

WORSHIP SOLUTIONS APPLICATION GUIDE

CONTENTS

03 Getting Started

Determine the size of the sound reinforcement system you need

- 04 Portable System Solutions
- 18 Small System Solutions
- 29 Medium System Solutions
- 37 Large System Solutions
- 39 Working with a System Integrator- Learn what to look for in a system integrator
- 42 Product Support and Contact Information

GETTING STARTED

A few easy facts will help determine the size of the sound system you need.



REVIEW YOUR MINISTRY'S SCOPE

Portable System Solution

- You set up and tear down your system for each service
- Your congregation is 250 people or less
- $\boldsymbol{\cdot}$ You have an outdoor, coffee shop, or on-the-go ministry
- Your large ministry holds off-site events

Small System Solution

- Meeting space measures 500-2,000 square feet
- Your congregation is 250 people or less
- You need a permanently-installed sound system

Medium System Solution

- Meeting space measures 2,000-5,000 square feet
- Your congregation is 750 people or less
- You need a permanently-installed sound system

Large System Solution

- Meeting space measures 5,000 square feet or more
- Your congregation is 750 people or more
- You need a permanently-installed sound system



PORTABLE SYSTEM SOLUTIONS

PORTABLE SYSTEM SOLUTIONS

If you have an on-the-go ministry that meets outside or at temporary indoor locations, or a large ministry that holds off-site events, Yamaha has portable PA systems to meet your needs. These self-contained, self-powered packages are easy to set up, use, transport and store. They're designed for groups of about 250 people or less but you can expand them to host large events or accomodate your congregation's growth.



STAGEPAS 400BT and 600BT

These two flexible products both include a pair of speakers and a mixer with a collection of essential features. The Bluetooth[®] function gives you the ability to add music wirelessly from a smartphone or tablet. The 1-Knob Master EQ[™] and onboard feedback suppressor deliver music and your message clearly to everyone in attendance.



MG10XU/12XU/16XU

Yamaha MGXU systems bundle an MG analog mixer, powered DBR speakers, and a powered DXS subwoofer. The mixers include technologies developed by Yamaha for our professional consoles, including studio-quality preamps, powerful digital processing, and rugged, reliable construction. The DBR speakers harness a state-of-the-art Yamaha DSP amplifier and quality components engineered to deliver high-resolution sound at any output level. Conveniently, they connect directly to the subwoofer for rapid setup and tear down.



EMX5/7

EMX systems match a powered Yamaha EMX analog mixer with CBR Series passive speakers and a passive subwoofer. The all-in-one EMX concept ensures that anyone, even those with no audio experience, can be their own sound engineer; all they need to do is plug in a power cable and make a few simple, intuitive connections. The speakers and subwoofer, with their lightweight, durable cabinets, are just as easy to operate, and they provide beautiful, impactful sound quality.



TF Rack/1/3

TF systems combine TF digital mixers with Yamaha DZR Series powered speakers and a DXSXLF powered subwoofer. The TF's TouchFlow Operation™ interface allows you to control the action from a touch screen, making it easier than ever to achieve the ideal mix. And, like the other systems on this page, the speakers and subwoofer connect directly for quick, easy setup and teardown.



STAGEPAS 1K

The one-piece STAGEPAS 1K is a complete audio system consisting of a speaker array, a subwoofer and a five-channel powered mixer. Once set in place, you can remotely control its settings from an Android or iOS device using the free STAGEPAS Editor app, or stream music wirelessly via Bluetooth[®].

STAGEPAS PORTABLE PA SYSTEMS

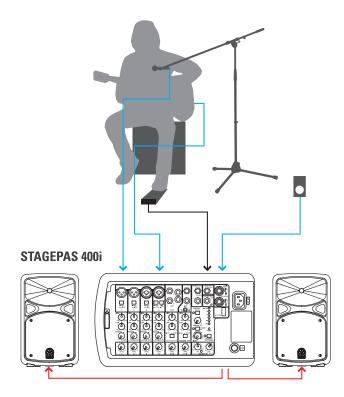


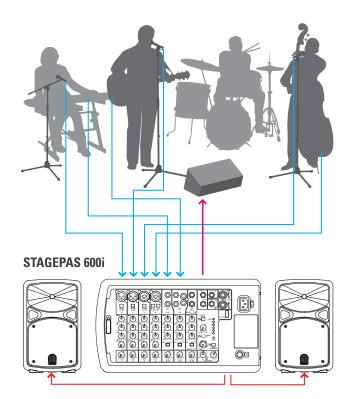
R E C O M M E N D E D P A SYSTEMS

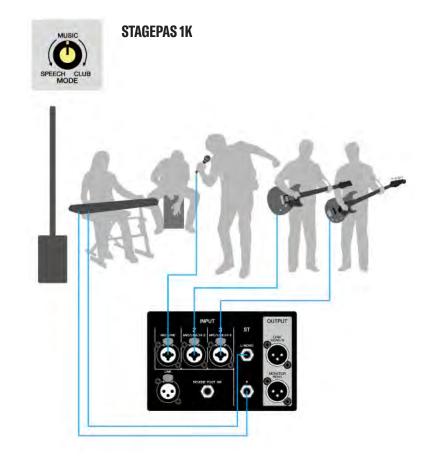
	Stagepas 400BT	Stagepas 600BT	<u>Stagepas 1K</u>
Audience Size	≤100	≤175	≤250
Powered Mixer	Yes	Yes	Yes
Mixing Channels	6	8	4
Power Output	400 W	680 W	1000 W
Speaker	2-Passive	2-Passive	1-Passive
Subwoofer	DXS12mkll	DXS12mkII	1-Included
Stage Monitor	DBR10	<u>DBR10</u>	DBR10
Microphone	Line 6 XD-V35	Line 6 XD-V35	Line 6 XD-V35

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MX61 Synthesizer
Rolling Case for Carrying and Storing Accessories	PSR-EW410 Portable Keyboard

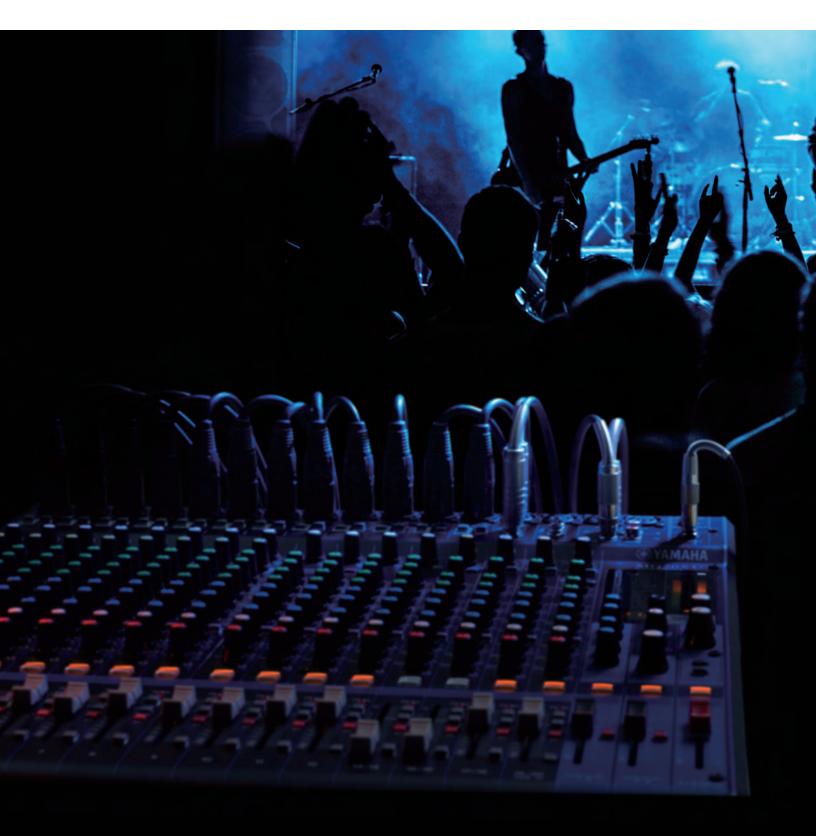
Stagepas PA System







MGXU PORTABLE ANALOG PA SYSTEMS

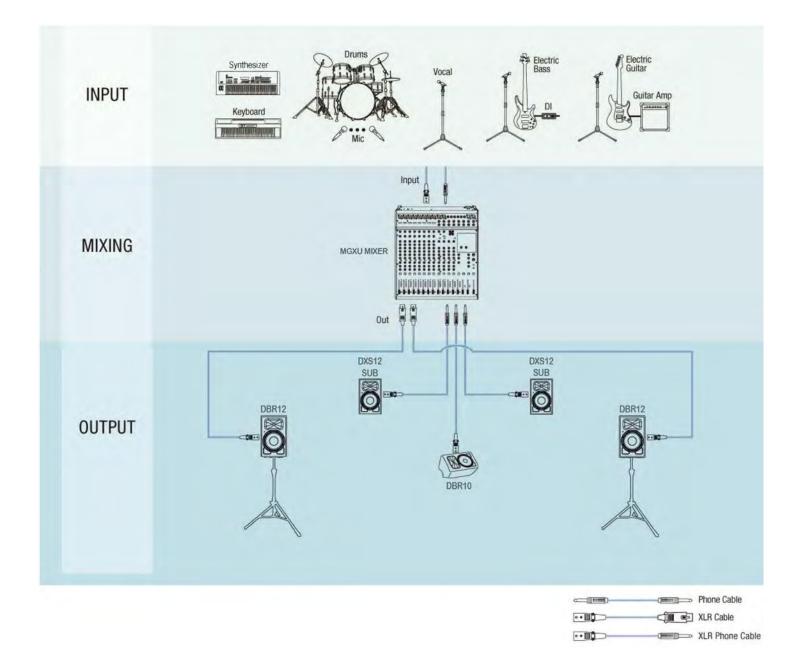


R E C O M M E N D E D P A SYSTEMS

	MG10XU	<u>MG12XU</u>	<u>MG16XU</u>
Audience Size	≤100	≤175	≤250
Powered Mixer	No	No	No
Mixing Channels	10	12	16
Power Output	Passive	Passive	Passive
Powered Speaker	DBR12	<u>DBR12</u>	<u>DBR15</u>
Powered Subwoofer	DXS12mkll	DXS12mkII	DXS15mkII
Stage Monitor	DBR10	<u>DBR10</u>	DBR10
Microphone	Line 6 XD-V35	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MX61 Synthesizer
Rolling Case for Carrying and Storing Accessories	PSR-EW410 Portable Keyboard

MG10XU PA System



EMX PORTABLE ANALOG PA SYSTEMS

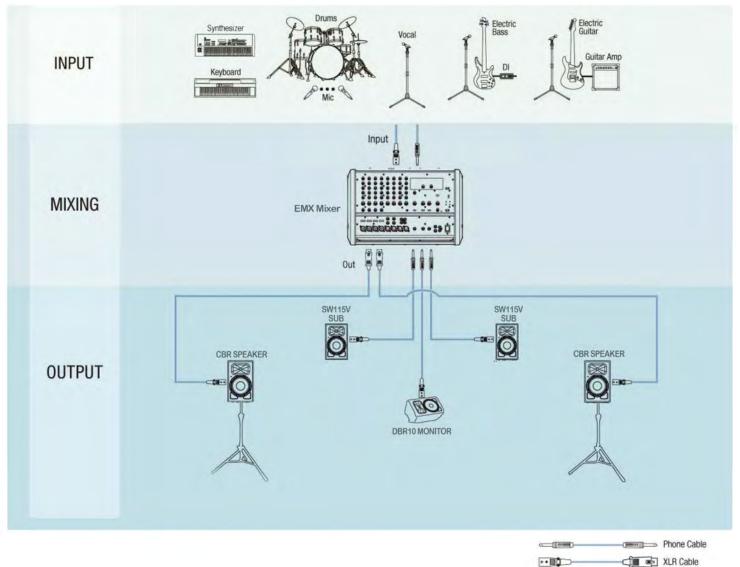


RECOMMENDED PA SYSTEMS

	<u>EMX5</u>	<u>EMX7</u>
Audience Size	≤175	≤250
Powered Mixer	Yes	Yes
Mixing Channels	12	12
Power Output	630 W	710 W
Passive Speaker	<u>CBR12</u>	<u>CBR15</u>
Passive Subwoofer	<u>SW115V</u>	<u>SW118V</u>
Stage Monitor	DBR10	<u>DBR10</u>
Microphone	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MX61 Synthesizer
Rolling Case for Carrying and Storing Accessories	PSR-EW410 Portable Keyboard

EMX5 PA System



	ALL GADIE
••	XLR Phone Cable

TF SERIES PORTABLE DIGITAL PA SYSTEMS

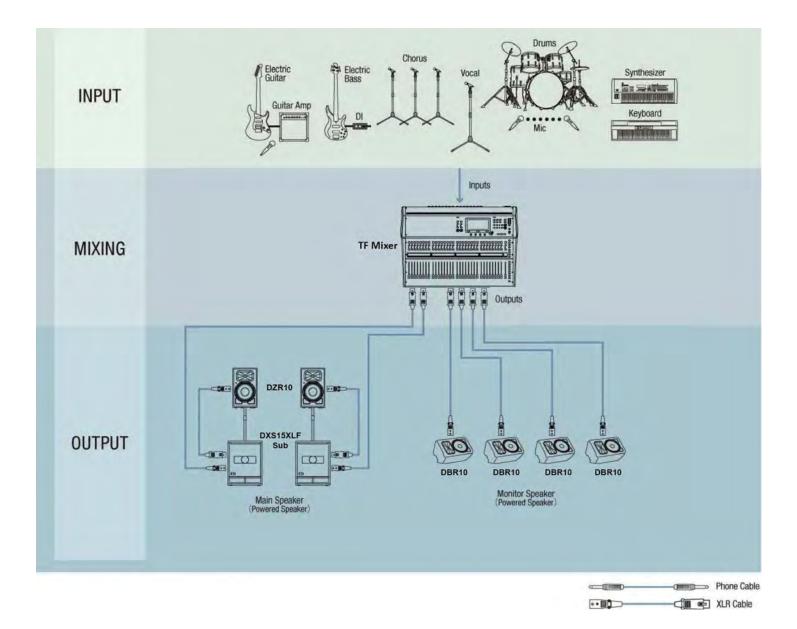


RECOMMENDED PA SYSTEMS

	<u>TF Rack</u>	<u>TF1</u>	<u>TF3</u>
Audience Size	≤100	≤175	≤250
Powered Mixer	No	No	No
Mixing Channels	16	16	24
Power Output	N/A	N/A	N/A
Powered Speaker	<u>DZR10</u>	<u>DZR12</u>	<u>DZR15</u>
Powered Subwoofer	DXS15XLF	DXS15XLF	DXS15XLF
Stage Monitor	<u>DBR10</u>	<u>DBR10</u>	<u>DBR10</u>
Microphone	Line 6 XD-V35	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
TIO 1608 Digital Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MX61 Synthesizer
Rolling Case for Carrying and Storing Accessories	PSR-EW410 Portable Keyboard

TF1/3 PA Systems



SMALL SYSTEM SOLUTIONS

SMALL SYSTEM SOLUTIONS

In one respect, a house of worship with 250 members is exactly the same as one with thousands: everyone in the building wants to hear clearly, no matter where they sit. Yamaha has created three solutions that give smaller facilities (500-2,000 square feet) the means to reach everyone in the congregation with power and clarity.





MG16XU/20XU

Yamaha MGXU systems bundle an MG analog mixer, powered DBR speakers, and a powered DXS subwoofer. The mixers include technologies developed by Yamaha for our professional consoles, including studio-quality preamps, powerful digital processing, and rugged, reliable construction. The DBR speakers harness a state-of-the-art Yamaha DSP amplifier and quality components to deliver high-resolution sound at any output level. Conveniently, they connect directly to the subwoofer for rapid setup and tear down.



MGP24X

This MGP system integrates a Yamaha MGP Series mixer, DBR Series powered speakers and a DXS Series powered subwoofer. The compact MGP brings digital technology to analog mixing. It adds high-resolution effects, iPod®/iPhone® integration, and the functionality of a unique Stereo Hybrid Channel for warmth and musicality. The speakers and subwoofer complement that control with high-efficiency amplifiers that effortlessly fill a room with sound.

TF Rack/1/3

TF systems combine TF Rack digital mixers with Yamaha DZR Series powered speakers and a DXSXLF powered subwoofer. The TF's Touch-Flow Operation[™] interface allows you to control the action from a touch screen, making it easier than ever to achieve the ideal mix. The speakers and subwoofer deliver that mix evenly throughout your sanctuary.

MGXU SMALL ANALOG PA SYSTEMS

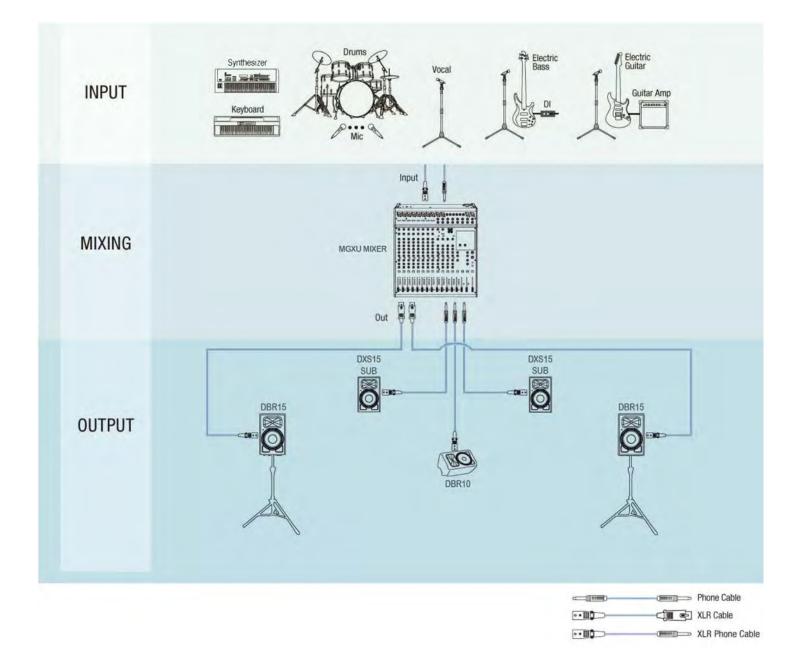


RECOMMENDED PA SYSTEMS

	<u>MG16XU</u>	<u>MG20XU</u>
Audience Size	≤175	≤250
Powered Mixer	No	No
Mixing Channels	16	20
Power Output	Passive	Passive
Powered Speaker	<u>DBR12</u>	<u>DBR15</u>
Powered Subwoofer	DXS12mkII	DXS15mkII
Stage Monitor	<u>DBR10</u>	<u>DBR10</u>
Microphone	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MODX 7 Synthesizer
Rolling Case for Carrying and Storing Accessories	CP73 Stage Keyboard

MGXU PA System



MGP SERIES SMALL ANALOG PA SYSTEMS

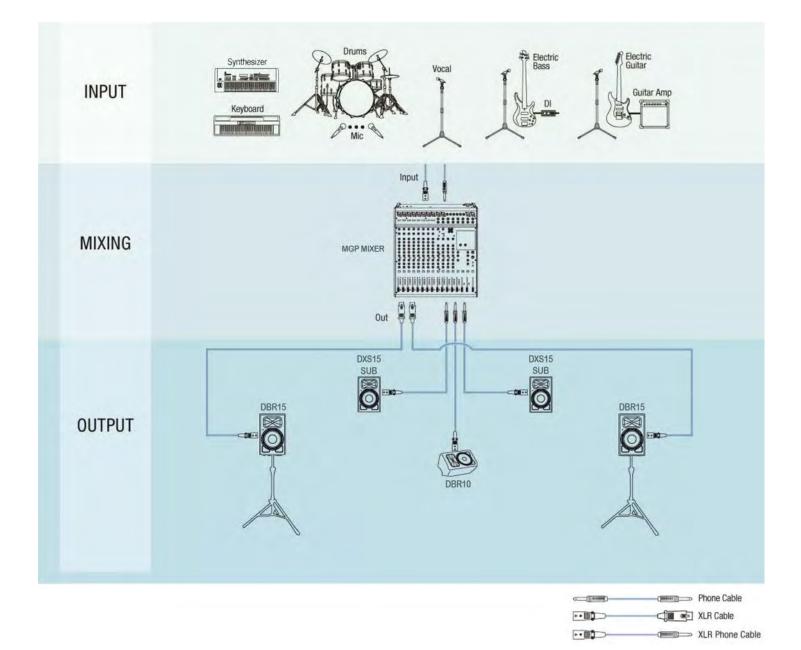


RECOMMENDED PA SYSTEMS

	<u>MGP24X</u>
Audience Size	≤250
Powered Mixer	No
Mixing Channels	24
Power Output	Passive
Powered Speaker	DBR15
Powered Subwoofer	DXS15mkll
Stage Monitor	DBR10
Microphone	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MODX 7 Synthesizer
Rolling Case for Carrying and Storing Accessories	CP73 Stage Keyboard

MGP PA System



TF SERIES SMALL DIGITAL PA SYSTEMS

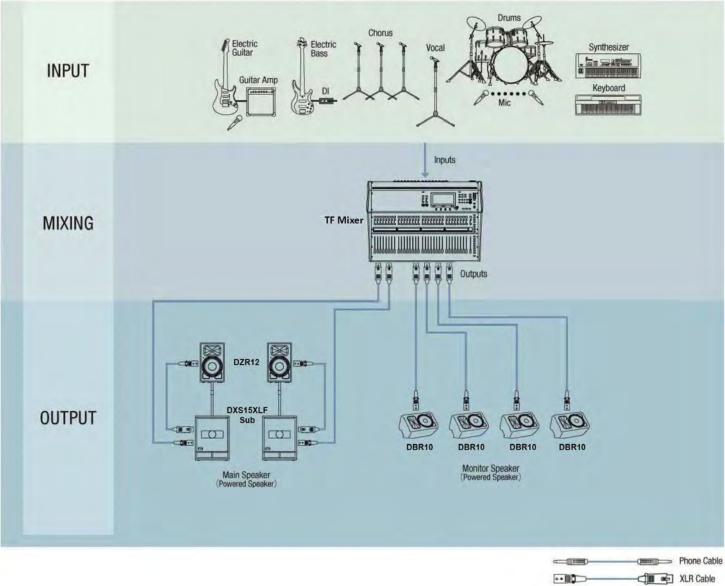


RECOMMENDED PA SYSTEMS

	<u>TF Rack</u>	<u>TF1</u>	<u>TF3</u>
Audience Size	≤100	≤175	≤250
Powered Mixer	No	No	No
Mixing Channels	16	16	24
Power Output	N/A	N/A	N/A
Passive Speaker	<u>DZR10</u>	<u>DZR12</u>	<u>DZR15</u>
Passive Subwoofer	DXS15XLF	DXS15XLF	DXS15XLF
Stage Monitor	DBR10	<u>DBR10</u>	DBR10
Microphone	Line 6 XD-V35	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
TIO 1608 Digital Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MODX 7 Synthesizer
Rolling Case for Carrying and Storing Accessories	CP73 Stage Keyboard

TF Series PA System



 	XLR Cable

MEDIUM SYSTEM Solutions

MEDIUM SYSTEM SOLUTIONS

While small ministrires can thrive with portable or compact sound gear, houses of worship that fill 2,000-5,000 square feet and support 250-750 members require a more dedicated, comprehensive sound reinforcement solution.

MGP32X

This system combines a 32-channel analog mixer with Yamaha DZR Series powered speakers and the DXSXLF powered subwoofer. The mixer offers simple, analog-style control of sophisticated functions, making it easy to achieve professional-quality results. The speakers and subwoofer deliver best-in-class SPL performance, sophisticated DSP processing, and unrivaled bass reproduction.



TF5/QL1/CL1

The mixing console is the heart of any live sound system and Yamaha is a leader in the field. Yamaha TF, QL and CL digital mixers offer allin-one mixing, processing and routing capabilities and unique features tailored to medium-sized venues. Their abundance of audio shaping controls gives sound engineers both creative freedom and absolute precision. In these bundles, each console is matched with complementary speakers and subwoofers to produce inspiring sound throughout your worship space.

MGP MEDIUM ANALOG PA SYSTEMS

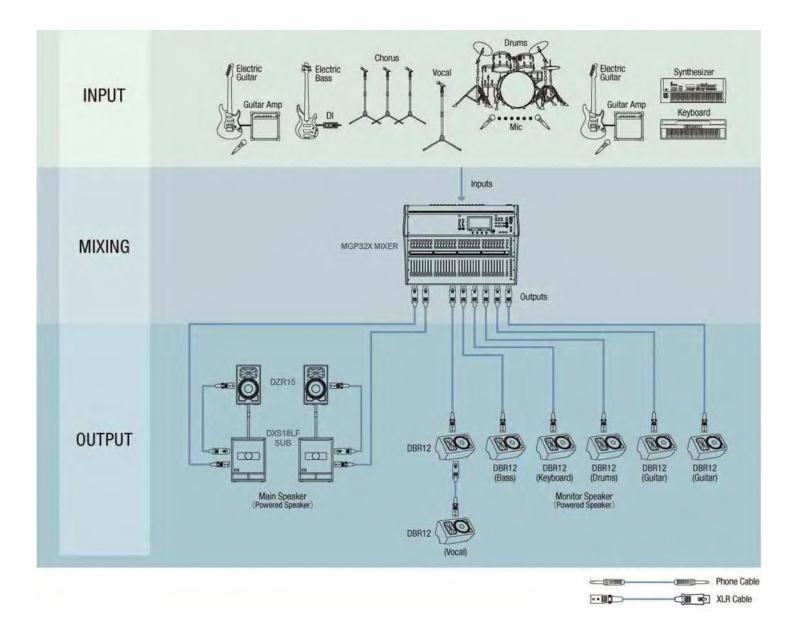


RECOMMENDED PA SYSTEMS

	<u>MGP32X</u>
Audience Size	≤750
Powered Mixer	No
Mixing Channels	32
Power Output	Passive
Powered Speaker	<u>DZR15</u>
Powered Subwoofer	DXS18XLF
Stage Monitor	<u>DBR12</u>
Microphone	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
Analog Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MODX 8 Synthesizer
Rolling Case for Carrying and Storing Accessories	CP88 Stage Keyboard

MGP Series PA System



DIGITAL SOLUTION MEDIUM PA SYSTEMS

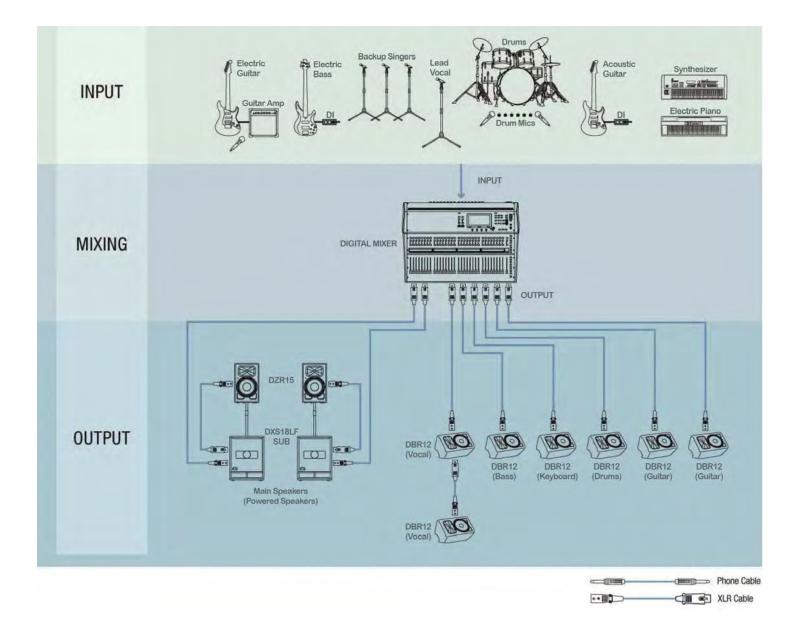


RECOMMENDED PA SYSTEMS

	<u>TF5</u>	<u>QL1</u>	<u>CL1</u>
Audience Size	≤750	≤750	≤750
Powered Mixer	No	No	No
Mixing Channels	32	32	48
Power Output	N/A	N/A	N/A
Powered Speaker	<u>DZR15</u>	<u>DZR15</u>	<u>DZR15</u>
Powered Subwoofer	DXS18XLF	DXS18XLF	DXS18XLF
Stage Monitor	DBR12	<u>DBR12</u>	DBR12
Microphone	Line 6 XD-V35	Line 6 XD-V55	Line 6 XD-V55

Recommended Accessories	Recommended Musical Instruments
TIO 1608 Digital Snake	Pacifica Series Electric Guitar
Microphone Cables	FG Series Acoustic Guitar
Microphone Stands	Line 6 Spider Series Guitar Amp
Instrument and Monitor Cables	Line 6 HX Stomp Effects Pedal Board
Direct Boxes for Instruments	BB Series Electric Bass
Speaker Stands	Stage Custom Series Acoustic Drums
AC Extension Cables	DTX Series Electronic Drums
AC Power Strips	MODX 8 Synthesizer
Rolling Case for Carrying and Storing Accessories	CP88 Stage Keyboard

Digital PA System



LARGE SOLUTION PA SYSTEMS

LARGE SYSTEM SOLUTIONS

There are a myriad of factors that must be considered when designing a large sound system. For instance:

- Is your building or meeting space larger than 5,000 square feet?
- Do 750 people or more regularly attend your services?
- · Do you livestream and/or record performances?
- · Do you need a separate monitor console for performers?
- · Are you considering a line array speaker system?
- Do you have multiple locations on campus that need to be networked together?
- Do you need a mixing console with more than 48 input channels?

Because of all these variables, and more, Yamaha highly recommends that you consult with a qualified systems integrator. We can help. First, careful-ly answer the questions on the following page and provide the information to system integrators so they can develop an accurate, thoughtful proposal. (We've included a checklist on the next page to compile the information.) Then review page 41, which lists several factors that will help you evaluate system integrators and find one that's right for you.

INFORMATION FOR THE INTEGRATOR

The System You Want

- · Do you want a completely new sound system or do you want to expand your current system?
- What components from your current system will you continue to use?
- · What are the specifications for these components?

Your Building

- · How big is your sanctuary (height/width/length)?
- · How many people are seated during any given service?
- · Do you have large windows in the sanctuary?
- Are your floors covered in carpet, tile, or concrete?
- · What are the dimensions of your stage/pulpit?
- What type of ceiling do you have drop, tile, open?
- · Does your ceiling have exposed wooden beams or metal I-beams?
- · Do you want to put speakers on the floor or hang them from the ceiling?
- · Where is the sound booth located in the space?
- · Is there crawl space under your stage?
- Do you have a snake already in place?
- Do you need sound systems in other locations?

Inputs and Outputs

- · List all the instruments and vocals in your worship band
- · Do you use floor monitors or IEM's (in-ear monitors)?
- · Do you need to send an audio signal to other rooms?
- Do you livestream services or intend to?
- Do you record services?

The Future

- Do you see your congregation growing in two to three years? By how much?
- Will your worship band expand?
- Will you need to add sound systems for other areas or applications?

SYSTEM CHECKLIST: IMPORTANT INFO

□ New Sound System

□ Just Adding Components

Wish List		Exis	sting Components List	
		-		
Room Dimensions		Con	ngregation Size	
Height/Width/Length		Aver	erage Attendance Per Service	
Sound Booth Location		Estir	imate: 2 Years Estimate: 3 Years	
Building Features	Worship Band		Vocals Quantity	
Large Windows	Acoustic Guitar		Lead	
Drop Ceiling	Electric Guitar		Backup	
Wooden Beams	Bass Guitar		Announce	
Ceiling-Mount Speakers	Acoustic Piano		Pastor	
Floor-Mount Speakers	Electric Piano			
Carpet	Synthesizer		Additional Needs	
Concrete / Tile Floor	Organ		Livestream Service	
Open Ceiling	Acoustic Drums			
Steel Beams	Electric Drums		Additional Campus Sound Systems Required	
Exposed Beams	Horns			
Existing Snake	Strings			
Crawl Space				

INTEGRATORS: CHOOSING ONE

Check Their Track Record

System integrators may list prominent venues without disclosing what they did for those clients, so dig deep. Check their references carefully. Look for a company with a long history in the house of worship market and a large list of successful installations.

Watch For Over Promises

Sales managers are in the business of selling, not building sound systems, so they sometimes make promises their companies cannot fulfill. Make sure the people you talk with understand your requirements, demonstrate experience with similar projects, and employ a qualified staff that will run your project. If you get a much lower bid than expected, find out why it's so inexpensive and explore the implications.

Make Sure They Understand Local Standards and Codes

You need to see system integrators' code libraries and learn how they manage projects, so, contact their references. Find out what methodologies they use and if they can guarantee that the staff they mobilize are certified and experienced in those methodologies. Also, learn who each integrator partners with, since no one can do it alone.

Check Your Comfort Factor

Besides their reliability and capability, choose an integrator who makes you feel comfortable, who understands your needs, and who has experience with similar clients.

Review Their Team

Focus on the knowledge, techniques and skills of the integrators' team. Make sure the staff that will work on your project has full knowledge of system engineering, as well as sufficient experience to handle your needs. While it's easy for a large system integrator to claim their expertise, the only thing that matters to you is that the expertise finds its way onto your premises. An impressive list of resources is no good to you if they're all busy on other accounts.

Sometimes, integrators need to look outside the ranks of their staff for certain projects. Make sure they can source, integrate, and manage additional capabilities as needed to satisfy your end-to-end requirements.

Make Sure They Have House of Worship Experience

Integrators who work regularly in the house of worship market stay current on new equipment and systems. Take the time to assess the strengths and weaknesses of any integrator you consider to ensure that they're capable of delivering the people you require, who in turn will deliver the system you desire.

Examine Your Own Team

Can you, as the customer, allocate the right resources to work with an integrator on a day-to-day basis? Your people will need to operate in the new world that the system integrator helps to create, so ensure you assign capable, knowledgeable people from the beginning.

Review Their Project Management Capability

Project management is vital to the success of your job. A system integrator needs to carefully balance resources, strategic priorities and other elements to ensure your venture progresses smoothly, stays on budget and finishes on time.

Ask Questions

Choosing a system integrator is the hardest and easily most overlooked part of any project but it's vital that you take your time and do it right. So ask them about the types and sizes of projects they've done. Get details about the duration of similar jobs, whether your budget is sufficient for your needs, and more. Don't be afraid to say, "I don't understand, please explain." The integrator you choose can make you a hero in your house of worship or take you down a path you don't want to go.

CONTACT US: IMPORTANT INFO

Please visit our worship-dedicated website to learn more: www.yamahaworship.com

For product information: usa.yamaha.com/products

Yamaha dealer locator: www.yamaha.com/paragon/dealerlocator

Address: Yamaha Corporation of America 6600 Orangethorpe Ave Buena Park, CA 90620 (714) 522-9000

Product Support:

Digital Pianos, Keyboards, Guitars, Drums, Live Sound and Music Production (714) 522-9000 Option 3

Acoustic, Silent and Disklavier Pianos (714) 522-9000

Audio & Visual (714) 522-9105

Steinberg (844) 358-4022

Professional Audio (866) 211-9366