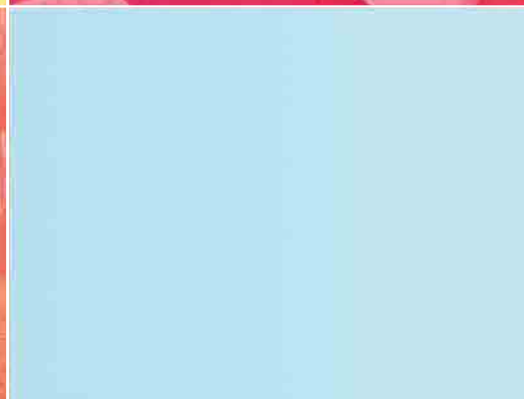# YAMAHA

COMMERCIAL INSTALLATION SOLUTIONS
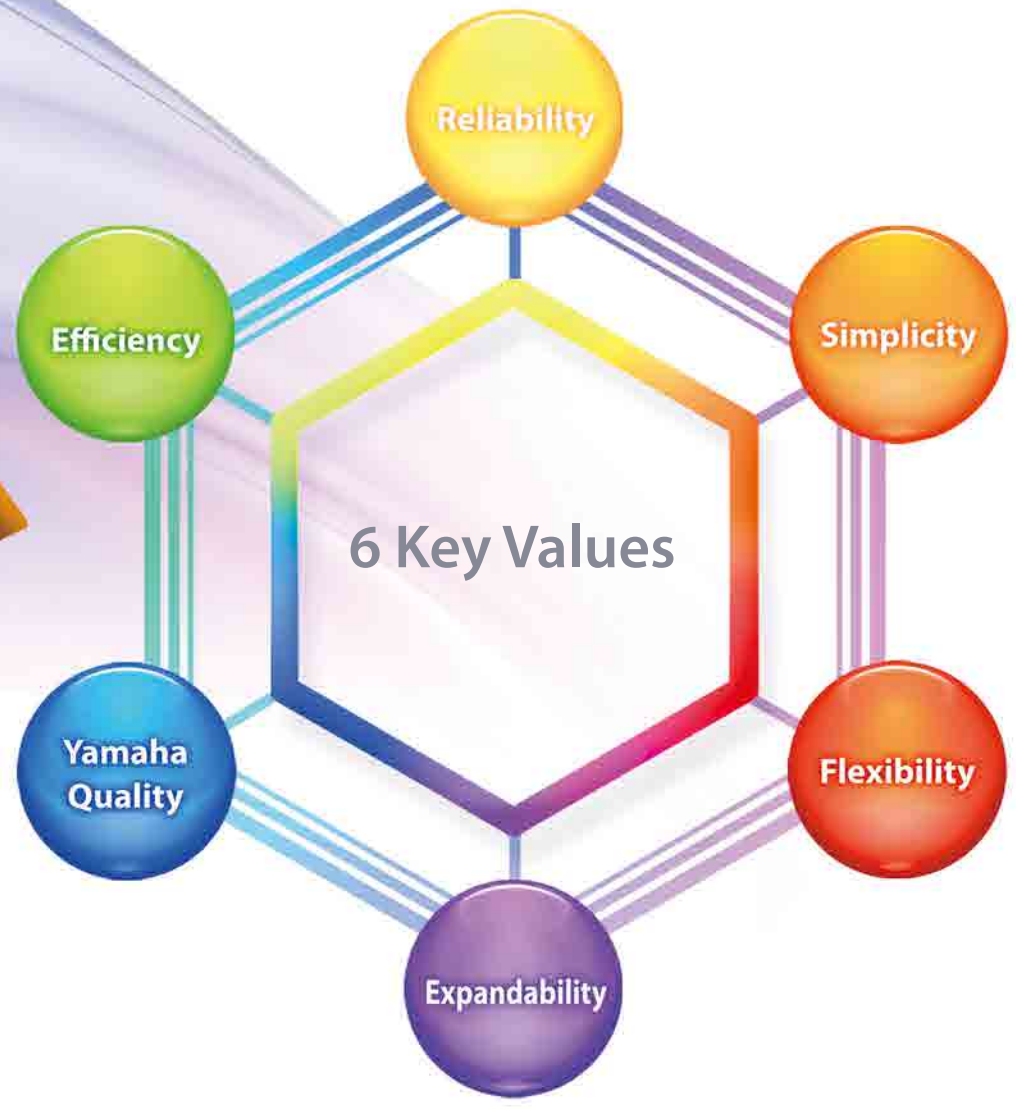
The Art of Installed Sound

The Yamaha Difference

Ever since Yamaha's inception, the craftsmen, engineers, and creative minds that help define the Yamaha brand have adopted a singular philosophy in their pursuit to meet, and exceed, the demands of each new challenge. The scope of Yamaha's influence and experience in numerous markets is without parallel, offering an unrivaled variety of product lines from grand pianos to Hi-Fi components to a range of complete sound solutions for various professional and commercial applications. Through an exhaustive process of studying, refining, testing and introducing new technologies and innovations to each market, Yamaha has developed a truly unique perspective that draws from the vast base of knowledge accumulated through years of designing and manufacturing such a wide array of music and sound related creations.

Distilled into "6 Key Values", this depth of accrued knowledge and experience served as the foundation behind the development of our Commercial Installation Solutions product lineup. By combining a unique, streamlined overall approach to installed sound, with acclaimed Yamaha product reliability and thorough customer care, this flexible lineup promises to benefit everyone at each stage of the installation process—from installers and contractors, to investors and owners. Most importantly, however, it is the patrons, clients, and customers of each commercial installation that will ultimately benefit from the clarity, tonal quality and musicality of these unique installed solutions that exude the decorated history of the sound specialists of Yamaha.

6 Key Values

Reliability

Simplicity

Efficiency

Flexibility

Yamaha Quality

Expandability

Reliability
Performance you can count on

With commercial installed sound, nothing is more important than the assurance that every piece of equipment in your sound solution will operate at peak performance long after the installation process has finished. Since most commercial environments require un-manned operation without the expertise of an audio engineering professional, you need products that you can depend on for years to come. Over the past several decades Yamaha has developed a reputation for providing customers with dependable, high-grade products that guarantee a lifetime of reliable operation.

All Yamaha products undergo rigorous testing at every stage of their development in order to meet the highest standards of reliability and endurance. Only the best quality component parts are used in our products— each of them subject to detailed analysis before and after extensive testing that simulates the harshest conditions our products might be subjected to, in order to ensure they can operate in even the most demanding environments. This
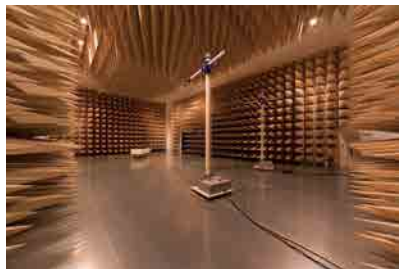
meticulous testing process is backed up by protection features that keep your equipment safe, offering improved longevity even when working in less-than-ideal conditions. Combined with road-tested innovation, this attention to detail has established Yamaha as the premier force in live sound reinforcement and large installation markets, and now we've brought this same dedication to performance excellence to our new lineup of commercial installation products.

Our commitment to our customers extends well beyond the reliability of our products. Thanks to a comprehensive worldwide distribution network, we can offer customers professional service and support to ensure that everyone who uses our products is getting the best out of their Yamaha purchases. No matter where you are, you can be assured of assistance with any product-related inquiries, so you'll never be left hanging.

Simplicity

Time is on your side

Installing a commercial sound solution can be a sizeable undertaking, requiring a great deal of energy, planning and perhaps most significantly, time. Yamaha now offers a comprehensive new range of installed sound products that possess superior sound and performance characteristics, yet reduce the amount of resources that would normally go into designing, installing and configuring such a system. With standardized connections, flexible functionality, and an innovative approach to workflow, these products function together seamlessly, allowing you to construct a sound that remains consistent throughout your installation space.

With the MTX Editor application, sound system installers have a software tool that allows them to design and configure a sound solution on a PC, creating a detailed design that they can then utilize in the real world. MTX Editor mirrors the workflow of an installation process— from selecting which products are best suited to your commercial space, right through to installation— allowing detailed configurations to be assessed virtually, and then processors configured to match, prior to the final installation work. This process greatly accelerates and simplifies the overall workflow, providing everyone involved in the system's installation with a flexible roadmap to work from.

Yamaha's new proprietary YDIF digital transmission format provides 16 channels of digital audio using Ethernet cable, reducing the need for excessive cabling that often requires a lengthy setup process as well as more physical space to accommodate it. Numerous innovative new features also contribute significantly to simplifying the design process as well as reducing the amount of equipment normally required to meet the demands of various environments. Even series speakers have been purpose built for safe, easy installation, with carrying bands and mounting brackets arranged in a standardized configuration.

From the products, to the software, to the workflow itself, everything comes together to form a simple, intuitive system of operation that benefits each stage of the installation process and everyone involved— from system designers and installers, to end-users. This new approach is guaranteed to reduce cost, energy, space, man-power and best of all, the amount of time required to complete an installation.
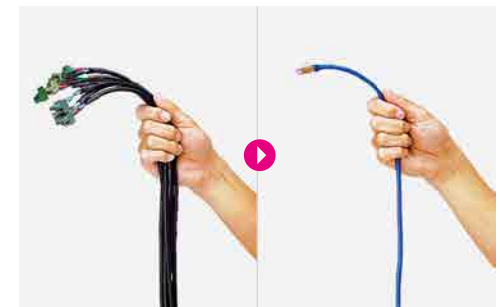
Flexibility

We've got you covered

Designing a complete sound solution from the ground up can be a daunting task, and selecting the proper equipment for your system is the crucial first step. Our new lineup of commercial installation products offers numerous advantages by providing flexible features that reduce the number of components required to configure your system and ensure that it meets the specific demands of your commercial environment.

Easily adaptable to countless applications, all series speakers and amplifiers are capable of running in high or low impedance modes. XMV power amplifiers can even achieve 70V or 100V operation on all channels without sacrificing any outputs. Additionally, the newly developed Double Power Mode allows a single amplifier to drive speakers of varying output capabilities. Offering additional flexibility for end users, the newly developed Wireless DCP software app gives iPhone and Android device users remote control of system presets and levels.

Expandability

Broaden your horizons

Based on Yamaha's extensive experience in sound reinforcement and larger installations this new lineup features several expandability options, adding more input/output capability and functionality to accommodate a wider range of applications. For larger installations, products featuring dedicated Dante ports provide the latest in audio network technology and seamless integration with other Dante enabled equipment. Yamaha's popular MY expansion cards make it easy to add functionality and input/output capability in a wide variety of audio and network formats, to products that are equipped with compatible card slots. This series also features dedicated expanders that can add flexibility to your systems design, providing additional input/output capability via Yamaha's YDIF proprietary digital audio transmission format using Ethernet cables.
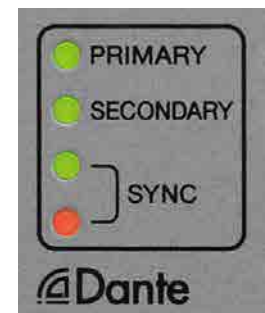
Yamaha Quality
For discriminating tastes

Yamaha has a proven track record for providing both industry leading AV products for the consumer market, and high quality, professional equipment for live sound, broadcast and recording applications. Now we are bringing this same commitment to our customers in the installed sound market, offering the proven assurance of Yamaha sound quality in a whole new range of installation applications.

With each new application comes a different set of sonic demands and your sound system has to be able to adapt accordingly. For example, in a retail store a prominent bass end could be beneficial by making customers enthusiastic, while in a cafe or restaurant, a more subtle approach might serve to complement the overall atmosphere. Whether music or spoken words, you can be sure of a clear, natural reproduction of the original sound source, with very low noise and minimal distortion.

This insistence on quality and clarity is also evident in the appearance of these products, which feature simple yet sophisticated designs that enable them to blend seamlessly into almost any installation environment. Even the signature hexagon motif that is consistent throughout the lineup serves a dual role, acting as a design element while enhancing product performance. Functional yet aesthetically pleasing, our commercial sound installation lineup is the perfect choice to bring Yamaha quality into your installation.

Efficiency
Think Green

In an era when the world faces issues such as climate change, rising costs, and diminishing resources, the slightest reduction in power consumption represents a significant benefit, both in cost and in environmental impact. For this reason, our commercial sound products offer a range of innovative features aimed specifically at lowering power consumption.

XMV power amplifiers feature Class-D topology combined with a new patent pending 2-step output circuit that raises the efficiency of the amplifier to over 90% at rated output power. The amplifiers also utilize a Power Factor Correction equipped switching power supply that benefits the installation venue itself, making circuit breakers less prone to shutting down, as well as negating the need for thicker, heavier cables. Our commercial sound systems also feature high efficiency speakers that offer stunning sound while requiring less power than conventional speakers, allowing the use of smaller capacity amplifiers than was previously possible.

Perhaps most importantly, is the simplicity of Yamaha's streamlined new approach to installed sound— taking this power-saving philosophy a step further by making system design and setup faster and easier, allowing your team to work less but achieve more.

MTX and XMV Series

VXC Series

MA2030 / PA2030

VXC Series

VXS Series

DCP Series

VXS Series

Volume Zoning System

Although simple and compact – the half-rack size MA2030 Mixing Amplifier and PA2030 Power Amplifier can be mounted side-by-side in a single 1U rack space – this system offers advanced performance and features for BGM and paging applications. The MA2030 includes feedback suppression, priority ducking, and automatic leveling functions that facilitate background music and microphone announcements with minimum need for operator control. The MA2030 user interface itself is straightforward and simple to use, but a DCP1V4S remote control panel adds even further convenience and intuitive ease. The addition of a PA2030 makes it possible to drive a larger number of speakers while implementing volume zoning as necessary. In addition to front-panel EQ controls that are convenient for adjusting source response, rear-panel DIP switches allow speaker EQ to be selected for optimum performance with Yamaha commercial installation speakers.

Mic

Ⓐ
Ⓑ
Ⓒ
Ⓓ
Ⓔ
Ⓕ

Entrance

Table
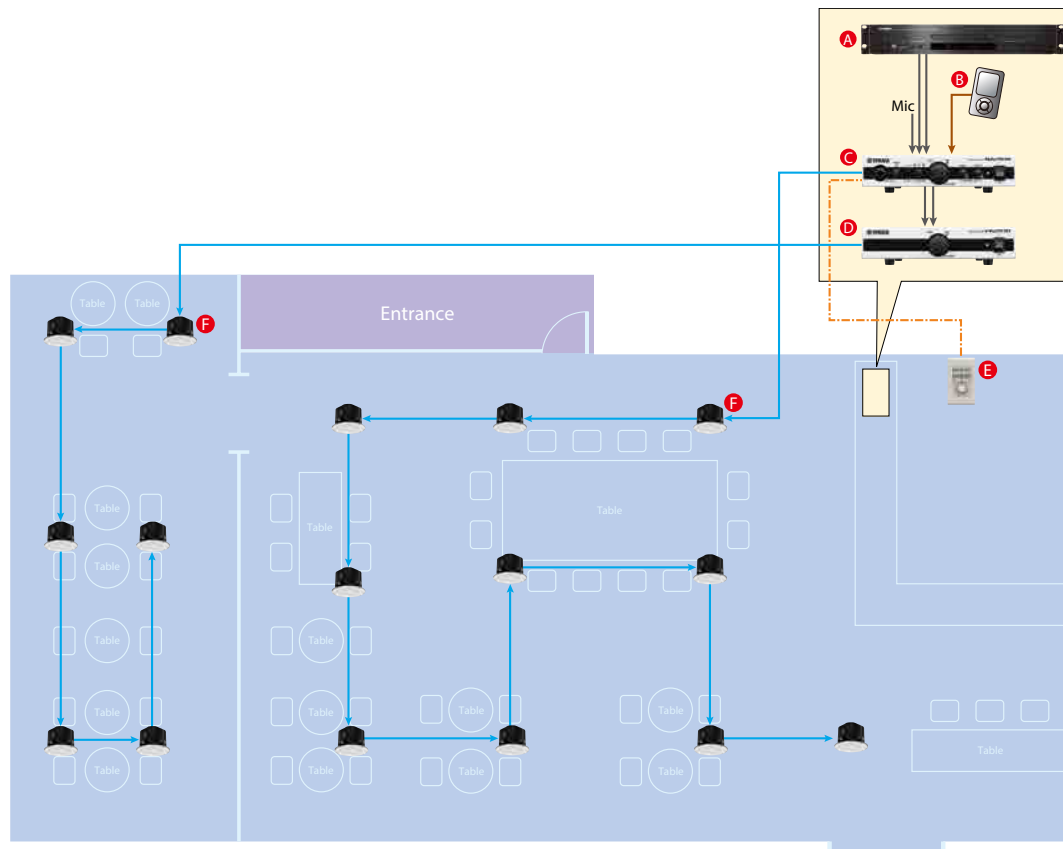
Applications:

Café

Bar

Restaurants

etc…

> " Good music and good beer are a perfect match and we are very satisfied with our Yamaha audio system. "

Denmark   café/bar/nightclub

Products List

(A)	CD Player	CD-S300RK
(B)	Audio Player	
(C)	Mixing Amplifier	MA2030

(D)	Power Amplifier	PA2030
(E)	Control Panel	DCP1V4S
(F)	Ceiling Speaker	VXC4W

—— Analog Cable
—— Speaker Cable (High Impedance)
·—·— CAT5e Cable (DCP)
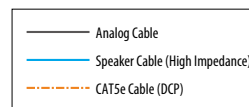
Simple Digital System

This system features a digital matrix processor. Touch panel control systems make it easy for just about anyone to operate major sound system functions from an easily comprehensible interface. The MTX3 scene memory can store up to 50 complete setups that can be instantly recalled whenever needed, making it easy to switch setups for a variety of applications. The XMV4280 power amplifier can be set up to drive low and high impedance loads in 2-channel groups, so a single unit can simultaneously power low and high impedance speaker systems. Since the MTX3 features processing data for Yamaha speaker systems built in, it's easy to achieve optimum sound and matching while protecting the speakers against overload damage.

Screen

Wireless Mic

Mic Podium

Projector

PC

Wireless Mic Receiver

AV Switcher

Made for iPod

Podium Mic

Video Monitor

——	Analog Cable
——	Speaker Cable (High Impedance)
——	Speaker Cable (Low Impedance)
——	Video Cable
- - -	CAT5e Cable (YDIF)
-·-·-	CAT5e Cable (DCP)
——	USB Cable
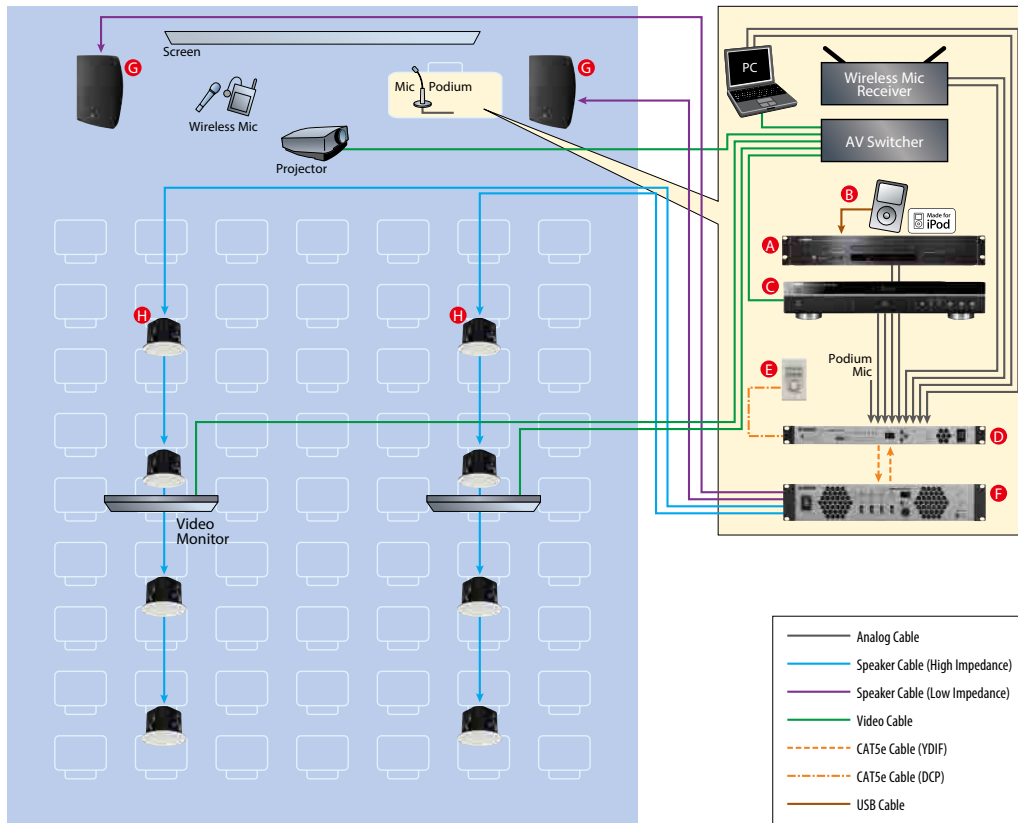
Products List

(A)	CD Player	CD-S300RK		(E)	Control Panel	DCP1V4S
(B)	iPod or Other MP3/WMA Player			(F)	Power Amplifier	XMV4280
(C)	Blu-ray Disc Player	BD-S667		(G)	Surface Mount Speaker	VXS8
(D)	Matrix Processor	MTX3		(H)	Ceiling Speaker	VXC6W

Applications:

Lecture Rooms

Small Meeting Rooms

Houses of Worship

Restaurants

etc…

> " The VXS loudspeakers have allowed us to deliver the highest monitoring audio quality. Combined with their subtle, non invasive aesthetic, these are qualities which are absolutely indispensable in a place of worship. "

Italy   church

Zoning System

This system features a digital matrix processor that also provides zoning capability. Overall system routing and processing is handled by a single MTX3 unit located in the office. Different BGM and announcements can be broadcast to five different zones: the entrance, the two zones in the main area (blue and green areas), the fitting room (green area), and office. By using a subwoofer to reinforce the low frequencies listeners will feel the music more for a greater sense of involvement and impact. A DCP4V4S control panel at the checkout counter allows easy volume adjustment and preset selection. The MTX3 features a built-in priority ducker function that automatically reduces the volume of background music when an announcement is being made. A built-in MP3/WAV file player means that the MTX3 can play background music, scheduled announcements, or chimes, etc., without the need for external playback equipment.
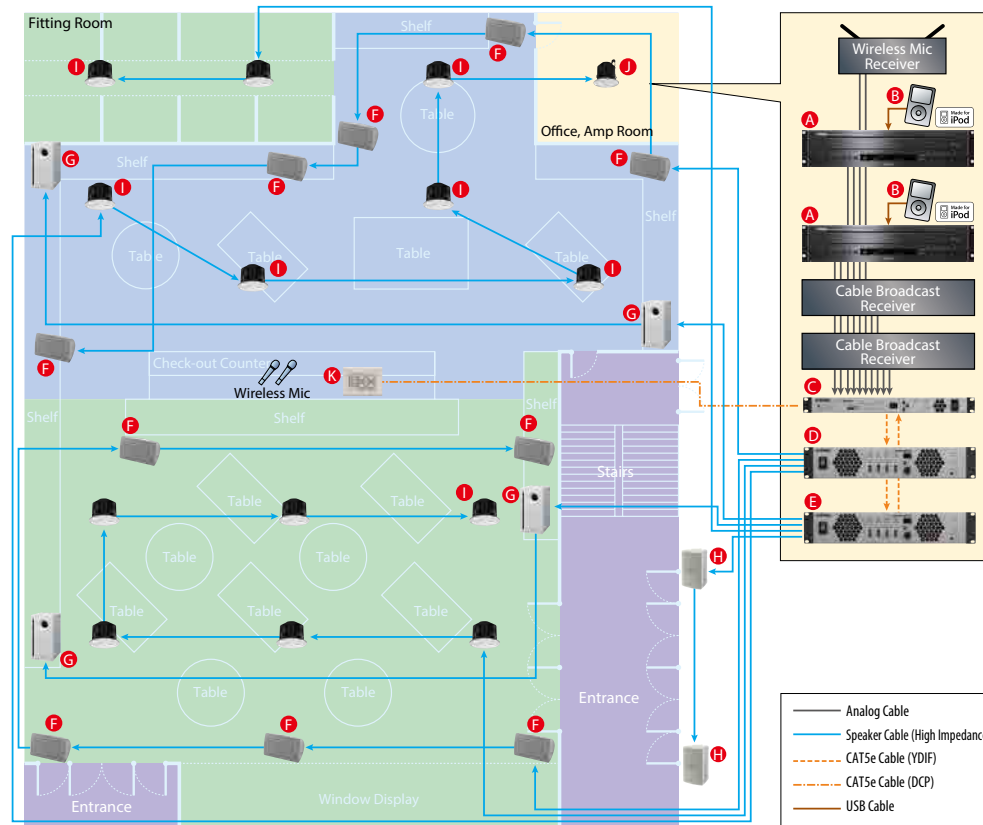
Applications:

Retail Stores

Bars

Restaurants

Hotel Lobbies

etc…

> " Beer and music are so embedded in the Clock Tower's particles that they have transformed its walls and the lives of people who visit. "

Italy   pub

Products List

(A)	CD Player	CD-C600RK	(E)	Power Amplifier	XMV4280	(I)	Ceiling Speaker	VXC6W
(B)	iPod or Other MP3/WMA Player		(F)	Surface Mount Speaker	VXS5W	(J)	Ceiling Speaker	VXC4W
(C)	Matrix Processor	MTX3	(G)	Subwoofer	VXS10STW	(K)	Control Panel	DCP4V4S
(D)	Power Amplifier	XMV4140	(H)	Surface Mount Speaker	VS6W			

Dante Networking System

A digital matrix processor is used to mediate Dante networking between room A and rooms B and C, allowing audio to be shared in a variety of ways. In addition to handling audio input and output for the rooms in which they are located, the MTX5-D units provide Dante network communication with the other rooms. An event taking place in Room A can be auditioned in Rooms B and C, and bidirectional communication means that questions and answers can be passed back and forth as well.
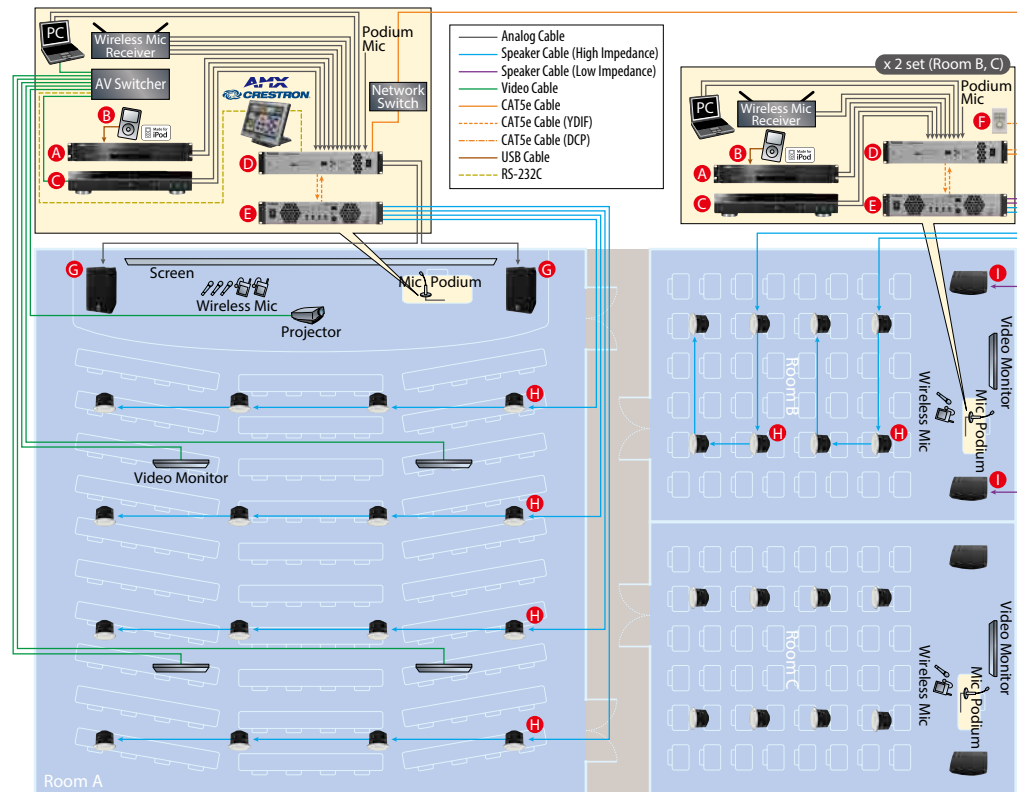
Cable legend:
- Analog Cable
- Speaker Cable (High Impedance)
- Speaker Cable (Low Impedance)
- Video Cable
- CAT5e Cable
- CAT5e Cable (YDIF)
- CAT5e Cable (DCP)
- USB Cable
- RS-232C

x 2 set (Room B, C)

Products List

(A)	CD Player	CD-S300RK
(B)	iPod or Other MP3/WMA Player	
(C)	Blu-ray Disc Player	BD-S667
(D)	Matrix Processor	MTX5-D
(E)	Power Amplifier	XMV4280

(F)	Control Panel	DCP1V4S
(G)	Active Loudspeaker	DXR10
(H)	Ceiling Speaker	VXC6W
(I)	Surface Mount Speaker	VXS8

Applications:

Conference Centers

Lecture Hall & Classroom Complex

Corporate Facilities

etc…

> " Another thing we liked about the MTX3, which was key to the brief, was that we could install a DCP4V4S wall plate backstage for adjusting levels manually, which is a very straightforward control system for making rapid changes. The building's historic architecture meant that the system had to be as visually unobtrusive as possible, so the compact size of the wall plate and Wi-Fi control were ideal. "

London   hall

Matrix Processor

MTX Series   MTX3
MTX5-D   🔊Dante™

The Heart of Your Sound Solution

Designed primarily for multi-zone commercial installations, MTX Series matrix processors are equipped with flexible processing functions that are essential to a wide variety of applications such as retail stores, restaurant/bars or banquet rooms. Responsible for the primary processing functions at the heart of your system's design, MTX processors allow you to configure, program, and manage your entire sound solution via the intuitive interface of the accompanying MTX Editor software application. The series is comprised of two models with varying DSP capacities and expansion capabilities, allowing MTX processors to meet the demands of a truly impressive range of commercial environments.

The ideal Digital Signal Processor for small to mid-size commercial applications

MTX Series processors come equipped with a variety of programmable features designed to maximize the performance of sound systems in commercial installations. With a focus on reliability and worry-free operation, functions such as Feedback Suppressor can automatically locate and eliminate acoustic feedback, while Auto Gain Control maintains a constant output level when input signals vary. For ancillary applications or environments that require public speaking, MTX processors feature a Priority Ducker function which automatically attenuates the output level a specified amount when the input signal from a separate sound source exceeds its threshold— as well as an Ambient Noise Compensator which adjusts system gain to compensate for fluctuating background noise levels. Combined with an onboard speaker processor for optimized speaker performance and sound quality, the MTX Series makes it easy to design and configure a complete audio system from input to output.

Newly developed digital audio transmission format YDIF

MTX processors feature the newly developed YDIF digital transmission format; a unique proprietary Yamaha technology that delivers 16ch audio and word clock transmission via CAT5 Ethernet cable. YDIF can be used for cascading multiple MTX Series or for feeding audio signal to XMV Series power amplifiers with very simple cabling up to 30 metres.

Versatile Input/Output configuration and SD Memory Card Slot for playback

The MTX Series feature an input/output configuration that is ideal for a wide range of applications: 8 mono inputs (mic/line), 2 stereo inputs (line) and 16 digital inputs via YDIF. The output side consists of 8 line-level mono outputs and 16 digital outputs via YDIF. MTX processors also feature an SD Card Slot for playback of MP3/WAV files stored on an SD Memory Card. The Event Scheduler function allows you to play back these files as music, announcements or chimes—or even trigger external devices with a GPI output—at scheduled times, as well as recall presets stored within the MTX.

On-board Dante network port offer expandability for larger installations (MTX5-D only)

Dante is the latest audio network technology from Audinate, designed to deliver multi-channel, uncompressed, low-latency digital audio to multiple locations over relatively long distances. Equipped with an on-board Dante port, MTX5-D processors can send and receive up to 16 channels of digital audio using a single Ethernet cable. MTX5-D processors connect easily to other Dante-enabled devices such as CL Series mixers or XMV Series power amplifiers, making system design and configuration much simpler for larger venues.

Flexible external control

With DCP Series wall mount digital controllers, the MTX Series can control the volume and presets of multiple zones from remote locations. Up to eight DCP controllers can be linked together for a maximum of 200m length (the power is also fed through the cable) lending considerable flexibility to the installation process. The MTX Series is also equipped with a Network port that will offer compatibility with touch panel controllers such as AMX/Crestron, as well as GPI ports for general controllers, while users with iPhone or Android devices can download the newly developed Wireless DCP app for remote control your sound solution using the simple, intuitive operation of your smart device.

Available on the App Store

GET IT ON Google play

* Wireless DCP can be downloaded from Apple's App Store and Google Play at no charge. (Apple, iPhone and iPod are trademarks of Apple Inc.., registered in the U.S and other countries. App Store is a service mark of Apple Inc. Android and Google Play are trademarks of Google Inc.).

More MY cards. More Functions.

MTX5-D processors now offer improved MY card compatibility for two Mini-YGDAI cards that offer invaluable functions for commercial applications. The MY4-AEC provides intelligent acoustic echo cancellation for high-performance distance conferencing, while the DUGAN-MY16 card features an advanced automatic mixing algorithm from Dan Dugan Sound Design that automatically optimizes gain distribution in multiple-mic applications.

MTX3
MTX5-D

MTX3 Rear Panel

MTX5-D Rear Panel

Specifications

		MTX3	MTX5-D
Memory Bank		PRESET: 50	
Mixing Capacity		Mixing Channel: 8 Mono + 3 Stereo + 2 Effect Return + 8 Insert	Mixing Channel: 16 Mono + 3 Stereo + 2 Effect Return + 8 Insert
		Output Busses: 8 Mono	Output Busses: 16 Mono
Sampling Frequency Rate		48kHz/44.1kHz	
Inputs	Analog	8 x Euroblock (Balanced), 4 x RCA Pin Jack (for ST In 1,2)	
	Digital	RJ45 for YDIF (16ch)	
		–	RJ45 for Dante (16ch)
Outputs	Analog	8 x Euroblock (Balanced)	
	Digital	RJ45 for YDIF (16ch)	
		-	RJ45 for Dante (16ch)
Control		8 x GPI Input	16 x GPI Input
		4 x GPI Output (Open Collector)	8 x GPI Output (Open Collector)
		Ethernet 100Base-TX	Ethernet 1000Base-T/ Dante
		RS-232C	
		DCP	
SD Card Slot		1	
Power Requirements		AC100V-240V, 50Hz/60Hz	
Dimensions (W x H x D) / Weight		480 x 44 x 362mm (18.9" x 1.7" x 14.3") / 4.8kg (10.6lbs)	480 x 88 x 351mm (18.9" x 3.4" x 13.9") / 6.3kg (13.9lbs)

Digital Control Panel
DCP Series

DCP controllers provide flexible external control of several functions such as preset recall, levels, and SD card playback. Three different models comprise the series featuring various configurations of switches and volume knobs. All three models are available in either US or EU standardized sizes, built to meet the specifications of most regions around the globe.

DCP1V4S-US

DCP4S-US

DCP4V4S-US

Input Expander/Output Expander
EXi8/EXo8

YDIF equipped input and output expanders for MTX Series

EXi8 input expanders convert analog microphone/line audio to digital and transmits the signal using Yamaha's YDIF format. The EXi8's preamps can be controlled remotely from an MTX processor via Ethernet cable. EXo8 output expanders feature 8 channels of DA converters that produce high quality analog audio by converting digital output from MTX Series processors via YDIF.
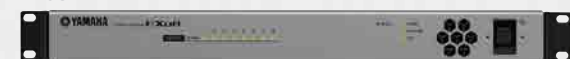
EXi8

Front Panel

Rear Panel

EXo8

Front Panel

Rear Panel

MTX Editor

Fast and easy set up of your audio system with a single software application

MTX Editor allows you to design sound systems for small to mid-size installations built around MTX Series processors. With a workflow that closely emulates the actual physical configuration of an installation application, MTX Editor's wizard guides you through a simple yet thorough step process. What's more, in addition to the MTX Series, MTX Editor lets you incorporate EXi8 and EXo8 expanders, DCP Series digital control panels, and even XMV Series power amplifiers into your system and adjust parameter settings accordingly. With MTX Editor, you can design, configure and manage a complete installation audio system from microphones right through to speakers—with a single program.

The workflow of MTX Editor

Device Configuration

By simply following the instructions of the MTX Editor wizard, you can easily configure a complete sound system comprised of MTX Series matrix processors as well as XMV Series power amplifiers, DCP Series digital control panels or EXi8/ EXo8 expanders.

MTX Series parameter settings

Once your system is configured you can set the parameters for the MTX Series. The Main window gives you an overview of each channel's settings and the Channel Edit window lets you adjust each of the selected channel's parameters in detail.

Input Processing settings

By selecting GAIN/HPF/EQ you can adjust 3-Band PEQ settings for each input channel, as well as each microphone channels' HPF. GATE/COMP sets Gate and Compressor parameters and FBS/AGC features feedback suppressors that eliminate acoustic feedback, as well as the Auto Gain Control function that maintains a constant output level with input signals that vary in level.

Matrix/Zone Processing settings

In the matrix mixer, the input channels and output buses are arranged in a checkerboard configuration. You can adjust the group balance for each output bus, or use the faders to adjust the signal from all input channels to a specific matrix bus when Sends On Faders mode is enabled.

The signal from the matrix mixer is sent to 8 units of Zone Processor. Here, you can make detailed adjustments to the parameter settings of the Ducker function as well the Ambient Noise Compensator.

Output Processing settings

After Zone Processor settings have been applied, signals are sent to output channels through the Router. Each output channel is equipped with a 4 Band PEQ, Delay and Speaker Processor. The Speaker Processor has stored presets for a range of Yamaha speakers allowing you to easily select the optimum settings for the speakers in your system. Settings for 4-Band PEQ and Delay can also be adjusted to match the audio output with the acoustic characteristics of various installation environments.

External controller settings

MTX Editor can also be used to configure the settings of external controllers. MTX processing functions can be easily assigned to the switches and knobs of DCP Series wall-mounted controllers or to the dedicated iPhone/ iPod touch software application.
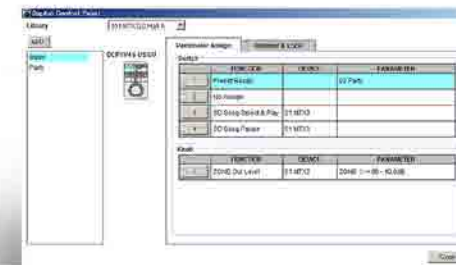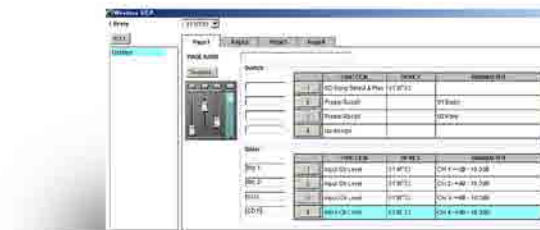
Power Amplifier

# XMV Series

**XMV4280 / XMV4140 / XMV8280 / XMV8140
XMV4280-D / XMV4140-D / XMV8280-D / XMV8140-D** Dante™

A comprehensive line-up to power your sound solution

XMV Series multi-channel power amplifiers combine Class-D efficiency with features designed specifically to benefit commercial installation sound systems. The Series is comprised of 8 different models with varying output power capabilities and flexible in/out connectivity to accommodate a wide range of installation environments.

High impedance and low impedance … or both

Installed sound applications often demand both high and low impedance connectivity in the same venue, requiring separate, dedicated amplifiers or an external transformer. XMV power amplifiers, however, can operate in both high-impedance (70V/100V line) or low-impedance (4Ω/8Ω) modes simultaneously, eliminating the need for additional equipment, as well as streamlining the installation process. XMV power amplifiers also enable both 70V and 100V operation for every pair of channels by simply selecting the preferred mode using the dip switches on the rear panel. High impedance operation often requires the use of two combined channels in bridge mode, but with XMV amplifiers, 70V or 100V mode can be assigned to every pair of channels without affecting the number of available output channels.
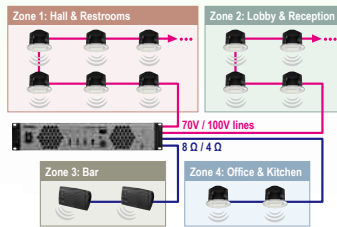
New "Double Power Mode"

The newly developed Double Power Mode function effectively doubles the output power of selected channels in order to drive speakers with higher output power. This means that speakers with varying output capacities can be powered simultaneously by the same amplifier, adding flexibility to system design and configuration.

*The number of channels that can be used will be reduced to half.

XMV4140

Selectable input formats for a wider range of applications

XMV amplifiers come equipped with either the newly developed YDIF digital audio format, or Audinate's digital audio network Dante. YDIF allows easy setup with the use of Ethernet cables while Dante models can be used for larger venues where long distant cabling is required.

A perfect match for the MTX Series

When XMV power amplifiers are used in systems with MTX series processors, settings such as the mute on/off or attenuator changes can be set via computer using the MTX Editor software application. YDIF and Dante ports make system configuration simple and fast with instant connectivity and flexible parameter control.

Best installation amp ever?

XMV amplifiers feature an innovative, new, patent pending circuit that improves the already highly efficient Class D circuit topology, bringing the efficiency level of the amplifier's output stage up to over 90%. This is achieved by automatically switching the circuit to match the corresponding output voltage. In high-impedance connections, both 70V and 100V operation can be achieved since the circuit is already capable of operating in high voltages. However, using the same circuit in low-impedance operation can mean excessive energy loss, so by automatically switching to a lower voltage drive, efficiency is improved significantly without sacrificing crucial aspects of the amp's performance such as keeping the distortion levels to a minimum.

XMV power amplifiers also feature a new switching power supply equipped with Power Factor Correction, which ensures harmonic control and decreases the amount of current draw dramatically, yet still maintains the same output power. This makes circuit breakers less prone to shutting down, as well as eliminating the need for thicker, heavier cables or a larger, more powerful system.

Protection features for more reliable operation

Automatic protection functions are an essential part of the XMV Series' design, ensuring peak performance and reliable operation in less than ideal situations. Low load impedance, overcurrent, and overheating can all damage vital amplifier components and threaten their ability to function effectively. To combat these hazards, XMV Series power amps feature powerful, intelligent protection functions that can deliver the assurance of long product life and consistent performance.

XMV8280 XMV8140 XMV8280-D XMV8140-D

XMV4280 XMV4140 XMV4280-D XMV4140-D

XMV4280 XMV4280-D XMV8280D XMV8280

Specifications

			XMV4280	XMV4140	XMV4280-D	XMV4140-D	XMV8280	XMV8140	XMV8280-D	XMV8140-D
Output Power	1kHz, THD+N=1%	4Ω	4 x 280W	4 x 140W	4 x 280W	4 x 140W	8 x 280W	8 x 140W	8 x 280W	8 x 140W
		8Ω	4 x 280W	4 x 140W	4 x 280W	4 x 140W	8 x 280W	8 x 140W	8 x 280W	8 x 140W
		4Ω/ Double Power Mode	2 x 560W	2 x 280W	2 x 560W	2 x 280W	4 x 560W	4 x 280W	4 x 560W	4 x 280W
		8Ω/ Double Power Mode	2 x 560W	2 x 280W	2 x 560W	2 x 280W	4 x 560W	4 x 280W	4 x 560W	4 x 280W
	High impedance	100V line	4 x 250W / 4Ω	4 x 125W / 8Ω	4 x 250W / 4Ω	4 x 125W / 8Ω	8 x 250W / 4Ω	8 x 125W / 8Ω	8 x 250W / 4Ω	8 x 125W / 8Ω
		70V line	4 x 250W / 2Ω	4 x 125W / 4Ω	4 x 250W / 2Ω	4 x 125W / 4Ω	8 x 250W / 2Ω	8 x 125W / 4Ω	8 x 250W / 2Ω	8 x 125W / 4Ω
Voltage Gain	RL=8Ω		31.7dB	28.7dB	31.7dB	28.7dB	31.7dB	28.7dB	31.7dB	28.7dB
	RL= 8Ω / Double Power Mode		34.7dB	31.7dB	34.7dB	31.7dB	34.7dB	31.7dB	34.7dB	31.7dB
	100V		38.2dB	38.2dB	38.2dB	38.2dB	38.2dB	38.2dB	38.2dB	38.2dB
	70V		35.2dB	35.2dB	35.2dB	35.2dB	35.2dB	35.2dB	35.2dB	35.2dB
Input Sensitivity			+4dBu							
S/N Ratio	A-weighted		≥ 100dB							
Power Consumption	1/8 power (4Ω pink noise)		250W	150W	250W	150W	450W	250W	450W	250W
	Idle (4Ω)		37W	37W	37W	37W	73W	73W	73W	73W
	Standby		18.5W	18.5W	18.5W	18.5W	23W	23W	23W	23W
THD+N	1kHz, 1W, RL=4Ω		≤ 0.2%							
Frequency Response	8Ω, 100V / 70V, Po=1W, 20Hz - 20kHz		0dB, ±1.0dB							
Crosstalk	1kHz, half power, 8Ω Att. max, input 150Ω shunt		≤ -60dB							
Maximum Input Level			+24dBu							
Input Impedance			20kΩ (balanced), 10kΩ (unbalanced)							
Connectors	Analog Input		2 x Euroblock (6P, balanced)							
	Digital Input / Output		2 x RJ45 (YDIF IN / OUT)		2 x RJ45 (Dante PRIMARY / SECONDARY)		2 x RJ45 (YDIF IN / OUT)		2 x RJ45 (Dante PRIMARY / SECONDARY)	
	Speaker Output		4 pairs x Barrier strip				8 pairs x Barrier strip			
	Network		1 x RJ45		Shared with Dante ports		1 x RJ45		Shared with Dante ports	
	Remote, Fault Output		1 x Euroblock (3P)							
	AC IN		1 x AC Inlet							
Load Protection			POWER switch on/off: Output mute, DC-fault: Power supply shutdown							
Amplifier Protection			Thermal: Output mute (heatsink temp ≥90°C) (Return automatically), Overcurrent: Output mute (Return automatically), Low load impedance: Output mute (Return automatically)							
Power Supply Protection			Thermal: Power supply shutdown (heatsink temp ≥100°C), Integrated power: Gain reduction (Return automatically)							
Lmiter Circuit			Clip Limiter							
Cooling Fan			2x 3-Speed fan, front-to-back airflow							
Power Requirements			100V, 120V, 230V-240V; 50Hz /60Hz							
Dimensions (W x H x D) / Weight			480 x 88 x 422mm (18.9" x 3.5" x 16.6") / 8.1kg (17.9lbs)				480 x 88 x 422mm (18.9" x 3.5" x 16.6") / 10.1kg (22.3lbs)			

Power Amplifier

MA2030 / PA2030

A Smart Simple Solution

With a quick, easy setup and simple intuitive operation, it's never been easier to bring your commercial space to life than with Yamaha's newest additions to our Commercial Installation Solutions lineup, the MA2030 and PA2030 compact power amplifiers. Both models combine a familiar, unassuming construction with efficient, flexible performance, while the MA2030 offers 2-channel mixing capability with source EQ (Bass/Treble), as well as a number of the same acclaimed Yamaha's state-of-the-art DSP technologies featured in our top of the line professional audio gear. Whether providing background music for a cafe or restaurant, or powering a conference room or any number of applications requiring a microphone, the MA2030 and PA2030 provides you with a compact, yet powerful tool to help shape your ideal commercial sound environment.

Designed for Effortless Everyday Use

Yamaha is known for creating musical instruments, home audio equipment, and other products that blend effortlessly with the daily routine. The MA2030 Mixer Amplifier and PA2030 Power Amplifier inherit the same type of well thought out interface, offering operating ease that is a hallmark of Yamaha design. A layout that gives priority to the frequently used output volume knob while other controls are visually subdued, for example, significantly enhances control efficiency in normal day-to-day operation. And there's no need for computers or complex programming procedures for installation or operation. After a quick, easy setup procedure that requires no special knowledge or skill, the system is ready to deliver outstanding sound in a wide range of applications.
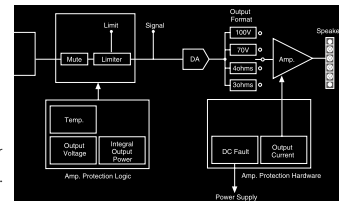
Supports Lo-Z and Hi-Z Speaker Systems

Both the MA2030 and PA2030 directly support low impedance and high impedance speaker systems without the need for additional transformers or other hardware that can take up valuable installation space. When used to drive a 3Ω or higher low-impedance speaker system (3Ω/4Ω selectable) the amplifiers deliver up to 30W per channel into two channels. With a high-impedance 70V or 100V line connection output is a single channel at up to 60W. That is ideal output power for a variety of small installations. And since the MA2030 and PA2030 can be used with all Yamaha commercial installation speakers, you have the choice and flexibility to design a sound system that ideally meets your specific requirements.

Flexible EQ Functions

Bass and treble EQ controls on the front panel of the MA2030 are convenient for adjusting the low and high frequency contours of the stereo input source. The source EQ also includes an enhancer function that adds harmonics as necessary to compensate for source material that is deficient in bass or high-end response. In addition to the MA2030 source EQ, the MA2030 and PA2030 both include speaker EQ that can be selected via a rear-panel DIP switch to provide ideal equalization for Yamaha VXC or VXS series speakers.

Acclaimed Yamaha DSP Features Built In

The quality and performance of Yamaha digital mixing consoles and processors are highly regarded by professional users throughout the industry. The MA2030 brings years of experience and success in the commercial audio field together in a compact but powerful amplifier designed specifically for installations. The entire unit is built into a rugged metal chassis for outstanding durability. Advanced features that contribute to high quality music playback and microphone use include a feedback suppressor that effectively stops feedback that can occur when a microphone picks up sound from the system's speakers, automatic ducking that smoothly adjusts the background program level when microphone input is detected, and automatic leveling that keeps overall volume constant regardless of changes in source level.

Safe and Efficient in Any Environment

All Yamaha products undergo rigorous quality testing. The MA2030 and PA2030 are no exception, and they'll provide top performance for many years under demanding conditions. At the heart of both models is a high-efficiency Class D amplifier that delivers sufficient power for small scale applicaitions while consuming minimal mains power during operation. And for absolutely quiet operation as well as superior reliability, both models feature thermal designs that achieve efficient cooling without the need for cooling fans. Intelligent protection functions inherited from our flagship models are included in the power supply and amplifier sections to prevent damage to the amplifier as well as the connected speaker system in the case of overload.

Build a System that Meets Your Needs

The MA2030 has 3 stereo inputs and 2 microphone inputs (XLR combo jack and Euroblock) that provide plenty of input capacity for small installations. For larger systems the MA2030 can be added to the PA2030 to drive more speakers, service a wider area, or set up volume zoning. An optional RKH1 rack mount kit can be used to mount either the half-rack size MA2030 or PA2030 alone, or both units side by side in a single 1U rack space. There's also an optional DCP1V4S control panel that can be connected to the MA2030 for remote volume control, microphone on/off switching, or triggering the built-in chime for announcements.
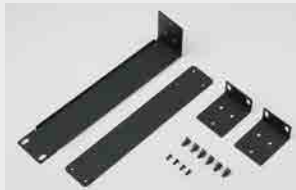
MA2030 Rear Panel

PA2030 Rear Panel

Rack-mount Accessory

RKH1

Dedicated rack-mount kit for MA2030 and PA2030.

Specifications

			MA2030	PA2030
Output power (1kHz, THD+N=1%)		3Ω/4Ω	30W x 2	
		70V/100V	60W x 1	
Input level (Stereo Input)	Unbalanced	Sensitivity	-10.0dBV	
		Max before clip	10.0dBV	
	Balanced	Sensitivity	–	+4.0dBu
		Max before clip	–	+24.0dBu
Output level (Line Out)	Nominal		-10.0dBV	–
Power Consumption	1/8max. power, 3Ω, pink noise at all channels		30W	
Amplifier Type (Output Circuitry)			Class D	
THD+N		Stereo in (Line in) to Speaker out 1kHz, 15W, 3Ω/4Ω	≤ 0.1%	
		Stereo in (Line in) to Speaker out 1kHz, 30W, 70V/100V	≤ 0.2%	
Frequency Response		Stereo in to Line out 20Hz to 20kHz	0dB, -2.5dB, +1.0dB	–
		Stereo in (Line in) to Speaker out 50Hz to 20kHz, 1W, 3Ω/4Ω	0dB, -3.0dB, +1.0dB	
		Stereo in (Line in) to Speaker out 90Hz to 20kHz, 1W, 70V/100V	0dB, -3.0dB, +1.0dB	
Crosstalk		Stereo in to other Stereo in	≤ -70dB	–
Connectors	Mic Input	MIC IN 1	XLR combo jack, balanced	–
		MIC IN 2	3.5mm Euroblock 3-pin, balanced	–
	Stereo Input	ST IN 1	Stereo mini phone (3.5mm), unbalanced	–
		ST IN 2/ST IN 3	Stereo RCA pin, unbalanced	–
		LINE IN	–	Stereo RCA pin (unbalanced), 3.5mm Euroblock 3-pin x 2 (balanced)
	Speaker Output		Barrier strip x 2 pairs	
	Line Out		Stereo RCA pin, unbalanced	–
	Remote Control (DCP1V4S)		RJ-45	–
Cooling			Conventional cooling, bottom to up airflow	
AC Power Requirements			100V, 120V, 230V – 240V 50Hz/60Hz	
Installation Condition, Rack Mount Condition			Rack-mountable when ensuring sufficient ventilation above and below the unit	
Dimensions (W x H x D) / Weight			215 x 54 x 288 mm (8.5 x 2.1 x 11.4inch) / 1.8kg (4.0lbs)	

Ceiling Speaker / Surface Mount Speaker

VXC/VXS Series

VXC4(W) / VXC6(W) / VXC8(W)
VXS5(W) / VXS8(W) / VXS10S(W) / VXS10ST(W)

A versatile lineup for clear consistent sound

Yamaha designed the new VXC and VXS speakers to accommodate a growing list of applications in the installation market. While these speakers deliver quintessential Yamaha sound quality, they have also been carefully designed for safe and easy installation. Featuring both ceiling and surface mount options, these speaker series include a comprehensive range of models that are available in either black or white, or can be painted to match the interior of any application.

Pursuing the best sound for installation

We developed the VXC and VXS Series speakers to address a demand in the installation market for speakers capable of providing superb music reproduction as well as crystal clear announcements for public address applications. Both series feature newly customized transducers with large, powerful magnetic circuits that increase driving and braking force substantially, as well as dedicated tweeter diaphragms and speaker cone paper made from a carefully-created blend of materials that help optimize sound reproduction. Cabinets are built tough to meet the demands of a wide variety of commercial environments, constructed from a carefully selected plastic with just the right tensile strength, and designed with optimized bass-reflex tuning to offer a firm, tight low-end. From the networking components and the materials used for wiring and soldering, right down to the optimal placement of acoustic absorption material, a great deal of attention has been paid to even the smallest details of the series' design.

Speaker Design

Several aspects of these speakers' design reflect a strong emphasis on functionality as well as the aesthetic features of their construction—effectively enhancing sound quality and speaker performance without disturbing the interior décor of the installation. This concept is evident in the hexagonal design featured on the grille of both series' speakers that actually improves sound clarity by raising the aperture ratio. Similarly, the smooth curves of the surface-mount cabinet's simple yet sophisticated design allow the speakers to be mounted closely to the wall—while still fully capable of panning and tilting to target service areas. Even the innovative design of the VXC's tweeter improves sound clarity by providing unrestricted woofer movement.

EN54 compatible version with uncompromised performance

We also offer "VA" versions that add EN54-24 voice alarm system standard compliance while retaining the outstanding sonic quality and ease of installation provided by the series speakers; therefore a single speaker can optimally handle both music reproduction and emergency broadcast functions. The VA versions employ flame-retardant materials for the cabinet and baffle, ceramics for the speaker terminal support, and clamping covers on the rear panels to meet EN54-24 standard heat and moisture resistance requirements.

*Available in certain regions

VXC Series

Ceiling speakers for any application

The VXC Series offers three different woofer sizes, allowing you to choose the speaker that is most suitable for your venue. Each model has an internal transformer that allows both high and low-impedance drive with just a single speaker, simply by switching the tap on the baffle. Since a single speaker can be used for both operations, inventory control is simplified, and you can easily adapt your system to any changes.

VXS Series

Highly adaptable surface mount speakers

The VXS Series lineup features two full-range models and two subwoofers, allowing you to choose the optimal model for a particular application and, if necessary, combine it with a subwoofer for venues that require a stronger bottom end. VXS Series full-range models are equipped with internal transformers that allow them to operate at both high or low impedance simply by changing the tap on the rear of the speaker. Full-range models also offer IP35-rated protection, ensuring worry-free use in outdoor applications.

VXS Series

VXC Series

Safe, seamless installation

Series speakers' Anti-Drop tab allows them to be mounted temporarily in the ceiling, freeing your hands for better safety and ease of installation. An attached, flexible carrying band also makes the speakers very portable, allowing you to carry multiple speakers at once safely. Additionally, VXC Series speakers also come complete with O-rings and tile rails for a safer, smoother installation.

Anti-Drop tab

Specifications

		VXC4 / VXC4W	VXC6 / VXC6W	VXC8 / VXC8W
Speaker Type		Full-range, Bass-reflex	2-way, Acoustic suspension	2-way, Acoustic suspension
Components	LF	4" full-range	6.5" Cone	8" Cone
	HF		0.75" Soft dome	1" Soft dome
Coverage Angle[*1]		130° conical	110° conical	100° conical
Nominal Impedance		8Ω		
Power Rating[*2]	NOISE	30W	75W	90W
	PGM	60W	150W	180W
	MAX	120W	300W	380W
Sensitivity[*3]	(1W, 1m)	87dB SPL	86dB SPL	90dB SPL
Maximum SPL	(Calculated, 1m)	108dB SPL	111dB SPL	116dB SPL
Frequency Range[*3]	(-10dB)	80Hz - 20kHz	56Hz - 20kHz	55Hz - 20kHz
Transformer Taps	70V	30W (170Ω), 15W (330Ω), 7.5W (670Ω), 3.8W (1.3kΩ)	60W (83Ω), 30W (170Ω), 15W (330Ω), 7.5W (670Ω)	60W (83Ω), 30W (170Ω), 15W (330Ω), 7.5W (670Ω)
	100V	30W (330Ω), 15W (670Ω), 7.5W (1.3kΩ)	60W (170Ω), 30W (330Ω), 15W (670Ω)	60W (170Ω), 30W (330Ω), 15W (670Ω)
Connectors		1 x Euroblock (4P) (Input: + / -, Loop Thru: + / -)	1 x Euroblock (4P) (Input: + / -, Loop Thru: + / -)	1 x Euroblock (4P) (Input: + / -, Loop Thru: + / -)
Color	(Grille)	VXC4: Black / VXC4W: White	VXC6: Black / VXC6W: White	VXC8: Black / VXC8W: White
Dimensions	(Diameter x H)	Ø225 x 195mm (Ø8.9" x 7.7")	Ø286 x 205mm (Ø11.3" x 8.1")	Ø325 x 259mm (Ø12.8" x 10.2")
Weight		2.6kg (5.7lbs)	4.4kg (9.7lbs)	6.6kg (14.6lbs)
Included Accessories		O-ring, Tile Rail, Cutout Template	O-ring, Tile Rail, Cutout Template	O-ring, Tile Rail, Cutout Template

[*1] 500Hz - 4kHz average [*2] IEC [*3] Half space

Flexible mounting for easier configuration

VXS speakers come with a dedicated bracket for safe, trouble-free speaker installation. Speakers can be mounted temporarily, freeing your hands to adjust mounting angles, which can now be configured consistently with ease thanks to the gear guides in the bracket connectors. Furthermore, the bracket base allows VXS Series speakers to be mounted on both walls and ceilings without the need to prepare a different set of brackets.

Specifications

		VXS5 / VXS5W	VXS8 / VXS8W	VXS10S / VXS10SW	VXS10ST / VXS10STW
Speaker Type		2-way, Bass-reflex	2-way, Bass-reflex	Subwoofer	
Components	LF	5.25" Cone	8" Cone	10" Dual Voice Coil	
	HF	0.75" Soft dome	1" Soft dome	-	
Coverage Angle[*1]	H x V	120 x 120	100 x 100	-	
Nominal Impedance		8Ω		8Ω + 8Ω	-
Satellite Impedance		-		8Ω load per satellite output recommended[*4]	
Power Rating[*2]	NOISE	75W	90W	100W + 100W	-
	PGM	150W	180W	200W + 200W	-
	MAX	300W	360W	400W + 400W	-
Sensitivity[*3]	(1W, 1m)	89dB SPL	91dB SPL	96dB SPL	96dB SPL
Maximum SPL	(Calculated, 1m)	114dB SPL	117dB SPL	125dB SPL	-
Frequency Range[*3]	(-10dB)	62Hz - 20kHz	51Hz - 20kHz	45Hz - 250Hz	45Hz - 250Hz
Transformer Taps	70V	30W (170Ω), 15W (330Ω), 7.5W (670Ω), 3.8W (1.3kΩ)	60W (83Ω), 30W (170Ω), 15W (330Ω), 7.5W (670Ω)	-	200W (25Ω), 100W (50Ω), 50W (100Ω), 25W (200Ω)
	100V	30W (330Ω), 15W (670Ω), 7.5W (1.3kΩ)	60W (170Ω), 30W (330Ω), 15W (670Ω)	-	200W (50Ω), 100W (100Ω), 50W (200Ω)
Connectors		1x Euroblock (4P) (Input: + / -, Loop Thru: + / -)	1x Euroblock (4P) (Input: + / -, Loop Thru: + / -)	Input: 1x Euroblock (4P) (CH1: + / -, CH2: + / -) Satellite Output: 1x Euroblock (4P) (ST 1: + / -, ST 2: + / -)	Input: 1x Euroblock (4P) (Input: + / -, Loop Thru: + / -) Satellite Output: 1x Euroblock (4P) (ST 1: + / -, ST 2: + / -)
Environmental[*5]		IP35	IP35	-	
Color		VXS5: Black / VXS5W: White	VXS8: Black / VXS8W: White	VXS10S: Black / VXS10SW: White	VXS10ST: Black / VXS10STW: White
Dimensions	(W x H x D)	176 x 280 x 163mm (6.9" x 11.0" x 6.4")	278 x 430 x 239mm (10.9" x 16.9" x 9.4")	260 x 500 x 389mm (10.2" x 19.7" x 15.3")	260 x 500 x 389mm (10.2" x 19.7" x 15.3")
Weight		3.6kg (7.9lbs)	8.2kg (18.1lbs)	16.5kg (36.4lbs)	19.5kg (43.0lbs)
Included Accessories		Wall / Ceiling mount bracket, Terminal cover	Wall / Ceiling mount bracket Terminal cover	Wall mount bracket	Wall mount bracket

[*1] 500Hz - 4kHz average [*2] IEC [*3] Half space [*4] Impedance lower limit (per satellite output) VXS10S/10SW: 4Ω, VXS10ST/10STW: 8Ω [*5] IP34 when installing the speaker to the ceiling vertically

System Design Software

Simulate your space for peak system performance

Yamaha offers two simulation software programs that allow users to optimize their sound system's performance in commercial spaces that vary in size, dimensions, and acoustic properties. CISSCA provides users with a quick, easy-to-use tool to calculate the ideal number of speakers for their respective application, while Y-S3 software provides an acoustic simulation based on varying speaker models and placements within your specified environment. Both software applications are available for download for free at the Yamaha Pro Audio website: www.yamahaproaudio.com

Commercial Installation Solutions Speaker Calculator

CISSCA

Commercial Installation Solutions Speaker Calculator (CISSCA) is a software application that quickly calculates the number of speakers required for optimum performance in a room specified by the user, plus the effective sound pressure level of the system.
- ■ A fast, easy way to estimate the number of speakers required for any project.
- ■ Easy setup and operation.
- ■ Report output function provides convenient documentation for system proposals.
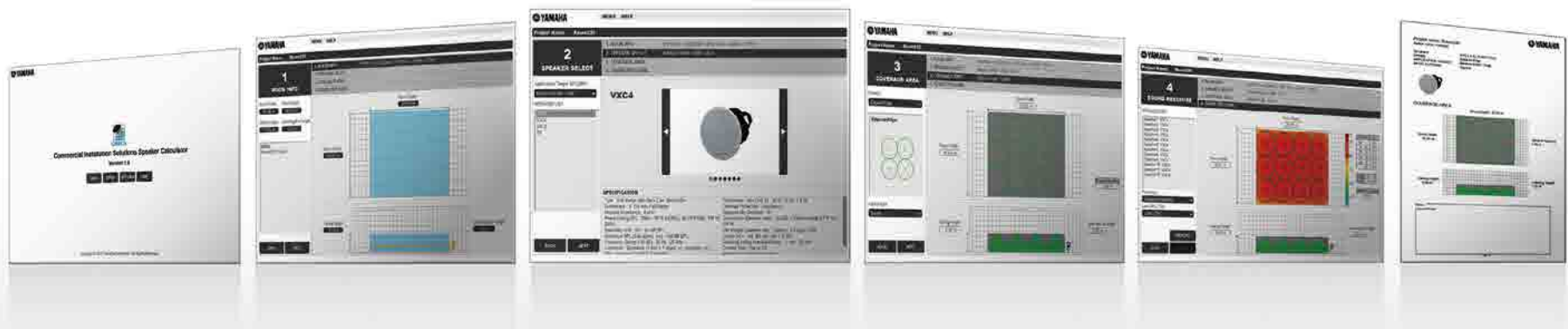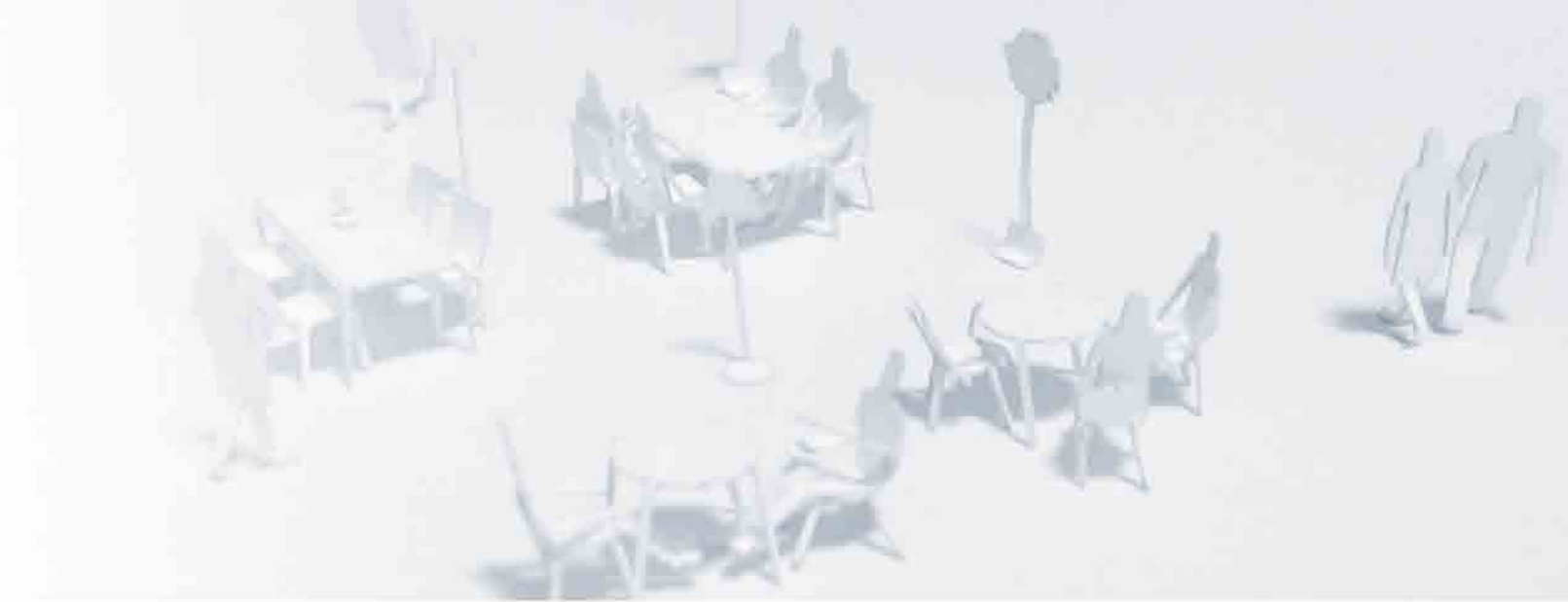
Yamaha Sound System Simulator

Y-S3

This acoustic simulation software combines the essential elements of Yamaha Professional Audio acoustic technology for all sound handled from input to output, including DSP, amps, speakers, and even the venue's design. The software provides superb accuracy and reliability thanks to the knowledge and experience of the Sound & IT Development Division, which is at the forefront of the world's acoustic technology with its Active Field Control and Acoustic Modeling, and has employed its advanced technology in the acoustic design of many concert halls.
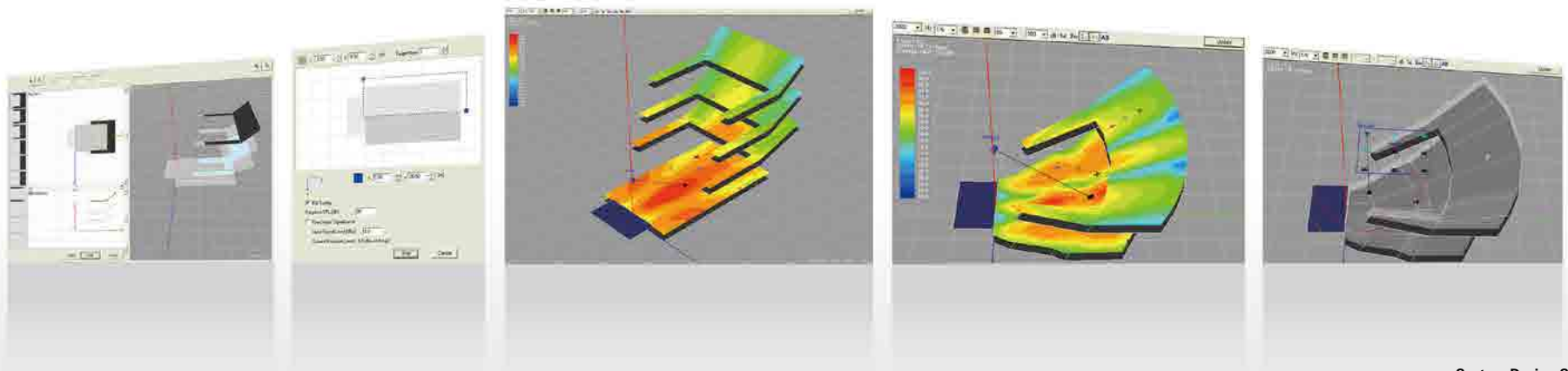
An Extended Lineup for Enhanced Installation Potential

Yamaha offers an extensive lineup of professional audio products, including digital mixing consoles favored by discerning live sound engineers and speakers chosen for some of the world's most distinguished theaters and halls. These products can provide dramatically enhanced capabilities for commercial sound installations, making Yamaha performance advantages available for wider range of applications.

Atmosphere is key to the success of any commercial environment and plays a crucial role in making an overall impression on a potential customer-base. The aesthetic style, sights and sounds comprise the core elements of how a business is represented to its prospective public, and very often the most subtle nuances can have the greatest impact. The ultimate goal of Yamaha's Commercial Installation Solutions is to provide system owners and operators with a reliable and attractive complement to the overall atmosphere of their installation by providing the comfort and confidence they need to bring their vision to life. Let's face it, no one goes to a cafe, health club or lecture hall for the first time to experience the high quality sound of the background music or speaking engagements — but it will very likely factor into their decision to come back.
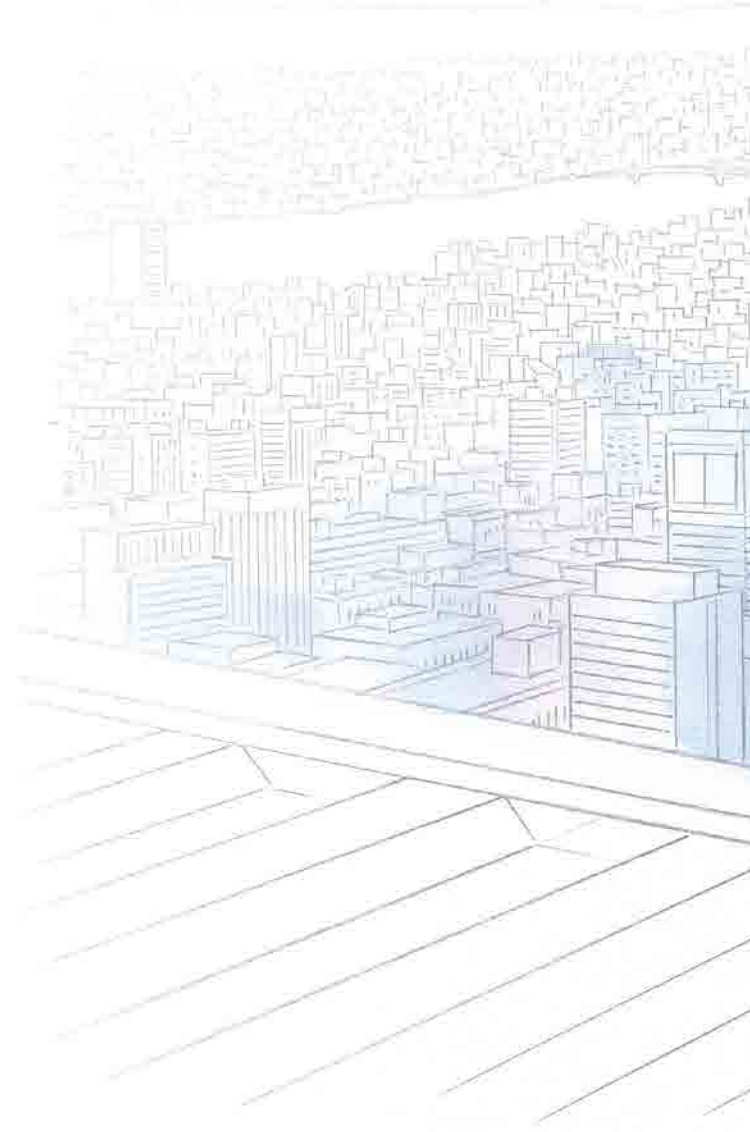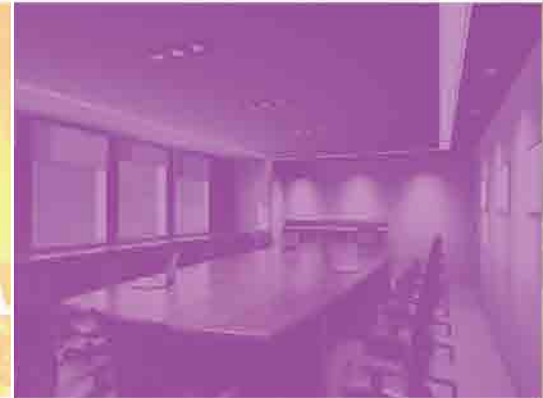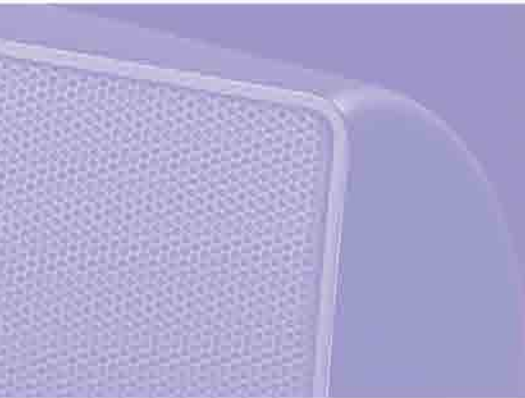
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CREATING 'KANDO' TOGETHER

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P.O. BOX1, Hamamatsu Japan
www.yamahaproaudio.com

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