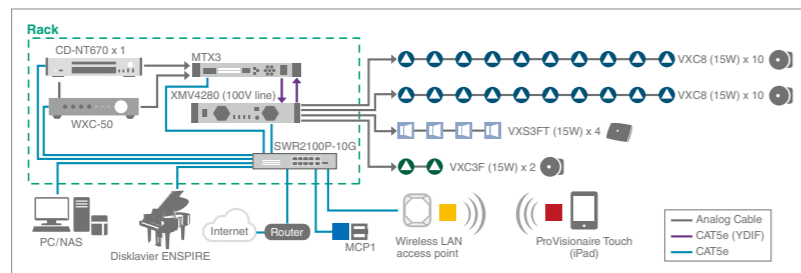
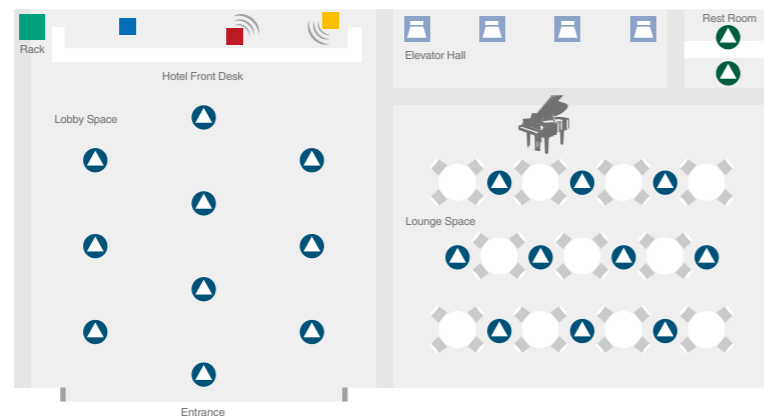
- ◆ 1. Hotel Lobby
- ◆ 2. Banquet Hall

### System Overview

Hotel lobbies can have a number of adjoining areas and in this example, background music is delivered to four separate zones: the main lobby space, a lounge space, an elevator hall, and nearby toilets / restrooms. Independent volume control is provided for each zone and each zone can offer independent background music with announcements tailored to that zone.

### Key features

- This background music system based around an MTX3 signal processor and an XMV4280 power amplifier is able to change moods according to the situation and time of day.
  - The ProVisionaire Touch iPad application, which supports MTX3, XMV4280, MusicCast audio devices and Disklavier Enspire pianos, can be used for remote wireless ON/OFF switching, volume control, and more, allowing the mood of the environment to be adjusted to suit different times of day and events.\*
- \*ProVisionaire Touch V1.2 or higher required.
- Yamaha speaker systems are specially designed for music reproduction and speech intelligibility applications and are an ideal solution for foreground / background music with both low and high SPL requirements. Elegant grille and enclosure designs combined with paintable grille and enclosure surfaces can be detailed to match room décor.

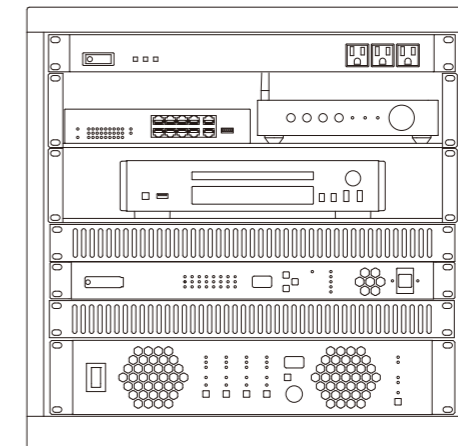


### Component List

Name	MTX3 Processor	XMV4280 Power Amplifier	VXC8 Speaker	VXS3FT Speaker
QTY	1	1	20	4
Name	VXC3F Speaker	MCP1 Wall Mount Controller	SWR2100P-10G L2 Switch	CD-NT670 Network CD Player
QTY	2	1	1	1
Name	WXC-50 Wireless Streaming Amp	ProVisionaire Touch iPad		
QTY	1	1		

### Rack Diagram

- Power Distributor
- SWR2100P-10G/WXC-50
- CD-NT670
- 1U Ventilation Panel
- MTX3
- 1U Ventilation Panel
- XMV4280



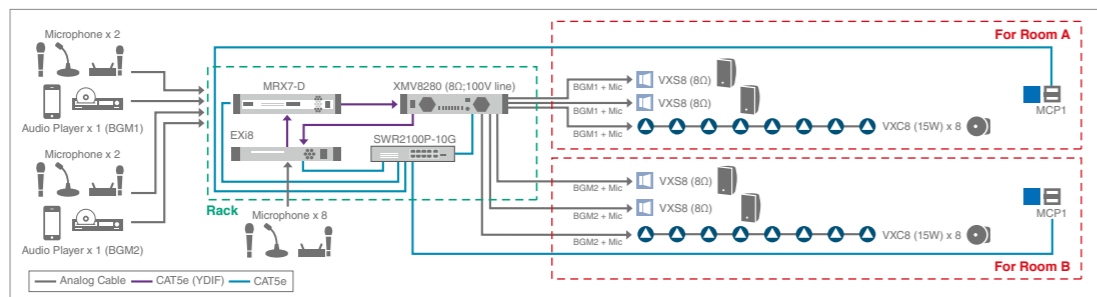
10U Rack

### System Overview

This system example represents a fairly common hotel banquet room or multi-purpose hall scenario. A Yamaha MRX7-D digital signal processor handles overall system routing and processing and offers an audio solution that is flexible enough to adapt to the needs of various events held at the facility. Room A and Room B in this system example are normally used independently for meetings, parties, or other events and are equipped with audio systems that can be operated independently. When the partition is removed, these rooms can be combined to form one larger space. With the click of a single button, the MRX7-D can be reconfigured to mode that has been pre-programmed using the MTX-MRX Editor instantly setting up the system with central control for the larger space.

### Key features

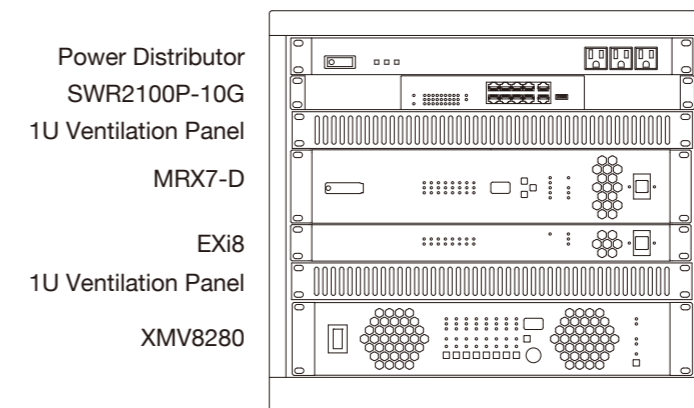
- The MRX7-D is a convenient signal processor that can accept input from multiple audio sources and microphones and route that audio to specified speaker systems.
- MRX7-D equipped the room combiner with auto mixer. This component is ideal for managing the separation or combination of partitioned spaces in banquet halls as well as zones in open retail spaces with combination of Dugan Auto mixer, for example.
- The EXi8 is handy for increasing the number of available microphone inputs, for example.
- MCP1 control panels installed in each room can be set up to allow remote control of microphone level and on/off switching, Settings can be configured flexibly with the MTX-MRX Editor software as required.



### Component List

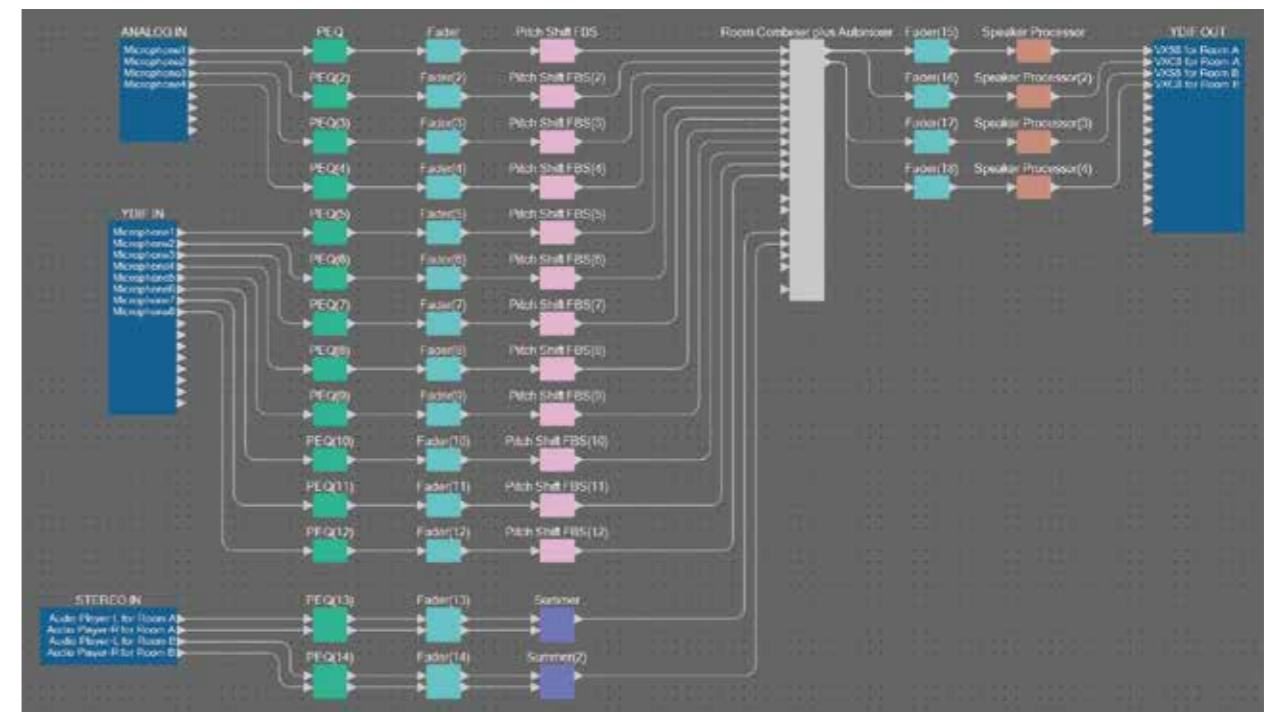
Name	MRX7-D Processor	EXi8 Input Expander	XMV8280 Power Amplifier	VXS8 Speaker
QTY	1	1	1	4
Name	VXC8 Speaker	MCP1 Wall Mount Controller	SWR2100P-10G L2 Switch	
QTY	16	2	1	

### Rack Diagram



9U Rack

### Screen Shot



## 3

## Education

Keeping the students' attention focused on the subject at hand is a priority in any education situation. Although the curriculum itself is vital to achieving that goal, it is also necessary to ensure that lectures and presentations are clearly conveyed. Concentration can quickly wane in an environment where speech and/or music cannot be intelligibly heard. The Yamaha Commercial Installation Solutions lineup offers everything from high-performance speaker systems to signal processors that can help provide the most effective audio delivery for a wide range of requirements and systems of any size.



## Education

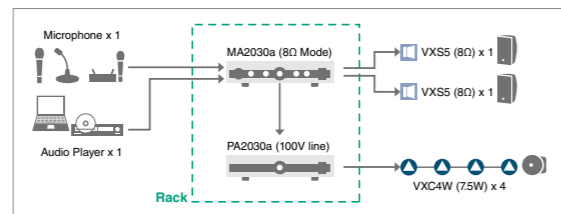
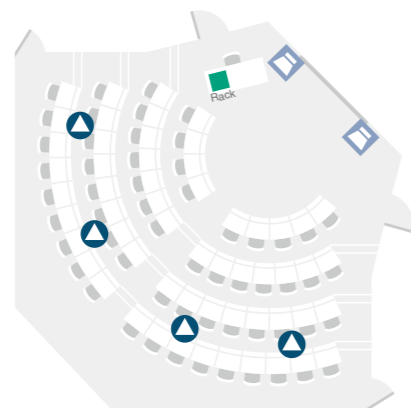
- ◆ 1. Class Room 1
- ◆ 2. Class Room 2
- ◆ 3. Class Room 3
- ◆ 4. Partitioned Classrooms

### System Overview

A stereo speaker system is installed to the left and right of a video screen at the front of the room to provide high-quality stereo sound. Four more ceiling speakers are installed in the seating area near the back of the room so that sufficient volume reaches the furthest attendees. A microphone, a computer and an audio player are located in one spot.

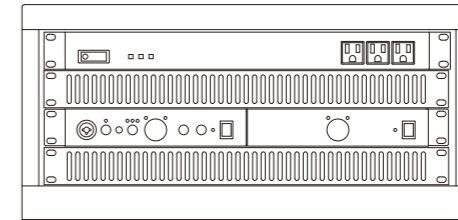
### Key features

- Yamaha speaker systems deliver high quality, well defined sound that is ideal for both music and speech delivery.
- The wide coverage of the speakers themselves plus dedicated brackets with tilt and pan adjust ability makes it easy to target the desired service area.
- The MA2030a and PA2030a provide easy system expansion and convenient output level control via front-panel volume knob.



### Rack Diagram

- Power Distributor
- 1U Ventilation Panel
- MA2030a/PA2030a
- 1U Ventilation Panel



4U Rack

### Component List

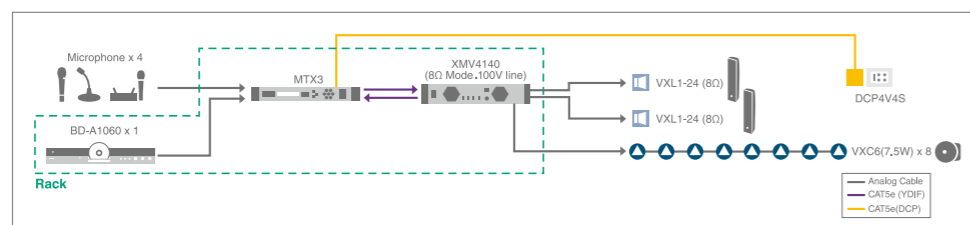
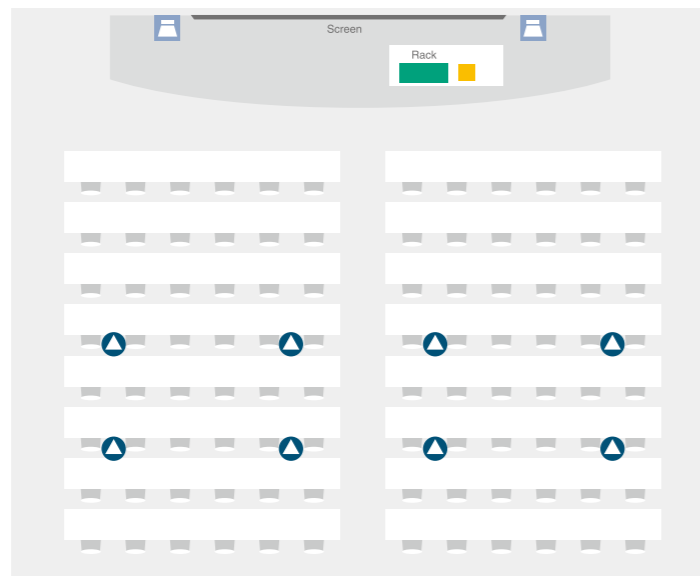
Name	MA2030a Power Amplifier	PA2030a Power Amplifier	VXS5 Speaker	VXC4 Speaker
QTY	1	1	2	4

## System Overview

A stereo speaker system is installed to the left and right of a video screen at the front of the room to provide high-quality stereo sound. Additional ceiling speakers are installed to the left and right of the seating area near the back of the room so that sufficient volume reaches the furthest attendees. Microphones, computers, and all playback devices are located in one spot, while source selection and volume adjustment are carried out from a single controller for simple, centralized day-to-day operation.

## Key features

- Yamaha speaker systems deliver high quality, well defined sound that is ideal for both music and speech delivery.
- The wide coverage of the speakers plus dedicated brackets with tilt and pan adjust ability makes it easy to target the desired service area.
- The MTX matrix processor includes a number of functions that can aid in optimizing audio quality for lectures, including high-pass filtering, equalization, and speaker processing.
- DCP4V4S wall controller offers remote volume level and input source selection control for easy day-to-day use.

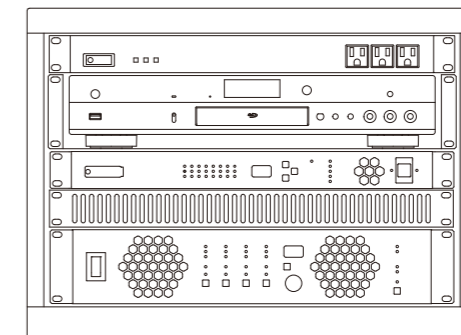


## Component List

Name	MTX3 Processor	XMV4140 Power Amplifier	VXL1-24 Speaker	VXC6 Speaker
				
QTY	1	1	2	8
Name	DCP4V4S Digital Control Panel	BD-A1060 Blu-ray Disc Player		
				
QTY	1	1		

## Rack Diagram

Power Distributor  
BD-A1060  
MTX3  
1U Ventilation Panel  
XMV4140



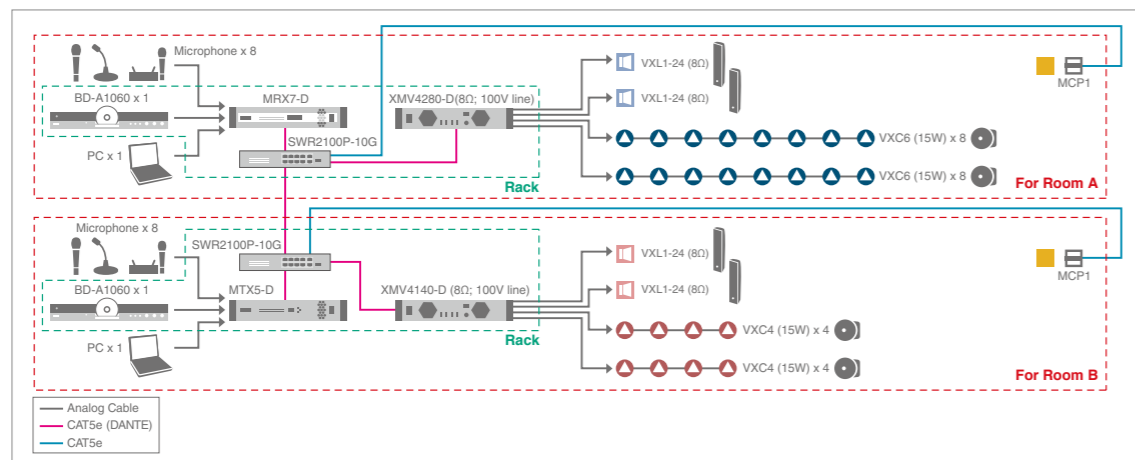
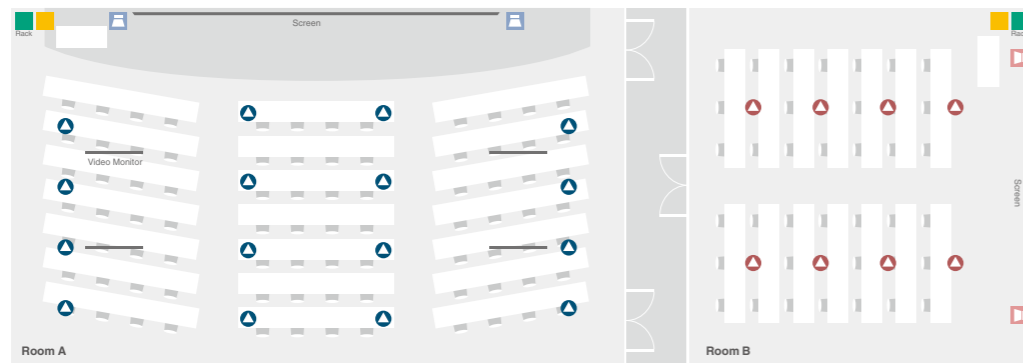
7U Rack

### System Overview

In this lecture hall complex, MRX7-D and MTX5-D digital signal processors provide audio control in separate lecture rooms and they are also connected via on a Dante™ audio network enabling audio to be shared in a number of ways. In addition to the rooms where these processors are located and because they also reside on a Dante audio network, audio and control can also be routed to other rooms and zones. Bi-directional communication enables real-time question and answer sessions between multiple zones.

### Key features

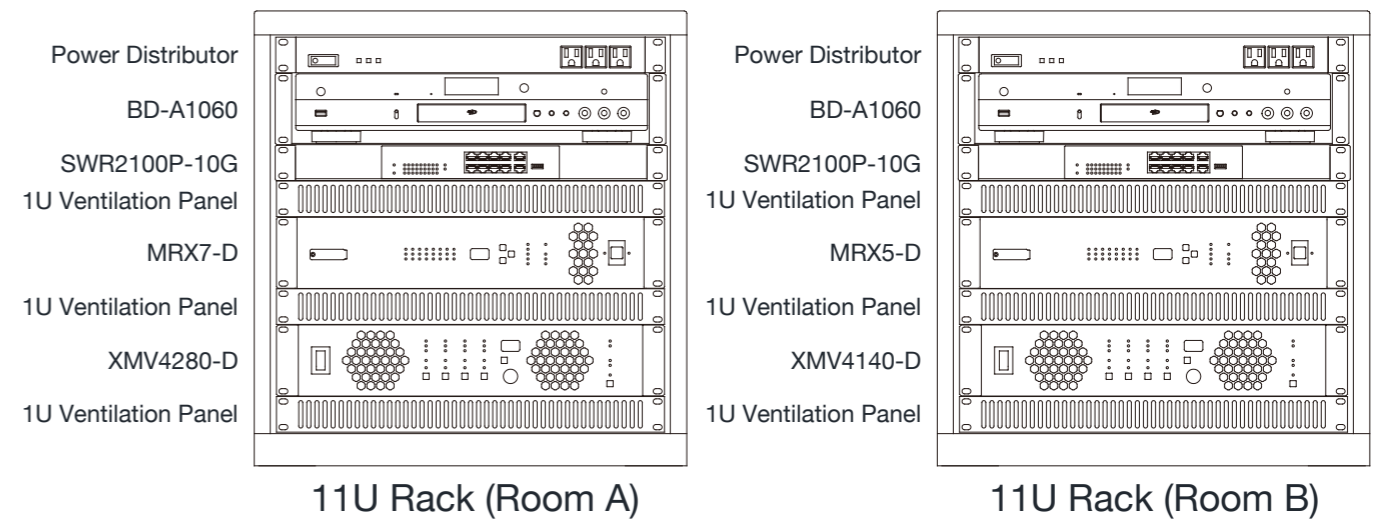
- The MRX7-D and MTX5-D allow Dante audio networking over long distances with no delay or degradation in sound quality. If an appropriate setup is pre-programmed using the MTX-MRX Editor software, it is possible to broadcast audio simultaneously to all rooms by simply pressing a button.
- Built-in Dugan Automixer on the MRX7-D and the MTX5-D manages multiple microphone signal levels and automatically adjusts them allowing the person speaking to be clearly heard without being cut off or interrupted by feedback.
- MCP1 control panels installed in each room can be individually customized to allow remote control of input and output levels, source selection and other functions on the MRX7-D.



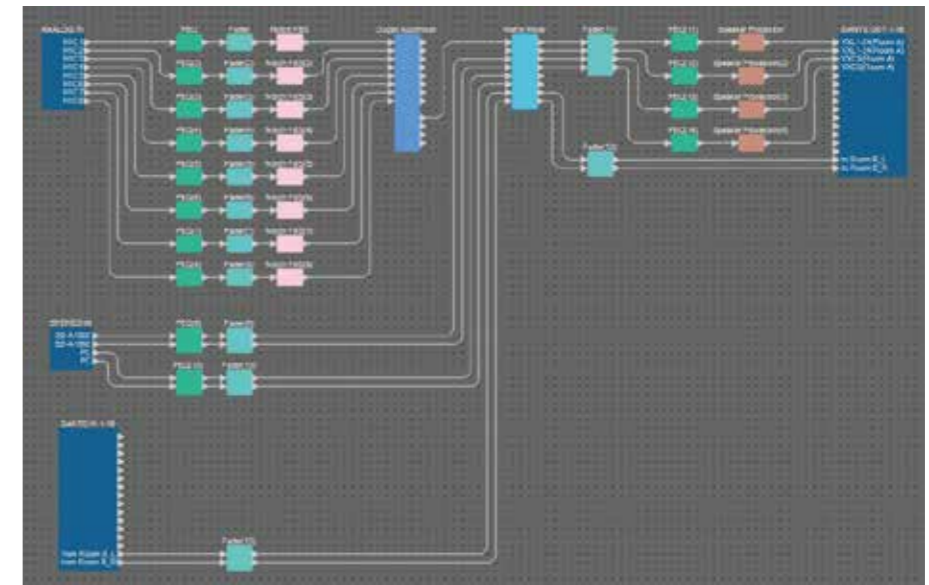
### Component List

Name	MRX7-D Processor	MTX5-D Processor	XMV4280-D Power Amplifier	XMV4140-D Power Amplifier
QTY	1	1	1	1
Name	SWR2100P-10G L2 Switch	BD-A1060 Blu-ray Disc Player	VXC4 Speaker	VXC6 Speaker
QTY	2	2	8	16
Name	VXL1-24 Speaker	MCP1 Wall Mount Controller		
QTY	4	2		

### Rack Diagram



### Screen Shot



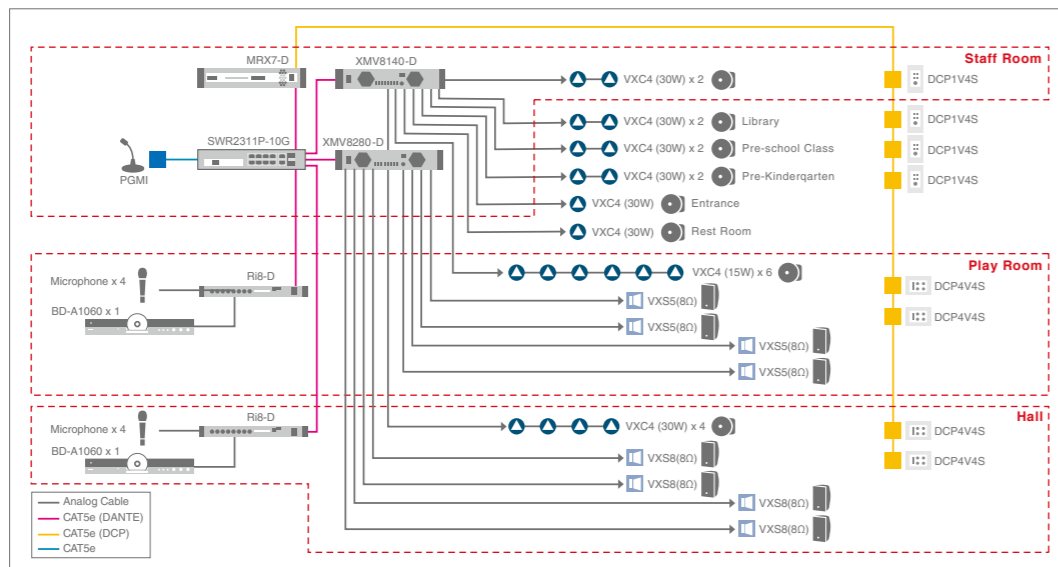
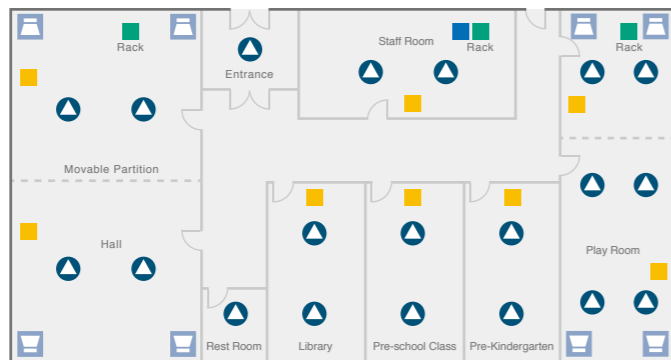


### System Overview

A notable feature of this system is that it serves a room that can be used as single large space or partitioned to function as multiple smaller spaces. The system can be set up to allow independent source selection and volume control for each partition, or the same source can be fed to all speakers when the entire room is used. In addition to the main room with partitions, separate controllers installed in several smaller rooms allow independent volume adjustment for those rooms as well.

### Key features

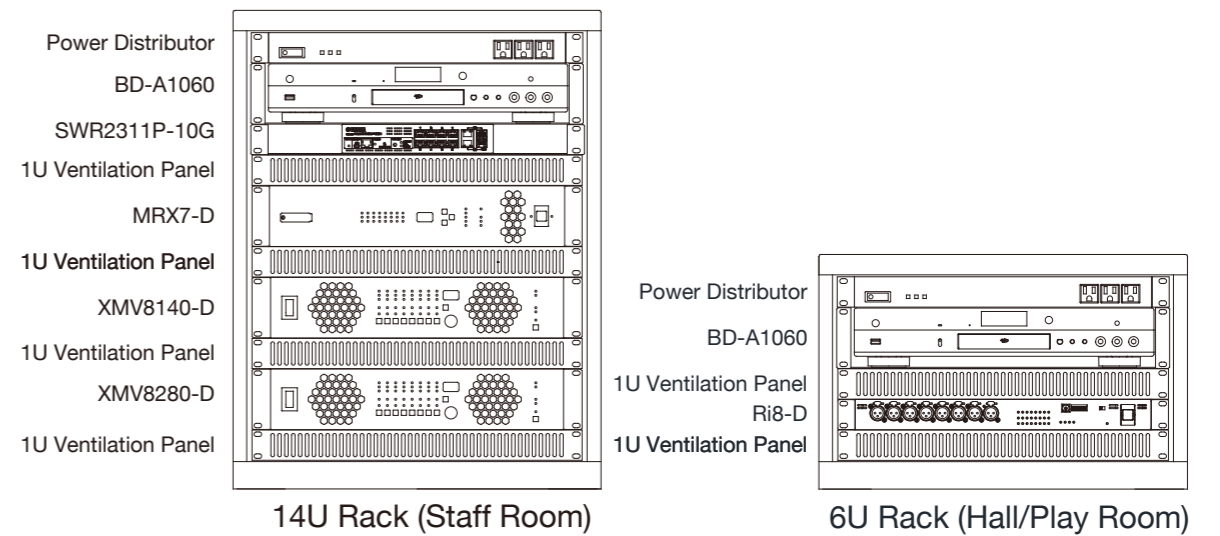
- An MRX7-D signal processor makes it easy to switch to different audio configurations when the main room is partitioned or combined.
- Day-to-day source selection and volume adjustment can be easily carried out via DCP control panels.
- The PGM1 paging microphone utilizes Dante™ audio networking protocols for easy integration and is capable of sending announcement to specific zones.
- Yamaha CIS speaker systems are specifically tuned for music reproduction so that the same excellent sound quality is achieved whether used for low-volume BGM or louder featured music.



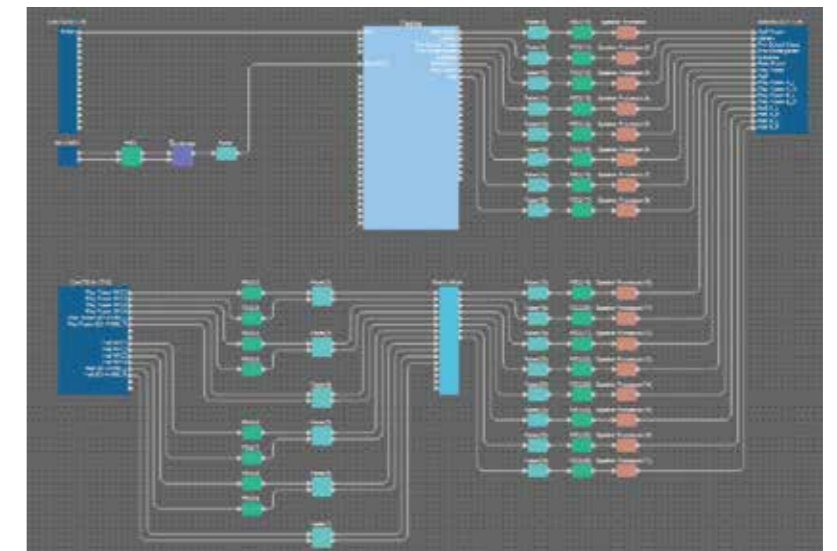
### Component List

Name	MRX7-D Processor	Ri8-D Input Rack	XMV8140-D Power Amplifier	XMV8280-D Power Amplifier
QTY	1	2	1	1
Name	VXS8 Speaker	VXS5 Speaker	VXC4 Speaker	SWR2311P-10G L2 Switch
QTY	4	4	20	1
Name	BD-A1060 Blu-ray Disc Player	DCP1V4S Digital Control Panel	DCP4V4S Digital Control Panel	PGM1 Paging Station Microphone
QTY	2	4	4	1

### Rack Diagram



### Screen Shot



## 4

## Offices & Corporate Spaces

Ensuring presenters and their messages are easily and clearly understood is vital to assuring an idea and its intent is properly received. In a professional setting, discreet and elegant product lines that seamlessly blend into any décor are just as important. Understanding the importance of this, Yamaha combines these requirements into high performance audio systems that maintain sonic integrity regardless of volume level, that feature incredibly powerful yet easy to operate advanced DSP and network technologies with unparalleled product reliability ensuring every Yamaha audio solution with perform for flawlessly for years to come.



## Offices & Corporate Spaces

- ◆ 1. Conference Room 1 (Small)
- ◆ 2. Conference Room 2 (Medium)
- ◆ 3. Conference Room 3 (Medium)
- ◆ 4. Town Hall

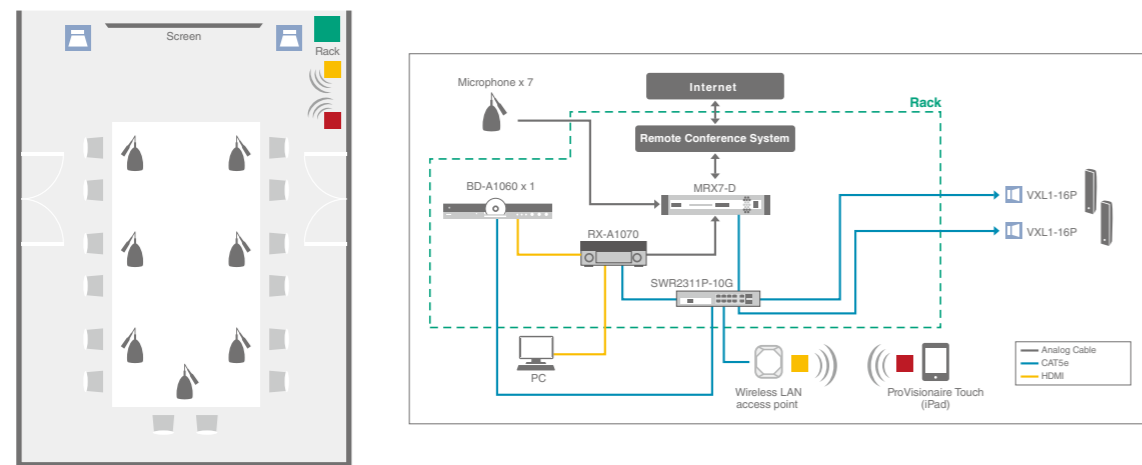
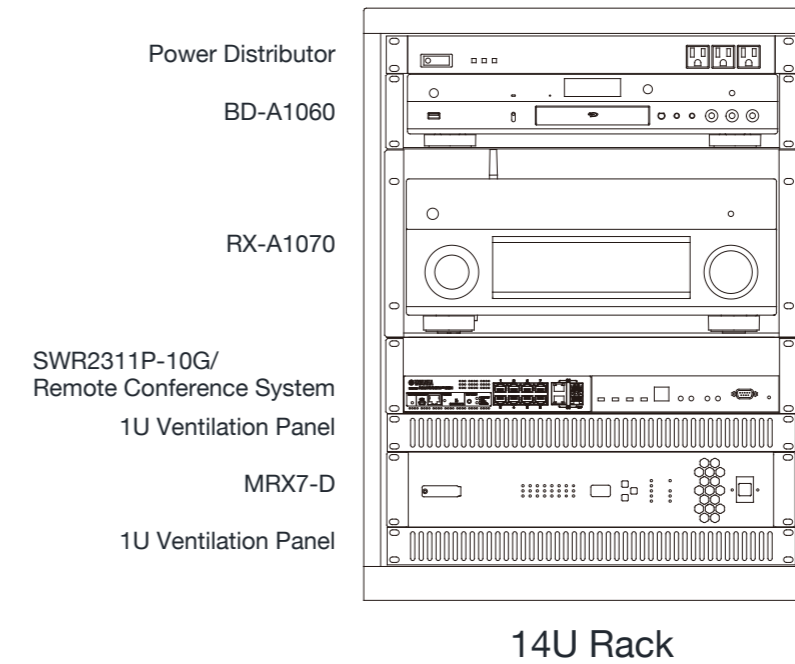
### System Overview

This sample system for a conference room includes a remote conferencing system, built around a digital signal processor, which allows conferences to be shared with remote locations. In addition, the touch panel control system interfaces allows smooth and intuitive sound system operation.

### Key features

- The Acoustic Echo Cancellation feature on the MRX7-D signal processor effectively quells bothersome echoes and dropouts in both directions.
- By combining the MRX7-D system with the Yamaha AV receiver and the Yamaha Blu-ray disc player, it is possible to select the music source, switch the HDMI input source with the AV receiver, and control devices including video playback of the Blu-ray disc, all from one Provisionaire Touch\* iPad application.
- \*ProVisionaire Touch V1.3 or higher required.
- With audio and control managed via a Dante™ audio network and PoE power supplied via the Yamaha SWR2311P network switch, VXL1-16P column loudspeakers can easily be connected to the network enabling IT infrastructure to be effectively utilized.

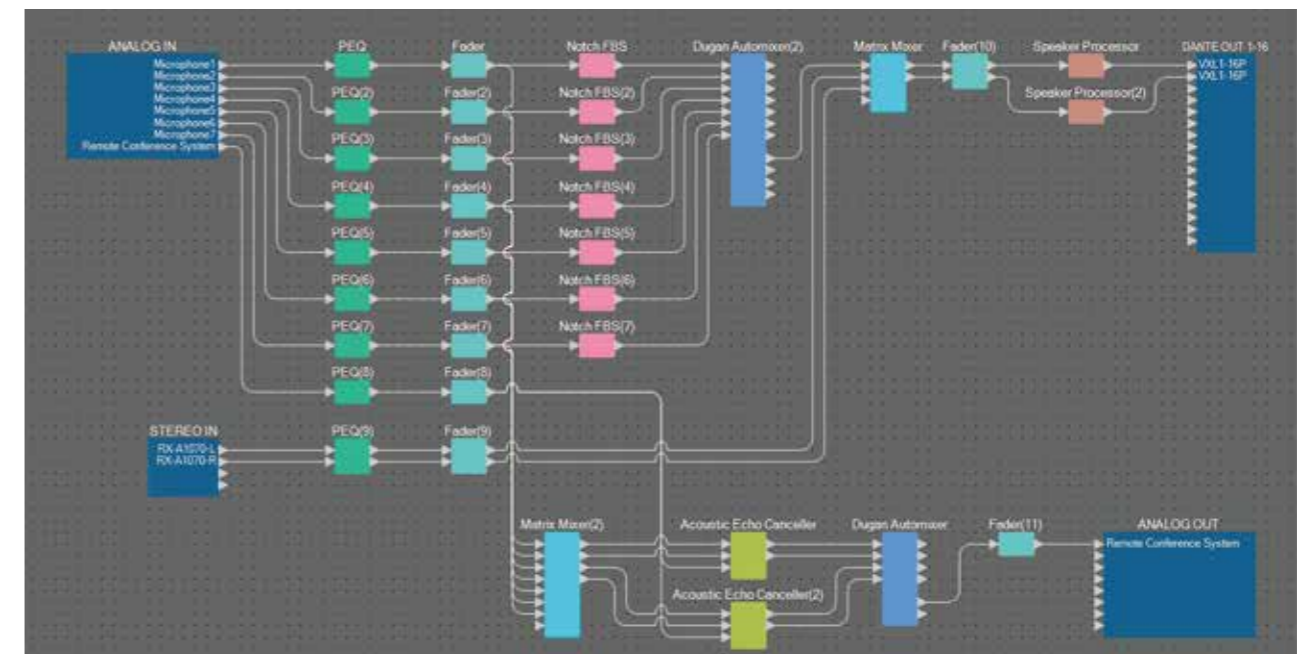
### Rack Diagram



### Component List

Name	MRX7-D Processor	VXL1-16P Speaker	SWR2311P-10G L2 Switch	RX-A1070 AV Receiver
QTY	1	2	1	1
Name	BD-A1060 Blu-ray Disc Player	ProVisionaire Touch iPad		
QTY	1	1		

### Screen Shot

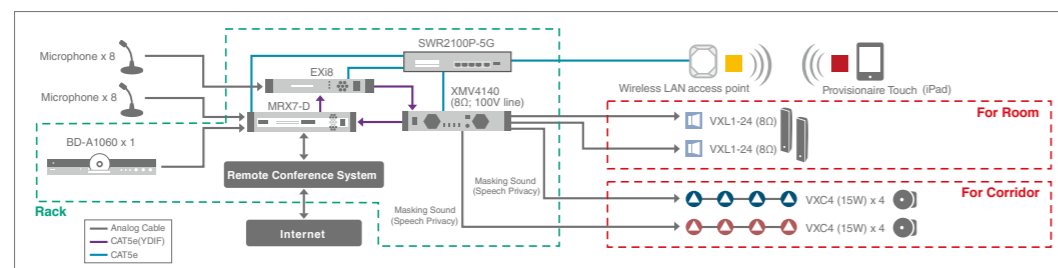
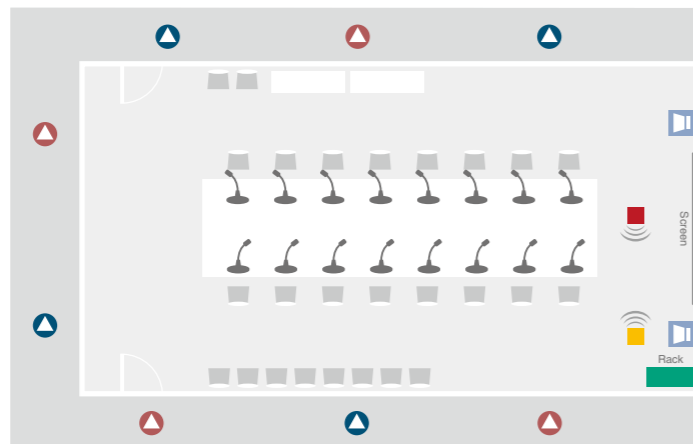


### System Overview

Whether it is a large open-office floorplan, new rules and regulations aimed at protecting patient or client privacy or protecting confidential conversations in the workplace, the need to protect confidential conversations is on the rise. The Speech Privacy function found on the Yamaha MRX7-D is designed specifically to mitigate unintended confidential conversation leaks in a variety of applications using proprietary techniques. Unlike other speech privacy systems which simply flood the area with pink or white noise, Yamaha speech privacy uses natural environmental sounds combined with elements of human speech to provide a sound masking solution with unprecedented performance.

### Key features

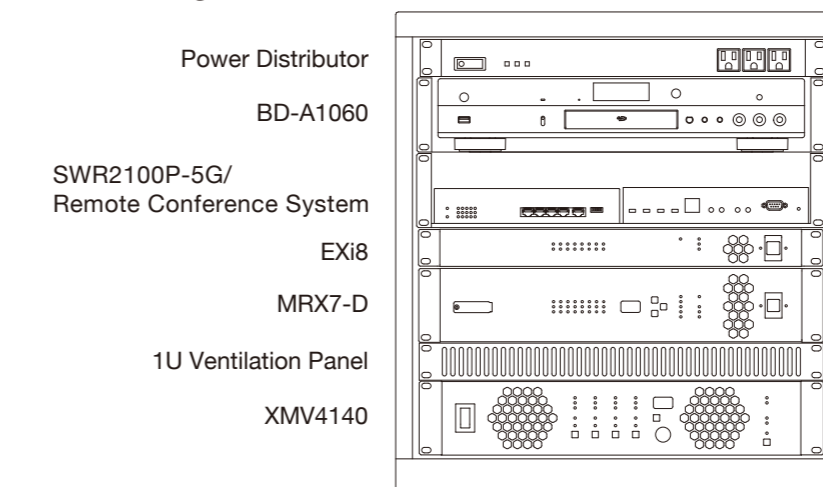
- The speech privacy function on the MRX7-D feeds a masking signal to loudspeakers installed in the hallway outside the conference room minimizing the ability for outsiders to eavesdrop on the proceedings.
- The Acoustic Echo Cancellation feature on the MRX7-D signal processor effectively quells bothersome echoes and dropouts in both directions.
- VXL1 slim line array speakers offer outstanding clarity, which provides a system that achieves excellent intelligibility for smooth, effortless communication.



### Component List

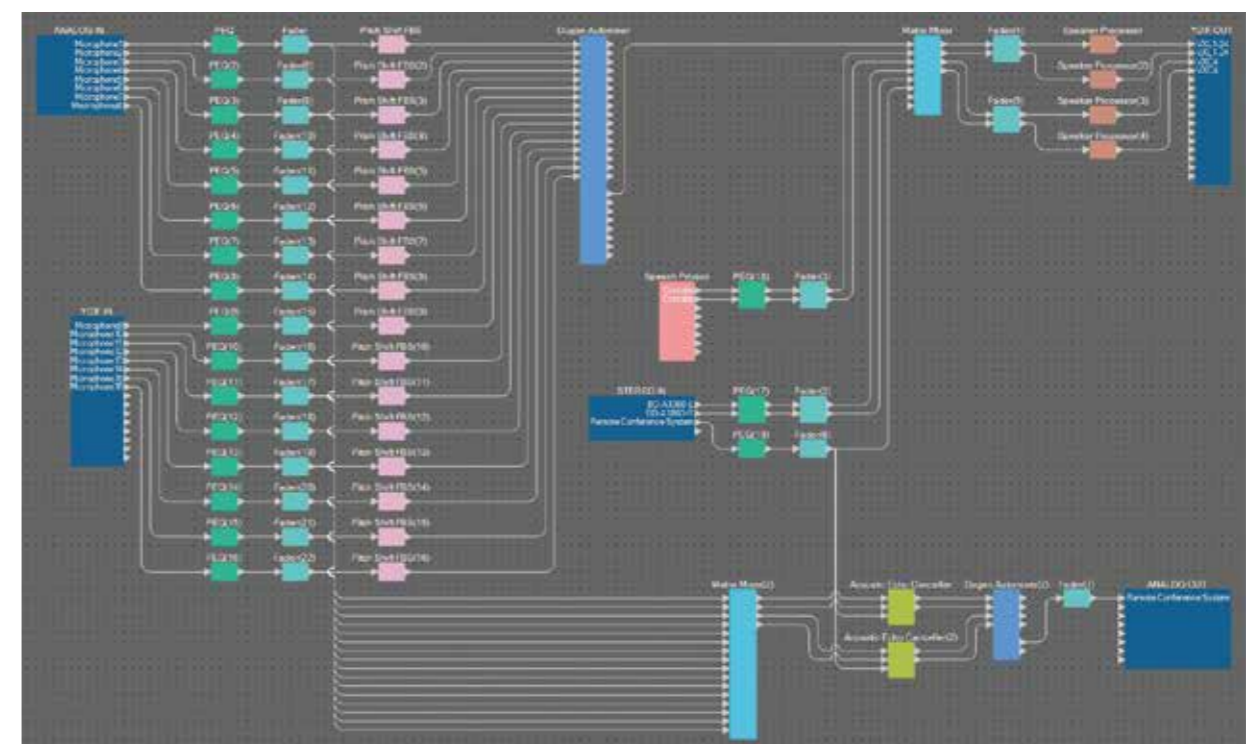
Name	MRX7-D Processor	EXi8 Input Expander	XMV4140 Power Amplifier	VXL1-24 Speaker
QTY	1	1	1	2
Name	VXC4 Speaker	SWR2100P-5G L2 Switch	BD-A1060 Blu-ray Disc Player	
QTY	8	1	1	

### Rack Diagram



11U Rack

### Screen Shot



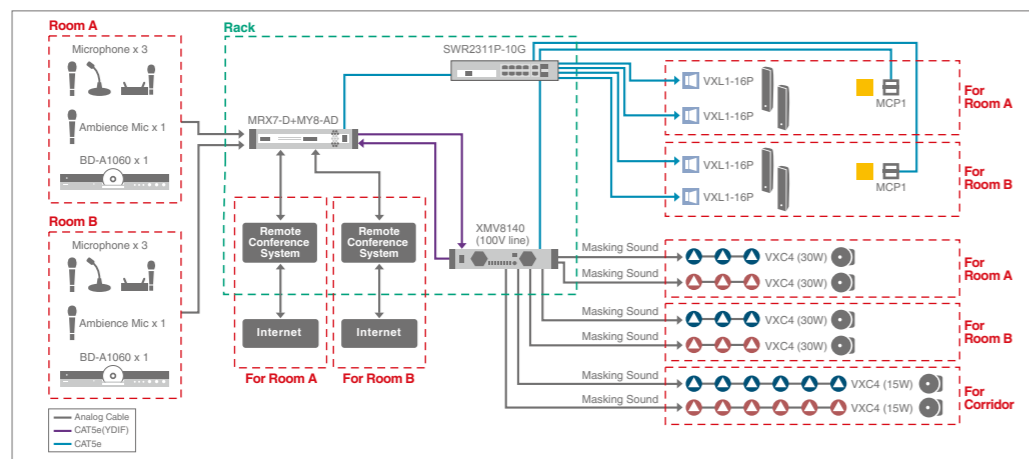
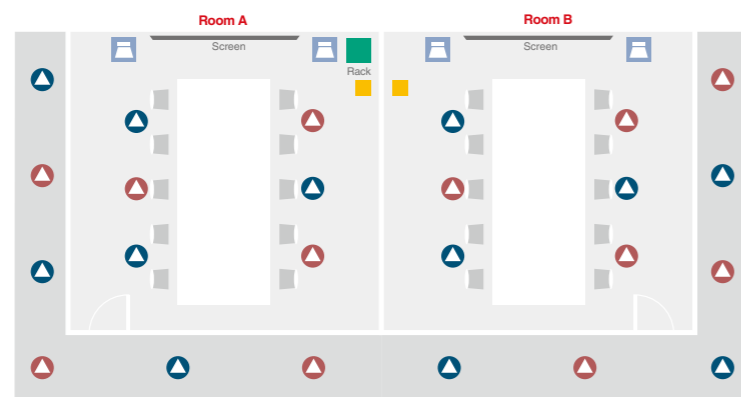
### System Overview

For concurrently held meetings held in two adjacent conference rooms, overhearing chatter and noise from the neighboring room can be bothersome and distract meeting attendees. By employing speech privacy on the MRX7-D, conversations are confined to their respective rooms and outside distractions are minimized. Eliminating obtrusive conversations and noise provides a comfortable environment where attendees can focus and concentrate on their own discussions and work at hand.

### Key features

- The MRX7-D signal processor provides measures to prevent invasion of privacy in office work areas(which provides an environment where workers can concentrate on their jobs) by utilizing the Speech Privacy function.
- The Acoustic Echo Cancellation feature on the MRX7-D signal processor effectively quells bothersome echoes and dropouts in both directions.
- By combining the MRX7-D system with the Yamaha AV receiver and the Yamaha Blu-ray disc player, it is possible to select the music source, switch the HDMI input source with the AV receiver, and control devices including video playback of the Blu-ray disc, all from one Provisionaire Touch\* iPad application.
- With audio and control managed via a Dante™ audio network and PoE power supplied via the Yamaha SWR2311P network switch, VXL1-16P column loudspeakers can easily be connected to the network enabling IT infrastructure to be effectively utilized.

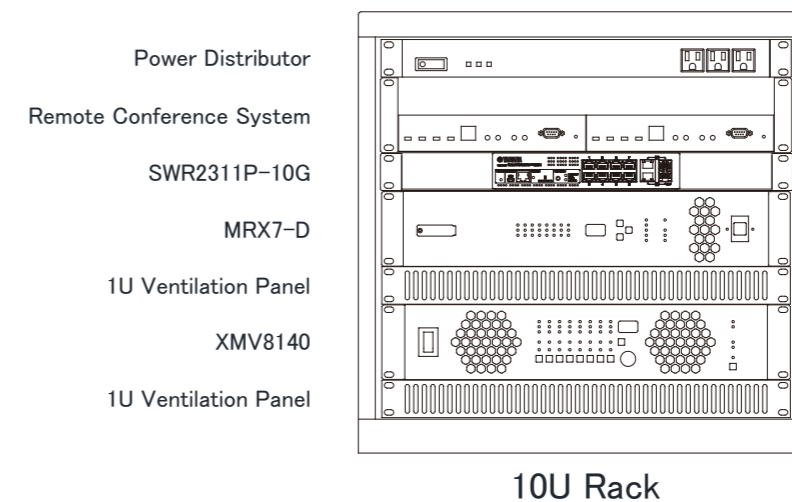
\*ProVisionaire Touch V1.3 or higher required.



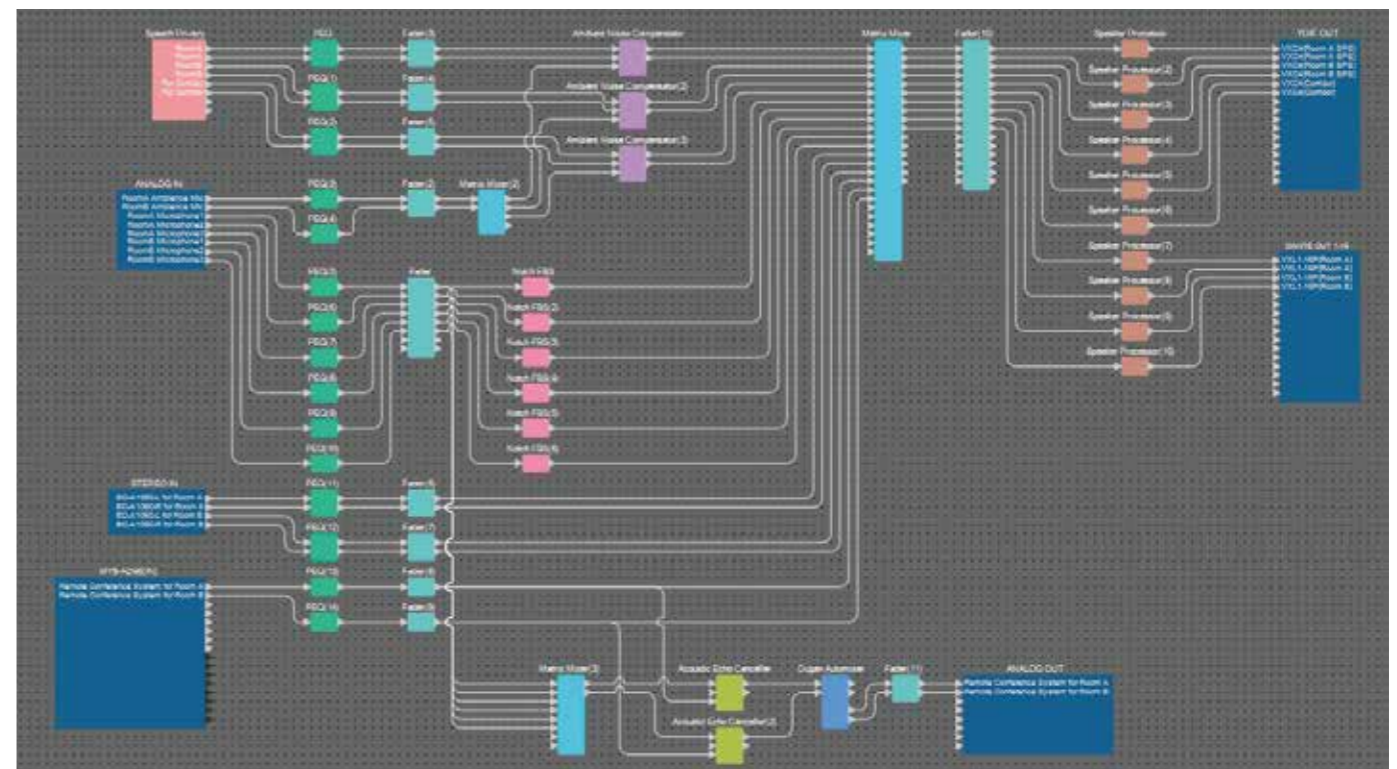
### Component List

Name	MRX7-D Processor	MY8-AD Interface	XMV8140 Power Amplifier	VXL1-16P Speaker	VXC4 Speaker
QTY	1	1	1	4	24
Name	MCP1 Wall Mount Controller	SWR2311P-10G L2 Switch	BD-A1060 Blu-ray Disc Player		
QTY	2	1	2		

### Rack Diagram



### Screen Shot

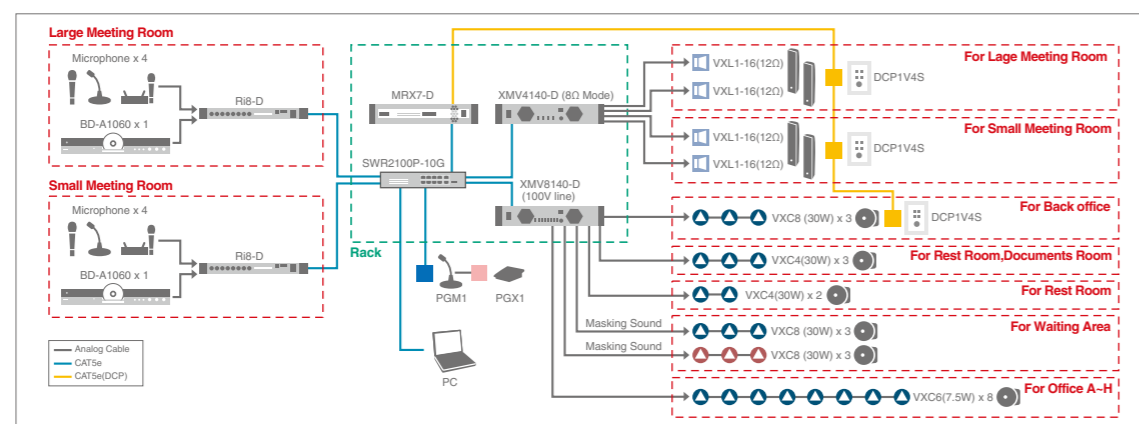
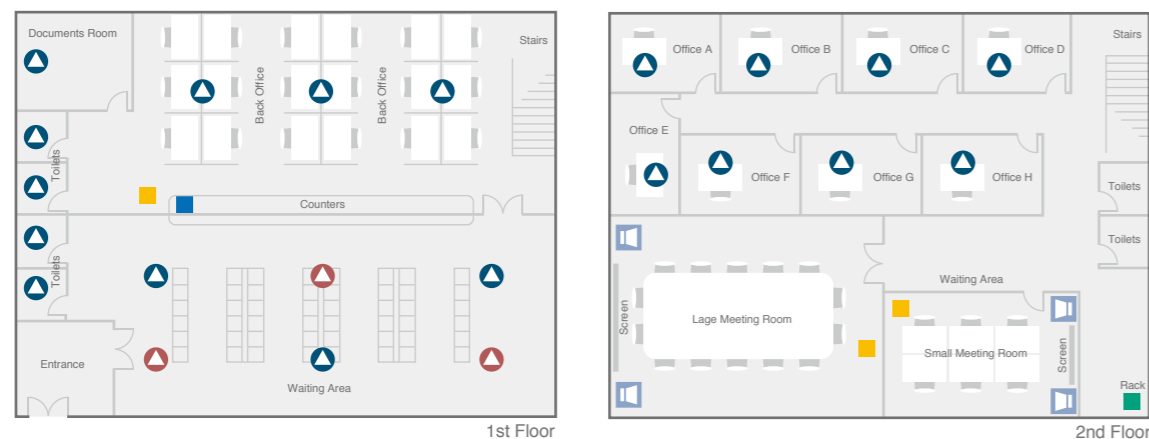


### System Overview

This application is an example of a system that can service an entire building with announcements and background music, while also providing PA and music playback capability for presentations in individual rooms. All equipment other than the speakers is located in a central machine room, while controllers in individual rooms or areas allow remote operation and adjustment. In addition, this system also provides the Speech Privacy System for securing the privacy of conversations between visitors and officials.

### Key features

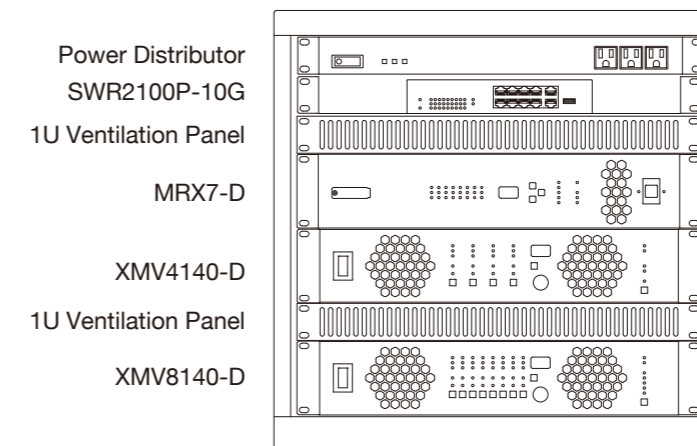
- The combination of an MRX7-D signal processor and PGM1 paging station microphone make it possible to deliver announcements and background music to the entire building while presentations are taking place in individual rooms.
- Source selection and volume adjustment can be easily carried out via MCP1 control panels.
- A scheduler function provides automatic playback of announcements or other material at preset times.
- Aggregate in-house broadcasting and voice control of each area into MRX7-D system, and manage them all with Provisionaire Control.



### Component List

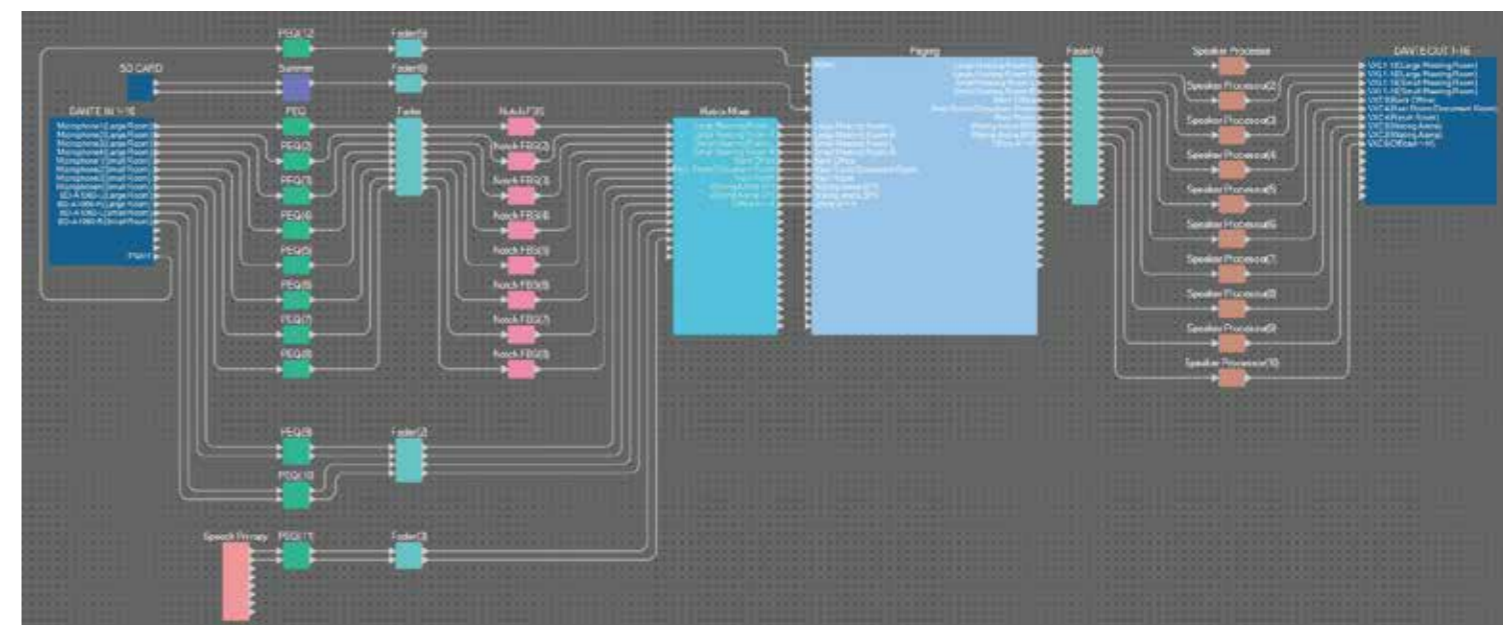
Name	MRX7-D Processor	Ri8-D Input Rack	XMV4140-D Power Amplifier	XMV8140-D Power Amplifier	VXL1-16 Speaker
QTY	1	2	1	1	4
Name	VXC8 Speaker	VXC6 Speaker	VXC4 Speaker	SWR2100P-10G L2 Switch	DCP1V4S Digital Control Panel
QTY	9	8	5	1	3
Name	PGM1 Paging Station Microphone	PGX1 Paging Station Extension	BD-A1060 Blu-ray Disc Player	ProVisonaire Control (WindowsPC)	
QTY	1	1	2	1	

### Rack Diagram



10U Rack

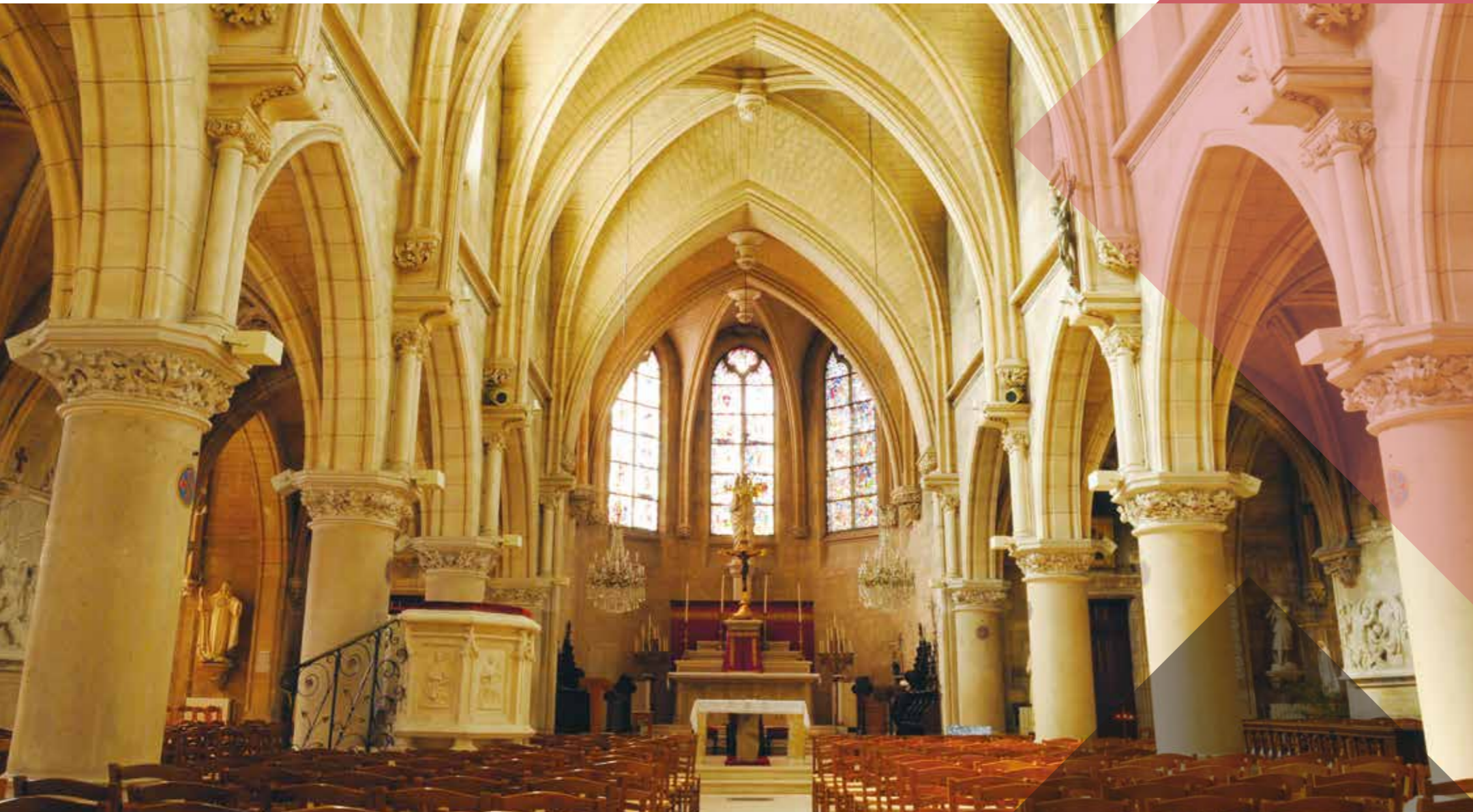
### Screen Shot



## 5

# Houses of Worship

Houses of Worship range in size from small and intimate to immense and all-encompassing, and the acoustic diversity within these spaces can vary widely. Whether it is an absorbent or a highly reverberant space, worship interiors can sometimes challenge congregants with poor speech intelligibility or overall system clarity. Yamaha Commercial Installation Solutions can significantly improve the audio clarity and speech intelligibility in the most challenging spaces with equipment that supports superior audio quality from input through output.



## Houses of Worship

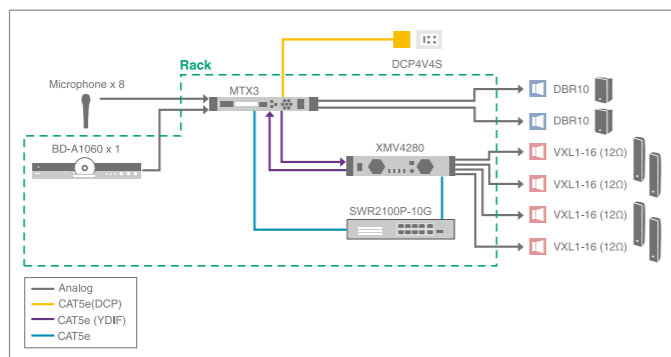
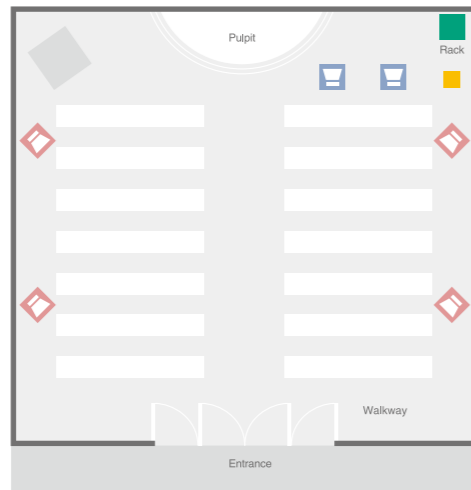
- ◆ 1. Church & Temples 1
- ◆ 2. Church & Temples 2
- ◆ 3. Mosque 1
- ◆ 4. Mosque 2

### System Overview

To compensate for reflections and reverberations that can reduce intelligibility, multiple VXL1-16 loudspeakers have been deployed on the left and right sides of the room. Each enclosure is fed a signal that has been time-aligned and level matched so that attendees can hear clearly. Small portable, powered monitors are available for added sound reinforcement when needed or removed when they are not required.

### Key features

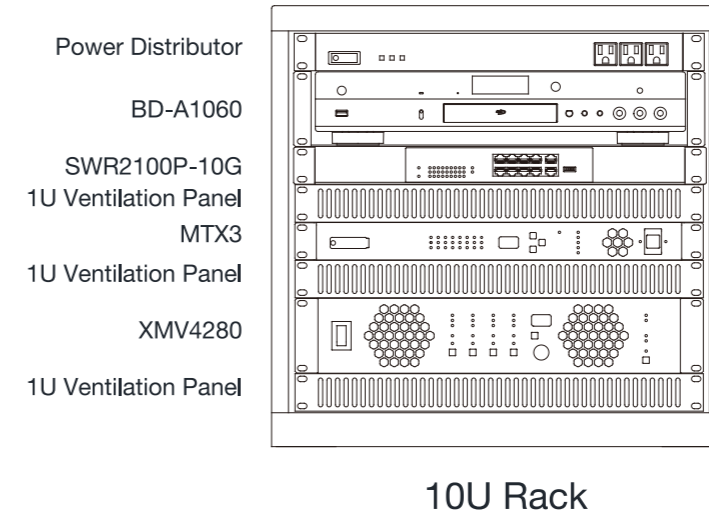
- VXL series slim line array speakers deliver clear, well-defined sound in reverberant rooms.
- DBR series powered speakers have compact, low profile enclosures that make them ideal for monitor applications or for temporary deployment to augment the main system.
- Employing the Dugan Automixer and Feedback Suppression functions on the MTX3 processor makes it possible to have a simple presentation system that does not require an operator.
- Two digital effect processors included in the MTX3 enable use of reverb and delay effects.



### Component List

Name	MTX3 Processor	XMV4280 Power Amplifier	DBR10 Speaker	VXL1-16 Speaker
				
QTY	1	1	2	4
Name	DCP4V4S Digital Control Panel	BD-A1060 Blu-ray Disc Player	SWR2100P-10G L2 Switch	
				
QTY	1	1	1	

### Rack Diagram



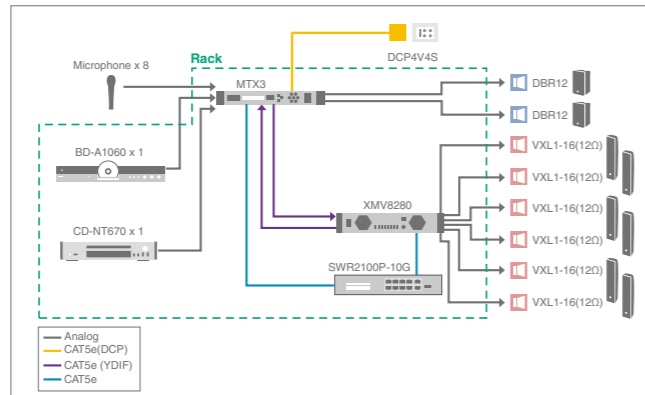
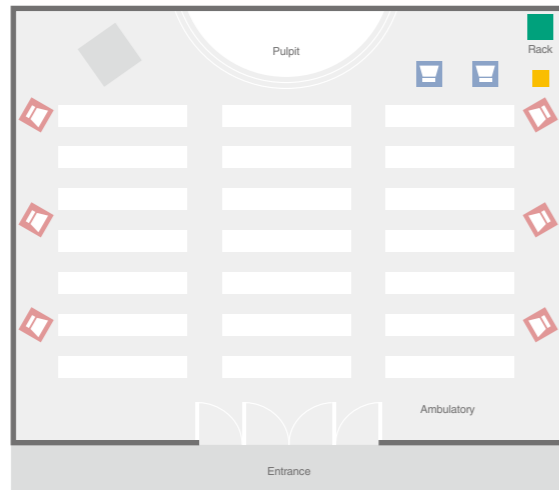


### System Overview

In order to ensure maximum intelligibility in a reflective and reverberant environment, multiple time-aligned speakers have been located from the front to the rear of the room. Coverage is maximized and dead spots eliminated by placing speakers on the left and right sides of the room. This arrangement provides clear sound for everyone present. Compact powered monitor speakers that can be removed when not needed are positioned in front of the choir so that they can hear themselves when singing.

### Key features

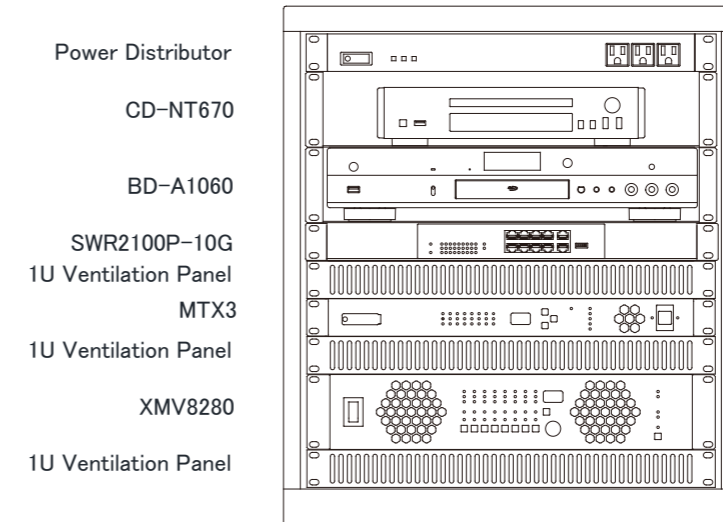
- VXL series slim line array speakers deliver clear, well-defined sound in reverberant rooms.
- In addition to providing time alignment for the speaker systems, the MTX matrix processor features a Feedback Suppressor function that is also useful in this application.
- Day-to-day volume adjustment can be conveniently carried out via DCP control panels without having to operate the MTX processor.



### Component List

Name	MTX3 Processor	XMV8280 Power Amplifier	DBR12 Speaker	VXL1-16 Speaker
				
QTY	1	1	2	6
Name	DCP4V4S Digital Control Panel	CD-NT670 Network CD Player	BD-A1060 Blu-ray Disc Player	SWR2100P-10G L2 Switch
				
QTY	1	1	1	1

### Rack Diagram



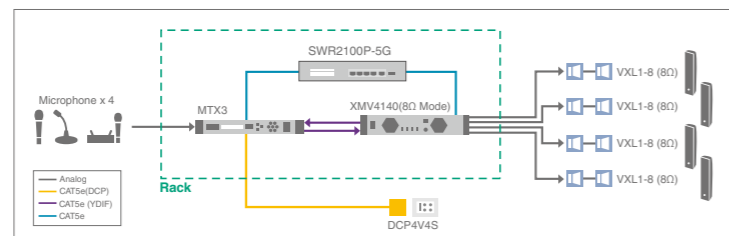
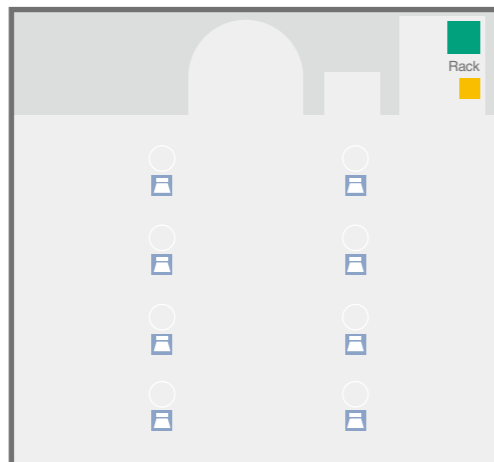
12U Rack

### System Overview


This is a system example of simple system built around a matrix processor MTX3 with some of the finest reverb. Speakers are positioned around the room for uniform delivery and the feedback suppressor built into the MTX3 automatically detects and prevents annoying feedback while at the same time protecting the system's speakers from feedback damage.

### Key features

- Two digital effect processors included in the MTX3 enable use of reverb and delay effects.
- VXL1 slim line array speakers that offer outstanding clarity, and you have a system that achieves excellent intelligibility for smooth, effortless communication.
- Day-to-day volume adjustment can be conveniently carried out via DCP control panels without having to operate the MTX processor.

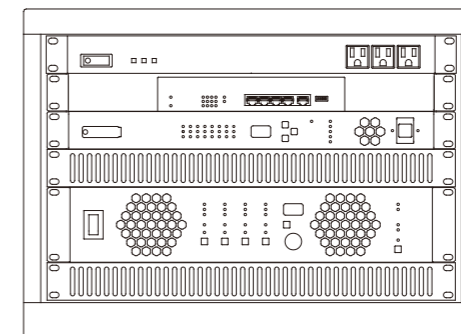


### Component List

Name	MTX3 Processor	XMV4140 Power Amplifier	VXL1-8 Speaker	DCP4V4S Digital Control Panel
				
QTY	1	1	8	1
Name	SWR2100P-5G L2 Switch			
				
QTY	1			

### Rack Diagram

- Power Distributor
- SWR2100P-5G
- MTX3
- 1U Ventilation Panel
- XMV4140
- 1U Ventilation Panel



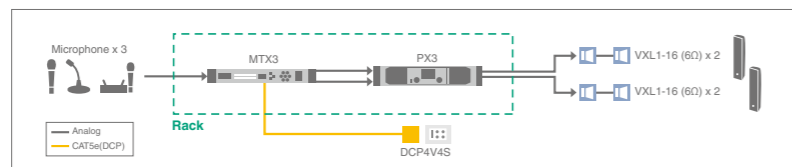
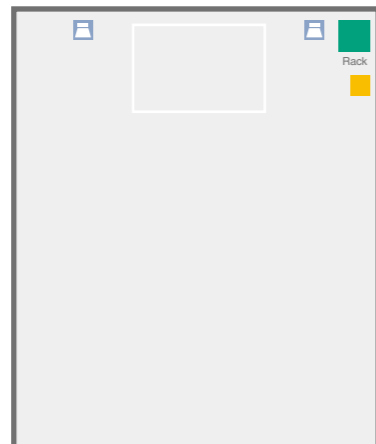
7U Rack

### System Overview





This example is a simple system built around a matrix processor MTX3 with some of the finest reverberation and the Feedback Suppressor function built into the MTX3 automatically detects and prevents annoying feedback while at the same time protecting the system's speakers from feedback damage. And by using tht Slim line array speakers, positioned the front of room, allows you to avoid the uniform delivery.

### Key features

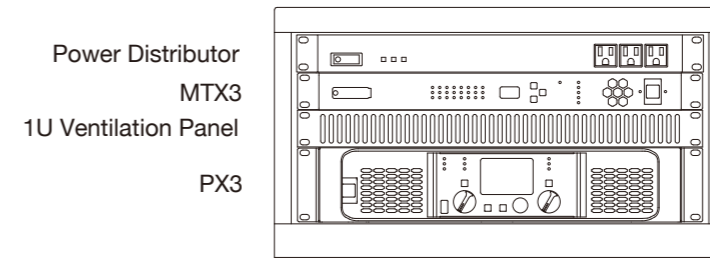
- Two digital effect processors included in the MTX3 enable use of reverb and delay effects.
- The two VXL1 slim line array speakers connected vertically offer outstanding clarity, to provide a system with excellent intelligibility for smooth, effortless communication.
- Day-to-day volume adjustment can be conveniently carried out via DCP control panels without having to use the MTX processor's front panel.



### Component List

Name	MTX3 Processor	PX3 Power Amplifier	VXL1-16 Speaker	DCP4V4S Digital Control Panel
				
QTY	1	1	4	1

### Rack Diagram



5U Rack

## 6

## Multi-zone Facilities

One of the main features of Yamaha Commercial Installation Solutions products is that they provide outstanding sound and music delivery in applications of just about size without the need for complex setup procedures or operation. Our extensive lineup makes it possible to provide solutions that are ideally tailored to suit customer needs.



## Multi-zone Facilities

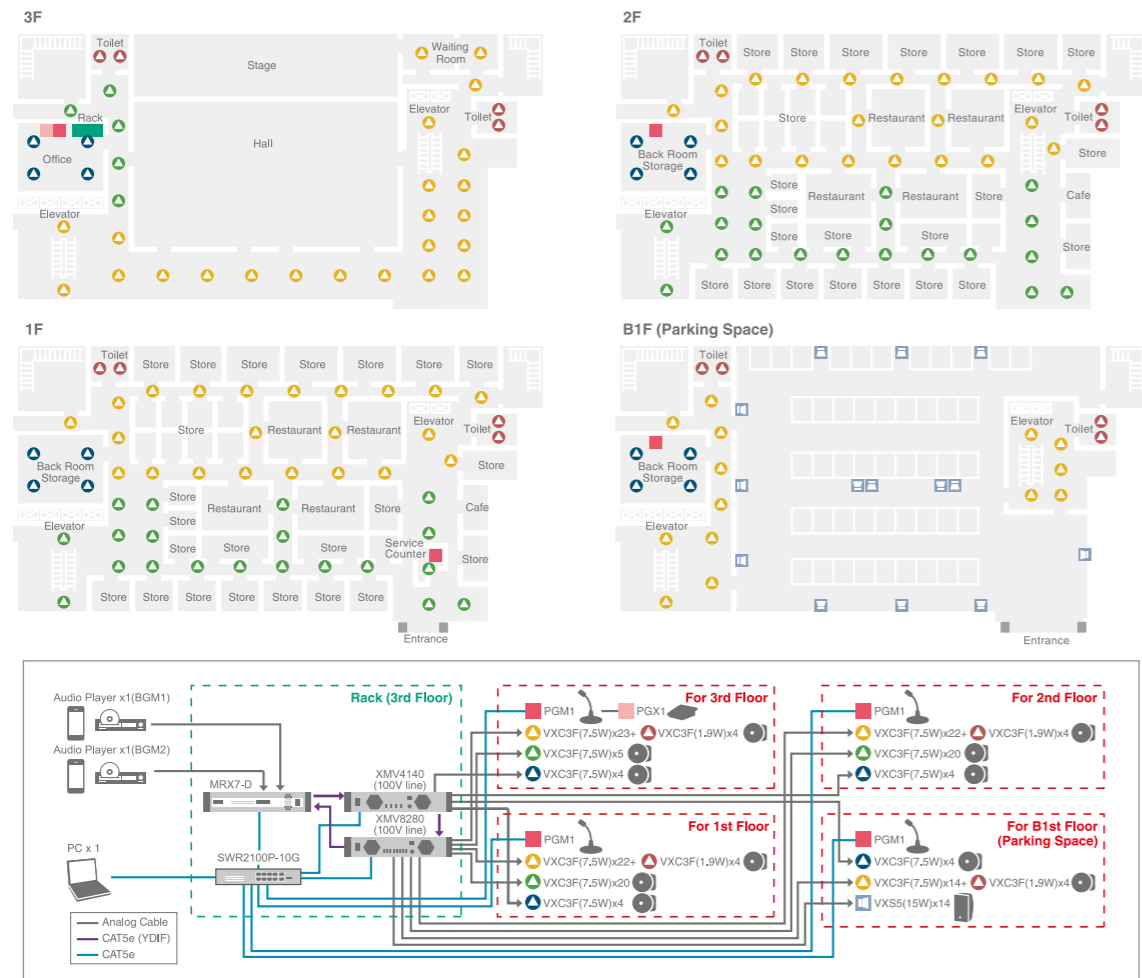
- ◆ 1. Shopping Mall
- ◆ 2. Fitness Club

**System Overview**

The Dante network audio system not only makes it easier to design and install audio systems, but also results in more convenient and controllable installations as well. The combination of MRX7-D signal processor and XMV power amplifiers devices is ideal for large-scale applications such as shopping malls. In this system, Dante compatible paging microphones can be added to provide multiple remote paging stations. In the setup shown, a paging microphone unit located in the 3rd floor office is set up as a master station that will take priority over all other paging microphone units for emergency announcements. The VXC and VXS series speakers allow high-impedance connections, making it possible to distribute multiple speakers over a wide area for broad coverage. A tap on the speakers allows output wattage to be easily changed to create the desired background music and announcement balance, even after installation.

**Key features**

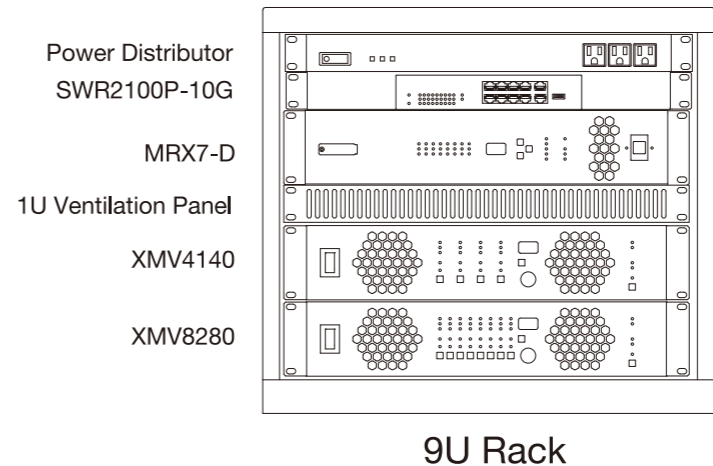
- PoE-compliant Dante enabled PGM1 Paging Station Microphone can be supplied power as well as, audio and control signals via L2 switches over a standard off the shelf ethernet cable.
- Systems built using SWR2100P-5G or SWR2100P-10G L2 switches allow comprehensive network monitoring from the dedicated Yamaha LAN Monitor software application offering PoE power status monitoring and ON/OFF switching capability.



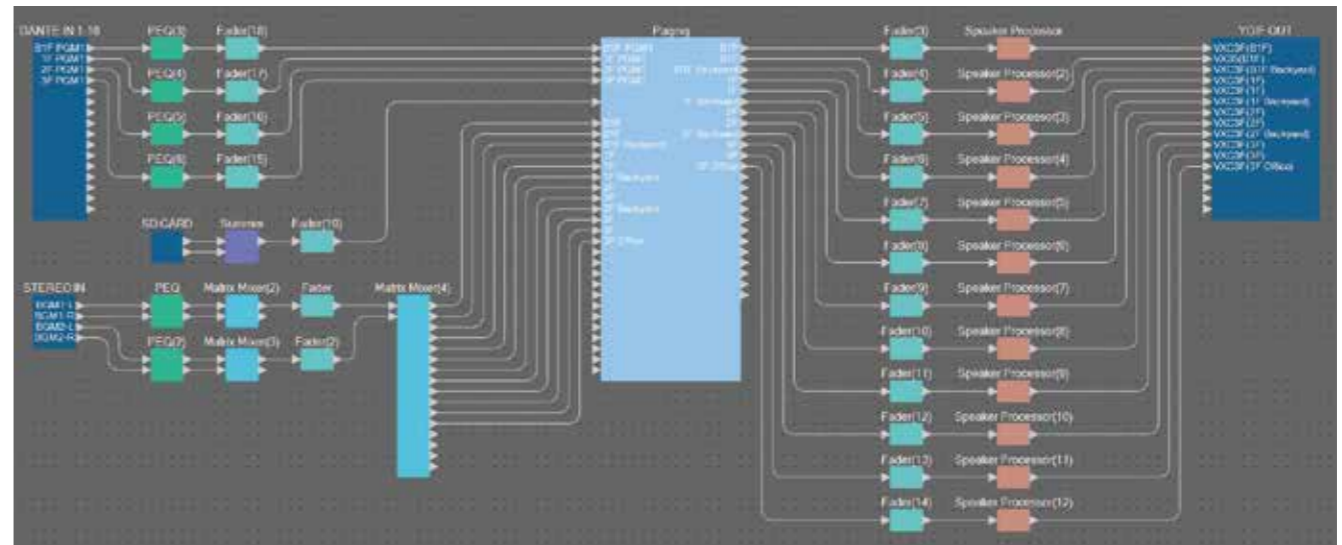
**Component List**

Name	MRX7-D Processor	XMV4140 Power Amplifier	XMV8280 Power Amplifier	VXC3F Speaker
QTY	1	1	1	158
Name	VXS5 Speaker	SWR2100P-10G L2 Switch	PGM1 Paging Station Microphone	PGX1 Paging Station Extension
QTY	14	1	4	1

**Rack Diagram**



**Screen Shot**



**System Overview**

In this example, an MRX7-D is at the center of a Dante network audio system that have been configured for high quality background music and paging. Music and announcements can be routed to multiple zones and rooms from the MRX7-D via a SWR2311P-10G L2 network switch which is used to distribute audio and control signals over standard Ethernet cables. In addition to a central management point of the entire system, MCP1 wall-mount remote control panels enable individual room / zone source selection and volume control.

**Key features**

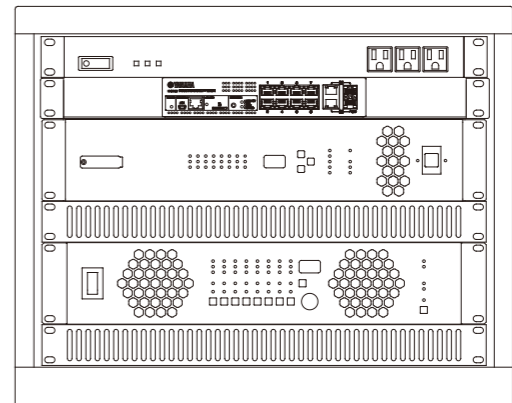
- An MRX7-D signal processor and XMV Series power amplifiers featuring Dante network capabilities facilitate easy deployment throughout the facility while utilizing a minimal amount of rack space.
- Systems built around SWR series L2 switches allow comprehensive network monitoring from the dedicated Yamaha LAN Monitor software application, which offers PoE power status monitoring and ON/OFF switching capability.
- Yamaha speaker systems are specifically tuned for music reproduction, so that the same excellent sound quality is achieved whether they are used at low or high volume.

**Component List**

Name	MRX7-D Processor	XMV8140-D Power Amplifier	VXS5 Speaker	VXC6 Speaker
QTY	1	1	6	19
Name	VXC4 Speaker	VXC3F Speaker	SWR2311P-10G L2 Switch	MCP1 Wall Mount Controller
QTY	8	6	1	3
Name	MG12 Mixing Console	DXS15XLF Powered Subwoofer	DZR10 Speaker	PGM1 Paging Station Microphone
QTY	2	2	8	1

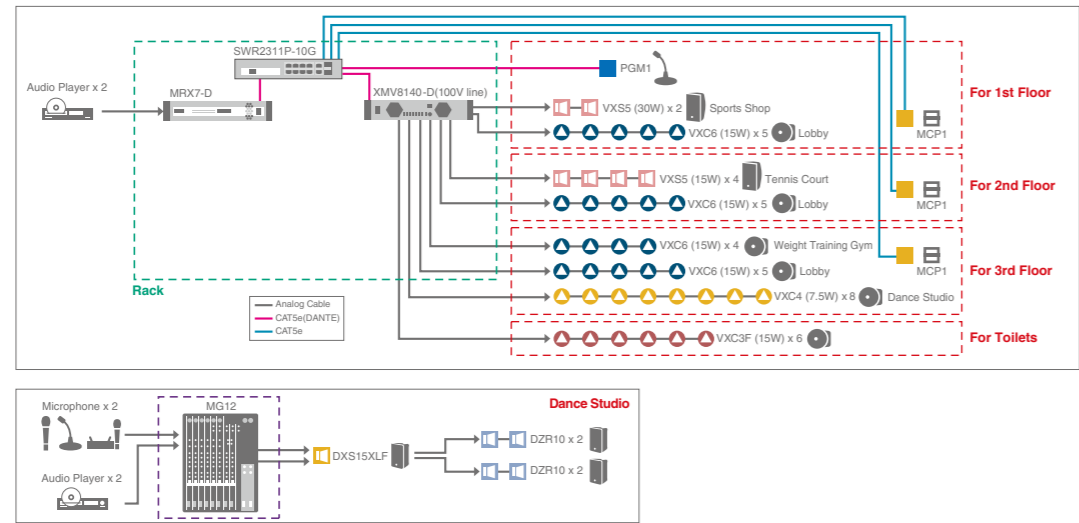
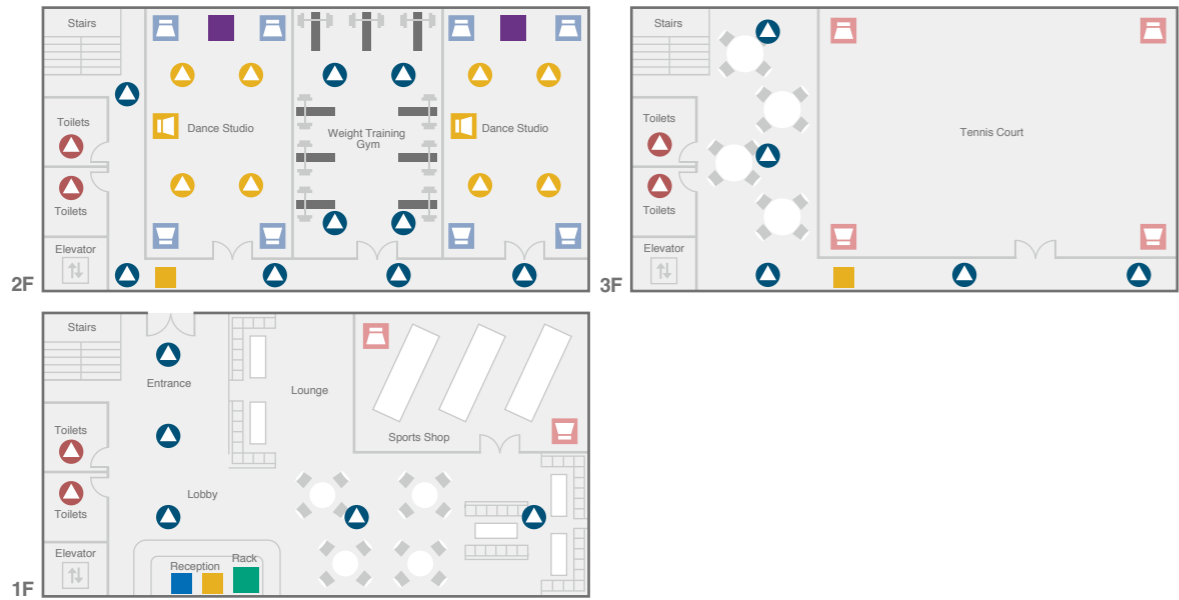
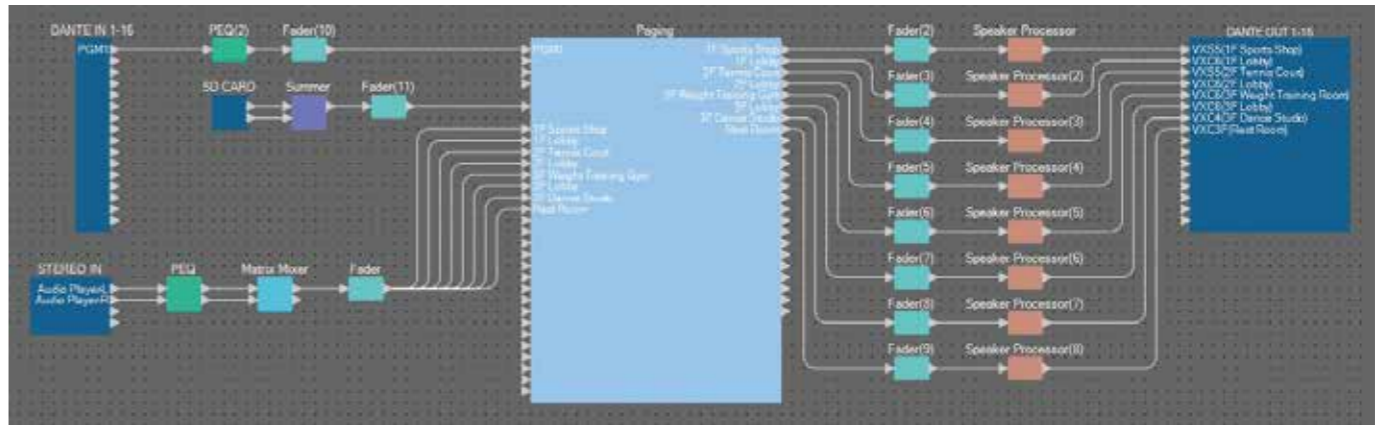
**Rack Diagram**

- Power Distributor SWR2311P-10G
- MRX7-D
- 1U Ventilation Panel
- XMV8140-D
- 1U Ventilation Panel



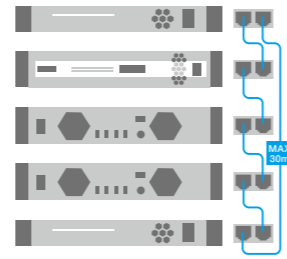
8U Rack

**Screen Shot**



## YDIF

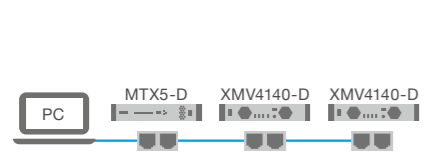
MRX/MTX Series digital signal processors and XMV Series power amplifiers feature the YDIF digital transmission format; a unique proprietary Yamaha technology that delivers 16 channels of digital audio and word clock transmission via a standard CAT5 Ethernet cable. YDIF can be used to cascade multiple MRX/MTX Series processors or easily feed signal to XMV series power amplifiers at distances up to 30 meters (98 feet).



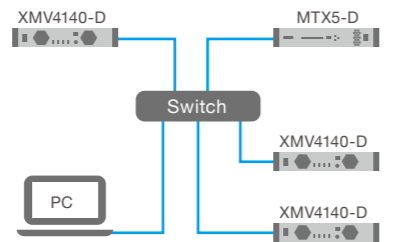
## Dante Network

Audinate's Dante Network Audio Protocol has been included in Yamaha digital signal processors, power amplifiers, select loudspeaker solutions, all Yamaha Digital Mixing Consoles and other peripheral devices. Dante serves as an ideal backbone for building larger network audio systems particularly when connections between equipment exceed the 30m distance max found on the YDIF protocol. Dante enables audio signal and control and audio up to 100m (328 feet) between devices via CAT5e cables which also makes system alterations and expansion easy. With this kind of flexibility, systems can be easily updated as needed with minimal if any downtime.

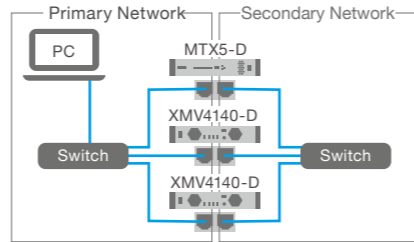
### Daisy Chain



### Star Network



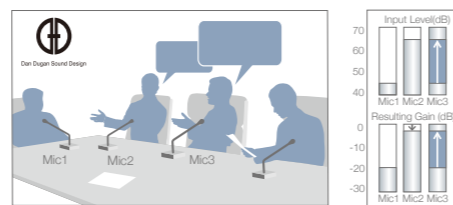
### Redundant



## Dugan Automixer

The Dugan Automixer by Dan Dugan Sound Design automatically raises the gain of microphones at which an input is detected while lowering the gain of microphones that are receiving no input, adjusting channel levels to maintain consistent overall mixer gain. This eliminates the need for complex manual fader operation, safely and reliably maximizing overall clarity and intelligibility.

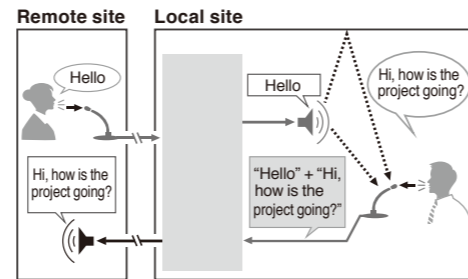
[Supported Product]  
Digital mixer RIVAGE PM series/CL/QL/TF series, Signal Processor MTX/MRX series



## Acoustic Echo Canceller

In remote conferencing situations speech from the remote location emanating from the local speaker can be picked up by the local microphone and returned to the remote location in addition to the local speech. This type of echo can significantly degrade the intelligibility of the sound heard at the remote location. The Acoustic Echo Canceller effectively suppresses this type of unwanted echo, maximizing clarity and intelligibility. The sound received at the microphone is compared with the sound emanating from the speaker and analyzed. An adaptive filter is employed to subtract the speaker output from the microphone input, preventing the speaker output from being returned as an echo by the microphone. Please note that this function is not designed to eliminate the room's own acoustic reflections or reverberation.

[Supported Product] Signal Processor MRX7-D



## Speech Privacy System

The need to protect confidential conversations regardless of the workspace or environment is a growing concern. The Speech Privacy function found in Yamaha signal processors uses an original sonic masking technique that uses synthesized elements of human speech combined with natural environmental sounds to effectively camouflage spoken information. This approach allows conversations to be protected by relatively low volume masking while maintaining the comfort of a conference environment. Sound synthesized from human speech, renders conversation unintelligible to eavesdroppers without completely eliminating the sound of the conversation.

[Supported Product] Signal Processor MRX7-D



## ProVisionaire Series

### Intuitive and simple approach to design flexible controllers

Yamaha provides a versatile range of remote control options to suit the various installation types as well as the customer's unique requirements. These range from simple remotes to fully customizable software based control for either iOS or Windows based platforms. ProVisionaire series can operate a wide range of Yamaha and Nexo equipment such as MTX/MRX series signal processors, CL/QL/TF series digital mixers, the Rio series I/O boxes, the XMV series power amplifiers and NEXO Powered TD Controller NXAMPmk2. The software programmer can define which parameters from their selection of products are to be included in the ProVisionaire series design, thus creating a completely customized control surface for their client. ProVisionaire series offers a total Yamaha and NEXO control solution.



### Line-up

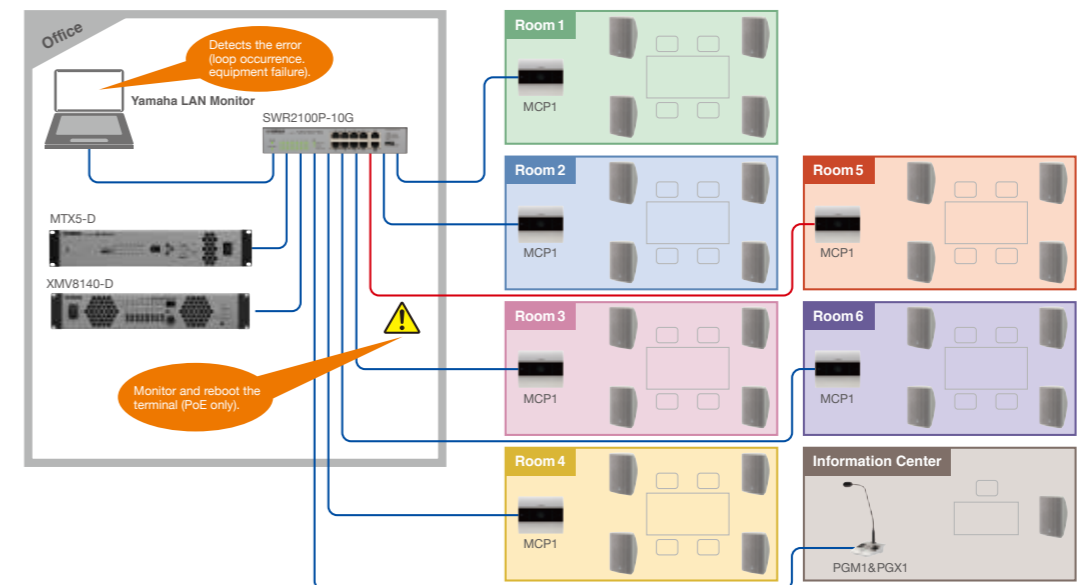
ProVisionaire Control and ProVisionaire touch are the customizable control panel software for a variety of Yamaha professional audio systems. By simply dragging and dropping widgets such as faders and switches onto a screen, you can create an ideal original control panel dedicated to the applications and functions required for an installation project. ProVisionaire Control KIOSK and ProVisionaire Touch KIOSK allows the Windows PC/Tablet or iPad to be set up to function as a dedicated controller, preventing users from accessing the operating system or other applications so that unintended control or design changes cannot occur. The use of ProVisionaire Control.KIOSK ensures a smooth and easy to use controller over Yamaha professional audio systems.

	ProVisionaire Control	ProVisionaire Control KIOSK	ProVisionaire Touch	ProVisionaire Touch KIOSK
UI Design	✓		✓	
Control	✓	✓	✓	✓
Support OS	Windows	Windows	iOS(iPad)	iOS(iPad)

## Yamaha LAN Monitor

### Network Visibility

Effective Dante network management hinges on a range of parameters such as network traffic, switch status, and individual Dante device information. The dedicated Yamaha LAN Monitor application for Windows computers provides a comprehensive single-screen view of all necessary parameters when used with SWP/SWR series switches. We refer to this type of graphical overview as "network visibility." You can even take a snapshot of the normal network status and set an alarm to warn you if any of the parameters changes, so that problems can be identified and resolved quickly and easily. The Dante Controller application can also be launched from the Yamaha LAN Monitor with a single click, providing a total Dante network solution on a single computer.



# About Yamaha



### Dedicated to Great Sound

Yamaha was established more than 125 years ago, and since that time the company has led musical instrument and sound innovation, acquiring extensive know-how and refined sonic sense along the way. As sound professionals we are dedicated to continue building on that background, delivering products and services that result in thoroughly satisfying sound and music environments.



### Innovative Electronics

Innovative electronics for digital musical instruments as well as audio equipment is one of Yamaha's strengths. The same advanced Yamaha digital signal processing and network technologies that are highly regarded by audio professionals contribute to quick, easy design and management of commercial sound environments as well.



### Industry Leading Quality Control

ISO 9001 or equivalent quality management is maintained at all Yamaha manufacturing facilities. Quality control is a priority for every product we make. We are dedicated to delivering products that are easy to use while offering long-term reliability and safety that truly meet our customers' needs.



### Comprehensive Sales Network

Yamaha has more than 30 branch offices around the world, providing the same level of sales, service, and support for affiliates and customers everywhere.\*  
\* Availability of some products may vary according to region. Contact your nearest Yamaha representative for details.



### Experience and Imagination

Yamaha offers an impressively wide range of products, from world-renowned pianos and other musical instruments to home and professional audio equipment. The experience gained in all of those fields goes into our Commercial Installation Solutions products as well, resulting in unique solutions for high-quality sonic environments.



### Beautiful, Practical Design

The visual designs for Yamaha products are created at our in-house Product Design Laboratory, adhering to the basic concept of unobtrusive functional beauty. The many prestigious international design awards we have been honored to receive attest to the success of this approach. It is our goal to offer the most pleasing environments possible, both sonically and visually.



### Environmental Management

Yamaha operations comply with ISO 14001 standards for responsible environmental management. We are dedicated to employing sustainable resources and reducing the energy consumption of our technology and products to reduce the overall burden on the environment. Responsible environmental management directly benefits our customers as well as society at large.



### Contributing to a Better Society

Yamaha's corporate slogan of "Sharing Passion and Performance" is applied not only in our products, but in our acoustic design consulting services for distinguished halls and music education activities as well. We believe that by creating opportunities for more people to enjoy sound and music we are contributing to a better, culturally richer society as well.