

**MUSIC  
TO  
YOUR  
EARS**  
Yamaha Speakers  
since 1967

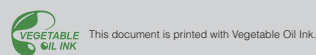
YAMAHA CORPORATION  
P.O.BOX1, Hamamatsu Japan  
[www.yamaha.com/proaudio](http://www.yamaha.com/proaudio)

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\* Some products in this catalog may not be available in certain regions.

Amendments and errors may occur



Printed in Japan

Yamaha Professional Audio Full-line Catalog 2018

# Yamaha Professional Audio Full-line Catalog



Spring 2018



## PRODUCTION PHILOSOPHY

We at Yamaha have a great history of musical instrument production based on our craftsmanship, engineering, and creative minds, delivering unrivaled variety of product lines to the market. Acoustical instruments range from recorder flute to concert grand piano, from Oboe to Violin, from classical guitar to Marimba, from concert drums to French horns – but it doesn't stop at acoustics. With the same craftsmanship and innovation, Yamaha pioneered in the development of electronic musical instruments, including synthesizers, keyboards, organs, electric guitars, electronic drums.



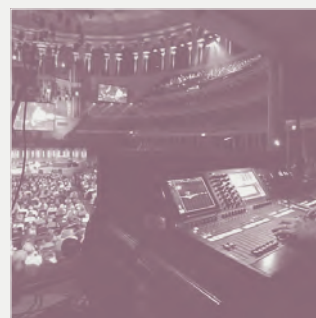
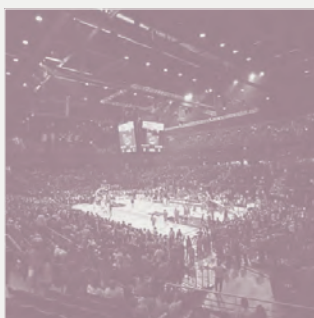




Yamaha entered the professional audio market 45 years ago, knowing exactly how music should sound since Yamaha covers the complete range of acoustic as well as electronic musical instruments.

**Yamaha's Professional Audio** division introduced game changing innovations such as the 'matrix' section on modular mixing consoles (PM1000, 1974), Class D power amplifiers (PD2500, 1986), DSP based Active Field Control (AFC, 1985), DSP based mixing consoles (DMP7, 1987) and networked audio distribution (NHB32C, 2003).

All these innovations, combined with a strong focus on quality, made Yamaha the most trusted equipment supplier for any audio application imaginable.



# Yamaha Commercial Audio Core Competences



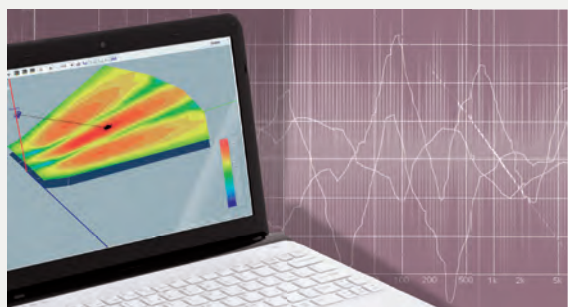
## DSP

Yamaha introduced Digital Signal Processing to the live market in the eighties with the SPX90 digital effect processor, and in the nineties with the DMP7 Digital Mixing Processor. Building on 30 years of DSP experience, the current digital mixer models are built with Yamaha's 7th generation DSP platform.



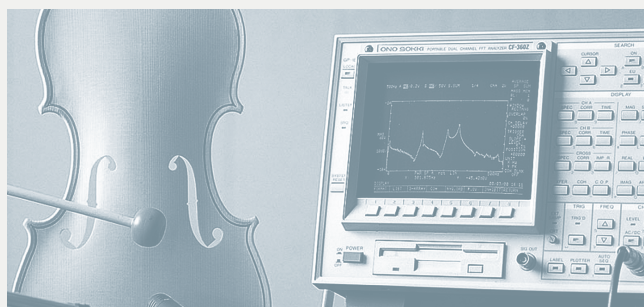
## NETWORKED AUDIO

Introducing Cobranet networked systems in 2004, joined by Ethersound systems in 2006, Yamaha evolved with the market to gigabit networked environments, providing the Dante™ high capacity networked audio protocol. Being involved with networking technologies from the beginning, Yamaha has become one of the most experienced companies in the world – assuring safe investments in networked audio systems.



## ELECTRO-ACOUSTICS

With more than 100 million loudspeakers sold, and thousands of acoustic and electro-acoustic designs of concert halls and theaters around the world, Yamaha has a long track record of high quality electro-acoustic systems and products.



## AUDIO QUALITY

As the world's largest manufacturer of virtually all kinds of musical instruments, Yamaha professional audio product engineers respect the natural sound of electronic and acoustic musical instruments, offering the highest audio quality possible in their designs.



## RELIABILITY

Since the conception of the PM consoles in the sixties, Yamaha understands the value of reliability in the live and recording industry. The result is a track record second to none – thanks to a thoroughly maintained ISO9001 certified quality assurance management system.



# | Yamaha GLOBAL



- \* CORPORATE NAME: Yamaha Corporation
- \* ESTABLISHED: October 12, 1897
- \* GROUP EMPLOYEES: 28,113
- \* NR. OF SUBSIDIARY COMPANIES: 76

- \* PATENTS AND UTILITY MODELS: over 9,000
- \* CONSOLIDATED NET SALES: 3.64 billion U.S. dollar

[http://www.yamaha.com/about\\_yamaha/corporate/](http://www.yamaha.com/about_yamaha/corporate/)

\*as of March 31, 2017

\*U.S. dollar amounts are translated from yen at the rate of ¥112.19 = U.S.\$1.00, the approximate rate prevailing on March 31, 2017.

## LOCATIONS OF YAMAHA GROUP COMPANIES



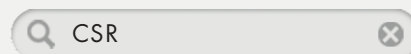
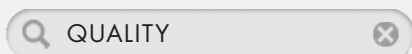
Quality is one of the core values in the Yamaha Group, upholding an outstanding reputation on sound quality and reliability. Embedded in the Yamaha management, the Professional Audio Division is ISO9001 certified to assure that Yamaha products always live up to the highest quality standards, now and in the future.

[www.yamaha.com/en/](http://www.yamaha.com/en/)



The Yamaha Group introduced its ISO14001 environmental management system in 1997. In August 2011, the ISO14001 unification was achieved for all group companies in Japan. Yamaha is listed in some of the world's most prominent SRI (Socially Responsible Investment) indexes, such as the FTSE4 Good Global Index.

[www.yamaha.com/en/](http://www.yamaha.com/en/)



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# | www.yamahaproaudio.com



## **www.yamahaproaudio.com**

provides product information and many download contents for Yamaha pro audio gear: mixers, processors, power amplifiers, speakers, and more.

- \* PRODUCT FEATURES, SPECIFICATIONS AND FOTOS
- \* PRODUCT SUGGESTIONS BY APPLICATION TYPE
- \* SYSTEM EXAMPLES FOR INSTALLED SOUND
- \* DOWNLOADS OF SOFTWARE, DATA SHEETS AND MANUALS
- \* TRAINING AND SUPPORT, DOCUMENTS AND VIDEOS
- \* PRODUCT BROCHURES
- \* THE MINI-YGDAI COMPATIBILITY

Besides high quality products, high quality information is essential to support the design and installation of high quality audio systems. In addition to our engineering support teams and local training seminars, the **www.yamahaproaudio.com** website is a valuable source of on-demand information to support fast and accurate system conceptualization, design and installation. The scope of technical information available is unique in the professional audio market – from training videos to CAD data for individual products, it's all there. And if there's anything more required to finish a job – just call one of our sales engineers and we'll make it happen.



### SELF TRAINING

Not everyone has the time to attend the CA Training Seminars. Our Self Training program allows busy users to learn at their own pace. Self Training is also a great way to prepare for an actual seminar, or review the information after attending. Online movies and technical documents are designed to make learning easy.



### FAQ

Answers to frequently asked questions on product settings, operation and troubleshooting, as well as useful tips to support concept, design, installation and use of Yamaha systems.



### SYSTEM EXAMPLES

From simple store systems through restaurants and conference rooms to large installations catering to hundreds of guests, a selection of total sound solutions using components from the extensive Yamaha lineup is presented.



### CAD LIBRARY

DXF data files for individual products in compressed ".zip" format.



### MANUALS

Owner's manuals are organized by product category. Manuals are provided in ".pdf" format.



### FIRMWARE AND SOFTWARE

Mixer and processor firmware as well as driver, editor, manager, and designer software are available for all products – current and legacy. Installation guides and upgrades are also available.



### DATA SHEETS

Product outlines, specifications and dimension diagrams are available in ".pdf" or ".zip" format.



### SYSTEM DESIGN RESOURCES

System design resources such as CAD data, Datasheets, A&E Specs, Speaker and processing data, protocol specs, and so on are available.



### PHOTO LIBRARY

Download high resolution JPG files of our products in the current line-up.



NEXT



# SPEAKER SYSTEMS





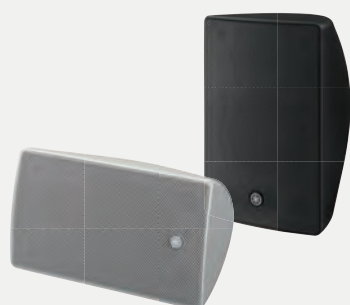
# VXS SERIES



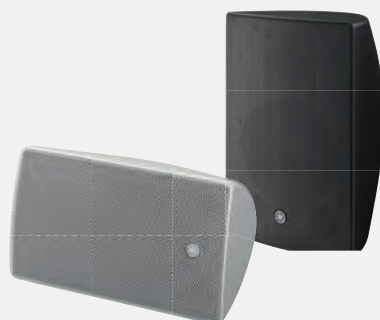
CONFERENCE

BACKGROUND  
MUSIC

ACOUSTICS



VXS5/VXS5W



VXS8/VXS8W



VXS10ST/VXS10STW

## SURFACE MOUNT SPEAKERS

|                                 | VXS5/VXS5W         | VXS8/VXS8W         | VXS10S/VXS10SW      | VXS10ST/VXS10STW    |
|---------------------------------|--------------------|--------------------|---------------------|---------------------|
| POWER RATING PGM (IEC)          | 150 W              | 180 W              | 200 W + 200 W       | -                   |
| NOMINAL IMPEDANCE               | 8 Ω                | 8 Ω                | 8 Ω + 8 Ω           | -                   |
| TRANSFORMER TAPS 100V           | 30W/15W/7,5W       | 60W/30W/15W        | -                   | 200W/100W/50W       |
| TRANSFORMER TAPS 70V            | 30W/15W/7,5W/3,8W  | 60W/30W/15W/7,5W   | -                   | 200W/100W/50W/25W   |
| SENSITIVITY @1W/1M              | 89 dB SPL          | 91 dB SPL          | 96 dB SPL           | 96 dB SPL           |
| MAXIMUM SPL<br>(CALCULATED, 1M) | 114 dB SPL         | 117 dB SPL         | 125dB SPL           | -                   |
| FREQUENCY RANGE<br>(-10dB)      | 62Hz - 20kHz       | 51hz - 20kHz       | 45hz - 250Hz        | 45hz - 250Hz        |
| SPEAKER TYPE                    | 2-way bass reflex  | 2-way bass reflex  | Subwoofer           | Subwoofer           |
| COVERAGE ANGLE (HXV)            | 120° x 120°        | 100° x 100°        | -                   | -                   |
| WOOFER                          | 5,25"              | 8"                 | 10" dual voice coil | 10" dual voice coil |
| TWEETER                         | 0.75" soft dome    | 1" soft dome       | -                   | -                   |
| CONNECTORS                      | Euroblock 4P x1    | Euroblock 4P x1    | Euroblock 4P x2     | Euroblock 4P x2     |
| DIMENSIONS (W x H x D)          | 176 x 280 x 163 mm | 278 x 430 x 239 mm | 260 x 500 x 389 mm  | 260 x 500 x 389 mm  |
| WEIGHT                          | 3.6 kg             | 8.2 kg             | 16.5 kg             | 19.5 kg             |
| PACKAGING                       | per pair           | per pair           |                     |                     |

## SOPHISTICATED SOUND AND DESIGN FOR MATCHING ANY APPLICATION

- Series comprises two full-range models and two subwoofers available in either black or white.
- Features newly customized transducers for superb music reproduction as well as crystal clear announcements.
- Full-range models are equipped with internal transformer that allows operation at both high and low impedance.
- VXS10ST(W) comes equipped with an internal transformer, adding stronger bottom end in high impedance systems.
- VXS8(W) and VXS5(W) offer IP35 rated protection, ensuring use in outdoor applications.
- Subwoofers feature 10" dual voice coil with high pass outputs for satellite speakers.
- Comes with a dedicated bracket for safe, trouble-free speaker installation.
- Overload protection circuit provided to protect speaker components.

\* MOUNTING ACCESSORIES (INCLUDED)



# | VXS SERIES F MODEL



CONFERENCE



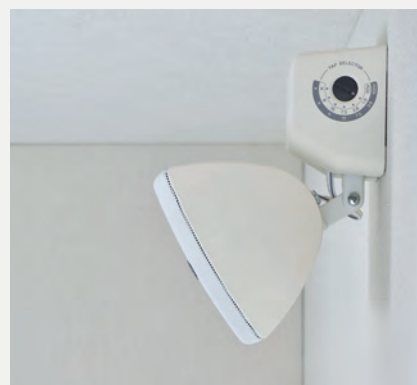
BACKGROUND  
MUSIC



ACOUSTICS

## COMPACT SURFACE MOUNT SPEAKER

- \* 3,5" FULL RANGE SPEAKER
- \* ATTRACTIVE, DISCREET DESIGN BY Yamaha DESIGN LABORATORY
- \* ACOUSTIC DESIGN FOR SOPHISTICATED NATURAL SOUND, MEMBER OF THE VXS FAMILY
- \* AVAILABLE AS LOW-Z AND HIGH-Z WITH 100V TRANSFORMER
- \* BLACK AND WHITE FINISH, PAINTABLE
- \* 20W FULL RANGE, 105DB PEAK SPL, 150° X 160° COVERAGE



|                       | VXS3F/VXS3FW                                    | VXS3FT/VXS3FTW                   |
|-----------------------|-------------------------------------------------|----------------------------------|
| POWER RATING          | 40W                                             | -                                |
| NOMINAL IMPEDANCE     | 8 ohm                                           | -                                |
| TRANSFORMER TAPS 100V | -                                               | 15W/7.5W/3.8W                    |
| TRANSFORMER TAPS 70V  | -                                               | 15W/7.5W/3.8W/1.9W               |
| SENSITIVITY @1W1M     | 86 dB SPL *1                                    | 86 dB SPL *1                     |
| MAX SPL               | 105 dB SPL                                      | -                                |
| FREQ RANGE            | 130Hz - 20kHz                                   | 130Hz - 20kHz                    |
| SPEAKER TYPE          | Fullrange, Acoustic suspension                  | Fullrange, Acoustic suspension   |
| COVERAGE ANGLE        | 150° x 160°                                     | 150° x 160°                      |
| WOOFER                | 3,5" full range                                 | 3,5" full range                  |
| TWEETER               | -                                               | -                                |
| CONNECTORS            | 1 x Euroblock (4P) (Input: +/-, Loop Thru: +/-) | 1 x Barrier strip (Input: +/-)   |
| DIMENSIONS            | 184x130x94 mm (184x130x134 mm*2)                | 184x130x94 mm (184x178x139 mm*2) |
| WEIGHT                | 1.0kg (1.1kg*2)                                 | 1.0kg (1.7kg*2)                  |
| PACKAGING             | packaged in pairs                               | packaged in pairs                |

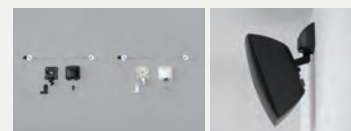
\*1: Full-space (4π) , 200Hz to 10kHz pink noise

\*2: with bracket (in 0° setup)



- \* 100V/70V TRANSFORMER FOR VXS3FT (INCLUDED)

- \* MOUNTING ACCESSORIES FOR VXS3F (INCLUDED)





# | VXS SERIES M/S MODEL



## VXS1ML – MINI SATELLITE SPEAKERS

- 1.5" Full range speaker with 10W (PGM)
- Minimalistic Design with superior sound quality
- Various ways of installation
- Optional ceiling mount and rail mount kits available
- Black and white finish, paintable
- Very wide coverage (170°)

## VXS3S – COMPACT SUBWOOFERS

- Yamaha's unique SR-Bass™ technology
- Easy system expandability
- Lo-Z (8Ω)/Hi-Z (70V/100V) switchable
- Optional in-ceiling mount kit available
- Black and white finish, paintable
- Satellite connections

## VXS SERIES M



## VXS SERIES S



\* **CMA1MB / CMA1MW**  
CEILING MOUNT ADAPTER  
FOR VXS SERIES "M MODEL"



\* **CMA3SB / CMA3SW**  
CEILING MOUNT ADAPTER  
FOR VXS3S



\* **RMA1MB**  
RAIL MOUNT ADAPTER FOR  
VXS SERIES "M MODEL"



## GENERAL SPECIFICATIONS

| MODEL                   |                              | VXS1MLB / VXS1MLW                                                                              | VXS3SB / VXS3SW                                                                                         |
|-------------------------|------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| SPEAKER TYPE            |                              | Full-range, acoustic suspension type                                                           | SR-Bass™ type Subwoofer                                                                                 |
| FREQUENCY RANGE (-10DB) |                              | 180Hz-20kHz                                                                                    | 65Hz-180Hz                                                                                              |
| NOMINAL COVERAGE        | H                            | 170°                                                                                           | -                                                                                                       |
|                         | V                            | 170°                                                                                           | -                                                                                                       |
| COMPONENTS              | LF                           | -                                                                                              | 3.5" Cone                                                                                               |
| COMPONENTS              | LF-HF                        | 1.5" Cone                                                                                      | -                                                                                                       |
| POWER RATING            | NOISE                        | 5W                                                                                             | 20W                                                                                                     |
|                         | PGM                          | 10W                                                                                            | 40W                                                                                                     |
|                         | PEAK                         | 20W                                                                                            | 80W                                                                                                     |
| NOMINAL IMPEDANCE       |                              | 8Ω                                                                                             | 8Ω                                                                                                      |
| SATELLITE IMPEDANCE     |                              | -                                                                                              | 8Ω load per satellite output recommended                                                                |
| TRANSFORMER TAPS        | 100V                         | -                                                                                              | 15W, 7.5W, 3.8W                                                                                         |
|                         | 70V                          | -                                                                                              | 15W, 7.5W, 3.8W, 1.9W                                                                                   |
| SPL                     | Sensitivity (1W; 1m on axis) | 79dB SPL *1                                                                                    | 79dB SPL *1                                                                                             |
|                         | Peak (Calculated)            | 92dB SPL *2                                                                                    | 98dB SPL *2                                                                                             |
| I/O CONNECTORS          |                              | Euroblock (2 pin) × 1                                                                          | TERMINAL BLOCKS(4pin) Input: +/-, Loop-thru: +/-, TERMINAL BLOCKS(8pin) Satellite output: +/- (ST1 ST4) |
| PROTECTION CIRCUIT      | Load protection              | Full-range power limiting for protecting network and transducers                               | Full-range power limiting for protecting network and transducers                                        |
| SHAPE                   |                              | Rectangular                                                                                    | Rectangular                                                                                             |
| CABINET MATERIAL        |                              | ABS                                                                                            | ABS                                                                                                     |
| FINISH                  |                              | VXS1MLB: Black (approximate value: Munsell N3), VXS1MLW: White (approximate value: Munsell N9) | VXS3SB:Black (approximate value:Munsell N3) VXS3SW: White (approximate value:Munsell N9)                |
| DIMENSIONS              | W                            | 62mm (2.4") *3                                                                                 | 322mm (12.7") *3                                                                                        |
|                         | H                            | 62mm (2.4") *3                                                                                 | 162mm (6.4") *3                                                                                         |
|                         | D                            | 82mm (3.2") *3                                                                                 | 118mm (4.6") *3                                                                                         |
| NET WEIGHT              |                              | 0.17 kg (0.37 lbs) *3                                                                          | 2.7kg (6.0 lbs) *3                                                                                      |
| ACCESSORIES             |                              | Wall/Ceiling Bracket                                                                           | Mounting bracket, Safety wire, Spacer, Screw, Masking sheet                                             |
| PACKAGING               |                              | Packaged each                                                                                  | Packaged each                                                                                           |
| CERTIFICATE             |                              | NFPA70, CE, RoHS                                                                               | NFPA70, CE, RoHS                                                                                        |

\*1: VXS1ML: Full-space (4π) (300Hz-10kHz), VXS3S:Full-space (4π)

\*2: Calculated based on power rating and sensitivity, exclusive of power compression

\*3: Speaker only

# |VXL SERIES



CONFERENCE

BACKGROUND  
MUSIC

ACOUSTICS

## HIGH PERFORMANCE SLIM LINE ARRAY LOUDSPEAKERS

### VXL SERIES

High quality audio with visual discretion are two of the key demands for installed loudspeakers in spaces such as houses of worship, boardrooms, lecture theatres and many other situations. Yamaha Commercial Audio's new **VXL1** range column loudspeakers bring sleek, smart sound to virtually any space, based on multiple arrays of the same 1.5" driver which is at the heart of Yamaha's multiple award-winning VXS1ML speaker. Featuring IP35-rated, paintable enclosures in black or white, the VXL1 series includes the VXL1-8 (featuring eight full-range 1.5" drivers), the VXL1-16 (16 full-range 1.5" drivers) and the VXL1-24 (24 full-range 1.5" drivers). Each speaker is supplied as a Lo-Z unit (a Hi-Z option is available). All models measure just 54mm/2.1" wide by 104mm/4.1" deep, with heights of 480mm/18.9" (VXL1-8), 846mm/33.3" (VXL1-16) and 1212mm/47.7" (VXL1-24). Frequency range and sensitivity is exceptionally consistent across the series.

Optional accessories include a high impedance transformer box and range of alternative mounting brackets. As part of Yamaha's acclaimed Commercial Installation Solutions (CIS) range, VXL1 series loudspeakers are designed for fast and seamless incorporation into CIS-based audio networks.

- High quality compact 1.5" drivers deliver excellent sound.
- 54mm total width enclosure to blend in with any interior design.
- Optional brackets for vertical and horizontal arrays for increase SPL and extra projection.
- Optional wall mount brackets for 2-axys adjustment.
- Transformer option for 100V operation.
- Paintable, IP35 waterproof design.

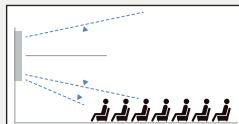




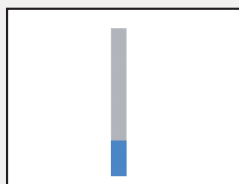
### SUPPLIED BRACKET

For seamless wall mounting.

\*This bracket does not allow angle adjustment

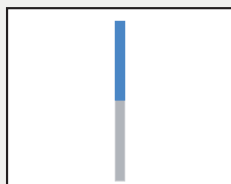


All models are supplied with a wall mounting bracket, while the VXL1-16 and VXL1-24 feature dispersion expander switches which allow the lower vertical dispersion of the array to be easily expanded without having to angle the speaker.



### ST-L1

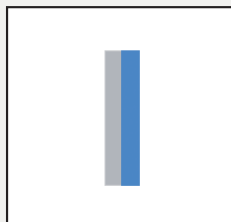
Transformer box for high-impedance connections. Ideal for multiple speaker layouts.



### VCB-L1

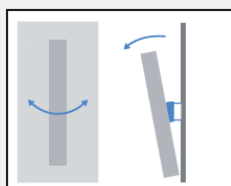
Bracket for vertical mounting of two arrays, for increased SPL and extra projection.

\*This VCB-L1 and WMB-L1 are used together.



### HCB-L1

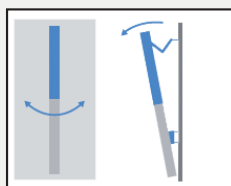
Bracket for side-by-side mounting of two arrays, for increased SPL and more focused horizontal dispersion that can minimize unwanted reflections from nearby surfaces.



### WMB-L1

Bracket for 2-axis adjustment of a single array.

\*This VCB-L1 and WMB-L1 are used together.



### VCSB-L1

Bracket for 2-axis adjustment of a two vertically linked arrays.



## GENERAL SPECIFICATIONS

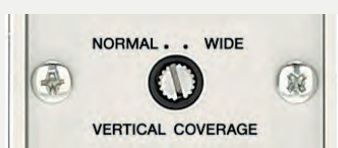
|                                       |                              | VXL1B-24 / VXL1W-24                                                                                                       | VXL1B-16 / VXL1W-16                                                                                                       | VXL1B-8 / VXL1W-8                                                                                                       |
|---------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| SPEAKER TYPE                          |                              | Full-range, Bass reflex                                                                                                   | Full-range, Bass reflex                                                                                                   | Full-range, Bass reflex                                                                                                 |
| FREQUENCY RANGE (-10DB) <sup>*1</sup> |                              | 77 Hz - 20 kHz,<br>98 Hz - 20 kHz (with port cover)                                                                       | 81 Hz - 20 kHz,<br>108 Hz - 20 kHz (with port cover)                                                                      | 70 Hz - 20 kHz,<br>110 Hz - 20 kHz (with port cover)                                                                    |
| NOMINAL COVERAGE (-6DB)               | HORIZONTAL                   | 170°                                                                                                                      | 170°                                                                                                                      | 170°                                                                                                                    |
|                                       | VERTICAL                     | 15° (+7.5° - -7.5°) (NORMAL),<br>20° (+7.5° - -12.5°) (WIDE)                                                              | 25° (+12.5° - -12.5°) (NORMAL),<br>30° (+12.5° - -15°) (WIDE)                                                             | 40° (+20° - -20°)                                                                                                       |
| EFFECTIVE COVERAGE (-10DB)            | HORIZONTAL                   | 180°                                                                                                                      | 180°                                                                                                                      | 180°                                                                                                                    |
|                                       | VERTICAL                     | 25° (+12.5° - -12.5°) (NORMAL),<br>35° (+12.5° - -22.5°) (WIDE)                                                           | 30° (+15° - -15°) (NORMAL),<br>45° (+15° - -30°) (WIDE)                                                                   | 65° (+32.5° - -32.5°)                                                                                                   |
| COMPONENTS                            | LF-HF                        | 1.5" (3.75 cm) Cone × 24                                                                                                  | 1.5" (3.75 cm) Cone × 16                                                                                                  | 1.5" (3.75 cm) Cone × 8                                                                                                 |
| POWER RATING                          | NOISE                        | 110 W                                                                                                                     | 80 W                                                                                                                      | 40 W                                                                                                                    |
|                                       | PGM                          | 220 W                                                                                                                     | 160 W                                                                                                                     | 80 W                                                                                                                    |
|                                       | PEAK                         | 440 W                                                                                                                     | 320 W                                                                                                                     | 160 W                                                                                                                   |
| NOMINAL IMPEDANCE                     |                              | 8Ω                                                                                                                        | 12Ω                                                                                                                       | 16Ω                                                                                                                     |
| SPL                                   | SENSITIVITY (1W; 1M ON AXIS) | 91 dB SPL (1 m/1 W) *1 *2                                                                                                 | 91 dB SPL (1 m/1 W) *1 *2,<br>(90 dB SPL with port cover)                                                                 | 89 dB SPL (1 m/1 W) *1 *2,<br>(88 dB SPL with port cover)                                                               |
|                                       | PEAK (CALCULATED)            | 117 dB SPL (1 m) *3                                                                                                       | 116 dB SPL (1 m) *3                                                                                                       | 111 dB SPL (1 m) *3                                                                                                     |
| I/O CONNECTORS                        |                              | Euroblock (2 pin) × 2 (input: +/-)<br>Max. wire size AWG 12 (3.3 mm <sup>2</sup> )                                        | Euroblock (2 pin) × 2 (input: +/-)<br>Max. wire size AWG 12 (3.3 mm <sup>2</sup> )                                        | Euroblock (2 pin) × 2 (input: +/-)<br>Max. wire size AWG 12 (3.3 mm <sup>2</sup> )                                      |
| PROTECTION CIRCUIT                    | LOAD PROTECTION              | Full-range power limiting to protecting network and transducers                                                           | Full-range power limiting to protecting network and transducers                                                           | Full-range power limiting to protecting network and transducers                                                         |
| FINISH                                |                              | VXL1B-24: Black painting (approximate value: Munsell N3.0),<br>VXL1W-24: White painting (approximate value: Munsell N9.0) | VXL1B-16: Black painting (approximate value: Munsell N3.0),<br>VXL1W-16: White painting (approximate value: Munsell N9.0) | VXL1B-8: Black painting (approximate value: Munsell N3.0),<br>VXL1W-8: White painting (approximate value: Munsell N9.0) |
| DUST AND WATER RESISTAN               |                              | IP34<br>(IP35 with port cover)                                                                                            | IP34<br>(IP35 with port cover)                                                                                            | IP33<br>(IP35 with port cover)                                                                                          |
| PACKAGING                             |                              | Packaged in 1 pc                                                                                                          | Packaged in 1 pc                                                                                                          | Packaged in 1 pc                                                                                                        |
| DIMENSIONS (W X H X D)                |                              | W54 × H1212 × D104 mm<br>(Speaker only), W54 × H1212 × D111.5 mm (With included bracket)                                  | W54 × H846 × D104 mm (Speaker only), W54 × H846 × D111.5 mm (With included bracket)                                       | W54 × H480 × D104 mm (Speaker only), W54 × H480 × D111.5 mm (With included bracket)                                     |
| WEIGHT                                |                              | 5.5 kg (Speaker only)                                                                                                     | 3.9 kg (Speaker only)                                                                                                     | 2.1 kg (Speaker only)                                                                                                   |

\*1: HALF-SPACE (2 II)

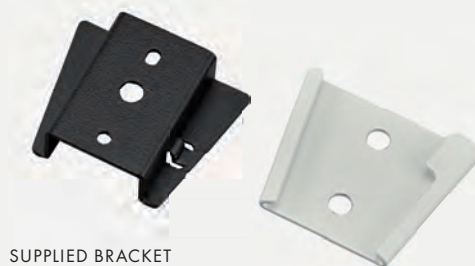
\*2: MEASURED AT 2 M; VALUE CONVERTED TO 1 M IS SHOWN (FREQUENCY RANGE: 100 HZ - 10 KHZ)

\*3: CALCULATED BASED ON POWER RATING AND SENSITIVITY, EXCLUSIVE OF POWER COMPRESSION.

\*0 DBU IS REFERENCED TO 0.775 VRMS.



DISPERSION EXPANDER SWITCH



SUPPLIED BRACKET

## OPTIONAL ACCESSORIES



### WMB-L1B/WMB-L1W

2-AXIS ADJUSTMENT WALL BRACKET  
COMPATIBLE MODELS: VXL1-24/16/8  
BLACK AND WHITE VERSIONS AVAILABLE



### ST-L1B/ST-L1W

TRANSFORMER FOR HIGH-IMPEDANCE SYSTEMS  
COMPATIBLE MODELS: VXL1-24/16/8  
BLACK AND WHITE VERSIONS AVAILABLE



### HCB-L1B

HORIZONTAL COUPLING BRACKET  
COMPATIBLE MODELS: VXL1-24/16/8



### VCB-L1B

VERTICAL COUPLING BRACKET  
COMPATIBLE MODELS: VXL1-24/16



### VCSB-L1B/VCSB-L1W

VERTICAL COUPLING SUPPORT BRACKET  
COMPATIBLE MODELS: VXL1-24/16  
BLACK AND WHITE VERSIONS AVAILABLE

# VXC SERIES



CONFERENCE



BACKGROUND  
MUSIC



ACOUSTICS



VXC8/VXC8W

VXC6/VXC6W

VXC4/VXC4W

## CEILING MOUNT SPEAKERS

|                              | VXC4 / VXC4W            | VXC6 / VXC6W               | VXC8 / VXC8W               |
|------------------------------|-------------------------|----------------------------|----------------------------|
| POWER RATING PGM (IEC )      | 60 W                    | 150 W                      | 180 W                      |
| TRANSFORMER TAPS 100V        | 30W/15W/7.5W            | 60W/30W/15W                | 60W/30W/15W                |
| TRANSFORMER TAPS 70V         | 30W/15W/7.5W/3.8W       | 60W/30W/15W/7.5W           | 60W/30W/15W/7.5W           |
| NOMINAL IMPEDANCE            | 8 Ω                     | 8 Ω                        | 8 Ω                        |
| SENSITIVITY @1W/1M           | 87 dB SPL               | 86 dB SPL                  | 90 dB SPL                  |
| MAXIMUM SPL (CALCULATED, 1M) | 108 dB SPL              | 111 dB SPL                 | 116 dB SPL                 |
| FREQUENCY RANGE (-10dB)      | 80Hz - 20kHz            | 56Hz - 20kHz               | 55Hz - 20kHz               |
| SPEAKER TYPE                 | Full range, bass reflex | 2-way, acoustic suspension | 2-way, acoustic suspension |
| COVERAGE ANGLE               | 130° conical            | 110° conical               | 100° conical               |
| WOOFER                       | 4"                      | 6,5" cone                  | 8" cone                    |
| TWEETER                      | -                       | 0,75" soft dome            | 1" softdome                |
| CONNECTORS                   | Euroblock 4P x1         | Euroblock 4P x1            | Euroblock 4P x1            |
| DIMENSIONS (ø x D)           | 225 x 195 mm            | 286 x 205 mm               | 325 x 259 mm               |
| WEIGHT                       | 2.6 kg                  | 4.4 kg                     | 6.6 kg                     |
| PACKAGING                    | per pair                | per pair                   | per pair                   |

## A VERSATILE LINEUP FOR CLEAR AND CONSISTENT SOUND

- Series offers three different woofer sizes in either black or white.
- The VXC series feature newly customized transducers for superb music reproduction as well as crystal clear announcements.
- Designed with optimized bass-reflex tuning to offer a firm, tight low-end (VXC4).
- Equipped with internal transformers that allow both high and low impedance drive, which can be selected by simply switching the tap on the baffle.
- Anti-Drop tab allows the speakers to be mounted temporarily in the ceiling for improved safety and ease of installation.
- A flexible carrying band makes the speakers very portable and allows carrying multiple speakers at once.
- Come complete with O-rings and tile rails for safer and smoother installation.
- Overload protection circuit provided to protect speaker components.



\* MOUNTING ACCESSORIES (INCLUDED)

# VXC SERIES F-MODEL



CONFERENCE



BACKGROUND  
MUSIC



ACOUSTICS



VXC3F/VXC3FW



VXC5F/VXC5FW

## LOW PROFILE CEILING SPEAKERS

|                              | VXC3F/VXC3FW            | VXC5F/VXC5FW            |
|------------------------------|-------------------------|-------------------------|
| POWER RATING PGM (IEC )      | 40 W                    | 80 W                    |
| TRANSFORMER TAPS 100V        | 15W/7.5W/3.8W           | 30W/15W/7.5W            |
| TRANSFORMER TAPS 70V         | 15 W/7.5W/3.8W/1.9W     | 30 W/15W/7.5W/3.8W      |
| NOMINAL IMPEDANCE            | 8 Ω                     | 8 Ω                     |
| SENSITIVITY @1W/1M           | 87 dB SPL               | 89 dB SPL               |
| MAXIMUM SPL (CALCULATED, 1M) | 106 dB SPL              | 111 dB SPL              |
| FREQUENCY RANGE (-10dB)      | 71Hz - 20kHz            | 60Hz - 20kHz            |
| SPEAKER TYPE                 | Full range, bass reflex | Full range, bass reflex |
| COVERAGE ANGLE               | 140° conical            | 130° conical            |
| WOOFER                       | 3,5" full range unit    | 4,5" full range unit    |
| TWEETER                      | -                       | -                       |
| CONNECTORS                   | Euroblock 4P X 1        | Euroblock 4P X 1        |
| DIMENSIONS (Ø x D)           | 285 × 112 mm            | 324 × 143 mm            |
| WEIGHT                       | 2.5 kg                  | 3.1 kg                  |
| PACKAGING                    | per pair                | per pair                |

## LOW-PROFILE CEILING SPEAKERS DESIGNED FOR SUPERIOR MUSIC REPRODUCTION

- 4.5" full-range speaker unit [VXC5F/VXC5FW]; 3.5" full-range speaker unit [VXC3F/VXC3FW]
- Engineered for optimum BGM reproduction
- Wide coverage allows a single speaker to cover a wide area
- Direct support for low-impedance or high-impedance connections
- Low-profile design facilitates installation in limited ceiling spaces
- Built-in carrying band increases safety during installation
- Anti-drop tab mechanism provide secure temporary positioning during installation
- Double-threaded speaker clamp screws for speedy tightening
- Paintable grilles with magnetic catches
- Black and white versions available

\* MOUNTING ACCESSORIES (INCLUDED)





# |VS SERIES



CONFERENCE



BACKGROUND  
MUSIC



VS4/VS4W



VS6/VS6W

## SURFACE MOUNT SPEAKERS

|                              | VS4 / VS4W           | VS6 / VS6W           |
|------------------------------|----------------------|----------------------|
| POWER RATING PGM (IEC )      | 30 W                 | 50 W                 |
| NOMINAL IMPEDANCE            | 8 Ω                  | 8 Ω                  |
| TRANSFORMER TAPS 100 V       | 15W/7.5W/3.8W        | 25W/12.5W/6.3W       |
| TRANSFORMER TAPS 70 V        | 15W/7.5W/3.8W/1.9W   | 25W/12.5W/6.3W/3.1W  |
| SENSITIVITY @1W/1M           | 88 dB SPL            | 90 dB SPL            |
| MAXIMUM SPL (CALCULATED, 1M) | 106dB SPL            | 110dB SPL            |
| FREQUENCY RANGE (-10dB)      | 100Hz - 20kHz        | 80hz - 20kHz         |
| SPEAKER TYPE                 | 2-way                | 2-way                |
| COVERAGE ANGLE (HXV)         | 110° x 110°          | 90° x 90°            |
| WOOFER                       | 4"                   | 6,5"                 |
| TWEETER / COMPRESSION DRIVER | 1"                   | 1"                   |
| CONNECTORS                   | 2 pair barrier strip | 2 pair barrier strip |
| DIMENSIONS (W x H x D)       | 152 x 243 x 172 mm   | 190 x 308 x 219 mm   |
| WEIGHT                       | 1.9 kg               | 2.8 kg               |
| PACKAGING                    | per pair             | per pair             |

## OUTSTANDING SONIC PERFORMANCE INDOORS OR OUT, PLUS VISUAL SOPHISTICATION THAT WILL COMPLEMENT ANY DÉCOR.

- Compact surface mount speakers with superior sound quality and sleek, functional design.
- Series comprises two models: the VS6 (6.5" woofer) and VS4 (4" woofer) - both models feature a 1" balanced dome tweeter and are available in Black or White.
- Waterproof construction meeting the IEC60529 IPX3 rating requirements for outdoor usage.
- Internally mounted transformers allowing operation in 70V or 100V distributed sound systems.
- Dedicated, color-matched steel U-bracket enclosed for horizontal or vertical installation.
- Paintable enclosure and grill to match any decor.
- Overload protection circuit provided to protect speaker components.



\* CINECITTA, TILBURG (NETHERLANDS)



\* CAFE STYLO, TOKYO (JAPAN)

# | INSTALLATION SERIES



LIVE



CONFERENCE



ACOUSTICS

Supporting even the most demanding multi-cabinet Sound Reinforcement installations, the **INSTALLATION SERIES** offers a range of models that can be combined as required while delivering the most natural sound field possible, with the greatest controllability. The **INSTALLATION SERIES** has been specifically designed to provide an acoustic „white canvas“ on which the most delicate tonal gradations will stand out clearly. The entire lineup has been designed with consistent phase characteristics so that they will deliver optimum performance in any combination, and respond smoothly to equalization for unprecedented installation flexibility and natural sound.



## INSTALLATION SERIES

- 16 models from 5" to 18"
- 4 different horn dispersion patterns available for 12" and 15" models
- Sound and phase characteristics matched within the range of Installation Series models for optimum performance in any combination.
- Horn can be rotated 90-degrees for vertical or horizontal mounting.
- M8 and M10 suspension points for flexible rigging.
- Broad range of array frames and U-brackets available for flexible mounting
- Parallel-wired Neutrik NL4 and barrier strip connectors.
- Black and white finish available for all models
- Switchable passive and bi-amped mode on 12" and 15" models
- Rotatable and removable logo
- Speaker processing parameters included in DME designer
- Electro-acoustic simulation through YS3 software. CLF and EASE data available.
- IS series speakers and accessories are available on a built to order schedule





IF2205



IF2108



IF2208

#### 5" AND 8" 2-WAY FULL RANGE SR SPEAKERS

|                              | IF2205(W)             | IF2108(W)                       | IF2208(W)                       |
|------------------------------|-----------------------|---------------------------------|---------------------------------|
| POWER RATING PGM (IEC )      | 200 W                 | 200 W                           | 400W                            |
| NOMINAL IMPEDANCE            | 8 Ω                   | 8 Ω                             | 8 Ω                             |
| SENSITIVITY @1W/1M           | 89 dB SPL             | 95 dB SPL                       | 95 dB SPL                       |
| MAXIMUM SPL (CALCULATED, 1M) | 115 dB SPL            | 121 dB SPL                      | 124 dB SPL                      |
| FREQUENCY RANGE (-10dB)      | 65Hz - 19kHz          | 55Hz - 19kHz                    | 55Hz - 19kHz                    |
| SPEAKER TYPE                 | 2-way                 | 2-way                           | 2-way                           |
| COVERAGE ANGLE               | 90° x 60° (rotatable) | 90° x 60° (rotatable)           | 90° x 60° (rotatable)           |
| WOOFER                       | 2 x 5"                | 8"                              | 2 x 8"                          |
| TWEETER/COMPRESSION DRIVER   | 1"                    | 1,7"                            | 1,7"                            |
| CONNECTORS                   | barrier strip         | 2 x Neutrik NL4 + barrier strip | 2 x Neutrik NL4 + barrier strip |
| DIMENSIONS (W x H x D)       | 457 x 146 x 226 mm    | 283 x 448 x 250 mm              | 283 x 673 x 250 mm              |
| WEIGHT                       | 7.5 kg                | 14 kg                           | 19 kg                           |





LIVE



CONFERENCE



ACOUSTICS



IF2112M



IF2112



IF2112AS

## 12" 2-WAY FULL RANGE SR SPEAKERS

|                              | IF2112M (64, 95, 99)(W)         | IF2112 (64, 95, 99)(W)          | IF2112AS(W)                     |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| POWER RATING PGM (IEC )      | 700 W                           | 1200 W                          | 1200 W                          |
| NOMINAL IMPEDANCE            | 8 Ω                             | 8 Ω                             | 8 Ω                             |
| SENSITIVITY @1W/1M (PASSIVE) | 96 dB SPL                       | 96 dB SPL                       | 96 dB SPL                       |
| MAXIMUM SPL (CALCULATED, 1M) | 126 dB SPL                      | 130 dB SPL                      | 130 dB SPL                      |
| FREQUENCY RANGE (-10dB)      | 55Hz - 20kHz                    | 50Hz - 20kHz                    | 50Hz - 20kHz                    |
| SPEAKER TYPE                 | 2-way, passive & bi-amp         | 2-way, passive & bi-amp         | 2-way, passive & bi-amp         |
| COVERAGE ANGLE               | see model nr.                   | see model nr.                   | 60°-100° x 60°                  |
| WOOFER                       | 12"                             | 12"                             | 12"                             |
| TWEETER / COMPRESSION DRIVER | 1,7"                            | 3"                              | 3"                              |
| CONNECTORS                   | 2 x Neutrik NL4 + barrier strip | 2 x Neutrik NL4 + barrier strip | 2 x Neutrik NL4 + barrier strip |
| DIMENSIONS (W x H x D)       | 378 x 695 x 454 mm              | 378 x 695 x 454 mm              | 378 x 695 x 333 mm              |
| WEIGHT                       | 28 kg                           | 31 kg                           | 29 kg                           |



IF2115M



IF2115



IF2115AS

**15" 2-WAY FULL RANGE SR SPEAKERS**

|                              | <b>IF2115M (64, 95, 99)(W)</b> | <b>IF2115 (64, 95, 99)(W)</b> | <b>IF2115AS(W)</b>              |
|------------------------------|--------------------------------|-------------------------------|---------------------------------|
| POWER RATING PGM (IEC )      | 700 W                          | 1200 W                        | 1200 W                          |
| NOMINAL IMPEDANCE            | 8 Ω                            | 8 Ω                           | 8 Ω                             |
| SENSITIVITY @1W/1M (PASSIVE) | 97 dB SPL                      | 97 dB SPL                     | 97 dB SPL                       |
| MAXIMUM SPL (CALCULATED, 1M) | 128 dB SPL                     | 131 dB SPL                    | 131 dB SPL                      |
| FREQUENCY RANGE (-10dB)      | 45Hz - 20kHz                   | 45Hz - 20kHz                  | 45Hz - 20kHz                    |
| SPEAKER TYPE                 | 2-way, passive & bi-amp        | 2-way, passive & bi-amp       | 2-way, passive & bi-amp         |
| COVERAGE ANGLE               | see model nr.                  | see model nr.                 | 60°-100° x 60°                  |
| WOOFER                       | 15"                            | 15"                           | 15"                             |
| TWEETER / COMPRESSION DRIVER | 1,7"                           | 3"                            | 3"                              |
| CONNECTORS                   | NeutrikNL4 + barrier strip     | Neutrik NL4 + barrier strip   | 2 x Neutrik NL4 + barrier strip |
| DIMENSIONS (W x H x D)       | 448 x 770 x 534 mm             | 448 x 770 x 534 mm            | 448 x 770 x 374 mm              |
| WEIGHT                       | 34 kg                          | 39 kg                         | 35 kg                           |

\* CONNECTIONS



\* WHITE VERSION (W)





LIVE



CONFERENCE



ACOUSTICS



IF3115



IH2000



IL1115

## 15" 3-WAY SR SPEAKERS

|                               | IF3115 (64, 95)(W)                | IH2000 (64, 95)(W)          | IL1115(W)                   |
|-------------------------------|-----------------------------------|-----------------------------|-----------------------------|
| POWER RATING PGM (IEC )       | 1400 W / 250 W                    | 250 W                       | 1400 W                      |
| NOMINAL IMPEDANCE             | 8 Ω                               | 8 Ω                         | 8 Ω                         |
| SENSITIVITY @1W/1M (BI-AMPED) | 97/106 dB SPL                     | 106 dB SPL                  | 97 dB SPL                   |
| MAXIMUM SPL (CALCULATED, 1M)  | 131/133 dB SPL                    | 133 dB SPL                  | 131 dB SPL                  |
| FREQUENCY RANGE (-10dB)       | 45Hz - 20kHz                      | 200Hz - 20kHz               | 45Hz - 2.5kHz               |
| SPEAKER TYPE                  | 3-way, bi-amp & tri-amp           | 2-way, passive & bi-amp     | Subwoofer                   |
| COVERAGE ANGLE                | see model nr.                     | see model nr.               | -                           |
| WOOFER                        | 15" + 8"                          | 8"                          | 15"                         |
| TWEETER / COMPRESSION DRIVER  | 3"                                | 3"                          | -                           |
| CONNECTORS                    | Neutrik NL8 + NL4 + barrier strip | Neutrik NL4 + barrier strip | Neutrik NL4 + barrier strip |
| DIMENSIONS (W x H x D)        | 610 x 1006 x 600 mm               | 610 x 591 x 600 mm          | 610 x 591 x 600 mm          |
| WEIGHT                        | 64 kg                             | 33 kg                       | 38 kg                       |



IS1112



IS1215



IS1118



IS1218

## SUBWOOFERS

|                                 | IS1112(W)                      | IS1215(W)                      | IS1118(W)                      | IS1218(W)                      |
|---------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| POWER RATING PGM (IEC )         | 1400 W                         | 2800 W                         | 1400 W                         | 2800 W                         |
| NOMINAL IMPEDANCE               | 8 Ω                            | 4 Ω                            | 8 Ω                            | 4 Ω                            |
| SENSITIVITY @1W/1M              | 93 dB SPL                      | 97 dB SPL                      | 96 dB SPL                      | 99dB SPL                       |
| MAXIMUM SPL<br>(CALCULATED, 1M) | 127 dB SPL                     | 134 dB SPL                     | 130 dB SPL                     | 136 dB SPL                     |
| FREQUENCY RANGE<br>(-10dB)      | 45Hz - 2kHz                    | 40Hz - 2.5kHz                  | 33Hz - 3kHz                    | 33Hz - 3kHz                    |
| SPEAKER TYPE                    | Subwoofer                      | Subwoofer                      | Subwoofer                      | Subwoofer                      |
| WOOFER                          | 12"                            | 2x15"                          | 18"                            | 2x18"                          |
| CONNECTORS                      | Neutrik NL4 + barrier<br>strip | Neutrik NL4 + barrier<br>strip | Neutrik NL4 + barrier<br>strip | Neutrik NL4 + barrier<br>strip |
| DIMENSIONS (W x H x D)          | 378 x 394 x 454 mm             | 448 x 883 x 610 mm             | 610 x 591 x 709 mm             | 610 x 1006 x 709 mm            |
| WEIGHT                          | 24 kg                          | 63 kg                          | 44 kg                          | 76 kg                          |

\* CONNECTIONS



\* WHITE VERSION (W)







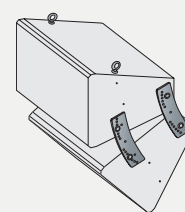
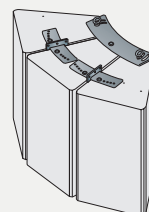
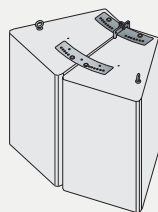
LIVE



CONFERENCE



ACOUSTICS



| HORIZONTAL ARRAY FRAME<br>FOR 3 SPEAKERS<br>(BLACK, WHITE) |   |   |   |   | HORIZONTAL ARRAY<br>FRAME FOR 2 SPEAKERS<br>(BLACK, WHITE) |   |   | VERTICAL ARRAY<br>FRAME<br>FOR 2 SPEAKERS<br>(BLACK, WHITE) |               |               | U-BRACKETS<br>(BLACK, WHITE) |        |        |
|------------------------------------------------------------|---|---|---|---|------------------------------------------------------------|---|---|-------------------------------------------------------------|---------------|---------------|------------------------------|--------|--------|
| HAF3-2112 HAF3-2115 HAF3-3115 HAF3-S18                     |   |   |   |   | HAF2-2112 HAF2-2115 HAF2-3115                              |   |   | VAF2-<br>2112                                               | VAF2-<br>2115 | VAF2-<br>3115 | UB2112                       | UB2115 | UB2000 |
| IF3115                                                     |   |   | • | • |                                                            |   | • |                                                             |               | •             |                              |        |        |
| IH2000                                                     |   |   | • | • |                                                            |   | • |                                                             |               | •             |                              |        | •      |
| IL1115                                                     |   |   | • |   |                                                            |   | • |                                                             |               |               |                              |        | •      |
| IF2115/<br>IF2115M                                         |   | • |   |   |                                                            | • |   |                                                             | •             |               |                              | •      |        |
| IF2115AS                                                   |   |   |   |   |                                                            |   |   |                                                             |               |               |                              | •      |        |
| IF2112/<br>IF2112M                                         | • |   |   |   | •                                                          |   |   | •                                                           |               |               | •                            |        |        |
| IF2112AS                                                   |   |   |   |   |                                                            |   |   |                                                             |               |               | •                            |        |        |
| IF2208                                                     |   |   |   |   |                                                            |   |   |                                                             |               |               |                              |        |        |
| IF2108                                                     |   |   |   |   |                                                            |   |   |                                                             |               |               |                              |        |        |
| IF2205                                                     |   |   |   |   |                                                            |   |   |                                                             |               |               |                              |        |        |



| U-BRACKETS (BLACK, WHITE) |        |        | CEILING<br>BRACKETS | WALL BRACKETS |            | BATON<br>BRACKETS |
|---------------------------|--------|--------|---------------------|---------------|------------|-------------------|
|                           |        |        |                     |               |            |                   |
| UB2208                    | UB2108 | UB2205 | BCS251              | BWS251-300    | BWS251-400 | BBS251            |
|                           |        |        |                     |               |            |                   |
|                           |        |        |                     |               |            |                   |
|                           |        |        |                     |               |            |                   |
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# |CZR / CXS XLF SERIES



LIVE



CONFERENCE



ACOUSTICS

The **CZR** and **CXS XLF SERIES** of passive loudspeakers and subwoofers offer high power handling and outstanding sonic performance in a portable, lightweight yet rugged design. The CZR series is ideal for a range of live performance and installed sound environments - from live bands at outdoor festivals to DJ's in clubs. The CZR series deliver crystal clear, high quality sound with impressive bass response. The CXS series deliver an extended low frequency response at best-in-class SPL.

LOUDSPEAKERS

**CZR** SERIES

SUBWOOFERS

**CXS XLF** SERIES

CZR15 &amp; CXS18XLF



CZR12 &amp; CXS15XLF



CZR10 &amp; CXS15XLF

## CZR AND CXS XLF SERIES

- HF : 2" voice coil and 1" throat compression driver, titanium diaphragm
- LF: 3" voice coil and neodymium magnet for CZR, 4" voice coil and ferrite magnet for CXS XLF
- High power input and Bi-amp capable
- Durable plywood cabinet with Polyurea coating
- Rotatable wide dispersion constant directivity horn
- Mirror set up for floor monitoring (CZR12 and CZR15)
- Dual angle pole socket
- Vertical and horizontal U-bracket
- M8, M10 and M8 rigging points



CZR15

- 15"/2" FULL RANGE
- 1600W / 129dB PEAK SPL



CZR12

- 12"/2" FULL RANGE
- 1600W / 129dB PEAK SPL



CZR10

- 10"/2" FULL RANGE
- 1600W / 127dB PEAK SPL



CXS18XLF

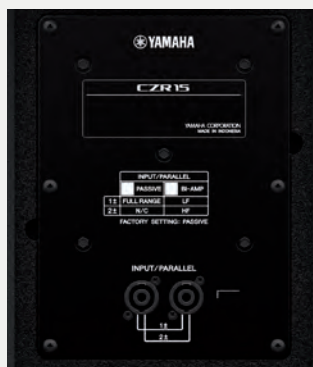
- 18" SUB WOOFER
- 2000W / 133dB PEAK SPL



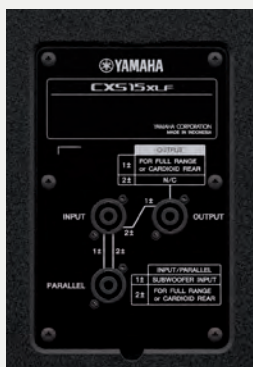
CXS15XLF

- 15" SUB WOOFER
- 1600W / 131dB PEAK SPL

## REAR PANELS



CZR



CXS XLF

CZR WEDGE PLACEMENT





## GENERAL SPECIFICATIONS

|                                                  |           |       | CZR15                                                                             | CZR12                                                    | CZR10                                                    | CXS18XLF                                                       | CXS15XLF                                                       |   |
|--------------------------------------------------|-----------|-------|-----------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|---|
| SYSTEM TYPE                                      |           |       | 2-way Speaker, Bass-reflex Type                                                   |                                                          |                                                          | Subwoofer, Bass-reflex Type                                    |                                                                |   |
| FREQUENCY RANGE (-10DB)                          | PASSIVE   |       | 43 Hz - 20 kHz                                                                    | 43 Hz - 20 kHz                                           | 43 Hz - 20 kHz                                           | 32 Hz - 3kHz                                                   | 33 Hz - 3.5kHz                                                 |   |
|                                                  | NORMAL *1 |       | 34 Hz - 20 kHz                                                                    | 42 Hz - 20 kHz                                           | 46 Hz - 20 kHz                                           | 32 Hz - 150 Hz                                                 | 35 Hz - 150 Hz                                                 |   |
|                                                  | EXTEND *1 |       | 33 Hz - 20 kHz                                                                    | 38 Hz - 20 kHz                                           | 43 Hz - 20 kHz                                           | 29 Hz - 150 Hz                                                 | 33 Hz - 150 Hz                                                 |   |
| COVERAGE ANGLE                                   |           |       | H90° x V50°<br>Rotatable<br>Constant<br>Directivity Horn                          | H90° x V60°<br>Rotatable<br>Constant<br>Directivity Horn | H90° x V60°<br>Rotatable<br>Constant<br>Directivity Horn | -                                                              | -                                                              |   |
| CROSSOVER                                        |           |       | Passive 2.0 kHz<br>(Bi-amp selec-<br>table)                                       | Passive 2.0 kHz<br>(Bi-amp selec-<br>table)              | Passive 2.5 kHz<br>(Bi-amp selec-<br>table)              | Recommendati-<br>on: 29 Hz - 150<br>Hz ('extend',<br>with DSP) | recommendati-<br>on: 36 Hz - 120<br>Hz ('extend',<br>with DSP) |   |
| NOMINAL IMPEDANCE                                | PASSIVE   |       | 8Ω                                                                                | 8Ω                                                       | 8Ω                                                       | 8Ω                                                             | 8Ω                                                             |   |
|                                                  | BI-AMP    |       | LF: 8Ω, HF: 16Ω                                                                   | LF: 8Ω, HF: 16Ω                                          | LF: 8Ω, HF: 16Ω                                          | -                                                              | -                                                              |   |
| POWER RATING<br>(EIA 426-A)                      | PASSIVE   | NOISE | 400 W                                                                             | 400 W                                                    | 350 W                                                    | 500 W                                                          | 400 W                                                          |   |
|                                                  |           | PGM   | 800 W                                                                             | 800 W                                                    | 700 W                                                    | 1000 W                                                         | 800 W                                                          |   |
|                                                  |           | MAX   | 1600 W                                                                            | 1600 W                                                   | 1400 W                                                   | 2000 W                                                         | 1600 W                                                         |   |
| POWER RATING<br>(LF: EIA 426-A)<br><br>(HF: AES) | BI-AMP    | NOISE | LF: 400W,<br>HF: 50W                                                              | LF: 400W,<br>HF: 50W                                     | LF: 350W,<br>HF: 50W                                     | -                                                              | -                                                              |   |
|                                                  |           | PGM   | LF: 800W,<br>HF: 100W                                                             | LF: 800W,<br>HF: 100W                                    | LF: 700W,<br>HF: 100W                                    | -                                                              | -                                                              |   |
|                                                  |           | MAX   | LF: 1600W,<br>HF: 200W                                                            | LF: 1600W,<br>HF: 200W                                   | LF: 1400W,<br>HF: 200W                                   | -                                                              | -                                                              |   |
| SENSITIVITY<br>(1W, 1M)                          | PASSIVE   |       | 97dB SPL                                                                          | 97dB SPL                                                 | 95dB SPL                                                 | 100 dB SPL                                                     | 98 dB SPL                                                      |   |
|                                                  | BI-AMP    |       | LF: 99dB SPL,<br>HF: 108dB SPL                                                    | LF: 97dB SPL,<br>HF: 108dB SPL                           | LF: 95dB SPL,<br>HF: 108dB SPL                           | -                                                              | -                                                              |   |
| MAXIMUM SPL<br>(CALCULATED,<br>1M)               | PASSIVE   |       | 129 dB SPL                                                                        | 129 dB SPL                                               | 127 dB SPL                                               | 133 dB SPL                                                     | 130 dB SPL                                                     |   |
|                                                  | BI-AMP    |       | LF: 131dB SPL,<br>HF: 131dB SPL                                                   | LF: 128dB SPL,<br>HF: 129dB SPL                          | LF: 126dB SPL,<br>HF: 127dB SPL                          | -                                                              | -                                                              |   |
| TRANSDUCER                                       |           | LF    | 15''' Cone, 3''<br>Voice Coil,<br>Neodymium<br>magnet                             | 12'' Cone,<br>3''Voice Coil,<br>Neodymium<br>magnet      | 10'' Cone,<br>3''Voice Coil,<br>Neodymium<br>magnet      | 18'' Cone,<br>4''Voice Coil,<br>Ferrite magnet                 | 15'' Cone, 4''<br>Voice Coil,<br>Ferrite magnet                |   |
|                                                  |           | HF    | 2" Voice Coil, 1" Throat Compression Driver, Titanium diaphragm, Neodymium magnet |                                                          |                                                          | -                                                              | -                                                              |   |
| ENCLOSURE MATERIAL,<br>FINISH, COLOR             |           |       | Plywood, Durable Polyurea coating, Black                                          |                                                          |                                                          | Plywood, Durable Polyurea coating, Black                       |                                                                |   |
| FLOOR MONITOR ANGLE                              |           |       | 50° Symmetrical                                                                   | 50° Symmetrical                                          | 50°                                                      | -                                                              | -                                                              |   |
| DIMENSIONS<br>(WXHxD, WITH RUBBER FEET)''        |           |       | 450x761x460<br>mm                                                                 | 410 x 646 x<br>394 mm                                    | 315 x 537 x<br>345 mm                                    | 550 x 657 x<br>720 mm                                          | 450 x 587 x<br>600 mm                                          |   |
| NET WEIGHT                                       |           |       | 21.3 kg                                                                           | 18.0 kg                                                  | 14.0 kg                                                  | 43.6kg                                                         | 35.6 kg                                                        |   |
| HANDLES                                          |           |       | Aluminium die-cast, Side x 2                                                      |                                                          |                                                          | Aluminium die-cast, Top x 1,<br>Side x 1                       | Aluminium die-cast, Side x 2                                   |   |
| POLE SOCKET                                      |           |       | Φ35 mm, (Dual angle 0° or -7° )                                                   |                                                          |                                                          | Φ35 mm (depth 80mm), M20 threaded (depth 25mm)                 |                                                                |   |
| RIGGING<br>POINTS                                |           |       | M10 x 12 points                                                                   |                                                          |                                                          | M10 x 8 points,<br>M8 x 2 points                               | -                                                              | - |
| CONNECTORS                                       |           |       | SpeakON NL4MP x 2 (Parallel)                                                      |                                                          |                                                          | SpeakON NL4MP x 3 (Parallel x2, Output x1)                     |                                                                |   |
| OPTIONAL BRACKET                                 |           |       | UB-DZR15H/V                                                                       | UB-DZR12H/V                                              | UB-DZR10H/V                                              | SPW-1                                                          |                                                                |   |
| OPTIONAL COVER                                   |           |       | SPCVR-DZR15                                                                       | SPCVR-DZR12                                              | SPCVR-DZR10                                              | SPCVR-DXS18X                                                   | SPCVR-DXS15X                                                   |   |

## OPTIONAL MOUNTING U-BRACKETS FOR CZR SERIES



UB-DZR15H



UB-DZR12H



UB-DZR10H



UB-DZR15V



UB-DZR12V



UB-DZR10V

## OPTIONAL COVERS



SPVCR-DZR15



SPVCR-DZR12



SPVCR-DZR10



SPVCR-DXS18X



SPVCR-DXS15X



SPW-1

### OPTIONAL CASTERS FOR

- CXS15XLF
- CXS18XLF

# | CBR SERIES



LIVE



CONFERENCE

The **CBR SERIES** is a new lineup of passive loudspeakers developed by adopting the extensive knowledge of speaker design and acoustic technologies that Yamaha has accrued over a long and storied history of making speakers of every kind. Combining a meticulous materials selection process, thorough customization of the audio components, and a fresh, innovative approach to speaker design, our engineering team's primary focus was to deliver high-power, high-definition sound in a highly portable and versatile design that is equally at home in front-of-house, floor monitoring, or rigged configurations.



CBR10

CBR12

CBR15



- Custom designed transducers and wide-dispersion constant directivity horn for powerful high-definition sound
- HF protection and highly responsive LF unit for reliable performance at any output level
- Rugged, highly portable enclosure design
- Simple connectivity
- Smart enclosure design for floor monitoring
- Rigging points for installation applications

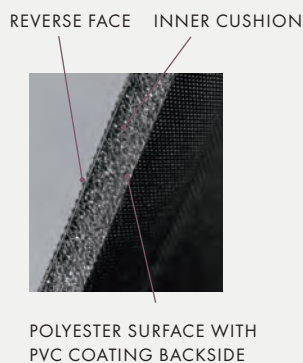
## CBR SERIES PASSIVE SR LOUDSPEAKERS

|                              | CBR15                           | CBR12                           | CBR10                           |
|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| POWER RATING PGM (IEC )      | 500 W                           | 350 W                           | 350 W                           |
| NOMINAL IMPEDANCE            | 8 $\Omega$                      | 8 $\Omega$                      | 8 $\Omega$                      |
| SENSITIVITY @1W/1M (PASSIVE) | 96 dB SPL                       | 96 dB SPL                       | 94 dB SPL                       |
| MAXIMUM SPL (CALCULATED, 1M) | 126 dB SPL                      | 125 dB SPL                      | 123 dB SPL                      |
| FREQUENCY RANGE (-10dB)      | 46Hz - 20kHz                    | 48Hz - 20kHz                    | 50Hz - 20kHz                    |
| SPEAKER TYPE                 | 2-way, bass reflex              | 2-way, bass reflex              | 2-way, bass reflex              |
| COVERAGE ANGLE               | 90° x 60°                       | 90° x 60°                       | 90° x 60°                       |
| WOOFER                       | 15"                             | 12"                             | 10"                             |
| TWEETER / COMPRESSION DRIVER | 1.4"                            | 1.4"                            | 1"                              |
| CONNECTORS                   | 1x speakON NL4MP,<br>1/4" PHONE | 1x speakON NL4MP,<br>1/4" PHONE | 1x speakON NL4MP,<br>1/4" PHONE |
| DIMENSIONS (W x H x D)       | 455 x 700 x 378 mm              | 376 x 601 x 348 mm              | 308 x 493 x 289 mm              |
| WEIGHT                       | 17.7 kg                         | 13.9 kg                         | 9.4 kg                          |

## OPTIONAL ACCESSORIES

## FUNCTIONAL SPEAKER COVERS

## SPCVR-1501



## COMPATIBLE SPEAKERS

- SPCVR-0801      DXR8
- SPCVR-1001     DXR10, DBR10, CBR10
- SPCVR-1201     DXR12, DBR12, CBR12

## SPEAKER BRACKETS



✱ **BBS251**  
BATON BRACKET



✱ **BCS251**  
CEILING BRACKET



✱ **BWS251-300/400**  
WALL BRACKET



✱ **EYE BOLTS**  
(NOT INCLUDED)



# |CONCERT CLUB V SERIES

Musicians all over the world made the first four generations of Yamaha American Series Speakers incredibly popular. Generation V continues this success story: larger enclosures for improved low-frequency performance, improved drivers for higher power handling, redesigned crossovers, stronger grills, and dual speakON® and 1/4" connectors.

- \* IDEALLY MATCHED TO EMX POWERED MIXERS OR PX-SERIES AMPLIFIERS
- \* FOR INSTALLATION APPLICATIONS FLYING (VA) VERSIONS AVAILABLE
- \* 35 MM POLE SOCKETS (ON ALL NON-FLYING MODELS)

**A SOPHISTICATED SPRAY-FINISH LOOK WITH THE LEGENDARY CLUB V SOUND (C TYPE).**



CM10V



CM12V



CM15V



C112V



C112VA

|                               | CM10V                 | CM12V                     | CM15V                     | C112V                     | C112VA                  |
|-------------------------------|-----------------------|---------------------------|---------------------------|---------------------------|-------------------------|
| <b>TYPE</b>                   | 10" 2-way bass reflex | 12" 2-way bass reflex     | 15" 2-way bass reflex     | 12" 2-way bass reflex     | 12" 2-way bass reflex   |
| FREQUENCY RANGE               | 70Hz - 20kHz (-10dB)  | 60Hz - 16kHz (-10dB)      | 55Hz - 16kHz (-10dB)      | 60Hz - 16kHz (-10dB)      | 60Hz - 16kHz (-10dB)    |
| POWER HANDLING<br>(PROGRAMME) | 250 Watts             | 350 Watts                 | 500 Watts                 | 350 Watts                 | 350 Watts               |
| IMPEDANCE                     | 8 Ω                   | 8 Ω                       | 8 Ω                       | 8 Ω                       | 8 Ω                     |
| SENSITIVITY (1W,1M)           | 96dB                  | 97dB                      | 99dB                      | 97dB                      | 97dB                    |
| <b>COMPONENTS</b>             |                       |                           |                           |                           |                         |
| LF DRIVER                     | 10" cone              | 12" cone                  | 15" subwoofer             | 12" cone                  | 12" cone                |
| HF DRIVER                     | 1" vc, Ph             | 2" pressure chamber, Ti   | 2" pressure chamber, Ti   | 2" pressure chamber, Ti   | 2" pressure chamber, Ti |
| <b>MISCELLANEOUS</b>          |                       |                           |                           |                           |                         |
| TEXTURED PAINT                | •                     | •                         | •                         | •                         | •                       |
| HANDLE                        | Strap handle x1       | Recessed handle, metal x1 | Recessed handle, metal x1 | Recessed handle, metal x2 | -                       |
| INPUT TERMINALS               | speakON x2, jack x2   | speakON x2, jack x2       | speakON x2, jack x2       | speakON x2, jack x2       | Terminal connection     |
| <b>WEIGHT</b>                 |                       |                           |                           |                           |                         |
| DIMENSIONS (WXHxD)            | 556 x 349 x 273 mm    | 628 x 410 x 339 mm        | 715 x 339 x 343 mm        | 416 x 628 x 329 mm        | 416 x 620 x 329 mm      |
| NET WEIGHT                    | 13.3 kg               | 21.8 kg                   | 28.8 kg                   | 21.3 kg                   | 21.8 kg                 |





C115V



C115VA



C215V



CW115V



CW118V



CW218V

| C115V                                                     | C115VA                                                    | C215V                                                        | CW115V                                                | CW118V                                                | CW218V                                                |
|-----------------------------------------------------------|-----------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|
| 15" 2-way bass reflex<br>55Hz - 16kHz(-10dB)<br>500 Watts | 15" 2-way bass reflex<br>55Hz - 16kHz(-10dB)<br>500 Watts | 15"x2 2-way bass reflex<br>42Hz - 16kHz(-10dB)<br>1000 Watts | 15" bass reflex<br>35Hz - 2kHz(-10dB)<br>500 Watts    | 18" bass reflex<br>30Hz - 2kHz(-10dB)<br>600 Watts    | 18"x2 bass reflex<br>30Hz - 2kHz(-10dB)<br>1200 Watts |
| 8 Ω<br>99dB                                               | 8 Ω<br>99dB                                               | 4 Ω<br>99dB                                                  | 8 Ω<br>95dB                                           | 8 Ω<br>96dB                                           | 4 Ω<br>98dB                                           |
| 15" cone<br>2" pressure chamber, Ti                       | 15" cone<br>2" pressure chamber, Ti                       | 15" cone x2<br>2" pressure chamber, Ti                       | 15" cone<br>-                                         | 18" cone<br>-                                         | 18" cone x2<br>-                                      |
| •<br>Recessed handle, metal x2<br>speakON x2, jack x2     | •<br>-<br>Terminal connection                             | •<br>Recessed handle, metal x2<br>speakON x2, jack x2        | •<br>Recessed handle, metal x2<br>speakON x2, jack x2 | •<br>Recessed handle, metal x2<br>speakON x2, jack x2 | •<br>Recessed handle, metal x2<br>SpeakON x2, jack x2 |
| 485 x 715 x 373<br>30.3 kg                                | 485 x 707 x 373 mm<br>29.9 kg                             | 491 x 1163 x 593<br>47.5 kg                                  | 500 x 607 x 528<br>28 kg                              | 605 x 720 x 637<br>37.2 kg                            | 1217 x 574 x 655<br>64.7 kg                           |



# |CONCERT CLUB V SERIES

**DURABLE CARPETED EXTERIORS AND STUNNING SOUND FOR THE RIGORS OF THE ROAD (S TYPE).**



S215V



S115V



S112V



SM15V



SM12V

|                                          |       | S215V                                          | S115V             | S112V             | SM15V                                          | SM12V             |
|------------------------------------------|-------|------------------------------------------------|-------------------|-------------------|------------------------------------------------|-------------------|
| TYPE                                     |       | 2-way bass-reflex                              |                   |                   | 2-way bass-reflex                              |                   |
| FREQUENCY RANGE (-10DB)                  |       | 42Hz-16kHz                                     | 55Hz-16kHz        | 60Hz-16kHz        | 55Hz-16kHz                                     | 60Hz-16kHz        |
| NOMINAL COVERAGE (HORIZONTAL X VERTICAL) |       | 90° x 40°                                      |                   |                   | 40° x 90°                                      |                   |
| NOMINAL IMPEDANCE                        |       | 4Ω                                             | 8Ω                |                   | 8Ω                                             |                   |
| POWER RATING                             | NOISE | 500W                                           | 250W              | 175W              | 250W                                           | 175W              |
|                                          | PGM   | 1000W                                          | 500W              | 350W              | 500W                                           | 350W              |
|                                          | MAX   | 2000W                                          | 1000W             | 700W              | 1000W                                          | 700W              |
| SENSITIVITY (1W,1M)                      |       | 99dB SPL                                       |                   |                   | 99dB SPL                                       | 97dB SPL          |
| COMPONENT                                | LF    | 15" cone x 2                                   | 15" cone          | 12" cone          | 15" cone                                       | 12" cone          |
|                                          | HF    | CD horn + 2" voice coil compression driver     |                   |                   | CD horn + 2" voice coil compression driver     |                   |
| CONNECTORS                               |       | 1/4" phone jack x 2, SPEAKON Neutrik NL4MP x 2 |                   |                   | 1/4" phone jack x 2, SPEAKON Neutrik NL4MP x 2 |                   |
| DIMENSIONS (W X H X D)                   |       | 495 x 1167 x 597mm                             | 489 x 719 x 377mm | 420 x 632 x 333mm | 719 x 483 x 343mm                              | 632 x 414 x 351mm |
| WEIGHT                                   |       | 47.2kg                                         | 29.4kg            | 20.8kg            | 28.0kg                                         | 21.4kg            |



SM10V



SW218V

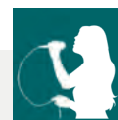


SW118V



SW115V

|                                             | SM10V             | SW218V                                         | SW118V            | SW115V            |
|---------------------------------------------|-------------------|------------------------------------------------|-------------------|-------------------|
| TYPE                                        |                   | Bass-reflex                                    |                   |                   |
| FREQUENCY RANGE (-10DB)                     | 70Hz-20kHz        | 30Hz-2kHz                                      | 30Hz-2kHz         | 35Hz-2kHz         |
| NOMINAL COVERAGE<br>(HORIZONTAL X VERTICAL) | 40° x 60°         | -                                              |                   |                   |
| NOMINAL IMPEDANCE                           |                   | 4Ω                                             |                   |                   |
| POWER RATING                                | NOISE             | 125W                                           | 600W              | 300W              |
|                                             | PGM               | 250W                                           | 1200W             | 600W              |
|                                             | MAX               | 500W                                           | 2400W             | 1200W             |
| SENSITIVITY (1W,1M)                         | 96dB SPL          | 98dB SPL                                       | 96dB SPL          | 95dB SPL          |
| COMPONENT                                   | LF                | 10" cone                                       | 18" cone x 2      | 18" cone          |
|                                             | HF                | Horn + 1" voice coil driver                    | -                 | 15" cone          |
| CONNECTORS                                  |                   | 1/4" phone jack x 2, SPEAKON Neutrik NL4MP x 2 |                   |                   |
| DIMENSIONS (W X H X D)                      | 560 x 353 x 277mm | 1221 x 578 x 659mm                             | 610 x 728 x 641mm | 506 x 611 x 532mm |
| WEIGHT                                      | 13.4kg            | 65.4kg                                         | 39.0kg            | 28.2kg            |



LIVE

# | BR SERIES

## **COST-EFFECTIVE DESCENDENTS OF THE LEGENDARY CONCERT CLUB SERIES SPEAKERS FOR A WIDE RANGE OF APPLICATIONS**

- Proven audio quality and reliability of Yamaha's acclaimed Concert Club series.
- A variety of cabinets for applications ranging from solo street entertainers to bands in concert halls
- An optimally-tuned bass-reflex system delivers excellent low-frequency response while a horn with titanium-dome compression driver provides broad 90°/40° high-frequency coverage.
- Dual phone jacks for input and parallel connection
- Durable carpeted enclosure with steel corner protectors and heavy duty metal handles
- All models are equipped with a pole socket for use with speaker stands.



BR15



BR12



BR10



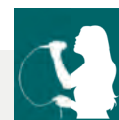
BR15M



BR12M

| BR15, BR15M                        |                                                         | BR12, BR12M                                          | BR10              |
|------------------------------------|---------------------------------------------------------|------------------------------------------------------|-------------------|
| TYPE                               | 2-way bass reflex                                       |                                                      |                   |
| FREQUENCY RANGE (-10DB)            | 60Hz-20kHz                                              | 65Hz-20kHz                                           | 65Hz-20kHz        |
| DISPERSION (HORIZONTAL X VERTICAL) | BR10, BR12, BR15 : 90° x 40° / BR12M, BR15M : 40° x 90° |                                                      |                   |
| NOMINAL IMPEDANCE                  | 8Ω                                                      |                                                      |                   |
| POWER RATING                       | NOISE                                                   | 200W                                                 | 150W              |
|                                    | PGM                                                     | 400W                                                 | 300W              |
|                                    | MAX                                                     | 800W                                                 | 600W              |
| SENSITIVITY (1W,1M)                | 98dB SPL                                                | 97dB SPL                                             | 96dB SPL          |
| COMPONENT                          | LF                                                      | 15" cone                                             | 12" cone          |
|                                    | HF                                                      | CD horn + 1" voice coil compression driver, Titanium | 10" cone          |
| INPUT TERMINAL                     | Phone x 2                                               |                                                      |                   |
| DIMENSIONS (W X H X D)             | BR15: 485 x 656 x 365mm                                 | BR12: 403 x 569 x 335mm                              | 394 x 537 x 326mm |
|                                    | BR15M: 652 x 487 x 365mm                                | BR12M: 569 x 407 x 334mm                             |                   |
| WEIGHT                             | BR15: 21.3kg                                            | BR12: 16kg                                           | 14.4kg            |
|                                    | BR15M: 20.9kg                                           | BR12M: 15.6kg                                        |                   |





LIVE

# | R SERIES

## Delivering Yamaha Quality and Outstanding Cost Performance.

Yamaha's Concert Club Series loudspeakers have long been a popular choice among audio professionals and musicians for offering quality components, excellent performance, and durability at an affordable price. In that same tradition, the R-Series offers powerful sound, practical function, features, and audio quality at a price that is even harder to beat.



R215



R115



R112

|                         | R215                                        | R115                              | R112                              |
|-------------------------|---------------------------------------------|-----------------------------------|-----------------------------------|
| SPEAKER TYPE            | 2-way Bass-reflex                           |                                   |                                   |
| FREQUENCY RANGE (-10dB) | 40Hz - 20kHz                                | 50Hz - 20kHz                      | 55Hz - 20kHz                      |
| NOMINAL COVERAGE        | 90H x 40V                                   |                                   |                                   |
| NOMINAL IMPEDANCE       | 4Ω                                          | 8Ω                                | 8Ω                                |
| POWER RATING            | PGM 1000W<br>MAX 2000W                      | 500W<br>1000W                     | 400W<br>800W                      |
| SENSITIVITY (1W, 1M)    | 98 dB SPL                                   | 98 dB SPL                         | 97 dB SPL                         |
| COMPONENT               | LF 15" cone X 2<br>HF 1.75", Ti vc, CD-Horn | 15" cone<br>1.75", Ti vc, CD-Horn | 12" cone<br>1.75", Ti vc, CD-Horn |
| CONNECTORS              | Speakon x 1, Phone x 2                      | Speakon x 1, Phone x 2            | Speakon x 1, Phone x 2            |
| RIGGING POINTS          | n/a                                         | M10 x 3                           | M10 x 3                           |
| POLE MOUNT SOCKET       | n/a                                         | 35 mm                             | 35 mm                             |
| DIMENSIONS (W X H X D)  | 520 x 1175 x 600 mm                         | 520 x 765 x 470 mm                | 480 x 695 x 400 mm                |
| WEIGHT                  | 69.0 kg                                     | 35.0 kg                           | 26.5 kg                           |

Features like high-power woofers, titanium high frequency compression drivers, and constant directivity horns, deliver audio performance that is hard to obtain in this price range. Neutrik's Speakon connectors, durable MDF enclosures, big heavy-duty steel handles, durable finishes, and heavy-duty grills offer convenience and protection that professionals look for in a sound system. Enclosures are designed with rounded fronts that look better when multiple units are arranged in an array and the series offers six different models, designed to meet the needs of a variety of budgets and applications.

\*Some models may not be available in all areas.



R15M

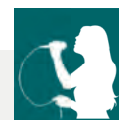


R12M



R118W

|                         | R15M                                    | R12M                              | R118W                  |
|-------------------------|-----------------------------------------|-----------------------------------|------------------------|
| SPEAKER TYPE            |                                         |                                   | Bass-reflex            |
| FREQUENCY RANGE (-10DB) | 50Hz - 20kHz                            | 55Hz - 20kHz                      | 35Hz - 3kHz            |
| NOMINAL COVERAGE        | 90H x 40V                               |                                   | -                      |
| NOMINAL IMPEDANCE       | 8Ω                                      | 8Ω                                | 8Ω                     |
| POWER RATING            | PGM 500W<br>MAX 800W                    | 400W<br>800W                      | 500W<br>1000W          |
| SENSITIVITY (1W, 1M)    | 98 dB SPL                               | 97 dB SPL                         | 97 dB SPL              |
| COMPONENT               | LF 15" cone<br>HF 1.75", Ti vc, CD-Horn | 12" cone<br>1.75", Ti vc, CD-Horn | 18" cone<br>-          |
| CONNECTORS              | Speakon x 1, Phone x 2                  | Speakon x 1, Phone x 2            | Speakon x 1, Phone x 2 |
| RIGGING POINTS          | n/a                                     | n/a                               | n/a                    |
| POLE MOUNT SOCKET       | n/a                                     | n/a                               | n/a                    |
| DIMENSIONS (W X H X D)  | 745 x 490 x 400 mm                      | 675 x 450 x 380 mm                | 562 x 811 x 639 mm     |
| WEIGHT                  | 30.5 kg                                 | 24.0 kg                           | 49.5 kg                |



LIVE

# | A SERIES

## POWERFUL SOUND OUTPUT WITH OUTSTANDING CLARITY

From solo entertainers to touring bands, jazz clubs to houses of worship, for any situation that needs a quality sound system, Yamaha's A Series speakers are worth a good look and listen. In addition to sounding superb and being capable of handling serious power, these speakers are light, compact and easily manageable when the system needs to be moved or reconfigured. They feature durable metal handles that will withstand nightly transportation, and are pole-mountable for optimum positioning in any room. Robust carpet covering and metal grilles are pluses, too, minimizing damage while looking downright handsome. But, of course, practicality isn't the only issue.



A15



A12



A10

|                         | A15                                | A12                        | A10                        |
|-------------------------|------------------------------------|----------------------------|----------------------------|
| SPEAKER TYPE            | 2-way Bass-reflex                  |                            |                            |
| FREQUENCY RANGE (-10dB) | 65Hz - 20kHz                       | 65Hz - 20kHz               | 65Hz - 20kHz               |
| NOMINAL COVERAGE        | 90H x 40V                          |                            |                            |
| NOMINAL IMPEDANCE       | 8Ω                                 | 8Ω                         | 8Ω                         |
| POWER RATING            | NOISE 200W<br>PGM 400W<br>MAX 800W | 150W<br>300W<br>600W       | 125W<br>500W<br>1000W      |
| SENSITIVITY (1W, 1M)    | 98dB SPL                           | 97dB SPL                   | 98dB SPL                   |
| COMPONENT               | LF 15" cone<br>HF 1" vc, Horn-TW   | 12" cone<br>1" vc, Horn-TW | 10" cone<br>1" vc, Horn-TW |
| CONNECTORS              | Speakon x 1, Phone x 1             |                            |                            |
| POLE MOUNT SOCKET       | 35 mm                              | 35 mm                      | 35 mm                      |
| DIMENSIONS (W X H X D)  | 470 x 665 x 375 mm                 | 405 x 575 x 323 mm         | 385 x 535 x 307 mm         |
| WEIGHT                  | 21.3Kg                             | 16Kg                       | 14.4Kg                     |

You want great sound, too. The A Series speakers feature optimally matched high-power woofers, compression drivers, and constant-directivity horns that deliver your sound to every corner of the room with every subtle nuance intact. There's also a range of five models to choose from, so you can create the system that is perfect for your touring or installation needs. One possible system is shown in the example below: a pair of A15 and A15W's for the house and a pair of A12M's on the floor or wherever you need them to hear precisely what you're playing or singing.

\*Some models may not be available in all areas.



A12M



A15W

| A12M                    |       | A15W                   |
|-------------------------|-------|------------------------|
| SPEAKER TYPE            |       | Bass-reflex            |
| FREQUENCY RANGE (-10DB) |       | 50Hz - 200kHz          |
| NOMINAL COVERAGE        |       | -                      |
| NOMINAL IMPEDANCE       |       | 8Ω                     |
| POWER RATING            | NOISE | 150W                   |
|                         | PGM   | 300W                   |
|                         | MAX   | 600W                   |
| SENSITIVITY (1W, 1M)    |       | 97dB SPL               |
| COMPONENT               | LF    | 12" cone               |
|                         | HF    | 1" vc, Horn-TW         |
| CONNECTORS              |       | Speakon x 2, Phone x 2 |
| POLE MOUNT SOCKET       |       | 35 mm                  |
| DIMENSIONS (W X H X D)  |       | 485 x 622 x 485 mm     |
| WEIGHT                  |       | 20.9Kg                 |

# |DZR/DXS XLF SERIES



LIVE



CONFERENCE



ACOUSTICS

**DZR** and **DXS XLF SERIES** is positioned at the highest level of Yamaha professional live SR powered loudspeaker and Yamahas' first fully integrated & digitally connected and smart / editable Speaker Range for Professional Live Sound Productions – in particular considering the DANTE versions. Based on Yamaha's long professional audio experiences with digital processing technologies, amplifier designing and speaker development know-how, ultimate power is now available as 10", 12" and 15" 2-way enclosure and 15", 8" and 2" 3-way enclosure, matched by two new 'eXtended Low Frequency' sub woofers for a natural, balanced yet extremely powerful and clear sound. Truly musical bass sound reproduction, truly professional sound clarity and best-in-class sound pressure level guarantee a perfect performance for any music genre.



POWERED LOUDSPEAKERS  
**DZR** SERIES  
POWERED SUBWOOFERS  
**DXS XLF** SERIES



DZR315(-D) &  
DXS18XLF(-D)



DZR15(-D) &  
DXS18XLF(-D)



DZR12(-D) &  
DXS15XLF(-D)



DZR10(-D) &  
DXS15XLF(-D)

## DZR AND DXS XLF SERIES

- 96kHz high performance DSP for truly high-definition sound with super low latency
- Advanced FIR-X tuning, the combination of FIR filtering and EQ.
- D-Contour and highly reliable protection
- Dante models listed for sophisticated integration with digital consoles
- LCD display for easy processor programming and editing
- Monitoring and editing on TF, QL, CL consoles and Pro Visionaire Touch iPad app
- High power 2000W Class-D Amplifiers
- HF : 2" voice coil and rotatable 1" throat Compression driver, Titanium diaphragm
- LF: 3" voice coil and neodymium magnet for DZR, 4" voice coil and ferrite magnet for DXS XLF
- Durable plywood cabinet with Polyurea coating
- Wide Dispersion CD Waveguide Horn
- Mirror set up for floor monitoring (DZR12 & DZR15)
- Dual angle pole socket
- Vertical and horizontal U-bracket
- M8, M10 and M8 rigging points





DZR315(-D)

- 15"/8"/2" FULL RANGE
- 2000W / 143dB PEAK SPL
- D version: Dante audio networking



DZR15(-D)

- 15"/2" FULL RANGE
- 2000W / 139dB PEAK SPL
- D version: Dante audio networking



DZR12(-D)

- 12"/2" FULL RANGE
- 2000W / 139dB PEAK SPL
- D version: Dante audio networking



DZR10(-D)

- 10"/2" FULL RANGE
- 2000W / 137dB PEAK SPL
- D version: Dante audio networking



DXS18XLF(-D)

- 18" SUB WOOFER
- 1600W / 136dB PEAK SPL
- D version: Dante audio networking



DXS15XLF(-D)

- 15" SUB WOOFER
- 1600W / 136dB PEAK SPL
- D version: Dante audio networking

DZR WEDGE PLACEMENT



## REAR PANELS



DZR



DZR-D models



DXS XLF



DXS-D models

## GENERAL SPECIFICATIONS

|                                      |                       | DZR315(-D)                                                                                             | DZR15(-D)                                    | DZR12(-D)                                 | DZR10(-D)                                 | DXS18XLF (-D)                                 | DXS15XLF (-D)                           |
|--------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------------|-----------------------------------------|
| SYSTEM TYPE                          |                       | 3-way, Bi-amped Powered Speaker, Bass-reflex                                                           | 2-way, Bi-amped Powered Speaker, Bass-reflex |                                           |                                           | Powered Subwoofer, bass-reflex                |                                         |
| FREQUENCY RANGE (-10DB)              |                       | 31Hz - 20kHz                                                                                           | 34Hz - 20kHz                                 | 39Hz - 20kHz                              | 44Hz - 20kHz                              | 30Hz - 150Hz                                  | 33Hz - 150Hz                            |
| COVERAGE ANGLE                       |                       | H75° x V50°                                                                                            | H90° x V50° (Rotatable)                      | H90° x V60° (Rotatable)                   | H90° x V60° (Rotatable)                   | -                                             | -                                       |
| CROSSOVER FREQUENCY, TYPE            |                       | 700Hz (FIR-X)<br>2.5kHz (Passive)                                                                      | 1.7kHz (FIR-X)                               | 1.8kHz (FIR-X)                            | 1.8kHz (FIR-X)                            | -                                             | -                                       |
| MAXIMUM SPL <sup>*1</sup>            |                       | 143dB SPL                                                                                              | 139dB SPL                                    | 139dB SPL                                 | 137dB SPL                                 | 136dB SPL                                     | 136dB SPL                               |
| TRANSDUCERS                          | LF                    | 15" Cone, 3" Voice Coil, Neodymium magnet                                                              | 15" Cone, 3" Voice Coil, Neodymium magnet    | 12" Cone, 3" Voice Coil, Neodymium magnet | 10" Cone, 3" Voice Coil, Neodymium magnet | 18" Cone, 4" Voice Coil, Ferrite magnet       | 15" Cone, 4" Voice Coil, Ferrite magnet |
|                                      | MF                    | 8" Cone, 1.5" Voice Coil, Ferrite magnet                                                               | -                                            | -                                         | -                                         | -                                             | -                                       |
|                                      | HF                    | 2" Voice Coil, 1" Throat Compression Driver, Titanium diaphragm, Neodymium magnet                      |                                              |                                           |                                           | -                                             | -                                       |
| ENCLOSURE MATERIAL, FINISH, COLOR    |                       | Plywood, Durable Polyurea Painting, Black                                                              |                                              |                                           |                                           |                                               |                                         |
| FLOOR MONITOR ANGLE                  |                       | -                                                                                                      | 50° Symmetrical                              | 50° Symmetrical                           | 50°                                       | -                                             | -                                       |
| DIMENSIONS (WXHxD, WITH RUBBER FEET) |                       | 550x897x520mm                                                                                          | 450x761x460mm                                | 410x646x394mm                             | 315x537x345mm                             | 550x657x720mm                                 | 450x587x600mm                           |
| WEIGHT                               |                       | 41.6 kg                                                                                                | 25.2 kg                                      | 21.4 kg                                   | 17.9 kg                                   | 48.9 kg                                       | 40.0 kg                                 |
| HANDLES                              |                       | Aluminium die-cast, Side x2                                                                            |                                              |                                           | Aluminium die-cast, Top x1, Side x1       | Aluminium die-cast, Side x2                   |                                         |
| POLE SOCKET                          |                       | -                                                                                                      | Φ35 mm x2 (0° or -7°)                        |                                           |                                           | Φ35 mm (depth 80mm), M20 Threaded depth 25mm) |                                         |
| RIGGING POINTS                       |                       | M10 x16                                                                                                | M10 x12                                      |                                           | M10 x8, M8 x2                             | -                                             |                                         |
| AMPLIFIER TYPE                       |                       | Class-D                                                                                                |                                              |                                           |                                           | Class-D                                       |                                         |
| POWER RATING                         | DYNAMIC <sup>*2</sup> | 2000W (LF:1000W, MF/HF: 1000W)                                                                         |                                              |                                           |                                           | 1600W                                         |                                         |
| CONTINUOUS                           |                       | 1300W (LF: 920W, MF/HF: 380W)                                                                          |                                              |                                           |                                           | 1230W                                         |                                         |
| COOLING                              |                       | Fan cooling, Variable speeds.                                                                          |                                              |                                           |                                           |                                               |                                         |
| DSP, AD/DA                           |                       | 96kHz processing with 96kHz AD/DA and FIR filter                                                       |                                              |                                           |                                           |                                               |                                         |
| CONNECTORS                           | ANALOG IN             | Combo x2, Line level (Maximum +24dBu), Input impedance 20kΩ                                            |                                              |                                           |                                           |                                               | XLR3-32 x2, CH1/2: THRU or DSP OUT      |
|                                      | ANALOG OUT            | XLR3-32 x2, CH1: THRU (fix), CH2: THRU or DSP OUT                                                      |                                              |                                           |                                           |                                               |                                         |
|                                      | DANTE (-D MODEL ONLY) | etherCON CAT5e x2 (Daisy Chain), 2 IN / 2 OUT (Fs: 44.1k,48k 88.2k,96k) and Remote Control, 1000BASE-T |                                              |                                           |                                           |                                               |                                         |
|                                      | USB                   | USB2.0 Host 5V 500mA, for USB memory DATA storage/load                                                 |                                              |                                           |                                           |                                               |                                         |
|                                      | AC IN                 | IEC AC inlet x1 (V-Lock)                                                                               |                                              |                                           |                                           |                                               |                                         |
| IDLE POWER CONSUMPTION               |                       | 45W                                                                                                    |                                              |                                           |                                           | 40W                                           |                                         |
| 1/8 POWER CONSUMPTION                |                       | 150W                                                                                                   |                                              |                                           |                                           | 180W                                          |                                         |
| OPTIONS                              | U-BRACKET             | -                                                                                                      | UB-DZR15H/V                                  | UB-DZR12H/V                               | UB-DZR10H/V                               | -                                             | -                                       |
|                                      | COVER                 | SPCVR-DZR315                                                                                           | SPCVR-DZR15                                  | SPCVR-DZR12                               | SPCVR-DZR10                               | SPCVR-DXS18X                                  | SPCVR-DXS15X                            |
|                                      | CASTER                | -                                                                                                      | -                                            | -                                         | -                                         | SPW-1                                         | -                                       |

\*1: Measured peak SPL with pink noise @1m.

\*2: Total peak power of individual outputs (AC 120V, 25°C. This value was measured at minimum load impedance, with protection released.



YAMAHA



## OPTIONAL MOUNTING U-BRACKETS FOR DZR15/12/10 (D)



UB-DZR15H



UB-DZR12H



UB-DZR10H



UB-DZR15V



UB-DZR12V



UB-DZR10V

## OPTIONAL COVERS



SPVCR-DZR315



SPVCR-DZR15



SPVCR-DZR12



SPVCR-DZR10



SPVCR-DXS18X



SPVCR-DXS15X



SPW-1

**OPTIONAL  
CASTERS FOR**

- DXS15XLF(-D)
- DXS18XLF(-D)

# | DSR SERIES



CONFERENCE



LIVE

## POWER PERFECTLY PROCESSED

**DSR SERIES POWERED LOUDSPEAKERS** take portable loudspeakers to the extreme limits of their potential. Output levels are pushed to the highest sound pressure levels possible, yet in cabinets that are lightweight and compact. Sound resolution remains superb, no matter how hard or for how long the speakers are driven. Designed by applying our leading-edge digital and acoustic technologies developed over decades, the **DSR SERIES** provides a listening experience that redefines high definition sound reinforcement.

- \* EXTREMELY LOUD
- \* COMPACT SPEAKERS WITH 48-BIT DSP AND FIR-X TUNING
- \* PREMIUM GRADE TRANSDUCERS

UP TO  
1500W



HEAVY-DUTY POWDER-COATED STEEL GRILLES



LINE-X® COATING (DAMAGE RESISTANT)



LOCKING IEC POWER CONNECTOR



M10 RIGGING POINTS FOR SUSPENDED INSTALLATION (DSR115/DSR112).



BACKSIDE (DSR215/DSR115/DSR112)

## DSR215

- LF: 2x15" cone
- Voice Coil: 2.5"
- Magnet: Ferrite
- HF: Diaphragm 2"
- Type: 1" throat compression driver
- Magnet: Neodymium
- Output power:  
Dynamic: 1500W (LF: 1020W HF: 480W)  
Continuous: 1300W (LF: 850W HF: 450W)
- Max. SPL: 138dB SPL
- Dimensions: W 467 mm, H 1158 mm, D 520 mm
- Net weight: 49.8 kg



## DSR115

- LF: 15" cone
- Voice Coil: 3"
- Magnet: Neodymium
- HF: Diaphragm 2"
- Type: 1" throat compression driver
- Magnet: Neodymium
- Output power:  
Dynamic: 1500W (LF: 1020W HF: 480W)  
Continuous: 1300W (LF: 850W HF: 450W)
- Max. SPL: 136dB SPL
- Dimensions: W 442 mm, H 755 mm, D 423 mm
- Net weight: 28 kg





## DSR112

- LF: 12" cone
- Voice Coil: 3"
- Magnet: Neodymium
- HF: Diaphragm 2"
- Type: 1" throat compression driver
- Magnet: Neodymium
- Output power:
  - Dynamic: 1500W (LF: 1020W HF: 480W)
  - Continuous: 1300W (LF: 850W HF: 450W)
- Max. SPL : 134dB SPL
- Dimensions: W 370 mm, H 638 mm, D 368 mm
- Net weight: 21.2 kg

## DSR118W

- LF: 18" cone
- Voice Coil: 3"
- Output power:
  - Dynamic: 1020W
  - Continuous: 800W
- Max. SPL: 132dB SPL
- Dimensions: W 520 mm, H 638 mm, D 584 mm
- Material: Wood (Paint, Black)
- Pole socket: 35mm (Top x1)
- Net weight: 42 kg



BACKSIDE (DSR118W)

|                            | <b>DSR215</b>                    | <b>DSR115</b>                     | <b>DSR112</b>                     | <b>DSR118W</b>                   |
|----------------------------|----------------------------------|-----------------------------------|-----------------------------------|----------------------------------|
| TRANSDUCER: LF             | 2x 15" cone /<br>2,5" Voice Coil | 15" cone /<br>3" Voice Coil       | 12" cone /<br>3" Voice Coil       | 1x 18" cone /<br>2,5" Voice Coil |
| TRANSDUCER: HF             | 2" Diaphragm                     | 2" Diaphragm                      | 2" Diaphragm                      | -                                |
| POWER RATING               | 1500W<br>(LF:1020W/HF: 480W)     | 1500W<br>(LF:1020W/HF: 480W)      | 1500W<br>(LF:1020W/HF: 480W)      | 1020W                            |
| MAXIMUM SPL                | 138 dB SPL                       | 136 dB SPL                        | 134 dB SPL                        | 132 dB SPL                       |
| FREQUENCY RANGE<br>(-10dB) | 45Hz - 20kHz                     | 45Hz - 20kHz                      | 55Hz - 20kHz                      | 40Hz - 130Hz                     |
| DSP                        | D-Contour                        | D-Contour                         | D-Contour                         | -                                |
| INPUTS /<br>OUTPUTS        | In: XLR, Phone /<br>Out: XLR     | In: XLR, Phone /<br>Out: XLR      | In: XLR, Phone /<br>Out: XLR      | In: 2xXLR /<br>Out: 2xXLR        |
| RIGGIN POINTS              | -                                | 3 (fits for<br>M10x18 mm eyebots) | 3 (fits for<br>M10x18 mm eyebots) | -                                |
| POLE SOCKET                | -                                | 35 mm (Bottom)                    | 35 mm (Bottom)                    | 35 mm (Top)                      |
| COOLING                    | Natural convection               | Natural convection                | Natural convection                | Natural convection               |
| DIMENSIONS<br>(W x H x D)  | 467 x 1158 x 520 mm              | 442 x 755 x 423 mm                | 370 x 638 x 368 mm                | 520 x 638 x 584mm                |
| MATERIAL/FINISH            | Wood, Line-X                     | Wood, Line-X                      | Wood, Line-X                      | Wood, Line-X                     |
| WEIGHT                     | 49.8 kg                          | 28 kg                             | 21.2 kg                           | 42 kg                            |

# | DXR SERIES



CONFERENCE



LIVE

## POWER TO THE PEOPLE!

**DXR SERIES POWERED LOUDSPEAKERS** offer superb high-definition sound and class-leading sound pressure levels – yet in a more compact and extremely functional design that provides a level of versatility unmatched by any speaker in its class today. Each DXR speaker provides two Class D digital amplifiers, one D-Contour multi-band compressor and comprehensive DSP-protections. In addition, all full range models feature Yamaha's proprietary FIR-X tuning™ utilizing linear phase FIR filters for the crossover network.



DXR Series loudspeakers developed in cooperation with NEXO.

- \* EXTREMELY LOUD
- \* INTELLIGENT 3-CHANNEL-MIXER
- \* COMPACT SPEAKERS WITH 48-BIT DSP AND FIR-X TUNING

UP TO  
1300W



SYMMETRICAL ENCLOSURE  
DESIGN FOR MIRROR-MODE  
FLOOR MONITORING (DXR12/  
DXR15)



HIGH-EFFICIENCY 1100W  
CLASS-D AMPLIFIERS



DURABLE, COMPACT ABS  
ENCLOSURES



BACKSIDE  
(DXR15/DXR12/DXR10/DXR8)



## DXR15

- LF: 15" cone
- Voice Coil: 2.5"
- Magnet: Ferrite
- HF: Diaphragm 1.4"
- Type: 1" throat compression driver
- Magnet: Ferrite
- Output power:  
Dynamic: 1100W (LF: 950W HF: 150W)  
Continuous: 700W (LF: 600W HF: 100W)
- Max SPL: 133dB SPL
- Dimensions: W 445 mm, H 700 mm, D 380 mm
- Net weight: 22.5 kg

## DXR12

- LF: 12" cone
- Voice Coil: 2.5"
- Magnet: Ferrite
- HF: Diaphragm 1.4"
- Type: 1" throat compression driver
- Magnet: Ferrite
- Output power:  
Dynamic: 1100W (LF: 950W HF: 150W)  
Continuous: 700W (LF: 600W HF: 100W)
- Max SPL: 132dB SPL
- Dimensions: W 362 mm, H 601 mm, D 350 mm
- Net weight: 19.3 kg





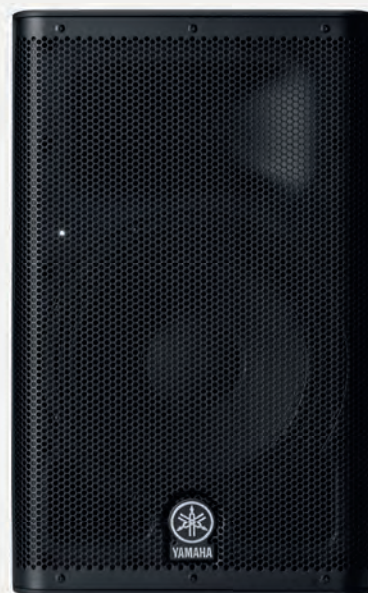


## DXR10

- LF: 10" cone
- Voice Coil: 2"
- Magnet: Ferrite
- HF: Diaphragm 1.4"
- Type: 1" throat compression driver
- Magnet: Ferrite
- Output power:  
Dynamic: 1,100W (LF: 950W HF: 150W)  
Continuous: 700W (LF: 600W HF: 100W)
- Max SPL: 131dB SPL
- Dimensions: W 305 mm, H 502 mm, D 310 mm
- Net weight: 14.6 kg

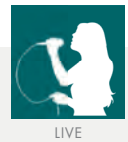
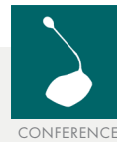
## DXR8

- LF: 8" cone
- Voice Coil: 2"
- Magnet: Ferrite
- HF: Diaphragm 1.4"
- Type: 1" throat compression driver
- Magnet: Ferrite
- Output power:  
Dynamic: 1,100W (LF: 950W HF: 150W)  
Continuous: 700W (LF: 600W HF: 100W)
- Max SPL: 129dB SPL
- Dimensions: W 280 mm, H 458 mm, D 280 mm
- Net weight: 13.5 kg





# | DXS SERIES



## POWER IN VERSATILITY

**DXS SERIES** is a new line of compact, high output **POWERED SUBWOOFERS** that match perfectly with **DSR**, **DXR** and **DBR** fullrange powered loudspeakers.

- \* THE DXS'S HIGH PERFORMANCE CLASS-D AMPLIFIER IS CAPABLE OF PRODUCING HIGH POWER OUTPUTS, REALIZING A HIGH SPL DELIVERED WITH EXCEPTIONAL CLARITY AND ACCURACY.
- \* D-XSUB BASS PROCESSING IS A DSP TECHNOLOGY THAT GIVES USERS ADDITIONAL DYNAMIC CONTROL OF THE FREQUENCY RANGE TO MEET THE DEMANDS OF A VARIETY OF APPLICATIONS OR MUSICAL STYLES.
- \* THE CARDIOID MODE SETTING (DXS18 ONLY) ADDS ADDITIONAL CONTROL OF LOW FREQUENCIES FOR SUB-WOOFER ARRAYS OF TWO OR MORE DXS18 SPEAKERS, EFFECTIVELY REDUCING THE SPL OF BASS DIRECTED TOWARDS THE STAGE WHILE INCREASING THE BASS LEVELS DIRECTED TOWARDS THE AUDIENCE.



## DXS18

- LF: 18" cone
- Voice Coil: 4"
- Magnet: Ferrite
- Max SPL: 136dB
- Output power: Dynamic: 1020W, Continuous: 800W
- Frequency range (-10dB): 32Hz - 120Hz
- Dimensions: W 563 mm, H 683 mm, D 721 mm
- Material: Plywood (LINE-X®, black)
- Pole socket: 35mm (depth 80mm) & M20 (depth 25mm)
- Net weight: 49.7 kg

## SPW-1

### OPTIONAL WHEEL KIT

For more fast and convenient setup of your DXS subwoofers, optional casters are available, featuring radial ball bearings that ensure quick, quiet transport of your gear (only for DXS18).





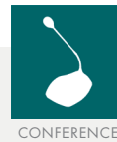
## DXS15MKII

- LF: 15" cone
- Voice Coil: 2.5"
- Magnet: Ferrite
- Max SPL: 135dB
- Output power:  
Dynamic: 1020W, Continuous: 800W
- Frequency Range: (-10dB): 40Hz - 150Hz
- Cardioid Mode
- Dimensions: W 480 mm, H 611 mm, D 614 mm
- Material: Wood (Paint, Black)
- Pole socket: 35mm (Top x1)
- Net weight: 36.0 kg
- Optional Speaker Cover (SPCVR DXS152)
- Optional Wheel Kit (SPW-1)

## DXS12MKII

- LF: 12" cone
- Voice Coil: 2.5"
- Magnet: Ferrite
- Max SPL: 134dB
- Output power:  
Dynamic: 1020W, Continuous: 800W
- Frequency Range: (-10dB): 42Hz - 150Hz
- Cardioid Mode
- Dimensions: W 400 mm, H 567 mm, D 570 mm
- Material: Wood (Paint, Black)
- Pole socket: 35mm (Top x1)
- Net weight: 30.0 kg
- Optional Speaker Cover (SPCVR DXS122)
- Optional Wheel Kit (SPW-1)





CONFERENCE



LIVE

### U-BRACKETS FOR DXR SERIES FOR FLYING APPLICATION

The durable, portable design of its enclosure makes the **DXR SERIES** perfectly suited for use in a variety of environments. All DXRs come equipped with rigging points, allowing them to be flown from trussing with standard eyebolts. (DXR8/DXR10: M8 x 15 mm and DXR12/DXR15: M10 x 18 mm). When more versatility is required, optional BG-VC1 compliant U-brackets allow simple and easy rigging in both horizontal and vertical configurations.



#### U-BRACKET FOR

- DXR8 - UBDXR8 (piece)
- DXR10 - UBDXR10 (piece)
- DXR12 - UBDXR12 (piece)
- DXR15 - UBDXR15 (piece)



|                           | <b>DXR15</b>                       | <b>DXR12</b>                       | <b>DXR10</b>                      | <b>DXR8</b>                       |
|---------------------------|------------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| TRANSDUCER: LF            | 15" cone/2" v.coil                 | 12" cone/2" v.coil                 | 10" cone/2" v.coil                | 8" cone/2" v.coil                 |
| TRANSDUCER: HF            | 1,4" Diaphragm                     | 1,4" Diaphragm                     | 1,4" Diaphragm                    | 1,4" Diaphragm                    |
| POWER RATING              | 1100W<br>(LF: 950W/HF: 150W)       | 1100W<br>(LF: 950W/HF: 150W)       | 1100W<br>(LF: 950W/HF: 150W)      | 1100W<br>(LF: 950W/HF: 150W)      |
| MAXIMUM SPL               | 132 dB SPL                         | 132 dB SPL                         | 131 dB SPL                        | 129 dB SPL                        |
| FREQUENCY RANGE (-10dB)   | 49Hz - 20kHz                       | 52Hz - 20kHz                       | 56Hz - 20kHz                      | 57Hz - 20kHz                      |
| DSP                       | D-Contour<br>(FOH/Monitor)         | D-Contour<br>(FOH/Monitor)         | D-Contour<br>(FOH/Monitor)        | D-Contour<br>(FOH/Monitor)        |
| INPUTS/OUTPUTS            | In: XLR, Phone, RCA /<br>Out: XLR  | In: XLR, Phone, RCA /<br>Out: XLR  | In: XLR, Phone, RCA /<br>Out: XLR | In: XLR, Phone, RCA /<br>Out: XLR |
| RIGGING POINTS            | 3 (fits for M10 x<br>18mm eyebots) | 3 (fits for M10 x<br>18mm eyebots) | 3 (fits for M8 x<br>15mm eyebots) | 3 (fits for M8 x<br>15mm eyebots) |
| POLE SOCKET               | 35mm (Bottom)                      | 35mm (Bottom)                      | 35mm (Bottom)                     | 35mm (Bottom)                     |
| COOLING                   | Fan cooling                        | Fan cooling                        | Fan cooling                       | Fan cooling                       |
| DIMENSIONS<br>(W x H x D) | 445x700x380 mm                     | 362x601x350 mm                     | 305x502x310 mm                    | 280x458x280 mm                    |
| MATERIAL/FINISH           | ABS, Matte black                   | ABS, Matte black                   | ABS, Matte black                  | ABS, Matte black                  |
| WEIGHT                    | 22.5 kg                            | 19.3 kg                            | 14.6 kg                           | 13.5 kg                           |

|                           | <b>DXS18</b>                                     | <b>DXS15MKII</b>               | <b>DXS12MKII</b>               |
|---------------------------|--------------------------------------------------|--------------------------------|--------------------------------|
| TRANSDUCER: LF            | 18" cone / 4" Voice Coil                         | 15" cone / 2,5" Voice Coil     | 12" cone / 2,5" Voice Coil     |
| TRANSDUCER: HF            | -                                                | -                              | -                              |
| POWER RATING              | 1020W                                            | 1020W                          | 1020W                          |
| MAXIMUM SPL               | 136 dB SPL                                       | 135 dB SPL                     | 134 dB SPL                     |
| FREQUENCY RANGE (-10dB)   | 32Hz - 120Hz                                     | 40Hz - 150Hz                   | 42Hz - 150Hz                   |
| DSP                       | D-X SUB: BOOST, XTD LF, NORMAL,<br>CARDIOID mode | D-XSUB: BOOST, XTENDED-LF, OFF | D-XSUB: BOOST, XTENDED-LF, OFF |
| INPUTS/OUTPUTS            | 2x XLR IN/ 2x XLR Out                            | 2x XLR IN/ 2x XLR Out          | 2x XLR IN/ 2x XLR Out          |
| RIGGING POINTS            | -                                                | -                              | -                              |
| POLE SOCKET               | 35mm (depth 80mm) &<br>M20 (threaded depth 25mm) | 35mm (Top) /<br>M20 (Top)      | 35mm (Top) /<br>M20 (Top)      |
| COOLING                   | Natural convection                               | Fan cooling                    | Fan cooling                    |
| DIMENSIONS<br>(W x H x D) | 563x683x721 mm                                   | 480x611x614                    | 400x567x570                    |
| MATERIAL/FINISH           | Plywood, LineX coated, Black                     | Plywood, LineX coated, Black   | Plywood, LineX coated, Black   |
| WEIGHT                    | 49.7 kg                                          | 36 kg                          | 30 kg                          |

## SPEAKER COVERS FOR DXR, DXS, DBR AND CBR SERIES

Introducing Yamaha's newly designed functional **SPEAKER COVERS** that protect your speakers from unfavorable weather conditions during outdoor performances, dusty and dirty warehouse storage, or the rigors of equipment transport on the road.

- \* GAPS FOR CARRYING HANDLES
- \* Yamaha LOGO
- \* MATERIAL: SYNTHETIC



**SPCVR-1501  
PADDED SHEATH FOR**

- DXR15
- DBR15
- CBR15
- Colour: Black



**SPCVR-1201  
PADDED SHEATH FOR**

- DXR12
- DBR12
- CBR12
- Colour: Black



**SPCVR-1001  
PADDED SHEATH FOR**

- DXR10
- DBR10
- CBR10
- Colour: Black



**SPCVR-0801  
PADDED SHEATH FOR**

- DXR8
- Colour: Black



**SPCVR-18S01  
PADDED SHEATH FOR**

- DXS18
- Colour: Black



**SPCVR-DXS152  
PADDED SHEATH FOR**

- DXS15MKII
- Colour: Black

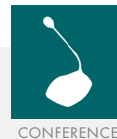


**SPCVR-DXS122  
PADDED SHEATH FOR**

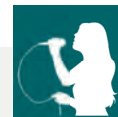
- DXS12MKII
- Colour: Black



# | DBR SERIES



CONFERENCE



LIVE

## POWER TO PLAY

**DBR SERIES** loudspeakers offer high-definition sound and high sound pressure levels in a compact and extremely lightweight speaker design. Each DBR speaker provides two Class D digital amplifiers, one D-Contour multi-band compressor and comprehensive DSP-protections. Yamaha implemented FIR-X tuning™ tuning technology from DSR-Series which offers linear frequency and phase response.

- \* HIGH-DEFINITION SOUND
- \* INTELLIGENT INTEGRATED 2-CHANNEL MIXER
- \* 48-BIT DSP AND FIR-X TUNING
- \* LEIGHTWEIGHT POWERED SPEAKERS

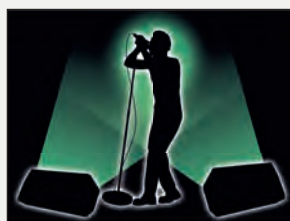
UP TO  
1000W



DURABLE, COMPACT DESIGN



HIGH VERSATILITY AND FUNCTIONALITY (2 CHANNEL MIXER WITH XLR, PHONE, RCA INPUTS)



SYMMETRICAL ENCLOSURE DESIGN FOR MIRROR-MODE FLOOR MONITORING (DBR12/DBR15)



EXTREMELY ACCURATE 90X60 CONSTANT-DIRECTIVITY HORN



DBR15



DBR12



DBR10

|                         | DBR15                                                                                       | DBR12                                                                                       | DBR10                                                                                       |
|-------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| TRANSDUCER: LF          | 15"                                                                                         | 12"                                                                                         | 10"                                                                                         |
| TRANSDUCER: HF          | 1,4"                                                                                        | 1,4"                                                                                        | 1"                                                                                          |
| POWER RATING            | 1000 W                                                                                      | 1000 W                                                                                      | 700 W                                                                                       |
| MAXIMUM SPL             | 132 dB SPL                                                                                  | 131 dB SPL                                                                                  | 129dB SPL                                                                                   |
| FREQUENCY RANGE (-10dB) | 50 Hz - 20 kHz                                                                              | 52 Hz - 20 kHz                                                                              | 55 Hz - 20 kHz                                                                              |
| DSP                     | D-Contour (FOH/Monitor)                                                                     | D-Contour (FOH/Monitor)                                                                     | D-Contour (FOH/Monitor)                                                                     |
| INPUTS                  | In: XLR, Phone, RCA<br>Out: XLR                                                             | In: XLR, Phone, RCA<br>Out: XLR                                                             | In: XLR, Phone, RCA<br>Out: XLR                                                             |
| RIGGING POINTS          | 3x (M8 x 15 mm)<br>(Bottom x2, Rear x1)                                                     | 3x (M8 x 15 mm)<br>(Bottom x2, Rear x1)                                                     | 2x (M8 x 15 mm)<br>(Bottom x 2)                                                             |
| BRACKETS (OPTIONAL)     | Wall-Bracket:<br>BWS251-300 / BWS251-400<br>Ceiling-Bracket: BCS251<br>Baton-Bracket BBS251 | Wall-Bracket:<br>BWS251-300 / BWS251-400<br>Ceiling-Bracket: BCS251<br>Baton-Bracket BBS251 | Wall-Bracket:<br>BWS251-300 / BWS251-400<br>Ceiling-Bracket: BCS251<br>Baton-Bracket BBS251 |
| POLE SOCKET             | 1                                                                                           | 1                                                                                           | 1                                                                                           |
| COOLING                 | Fan cooling                                                                                 | Fan cooling                                                                                 | Fan cooling                                                                                 |
| DIMENSIONS              | 455 x 700 x 378 mm                                                                          | 376 x 601 x 348 mm                                                                          | 308 x 493 x 289 mm                                                                          |
| HANDLES                 | 2                                                                                           | 2                                                                                           | 1                                                                                           |
| MATERIAL/FINISH         | Plastic / Black                                                                             | Plastic / Black                                                                             | Plastic / Black                                                                             |
| WEIGHT                  | 19.3 kg                                                                                     | 15.8 kg                                                                                     | 10.5 kg                                                                                     |



## DBR15

- LF: 15" cone
- Voice Coil: 2,5"
- Magnet: Ferrite
- HF: Diaphragm 1,4"
- Type: 1,4" throat compression driver
- Magnet: Ferrite
- Output power:
  - Dynamic: 1000W (LF: 800W HF: 200W)
  - Continuous: 465W (LF: 400W HF: 65W)
- Max SPL: 132dB SPL
- Dimensions: 455 x 700 x 378 mm
- Net weight: 19.3 kg

## DBR12

- LF: 12" cone
- Voice Coil: 2"
- Magnet: Ferrite
- HF: Diaphragm 1"
- Type: 1,4" throat compression driver
- Magnet: Ferrite
- Output power:
  - Dynamic: 1000W (LF: 800W HF: 200W)
  - Continuous: 465W (LF: 400W HF: 65W)
- Max SPL: 131dB SPL
- Dimensions: 376 x 601 x 348 mm
- Net weight: 15.8 kg





## DBR10

- LF: 10" cone
- Voice Coil: 2"
- Magnet: Ferrite
- HF: Diaphragm 1"
- Type: 1" throat compression driver
- Magnet: Ferrite
- Output power:  
Dynamic: 700W (LF: 500W HF: 200W)  
Continuous: 325W (LF: 260W HF: 65W)
- Max SPL: 129dB SPL
- Dimensions: 308 x 493 x 289 mm
- Net weight: 10.5 kg





# | HS SERIES



BROADCAST



PRODUCTION

## POWERED NEAR-FIELD MONITORS FOR THE HOME OR SMALL STUDIO

When choosing reference monitors for mixing and music production, accuracy is the prime consideration. Speakers that sound “good” on first impression may not necessarily be accurate. The **HS SERIES** monitors provide an honest reference for your mix, rather than monitors that have been tweaked or coloured to deceptively sound impressive.

- \* REFERENCE MONITORS FEATURING THE LEGENDARY Yamaha WHITE CONES
- \* BI-AMPLIFICATION



HS8S

HS8

HS7

HS5

HS5W

HS7W

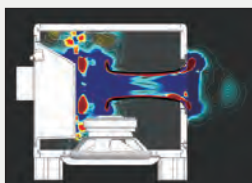
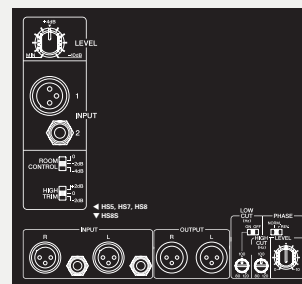
HS8W

|                            | HS8/HS8W                                        | HS7/HS7W                                        | HS5/HS5W                                        | HS8S                                                                                 |
|----------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------|
| POWER                      | 120 Watt<br>(75 W LF/ 45 W HF)                  | 95 Watt<br>(60 W LF/35 W HF)                    | 70 Watt<br>(45 W LF/25 W HF)                    | 150 Watt                                                                             |
| TRANSDUCER: LF             | 8"                                              | 6,5"                                            | 5"                                              | 8"                                                                                   |
| TRANSDUCER: HF             | 1"                                              | 1"                                              | 1"                                              | -                                                                                    |
| FREQUENCY RANGE<br>(-10dB) | 38 Hz - 30 kHz                                  | 43 Hz - 30 kHz                                  | 54 Hz - 30 kHz                                  | 22 Hz - 160 Hz                                                                       |
| CONNECTORS                 | Inputs: XLR/Jack                                | Inputs: XLR/Jack                                | Inputs: XLR/Jack                                | Input: 2 x XLR / 2 x Jack<br>Output: 2 x XLR (L&R) /<br>1 x XLR (EXT SUB)            |
| CONTROLS                   | Level Control / EQ:<br>High Trim & Room Control | Level Control / EQ:<br>High Trim & Room Control | Level Control / EQ:<br>High Trim & Room Control | Level Control / PHASE /<br>HIGH CUT control /<br>LOW CUT control /<br>LOW CUT switch |
| WEIGHT                     | 10.2 kg                                         | 8.2 kg                                          | 5.3 kg                                          | 12.5 kg                                                                              |



## OPTIMUM RESPONSE IN ANY ROOM

HS Series full-range models give you extra room-matching speaker placement versatility with **ROOM CONTROL** and **HIGH TRIM** response control switches that are specifically designed to compensate for common acoustic deficiencies and monitoring needs. For inputs, HS full-range speakers can accommodate a wide range of balanced and unbalanced sources such as mixers, keyboards and audio interfaces with XLR and TRS phone jacks.



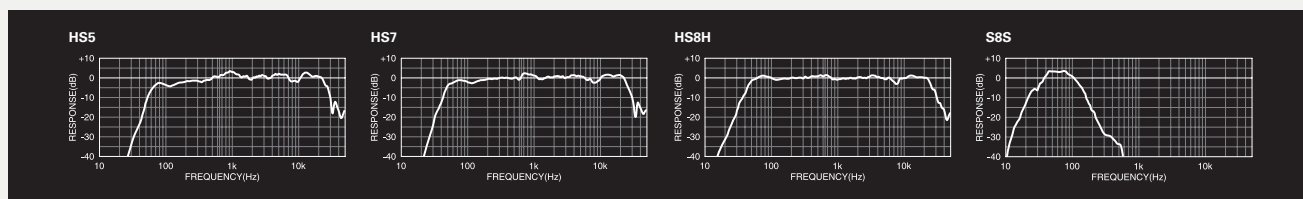
HS10W (FORMER MODEL)



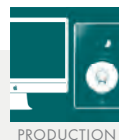
HS8S (NEW MODEL)

## CUTTING EDGE NOISE REDUCTION TECHNOLOGY

By adopting an advanced noise reduction technology that incorporates a thorough analysis of a visual representation of the sound, Yamaha's engineers are able to control and reduce the vortex. Through this in-depth analysis we have arrived at the ideal port design, resulting in a reduction of audible noise up to 6dB. The utilization of this state-of-the-art technology allows HS Series studio monitors to meet the demands of more strict professional production environments.



# | HS SERIES – INSTALLATION VERSION



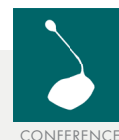
PRODUCTION



BROADCAST



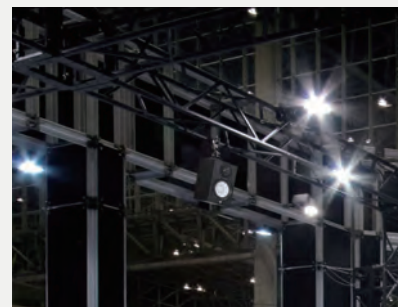
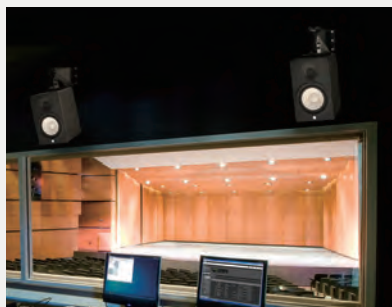
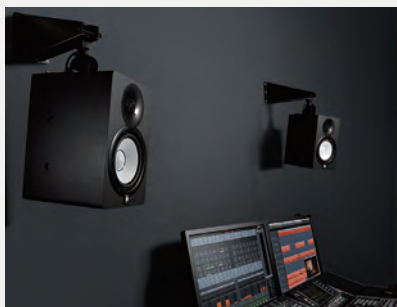
BACKGROUND  
MUSIC



CONFERENCE

The new **HS-I MODELS** of powered speakers add mounting points to the popular **HS SERIES**, making them compatible with a wider range of monitoring, sound reinforcement and installation environments.

- \* HS HIGH QUALITY STUDIO MONITORS
- \* HS I SERIES SUPPORTS CEILING AND WALL INSTALLATIONS
- \* SUPPORT FOR BBS, BCS AND BWS MOUNTING BRACKETS
- \* SAME STUDIO QUALITY AS IN WORLD FAMOUS RECORDING STUDIOS
- \* NEW HSI SERIES PROVIDE MOUNTING POINTS



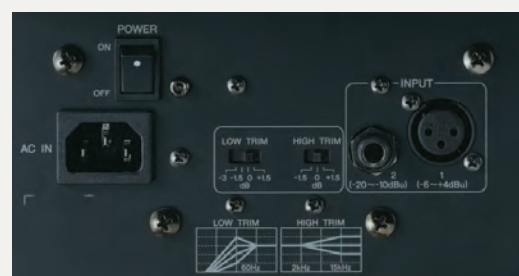
|                                  |             | HS5I/HS5IW                                                                                                                 | HS7I/HS7IW                                                 | HS8I/HS8IW                                                 |
|----------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| TYPE                             |             | Bi-amp 2-way powered speaker                                                                                               | Bi-amp 2-way powered speaker                               | Bi-amp 2-way powered speaker                               |
| OVERALL<br>FREQUENCY<br>RESPONSE | -3dB        | 74 Hz - 24 kHz                                                                                                             | 55 Hz - 24 kHz                                             | 47 Hz - 24 kHz                                             |
|                                  | -10dB       | 54 Hz - 30 kHz                                                                                                             | 43 Hz - 30 kHz                                             | 38 Hz - 30 kHz                                             |
| CROSSOVER<br>FREQUENCY           |             | 2 kHz                                                                                                                      | 2 KHZ                                                      | 2 kHz                                                      |
| SPEAKER<br>COMPONENTS            | LF: 5" cone |                                                                                                                            | LF: 6.5" cone                                              | LF: 8" cone                                                |
|                                  | HF: 1" dome |                                                                                                                            | HF: 1" dome                                                | HF: 1" dome                                                |
| OUTPUT POWER                     | Total       | 70 W (dynamic power)                                                                                                       | 95 W (DYNAMIC POWER)                                       | 120 W (dynamic power)                                      |
|                                  | LF          | 45 W (4 ohms)                                                                                                              | 60 W (4 OHMS)                                              | 75 W (4 ohms)                                              |
|                                  | HF          | 25 W (8 ohms)                                                                                                              | 35 W (8 OHMS)                                              | 45 W (8 ohms)                                              |
| INPUT SENSITIVITY /<br>IMPEDANCE |             | -10 dBu/10k ohms                                                                                                           | -10 dBu/10k ohms                                           | -10 dBu/10k ohms                                           |
| INPUT CONNECTORS<br>(PARALLEL)   |             | 1: XLR-3-31 type (balanced)<br>2: PHONE (balanced)                                                                         | 1: XLR-3-31 type (balanced)<br>2: PHONE (balanced)         | 1: XLR-3-31 type (balanced)<br>2: PHONE (balanced)         |
| CONTROLS                         |             | LEVEL control (+4 dB, center click) EQ: HIGH TRIM switch (+/- 2 dB at HF),<br>ROOM CONTROL switch (0/-2/-4 dB under 500Hz) |                                                            |                                                            |
| INDICATOR                        |             | Power ON (White LED)                                                                                                       |                                                            |                                                            |
| POWER<br>CONSUMPTION             |             | 45 W                                                                                                                       | 55 W                                                       | 60 W                                                       |
| ENCLOSURE                        |             | Bass-reflex type, Material: MDF                                                                                            | Bass-reflex type, Material: MDF                            | Bass-reflex type, Material: MDF                            |
| MOUNTING POINTS                  |             | Four surfaces x 2 x M5 (60 mm pitch)                                                                                       | Four surfaces x 2 x M8 (120 mm pitch)                      | Four surfaces x 2 x M8 (120 mm pitch)                      |
| DIMENSIONS<br>(W X H X D)        |             | 170 mm x 285 mm x 222 mm<br>(6-11/16" x 11-1/4" x 8-3/4")                                                                  | 210 mm x 332 mm x 284 mm<br>(8-1/4" x 13-1/16" x 11-3/16") | 250 mm x 390 mm x 334 mm<br>(9-13/16" x 15-3/8" x 13-1/8") |
| WEIGHT                           |             | 5.5 kg (12.1 lbs.)                                                                                                         | 8.7 kg (19.2 lbs.)                                         | 10.7 kg (23.6 lbs.)                                        |
| PACKAGING                        |             | Single                                                                                                                     | Single                                                     | Single                                                     |

# |MSP SERIES



**THE FIRST CHOICE** – The **MSP-SERIES** is the choice of top recording and production engineers who demand unmatched accuracy and resolution that reveals critical sonic details.

- \* REFERENCE-QUALITY MONITORING
- \* ADVANCED BI-AMP DESIGN
- \* MAGNETIC SHIELDING
- \* ONE-PIECE MOLDED ENCLOSURE WITH ROUNDED BAFFLE



REAR PANEL

## MSP5STUDIO

### MSP5STUDIO

|                         |                                              |
|-------------------------|----------------------------------------------|
| POWER                   | 67 Watt (40 Watt LF + 27 Watt HF)            |
| TRANSDUCER              | LF: 5" / HF: 1"                              |
| FREQUENCY RANGE (-10dB) | 50 Hz - 40 kHz                               |
| CONNECTORS              | Inputs: XLR/Phone                            |
| CONTROLS                | Level control, Low-Cut switch, High/Low Trim |
| DIMENSIONS              | W 179 x H 279 x D 208 mm                     |
| WEIGHT                  | 7.9 kg                                       |

## REFERENCE MONITOR SYSTEM

- Precision, fatigue-free monitoring for music production systems
- High-performance 20-watt power amplifier built in
- Compact size with the high-quality sound you expect from the MSP-Series
- Input jacks and controls for extended connectivity and setup flexibility
- Optional brackets allow installation in a variety of applications



MSP3

| MSP3               |                       |
|--------------------|-----------------------|
| POWER              | 20 Watt               |
| TRANSDUCER         | LF: 4" / HF: 1/8"     |
| FREQUENCY RESPONSE | 65Hz - 22kHz          |
| CONNECTORS         | RCA, XLR, Phone       |
| CONTROLS           | volume 1,2, low, high |
| DIMENSIONS (LXHXP) | 144 x 236 x 167 mm    |
| WEIGHT             | 4.4 kg                |



# | 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. The user specifies the room size, type of speakers to be used, and speaker layout.

- ✱ 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.
- ✱ SPEAKER LIBRARY INCLUDES VXC SERIES, NS-IC SERIES, S SERIES, VXS SERIES, NS-AW SERIES.



**STEP 1:** Enter the size of the room and the height of the listeners' ears.



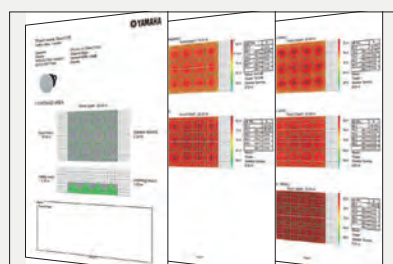
**STEP 2:** Select the target sound pressure level and the type of speakers to be used.



**STEP 3:** Select a speaker system layout. The program will provide an estimate of the number of speakers required.



**STEP 4:** Check the difference between the effective sound pressure level of the estimated system and the target sound pressure level entered in STEP 2. Click the "REPORT" button to output the results in report form.

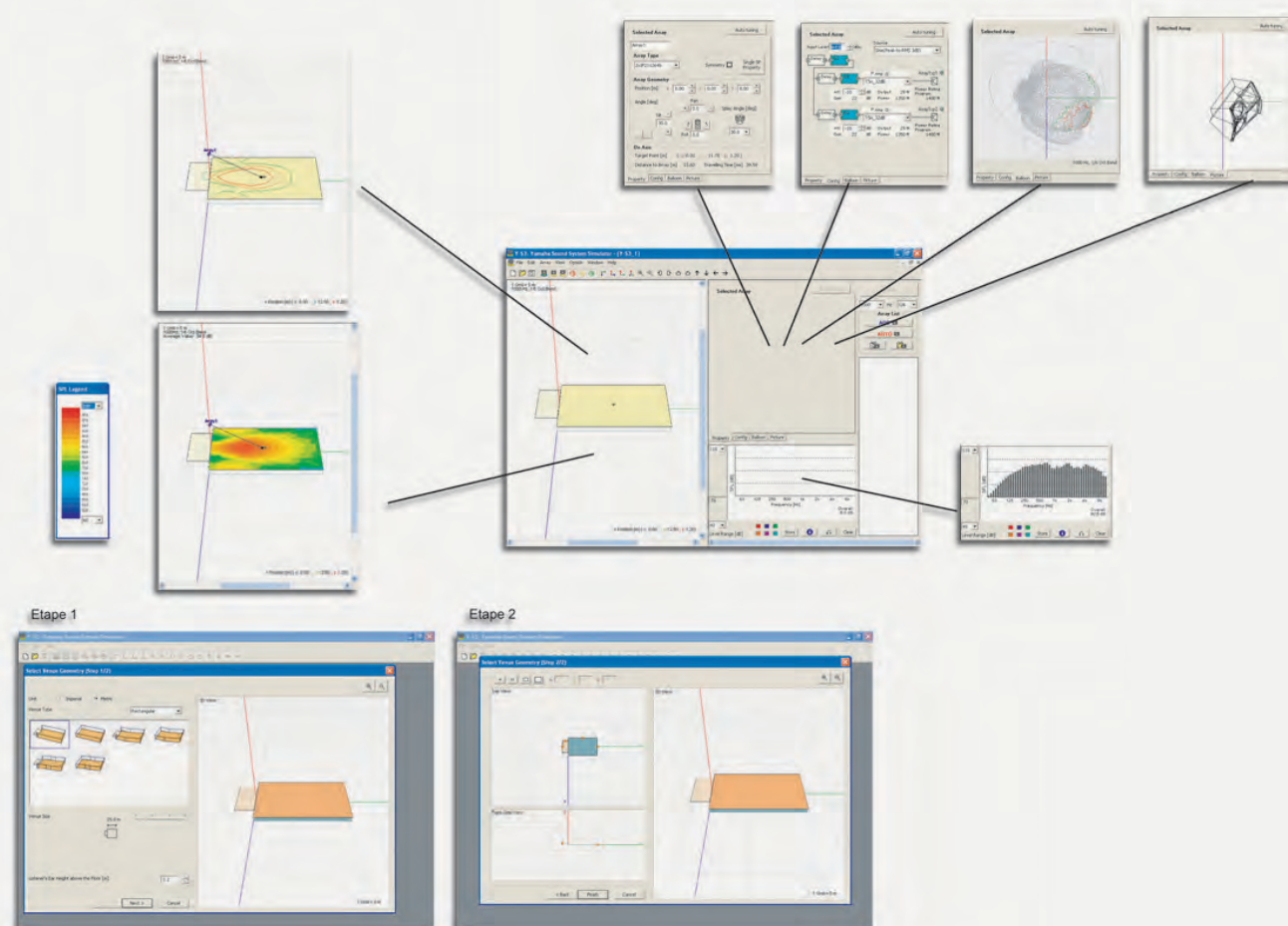


**REPORT:** The report output function included with this application (pdf format) is a convenient way to generate support documentation for system proposals.

CISSCA V2.0 supports VXC- and VXS Series. Where more detailed information is required use the Yamaha Y-S<sup>3</sup> Sound System Simulator application.

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.

- \* AUTOMATIC LAYOUT & TUNING
- \* DISTRIBUTED SPEAKERS
- \* EXPORT DME SPEAKER PROCESSOR SETTINGS AND AMPLIFIER RECOMMENDATIONS
- \* SPEAKER LIBRARY INCLUDES IF SERIES, S SERIES, VXS SERIES, VXC SERIES, CZR SERIES, CBR SERIES, DZR SERIES, DSR SERIES, DXR SERIES, DBR SERIES (UPGRADES FOR THE CZR SERIES AND DZR SERIES ARE SCHEDULED TO BE RELEASED AROUND AUGUST).



NEXT



# MICROPHONES & HEADPHONES







# | DM-305, DM-105



LIVE



BROADCAST



PRODUCTION

HIGH QUALITY MICROPHONES TUNED FOR  
CLEAR LEAD AND BACKUP VOCALS.



DM-305



DM-105



## SUPERIOR SOUND TECHNOLOGY

With its supercardioid polar pattern, the DM-305 is ideal for vocal performances. In addition, the magnet, voice coil and even the cable are extremely high quality to ensure high sound quality so voices sound clear and natural.

## RICH, CLEAR VOCAL CHARACTERISTICS

Designed not only for karaoke but also for use by serious amateur vocalists, the DM-305 delivers sound that is rich, full, clear and free of extraneous noise. The specifications are good, but the natural musical quality, which Yamaha pays careful attention to, is truly excellent. With the DM-305, singing is always a real pleasure.

## EXCLUSIVE BODY DESIGN

Yamaha developed a tapered body design that is easy and comfortable to hold, and gave the microphone an attractive silver finish.

## A GREAT CHOICE FOR VARIOUS TYPES OF USE

- Karaoke with friends or family.
- For serious amateur vocalists, either on stage or in the rehearsal studio.
- For announcers (schools, public events, etc.).

## GENERAL SPECIFICATIONS

|                              | DM-305                                                                         | DM-105                                                                         |
|------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| MICROPHONE UNIT              | Dynamic                                                                        | Dynamic                                                                        |
| POLAR PATTERN                | Super Cardioid                                                                 | Unidirectional                                                                 |
| FREQUENCY RESPONSE           | 40 Hz–18 kHz                                                                   | 40 Hz–15 kHz                                                                   |
| SENSITIVITY (2.83 V/1 M)     | -51 dB $\pm$ 3dB<br>(0 dB=1 V/Pa at 1 kHz)                                     | -54dB $\pm$ 3dB<br>(0 dB=1V/Pa at 1 kHz)                                       |
| OUTPUT IMPEDANCE             | 600 ohms $\pm$ 30% (at 1 kHz)                                                  | 500 ohms $\pm$ 30% (at 1 kHz)                                                  |
| CONNECTOR                    | 3 pin XLR-M type                                                               | 3 pin XLR-M type                                                               |
| CABLE                        | $\varnothing$ 6mm x 5m balanced cable with XLR-F type connector and 6.3mm plug | $\varnothing$ 6mm x 5m balanced cable with XLR-F type connector and 6.3mm plug |
| DIMENSIONS (MICROPHONE ONLY) | 54 mm x 178 mm                                                                 | 51 mm x 169 mm                                                                 |
| WEIGHT (MICROPHONE ONLY)     | 325 g                                                                          | 220 g                                                                          |

# | HPH-MT SERIES



LIVE



BROADCAST



PRODUCTION

## WHEN IT'S ABOUT PRECISION

It takes a true original to become an industry standard, and since their inception Yamaha's NS-10M studio monitor speakers have become a mainstay of professional studios the world over, renowned for their legendary accuracy. From the NS-10M to the MSP and HS Series, Yamaha has remained faithful to a design philosophy focused on delivering the sonic accuracy that provides sound professionals with the perfect platform upon which to develop and establish their own signature sound. MT Series studio monitor headphones remain true to this fundamental concept, delivering precision sound reproduction that meets the demanding requirements of today's professional studio and monitoring applications.



HPH-MT8



HPH-MT7W



HPH-MT7



HPH-MT5W



HPH-MT5

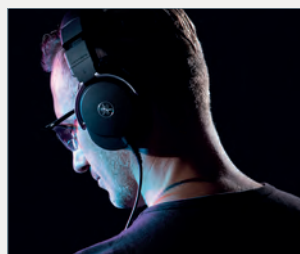
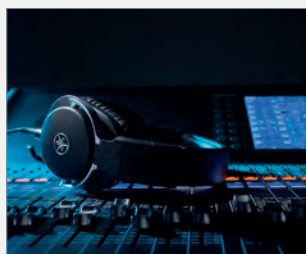
**YAMAHA**

# HPH-MT

## PROFESSIONAL MONITORING HEADPHONES

### HIGH RESOLUTION SOUND - SUPERB ISOLATION. PREMIUM COMFORT - STURDY, RELIABLE CONSTRUCTION

Whether you're recording in a professional studio, putting the finishing touches on a live mix, or simply listening to your music collection at home, your headphones serve a singular purpose of delivering the best possible reproduction of the source audio. Every aspect of the MT series design, from component and material selection to connectivity and overall fit, pays strict attention to achieving the highest possible levels of fidelity and the comfort required to focus on your sound. With a lineup of three models—the MT8, MT7, and MT5—the series offers a variety of features suited to a range of monitoring environments, with one ultimate objective... accuracy.



|                                       | HPH-MT8                                                                                                       | HPH-MT7W/HPH-MT7                                                | HPH-MT5W/HPH-MT5                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------------------------|
| TYPE                                  | Closed-back, Circumaural (Over Ear)                                                                           | Closed-back, Circumaural (Over Ear)                             | Closed-back, Circumaural (Over Ear)                                                    |
| FREQUENCY RESPONSE                    | 15 Hz - 28 kHz                                                                                                | 15 Hz - 25 kHz                                                  | 20 Hz - 20 kHz                                                                         |
| SOUND PRESSURE LEVEL                  | 102 dB/mW                                                                                                     | 99 dB/mW                                                        | 100 dB/mW                                                                              |
| IMPEDANCE (AT 1KHZ)                   | 37 Ω                                                                                                          | 49 Ω                                                            | 51 Ω                                                                                   |
| MAXIMUM INPUT POWER (AT 1KHZ)         | 1600 mW                                                                                                       | 1600 mW                                                         | 1600 mW                                                                                |
| DRIVER UNIT                           | 45 mm, Dynamic, CCAW Voice Coil                                                                               | 40 mm, Dynamic, CCAW Voice Coil                                 | 40 mm, Dynamic, CCAW Voice Coil                                                        |
| CABLE                                 | 1.2 m (3.9 ft), coiled cable<br>3.0 m (9.8 ft), straight cable                                                | 3.0 m (9.8 ft), straight                                        | 3.0 m (9.8 ft), straight cable                                                         |
| CONNECTOR                             | 3.5 mm (1/8") stereo with 6.3 mm (1/4") stereo adaptor                                                        | 3.5 mm (1/8") stereo with 6.3 mm (1/4") stereo adaptor          | 3.5 mm (1/8") stereo with 6.3 mm (1/4") stereo adaptor                                 |
| DIMENSIONS (WXHxD) WITHOUT CABLE&PLUG | 161 x 214 x 89 mm                                                                                             | 170 x 195 x 98 mm                                               | 165 x 203 x 88 mm                                                                      |
| WEIGHT                                | 350 g (0.8 lbs)                                                                                               | 360 g (0.8 lbs)                                                 | 245 g (0.5 lbs)                                                                        |
| ACCESSORIES                           | 1.2 m Coiled cable<br>3.0 m Straight cable<br>Threaded 6.3 mm (1/4") gold-plated adaptor, Padded carrying bag | Threaded 6.3 mm (1/4") gold-plated adaptor, Padded carrying bag | 3.0 m Straight cable<br>Threaded 6.3 mm (1/4") gold-plated adaptor, Nylon carrying bag |

NEXT



# POWER AMPLIFIERS





A B C D E F G H  
SELECT

POWER AMPLIFIER **XMV8140**

PROTECTION  
LIMIT  
SIGNAL

00  
-dB

MUTE

A B C D E F G H  
SELECT

POWER AMPLIFIER **XMV8280-D**

PROTECTION  
LIMIT  
SIGNAL

00  
-dB

MUTE

A B C D E F G H  
SELECT

POWER AMPLIFIER **XMV8140-D**

PROTECTION  
LIMIT  
SIGNAL

00  
-dB

MUTE

A B C D E F G H  
SELECT

8N52 8N5132 8L78  
DSW



# |XMV SERIES



CONFERENCE



BACKGROUND  
MUSIC



ACOUSTICS

**YDIF**

**Dante™**



| <b>XMV4140</b> | <b>XMV4280</b> | <b>XMV4140-D</b>  | <b>XMV4280-D</b>  |
|----------------|----------------|-------------------|-------------------|
| 4 x 140W@8Ω    | 4 x 280W@8Ω    | 4 x 140W@8Ω Dante | 4 x 280W@8Ω Dante |

| <b>XMV8140</b> | <b>XMV8280</b> | <b>XMV8140-D</b>  | <b>XMV8280-D</b>  |
|----------------|----------------|-------------------|-------------------|
| 8 x 140W@8Ω    | 8 x 280W@8Ω    | 8 x 140W@8Ω Dante | 8 x 280W@8Ω Dante |

\* **YDIF** – a format developed by Yamaha, supporting the transport of 16 audio channels, including synchronisation, through a single CAT5E cable. YDIF allows the connection of MTX matrix processors, XMV power amplifiers and Ex i/o interface units with cable lengths of maximum 30 meters.

\* **DANTE** – A multi-channel digital media networking technology based on IT industry standards, with very low latency and highly accurate synchronization. Dante supports a channel capacity of more than 500 channels per link.

## MULTI-CHANNEL POWER AMPLIFIERS WITH FEATURES DESIGNED SPECIFICALLY TO BENEFIT INSTALLATION SOUND SYSTEMS.

- Four-channel or eight-channel power amp that can operate in both high-impedance (70V/100V line) or low-impedance (4Ω/8Ω) modes simultaneously.
- 70V or 100V mode can be assigned to every pair of channels without affecting the number of available output channels.
- The newly developed Double Power Mode function effectively doubles the output power of selected channels.
- Equipped with either YDIF digital audio format or Audinate's digital audio network Dante for simple and fast system configuration.
- Easy setting such as the mute on/off or attenuator changes with MTX Editor when used in system with MTX Series.
- An innovative, new, patent pending circuit improves the already highly efficient Class D circuit topology, bringing the efficiency level of the amplifier's output stage up to over 90%.
- Feature a Power Factor Correction equipped switching power supply, ensuring harmonic control and decreasing the amount of current draw while maintaining the same output power.
- Powerful, intelligent protection features for more reliable operation.

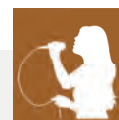
## GENERAL SPECIFICATIONS

| Model                   |                                                                                                                                                                                  |                                    | XMV8280      | XMV8140                 | XMV8280-D                            | XMV8140-D    | XMV4280                                 | XMV4140      | XMV4280-D                            | XMV4140-D    |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------|-------------------------|--------------------------------------|--------------|-----------------------------------------|--------------|--------------------------------------|--------------|
| Output Power            | 1kHz                                                                                                                                                                             | 4Ω                                 | 280W x 8     | 140W x 8                | 280W x 8                             | 140W x 8     | 280W x 4                                | 140W x 4     | 280W x 4                             | 140W x 4     |
|                         | THD+N=1%,                                                                                                                                                                        | 8Ω                                 | 280W x 8     | 140W x 8                | 280W x 8                             | 140W x 8     | 280W x 4                                | 140W x 4     | 280W x 4                             | 140W x 4     |
|                         | 20ms burst                                                                                                                                                                       | 4Ω/ Double Power Mode              | 560W x 4     | 280W x 4                | 560W x 4                             | 280W x 4     | 560W x 2                                | 280W x 2     | 560W x 2                             | 280W x 2     |
|                         |                                                                                                                                                                                  | 8Ω/ Double Power Mode              | 560W x 4     | 280W x 4                | 560W x 4                             | 280W x 4     | 560W x 2                                | 280W x 2     | 560W x 2                             | 280W x 2     |
|                         | High impedance                                                                                                                                                                   | 100V line                          | 250W x 8/40Ω | 125W x 8/80Ω            | 250W x 8/40Ω                         | 125W x 8/80Ω | 250W x 4/40Ω                            | 125W x 4/80Ω | 250W x 4/40Ω                         | 125W x 4/80Ω |
|                         | 70V line                                                                                                                                                                         | 250W x 8/20Ω                       | 125W x 8/40Ω | 250W x 8/20Ω            | 125W x 8/40Ω                         | 250W x 4/20Ω | 125W x 4/40Ω                            | 250W x 4/20Ω | 125W x 4/40Ω                         |              |
| 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       | RL=8Ω                                                                                                                                                                            | +4dBu                              |              |                         |                                      |              |                                         |              |                                      |              |
| S/N Ratio               | A-weighted                                                                                                                                                                       | ≥ 100dB                            |              |                         |                                      |              |                                         |              |                                      |              |
| Power Consumption       | 1/8 power (4Ω pink noise)                                                                                                                                                        |                                    | 450W         | 250W                    | 450W                                 | 250W         | 250W                                    | 150W         | 250W                                 | 150W         |
|                         | Idle (4Ω)                                                                                                                                                                        |                                    | 73W          | 73W                     | 73W                                  | 73W          | 37W                                     | 37W          | 37W                                  | 37W          |
|                         | Standby                                                                                                                                                                          |                                    | 23W          | 23W                     | 23W                                  | 23W          | 18.5W                                   | 18.5W        | 18.5W                                | 18.5W        |
| THD+N                   | 1kHz, half power                                                                                                                                                                 | ≤ 0.2%                             |              |                         |                                      |              |                                         |              |                                      |              |
| Frequency Response      | RL=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                                                                                                                                                                     | Euroblock x 4 (6P, balanced)       |              |                         |                                      |              | Euroblock x 2 (6P, balanced)            |              |                                      |              |
|                         | Digital Input / Output                                                                                                                                                           | RJ45 x 2 (YDIF IN / OUT)           |              |                         | RJ45 x 2 (Dante PRIMARY / SECONDARY) |              | RJ45 x 2 (YDIF IN / OUT)                |              | RJ45 x 2 (Dante PRIMARY / SECONDARY) |              |
|                         | Speaker Output                                                                                                                                                                   | Barrier strip x 8 pairs            |              |                         |                                      |              | Barrier strip x 4 pairs                 |              |                                      |              |
|                         | Network                                                                                                                                                                          | RJ45 x 1                           |              | Shared with Dante ports |                                      |              | RJ45 x 1                                |              | Shared with Dante ports              |              |
|                         | Remote, Fault Output                                                                                                                                                             | Euroblock (3P) x 1                 |              |                         |                                      |              | Euroblock (3P) x 1                      |              |                                      |              |
|                         | AC IN                                                                                                                                                                            | AC Inlet x 1                       |              |                         |                                      |              | AC Inlet x 1                            |              |                                      |              |
| Load Protection         | POWER switch on/off: Output mute, DC-fault: Power supply shuts down, Clip limiting                                                                                               |                                    |              |                         |                                      |              |                                         |              |                                      |              |
| Amplifier Protection    | Thermal: Output mute (heatsink temp ≥90°C) (Restored automatically), Overcurrent: Output mute (Restored automatically), Low load impedance: Output mute (Restored automatically) |                                    |              |                         |                                      |              |                                         |              |                                      |              |
| Power Supply Protection | Thermal: Amplifier shuts down automatically (heatsink temp ≥100°C) , Integrated power: Gain reduction (Restored automatically)                                                   |                                    |              |                         |                                      |              |                                         |              |                                      |              |
| Cooling Fan             | 3-Speed fan x 2, front-to-back airflow                                                                                                                                           |                                    |              |                         |                                      |              |                                         |              |                                      |              |
| Power Requirements      | 100V, 120V, 230V-240V; 50Hz/60Hz                                                                                                                                                 |                                    |              |                         |                                      |              |                                         |              |                                      |              |
| Dimensions (WxHxD)      | 480 x 88 x 422mm (18.9" x 3.5" x 16.6")                                                                                                                                          |                                    |              |                         |                                      |              | 480 x 88 x 422mm (18.9" x 3.5" x 16.6") |              |                                      |              |
| Weight                  | 10.1kg (22.3lbs)                                                                                                                                                                 |                                    |              |                         |                                      |              | 8.1kg (17.9lbs)                         |              |                                      |              |

# | XM SERIES



CONFERENCE

BACKGROUND  
MUSIC

LIVE



| XM4180      | XM4080     |
|-------------|------------|
| 4 x 180W@8Ω | 4 x 80W@8Ω |

## COMPACT, LIGHTWEIGHT 2U AMPS PROVIDE FOUR CHANNELS OF HIGH-POWER AMPLIFICATION.

- Ideal for theatre, hall, and conference room installations.
- Four independent channels of power amplification in convenient, manageable units (XM4180 = 180W per channel, XM4080 = 80W per channel).
- Stereo, parallel, or bridged operation switchable from the rear panel.
- Balanced XLR and Euroblock connectors for easy, secure input connection.
- Output connections via five-way binding posts.
- High-pass filter with a selectable 20 Hz or 55 Hz roll-off frequency.
- Precision attenuators and independent indicators for each channel allow accurate level setup and status monitoring.
- The XM4180 can also function as a distribution power amp to drive multiple high-impedance speakers via 70V line output.
- Rear-panel Monitor/Remote jack allows the amp to be monitored and controlled from an external device.

## GENERAL SPECIFICATIONS

| Model                   |                                                 |           | XM4180                                                                                                        | XM4080          |
|-------------------------|-------------------------------------------------|-----------|---------------------------------------------------------------------------------------------------------------|-----------------|
| Output Power            | 1kHz, THD+N = 1%                                | 4Ω        | 250W x 4                                                                                                      | 120W x 4        |
|                         |                                                 | 8Ω        | 210W x 4                                                                                                      | 90W x 4         |
|                         |                                                 | 8Ω bridge | 500W x 2                                                                                                      | 240W x 2        |
|                         | 20Hz ~ 20kHz, THD+N = 0.1%                      | 4Ω        | 230W x 4                                                                                                      | 115W x 4        |
|                         |                                                 | 8Ω        | 180W x 4                                                                                                      | 80W x 4         |
|                         |                                                 | 8Ω bridge | 460W x 2                                                                                                      | 230W x 2        |
|                         | High impedance                                  | 70V Line  | 300W x 2/16Ω (Bridge)                                                                                         | -               |
| Voltage Gain            | RL=8Ω                                           |           | 30dB                                                                                                          | 26dB            |
| Input Sensitivity       | RL=8Ω                                           |           | +4dBu                                                                                                         |                 |
| S/N Ratio               | 20Hz~20kHz, DIN AUDIO                           |           | 103dB                                                                                                         |                 |
| Power Consumption       | 1/8 power (4Ω pink noise)                       |           | 600W                                                                                                          | 400W            |
|                         | Idle                                            |           | 40W                                                                                                           | 40W             |
|                         | Standby                                         |           | 5W                                                                                                            | 5W              |
| THD+N                   | 20Hz~20kHz, 1/2 power, RL=4Ω                    |           | Less than 0.1%                                                                                                |                 |
| Frequency Response      | RL=8Ω, Po=1W, 20Hz - 20kHz                      |           | +0dB, -0.5dB                                                                                                  |                 |
| Crosstalk               | 1kHz, half power, 8Ω Att. max, input 600Ω shunt |           | Less than -60dB                                                                                               |                 |
| Damping Factor          | RL=8Ω, 1kHz                                     |           | More than 100                                                                                                 |                 |
| Maximum Input Level     |                                                 |           | +22dBu                                                                                                        |                 |
| Input Impedance         |                                                 |           | 20kΩ (balanced), 10kΩ (unbalanced)                                                                            |                 |
| Controls                | Front Panel                                     |           | POWER switch x 1 (push on/push off), Attenuator x 4 (31 position)                                             |                 |
|                         | Rear panel                                      |           | MODE switch x 2 (STEREO/BRIDGE/PARALLEL), HPF switch x 2 (20Hz/55Hz/OFF) (12dB/oct)                           |                 |
| Connectors              | Input                                           |           | XLR-3-31 type x 4, Euroblock connector x 4 pairs (balanced)                                                   |                 |
|                         | Output                                          |           | 5-way binding post x 4 pairs                                                                                  |                 |
|                         | Monitor/Remote                                  |           | D-SUB 15P x 1                                                                                                 |                 |
|                         | AC IN                                           |           | AC inlet x 1                                                                                                  |                 |
| Indicators              |                                                 |           | POWER/STAND-BY x 1 (Green/Orange), PROTECT/MUTE x 4 (Red), SIGNAL x 4 (Green), CLIP/LIMIT x 4 (Red)           |                 |
| Load Protection         |                                                 |           | POWER switch on/off mute, DC-fault: output relay Off (Restored automatically) Clip Limiting: THD ≥ 0.5%       |                 |
| Amplifier Protection    |                                                 |           | Thermal: Output Mute (heatsink temp ≥ 90°C) (Restored automatically), VI limiter (RL ≤ 2Ω): Limits the output |                 |
| Power Supply Protection |                                                 |           | Thermal: Amplifier shuts down automatically (Operation not restored automatically, heatsink temp ≥ 90°C)      |                 |
| Cooling Fan             |                                                 |           | Variable-speed fan x 1                                                                                        |                 |
| Power Requirements      |                                                 |           | 120V, 220V-240V; 50Hz/60Hz                                                                                    |                 |
| Dimensions (WxHxD)      |                                                 |           | 480 x 88 x 412mm (18-7/8" x 3-7/16" x 16-1/4")                                                                |                 |
| Weight                  |                                                 |           | 10kg (22lbs)                                                                                                  | 9.8kg (21.6lbs) |
| Included Accessories    |                                                 |           | Power cable x 1, Security cover x 1, Euroblock connector x 4 (3P), Owner's manual                             |                 |

# |XH200



CONFERENCE



BACKGROUND  
MUSIC



XH200

## XH200

2 x 200W@100V

### COMPACT, LIGHTWEIGHT 200W + 200W DISTRIBUTION POWER AMP FOR INSTALLED SYSTEMS.

- XH200 featuring a 2-channel high-impedance power amplifier (200W/25 ohms @70V, 200W/50 ohms @100V).
- The high-efficiency switching power supply allows for a compact (2U size) and lightweight design (9.8kg).
- Highly precise dB display detented attenuators, dedicated to each channel, are located on the front panel. The models also feature a protection circuit that allows you to monitor its status with an indicator. Attention to detail for better practicality can be found wherever you look.
- Equipped with Euro-block inputs and barrier strip terminal outputs. Also equipped with monitor/remote terminals and a sub-sonic filter. The models have been designed with all sorts of usage in mind.



## GENERAL SPECIFICATIONS

|                         |                                                 |                       |                                                                                                               |
|-------------------------|-------------------------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------|
| OUTPUT POWER            | High Impedance                                  | 100V Line<br>(RL=50Ω) | 200W x 2                                                                                                      |
|                         |                                                 | 70V Line<br>(RL=25Ω)  | 200W x 2                                                                                                      |
| VOLTAGE GAIN            |                                                 |                       | 38dB (100V)/35dB (70V)                                                                                        |
| INPUT SENSITIVITY       | RL=8Ω                                           |                       | +4dBu                                                                                                         |
| S/N RATIO               | DIN AUDIO                                       |                       | 103dB                                                                                                         |
| POWER                   | 1/8 power<br>(70V, RL=25Ω/pink noise)           |                       | 400W                                                                                                          |
| CONSUMPTION             | Idle                                            |                       | 40W                                                                                                           |
|                         | Standby                                         |                       | 5W                                                                                                            |
| THD+N                   | 40Hz~20kHz, 1/2 power                           |                       | Less than 0.1%                                                                                                |
| FREQUENCY RESPONSE      | Po=1W, HPF=40Hz, 80Hz~20kHz                     |                       | +0dB, -0.5dB                                                                                                  |
| CROSSTALK               | 1kHz, half power, Att. max, input<br>600Ω shunt |                       | Less than -60dB                                                                                               |
| MAXIMUM INPUT LEVEL     |                                                 |                       | +22dBu                                                                                                        |
| INPUT IMPE-DANCE        |                                                 |                       | 20kΩ (balanced), 10kΩ (unbalanced)                                                                            |
| CONTROLS                | Front Panel                                     |                       | POWER switch x 1 (push on/push off), Attenuator x 2 (31 position)                                             |
|                         | Rear panel                                      |                       | OUTPUT VOLTAGE switch x 1 (100V/70V), HPF switch x 1 (40Hz/80Hz, 12dB/oct)                                    |
| CONNECTORS              | Input                                           |                       | Euroblock connector x 2 pairs (balanced)                                                                      |
|                         | Output                                          |                       | Barrier strip x 2 pairs                                                                                       |
|                         | Monitor/Remote                                  |                       | D-SUB 15P x 1                                                                                                 |
|                         | AC IN                                           |                       | AC inlet x 1                                                                                                  |
| INDICATORS              |                                                 |                       | POWER/STAND-BY x 1 (Green/Orange), PROTECT/MUTE x 2 (Red), SIGNAL x 2 (Green), CLIP/LIMIT x 2 (Red)           |
| LOAD PROTECTION         |                                                 |                       | POWER switch on/off mute, DC-fault: Output relay Off (Restored automatically), Clip limiting: THD ≥ 0.5%      |
| AMPLIFIER PROTECTION    |                                                 |                       | Thermal: Output Mute (heatsink temp ≥ 90 °C) (Restored automatically),<br>VI limiter (RL ≤ 16Ω): Output limit |
| POWER SUPPLY PROTECTION |                                                 |                       | Thermal: Amplifier shuts down automatically (Operation not restored automatically,<br>heatsink temp ≥ 90 °C)  |
| COOLING FAN             |                                                 |                       | Variable-speed fan x 1                                                                                        |
| POWER REQUIREMENTS      |                                                 |                       | 120V, 220V-240V; 50Hz/60Hz                                                                                    |
| DIMENSIONS (WXHxD)      |                                                 |                       | 480 x 88 x 412mm (18-7/8" x 3-7/16" x 16-1/4")                                                                |
| WEIGHT                  |                                                 |                       | 9.8kg (21.6lbs)                                                                                               |
| INCLUDED ACCESSORIES    |                                                 |                       | Power cable x 1, Security cover x 1, Euroblock connector x 2 (3P), Owner's manual                             |

\* Half power = 1/2 power output level

# |MA MIXING AMPLIFIERS & PA AMPLIFIERS



CONFERENCE

BACKGROUND  
MUSIC

With quick, easy setup and intuitive operation, the compact MA and PA series power amplifiers make it easier than ever to bring your commercial space to life. The **MA2030A** and **PA2030A** are ideal audio solutions for retail stores, eateries, classrooms or public facilities like hospitals. The **MA2120** and **PA2120** meet the demands of a wide range of applications requiring higher power as well as more flexible DSP functionality and zone control. All models combine approachable, unobtrusive design with efficient, flexible performance. The **MA2030A** and **MA2120** offer mixing capability with source EQ (Bass/Treble) control, as well as some of the same state-of-the-art DSP technologies that are acclaimed features of professional Yamaha audio gear. Whether providing background music for a café or restaurant or powering a conference room or other application requiring microphone input, the MA/PA series amplifiers are simple yet powerful tools that can help establish an ideal commercial sound environment.

- Simple, user-friendly interface - Stereo and microphone inputs (MA series)
- DSP functions optimized for background music (MA series) - Switchable for low (3/4/8 Ω) and high (70/100 V) impedance speaker systems
- Stereo source EQ with enhancer function (MA series)
- EQ for optimum performance with Yamaha VXC/VXS series speakers built in
- Easy service zone expansion with PA series amplifiers (PA2030a excluded)
- Optional DCP control panels allow convenient remote volume control, microphone ON/OFF switching and chime activation (PA2030a excluded)
- Industry leading Yamaha quality control and reliability - Compact, space-saving design\*



MA2030A



PA2030A



MA2120



PA2120



\* All models are naturally cooled designs that require sufficient surrounding space for airflow.

# GENERAL SPECIFICATIONS

| MODEL                     |                           | MA2120                                                                                                                                                                                                                                                          | PA2120                                                                                                                                                                                                                    | MA2030A                                                                                                                                                                                                              | PA2030A                                                                                                                                                                           |
|---------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Output power              | 1kHz (THD+N=1%: 3Ω)       | 100W x 2 (20ms Burst)                                                                                                                                                                                                                                           | 100W x 2 (20ms Burst)                                                                                                                                                                                                     | 30W x 2 (20ms Burst)                                                                                                                                                                                                 | 30W x 2 (20ms Burst)                                                                                                                                                              |
|                           | High impedance: 100V line | 120W x 2 or 200W x 1                                                                                                                                                                                                                                            | 120W x 2 or 200W x 1                                                                                                                                                                                                      | 60W x 1                                                                                                                                                                                                              | 60W x 1                                                                                                                                                                           |
| Total harmonic distortion |                           | ≤0.2% (Line in to Speaker out, Half power @1kHz, 3Ω/4Ω/8Ω), ≤0.2% (Line in to Speaker out, Half Power @1kHz, 70V/100V, 120W/200W)                                                                                                                               |                                                                                                                                                                                                                           | ≤0.1% (Stereo in to Speaker out @1kHz, Half power, 3Ω/4Ω/8Ω), ≤0.2% (Stereo in to Speaker out @1kHz, Half power, 70V/100V)                                                                                           |                                                                                                                                                                                   |
| Frequency response        |                           | 0dB, -2.5dB, +1.0dB (Line in to Line out, 20Hz to 20kHz), 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 50Hz to 20kHz, 1W, 3Ω/4Ω/8Ω), 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 90Hz to 20kHz, 1W, 70V/100V, 120W/200W)                                       | 0dB, -2.5dB, +1.0dB (Line in to THRU OUT, 20Hz to 20kHz), 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 50Hz to 20kHz, 1W, 3Ω/4Ω/8Ω), 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 90Hz to 20kHz, 1W, 70V/100V, 120W/200W) | 0dB, -2.5dB, +1.0dB (Stereo in to Line out, 20Hz to 20kHz), 0dB, -3.0dB, +1.0dB (Stereo in to Speaker out, 50Hz to 20kHz, 1W, 3Ω/4Ω/8Ω), 0dB, -3.0dB, +1.0dB (Stereo in to Speaker out, 90Hz to 20kHz, 1W, 70V/100V) | 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 50Hz to 20kHz, 1W, 3Ω/4Ω/8Ω), 0dB, -3.0dB, +1.0dB (Line in to Speaker out, 90Hz to 20kHz, 1W, 70V/100V)                              |
| Crosstalk                 |                           | ≤ -70dB (MIC/LINE input to other MIC/LINE input)                                                                                                                                                                                                                | -                                                                                                                                                                                                                         | ≤ -70dB (Stereo in to other Stereo in)                                                                                                                                                                               | -                                                                                                                                                                                 |
| I/O Connectors            | Mic/Line Input            | Input 1-6: 3.5mm Euroblock (6-pin, balanced) x 3                                                                                                                                                                                                                | -                                                                                                                                                                                                                         | -                                                                                                                                                                                                                    | -                                                                                                                                                                                 |
|                           | Line Input                | Input 1-6: 3.5mm Euroblock (6-pin, balanced) x 3                                                                                                                                                                                                                | Input A-B: MONO RCA pin x 2 (unbalanced) or 3.5mm Euro block (6-pin, balanced)                                                                                                                                            | -                                                                                                                                                                                                                    | -                                                                                                                                                                                 |
|                           | Speaker Output            | Barrier strip x 2 pairs                                                                                                                                                                                                                                         | Barrier strip x 2 pairs                                                                                                                                                                                                   | Barrier strip x 2 pairs                                                                                                                                                                                              | Barrier strip x 2 pairs                                                                                                                                                           |
|                           | Line Out                  | LINE OUT: MONO RCA pin x2 (unbalanced)                                                                                                                                                                                                                          | THRU OUT: MONO RCA pin (unbalanced) x2                                                                                                                                                                                    | Stereo RCA pin (unbalanced)                                                                                                                                                                                          | -                                                                                                                                                                                 |
|                           | Control ports             | RJ-45 (for DCP4V4S, DCP1V4S, DCP4S), Remote (3.5mm Euro block 3-pin)                                                                                                                                                                                            | RJ-45 (for DCP4V4S, DCP1V4S, DCP4S), Remote (3.5mm Euro block 3-pin)                                                                                                                                                      | RJ-45 (for DCP1V4S)                                                                                                                                                                                                  | -                                                                                                                                                                                 |
|                           | 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, balanced) x 2                                                                                                       |
| Input Level               |                           | Mic input: -56dBu (Sensitivity), -36dBu (Nominal), -8dBu (Max before clip) / Line input (unbalanced): -30dBV (Sensitivity), -10dBV (Nominal), +10dBV (Max before clip) / Line input (balanced): -24dBu (Sensitivity), -4dBu (Nominal), +24dBu (Max before clip) | Line input (unbalanced): -10dBV (Sensitivity), -10dBV (Nominal), +10dBV (Max before clip) / Line input (balanced): +4dBu (Sensitivity), +4dBu (Nominal), +24dBu (Max before clip)                                         | Mic input: -76 dBu (Sensitivity), -66 dBu (Nominal), -22 dBu (Max before clip) / Line input: -10dBV (Sensitivity), -10dBV (Nominal), +10dBV (Max before clip)                                                        | Line input (unbalanced): -10dBV (Sensitivity), -10dBV (Nominal), +10dBV (Max before clip) / Line input (balanced): +4dBu (Sensitivity), +4dBu (Nominal), +24dBu (Max before clip) |
| Output Level              |                           | -10dBV (LINE OUT, Nominal)                                                                                                                                                                                                                                      | -10dBV (THRU OUT, Nominal)                                                                                                                                                                                                | -10dBV (LINE OUT, Nominal)                                                                                                                                                                                           | -                                                                                                                                                                                 |
| Processors                |                           | Speaker EQ (VXS:Full Range, VXC, VXS10S/ST), HPF (150Hz), LPF (150Hz, 200Hz)                                                                                                                                                                                    | Speaker EQ (VXS:Full Range, VXC, VXS10S/ST), HPF (150Hz), LPF (150Hz, 200Hz)                                                                                                                                              | Speaker EQ (VXS:Full Range, VXC), HPF (150Hz)                                                                                                                                                                        | Speaker EQ (VXS:Full Range, VXC, VXS10S/ST), HPF (150Hz), LPF (150Hz, 200Hz)                                                                                                      |
| Protection circuit        | Load protection           | Power switch on/off: Mute the output*, Output voltage protection: Compress the output*, DC-fault: Power supply shutdown (*Restored automatically)                                                                                                               |                                                                                                                                                                                                                           |                                                                                                                                                                                                                      |                                                                                                                                                                                   |
|                           | Amplifier protection      | Thermal: Limit the output* → Mute* → Shutdown, Over current: Mute the output*, Integrated power limit: Compress the output* (*Restored automatically)                                                                                                           |                                                                                                                                                                                                                           |                                                                                                                                                                                                                      |                                                                                                                                                                                   |
|                           | Power supply protection   | Thermal: Power supply shutdown, Over voltage: Power supply shutdown, Over current: Limit the output* → Power supply shutdown (*Restored automatically)                                                                                                          |                                                                                                                                                                                                                           | Thermal: Power supply shutdown, Over voltage: Power supply shutdown, Over current: Power supply shutdown                                                                                                             |                                                                                                                                                                                   |
| Amplifier class           |                           | Class D                                                                                                                                                                                                                                                         | Class D                                                                                                                                                                                                                   | Class D                                                                                                                                                                                                              | Class D                                                                                                                                                                           |
| Cooling                   |                           | Conventional cooling, bottom to up airflow                                                                                                                                                                                                                      |                                                                                                                                                                                                                           |                                                                                                                                                                                                                      |                                                                                                                                                                                   |
| Power requirements        |                           | 100V, 120V, 230V - 240V, 50Hz / 60Hz                                                                                                                                                                                                                            | 100V, 120V, 230V - 240V, 50Hz / 60Hz                                                                                                                                                                                      | 100V, 120V, 230V-240V; 50Hz/60Hz                                                                                                                                                                                     | 100V, 120V, 230V-240V; 50Hz/60Hz                                                                                                                                                  |
| Power consumption         |                           | 60W (1/8 max power, 4Ω, AC100V, pink noise at all channels)                                                                                                                                                                                                     | 60W (1/8 max power, 4Ω, AC100V, pink noise at all channels)                                                                                                                                                               | 30W (1/8max. power, 3Ω, AC 100V, pink noise at all channels)                                                                                                                                                         | 30W (1/8max. power, 3Ω, AC 100V, pink noise at all channels)                                                                                                                      |
| Dimensions                |                           | WxHxD 480x45x379 mm <sup>-1</sup>                                                                                                                                                                                                                               | 480x45x379 mm <sup>-1</sup>                                                                                                                                                                                               | 215x54x288 mm <sup>-1</sup>                                                                                                                                                                                          | 215x54x288 mm <sup>-1</sup>                                                                                                                                                       |
| Net weight                |                           | 4.9kg (10.8lbs)                                                                                                                                                                                                                                                 | 4.8kg (10.6lbs)                                                                                                                                                                                                           | 1.8kg (4.0lbs)                                                                                                                                                                                                       | 1.8kg (4.0lbs)                                                                                                                                                                    |
| Accessories               |                           | AC power cable, 3.5mm Euroblock plug (6-pin) x 3, Euroblock plug (3-pin) x 1, Owner's manual, Setup guide                                                                                                                                                       | AC power cable, 3.5mm Euroblock plug (6-pin) x 1, Euroblock plug (3-pin) x 1, Owner's manual, Specification sheet                                                                                                         | AC power cable, 3.5mm Euroblock plug (3-pin) x 1, Owner's manual, Specification sheet                                                                                                                                | AC power cable, 3.5mm Euroblock plug (3-pin) x 2, Owner's manual, Specification sheet                                                                                             |
| Options                   |                           | DCP4V4S, DCP1V4S, DCP4S (Digital Control Panel)                                                                                                                                                                                                                 | DCP4V4S, DCP1V4S, DCP4S (Digital Control Panel)                                                                                                                                                                           | RKH1 (Rack-mount Accessory), DCP1V4S (Digital Control Panel)                                                                                                                                                         | RKH1 (Rack-mount Accessory)                                                                                                                                                       |
| Certificate               |                           | ENERGY STAR                                                                                                                                                                                                                                                     | ENERGY STAR                                                                                                                                                                                                               | -                                                                                                                                                                                                                    | -                                                                                                                                                                                 |
| Others                    |                           | Operating Temperature: 0°C to +40°C, Storage Temperature: -20°C to +60°C, Rack-mountable when ensuring sufficient ventilation above and below the unit                                                                                                          |                                                                                                                                                                                                                           |                                                                                                                                                                                                                      |                                                                                                                                                                                   |

# |PC-1N SERIES



CONFERENCE



BACKGROUND  
MUSIC



LIVE



ACOUSTICS



| PC9501N      | PC6501N      | PC4801N     | PC3301N     | PC2001N     |
|--------------|--------------|-------------|-------------|-------------|
| 2 x 1600W@4Ω | 2 x 1100W@4Ω | 2 x 850W@4Ω | 2 x 600W@4Ω | 2 x 400W@4Ω |

## NEW BENCHMARKS FOR QUALITY, RELIABILITY, AND VERSATILITY IN PROFESSIONAL POWER APPLICATIONS

- In-depth analysis and circuit innovation, meticulous part selection, and advanced circuit mounting methods deliver outstanding sound quality with the lowest possible distortion.
- Advanced EEEngine technology achieves high-quality sound and exceptional power output with dramatically reduced power consumption.
- Selectable stereo, dual mono and bridged mono modes for maximum versatility.
- A comprehensive selection of rear-panel terminals and connectors for versatile connectivity.
- An impressive array of protection circuitry and indicators ensure stable operation and accurate monitoring.
- Built-in high-pass (subsonic) filter cuts frequencies below 20 Hz.
- The PC3301N has been specially designed for use as a distribution amplifier in installations, and is capable of driving high-impedance loads with multiple parallel-connected 100-volt line speakers.
- Ideal matches for the DME64N/24N Digital Mixing Engines and Installation Series speakers.
- PC01N series is available on a built to order schedule

# GENERAL SPECIFICATIONS

| Model                |                                                    |                                                                                                                   | PC9501N   | PC6501N   | PC4801N              | PC3301N  | PC2001N       | PC9501N       | PC6501N   | PC4801N              | PC3301N  | PC2001N       |  |
|----------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------|-----------|----------------------|----------|---------------|---------------|-----------|----------------------|----------|---------------|--|
|                      |                                                    |                                                                                                                   | 120V/240V |           |                      |          |               |               |           | 230V                 |          |               |  |
| Output Power         | 1kHz, THD+N = 1%                                   | 4Ω                                                                                                                | 1600W x 2 | 1100W x 2 | 850W x 2             | 600W x 2 | 400W x 2      | 1650W x 2     | 1150W x 2 | 800W x 2             | 700W x 2 | 450W x 2      |  |
|                      |                                                    | 8Ω                                                                                                                | 1000W x 2 | 700W x 2  | 550W x 2             | 350W x 2 | 230W x 2      | 1050W x 2     | 750W x 2  | 500W x 2             | 400W x 2 | 250W x 2      |  |
|                      |                                                    | 8Ω bridge                                                                                                         | 3200W     | 2200W     | 1700W                | 1200W    | 800W          | 3300W         | 2300W     | 1600W                | 1400W    | 900W          |  |
|                      | 1kHz, 20ms burst                                   | 2Ω                                                                                                                | 2300W x 2 | 1500W x 2 | 1200W x 2            | 800W x 2 | 500W x 2      | 2300W x 2     | 1600W x 2 | 1200W x 2            | 900W x 2 | 600W x 2      |  |
|                      |                                                    | 4Ω bridge                                                                                                         | 4600W     | 3000W     | 2400W                | 1600W    | 1000W         | 4600W         | 3200W     | 2400W                | 1800W    | 1200W         |  |
|                      | 20Hz ~ 20kHz,                                      | 4Ω                                                                                                                | 1400W x 2 | 930W x 2  | 725W x 2             | 525W x 2 | 325W x 2      | 1500W x 2     | 930W x 2  | 700W x 2             | 550W x 2 | 400W x 2      |  |
|                      | THD+N = 0.1%                                       | 8Ω                                                                                                                | 925W x 2  | 650W x 2  | 475W x 2             | 330W x 2 | 200W x 2      | 950W x 2      | 650W x 2  | 475W x 2             | 350W x 2 | 230W x 2      |  |
|                      |                                                    | 8Ω bridge                                                                                                         | 2800W     | 1860W     | 1450W                | 1050W    | 650W          | 3000W         | 1860W     | 1400W                | 1100W    | 800W          |  |
| High Impedance       | 100V Line                                          | -                                                                                                                 | -         | -         | 625W/16Ω<br>[Bridge] | -        | -             | -             | -         | 625W/16Ω<br>[Bridge] | -        |               |  |
| Voltage Gain         | RL=8Ω                                              | 32dB                                                                                                              |           |           |                      |          |               |               | 32dB      |                      |          |               |  |
| Input Sensitivity    | RL=8Ω                                              | +9.2dBu                                                                                                           | +7.7dBu   | +6.7dBu   | +4.7dBu              | +2.9dBu  | +9.5dBu       | +8.0dBu       | +6.2dBu   | +5.3dBu              | +3.2dBu  |               |  |
| S/N Ratio            | 20Hz~20kHz, DIN AUDIO                              | 106dB                                                                                                             | 105dB     | 103dB     | 101dB                | 100dB    | 106dB         | 105dB         | 103dB     | 101dB                | 100dB    |               |  |
| Power Consumption    | 1/8 power (4Ω pink noise)                          | 750W/1000W                                                                                                        | 700W/800W | 450W/600W | 450W/500W            | 350W     | 1100W         | 800W          | 600W      | 500W                 | 350W     |               |  |
|                      | Idle                                               | 55W                                                                                                               | 40W       | 40W       | 40W                  | 40W      | 55W           | 40W           | 40W       | 40W                  | 40W      |               |  |
| THD+N                | 20Hz~20kHz, 1/2 power, RL=4Ω                       | Less than 0.1%                                                                                                    |           |           |                      |          |               |               |           |                      |          |               |  |
| Frequency Response   | RL=8Ω, Po=1W, 20Hz - 20kHz                         | +0dB, -1.0dB                                                                                                      |           |           |                      |          |               |               |           |                      |          |               |  |
| Crosstalk            | 1kHz, half power, 8Ω<br>Att. max, input 600Ω shunt | Less than -70dB                                                                                                   |           |           |                      |          |               |               |           |                      |          |               |  |
| Damping Factor       | RL=8Ω, 1kHz                                        | More than 800                                                                                                     |           |           |                      |          | More than 500 | More than 800 |           |                      |          | More than 500 |  |
| Maximum Input Level  |                                                    | +22dBu                                                                                                            |           |           |                      |          |               |               |           |                      |          |               |  |
| Input Impedance      |                                                    | 20kΩ (balanced), 10kΩ (unbalanced)                                                                                |           |           |                      |          |               |               |           |                      |          |               |  |
| Controls             | Front Panel                                        | POWER switch x 1 (push on/push off), Attenuator x 2 (3 position)                                                  |           |           |                      |          |               |               |           |                      |          |               |  |
|                      | Rear panel                                         | MODE switch x 1 (STEREO/BRIDGE/PARALLEL), HPF switch x 1 (ON/OFF) (Fc=20Hz, 12dB/oct), AMP ID switch x 1 (6P DIP) |           |           |                      |          |               |               |           |                      |          |               |  |
| Connectors           | Input                                              | XLR-3-31 type x 2, Euroblock connector x 2 pairs (balanced)                                                       |           |           |                      |          |               |               |           |                      |          |               |  |
|                      | Output                                             | Neutrik® SPEAKON® NL4 x 2, 5-way binding post x 2 pairs                                                           |           |           |                      |          |               |               |           |                      |          |               |  |
|                      | Data Port                                          | RJ45 x 2                                                                                                          |           |           |                      |          |               |               |           |                      |          |               |  |
|                      | Power                                              | AC Inlet x 1                                                                                                      |           |           |                      |          |               |               |           |                      |          |               |  |
| Indicators           |                                                    | POWER/STANDBY x 1 (Green/Orange), PROTECTION x 1 (Red), TEMP x 1 (Red) heatsink temp ≥ 85°C, REMOTE x 1 (Green)   |           |           |                      |          |               |               |           |                      |          |               |  |
| Level Meters         |                                                    | 10 point LED meter x 2                                                                                            |           |           |                      |          |               |               |           |                      |          |               |  |
| Load Protection      |                                                    | POWER switch on/off mute, DC-fault: Amplifier shuts down automatically, Clip limiting: THD ≥ 0.5%                 |           |           |                      |          |               |               |           |                      |          |               |  |
| Amplifier Protection |                                                    | Thermal (heatsink temp ≥ 90°C), VI limiter (RL ≤ 1Ω)                                                              |           |           |                      |          |               |               |           |                      |          |               |  |
| Cooling Fan          |                                                    | Variable-speed fan x 2                                                                                            |           |           |                      |          |               |               |           |                      |          |               |  |
| Power Requirements   |                                                    | 120V, 60Hz; 220V-240V, 50Hz/60Hz                                                                                  |           |           |                      |          |               |               |           |                      |          |               |  |
| Dimensions (WxHxD)   |                                                    | 480 x 88 x 456mm (18-7/8" x 3-7/16" x 17-15/16")                                                                  |           |           |                      |          |               |               |           |                      |          |               |  |
| Weight               |                                                    | 12.5kg (27.6lbs) (PC9501N: 13kg (28.6lbs))                                                                        |           |           |                      |          |               |               |           |                      |          |               |  |
| Included Accessories |                                                    | Power cable x 1, Security cover x 1, Euroblock connector x 2 (3P), Owner's manual                                 |           |           |                      |          |               |               |           |                      |          |               |  |



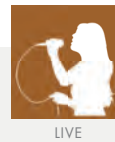
# |XP SERIES



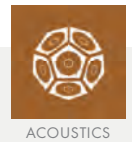
CONFERENCE



BACKGROUND  
MUSIC



LIVE



ACOUSTICS

## FIVE SUPERB AMPLIFIERS OPTIMIZED FOR INSTALLATION USE.



- Advanced circuit design and anti-vibration measures inherited from the PC-1N series deliver tight, solid lows, extraordinary midrange presence, and precisely defined highs.
- Yamaha EEEngine technology achieves unmatched efficiency.
- +4dBu/26dB/32dB gain switch for flexible level matching.
- Lightweight, compact 2U design for easy handling and installation.
- Monitor and Remote terminals for remote monitoring and control.
- Precision 1-dB/step detented attenuators.
- XLR and Euroblock input terminals.
- Speakon and 5-way binding post output terminals.
- Frequency-switchable high-pass filter for subsonic noise reduction or subwoofer matching.
- Comprehensive protection circuits, indicators and variable-speed cooling.
- Ideal matches for the DME/MTX/MRX series processors and Installation Series speakers.
- XP7000 can be used to drive 70V lines (stereo), while XP3500 is compatible with 100V lines (bridged) for high-impedance multi-speaker systems.

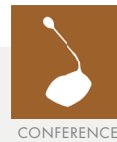


| XP7000       | XP5000      | XP3500      | XP2500      | XP1000      |
|--------------|-------------|-------------|-------------|-------------|
| 2 x 1100W@4Ω | 2 x 750W@4Ω | 2 x 590W@4Ω | 2 x 390W@4Ω | 2 x 155W@4Ω |

# GENERAL SPECIFICATIONS

| Model                |                                                 |                | XP7000                                                                                                                                                                                                                     | XP5000    | XP3500            | XP2500                 | XP1000                             | XP7000        | XP5000                 | XP3500            | XP2500                 | XP1000   |
|----------------------|-------------------------------------------------|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------|------------------------|------------------------------------|---------------|------------------------|-------------------|------------------------|----------|
|                      |                                                 |                | 120V/240V                                                                                                                                                                                                                  |           |                   |                        |                                    |               | 230V                   |                   |                        |          |
| Output Power         | 1kHz, THD+N = 1%                                | 4Ω             | 1100W x 2                                                                                                                                                                                                                  | 750W x 2  | 590W x 2          | 390W x 2               | 165W x 2 (120V)<br>155W x 2 (240V) | 1100W x 2     | 750W x 2               | 590W x 2          | 390W x 2               | 155W x 2 |
|                      |                                                 | 8Ω             | 750W x 2                                                                                                                                                                                                                   | 525W x 2  | 390W x 2          | 275W x 2               | 135W x 2 (120V)<br>120W x 2 (240V) | 750W x 2      | 525W x 2               | 390W x 2          | 275W x 2               | 125W x 2 |
|                      |                                                 | 8Ω bridge      | 2200W                                                                                                                                                                                                                      | 1500W     | 1180W             | 780W                   | 330W (120V)<br>310W (240V)         | 2200W         | 1500W                  | 1180W             | 780W                   | 310W     |
|                      | 1kHz, 20ms burst                                | 2Ω             | 1600W x 2                                                                                                                                                                                                                  | 1300W x 2 | 1000W x 2         | 650W x 2               | 250W x 2                           | 1600W x 2     | 1300W x 2              | 925W x 2          | 650W x 2               | 250W x 2 |
|                      |                                                 | 4Ω bridge      | 3200W                                                                                                                                                                                                                      | 2600W     | 2000W             | 1300W                  | 500W                               | 3200W         | 2600W                  | 1850W             | 1300W                  | 500W     |
|                      | 20Hz ~ 20kHz, THD+N = 0.1%                      | 4Ω             | 950W x 2                                                                                                                                                                                                                   | 700W x 2  | 450W x 2          | 300W x 2               | 125W x 2 (120V)<br>110W x 2 (240V) | 950W x 2      | 700W x 2               | 435W x 2          | 295W x 2               | 115W x 2 |
|                      |                                                 | 8Ω             | 700W x 2                                                                                                                                                                                                                   | 500W x 2  | 350W x 2          | 250W x 2               | 110W x 2 (120V)<br>100W x 2 (240V) | 690W x 2      | 500W x 2               | 350W x 2          | 250W x 2               | 100W x 2 |
|                      |                                                 | 8Ω bridge      | 1900W                                                                                                                                                                                                                      | 1400W     | 900W              | 600W                   | 250W (120V)<br>220W (240V)         | 1900W         | 1400W                  | 870W              | 590W                   | 230W     |
|                      | High Impedance                                  | 100V Line      | -                                                                                                                                                                                                                          | -         | 625W/16Ω (Bridge) | -                      | -                                  | -             | -                      | 625W/16Ω (Bridge) | -                      | -        |
|                      |                                                 | 70V Line       | 625W x 2/8Ω                                                                                                                                                                                                                | -         | -                 | -                      | -                                  | 625W x 2/8Ω   | -                      | -                 | -                      | -        |
| Voltage Gain         | RL=8Ω                                           |                | 26dB/32dB                                                                                                                                                                                                                  |           |                   |                        |                                    |               | 26dB/32dB              |                   |                        |          |
|                      |                                                 | +4dBu position | 35.7dBu                                                                                                                                                                                                                    | 34.2dBu   | 32.7dBu           | 31.2dBu                | 27.2dBu                            | 35.6dBu       | 34.2dBu                | 32.7dBu           | 31.2dBu                | 27.2dBu  |
| Input Sensitivity    | RL=8Ω                                           |                | +4dBu                                                                                                                                                                                                                      |           |                   |                        |                                    |               | +4dBu                  |                   |                        |          |
|                      |                                                 | 26dB position  | +13.7dBu                                                                                                                                                                                                                   | +12.2dBu  | +10.7dBu          | +9.2dBu                | +5.2dBu                            | +13.6dBu      | +12.2dBu               | +10.7dBu          | +9.2dBu                | +5.2dBu  |
|                      |                                                 | 32dB position  | +7.7dBu                                                                                                                                                                                                                    | +6.2dBu   | +4.7dBu           | +3.2dBu                | -0.8dBu                            | +7.6dBu       | +6.2dBu                | +4.7dBu           | +3.2dBu                | -0.8dBu  |
| S/N Ratio            | 20Hz~20kHz, DIN AUDIO                           |                | 104dB                                                                                                                                                                                                                      | 103dB     | 102dB             | 100dB                  | 96dB                               | 104dB         | 103dB                  | 102dB             | 100dB                  | 96dB     |
| Power Consumption    | 1/8 power (4Ω pink noise)                       |                | 650W                                                                                                                                                                                                                       | 500W      | 450W              | 320W                   | 170W                               | 650W          | 500W                   | 450W              | 320W                   | 170W     |
|                      | Idle                                            |                | 35W                                                                                                                                                                                                                        | 35W       | 30W               | 25W                    | 20W                                | 35W           | 35W                    | 30W               | 25W                    | 20W      |
|                      | Standby                                         |                | 5W                                                                                                                                                                                                                         | 5W        | 5W                | 5W                     | 5W                                 | 5W            | 5W                     | 5W                | 5W                     | 5W       |
| THD+N                | 20Hz~20kHz, 1/2 power, RL=4Ω                    |                | Less than 0.1%                                                                                                                                                                                                             |           |                   |                        |                                    |               |                        |                   |                        |          |
| Frequency Response   | RL=8Ω, Po=1W, 20Hz - 20kHz                      |                | +0dB, -1.0dB                                                                                                                                                                                                               |           |                   |                        |                                    |               |                        |                   |                        |          |
| Crosstalk            | 1kHz, half power, 8Ω Att. max, input 600Ω shunt |                | Less than -70dB                                                                                                                                                                                                            |           |                   |                        |                                    |               |                        |                   |                        |          |
| Damping Factor       | RL=8Ω, 1kHz                                     |                | More than 350                                                                                                                                                                                                              |           |                   | More than 200          |                                    | More than 350 |                        | More than 200     |                        |          |
| Maximum Input Level  |                                                 |                | +22dBu                                                                                                                                                                                                                     |           |                   |                        |                                    |               |                        |                   |                        |          |
| Input Impedance      |                                                 |                | 20kΩ (balanced), 10kΩ (unbalanced)                                                                                                                                                                                         |           |                   |                        |                                    |               |                        |                   |                        |          |
| Controls             | Front Panel                                     |                | POWER switch x 1 (push on/push off), Attenuator x 2 (31 position)                                                                                                                                                          |           |                   |                        |                                    |               |                        |                   |                        |          |
|                      | Rear panel                                      |                | MODE switch x 1 (STEREO/BRIDGE/PARALLEL), HPF switch x 2 (20Hz/55Hz/OFF) (12dB/oct), GAIN switch x 1 (+4dBu/26dB/32dB)                                                                                                     |           |                   |                        |                                    |               |                        |                   |                        |          |
| Connectors           | Input                                           |                | XLR-3-31 type x 2, Euroblock connector x 2 pairs (balanced)                                                                                                                                                                |           |                   |                        |                                    |               |                        |                   |                        |          |
|                      | Output                                          |                | Neutrik® SPEAKON® NL4 x 2, 5-way binding post x 2 pairs                                                                                                                                                                    |           |                   |                        |                                    |               |                        |                   |                        |          |
|                      | Monitor/Remote                                  |                | D-SUB 15P x 1                                                                                                                                                                                                              |           |                   |                        |                                    |               |                        |                   |                        |          |
| Indicators           |                                                 |                | POWER/STANDBY x 1 (Green/Orange), PROTECTION x 1 (Red), TEMP x 1 (Red) heatsink temp ≥ 85°C, SIGNAL x 2 (Green), CLIP/LIMIT x 2 (Red)                                                                                      |           |                   |                        |                                    |               |                        |                   |                        |          |
| Load Protection      |                                                 |                | POWER switch on/off mute, DC-fault: Amplifier shuts down automatically (XP7000, XP5000 Operation not restored automatically)<br>Output Relay Off (XP3500, XP2500, XP1000 returns automatically), Clip limiting: THD ≥ 0.5% |           |                   |                        |                                    |               |                        |                   |                        |          |
| Amplifier Protection |                                                 |                | Thermal: Output Mute (heatsink temp ≥ 90°C) (Operation not restored automatically), VI limiter (RL ≤ 1Ω): Limit the output                                                                                                 |           |                   |                        |                                    |               |                        |                   |                        |          |
| Cooling Fan          |                                                 |                | Variable-speed fan x 2                                                                                                                                                                                                     |           |                   | Variable-speed fan x 1 |                                    |               | Variable-speed fan x 2 |                   | Variable-speed fan x 1 |          |
| Power Requirements   |                                                 |                | 120V, 220V-240V; 50Hz/60Hz                                                                                                                                                                                                 |           |                   |                        |                                    |               |                        |                   |                        |          |
| Dimensions (WxHxD)   |                                                 |                | 480 x 88 x 456mm (18-7/8" x 3-7/16" x 17-15/16")                                                                                                                                                                           |           |                   |                        |                                    |               |                        |                   |                        |          |
| Weight               |                                                 |                | XP7000, XP5000, XP2500: 14kg (30.9lbs), XP3500: 15kg (33.1lbs), XP1000: 12kg (26.5lbs)                                                                                                                                     |           |                   |                        |                                    |               |                        |                   |                        |          |
| Included Accessories |                                                 |                | Security cover x 1, Euroblock connector x 2 (3P), Owner's manual                                                                                                                                                           |           |                   |                        |                                    |               |                        |                   |                        |          |

# | PX SERIES



CONFERENCE



LIVE

## DSP POWER AMPLIFIERS

Yamaha's new **PX SERIES** power amplifiers are ideal for a wide range of installation and sound reinforcement applications. This line consists of 4 models, each providing exceptional output performance and advanced processing. Equipped with smart Quick-Config mode and a wide range of Yamaha speaker presets, these amplifiers gives optimal processing and provides maximum output to the speakers. Perfect companions to Yamaha's popular speaker lines such as CBR, Club, Installation and VXS/VXC series.

- \* SOPHISTICATED DSP PROCESSING WITH FLEXIBLE ON-BOARD PEQ, CROSSOVER, FILTERS, DELAY AND LIMITER D-CONTOUR MULTI-BAND DYNAMIC PROCESSING
- \* EASY LCD OPERATION WITH USB DATA TRANSFER AND LOGGING
- \* NEWLY DEVELOPED CLASS-D AMPLIFIER ENGINE



PX10: 2 X 1000W



PX8 : 2 X 800W



PX 5 : 2 X 500W



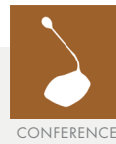
PX3 : 2 X 300W

## GENERAL SPECIFICATIONS

| MODEL                                                                     |                                       | PX10                                                                                                                                                                                                                                                                      | PX8                                                                                                                                                                     | PX5                                                                                                                                                                     | PX3                                                                                                                                                                     |
|---------------------------------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OUTPUT POWER;<br>1KHZ NON-CLIP<br>20MSEC BURST<br>BOTH CHANNELS<br>DRIVEN | 8Ω                                    | 1000W x 2                                                                                                                                                                                                                                                                 | 800W x 2                                                                                                                                                                | 500W x 2                                                                                                                                                                | 300W x 2                                                                                                                                                                |
|                                                                           | 4Ω                                    | 1200W x 2                                                                                                                                                                                                                                                                 | 1050W x 2                                                                                                                                                               | 800W x 2                                                                                                                                                                | 500W x 2                                                                                                                                                                |
|                                                                           | 2Ω                                    | 700W x 2                                                                                                                                                                                                                                                                  | 600W x 2                                                                                                                                                                | 500W x 2                                                                                                                                                                | 300W x 2                                                                                                                                                                |
|                                                                           | 8Ω/Power<br>Boost Mode                | -                                                                                                                                                                                                                                                                         | -                                                                                                                                                                       | 800W x 1                                                                                                                                                                | 600W x 1                                                                                                                                                                |
|                                                                           | 4Ω/Power<br>Boost Mode                | -                                                                                                                                                                                                                                                                         | -                                                                                                                                                                       | 1400W x 1                                                                                                                                                               | 1000W x 1                                                                                                                                                               |
| SAMPLING<br>FREQUENCY<br>RATE                                             | Internal                              | 48kHz                                                                                                                                                                                                                                                                     | 48kHz                                                                                                                                                                   | 48kHz                                                                                                                                                                   | 48kHz                                                                                                                                                                   |
| A/D D/A CONVERTERS                                                        |                                       | AD/DA: 24-bit linear, 128 times over sampling                                                                                                                                                                                                                             |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| TOTAL HARMONIC DISTORTION                                                 |                                       | 0.1% (1kHz, 10W), 0.3% (1kHz, Half power)                                                                                                                                                                                                                                 |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| FREQUENCY RESPONSE                                                        |                                       | ±1.0dB (1W, 8Ω, 20Hz to 20kHz)                                                                                                                                                                                                                                            |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| S/N RATIO                                                                 |                                       | 101dB (A-weighted, 8Ω, Gain setting = +14dBu)                                                                                                                                                                                                                             |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| CROSSTALK                                                                 |                                       | Less than -60dB (Half Power, 8Ω, 1kHz, Vol max input 150Ω shunt)                                                                                                                                                                                                          |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| VOLTAGE GAIN/<br>SENSITIVITY                                              | 8Ω Volume<br>max                      | 32.0dB/+9.3dBu<br>(Gain setting: 32dB),<br>26.0dB/+15.3dBu (Gain set-<br>ting: 26dB), 37.3dB/+4dBu<br>(Gain setting: +4dBu),<br>27.3dB/+14dBu (Gain<br>setting: +14dBu)                                                                                                   | 32.0dB/+8.3dBu<br>(Gain setting: 32dB),<br>26.0dB/+14.3dBu (Gain set-<br>ting: 26dB), 36.3dB/+4dBu<br>(Gain setting: +4dBu),<br>26.3dB/+14dBu (Gain<br>setting: +14dBu) | 32.0dB/+6.3dBu<br>(Gain setting: 32dB),<br>26.0dB/+12.3dBu (Gain set-<br>ting: 26dB), 34.3dB/+4dBu<br>(Gain setting: +4dBu),<br>24.3dB/+14dBu (Gain<br>setting: +14dBu) | 32.0dB/+4.1dBu<br>(Gain setting: 32dB),<br>26.0dB/+10.1dBu (Gain set-<br>ting: 26dB), 32.1dB/+4dBu<br>(Gain setting: +4dBu),<br>22.1dB/+14dBu (Gain<br>setting: +14dBu) |
|                                                                           | 8Ω Volume<br>max /Power<br>Boost mode | -                                                                                                                                                                                                                                                                         | -                                                                                                                                                                       | 34.0dB/+6.3dBu<br>(Gain setting: 32dB),<br>28.0dB/+12.3dBu (Gain set-<br>ting: 26dB), 36.3dB/+4dBu<br>(Gain setting: +4dBu),<br>26.3dB/+14dBu (Gain<br>setting: +14dBu) | 35.0dB/+4.1dBu<br>(Gain setting: 32dB),<br>29.0dB/+10.1dBu (Gain set-<br>ting: 26dB), 35.1dB/+4dBu<br>(Gain setting: +4dBu),<br>25.1dB/+14dBu (Gain<br>setting: +14dBu) |
| MAXIMUM INPUT VOLTAGE                                                     |                                       | +24dBu                                                                                                                                                                                                                                                                    | +24dBu                                                                                                                                                                  | +24dBu                                                                                                                                                                  | +24dBu                                                                                                                                                                  |
| INPUT IMPEDANCE                                                           |                                       | 20kΩ (Balance), 10kΩ (Unbalance)                                                                                                                                                                                                                                          |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| I/O<br>CONNECTORS                                                         | Speaker<br>output ports               | Neutrik speakON NL4 x2,<br>Binding post x2 pairs, 1/4"<br>PHONE(TS) x2                                                                                                                                                                                                    | Neutrik speakON NL4 x2,<br>Binding post x2 pairs, 1/4"<br>PHONE(TS) x2                                                                                                  | Neutrik speakON NL4 x2,<br>Binding post x2 pairs, 1/4"<br>PHONE(TS) x2                                                                                                  | Neutrik speakON NL4 x2,<br>Binding post x2 pairs, 1/4"<br>PHONE(TS) x2                                                                                                  |
|                                                                           | Line Input                            | XLR-3-31 x2, 1/4 "PHONE(TRS) x2                                                                                                                                                                                                                                           |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
|                                                                           | Others                                | USB 2.0 Standard-A Connector (Female) for Save/Load, Speaker preset update, Firmware update with USB memory;<br>AC inlet x1 with AC cord clamp                                                                                                                            |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| INDICATORS                                                                |                                       | POWER x1 (Green), ALERT x1 (Red), USB x1 (Green), PROTECT x2 (Red), CLIP/LIMIT x2 (Red), SIGNAL x2 (Green);<br>Auto LED off feature                                                                                                                                       |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| PROCESSORS                                                                |                                       | Input summing; D-CONTOUR(FOH/MAIN, MONITOR, OFF); Delay(0 - 74msec); HPF/LPF(cutoff frequency 20Hz~20kHz<br>with polarity control); Speaker Processor(6 band PEQ* + Limiter + Delay)                                                                                      |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| LATENCY                                                                   |                                       | 1.5 msec (Analog Input to Speakers)                                                                                                                                                                                                                                       |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| PRESETS                                                                   |                                       | 8 user amplifier presets (Factory preset: Speaker presets for Yamaha passive speakers)                                                                                                                                                                                    |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| PROTECTION<br>CIRCUIT                                                     | Load<br>protection                    | POWER switch on/off: Output mute; Output voltage protection: Over voltage limiter, user configurable by wattage and<br>speaker preset; DC-fault: Power Supply shutdown (NOT restored automatically)                                                                       |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
|                                                                           | Amplifier<br>protection               | Thermal: Output limiter (Restored automatically) → Output mute (Restored automatically); Over current: Output mute<br>(Restored automatically); Over voltage: Output limiter (Restored automatically); Integrated Power Limit: Output limiter<br>(Restored automatically) |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
|                                                                           | Power supply<br>protection            | Thermal: Output limiter (Restored automatically) → Power supply shutdown; Over voltage: Power supply shutdown;<br>Over current: Power supply shutdown                                                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| AMPLIFIER CLASS                                                           |                                       | Class D, Balanced output circuit (BTL)                                                                                                                                                                                                                                    |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| COOLING                                                                   |                                       | 16 step variable speed fan x 2, front to rear airflow                                                                                                                                                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| POWER REQUIREMENTS                                                        |                                       | Depending on area of purchase; 100V 50Hz/60Hz, 120V 60Hz, 220V-240V 50Hz/60Hz *Verified as operating at rated<br>power voltage +/- 10% voltage.                                                                                                                           |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| POWER CONSUMPTION                                                         |                                       | 310W (1/8 MAX power,<br>4Ω, Pink noise at all chan-<br>nels), 60W (4Ω, Idling)                                                                                                                                                                                            | 280W (1/8 MAX power,<br>4Ω, Pink noise at all chan-<br>nels), 60W (4Ω, Idling)                                                                                          | 230W (1/8 MAX power,<br>4Ω, Pink noise at all chan-<br>nels), 55W (4Ω, Idling)                                                                                          | 160W (1/8 MAX power,<br>4Ω, Pink noise at all chan-<br>nels), 55W (4Ω, Idling)                                                                                          |
| DIMENSIONS                                                                | W x H x D                             | 480x88x388 mm                                                                                                                                                                                                                                                             | 480x88x388 mm                                                                                                                                                           | 480x88x388 mm                                                                                                                                                           | 480x88x388 mm                                                                                                                                                           |
| NET WEIGHT                                                                |                                       | 7.4 kg                                                                                                                                                                                                                                                                    | 7.2 kg                                                                                                                                                                  | 6.9 kg                                                                                                                                                                  | 6.9 kg                                                                                                                                                                  |
| ACCESSORIES                                                               |                                       | USB cover, Owner's Manual, Specification sheet, AC cable (2.0m) x 1                                                                                                                                                                                                       |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |
| OTHERS                                                                    |                                       | USB 2.0 Standard-A Connector (Female) for Save/Load, Speaker preset update, Firmware update with USB memory;<br>AC inlet x1 with AC cord clamp                                                                                                                            |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                                                                                                         |

\*ONLY PRESET RECALL, USER CANNOT ADJUST THE PARAMETERS.

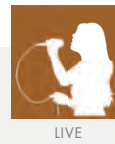
# |AMP EDITOR



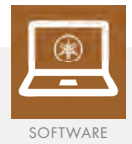
CONFERENCE



BACKGROUND  
MUSIC



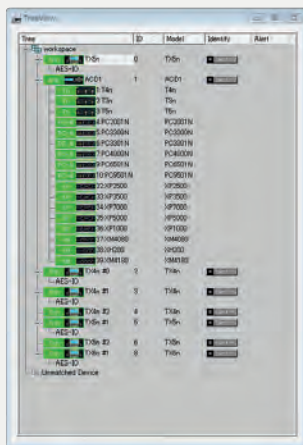
LIVE



SOFTWARE

## INTUITIVE, PLUG AND PLAY AMP MANAGEMENT SOFTWARE

**AMP EDITOR** is a dedicated software application for Yamaha amplifiers that makes amplifier management easy. Remotely control and monitor amplifiers simply by connecting your TXn, XMV amplifiers to an Ethernet port on a computer via a standard high-speed Ethernet switch. Connection to the Amp Editor network requires no special drivers so that your system is up and running in no time. All TXn amplifier functions and available DSP parameters can be controlled using Amp Editor. Using Amp Editor will give users much more real time information about the conditions of the amplifiers than previously possible. The software can, for example, warn you when a parameter exceeds a predefined voltage, wattage, or impedance (upper/lower) value. By monitoring these parameters, you are also notified instantly if a problem is detected in the input or output signal chain, for example a blown speaker driver on an amplifier channel. Amp Editor will keep logs of these warnings into a file so it's easy to pinpoint and trouble-shoot problems.



### \* TREE VIEW

All your amplifiers in the network at a glance. Double click on an amplifier to open the „Detail View“ screen.



### \* SYSTEM VIEW

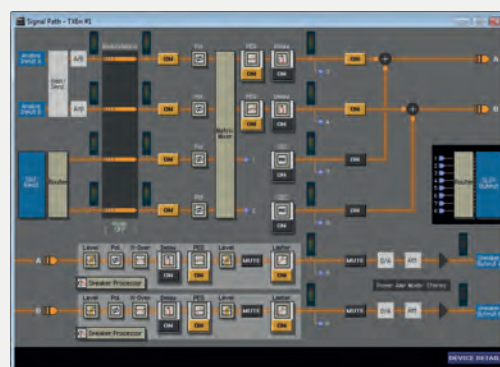
Manage multiple amplifiers using the System View window. You have access to key parameters and components from this screen. You may also choose to create your own custom control panel.





#### \* **DETAIL VIEW**

This window gives you in-depth information of the selected amplifier.



#### \* **SIGNAL PATH**

(This feature is for TXn series power amplifiers) Audio signal processing functions of the amplifier are placed in the signal path as modular components.

NEXT

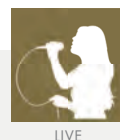


# MIXERS





# | RIVAGE PM SERIES



## PERFECTING THE ART OF LIVE SOUND

**Yamaha's first professional live sound console, the PM200, was released more than 40 years ago.**

The PM series has provided fertile ground from which numerous significant sound reinforcement milestones have grown ever since. Many of those innovations have become benchmarks that professionals depend on to this day. The **RIVAGE PM10** launched a new generation of PM consoles that have already become standards in large-scale live sound applications because of their unequalled sound, operation, functionality, reliability, expandability, and more. Now the **RIVAGE PM7** digital mixing system expands the digital mixing options available for an even broader range of applications. The Yamaha "PM brand" continues to bring true innovation to the developing live sound scene.

DIGITAL MIXING SYSTEM  
**RIVAGE**  
PM SERIES



## A CHOICE OF SYSTEMS FOR ANY APPLICATION

**THE RIVAGE PM SERIES OFFERS A CHOICE OF SYSTEMS THAT CAN BE CONFIGURED TO IDEALLY SUIT A WIDE RANGE OF APPLICATIONS.**

A basic RIVAGE PM10 system consists of the DSP-R10 DSP engine where all the signal processing magic actually happens, the CS-R10/CS-R10-S control surface for intuitive hands-on operation, one or more I/O Rack units for input and output connections, and one or more network cards for network connectivity. The flagship RIVAGE PM10 system also allows DSP mirroring for maximum dependability in mission critical applications while providing the capacity needed for large-scale setups.

A RIVAGE PM7 system is a little more compact, with signal processing for mixing and effects built into the central CSD-R7 digital mixing console. Other required components are one or more I/O racks for input and output, and a dedicated interface card for network connectivity. The RIVAGE PM7 system's CSD-R7 digital mixing console is the same size as the RIVAGE PM10 system CS-R10 control surface and has the same control layout, and with built-in DSP it offers similarly high standards of operation and workflow efficiency in a relatively compact, portable system.



# THE RIVAGE PM SOUND IS THE MUSIC ITSELF

The ideal starting point for creative audio engineering is transparent, uncolored sound. All Yamaha mixers are built on that philosophy, with the goal of allowing engineers to capture the on-stage sound accurately, without coloration, and then add creative touches as required. The merits of Yamaha's unwavering adherence to this concept are evident throughout the RIVAGE PM series. Input circuitry and processing are critical to achieving the required sonic quality. The output end of the signal chain plays an important role in maintaining that quality too. Yamaha offers two types of high-performance I/O Rack units for RIVAGE PM system input and output, each providing compatibility with a different audio network.

One is the TWINLANE network, using optical cable to simultaneously carry up to 400 audio channels. Combinations of the RPiO622 and/or RPiO222 I/O racks and HY256-TL or HY256-TL-SMF audio interface cards allow input via Hybrid Microphone Preamplifiers with analog input stages that take the Yamaha "natural sound" concept to new heights, as well as digital sections with immaculate VCM-technology models of Rupert Neve Designs transformer and SILK processing circuitry that offer outstanding musicality and atmosphere.

Then there's the Dante audio network from Audinate, already standard in CL and QL series digital consoles as well as a range of other Yamaha pro audio products.

Dante-equipped 2 and Rio1608-D2 I/O Racks and the HY144-D audio interface card can be combined to provide natural sound input at full RIVAGE PM series quality.

## RUPERT NEVE QUALITY FOR ALL ENGINEERS

(RPiO622 & RPiO222)

When fitted with RY16-ML-SILK analog input cards the RPiO622 and RPiO222 I/O racks offer outstanding emulations of the transformer circuitry and SILK processing featured in microphone preamplifiers from Rupert Neve Designs, immaculately modeled using acclaimed Yamaha VCM (Virtual Circuitry Modeling) technology.

Many recording engineers value Rupert Neve microphone preamps for their appealing natural compression and saturation. SILK processing can take that seductive sonic foundation to new levels with added power and flair. Sounds that tend to get lost in the mix are given new life and luster with a lush analog-like core.

The SILK processing function provided in the RIVAGE PM series Hybrid Microphone Preamplifiers offers two variations: "RED" for sparkling energy, and "BLUE" for solidity and power. There's also a continuously variable "TEXTURE" knob that musically shapes the harmonic components to best suit the source. The benefits of SILK processing are also evident in the way channel EQ and reverb plug-ins affect the sound. The RIVAGE PM series makes the coveted Rupert Neve preamplifier sound available to a wider range of engineers who can put it to creative use.



**TOSHIFUMI KUNIMOTO**  
ENGINEERING MANAGER,  
RESEARCH & DEVELOPMENT DIVISION



**RUPERT NEVE**



## DAN DUGAN AUTOMATIC MIXER BUILT IN

Through in-depth collaboration with Dan Dugan Sound Design, renowned Dan Dugan automatic microphone mixing with its advanced algorithms is built into the RIVAGE PM series digital mixing systems. Setup is easy: just insert the processor into up to 64 channels for automatically optimized microphone gain distribution. Gain control is smooth and natural, as though experienced human operators were doing the mix. The system also effectively reduces feedback and comb filter issues.

For speech applications, especially non-scripted situations, this allows the operator to concentrate on details other than fader operation for consistently high-quality mixes.



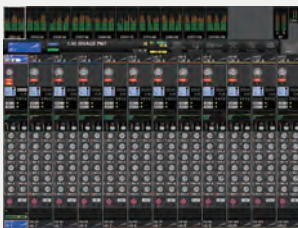
**DAN DUGAN**





## POLISHED OPERATION OFFERS CONFIDENCE AND COMFORT

Since the mixing console is the engineer's primary tool, its operability is crucial, particularly in today's rapidly evolving live sound environment. RIVAGE PM series systems feature a unique Hybrid Operation Style that takes the most highly valued aspects of Yamaha digital mixing consoles to a new, highly refined level, giving engineers unprecedented expressive control. Underpinning the system's extraordinary operability is a full implementation of Yamaha's acclaimed Selected Channel interface on the right side of the prominently raised control surface, allowing all parameters of the currently selected channel to be directly and intuitively controlled. The left side of the panel features two large LCD touch screens that provide logical continuity with the faders below, offering Centralogic style control of a large number of simultaneous channels. In addition to these two interface features, encoder position visibility has been enhanced, as have a number of other details that contribute to significantly improved operability overall. With operation and features designed to comprehensively support today's live sound scene, the RIVAGE PM series allows engineers to focus on the sound and enjoy the creative process.



OVERVIEW



SELECTED CHANNEL



ERGONOMICS FADER KNOBS

HORSESHOE-SHAPED  
ENCODER RINGS

## EVOLVING FUNCTIONALITY AND SCALABILITY

Because evolving applications continually raise new challenges and needs, Yamaha provides continuing support in the form of firmware updates that keep our digital mixers, RIVAGE PM systems included, up to date and often ahead of the curve. One of the major benefits offered by digital mixing systems is scene memory. But in order to accommodate individual situations and workflows it must be flexible and customizable. The RIVAGE PM series offers Overlay and Isolate filters as well as Event Lists functionality for significantly enhanced scene memory flexibility. RIVAGE PM series firmware Version 2.0 adds a number of important features, such as 5.1 surround panning and monitoring for broadcast applications, and two surround buses for efficient international feed production. A broadcast Mix Minus function is provided too, allowing a specified source to be removed from a specified remote feed with just a few steps. Dual Console and Port to Port functions contribute to broad system configurability, as does the DSP Mirroring functionality of the RIVAGE PM10.



OVERLAY



EVENT LIST



MIX MINUS



SURROUND MONITOR

## EQ/COMP DESIGNED BY RUPERT NEVE, EVENTIDE ULTRA HARMONIZER, AND MORE

Processing quality has always been a major strength of Yamaha digital consoles. The RIVAGE PM series offers a comprehensive selection of plug-ins, including models of in-demand classics. The RIVAGE PM10 includes 50 plug-ins, while the RIVAGE PM7 includes 48. Ample processing power allows up to 192 instances of complex plug-ins such as the Portico 5033 or Portico 5043 to be used simultaneously. The easy-operation Rupert Neve Designs Portico 5045 introduced with firmware Version 2.0 effectively suppresses background noise at microphone inputs for enhanced clarity while significantly increasing the feedback margin, making it a valuable tool for live sound in houses of worship, stadiums, halls, and other environments where feedback can be problem. RIVAGE PM series plug-ins are carefully chosen, practical effects that can be invaluable for creative processing in real-world live sound applications.



Rupert EQ 773



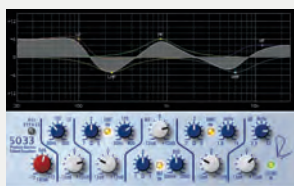
Rupert EQ 810



Rupert Comp 754



Rupert Comp 830



Portico 5033



Portico 5043



Portico 5045



H3000 Live



Buss Comp 369



MBC4



Dynamic EQ4

## SYSTEM COMPONENTS AND SOFTWARE

### RIVAGE PM10 CORE COMPONENTS

**THE CONTROL SURFACE WITH TWO LARGE TOUCH PANEL DISPLAYS AND 38 FADERS ENABLES YOU TO PERFORM GENERAL OPERATIONS ON THE RIVAGE PM10 SYSTEM.**



CS-R10

- Display: 15" touch panel x 2
- Faders: 38 (12+12+12+2)
- Selected Channel section: comprehensive channel parameters
- Custom Fader banks: 6 x 2 on each bay
- User Defined keys: 12 x 4 banks
- User Defined knobs: 4 x 4 banks
- Touch and Turn knobs: 2
- Analog I / O: 8 in / 8 out
- Slot: 2 MY slots
- AES/EBU: 4 in / 4 out (with SRC)
- Ports: GPI (8 in / 8 out), Word Clock Out, MIDI In / Out, 5 USB (1 for 2-track recording), Video Out (DVI-D)
- Power supply: Dual redundant power supply built-in
- Dimensions (WxHxD): 1,549 x 417 x 848mm
- Net Weight: 85 kg (187 lbs)

**THE CONTROL SURFACE WITH SINGLE LARGE TOUCH PANEL DISPLAY AND 26 FADERS ENABLES YOU TO PERFORM GENERAL OPERATIONS ON THE RIVAGE PM10 SYSTEM.**



CS-R10-S

- Display: 15" touch panel x 1
- Faders: 26 (12+12+2)
- Selected Channel section: comprehensive channel parameters
- Custom Fader banks: 6 x 2 on each bay
- User Defined keys: 12 x 4 banks
- User Defined knobs: 4 x 4 banks
- Touch and Turn knobs: 1
- Analog I / O: 8 in / 8 out
- Slot: 2 MY slots
- AES / EBU: 4 in / 4 out (with SRC)
- Ports: GPI (8 in / 8 out), Word Clock Out, MIDI In / Out, 5 USB (1 for 2-track recording), Video Out (DVI-D)
- Power supply: dual redundant power supply built-in
- Dimensions (WxHxD): 1,128 x 417 x 848mm
- Net Weight: 67 kg (147.7 lbs)

**THE DSP-R10 IS A POWERFUL DSP ENGINE THAT SERVES AS THE CORE FOR SIGNAL PROCESSING AND SYSTEM CONTROL REQUIRED FOR THE RIVAGE PM10 SYSTEM.**



DSP-R10

- Superior capability of processing digital audio signals of up to 144 input, 72 MIX, 36 MATRIX, and two STEREO channels.
- Four HY card slots that are capable of transmitting / receiving up to 256 ins / outs of digital audio signals / control signals.
- Two Mini-YGDAI slots to support various audio formats.
- Dual redundant power supply built-in
- Dimensions (WxHxD): 480 x 232 x 490.8mm (5U rack size)
- Net Weight: 20 kg (44 lbs)

## RIVAGE PM7 CORE COMPONENT

**THE CSD-R7 IS A DIGITAL MIXING CONSOLE THAT SERVES AS THE CORE FOR SIGNAL PROCESSING AND SYSTEM CONTROL, AND ENABLES YOU TO PERFORM GENERAL OPERATIONS ON THE RIVAGE PM7 SYSTEM.**



CSD-R7

- Superior capability of processing digital audio signals of up to 120 input, 60 MIX, 24 MATRIX, and two STEREO channels.
- Three HY card slots that are capable of transmitting / receiving up to 256 ins / outs of digital audio signals / control signals.
- Display: 15" touch panel x 2 Faders: 38 (12+12+12+2)
- Selected Channel section: comprehensive channel parameters
- Custom Fader banks: 6 x 2 on each bay
- User Defined keys: 12 x 4 banks
- User Defined knobs: 4 x 4 banks
- Touch and Turn knobs: 2
- Analog I / O: 8 in / 8 out
- Slot: 3 HY slots, 2 MY slots
- AES/EBU: 4 in / 4 out (with SRC)
- Ports: TC In, GPI (8 in / 8 out), Word Clock In / Out, MIDI In / Out, 5 USB (1 for 2-track recording), Video Out (DVI-D) Power supply: Dual redundant power supply built-in
- Dimensions (WxHxD): 1,549 x 417 x 848mm
- Net Weight: 94 kg (207 lbs)

## I/O RACK

**THE RPio622 IS AN AUDIO INTERFACE THAT ENABLES YOU TO FLEXIBLY CONFIGURE AND EXPAND I/OS FOR THE RIVAGE PM SYSTEM AS REQUIRED BY YOUR APPLICATION OR THE SCALE OF YOUR SYSTEM.**



- Six RY card slots that enable you to expand analog inputs and outputs, and / or digital inputs and outputs.
- Two HY card slots that are capable of transmitting/receiving up to 256 ins / outs of digital audio signals/control signals.
- HY card slot 1 features 256 ins/outs, and HY card slot 2 features 128 ins / outs.
- Two mini-YGDAI slots to support various audio formats.
- Dual redundant power supply built-in
- Dimensions (WxHxD): 480 x 455 x 489.7mm (10U rack size)
- Net Weight: 30 kg (66 lbs)



RPio622



## SYSTEM COMPONENTS AND SOFTWARE

**The RPio222 is an audio interface that enables you to flexibly configure and expand I/Os for the RIVAGE PM system as required by your application or the scale of your system.**



RPio222

- Two RY card slots that enable you to expand analog inputs and outputs, and / or digital inputs and outputs.
- Two HY card slots that are capable of transmitting/receiving up to 256 ins / outs of digital audio signals / control signals.
- HY card slot 1 features 256 ins / outs, and HY card slot 2 features 128 ins / outs.
- Two mini-YGDAI slots to support various audio formats.
- Dual redundant power supply built-in
- Dimensions (WxHxD): 480 x 232 x 491mm (5U rack size)
- Net Weight: 19 kg (41.9 lbs)

**The Rio3224-D2 is a high-performance I/O Rack unit with built-in Dante audio networking. Designed and manufactured to achieve outstanding sonic transparency in keeping with Yamaha's "natural sound" philosophy.**



Rio3224-D2

- 32-channel mic / line input
- 16-channel analog outputs
- AES/EBU 8-channel digital outputs.
- Dual redundant power supply built-in
- Character / icon display allowing confirmation of Dante settings and edit/check gain, high-pass filters, and phantom power settings
- Dimensions (WxHxD): 480 x 220 x 367.5mm (18.9" x 8.7" x 14.5")
- Net Weight: 13.5 kg (29.8 lbs)

**The Rio1608-D2 is a high-performance I/O Rack unit with built-in Dante audio networking. Designed and manufactured to achieve outstanding sonic transparency in keeping with Yamaha's "natural sound" philosophy.**



Rio1608-D2

- 16-channel mic / line input
- 8-channel analog outputs
- Dual redundant power supply built-in
- Character / icon display allowing confirmation of Dante settings and edit/check gain, high-pass filters, and phantom power settings
- Dimensions (WxHxD): 480 x 132 x 367.5mm
- Net Weight: 9.6 kg (21.2 lbs)



**YAMAHA**





## AUDIO INTERFACE CARD

The RY16-ML-SILK is a 16-channel mic / line input card that supports a 96 kHz sampling rate. It features a new revolutionary analog mic preamp combined with Silk processing from Rupert Neve Designs, which allows you to freely control depth and perspective through modeling in the digital domain. Each input connector can supply phantom power (+48V DC).



### RY16-ML-SILK

for RPi0622 / RPi0222

- 16-channel mic / line inputs
- SILK digital processing technology that has been co-developed by Rupert Neve Designs and Yamaha
- Dimensions (WxHxD): 405 x 42 x 258mm
- Net Weight: 1.6 kg (3.5 lbs)

The RY16-DA is a 16-channel analog output card that supports a 96 kHz sampling rate. You can use the switches on the board to set maximum output level to +15dBu, +18dBu, or +24dBu. The factory setting is +24dBu.



### RY16-DA

for RPi0622 / RPi0222

- 16-channel analog outputs
- Dimensions (WxHxD): 405 x 42 x 258mm
- Net Weight: 1.5 kg (3.3 lbs)

The RY16-AE is a 16-channel digital I/O card that supports the AES/EBU format. Sampling rate converters (SRC) are provided for each of the 16 input channels and 16 output channels.



### RY16-AE

for RPi0622 / RPi0222

- AES/EBU 16-channel digital I / Os.
- Sampling rate converter for both inputs and outputs.
- Dimensions (WxHxD): 405 x 42 x 258mm
- Net Weight: 1.4 kg (3.1 lbs)

The HY256-TL is a digital I / O card for HY card slots, and compatible with Yamaha's TWINLANE audio network protocol. The card supports multi-mode fiber connections for reliable operation.



### HY256-TL



for DSP-R10 / CSD-R7 / RPi0622 / RPi0222

- Can send / receive uncompressed digital audio signals of 32-bit 96 kHz quality, with a maximum of 256 inputs / 256 outputs.
- Redundant connections are supported with ring topology.
- Ind+C58icators show communication status useful for troubleshooting.
- Recommended cable: Neutrik opticalCON DUO multi-mode fiber
- Dimensions (WxHxD): 125 x 37 x 207mm
- Net Weight: 0.25 kg

## SYSTEM COMPONENTS AND SOFTWARE

The HY256-TL-SMF is a digital I / O card for HY card slots, and compatible with Yamaha's TWINLANE audio network protocol. The card supports single-mode fiber connections for reliable operation over long distances.



HY256-TL 

for DSP-R10 / CSD-R7 / RPio622 / RPio222

- Can send / receive uncompressed digital audio signals of 32-bit 96 kHz quality, with a maximum of 256 inputs / 256 outputs.
- Redundant connections are supported with ring topology.
- Indicators show communication status useful for troubleshooting.
- Recommended cable: Neutrik opticalCON DUO single-mode fiber
- Dimensions (WxHxD): 125 x 37 x 207mm
- Net Weight: 0.35 kg (0.8 lbs)

The HY144-D is a digital I / O card for HY card slots, and is compatible with the Dante digital audio network over Gigabit Ethernet connections.



HY144-D 

for DSP-R10 / CSD-R7 / RPio622 / RPio222

- Can send and receive uncompressed digital audio signals of 32-bit 96 kHz quality, with a maximum of 144 inputs / 144 outputs.
- Redundant connections are supported with primary and secondary connectors. Daisy chain connections are also supported.
- Indicators show communication status useful for troubleshooting.
- Dimensions (WxHxD): 125 x 37 x 207mm
- Net Weight: 0.25 kg (0.6 lbs)

### I/O RACK



Ri8-D 

- 8-channel mic / line inputs



RMio64-D 

The RMio64-D Dante / MAD1 conversion I / O rack supports a wide range of broadcast and live sound applications with extraordinary flexibility, and without getting in the way.



Ro8-D 

- 8-channel analog outputs



RSio64-D 

The RSio64-D is an audio interface that can convert between Dante and Mini-YGDAI formats for up to 64 inputs and 64 outputs.

## L2 SWITCH



SWP1-16MMF

- etherCON Connectors: 4 front / 8 rear
- RJ45 Connectors: 4 rear
- OpticalCON Connectors: 1 front
- Optional optical module slot: 1 front



SWP1-8MMF

- etherCON Connectors: 4 front / 4 rear
- OpticalCON Connectors: 1 front
- Optional optical module slot: 1 front



SWP1-8

- etherCON Connectors: 4 front / 4 rear
- Optional optical module slot: 2 front

## SOFTWARE



### RIVAGE PM STAGEMIX

RIVAGE PM StageMix provides remote control of RIVAGE PM series functions via a simple, intuitive graphical interface from anywhere within wireless range. The software has been specifically designed to allow engineers to adjust monitor mixes from the performers' positions on stage, directly controlling mix parameters via the iPad rather than having to rely on verbal directions to a second engineer.

StageMix



### RIVAGE PM EDITOR

The RIVAGE PM Editor is a standalone application for computers running Windows or Mac operating systems, for both extended online operation and of-line setup and editing.

## CONSOLE FILE CONVERTER

The Yamaha Console File Converter is an application that allows data to be shared between a number of Yamaha digital mixing consoles. You can share data between RIVAGE PM series, CL / QL series, PM5D, M7CL, and LS9 consoles, so data from one show doesn't have to be completely reprogrammed from scratch for the next, even if different consoles are used.

## FUNCTIONAL SPECIFICATIONS

|                         |                        |             | RIVAGE PM10<br>(EXCLUDING I/O RACK)                          | RIVAGE PM7<br>(EXCLUDING I/O RACK)                           |
|-------------------------|------------------------|-------------|--------------------------------------------------------------|--------------------------------------------------------------|
| MIXING CAPACITY         | Input Mixing Channels  |             | 144mono                                                      | 120mono                                                      |
|                         | Mix Buses              |             | 72                                                           | 60                                                           |
|                         | Matrices               |             | 36 (Input to Matrix supported)                               | 24 (Input to Matrix supported)                               |
|                         | Stereo Buses           |             | 2                                                            | 2                                                            |
|                         | Mono Buses             |             | 1                                                            | 1                                                            |
|                         | Cue Bus                |             | 2                                                            | 2                                                            |
| LOCAL CONNECTORS        | Analog Input           | XLR         | 8                                                            | 8                                                            |
|                         | Analog Output          | XLR         | 8                                                            | 8                                                            |
|                         | Expansion Slots        | HY Slots    | 4 (DSP-R10)                                                  | 3 (CSD-R7)                                                   |
|                         |                        | MY Slots    | CS-R10 & CS-R10-S: 2 DSP-R10: 2                              | 2 (CSD-R7)                                                   |
|                         | Digital In             | AES / EBU   | 4                                                            | 4                                                            |
|                         | Digital Out            | AES / EBU   | 4                                                            | 4                                                            |
|                         | GPI                    | IN (D-Sub)  | 8 (CS-R10 & CS-R10-S) / 8 (DSP-R10)                          | 8 (CSD-R7)                                                   |
|                         |                        | Out (D-Sub) | 8 (CS-R10 & CS-R10-S) / 8 (DSP-R10)                          | 8 (CSD-R7)                                                   |
|                         | Word Clock I/O         |             | Only Out (CS-R10 & CS-R10-S) In/Out (DSP-R10)                | In / Out (CSD-R7)                                            |
|                         | MIDI I/O               |             | In/Out (CS-R10 & CS-R10-S) In/Out (DSP-R10)                  | In / Out (CSD-R7)                                            |
|                         | USB                    | File        | 4                                                            | 4                                                            |
|                         |                        | 2 Track     | 1                                                            | 1                                                            |
|                         |                        | Rec / Play  |                                                              |                                                              |
|                         | External Redundant PSU |             | Built-in dual power supply                                   | Built-in dual power supply                                   |
|                         | Meter Bridge           |             | On screen                                                    | On screen                                                    |
|                         | Ethernet               |             | Yes                                                          | Yes                                                          |
|                         | Lamp                   |             | CS-R10: 4<br>CS-R10-S: 3                                     | 4 (CSD-R7)                                                   |
|                         | Talkback In            |             | Yes                                                          | Yes                                                          |
|                         | Video Out              |             | Yes                                                          | Yes                                                          |
|                         | TC In                  |             | Yes (DSP-R10)                                                | Yes (CSD-R7)                                                 |
|                         | Fault Output           |             | Yes (DSP-R10)                                                | No                                                           |
| SCENE MEMORY            | Number of Scenes       |             | 1000                                                         | 1000                                                         |
|                         | Recall Safe            |             | Yes                                                          | Yes                                                          |
|                         | Focus Recall           |             | Yes                                                          | Yes                                                          |
|                         | Fade Time              |             | Yes (0s ~ 60s)                                               | Yes (0s ~ 60s)                                               |
|                         | Preview                |             | Yes (V2.0 or later)                                          | Yes                                                          |
|                         | Selective Load / Save  |             | Yes (V1.5 or later)                                          | Yes                                                          |
|                         | Global Paste           |             | Yes (V1.2 or later)                                          | Yes                                                          |
|                         | Event List             |             | Yes (V2.0 or later with timecode trigger)                    | Yes                                                          |
|                         | Overlay                |             | Yes (V1.2 or later)                                          | Yes                                                          |
|                         | Isolate                |             | Yes                                                          | Yes                                                          |
|                         | Tactile Control Keys   |             | Yes                                                          | Yes                                                          |
| INPUT CHANNEL FUNCTIONS | Gain Compensation      |             | Yes                                                          | Yes                                                          |
|                         | Silk                   |             | Yes (with RPio)                                              | Yes (with RPio)                                              |
|                         | Digital Gain           |             | Yes (-96dB ~ +24dB)                                          | Yes (-96dB ~ +24dB)                                          |
|                         | ATT                    |             | No                                                           | No                                                           |
|                         | HPF                    |             | 20Hz~2000Hz, -6/-12/-18/-24dB/oct<br>Selectable              | 20Hz~2000Hz, -6/-12/-18/-24dB/oct<br>Selectable              |
|                         | PEQ                    |             | 4 Band Full PEQ (4 algorithms, RTA overlay support)          | 4 Band Full PEQ (4 algorithms, RTA overlay support)          |
|                         | Dynamics 1             |             | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking |
|                         | Dynamics 2             |             | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking |
|                         | Input Delay            |             | Yes (0ms ~ 1000ms)                                           | Yes (0ms ~ 1000ms)                                           |
|                         | Pan                    |             | Center Nominal                                               | Center Nominal                                               |
|                         | DCA Group              |             | 24 (Output DCA support)                                      | 24 (Output DCA support)                                      |
|                         | DCA Rollout            |             | Yes                                                          | Yes                                                          |
|                         | MUTE Group             |             | 12                                                           | 12                                                           |
|                         | Number of Inserts      |             | 4 slots on each 2 insert point                               | 4 slots on each 2 insert point                               |
|                         | Direct Out             |             | Yes                                                          | Yes                                                          |



YAMAHA



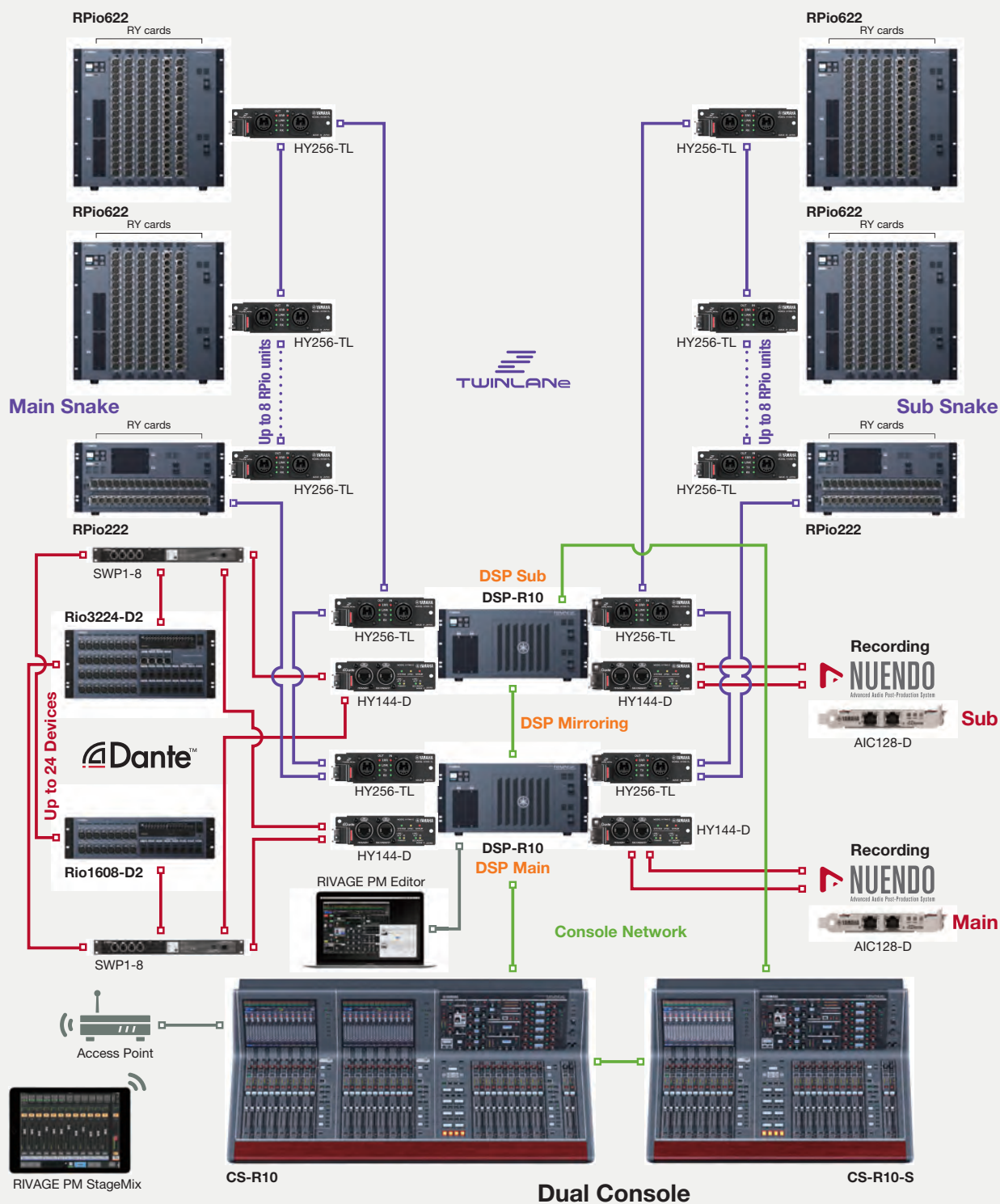
commercial audio

|                          |                                  | <b>RIVAGE PM10<br/>(EXCLUDING I/O RACK)</b>                          | <b>RIVAGE PM7<br/>(EXCLUDING I/O RACK)</b>                   |
|--------------------------|----------------------------------|----------------------------------------------------------------------|--------------------------------------------------------------|
| OUTPUT CHANNEL FUNCTIONS | PEQ                              | 8 Band Full PEQ                                                      | 8 Band Full PEQ                                              |
|                          | GEQ                              | Plug-in                                                              | Plug-in                                                      |
|                          | Dynamics 1                       | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking         | Legacy Comp / Comp260 / Gate / De-Esser / Expander / Ducking |
|                          | Output Channel Delay             | Yes (0ms ~ 1000ms)                                                   | Yes (0ms ~ 1000ms)                                           |
|                          | MUTE Group                       | 12                                                                   | 12                                                           |
|                          | Number of Inserts                | 4 slots on each 2 insert point                                       | 4 slots on each 2 insert point                               |
| PLUG-IN                  | Number of Slots                  | 384                                                                  | 384                                                          |
|                          | Number of Effect Programs        | 50                                                                   | 48 (VSS4HD and NonLin2 are not supported)                    |
| GEQ RACK                 | Number of GEQ Racks              | 48                                                                   | 48                                                           |
|                          | Mountable Device                 | 31BandGEQ / Flex15GEQ / 8Band PEQ (RTA overlay support)              | 31BandGEQ / Flex15GEQ / 8Band PEQ (RTA overlay support)      |
| TWINLANE                 | Number of I / O Channels         | 256 in / 256 out (with HY256-TL)                                     | 256 in / 256 out (with HY256-TL)                             |
| DANTE                    | Number of I / O Channels         | 144 in / 144 out (with HY144-D)                                      | 144 in / 144 out (with HY144-D)                              |
| RECORDING                | USB Memory Recording             | Yes                                                                  | Yes                                                          |
|                          | DVS Recording                    | Yes (with HY144-D)                                                   | Yes (with HY144-D)                                           |
| BROADCAST FUNCTIONS      | 5.1 Surround Panning             | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | Surround Monitor                 | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | Mix Minus                        | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | L-Mono / R-Mono / LR-Mono        | No                                                                   | No                                                           |
| MONITOR                  | Solo Mode                        | Yes                                                                  | Yes                                                          |
|                          | Oscillator                       | Sine Wave 1ch / Sine Wave 2ch / Pink Noise / Burst Noise             | Sine Wave 1ch / Sine Wave 2ch / Pink Noise / Burst Noise     |
| OTHER FUNCTIONS          | Port to Port                     | Yes (V1.5 or later)                                                  | Yes                                                          |
|                          | Dual Console                     | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | DSP Mirroring                    | Yes (V2.0 or later)                                                  | No                                                           |
|                          | Timecode Reader/Display          | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | Timecode Chase (Event List)      | Yes (V2.0 or later)                                                  | Yes                                                          |
|                          | GPI/MIDI                         | Yes                                                                  | Yes                                                          |
|                          | RTA                              | Yes                                                                  | Yes                                                          |
|                          | Output Port Delay                | Yes (0ms ~ 1000ms)                                                   | Yes (0ms ~ 1000ms)                                           |
|                          | Cascade                          | Yes (Future Update)                                                  | No                                                           |
| USER INTERFACE           | Display                          | CS-R10: 15 inch Touch Panel x 2<br>CS-R10-S: 15 inch Touch Panel x 1 | 15 inch Touch Panel x 2                                      |
|                          | Centralogic Section              | Yes                                                                  | Yes                                                          |
|                          | Faders                           | CS-R10: 12 + 12 + 12 + 2 CS-R10-S: 12 + 12 + 2                       | 12 + 12 + 12 + 2                                             |
|                          | Selected Channel Encoders        | All Parameters                                                       | All Parameters                                               |
|                          | Channel Encoder                  | Yes                                                                  | Yes                                                          |
|                          | Channel Name / Color Display     | Yes                                                                  | Yes                                                          |
|                          | Custom Fader Banks               | Yes (6 x 2 on each bay)                                              | Yes (6 x 2 on each bay)                                      |
|                          | User Defined Keys                | 12 (x 4 banks)                                                       | 12 (x 4 banks)                                               |
|                          | User Defined Knobs               | 4 (x 4 banks)                                                        | 4 (x 4 banks)                                                |
|                          | Touch and Turn Knob              | Yes                                                                  | Yes                                                          |
|                          | Monitor Level Knob               | Yes (2: A and B )                                                    | Yes (2: A and B )                                            |
|                          | Wooden Arm Rest                  | Yes                                                                  | Yes                                                          |
| SOFTWARE                 | Editor                           | RIVAGE PM Editor                                                     | RIVAGE PM Editor                                             |
|                          | StageMix                         | RIVAGE PM StageMix (V2.0 or later)                                   | RIVAGE PM StageMix                                           |
|                          | MonitorMix                       | TBD                                                                  | TBD                                                          |
|                          | Nuendo Live: Control integration | Yes (Future Update)                                                  | Yes (Future Update)                                          |
|                          | Console File Converter           | Yes                                                                  | Yes                                                          |



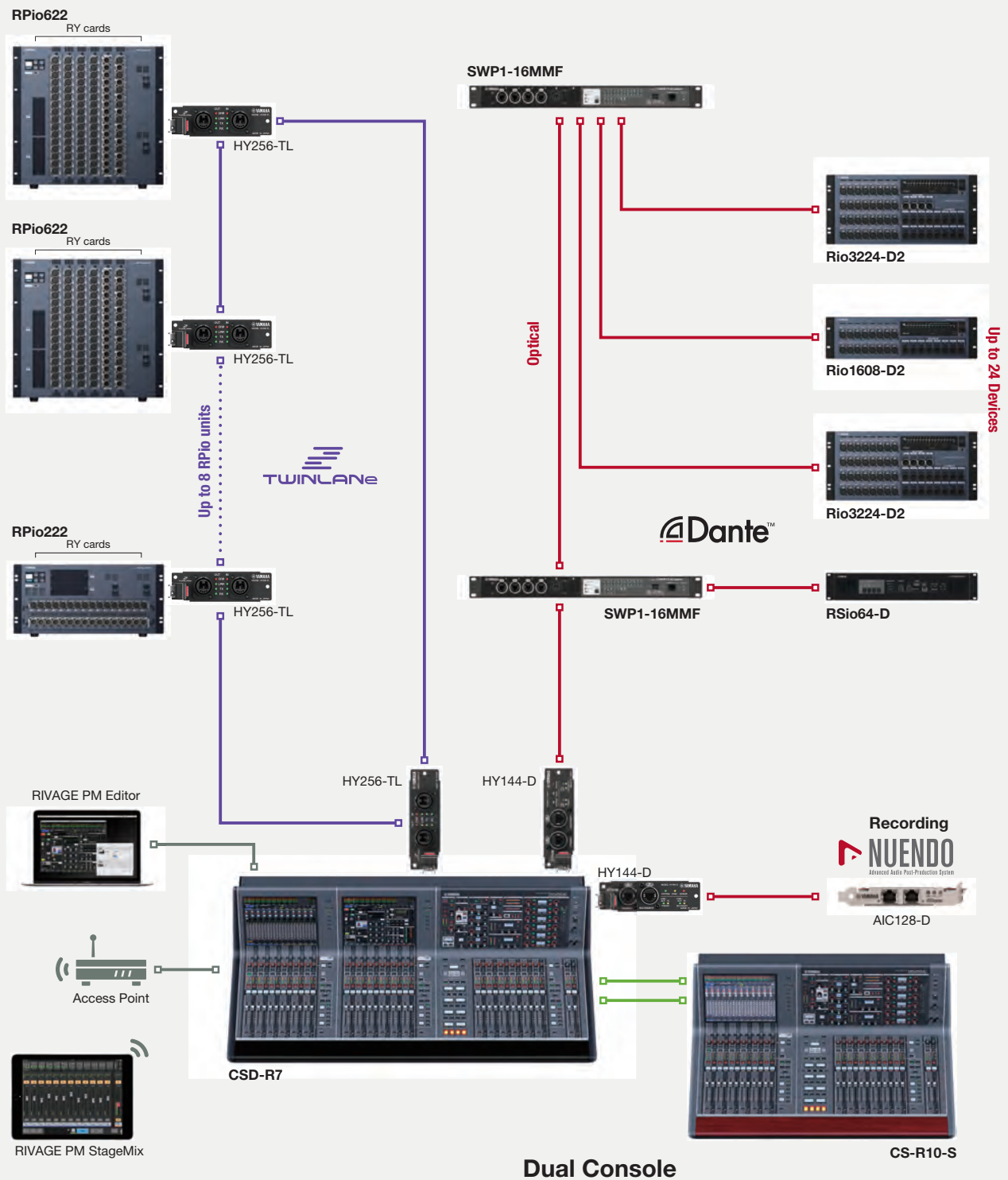
## SYSTEM EXAMPLE 1: RIVAGE PM10

In this **RIVAGE PM10** system two TWINLANE cards are installed in the DSP-R10 DSP Engine to allow connection of two TWINLANE rings. Each ring can accommodate up to eight RPi622 and/or RPi222 I/O Rack units, providing ample capacity for large-scale applications. A Dante network can coexist with the TWINLANE network as required. The RIVAGE PM10 supports DSP Mirroring with two DSP-R10 DSP Engine units. If a problem occurs in the main DSP-R10 the second DSP-R10 can take over for continued operation.



## SYSTEM EXAMPLE 2: RIVAGE PM7

In a **RIVAGE PM7** system the CSD-R7 Digital Mixing Console can be fitted with a TWINLANE or Dante-capable HY card for use with RPiO622/RPiO222 or Rio3224-D2/Rio1608-D2 I/O racks, respectively. Up to eight RPiO622/RPiO222 units can be connected to the TWINLANE card, or up to 24 Dante devices, including Rio3224-D2/Rio1608-D2 units, can be connected via a Dante network. TWINLANE and Dante networks can coexist in a RIVAGE PM7 system. The CS-R10-S Control Surface originally designed for use with the RIVAGE PM10 can also be connected to a RIVAGE PM7 system to serve as a sidecar for fader expansion and/or multi-operator control.



# |CL SERIES

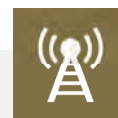
## DIGITAL MIXING CONSOLE



CONFERENCE



LIVE



BROADCAST

### CL5



StageMix

MonitorMix



RUPERT NIXON DESIGNS



Dante

MY16

NUENDO live

### CL3



StageMix

MonitorMix



RUPERT NIXON DESIGNS



Dante

MY16

NUENDO live

### CL1



StageMix

MonitorMix



RUPERT NIXON DESIGNS



Dante

MY16

NUENDO live



YAMAHA

commercial audio

## A NETWORKED LIVE MIXING SYSTEM WITH UNPRECEDENTED SCALABILITY, SOUND QUALITY AND FLEXIBILITY

### VERSATILE, CREATIVE CONSOLES FOR EXPRESSIVE ENGINEERING

- Naturally superior sound plus a comprehensive range of “coloring” options.
- Acclaimed Yamaha Centralogic concept at the core of a refined user interface.
- Separate console and I/O rack components communicate via Dante™ network audio protocol.
- AES67, Dante Device Lock and Dante Domain Manager support.
- Up to eight I/O rack units can be connected to each console. 5U size Rio3224-D(2) I/O unit provides 32 ins, 16 outs, and four AES/EBU outputs. 3U size Rio1608-D(2) I/O unit has 16 ins and 8 outs. Compact 2U size Tio1608-D provides 16 ins and 8 outs.
- Three versatile channel PEQ algorithms: Precise, Aggressive and Smooth.
- I/O rack unit sharing allows multiple consoles to control the same I/O unit, with gain compensation.
- Virtual “Premium Rack” with VCM models of the renowned Neve Portico 5033 equalizer and Portico 5043 compressor/limiter, plus other VCM equalizers, single- and multi-band compressors, and studio quality effects.
- Virtual “Effect Rack” allows simultaneous use of up to 8 effects from a selection of 46 ambience effects and 8 insertion effects.
- Virtual “GEQ Rack” allows graphic EQ to be inserted into the output buses as required for room equalization and other functions.
- Seamlessly integrated remote control and offline editing via an Apple iPad® or other computer.
- Shure ULX-D Wireless System control and monitoring.
- Network redundancy supported for maximum reliability.
- Every detail – faders, knobs, switches, indicators, displays, etc. – designed for optimum operating feel.
- 2-track mp3 recording to USB memory.
- Tight integration with Nuendo Live (included) for serious live multitrack recording.
- Multitrack recordings can be used for “virtual sound checks” when the performers aren’t available.
- Three Mini-YGDAI card slots provide easy I/O expansion as well as extra processing capabilities.
- Lake® processing can be added via expansion slots.
- Other features: editable channel names and colors, user defined keys and knobs, 300 scene memories, input and output delays, ample EQ and dynamics processing, 16 DCA groups, 8 mute groups, 5-in/5-out GPI interface, multiple user key sets, on-screen help, and more.
- Surround mixing & monitoring

## CL5

### THREE-SECTION FADER LAYOUT FOR EFFICIENT HANDS-ON CONTROL. THE CL5 IS THE IDEAL CHOICE FOR A DIVERSE SPECTRUM OF LIVE SOUND SYSTEMS

- Input channels: 72 mono, 8 stereo
- Fader configuration: 16-fader left section, 8-fader Centralogic section, 8-fader right section, 2-fader master section
- Stainless steel stay for iPad support
- Built-in meter bridge
- Busses: 24 MIX BUS, 8 MATRIX BUS (input to MATRIX supported)

## CL3

### AN IDEAL BLEND OF COMPACT SIZE AND CHANNEL CAPACITY FOR A VARIETY OF LIVE AND INSTALLED APPLICATIONS

- Input channels: 64 mono, 8 stereo
- Fader configuration: 16-fader left section, 8-fader Centralogic section, 2-fader master section
- Stainless steel stay for iPad support
- Meter bridge optional
- Busses: 24 MIX BUS, 8 MATRIX BUS (input to MATRIX supported)

## CL1

### DUAL 8-FADER SECTIONS IN A SPACE-SAVING CONSOLE THAT CAN BE USED ALONE OR CASCADED TO ANOTHER CL CONSOLE FOR INPUT EXPANSION

- Input channels: 48 mono, 8 stereo
- Fader configuration: 8-fader left section, 8-fader Centralogic section, 2-fader master section
- Meter bridge optional
- Busses: 24 MIX BUS, 8 MATRIX BUS (input to MATRIX supported)

# GENERAL SPECIFICATIONS

|                                                                       |                                                                                                                     |                                                 |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| Sampling frequency rate                                               | Internal:                                                                                                           | 44.1kHz, 48kHz                                  |
|                                                                       | External:                                                                                                           | 44.1kHz (+4.1667%, +0.1%, -0.1%, -4.0%) ±200ppm |
|                                                                       |                                                                                                                     | 48kHz (+4.1667%, +0.1%, -0.1%, -4.0%) ±200ppm   |
| Signal Delay                                                          | Less than 2.5 ms OMNI IN to OMNI OUT (@fs=48kHz)                                                                    |                                                 |
| Total harmonic distortion*1<br>OMNI IN to OMNI OUT<br>Input Gain=Min. | Less than 0.05% 20Hz to 20kHz @+4dBu into 600Ω                                                                      |                                                 |
| Frequency response<br>CH INPUT to OMNI OUT                            | +0.5, -1.5dB 20Hz to 20kHz, refer to +4dBu output @1kHz,<br>OMNI IN to OMNI OUT                                     |                                                 |
| Dynamic range<br>(maximum level to noise level)                       | 112dB typ., DA Converter,<br>108dB typ., OMNI IN to OMNI OUT, Input Gain = Min.                                     |                                                 |
| Hum & noise level*2<br>(20Hz to 20kHz), Rs=150Ω                       | -128dBu Equivalent input noise, Input Gain=Max.,<br>-84dBu Residual output noise, ST master off                     |                                                 |
| Crosstalk (@1kHz)<br>Input Gain=Min.                                  | -100dB*3, Adjacent OMNI IN/OMNI OUT channels                                                                        |                                                 |
| Phantom Power                                                         | +48V                                                                                                                |                                                 |
| Power requirements                                                    | AC110V-240V, 50/60Hz                                                                                                |                                                 |
| Power consumption                                                     | CL5/CL3/CL1: 170W, Internal Power Supply<br>CL5/CL3/CL1: 200W, Simultaneous use of Internal PSU and External PW800W |                                                 |

\*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.

\*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.

\*3 Crosstalk is measured with a 30 dB/octave filter @22kHz.

\*\* Excluded MBCL optional meter bridge.

## ANALOG INPUT SPECIFICATIONS

| Input terminal | GAIN  | Actual source impedance | For use with nominal      | Input level |         |                  | Connector     |
|----------------|-------|-------------------------|---------------------------|-------------|---------|------------------|---------------|
|                |       |                         |                           | Sensitivity | Nominal | Max. before clip |               |
| OMNI IN 1-8    | +66dB | 7.5kΩ                   | 50-600Ω Mics & 600Ω Lines | -82dBu      | -62dBu  | -42dBu           | XLR3-31 type* |
|                | -6dB  |                         |                           | -10dBu      | +10dBu  | +30dBu           |               |
| TALKBACK       | +64dB | 10kΩ                    | 50-600Ω Mics & 600Ω Lines | -70dBu      | -60dBu  | -40dBu           | XLR3-31 type* |
|                | +20dB |                         |                           | -26dBu      | -16dBu  | +4dBu            |               |

## ANALOG OUTPUT SPECIFICATIONS

| Output terminal | Actual source impedance | For use with nominal | GAIN SW | Output terminals |                  | Connector       |
|-----------------|-------------------------|----------------------|---------|------------------|------------------|-----------------|
|                 |                         |                      |         | Nominal          | Max. before clip |                 |
| OMNI OUT 1-8    | 75Ω                     | 600Ω Lines           | +24dB   | +4dBu            | +24dBu           | XLR3-32 type*   |
|                 |                         |                      | +18dB   | -2dBu            | +18dBu           |                 |
| PHONES          | 15Ω                     | 8Ω Phones            | —       | 75mW             | 150mW            | ST Phone Jack** |
|                 |                         | 40Ω Phones           | —       | 65mW             | 150mW            |                 |

## DIGITAL I/O SPECIFICATIONS

| Terminal          | Format | Data length    | Level      | Audio                         | Connector      |
|-------------------|--------|----------------|------------|-------------------------------|----------------|
| Primary/Secondary | Dante  | 24bit or 32bit | 1000Base-T | 64ch Input/64ch Output @48kHz | etherCON Cat5e |

## DIGITAL OUTPUT SPECIFICATIONS

| Terminal    | Format  | Data length              | Level | Connector     |
|-------------|---------|--------------------------|-------|---------------|
| DIGITAL OUT | AES/EBU | AES/EBU Professional Use | 24bit | RS422         |
|             |         |                          |       | XLR3-32 type* |

## I/O SLOT (1-3) SPECIFICATIONS

Each I/O Slot accepts a Mini-YGDAI card. Only Slot1 has a serial interface.

## CONTROL I/O SPECIFICATIONS

| Terminal                    |     | Format    | Level                |
|-----------------------------|-----|-----------|----------------------|
| MIDI                        | IN  | MIDI      | —                    |
|                             | OUT | MIDI      | —                    |
| WORD CLOCK                  | IN  | —         | TTL/75Ω terminated   |
|                             | OUT | —         | TTL/75Ω              |
| GPI (5IN/5OUT)              |     | —         | —                    |
| NETWORK                     |     | IEEE802.3 | 10BASE-T/100Base-TX/ |
| LAMP (CL5=3, CL3=2, CL1=1)  |     | —         | 0V - 12V             |
| USB HOST                    |     | USB 2.0   | —                    |
| EXT DC IN                   |     | —         | —                    |
| Meter Bridge (CL3/CL1 only) |     | —         | —                    |

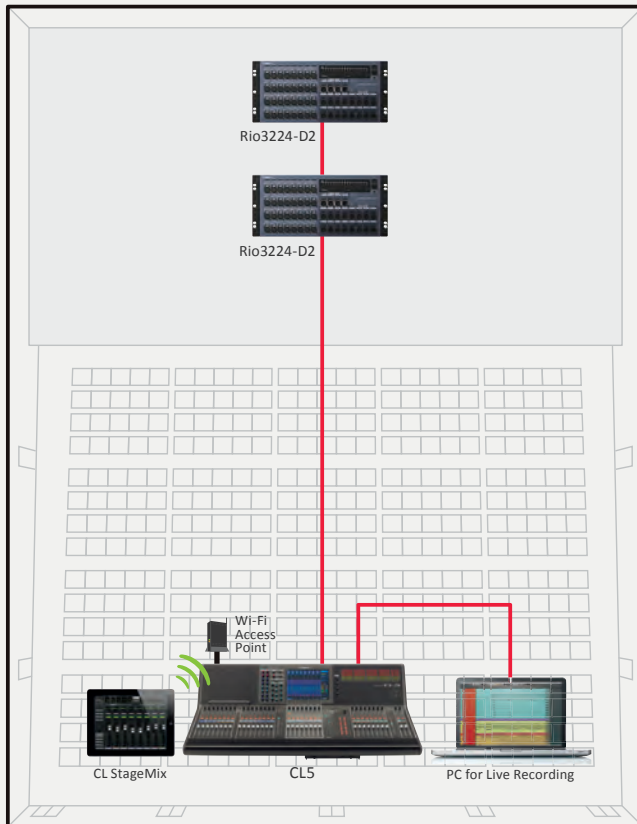
\*1. Input pins: Internal TTL-level pull-up resistors provided (47kΩ). Output pins: Open-drain output (Vmax = 12V, max. sink current/pin = 75mA)

Power pins: Output voltage Vp = 5V, max. output current Imax = 300mA

\*2. Pin 4 = +12V, Pin 3 = GND, lamp rating 5W. Software voltage control.

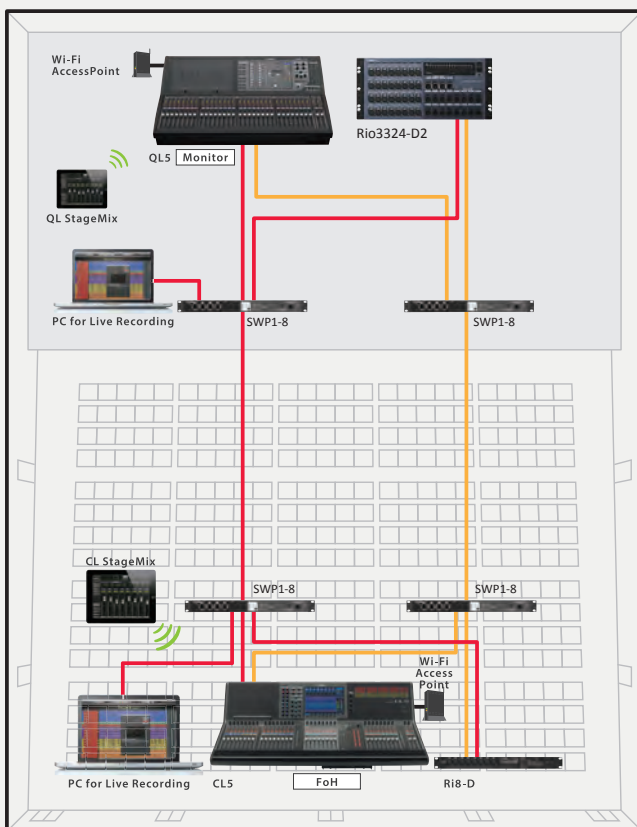


## SYSTEM EXAMPLES: LIVE SOUND



### A SIMPLE DAISY-CHAIN SYSTEM

Internal port switches allow the CL series to be easily set up for daisy-chain or star network configurations. In this example the Console at FOH position is directly connected to the I/O rack at the side of the stage. The network is self-configured. Of course the CL StageMix iPad app can be used even in simple systems like this one, and Dante Virtual Soundcard can be used to enable multitrack recording to a DAW such as Steinberg's Nuendo Live.



### QL CONSOLE FOR MONITOR MIX AND I/O IN A RELIABLE STAR NETWORK

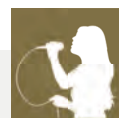
In this compact but capable live sound system a CL series console serves front-of-house while a stage side QL console doubles as monitor mixer and I/O device thanks to its Port to Port capability. The Gain Compensation function means that head amp gain can be safely controlled from either console without interference. For maximum system reliability a star network configuration with network switches is used for redundancy, so that a problem in one part of the network will not interrupt the overall signal flow. Live recording to multiple computers is also possible.

# |QL SERIES

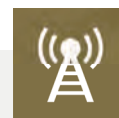
## DIGITAL MIXING CONSOLE



CONFERENCE



LIVE



BROADCAST



QL5

QL1



MIXERS

## EXPANDABLE ALL-IN-ONE DIGITAL MIXING CONSOLE THAT INHERITS CORE FEATURES AND PERFORMANCE DIRECTLY FROM THE CL SERIES

- Naturally superior sound plus powerful built-in processing for broad creative control.
- Built-in Dugan automixer provides optimum channel balance while allowing the operator to concentrate fully on optimizing the overall sound.
- A large touch-panel display, selected channel controls, and a “Touch and Turn” knob make up an intuitive, efficient control interface.
- Extensive built-in input and output capacity that can handle a variety of applications without the need for stage boxes or other external equipment.
- Built-in Dante networking allows for flexible system expansion.
- AES67, Dante Device Lock and Dante Domain Manager support.
- Up to 24 R series I/O rack units can be connected to each console.
- An innovative “Port to Port” feature allows the console to function as a remote I/O device for any other QL or CL console.
- “Gain Compensation” allows multiple consoles to share and control the same I/O unit.
- Three versatile channel PEQ algorithms: Precise, Aggressive and Smooth.
- Virtual “Premium Rack” with VCM models of the renowned Neve Portico 5033 equalizer and Portico 5043 compressor/limiter, plus other VCM equalizers, single- and multi-band compressors, and studio quality effects.
- Virtual “Effect Rack” allows simultaneous use of up to 8 effects from a selection of 46 ambience effects and 8 insertion effects.
- Virtual “GEQ Rack” allows graphic EQ to be inserted into the output buses as required for room equalization and other functions.
- Seamlessly integrated remote control and offline editing via an Apple iPad® or other computer.
- Shure ULX-D Wireless System control and monitoring.
- CL series compatibility: data exchangeable between QL and CL consoles.
- Direct 2-track recording to standard USB flash drives, or serious multitrack recording to a DAW via Dante.
- Multitrack recordings can be used for “virtual sound checks” when the performers aren’t available.
- Dual Mini-YGDAI card slots provide easy I/O expansion as well as extra processing capabilities.
- Other features: comprehensive Fader Bank section with recallable four custom banks, editable channel names and colors, user defined keys and on-screen user defined knobs, 300 scene memories, input and output delays, ample EQ and dynamics processing, 16 DCA groups, 8 mute groups, 5-in/5-out GPI interface, multiple user key sets, on-screen help, and more.
- Surround mixing & monitoring

## QL5

- 32 + 2 fader configuration adapts to a wide range of channel layouts. The QL5 is a compact console with large-scale capabilities
- Mix channels: 64 mono, 8 stereo
- Busses: 16 mix, 8 matrix (Input to Matrix supported)
- Local I/O: 32 in, 16 out
- Fader configuration: 32 + 2 (Master)
- Stainless steel iPad support stays

## QL1

- 16 + 2 fader configuration in a compact, rack mountable unit
- Mix channels: 32 mono, 8 stereo
- Busses: 16 mix, 8 matrix (Input to Matrix supported)
- Local I/O: 16 in, 8 out
- Fader configuration: 16 + 2 (Master)
- Rack mountable with optional RKH1 Rack Mount Kit

# SPECIFICATIONS

## GENERAL SPECIFICATIONS

|                                                                     |                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Sampling frequency rate                                             | Internal: 44.1kHz, 48kHz<br>External: 44.1kHz (+4.1667%, +0.1%, -0.1%, -4.0%) ±200ppm<br>48kHz (+4.1667%, +0.1%, -0.1%, -4.0%) ±200ppm |
| Signal Delay                                                        | Less than 2.5 ms OMNI IN to OMNI OUT (@fs=48kHz)                                                                                       |
| Fader                                                               | 100mm motorized, Resolution=1024steps<br>+10dB to -138dB, -∞dB all faders                                                              |
| Total harmonic distortion*1<br>INPUT to OMNI OUT<br>Input Gain=Min. | Less than 0.05% 20Hz to 20kHz @+4dBu into 600Ω                                                                                         |
| Frequency response<br>CH INPUT to OMNI OUT                          | +0.5, -1.5dB 20Hz to 20kHz, refer to +4dBu output @1kHz,<br>INPUT to OMNI OUT                                                          |
| Dynamic range<br>(maximum level to noise level)                     | 112dB typ., DA Converter,<br>108dB typ., INPUT to OMNI OUT, Input Gain = Min.wv                                                        |
| Hum & noise level*2<br>(20Hz to 20kHz), Rs=150Ω                     | -128dBu Equivalent input noise, Input Gain=Max.,<br>-88dBu Residual output noise, ST master off                                        |
| Crosstalk (@1kHz)<br>Input Gain=Min.                                | -100dB*3, Adjacent INPUT/OMNI OUT channels                                                                                             |
| Phantom Power                                                       | +48V                                                                                                                                   |
| Power requirements                                                  | AC100V-240V, 50/60Hz                                                                                                                   |
| Power consumption                                                   | QL5: 200W<br>QL1: 135W                                                                                                                 |
| Dimensions (W x H x D)                                              | QL5: 828 x 272 x 563mm (32.6" x 10.7" x 22.2")<br>QL1: 468 x 272 x 562mm (18.4" x 10.7" x 22.1")                                       |
| Weight                                                              | QL5: 21.8kg (48.1lbs)<br>QL1: 14.7kg (32.4lbs)                                                                                         |

\*1 Total harmonic distortion is measured with a 18dB/Oct filter @80kHz.

\*2 Hum & noise level is measured with a 6dB/oct filter @12.7kHz; equivalent to 20kHz filter with infinite dB/Oct attenuation.

\*3 Crosstalk is measured with a 30 dB/octave filter @22kHz.

## ANALOG INPUT SPECIFICATIONS

| Input terminal   | GAIN  | Actual source impedance | For use with nominal      | Input level |         |                  | Connector     |
|------------------|-------|-------------------------|---------------------------|-------------|---------|------------------|---------------|
|                  |       |                         |                           | Sensitivity | Nominal | Max. before clip |               |
| INPUT 1-32 (QL5) | +66dB | 7.5kΩ                   | 50-600Ω Mics & 600Ω Lines | -82dBu      | -62dBu  | -42dBu           | XLR3-31 type* |
| INPUT 1-16 (QL1) | -6dB  |                         |                           | -10dBu      | +10dBu  | +30dBu           |               |

## DIGITAL OUTPUT SPECIFICATIONS

| Terminal    |         | Format                   | Data length | Level | Connector     |
|-------------|---------|--------------------------|-------------|-------|---------------|
| DIGITAL OUT | AES/EBU | AES/EBU Professional Use | 24bit       | RS422 | XLR3-32 type* |

## I/O SLOT (1-2) SPECIFICATIONS

A Mini-YGDAI card can be inserted into slots 1-2. Only slot 1 supports serial interfaces.

## ANALOG OUTPUT SPECIFICATIONS

| Output terminal     | Actual source impedance | For use with nominal | GAIN SW | Output terminals |                  | Connector       |
|---------------------|-------------------------|----------------------|---------|------------------|------------------|-----------------|
|                     |                         |                      |         | Nominal          | Max. before clip |                 |
| OMNI OUT 1-16 (QL5) | 75Ω                     | 600Ω Lines           | +24dB   | +4dBu            | vt+24dBu         | XLR3-32 type*   |
| OMNI OUT 1-8 (QL1)  |                         |                      | +18dB   | -2dBu            | +18dBu           |                 |
| PHONES              | 15Ω                     | 8Ω Phones            | —       | 75mW             | 150mW            | ST Phone Jack** |
|                     |                         | 40Ω Phones           | —       | 65mW             | 150mW            |                 |

## CONTROL I/O SPECIFICATIONS

| Terminal            | Format    | Level               | Connector                       |
|---------------------|-----------|---------------------|---------------------------------|
| MIDI                | IN        | MIDI                | DIN Connector 5P                |
|                     | OUT       | MIDI                | DIN Connector 5P                |
| WORD CLOCK          | IN        | —                   | TTL/75Ω terminated              |
|                     | OUT       | —                   | TTL/75Ω                         |
| GPI (5IN/5OUT)      | —         | —                   | D Sub Connector 15P (Female) *1 |
| NETWORK             | IEEE802.3 | 10BASE-T/100Base-TX | RJ-45                           |
| LAMP (QL5=2, QL1=1) | —         | 0V - 12V            | XLR-4-31 type*2                 |
| USB HOST            | USB 2.0   | —                   | USB A Connector (Female)        |

\*1. Input pin: TTL level, w/ internal pull-up (47kΩ) Output pin: Open drain output (Vmax=12V, maximum sink current/pin=75mA) Power supply pin: Output voltage Vp=5V, Max. output current =300mA

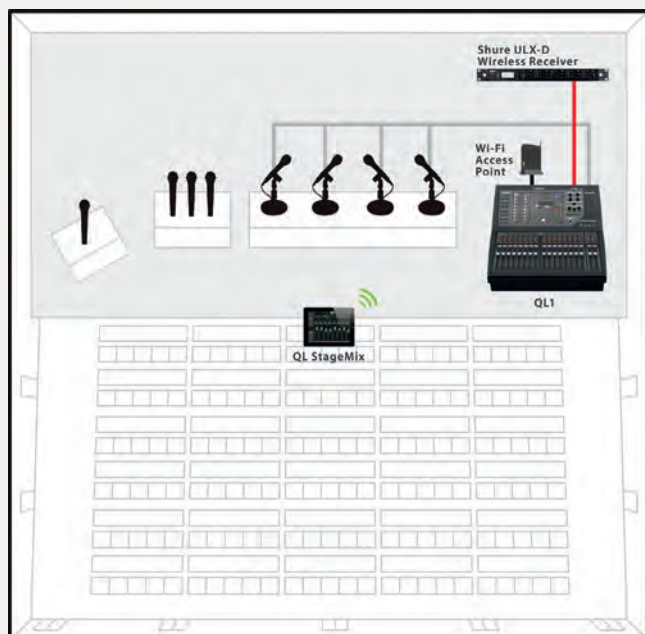
\*2. 4 pin=+12V, 3 pin=GND, Lamp nominal power: 5W, Brightness (voltage) can be adjusted from the software.

## DIGITAL I/O SPECIFICATIONS

| Terminal          | Format | Data length    | Level      | Audio                           | Connector      |
|-------------------|--------|----------------|------------|---------------------------------|----------------|
| Primary/Secondary | Dante  | 24bit or 32bit | 1000Base-T | 64ch Input/64ch Output @48kHz*1 | etherCON Cat5e |

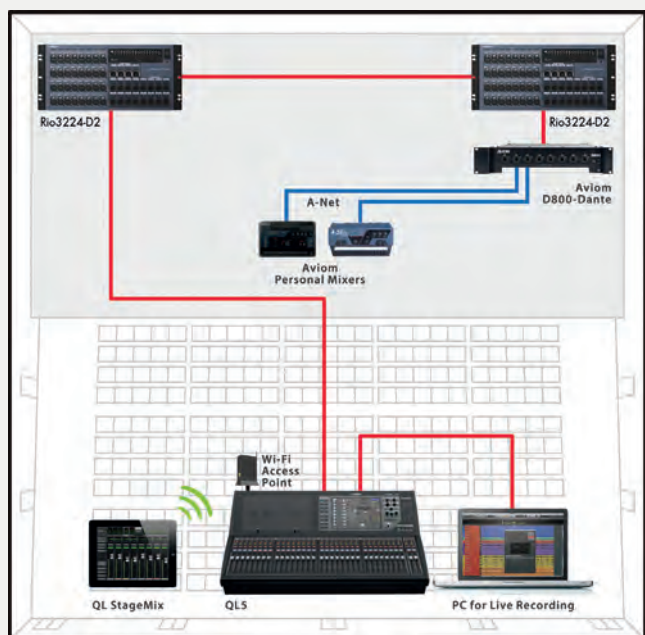
\*1 QL1: 32ch Input/32ch Output@48kHz

## SYSTEM EXAMPLES



### A COMPACT SYSTEM THAT AUTOMATICALLY MIXES UP TO 16 SPEECH MICS

At conferences or speech events where space for equipment is limited, a compact all-in-one QL console can be a huge advantage. The built-in Dan Dugan Automixer can automatically provide an optimum mix of up to 16 speech microphones. Events can be recorded directly to, and pre-recorded BGM can be played back from a USB flash drive. The StageMix application can provide remote control capability for even greater efficiency and convenience.



### A SIMPLE LIVE SYSTEM WITH DAISY-CHAINED I/O RACKS

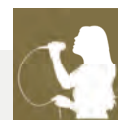
This is an example of a simple live system that makes use of Dante networking. Stage side R-series I/O rack units are connected to the front-of-house QL console via network cables. An Aviom personal monitor system can also be connected to the Dante network via an Aviom D800-Dante distributor. This setup even allows multi-track recording to a computer via the Dante network.



# |TF SERIES



CONFERENCE



LIVE

Yamaha has always made it a mission to stay in touch with the needs of sound engineers worldwide. The outcome is evident in the success of the recent CL and QL series digital mixing consoles, and the flagship RIVAGE PM10. The key to success has always been in supporting the user's creativity. Creativity is most effective when unrestricted, and now Yamaha has created a new digital mixing console that gives the user's intuition even freer rein. TouchFlow Operation™ introduced in the TF series consoles allows the user to respond to the music and artists on stage with unprecedented speed and freedom, taking live sound reinforcement to a new level of refinement. With the TouchFlow Operation interface optimized for touch panel control, experienced engineers as well as newcomers to the field will find it easier than ever to achieve the ideal mix. Recallable D-PRE™ preamplifiers support sound quality that will satisfy the most discerning professional ears, while advanced live recording features and seamless operation with high-performance I/O racks give these compact digital mixers capabilities that make them outstanding choices for a wide range of applications. Experience the intuitive control and creative freedom that a truly evolved digital console can provide.



TF5

StageMix

MonitorMix

NUENDO  
live



TF3

StageMix

MonitorMix

NUENDO  
live



TF1

StageMix

MonitorMix

NUENDO  
live



TF-RACK

Dante™  
WITH AES67

NUENDO  
live

MonitorMix

DIGITAL MIXING CONSOLE

## TF5

- 32 channel faders + 1 master fader
- 40 mono channels + 2 stereo channels
- 20 Aux (8 mono + 6 stereo) + Stereo + Sub buses
- 32 mic/line XLR/TRS combo inputs

DIGITAL MIXING CONSOLE

## TF3

- 24 channel faders + 1 master fader
- 40 mono channels + 2 stereo channels
- 20 Aux (8 mono + 6 stereo) + Stereo + Sub buses
- 24 mic/line XLR/TRS combo inputs

DIGITAL MIXING CONSOLE

## TF1

- 16 channel faders + 1 master fader
- 32 mono channels + 2 stereo channels
- 20 Aux (8 mono + 6 stereo) + Stereo + Sub buses
- 16 mic/line XLR/TRS combo inputs

DIGITAL MIXER

## TF-RACK

- 32 mono channels + 2 stereo channels
- 20 Aux (8 mono + 6 stereo) + Stereo + Sub buses
- 16 mic/line XLR/TRS combo inputs

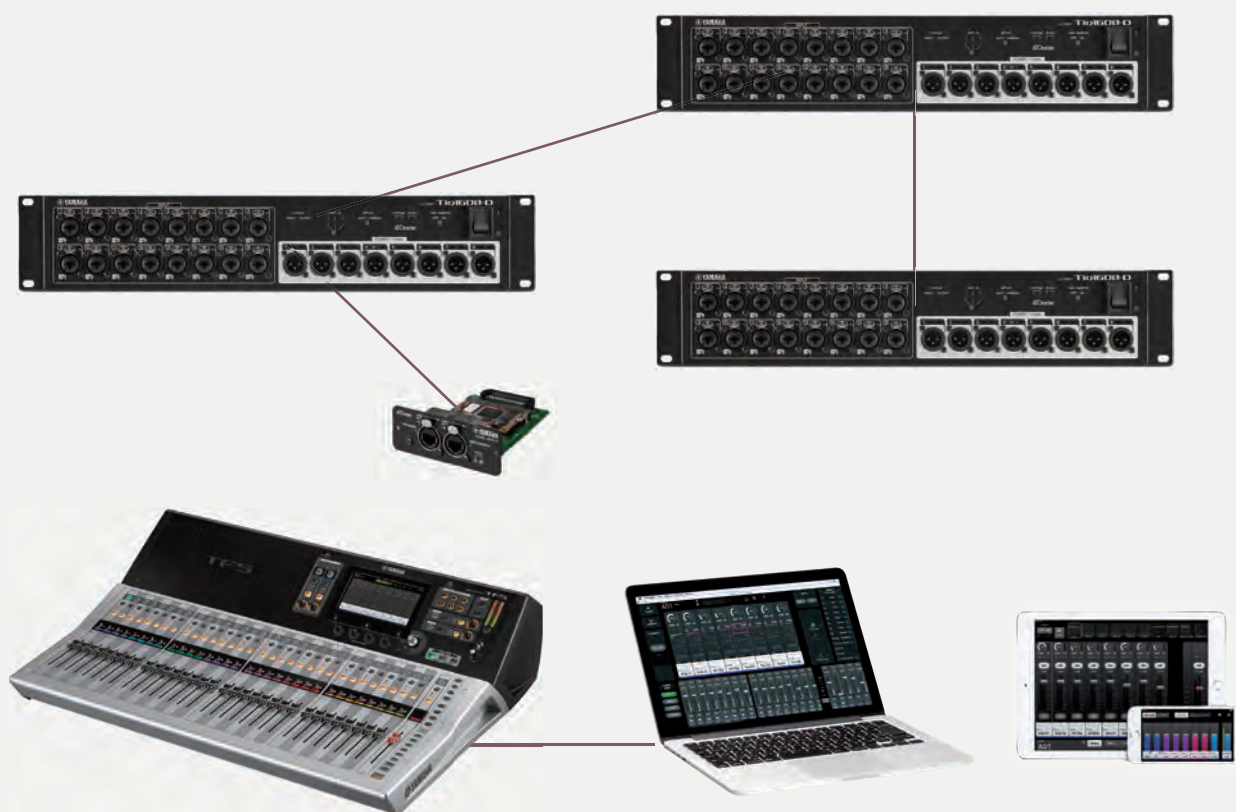


YAMAHA

commercial audio

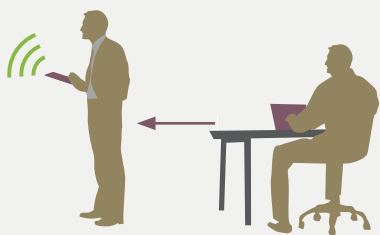
### A HIGH-PERFORMANCE STAGEBOX SOLUTION THAT'S SIMPLE TO SET UP.

The natural, musical sound that was a key element of the TF Series design policy is carried on without compromise in the Tio1608-D I/O Rack. Mechanical construction, circuit board layout, power supply, grounding, and parts selection have all been executed with meticulous attention to detail and quality, and exhaustive performance and listening tests were carried out at each stage of development. For networking the same Dante protocol implemented in higher end Yamaha digital consoles is used for precise synchronization, low latency, low jitter, and high sample accuracy. In addition to superior performance, a Tio1608-D stage box system can be set up in just three easy steps.



### A VERSATILE LIVE RECORDING AND PLAYBACK SOLUTION FOR ANY APPLICATION.

Live recording capability is becoming increasingly important in live sound systems. From simple 2-track recording and playback using a USB storage device to all-out multitrack recording with a computer based DAW (Digital Audio Workstation), the TF series is ready to roll. TF consoles come supplied with Steinberg's Nuendo Live Multitrack live recording software, providing an easy way to simultaneously record up to 34 tracks to a computer connected to the console via USB 2.0. MP3 and WAV files can be played back from USB storage devices, and audio from an iPhone or iPad can be played back via a direct digital connection. When playing back from a DAW, analog input or DAW input can be individually selected for each channel so that pre-recorded material can be mixed with live input for virtual sound checks or rehearsals. Of course BGM and sound effects can be played back too.



## OFFLINE EDITING PLUS SHOWTIME CONTROL

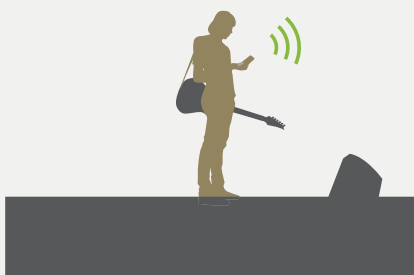
The TF Editor application for Windows and Mac computers provides a complete interface for offline editing and setup of TF consoles, with scene and preset management capabilities plus convenient keyboard entry of channel names. In addition to being able to set up the console offline at any convenient location and time, the TF Editor can be used online at the same time as the TF StageMix and MonitorMix applications. A Windows 10/8 PC with a multi-touch screen can use the same gestures as on the console itself. And if using Wi-Fi, a PC can function as a convenient remote-mixing device. Up to three devices running TF Editor or StageMix can be connected at the same time.



StageMix

## TF STAGEMIX™ FOR WIRELESS MIXING

TF StageMix is an iPad application that provides wireless control of TF series consoles, allowing remote mixing from audience seating, in front of floor monitors, or any other listening position. It can also be used at the console as an extension of the console's own interface. The TF StageMix interface is designed for similar operation and flow to the console display, making it easier than ever to refine the mix from any location.



MonitorMix

## PERSONAL MONITORING WITH MONITORMIX

The MonitorMix application for the TF Series allows individual wireless AUX mixing from up to 10 iPhone, iPad or iPod touch devices simultaneously. Each performer can have convenient control over the AUX buses assigned to them, without having to deal with complex settings or parameters. They can also create personal Group settings for even easier adjustment: all levels on just one fader, for example. Since up to three devices running TF Editor or StageMix and up to 10 devices running MonitorMix can be connected at the same time, even large bands can have the personal control they need, reducing demands on the sound engineer.



TF STAGEMIX AND MONITORMIX ARE AVAILABLE FREE OF CHARGE THROUGH THE APP STORE.



YAMAHA



## GENERAL SPECIFICATIONS

| MODEL                     |                        | TF5                                                                                                                               | TF3                                                   | TF1                                                   | TF-RACK                                                                    |
|---------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|----------------------------------------------------------------------------|
| FADER CONFIGURATION       |                        | 32 + 1 (Master)                                                                                                                   | 24 + 1 (Master)                                       | 16 + 1 (Master)                                       | n/a                                                                        |
| MIXING CAPACITY           | Input Channels         | 48 (40 mono + 2 stereo + 2 return)                                                                                                | 48 (40 mono + 2 stereo + 2 return)                    | 40 (32 mono + 2 stereo + 2 return)                    | 40 (32 mono + 2 stereo + 2 return)                                         |
|                           | Aux Buses              | 20 (8 mono + 6 stereo)                                                                                                            |                                                       |                                                       |                                                                            |
|                           | Stereo Buses           | 1                                                                                                                                 | 1                                                     | 1                                                     | 1                                                                          |
|                           | Sub Buses              | 1                                                                                                                                 | 1                                                     | 1                                                     | 1                                                                          |
|                           | Matrix Buses           | 4                                                                                                                                 | 4                                                     | 4                                                     | 4                                                                          |
| INPUT CHANNEL FUNCTIONS   |                        | 8 DCA Groups                                                                                                                      |                                                       |                                                       |                                                                            |
| I/O                       | Inputs                 | 32 mic/line (XLR/TRS combo) + 2 stereo line (RCA pin)                                                                             | 24 mic/line (XLR/TRS combo) + 2 stereo line (RCA pin) | 16 mic/line (XLR/TRS combo) + 2 stereo line (RCA pin) | 16 mic/line (XLR/TRS combo) + 1 stereo line (RCA pin)                      |
|                           | Outputs                | 16 (XLR)                                                                                                                          |                                                       |                                                       | 16 (8 XLR + 8 TRS phone)                                                   |
|                           | Expansion slots        | 1 (for NY64-D)                                                                                                                    |                                                       |                                                       |                                                                            |
| ON-BOARD PROCESSORS       | DSP                    | 8 Effects + 10 GEQ                                                                                                                |                                                       |                                                       |                                                                            |
| RECORDING / PLAY BACK     | PC/Mac (USB2.0)        | Recording 34 tracks, Playback 34 tracks                                                                                           |                                                       |                                                       |                                                                            |
|                           | USB Storage Device     | Recording 2 tracks (USB hard drive/ SSD)*, Playback 2 tracks (USB hard drive/ SSD/ thumb drive)                                   |                                                       |                                                       |                                                                            |
| GENERAL SPECIFICATIONS    |                        | TF5                                                                                                                               | TF3                                                   | TF1                                                   | TF-RACK                                                                    |
| SAMPLING FREQUENCY RATE   | Internal               | 48 kHz                                                                                                                            |                                                       |                                                       |                                                                            |
| SIGNAL DELAY              |                        | Less than 2.6 ms, INPUT to OMNI OUT, Fs=48 kHz                                                                                    |                                                       |                                                       |                                                                            |
| FADER                     |                        | 100 mm motorized, Resolution = 10-bit, +10 dB to -138 dB, -∞ dB all faders                                                        |                                                       |                                                       | n/a                                                                        |
| TOTAL HARMONIC DISTORTION |                        | Less than 0.05% 20 Hz-20 kHz @+4 dBu into 600 Ω, INPUT to OMNI OUT, Input Gain=Min. (Measured with a -18 dB/octave filter@80 kHz) |                                                       |                                                       |                                                                            |
| FREQUENCY RESPONSE        |                        | +0.5, -1.5 dB 20 Hz-20 kHz, refer to +4 dBu output @1kHz, INPUT to OMNI OUT                                                       |                                                       |                                                       |                                                                            |
| DYNAMIC RANGE             |                        | 110 dB typ., DA Converter, 107 dB typ., INPUT to OMNI OUT, Input Gain=Min.                                                        |                                                       |                                                       | 110 dB typ., DA Converter, 108 dB typ., INPUT to OMNI OUT, Input Gain=Min. |
| HUM & NOISE LEVEL         | Equivalent input noise | -128 dBu typ., Input Gain=Max. (Measured with an A-Weight filter)                                                                 |                                                       |                                                       |                                                                            |
|                           | Residual output noise  | -85 dBu, ST master off (Measured with an A-Weight filter)                                                                         |                                                       |                                                       |                                                                            |
| CROSSTALK                 |                        | -100 dB (Measured with a -30 dB/octave filter@22 kHz), adjacent INPUT/OMNI OUT channels, Input Gain=Min.                          |                                                       |                                                       |                                                                            |
| POWER REQUIREMENTS        |                        | 100-240 V 50/60 Hz                                                                                                                |                                                       |                                                       |                                                                            |
| POWER CONSUMPTION         |                        | 120 W                                                                                                                             | 110 W                                                 | 100 W                                                 | 85 W                                                                       |
| DIMENSIONS                | W x H x D              | 866x255x599 mm                                                                                                                    | 716x225x599 mm                                        | 510x225x599 mm                                        | 480x132x409 mm                                                             |
| NET WEIGHT                |                        | 20.0 kg (44.1lb)                                                                                                                  | 17.0 kg (37.5lb)                                      | 13.5 kg (29.8lb)                                      | 9.2 kg (20.3lb)                                                            |
| ACCESSORIES               |                        | Quick Guide, Power Cord, Nuendo Live                                                                                              |                                                       |                                                       |                                                                            |
| OPTIONS                   |                        | Rack-mount Kit RK5014, Audio Interface Card (NY-64D), Foot Switch (FC5)                                                           |                                                       |                                                       | Audio Interface Card (NY-64D), Foot Switch (FC5)                           |
| OTHERS                    |                        | Operating temperature range: 0-40 °C, Storage temperature range: -20-60 °C                                                        |                                                       |                                                       |                                                                            |

## OPTIONAL ACCESSORIES

### TF SERIES DIGITAL MIXING CONSOLES

- TouchFlow Operation™ – smooth, natural control flow
- Intuitive user interface optimized for touch panel operation
- Touch & turn knob offers extra control precision
- 1-knob COMP™ & 1-knob EQ™: One knob to dial in the ideal sound
- GainFinder™ supports precision gain setup
- QuickPro Preset™ provides instant access to pro sound setups
- DCA roll-out enhances group control
- Comprehensive fader bank section
- TF Editor offline editing plus showtime

- TF StageMix™ for wireless mixing control
- Personal monitoring with MonitorMix
- Recallable D-PRE™ microphone preamplifiers
- Powerful processors and effects
- NY64-D expansion slot (64 in/ 64 out) for connection to a Dante network
- Tio1608-D high-performance stagebox solution that's simple to set up
- 8-channel Dan Dugan automixer



✱ Tio1608-D I/O RACK



✱ NY64-D NY CARD

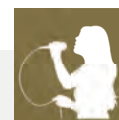


✱ RK5014 RACK MOUNT KIT

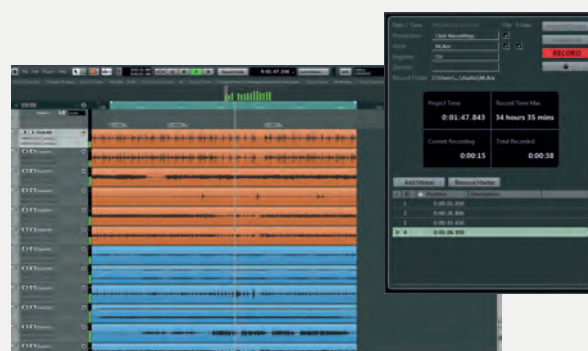
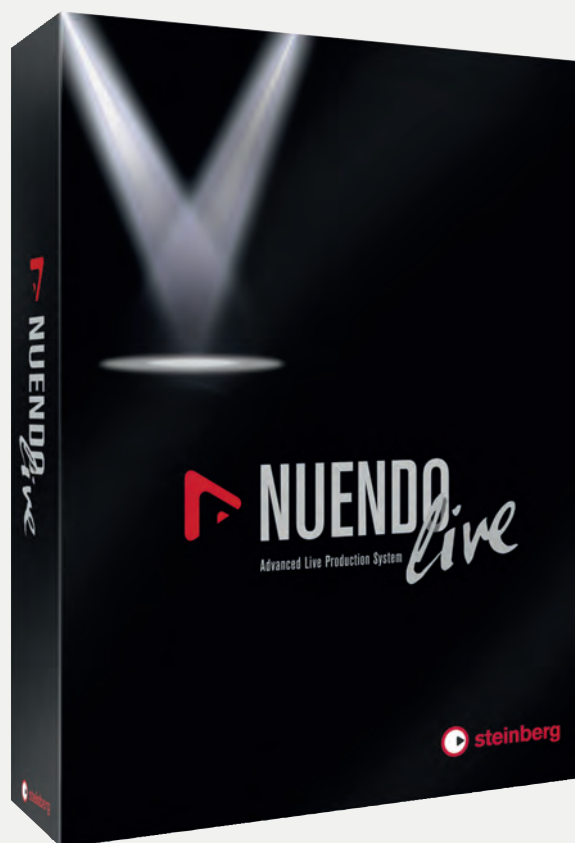
# | NUENDO LIVE



CONFERENCE



LIVE



## A PROFESSIONAL MULTI-TRACK LIVE RECORDING SOLUTION, PERFECTLY TAILORED TO CAPTURE LIVE PERFORMANCES, FROM CLUB SHOW UP TO THE LARGEST CONCERTS AND FESTIVALS

- **ADVANCED LIVE RECORDING SYSTEM** featuring a straightforward single-window operation, a record panel, a pre-record buffer and more
- **SEAMLESS INTEGRATION** with Yamaha CL-series consoles for controlling essential Nuendo Live functions straight from the live console
- **STATE-OF-THE-ART RECORDING QUALITY BASED ON STEINBERG'S AWARD-WINNING AUDIO ENGINE** with up to 192 kHz lets your production stand apart from the competition
- **NUENDO LIVE RECORD PANEL** shows all essential session information at once— creating confidence in demanding live situations
- **ADVANCED SESSION MANAGEMENT** with auto-naming of recorded files, multiple folder creation, easy-to-use marker track, auto-save and notepad
- **ZERO SETUP TIME** thanks to automatic track creation function that make Nuendo Live record-ready in less than a minute
- **24+ HOURS RECORDING TIME** thanks to EBU-compliant RIFF 64 broadcast wave format in standard recording mode
- **VIRTUAL SOUND CHECK** allows for easy use of previous recordings for sound check, including marker recall and 1:1 output
- **DELIVER WITH CONFIDENCE** due to standardized rendering formats and Nuendo
- **EDITING ON THE ROAD** Nuendo Live includes essential editing functions, making it possible to create a rough edit of the recordings right after the show



## SUPERIOR REMOTE CONTROL FROM CL AND QL CONSOLES

Nuendo Live seamlessly integrates with Yamaha's digital mixing consoles, the CL/QL series. Once connected, you can control all vital functions of Nuendo Live directly from the touch-sensitive surface of the console. Thanks to the Extension plug-in, a software adapter that facilitates the communication between the console and Nuendo Live, CL/QL features, such as channel name copy, marker set and transport control, are directly reflected within Nuendo Live's user interface. Record, play, stop – everything you need is just a touch away. Plus the CL/QL console also displays important information provided by Nuendo Live, such as current and remaining record time, making this system solution the perfect choice to master even the most demanding live recording tasks.

## 1:1 CONNECTION

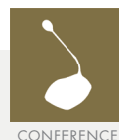
The close connection between Nuendo Live and Yamaha's live recording desks can also be seen by means of the channel management. All channels of the CL console are represented 1:1 in Nuendo Live, including the channel order, names and even the colors are perfectly matched between software and hardware – integration at its best.



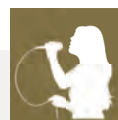
## SYSTEM REQUIREMENTS

| MAC                                                                                                                                                           | PC                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Mac OS X version 10.7 / 10.8 / 10.9 / 10.10 / 10.11                                                                                                           | Windows 7 / Windows 8.x / Windows 10 |
| Intel Dual Core CPU                                                                                                                                           | Intel or AMD Dual Core CPU           |
| OS compatible audio hardware                                                                                                                                  | OS compatible audio hardware         |
| 2GB RAM                                                                                                                                                       | 2GB RAM                              |
| 8GB of free HD space                                                                                                                                          | 8GB of free HD space                 |
| OS                                                                                                                                                            | OS                                   |
| Internet connection required for activation, account setup and personal / product registration.<br>Additional downloads may be required for the installation. |                                      |

# | STAGEMIX & MONITORMIX



CONFERENCE



LIVE



SOFTWARE



BROADCAST

**StageMix**
**MonitorMix**


MIXER WINDOW



SENDS ON FADERS



PEQ



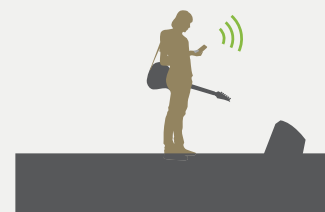
GEQ

## REMOTE CONTROL APPLICATION THROUGH IPAD

Stagemix provides remote control of RIVAGE, CL, QL, TF, M7CL, LS9 via a simple, intuitive graphical interface from anywhere within wireless range. The software has been specifically designed to allow engineers to adjust monitor mixes from the performers' positions on stage, directly controlling mix parameters via the iPad rather than having to rely on verbal directions to a second engineer. The result is better mixes in less time: a huge advantage during high-pressure pre-show setup.

## PERSONAL MONITORING WITH MONITORMIX

The MonitorMix application for the CL/QL/TF Series allows individual wireless monitor mixing from up to 10 devices simultaneously. Each performer can have convenient control over the MIX/AUX buses assigned to them, without having to deal with complex settings or parameters. They can also create personal Group settings for even easier adjustment: all instrument levels on just one fader, for example.



\* STAGEMIX AND MONITORMIX ARE AVAILABLE FREE OF CHARGE THROUGH THE APP STORE



# | CONSOLE FILE CONVERTER



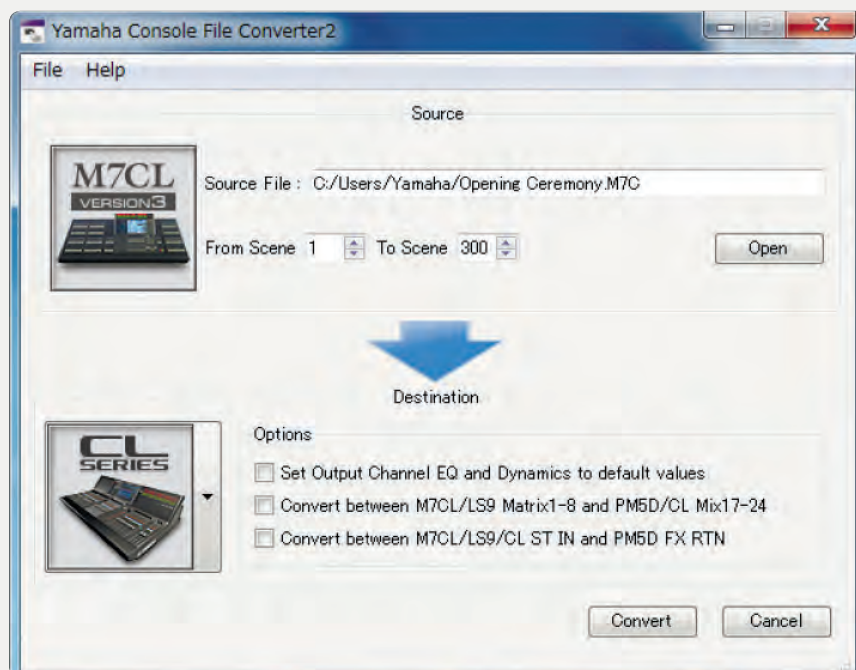
CONFERENCE



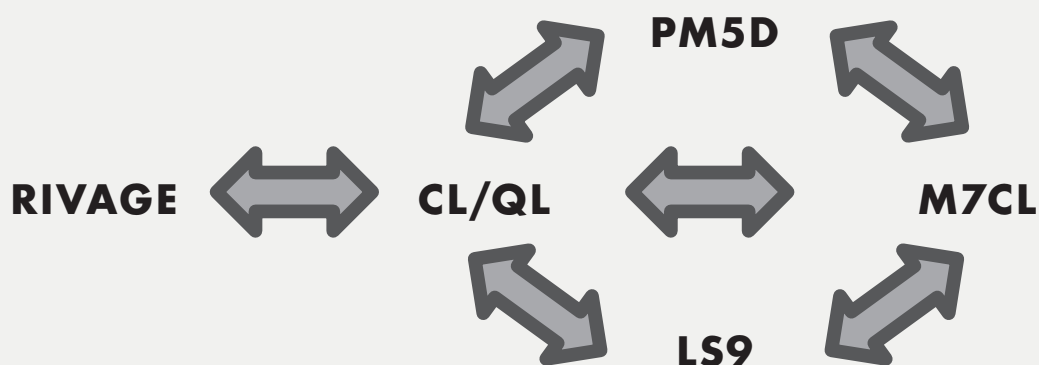
LIVE



SOFTWARE



The **CONSOLE FILE CONVERTER** is an application that allows data to be shared between a number of Yamaha digital mixing consoles. You can share data between **RIVAGE SERIES**, **CL/QL SERIES**, **PM5D**, **M7CL**, and **LS9** consoles, so data from one show doesn't have to be completely reprogrammed from scratch for the next, even if different consoles are used.



\* FILE CONVERTER CAN BE DOWNLOADED **FREE OF CHARGE** FROM: [WWW.YAMAHAPROAUDIO.COM](http://WWW.YAMAHAPROAUDIO.COM)

# |DM1000VCM



LIVE



PRODUCTION



BROADCAST

## DM 1000 VCM

DIGITAL PRODUCTION CONSOLE



MY16

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### 19-INCH DIGITAL PRODUCTION CONSOLE FOR PROFESSIONALS IN THE STUDIO OR ON THE ROAD.

- Precise 24-bit/96-kHz audio and high-performance head amps.
- Generous mixing capacity with up to 48 simultaneous inputs and 18 mix buses (8 group buses, 8 auxiliary buses, and the main stereo bus) in a compact rack-mount size console.
- Powerful channel functions with flexible control and digital patching capability.
- Four advanced multi-effect processors include surround effects.
- Scene memory and auto-mix functions for efficient workflow.
- Versatile pairing and grouping functions enhance mixing efficiency.
- Comprehensive interface with 17 touch-sensitive 100-mm motor faders.
- A generous selection of control interfaces: MIDI, USB, REMOTE, SMPTE, and word clock.
- Two mini-YGDAL expansion slots for easy I/O expansion in a variety of formats.
- Compatible with both Windows or Macintosh versions of Studio Manager version2 Software, allowing your PC and Console to work together seamlessly.
- Easy integration with computer-based DAWs (Digital Audio Workstations) or digital recorders to create an advanced digital production environment.
- A comprehensive range of features for surround production, including an enhanced surround monitoring environment with bass management.
- A new dimension of production power with the addition of Yamaha VCM effects and processing.
- Included in the THX pm3™ Studio Certification Program Approved Equipment List.
- DM1000 and accessories are available on a built to order schedule



## DM1000VCM

### DIGITAL PRODUCTION CONSOLE

| DM1000VCM                  |                                           |
|----------------------------|-------------------------------------------|
| MIXING CHANNELS            | 48                                        |
| MONO MICROPHONE INPUTS     | 16                                        |
| LINE INPUTS                | 4 OMNI                                    |
| ANALOGUE OUTPUTS           | 12 OMNI                                   |
| MONITORING OUTPUTS         | Through OMNI outputs                      |
| FADERS                     | 17                                        |
| MIX BUSES                  | 8 bus + 8 aux + St                        |
| EFFECTS                    | stereo multi effects x 4                  |
| DELAYS                     | all channels + all mixbuses               |
| GRAPHIC EQUALISERS         | -                                         |
| MY EXPANSION SLOTS         | 2                                         |
| DIGITAL I/O                | 2                                         |
| CASCADE PORT               | -                                         |
| SAMPLING FREQUENCY         | 44.1 - 48 - 88.2 - 96 kHz                 |
| SCENE MEMORY               | 99                                        |
| DYNAMIC AUTOMATION         | yes                                       |
| TIMECODE INPUT             | SMPTE (XLR)                               |
| SERIAL COMPUTER CONNECTION | yes, ESAMII Video Editor Support          |
| CONFIGURATION MEMORY       | StudioManager + Smart Media card          |
| DIMENSIONS (W/O OPTIONS)   | 436 x 200 x 585 mm (19" 13U) (W X H X D)  |
| WEIGHT (W X H X D)         | 9 kg                                      |
| OPTIONS                    | meter bridge, side panels, rack mount kit |

✱ **MB1000**  
METER BRIDGE

✱ **SP1000**  
WOODEN SIDE PANELS

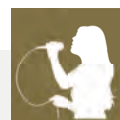
✱ **RK1**  
RACK MOUNT KIT



# |01V96i



CONFERENCE



LIVE



PRODUCTION

## CAPTURE THE PERFECT MOMENT

The **01V96i** represents the next step in the evolution of an industry standard, building on the proven configuration of its predecessors to create a compact digital mixer that meets the needs of an expanding user base with 16 in/16 out USB 2.0 audio streaming at an impressive 96kHz, the full suite of Yamaha's acclaimed Virtual Circuitry Modeling DSP effects and newly improved studio-quality head amps.

**01V96i**  
DIGITAL MIXING CONSOLE



**CUBASE AI**



**MY16**

PAGE 164



- 24 Bit/96 kHz I/O
- Integrated USB 2.0 interface streams 16x16 channels of audio
- Built-in VCM effects
- 40 inputs, 20 Buses at 96 kHz
- 16 analogue inputs
- Mini-YGDAI slot for I/O expansion
- Built-in optical adat interface
- 17 motorised faders (100 mm)
- Surround support
- Cascade link
- Studio Manager and Software Editor
- Controller function for DAW software



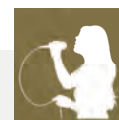
## 01V96i

### DIGITAL MIXING CONSOLE

#### 01V96i

|                            |                                          |
|----------------------------|------------------------------------------|
| MIXING CHANNELS            | 32 + 4 St                                |
| MONO MICROPHONE INPUTS     | 12 with insert                           |
| LINE INPUTS                | 2 stereo                                 |
| ANALOGUE OUTPUTS           | 4 OMNI + St                              |
| MONITORING OUTPUTS         | Monitor output                           |
| FADERS                     | 17                                       |
| MIX BUSES                  | 8 bus + 8 aux + St                       |
| EFFECTS                    | stereo multi effects x 4                 |
| DELAYS                     | all channels + all mixbuses              |
| GRAPHIC EQUALISERS         | -                                        |
| MY EXPANSION SLOTS         | 1                                        |
| DIGITAL I/O                | 1 x SP-DIF + 1 x Adat                    |
| CASCADE PORT               | - (Cascade possible through slots)       |
| SAMPLING FREQUENCY         | 44.1 - 48 - 88.2 - 96 kHz                |
| SCENE MEMORY               | 99                                       |
| DYNAMIC AUTOMATION         | -                                        |
| TIMECODE INPUT             | -                                        |
| SERIAL COMPUTER CONNECTION | yes + USB 16ch Audio                     |
| CONFIGURATION MEMORY       | StudioManager                            |
| DIMENSIONS (W/O OPTIONS)   | 436 x 150 x 540 mm (19" 13U) (W x H x D) |
| WEIGHT                     | 7.5 kg                                   |
| OPTIONS                    | rack mount kit                           |

# MY8-LAKE



LIVE

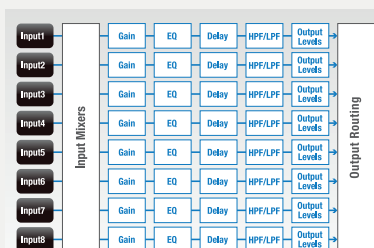


**Established Lake® Processing for Yamaha digital mixing consoles, signal processors, and power amplifiers.**

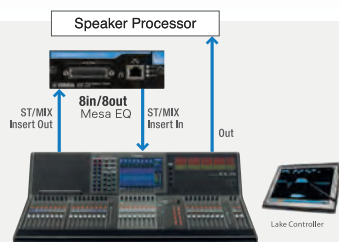
- 8-in/8-out Mesa mode (system EQ), 4-in/12-out Contour mode (crossover), or a combination of both for versatile processing.
- 96 kHz internal processing, supporting 44.1 kHz, 48 kHz, and 88.2 kHz sample rates.
- Compatible with Smart sound system measurement software for efficient, effective speaker tuning.
- Flexible system setup via Yamaha digital mixer insert points and MY8-LAKE card AES/EBU connectors.
- Lake Controller software application allows comprehensive overall management of all Lake devices in the system.
- Over 1,000 speaker presets included for fast, accurate tuning with a wide range of systems.
- Rsio64-D supports up to 4 units to be combined in 2U rack space connecting to a Dante network.

## MY8-LAKE

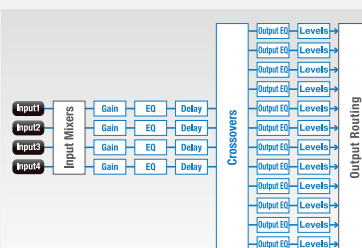
|                              |                                                                                                                                                |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| SAMPLING FREQUENCY           | 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz                                                                                                             |
| INTERNAL OPERATING FREQUENCY | 96 kHz                                                                                                                                         |
| SUPPORTED MODES              | Mesa 8 in / 8 out system EQ + Contour 4 in / 12 out crossover                                                                                  |
| CONNECTIONS                  | D-sub 25 pin 9AES/EBU 8 in / 8 out) + 100Mb Ethernet RJ45 (for Lake Controller)                                                                |
| COMPATIBLE HOSTS             | CL5/CL3/CL1, QL5/QL1, PM5D*/-RH*, DSP5D, M7CL, LS9, DM2000, 02R96, DM1000, 01V96i, DME64N/24N, Txn, DIO8(PM 1D).<br>*requires hardware upgrade |



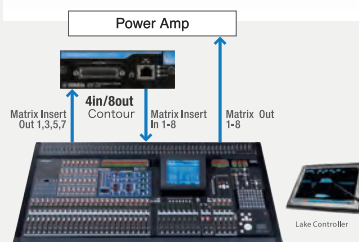
■ System EQ for the CL5



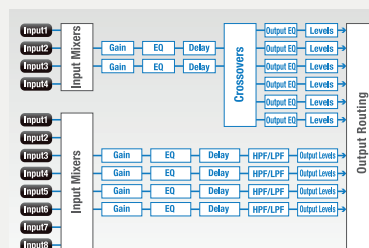
\*8 system EQs.  
\*Output can also be taken from the MY8-LAKE AES/EBU connectors.  
\*EQ grouping via the Lake Controller software is possible even when multiple MY8-LAKE cards are used.



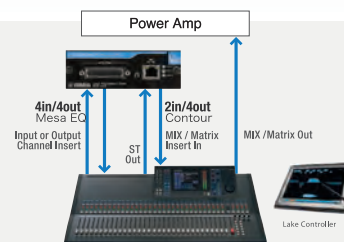
■ Crossover for the PM5D



\*4 crossovers (2-way).  
\*Up to 12 outs are available if the MY8-LAKE AES/EBU connectors are used.  
\*When using MY8-LAKE with the PM5D/-RH, a hardware upgrade for the PM5D/-RH is necessary. A fee will be charged for this upgrade.



■ Input/Output EQ & Crossover for the LS9



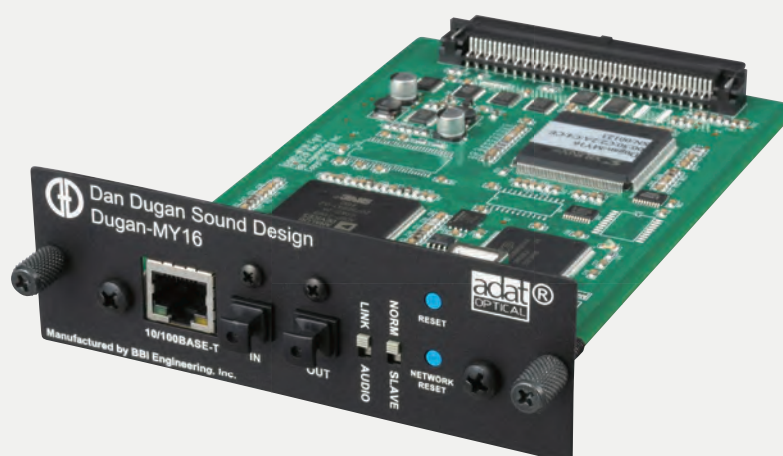
\*2 crossovers (2-way) plus 4 Mesa EQs for input channels and monitor speakers.  
\*Up to 6 Contour outs are available if the MY8-LAKE AES/EBU connectors are used.

# | DUGAN-MY16



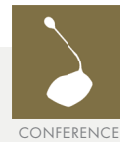
## FULLY AUTOMATIC MULTI-MIC MIXING THAT DELIVERS SMOOTH, PROFESSIONAL SOUND.

- Automatic detection of active mics with automatic control of individual channel and overall gain.
- No speech cutoff due to late fader activation, for smooth, uninterrupted sound.
- Effective background noise and feedback suppression without the need for noise-gate type threshold level settings.
- Easy setup: simply insert on the appropriate mixer input channels and raise the faders.
- One card provides automatic mixing for up to 16 channels at 48 kHz, or 8 channels at 96 kHz.
- Up to 8 cards can be used simultaneously to handle up to 128 channels at 48 kHz, or 64 channels at 96 kHz.
- Channels can be grouped to make up to three independent automatic mixers.
- Can also function as an 8-channel auto-mixer + 8-channel ADAT interface.
- Dugan Control Panel software application provides remote control and level monitoring capability.
- Rsio64-D supports up to 4 units to be combined in 2U rack space connecting to a Dante network.

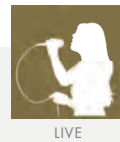


| DUGAN-MY16               |                                                                                                                             |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| OPERATING MODES STANDARD | 16 channels of Dugan mixing at 44.1 or 48 kHz, ADAT connectors link multiple Dugan units                                    |
| HIGH-RATE                | 8 channels of Dugan mixing at 88.2 or 96 kHz sample rate, ADAT connectors link multiple Dugan units                         |
| SHARED                   | 8 channels of Dugan mixing and 8 channels of general purpose ADAT I/O                                                       |
| DIGITAL I/O              | ADAT optical, 24 bit, 44.2/48kHz (Shared mode only)                                                                         |
| GAIN                     | Unity                                                                                                                       |
| AUDIO LATENCY            | 0.2ms                                                                                                                       |
| OPTICAL LINKING          | Up to 8 units may be linked in a ring; links with Models D-2, D-3 , E, E-1 and Dugan-MY16                                   |
| CONNECTORS               | 10/100 BASE T: RJ-45                                                                                                        |
| LINKING AND DIGITAL I/O  | ADAT optical                                                                                                                |
| RECOMMENDED              | Yamaha Mixers CL5/3/1, PM5D/-RH, DSP5D, M7CL-48ES/-48/-32, LS9-32/-16, DM2000, DM1000, 02R96, 01V96/96i, DME64N/24N, MTX5-D |

# |MGP-SERIES



CONFERENCE



LIVE



PRODUCTION

## DIGITAL HEART. ANALOGUE SOUL.

Yamaha has provided an impressive range of lineups in professional audio since the release of the PM200 in 1972 - our first ever professional analog mixing console. In 1987, we also released our first digital mixer, the DMP7, and have subsequently advanced technological innovations in sound quality, reliability and advanced functionalities with cutting-edge digital technologies. Drawing from our decades of experience crafting innovative, premium analog gear, we originally developed our new discrete Class-A microphone preamps for professional use in our high-end recording equipment. Utilizing an inverted Darlington circuit design, our newly-refined D-PRE mic preamps deliver a fat, rich, smooth tone that gives the MGP Series a significant advantage over any other mixer in its class. With Yamaha's proprietary X-pressive EQ we've managed to capture ultimate analog authenticity by unlocking the mysterious secret behind the expressive sound shaping capabilities of sought-after classic EQ modules.

- \* PREMIUM MIXING CONSOLES WITH UP TO 32 CHANNELS
- \* D-PRE CLASS A MIC PREAMPS
- \* 2 SEPARATED EFFECTS PROCESSORS (REV-X & SPX)
- \* 1-KNOB COMPRESSORS
- \* 2 HYBRID CHANNELS WITH DSP EFFECTS (DUCKER, STEREO IMAGE, LEVELER)
- \* IPOD/IPHONE APP



## MGP32X

- 32 channels
- 24 Discrete Class A D-PRE Mic Preamps
- Musical X-pressive EQ
- 16 Professional 1-knob Compressors with LED
- Dual Digital Effects Processors: REV-X and Classic SPX
- Stereo Hybrid Channels DSP Effects (Leveler, Stereo Imager, Priority Ducker)
- Digital Connectivity for iPod/iPhone
- USB Devices recorder (16-bit WAV, MP3) and playback (Stereo Out)
- 31-band GEQ (9 flex-band /14 fixed-band)
- Master compressor (3-band) assigned to stereo bus
- Free MGP Editor

## MGP24X

- 24 channels
- 16 Discrete Class A D-PRE Mic Preamps
- Musical X-pressive EQ
- 8 Professional 1-knob Compressors with LED
- Dual Digital Effects Processors: REV-X and Classic SPX
- Stereo Hybrid Channels DSP Effects (Leveler, Stereo Imager, Priority Ducker)
- Digital Connectivity for iPod/iPhone
- USB Devices recorder (16-bit WAV, MP3) and playback (Stereo Out)
- 31-band GEQ (9 flex-band /14 fixed-band)
- Master compressor (3-band) assigned to stereo bus
- Free MGP Editor







## MGP16X

- 16 channels
- 10 Discrete Class A D-PRE Mic Preamps
- Musical X-pressive EQ
- 8 Professional 1-knob Compressors with LED
- Dual Digital Effects Processors: REV-X and Classic SPX
- Stereo Hybrid Channels DSP Effects (Leveler, Stereo Imager, Priority Ducker)
- Digital Connectivity for iPod/iPhone
- DSP settings via iPod/iPhone
- Rugged, impact-resistant, powder-coated metal chassis
- Integrated rack-ears for easy rack mounting (11U+2)
- Internal universal power supply for world-wide use

## MGP12X

- 12 channels
- 6 Discrete Class A D-PRE Mic Preamps
- Musical X-pressive EQ
- 4 Professional 1-knob Compressors with LED
- Dual Digital Effects Processors: REV-X and Classic SPX
- Stereo Hybrid Channels DSP Effects (Leveler, Stereo Imager, Priority Ducker)
- Digital Connectivity for iPod/iPhone
- DSP settings via iPod/iPhone
- Rugged, impact-resistant, powder-coated metal chassis
- Integrated rack-ears for easy rack mounting (11U+2)
- Internal universal power supply for world-wide use



# MGP EDITOR



CONFERENCE



LIVE



PRODUCTION



SOFTWARE

**MGP EDITOR** is a free software application that gives you additional control of your MGP mixer's DSP settings via your iPhone and iPod touch. With a simple and intuitive graphic display, **MGP EDITOR** gives you additional, detailed control of your REV-X and SPX effects parameters – as well as Hybrid Channel's Priority Ducker, Leveler and attenuator. With MGP32X and 24X, setting of GEQ and Mastercompressor can be adjusted. Direct playback of iTunes play list is also possible.



- Requires an MGP mixing console
- Using a USB cable, connect your iPhone or iPod touch to the MGP's Apple Certified USB port.

|                          | MGP32X                                                       | MGP24X                                                       | MGP16X                                                       | MGP12X                                                       |
|--------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| MIXING CHANNELS          | 32                                                           | 24                                                           | 16                                                           | 12                                                           |
| D-PRE MIC PREAMPS        | 24                                                           | 16                                                           | 10                                                           | 6                                                            |
| 1-KNOB COMPRESSORS       | 16                                                           | 8                                                            | 8                                                            | 4                                                            |
| EQUALIZER                | 3-band X-Pressive EQ                                         | 3-band X-Pressive EQ                                         | 3-band X-Pressive EQ                                         | 3-band X-Pressive EQ                                         |
| FX PROCESSORS            | 2 separated (SPX & Rev-X Reverb)                             | 2 separated (SPX & Rev-X Reverb)                             | 2 separated (SPX & Rev-X Reverb)                             | 2 separated (SPX & Rev-X Reverb)                             |
| HYBRID CHANNELS          | 2 with DSP Effects (Priority Ducker, Leveller, Stereo Image) | 2 with DSP Effects (Priority Ducker, Leveller, Stereo Image) | 2 with DSP Effects (Priority Ducker, Leveller, Stereo Image) | 2 with DSP Effects (Priority Ducker, Leveller, Stereo Image) |
| IPOD/IPHONE APP          | Yes (USB port to connect and charge iPod or iPhone)          | Yes (USB port to connect and charge iPod or iPhone)          | Yes (USB port to connect and charge iPod or iPhone)          | Yes (USB port to connect and charge iPod or iPhone)          |
| 3-BAND MASTER COMPRESSOR | Yes                                                          | Yes                                                          | No                                                           | No                                                           |
| GRAPHIC EQ               | Yes (feature 14 band and flex 9 band)                        | Yes (feature 14 band and flex 9 band)                        | No                                                           | No                                                           |
| USB DEVICE RECORDING     | Yes (WAV or MP3)                                             | Yes (WAV or MP3)                                             | No                                                           | No                                                           |
| AUX SENDS                | 4 (2x Pre/2x Pre/Post switchable)                            | 4 (2x Pre/2x Pre/Post switchable)                            | 2 (1x Pre/1x Pre/Post switchable)                            | 2 (1x Pre/1x Pre/Post switchable)                            |
| GROUPS                   | 4                                                            | 4                                                            | 4                                                            | 4                                                            |
| MATRIX                   | 2                                                            | 2                                                            | No                                                           | No                                                           |
| RACKMOUNTS               | Yes                                                          | Yes                                                          | No                                                           | No                                                           |
| DIMENSIONS (WXHxD)       | 1207 x 169 x 565 mm                                          | 819 x 169 x 565 mm                                           | 447 x 143 x 495 mm                                           | 348 x 143 x 495 mm                                           |



# MG

MIXING CONSOLES

**D-PRE**  
Sonic Design Mix Process  
by an Award-Winning Design



MIXERS



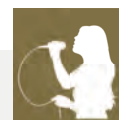
# |MG-SERIES



PRODUCTION



CONFERENCE



LIVE

## MG20XU

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- High-grade effect: SPX with 24 programs
- 24-bit / 192kHz 2 in / 2 out USB Audio Interface
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit included (12U+2)
- Metal chassis



## MG20

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit included (12U+2)
- Metal chassis



## MG16XU

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- High-grade effect: SPX with 24 programs
- 24-bit / 192kHz 2 in / 2 out USB Audio functions
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit included (12U+2)
- Metal chassis



## MG16

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit included (12U+2)
- Metal chassis



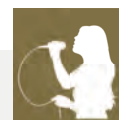




PRODUCTION



CONFERENCE



LIVE

## MG12XU

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- High-grade effect: SPX with 24 programs
- 24-bit / 192khz 2 in / 2 out USB Audio functions
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE and MG REC/PLAY free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit (10U+2) available as an option (RKM12)
- Metal chassis



## MG12XUK

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- High-grade effect: SPX with 24 programs
- 24-bit/192khz 2 in/2 out USB Audio functions
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE and MG REC/PLAY free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Metal chassis



**YAMAHA**



## MG12

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Rack Mount Kit (10U+2) available as an option (RKM12)
- Metal chassis



## MG10XU

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- 24-bit / 192khz 2 in / 2 out USB Audio functions
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE and MG REC/PLAY free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Metal chassis

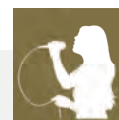




PRODUCTION



CONFERENCE



LIVE

## MG10XUF

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- 24-bit/192khz 2 in/2 out USB Audio functions
- iPod compatible via Apple iPad Camera Connection Kit
- Cubasis LE and MG REC/PLAY free download in the App store
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Internal universal power supply for world-wide use
- Metal chassis



## MG10

- D-Pre mic preamps with inverted Darlington circuit
- Improved 1-Knob compressors
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Metal chassis





## MG06X

- D-Pre mic preamps with inverted Darlington circuit
- High-grade effect: SPX with 6 programs
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Metal chassis



## MG06

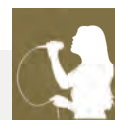
- D-Pre mic preamps with inverted Darlington circuit
- PAD switch on mono inputs
- XLR balanced outputs
- +48V phantom power
- Metal chassis



# |AG SERIES



BROADCAST



LIVE

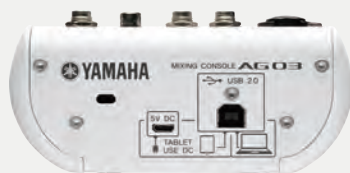


CONFERENCE



PRODUCTION

## MULTIPURPOSE MIXER WITH USB AUDIO INTERFACE



AG03



AG06

### AG03

- D-Pre mic preamp with inverted Darlington circuit
- Stereo LINE input
- USB interface, 192kHz / 24 bit, including CUBASE AI download
- 1-TOUCH DSP Compressor/EQ and SPX reverb

### AG06

- Two D-Pre mic preamps with inverted Darlington circuit
- Two stereo LINE inputs
- USB interface, 192kHz / 24 bit, including CUBASE AI download
- 1-TOUCH DSP Compressor/EQ, SPX reverb effect plus guitar amp simulation



#### FLEXIBLE CONNECTIVITY



#### HIGH RESOLUTION (192KHZ / 24BIT) PLAYBACK AND RECORDING



#### D-PRE STUDIO QUALITY MIC PREAMP



#### 1-TOUCH DSP OFFERS PROFESSIONAL SOUND WITH A SINGLE TOUCH

Phantom Power and a Hi-Z switchable input allow you to connect a variety of microphones, instruments and external audio players directly into your AG, while front panel volume knobs and a fader\* provide fast and easy volume control.

\*AG03 only

AG's high-resolution sound reproduces every subtlety of your performances and recordings with flawless fidelity and accurate imaging, ideal for music production, mixing and broadcasting, as well as high-definition listening.

AG features the same premium mic preamps developed by Yamaha for high-end recording consoles, capturing most detailed nuances of your vocal or instrumental performance.

AG features 1-TOUCH DSP that utilizes Yamaha's state-of-the-art signal processing technology. COMP/EQ will hone your tone while EFFECT adds ambient reverb, and AMP SIM\* delivers a classic, warm tube amp sound – all at the touch of a button.

\*AG06 only



## GENERAL SPECIFICATIONS

| AG06                                              |                                              | AG03                                                                                                                                                                  |                                                                                                                                                                                     |
|---------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frequency Response<br>(nom. output level @ 1 kHz) | Input (MIC) to MONITOR<br>OUT via USB IN/OUT | +0.5 dB/-1.5 dB (20 Hz to 48 kHz @ $F_s = 192$ kHz),<br>GAIN knob: Min, TO PC: DRY CH1-2G                                                                             |                                                                                                                                                                                     |
| Total Harmonic<br>Distortion (THD+N)              | Input to MONITOR OUT                         | 0.05% @ 0 dBu (20 Hz to 20 kHz), GAIN knob: Min 0.01% @ +4 dBu (1 kHz),<br>GAIN knob: Min                                                                             |                                                                                                                                                                                     |
| Hum&Noise<br>(20 Hz to 20 kHz)                    | Equivalent Input Noise                       | -128 dBu (Mono Input Channel, $R_s: 150 \Omega$ , GAIN knob: Max)                                                                                                     |                                                                                                                                                                                     |
|                                                   | Residual Output Noise                        | -103 dBu (MONITOR OUT, MONITOR knob: Min)                                                                                                                             |                                                                                                                                                                                     |
| Crosstalk (1 kHz)                                 |                                              | -80 dB                                                                                                                                                                |                                                                                                                                                                                     |
| Input Channels                                    |                                              | Mono (MIC/LINE): 2 including<br>HEADSET MIC (Plug-in Power) (CH1<br>MIC and HEADSET MIC cannot be used<br>simultaneously.), Stereo (LINE): 2, USB<br>IN: 1, AUX IN: 1 | Mono (MIC/LINE): 1 including<br>HEADSET MIC (Plug-in Power) (CH1<br>MIC and HEADSET MIC cannot be used<br>simultaneously.), Stereo (LINE) / Mono<br>(GUITAR) :1, USB IN:1, AUX IN:1 |
| Output Channels                                   |                                              | STEREO OUT: 1,<br>MONITOR OUT: 1,<br>PHONES: 2 including HEADSET PHO-<br>NES (PHONES and HEADSET PHONES<br>cannot be used simultaneously.)                            | MONITOR OUT: 2,<br>PHONES: 2 including HEADSET PHO-<br>NES (PHONES and HEADSET PHONES<br>cannot be used simultaneously.)                                                            |
| Bus                                               |                                              | Stereo: 1                                                                                                                                                             |                                                                                                                                                                                     |
| Input Channel<br>Function (CH1)                   | PAD                                          | 26 dB                                                                                                                                                                 |                                                                                                                                                                                     |
|                                                   | DSP                                          | CH1: COMP/EQ, EFFECT (SPX Reverb)<br>CH2: AMP SIM, EFFECT (SPX Reverb)                                                                                                | COMP/EQ, EFFECT (SPX Reverb)                                                                                                                                                        |
|                                                   | PEAK LED                                     | LED turns on when the signal reaches 3 dB below clipping level.                                                                                                       |                                                                                                                                                                                     |
| Level Meter                                       | USB Output Level                             | 2x2 point LED meter [PEAK, SIG]                                                                                                                                       |                                                                                                                                                                                     |
| USB Audio                                         | 2 IN / 2 OUT                                 | USB Audio Class 2.0 compliant<br>Sampling Frequency: Max 192 kHz<br>Bit Depth: 24-bit                                                                                 |                                                                                                                                                                                     |
| FOOT SW                                           |                                              | EFFECT Mute on/off                                                                                                                                                    |                                                                                                                                                                                     |
| Power Requirements                                |                                              | DC 5 V, 500 mA                                                                                                                                                        |                                                                                                                                                                                     |
| Power Consumption                                 |                                              | Max. 2.5 W                                                                                                                                                            |                                                                                                                                                                                     |
| Dimensions (W x H x D)                            |                                              | 155 x 63 x 202 mm                                                                                                                                                     | 129 x 63 x 202 mm                                                                                                                                                                   |
| Net Weight                                        |                                              | 1.0 kg                                                                                                                                                                | 0.8 kg                                                                                                                                                                              |
| Included Accessories                              |                                              | USB Cable (1.5 m), CUBASE AI DOWNLOAD INFORMATION, Owner's Manual,<br>Technical Specifications                                                                        |                                                                                                                                                                                     |
| Optional Accessories                              |                                              | Foot Switch: FC5, Mic Stand Adaptor: BMS-10A                                                                                                                          |                                                                                                                                                                                     |



### LOOPBACK FUNCTION FOR INTERNET LIVE STREAMING

The LOOPBACK function consolidates all input channels and playback tracks, and routes the mix to your internet streaming software for easy live streaming of performances to the internet.



### CLASS COMPLIANT MODE FOR IPAD CONNECTION

AG is compatible with Apple's second generation iPad or later, allowing you to create high quality recording and playback using an iOS compatible music app such as Cubasis.

\*Apple iPad Camera Connection Kit/  
Lightning to USB Camera Adapter  
required



### DURABLE, COMPACT METAL CHASSIS

The tough metal body of the AG is extremely portable and easy to place on a keyboard, on a guitar case, or even on a mic stand using an optional adaptor.



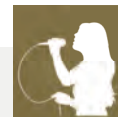
### USB BUS POWERED OR MOBILE BATTERY

AG can operate using USB bus power eliminating the need for an external adaptor. AG can also be driven by a mobile battery for use with an iPad providing users with a true mobile mixing and audio interface solution.

# |EMX SERIES



CONFERENCE



LIVE

## EMX



(EXCEPT EMX 5016CF)



(EMX5016CF ONLY)



(EMX5016CF ONLY)



(EMX5016CF ONLY)

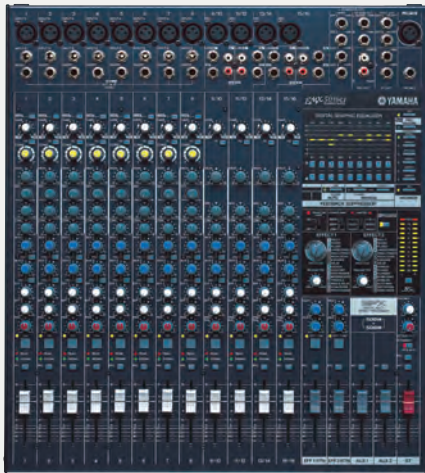


### INTEGRATED SOLUTIONS FOR SUPERIOR LIVE SOUND

Experienced musicians, performers, speakers, and club operators know the importance of a high-quality sound system with the right features and performance to deliver their sound. Where portability and convenience are important criteria, a system based on a high-performance Yamaha EMX-series powered mixer is definitely the way to go. In one integrated, portable unit you have a mixer to combine and balance your microphone and instrument and line sources, effects to refine and polish your sound, and power to drive the main speakers and even monitor speakers as well. But that's nowhere near the whole story - Yamaha EMX-series Powered Mixers offer a range of features that let you mix, process, and deliver your sound with maximum quality and creative control ... and, of course, that unrivalled Yamaha sound.

### CONSOLE-STYLE POWERED MIXERS THAT CAN TAKE YOUR LIVE SOUND TO THE NEXT LEVEL

- \* EMX2: 8 INPUTS, UP TO 4 MICROPHONES, 2 X 110W
- \* EMX5: 12 INPUTS, UP TO 8 MICROPHONES, 2 X 500W
- \* EMX7: 12 INPUTS, UP TO 8 MICROPHONES, 2 X 600W, GRAPHIC EQUALIZER
- \* EMX5014C: 14 INPUTS, UP TO 8 MICROPHONES, 2 X 320W, GRAPHIC EQUALIZER
- \* EMX5016CF: 16 INPUTS, UP TO 12 MICROPHONES, 2 X 320W, DIGITAL EQUALIZER



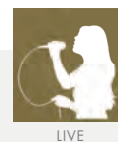
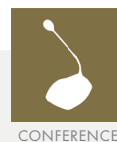
EMX5016CF



EMX5014C

|                             | EMX5016CF                                                                                                   | EMX5014C                            |
|-----------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------|
| OUTPUT POWER (1 KHZ/8 OHMS) | 2x320W                                                                                                      | 2x320W                              |
| CHANNELS                    | 16                                                                                                          | 14                                  |
| MICROPHONE INPUTS           | 12                                                                                                          | 10                                  |
| STEREO LINE INPUTS          | 4                                                                                                           | 4                                   |
| BUS OUTPUTS                 | ST                                                                                                          | ST                                  |
| AUX OUTPUTS                 | 3 (1FX)                                                                                                     | 3 (1FX)                             |
| EFFECTS                     | 2x SPX, 2x Digital 9-band GEQ, Feed-back suppressor, Frequency response correction, Maximizer, YSProcessing | 2x SPX, 2x 9-band GEQ, YSProcessing |
| DIMENSIONS                  | 444 x 155 x 493 mm                                                                                          | 444 x 155 x 493 mm                  |
| POIDS                       | 11 kg                                                                                                       | 10.5 kg                             |
| OPTIONAL RACK MOUNT KIT     | RK5014                                                                                                      | RK5014                              |

# |EMX SERIES



EMX7

EMX5

EMX2

MIXERS

|                          | EMX7                                                                                 | EMX5                                                                  | EMX2                                                                              |
|--------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| OUTPUT POWER (1KHZ/8OHM) | 2x600W                                                                               | 2x500W                                                                | 2x110W                                                                            |
| CHANNELS                 | 12                                                                                   | 12                                                                    | 10                                                                                |
| MICROPHONE INPUTS        | 8                                                                                    | 8                                                                     | 4                                                                                 |
| STEREO LINE INPUTS       | 4                                                                                    | 4                                                                     | 3                                                                                 |
| BUS OUTPUTS              | ST                                                                                   | ST                                                                    | ST                                                                                |
| AUX OUTPUTS              | 2 (1fx)                                                                              | 2 (1fx)                                                               | 1 (fx)                                                                            |
| EFFECTS                  | SPX Algorithm 24 programs, Feedback suppressor, Graphic equalizer, Speaker processor | SPX Algorithm 24 programs, Feedback suppressor, Master EQ, Monitor EQ | SPX Algorithm Reverb 4 programs, MASTER EQ (SPEECH to MUSIC), Feedback suppressor |
| DIMENSIONS               | 465x308x325mm                                                                        | 465x308x325mm                                                         | 375x147x220mm                                                                     |
| WEIGHT                   | 9.5KG                                                                                | 9.5KG                                                                 | 4.2KG                                                                             |
| OPTIONAL RACK MOUNT KIT  | RK7                                                                                  | RK7                                                                   | RK2                                                                               |



RK-EMX7



RK-EMX2

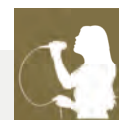


RK5014

#### ACCESSORIES EMX SERIES

| RK-EMX7                          | RK-EMX2                    | RK5014                                                  |
|----------------------------------|----------------------------|---------------------------------------------------------|
| RACK MOUNT KIT FOR<br>EMX5, EMX7 | RACK MOUNT KIT FOR<br>EMX2 | RACK MOUNT KIT FOR<br>EMX5014C,<br>EMX5016CF<br>(12U+1) |





# |STAGEPAS SERIES

The **STAGEPAS SERIES** features two sleek, lightweight speakers and a detachable powered mixer, along with one pair of speaker cables and a power cord, giving you a complete, extremely portable sound solution that can be set up quickly and easily in a variety of configurations and environments. The latest models feature Bluetooth® wireless audio streaming, SPX digital reverb, 1-knob master EQ and feedback suppressor.

PORTABLE PA SYSTEM  
**STAGEPAS 600BT**



STAGEPAS 600BT

PORTABLE PA SYSTEM  
**STAGEPAS 400BT**



STAGEPAS 400BT

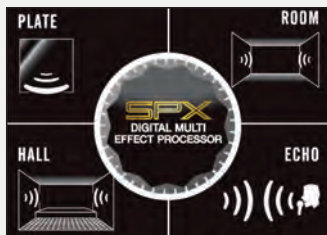
MIXERS

|                        | STAGEPAS 600BT                                               | STAGEPAS 400BT                                               |
|------------------------|--------------------------------------------------------------|--------------------------------------------------------------|
| MAX. POWER / MAX. SPL  | 680 W / 129dB                                                | 400 W / 125dB                                                |
| SPEAKER UNIT           | LF: 10" Cone / HF: 1,4" v.c. Driver                          | LF: 8" Cone / HF: 1" v.c. Driver                             |
| CHANNELS               | 10 Channels                                                  | 8 Channels                                                   |
| EQ                     | 3-Band EQ                                                    | 2-Band EQ                                                    |
| FX                     | SPX digital reverb                                           | SPX digital reverb                                           |
| OUTPUT PROCESSOR       | Feedback processor, 1-knob master EQ                         | Feedback processor, 1-knob master EQ                         |
| BLUETOOTH INPUTS       | Bluetooth Ver.4.1, A2DP v1.2,<br>Maximum Range: Approx. 10 m | Bluetooth Ver.4.1, A2DP v1.2,<br>Maximum Range: Approx. 10 m |
| SPEAKER MOUNT          | 34.8-35.2 mm pole socket with StageLok™                      | 34.8-35.2 mm pole socket with StageLok™                      |
| PHANTOM POWER          | 30V                                                          | 30V                                                          |
| SUBWOOFER OUTPUT       | with auto HPF                                                | with auto HPF                                                |
| DIMENSIONS (W X H X D) | Speaker: 335 x 545 x 319 mm<br>Mixer: 348 x 197 x 135 mm     | Speaker: 289 x 472 x 275 mm<br>Mixer: 308 x 180 x 116 mm     |
| WEIGHT                 | 25.6 kg                                                      | 18.3 kg                                                      |



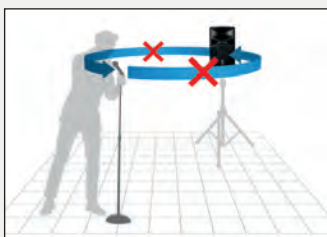
### BLUETOOTH® WIRELESS AUDIO STREAMING

Equipped with a Bluetooth input for wireless audio streaming from smartphones or tablets, the STAGEPAS-BT models let you seamlessly play backing tracks for gigs, or set the tone of parties, conferences, or events with the audio playback of your choice.



### SPX DIGITAL REVERB

One knob gives you access to four different high-quality reverb settings, perfect for vocals and acoustic instruments. Simply turn the knob to change the reverb type and time, and then you're ready to apply just the right amount of high-resolution effect to each channel.



### FEEDBACK SUPPRESSOR

Avoid the uncomfortable feedback that plagues so many sound reinforcement novices and professionals alike. Usually found only on high-end gear, this intelligent function removes feedback automatically with the push of a button, giving you a clear, professional sound.

## OPTIONAL ACCESSORIES



- \* **DXS12MKII AND DXS15MKII SUBWOOFERS**  
(connect to subwoofer output)

- \* **BMS-10A**  
Microphone stand adaptor

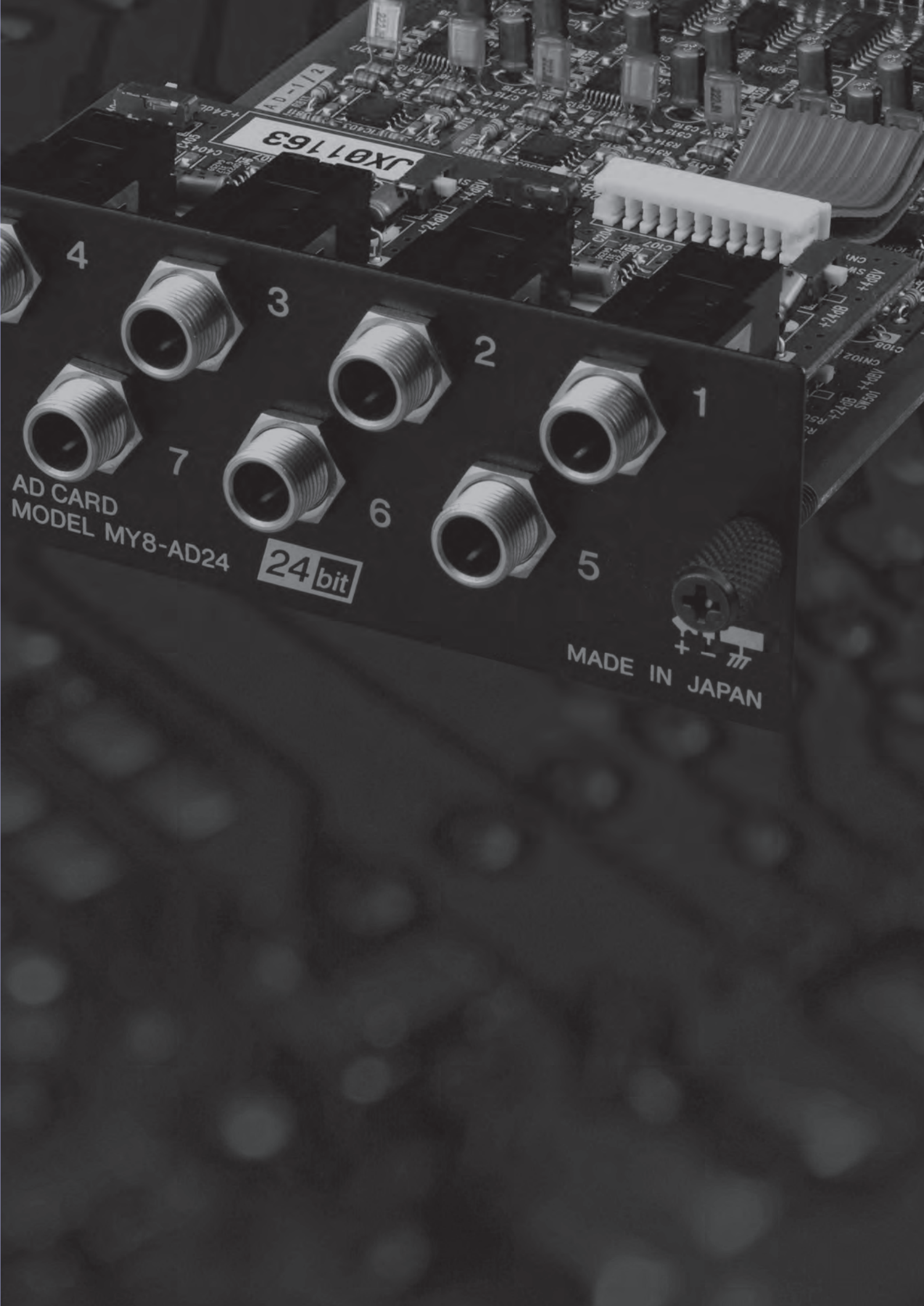




NEXT



# INTERFACES



24bit

AD CARD  
MODEL MY8-AD24

MADE IN JAPAN



# | MINI-YGDAI CARDS

| MODEL | CH | RESOLUTION | CONNECTOR |  |
|-------|----|------------|-----------|--|
|-------|----|------------|-----------|--|

## ANALOG

### \* AD/DA

|                                                                                                                                                                                   |             |       |                   |                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| MY8-ADDA96<br>  | 8in<br>8out | 24bit | Euroblock<br>x 16 | 96kHz compatible 8-in / 8-out analog audio interface. Max input / output level: +24dBu. 8x Euro block connectors (balanced). |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------|-------------------|------------------------------------------------------------------------------------------------------------------------------|

### \* AD

|                                                                                                                                                                                 |     |       |                     |                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| MY8-AD96<br>  | 8in | 24bit | D-sub 25 pin<br>x 1 | 96kHz compatible 8-in analog audio interface. Max input level: +24dBu(default) / +18dBu; GAIN switches at each input port. 1x D-sub 25pin connector.      |
| MY8-AD24<br>                                                                                   | 8in | 24bit | TRS Phone x 8       | 8-in analog audio interface. Max input level: +24dBu(default) / +4dBV; GAIN switches at each input port. 8x TRS phone jacks (balanced).                   |
| MY4-AD<br>                                                                                   | 4in | 24bit | XLR3-31 x 4         | 4-in analog audio interface. Max input level: +24dBu(default) / +18dBu / +4dBV; GAIN switches at each input port. 4x XLR-3-31 type connectors (balanced). |

### \* DA

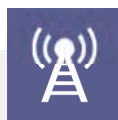
|                                                                                                                                                                                                                                                                         |      |       |                     |                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| MY8-DA96<br>   | 8out | 24bit | D-sub 25 pin<br>x 1 | 96kHz compatible 8-out analog audio interface. Max output level: +18dBu. 1x D-sub 25pin connector (balanced).                                       |
| MY4-DA<br>                                                                                        | 4out | 20bit | XLR3-32 x 4         | 4-out analog audio interface. Max output level: +18dBu(default) / +4dBV; GAIN switches at each output port. 4x XLR-3-32 type connectors (balanced). |

## DIGITAL

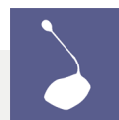
### \* ADAT

|                                                                                                |               |       |             |                                                                                                                                                |
|------------------------------------------------------------------------------------------------|---------------|-------|-------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| MY16-AT<br> | 16in<br>16out | 24bit | OPTICAL x 4 | 16 in / 16 out ADAT interface.<br>* If you use the card in Double Channel mode (FS: 88.2/96kHz), eight inputs and eight outputs are available. |
| MY8-AT<br>  | 8in<br>8out   | 24bit | OPTICAL x 2 | 8in / 8 out ADAT interface.<br>* If you use the card in Double Channel mode (FS: 88.2/96kHz), four inputs and four outputs are available.      |





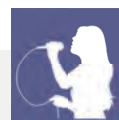
BROADCAST



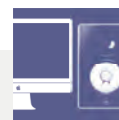
CONFERENCE



BACKGROUND  
MUSIC



LIVE



PRODUCTION

| MODEL | CH | RESOLUTION | CONNECTOR |  |
|-------|----|------------|-----------|--|
|-------|----|------------|-----------|--|

|                                                                                                                                                                                    |                      |       |                                                   |                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| * AES/EBU                                                                                                                                                                          |                      |       |                                                   |                                                                                                                                                                                                                                                                                                                     |
| MY16-AE<br>                                                                                       | 16in<br>16out        | 24bit | D-sub25 pin<br>x 2                                | 16 in / 16 out AES/EBU interface.<br><br>If you use the MY16-AE in Double Channel mode, selecting on the console's Word Clock Select page a slot that has the card installed enables the console to synchronize to the 88.2kHz or 96kHz clock signal.                                                               |
| MY8-AE96S<br>    | 8in<br>8out          | 24bit | D-sub25 pin<br>x 1                                | 96kHz compatible 8-in / 8-out AES/EBU interface. Equipped with a sampling rate converter at the input.                                                                                                                                                                                                              |
| MY8-AE96<br>   | 8in<br>8out          | 24bit | D-sub25 pin<br>x 1                                | 96kHz compatible 8-in / 8-out AES/EBU interface.                                                                                                                                                                                                                                                                    |
| MY8-AE<br>                                                                                      | 8in<br>8out          | 24bit | D-sub25 pin<br>x 1                                | 8-in / 8-out AES/EBU interface.                                                                                                                                                                                                                                                                                     |
| MY8-AEB<br>  | 8in<br>8out          | 24bit | BNC x 9<br>(IN x 4, OUT<br>x 4, REF<br>Video x 1) | 8-in / 8-out AES-3id-1995 compliant digital audio interface. x BNC for AES In/Out; 1x BNC for Reference Video In with the eXi-Clock sync capability.                                                                                                                                                                |
| * MADI                                                                                                                                                                             |                      |       |                                                   |                                                                                                                                                                                                                                                                                                                     |
| MY16-MD64<br>                                                                                   | 16in<br>16out        | 24bit | BNC x 2<br>Optical x 2<br>RJ-45 x 2               | 16-in / 16-out MADI interface.<br>Expandable to 64 in / 64 out with MY16-EX expansion cards. 2x BNC connectors and 2x SC fiber connectors for MADI I/O and 2x RJ45 for MY16-EX connection.                                                                                                                          |
| * SDI                                                                                                                                                                              |                      |       |                                                   |                                                                                                                                                                                                                                                                                                                     |
| MY8-SDI-ED<br>                                                                                  | 1in<br>1thru<br>2out | 24bit | BNC x 1<br>BNC (same<br>signal) x 2               | HD-/SD-SDI embed/de-embed card. Capable to de-embed two of the 4 audio groups out of an HD-SDI signal to the console. Capable to embed two audio groups into an HD-/SD-SDI signal for output. 2x BNC Connectors for HD-/SD-SDI output (parallel), 1x BNC connector for Thru, and 1x BNC connector for HD-SDI input. |

| MODEL | CH | RESOLUTION | CONNECTOR |  |
|-------|----|------------|-----------|--|
|-------|----|------------|-----------|--|

## NETWORK

### \* COBRANET

|                                                                                               |               |       |           |                                                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------|---------------|-------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MY16-CII<br> | 16in<br>16out | 24bit | RJ-45 x 2 | 16-in / 16-out CobraNet interface. Compliant with Yamaha HA Remote protocol via slot. If you use the card in Double Channel mode (FS: 88.2/96kHz), eight inputs and eight outputs are available. |
|-----------------------------------------------------------------------------------------------|---------------|-------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### \* DANTE

|                                                                                                      |               |                           |                         |                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------|---------------|---------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dante-MY16-AUD2<br> | 16in<br>16out | 16bit<br>24 bit<br>32 bit | RJ-45 x 2<br>D-sub9 x 1 | 16-in / 16-out Dante interface with support for Daisy chain switch mode, device clock and AES67 at low power consumption. 9-pin D-Sub support for Yamaha HA Remote protocol. Made by Audinate: <a href="http://www.audinate.com">http://www.audinate.com</a> |
|------------------------------------------------------------------------------------------------------|---------------|---------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### \* ETHERSOUND

|                                                                                                |               |       |                                                      |                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------|---------------|-------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MY16-ES64<br> | 16in<br>16out | 24bit | etherCON x 2 (EtherSound)<br>RJ-45 x 2 (for MY16-EX) | 16-in / 16-out EtherSound (ES100) interface. Compliant with Yamaha HA Remote protocol. Expandable to 64 in / 64 out with MY16-EX expansion cards. If you use the card in Double Channel mode (FS: 88.2/96kHz), eight inputs and eight outputs are available. |
|------------------------------------------------------------------------------------------------|---------------|-------|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

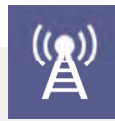
### \* I/O EXPANSION

|                                                                                                |               |       |           |                                                                                 |
|------------------------------------------------------------------------------------------------|---------------|-------|-----------|---------------------------------------------------------------------------------|
| MY16-EX<br> | 16in<br>16out | 24bit | RJ-45 x 4 | 16-in / 16-out expansion card for MY16-ES64 and MY16-MD64. 4x RJ-45 connectors. |
|------------------------------------------------------------------------------------------------|---------------|-------|-----------|---------------------------------------------------------------------------------|

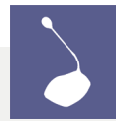


**YAMAHA**

**CA**  
commercial audio



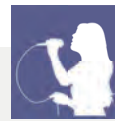
BROADCAST



CONFERENCE



BACKGROUND  
MUSIC



LIVE

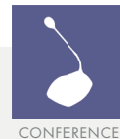


PRODUCTION

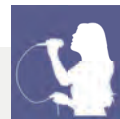
## MY CARD COMPATIBILITY CHART

|                  |                             |                 | CL  | QL  | PM5D | M7CL | L59 | DM2K | 02R96 | DM1K | 01V96i | MTX | DME | DA824 | TXn | RSio | CS-R10 | CS-R10S | CSD-R7 | DSP-R10 | RPIO-622 | RPIO-222 |
|------------------|-----------------------------|-----------------|-----|-----|------|------|-----|------|-------|------|--------|-----|-----|-------|-----|------|--------|---------|--------|---------|----------|----------|
| <b>Analog</b>    | AD/DA                       | MY8-AD-DA96     | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | AD                          | MY8-AD96        | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AD24        | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY4-AD          | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | DA                          | MY8-DA96        | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY4-DA          | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
| <b>Digital</b>   | ADAT                        | MY16-AT         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | -   | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AT          | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | YES   | -   | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | AES/EBU                     | MY16-AE         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AE96S       | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AE96        | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AE          | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | YES   | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AEB         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  |                             | MY8-AEB         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | MADI                        | MY16-MD64       | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | SDI                         | MY8-SDI-ED      | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | -   | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
| <b>Network</b>   | CobraNet                    | MY16-CII        | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | Dante                       | Dante-MY16-AUD2 | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | EtherSound                  | MY16-ES64       | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | I/O Expansion               | MY16-EX         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
| <b>Specialty</b> | Acoustic Echo Canceller     | MY4-AEC         | -   | -   | -    | -    | -   | -    | -     | -    | -      | YES | YES | -     | -   | -    | -      | -       | -      | -       | -        | -        |
|                  | Waves SoundGrid             | WSG-Y16         | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | YES | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | Lake Processing             | MY8-LAKE*       | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | -   | YES  | YES    | YES     | YES    | YES     | YES      | YES      |
|                  | Automatic Mixing Controller | Dugan-MY16      | YES | YES | YES  | YES  | YES | YES  | YES   | YES  | YES    | YES | YES | -     | -   | YES  | YES    | YES     | YES    | YES     | YES      | YES      |

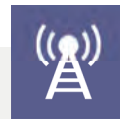
# |SWP1 SERIES



CONFERENCE



LIVE



BROADCAST

## SWITCHES FOR DANTE NETWORKED AUDIO SYSTEMS

Complex network switch setup that was previously better left to an IT technician can now be easily accomplished by anyone. A simple switch setting is all it takes to optimize **SWP1 SERIES** network switches for Dante operation, and a dedicated Windows application provides “network visibility” for comprehensive monitoring and control. The **SWP1 SERIES** makes audio network setup, monitoring, and operation easier and more convenient than ever before.



- \* BASED ON 20 YEARS OF Yamaha NETWORK SWITCH TECHNOLOGY
- \* DIP SWITCH DANTE OPTIMIZATION
- \* 3 PRESET VLAN TYPES
- \* NETWORK VISIBILITY
- \* ETHERCON CONNECTORS
- \* OPTICAL FIBRE
- \* REDUNDANT EXTERNAL DC INPUT

## Yamaha LAN MONITOR

Yamaha LAN Monitor software for Windows works with the SWP1 series to allow comprehensive monitoring and management of not only any connected SWP1 series switches, but connected Dante devices as well. Yamaha's original L2MS (Layer 2 Management Service) protocol extends “network visibility” capability to any Dante devices connected to SWP1 series switches.



## GENERAL SPECIFICATIONS

| MODEL                                                                   | SWP1-16MMF                                                                                                                                                                                                                                                                                                                                                                                                                                         | SWP1-8MMF                                     | SWP1-8                                            |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------|
| Number of LAN ports (1000BASE-T/100BASE-TX/10BASE-T/etherCON connector) | 12                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 8                                             | 8                                                 |
| Number of LAN ports (1000BASE-T/100BASE-TX/10BASE-T/RJ-45 connector)    | 4                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -                                             | -                                                 |
| Number of SFP ports (1000BASE-SX/opticalCON connector)                  | 2 (1 optical module is installed as standard)                                                                                                                                                                                                                                                                                                                                                                                                      | 2 (1 optical module is installed as standard) | 2 (optical modules are not installed as standard) |
| Console port                                                            | 1 (RJ-45)                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 (RJ-45)                                     | 1 (RJ-45)                                         |
| Automatic negotiation                                                   | Available                                                                                                                                                                                                                                                                                                                                                                                                                                          | Available                                     | Available                                         |
| Auto MDI/MDI-X                                                          | Available                                                                                                                                                                                                                                                                                                                                                                                                                                          | Available                                     | Available                                         |
| Switching capacity                                                      | 36 Gbit/s                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20 Gbit/s                                     | 20 Gbit/s                                         |
| Throughput                                                              | 27 Mpps                                                                                                                                                                                                                                                                                                                                                                                                                                            | 15 Mpps                                       | 15 Mpps                                           |
| Maximum number of MAC addresses                                         | 16,384                                                                                                                                                                                                                                                                                                                                                                                                                                             | 16,384                                        | 16,384                                            |
| Frame buffer                                                            | 1024 kB                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1024 kB                                       | 1024 kB                                           |
| VLAN                                                                    | Port VLAN, Tag VLAN (IEEE802.1Q), Private VLAN                                                                                                                                                                                                                                                                                                                                                                                                     |                                               |                                                   |
| Maximum number of VLANs                                                 | 256 (VLAN ID 1-4,094) *VLAN ID 1 is the default VLAN ID.                                                                                                                                                                                                                                                                                                                                                                                           |                                               |                                                   |
| IP multicast                                                            | IGMP Snooping (v1/v2/v3)                                                                                                                                                                                                                                                                                                                                                                                                                           | IGMP Snooping (v1/v2/v3)                      | IGMP Snooping (v1/v2/v3)                          |
| QoS                                                                     | 8 egress queues, Policy-based QoS, Remarking (CoS, ToS, DSCP), Scheduling (SP, WRR)                                                                                                                                                                                                                                                                                                                                                                |                                               |                                                   |
| Flow control                                                            | IEEE802.3x (Full-duplex), back pressure (Half-duplex)                                                                                                                                                                                                                                                                                                                                                                                              |                                               |                                                   |
| Support functions                                                       | Storm control, HOL blocking prevention, Loop detection, ACL, SNMP agents, Link aggregation (IEEE 802.3ad LACP, Static), Spanning tree (STP*, RSTP*, MSTP), Port mirroring, Port shutdown, Link speed down shift, Packet counter, Power saving mode (IEEE802.3az EEE; Disabled in DANTE mode), DHCP client, Logging, Firmware download via TFTP/HTTP, Config file download via TFTP *STP and RSTP are supported via downward compatibility of MSTP. |                                               |                                                   |
| DIP switches                                                            | CONFIG, VLAN PRESET                                                                                                                                                                                                                                                                                                                                                                                                                                | CONFIG, VLAN PRESET                           | CONFIG, VLAN PRESET                               |
| Indicators                                                              | Front: POWER, LED MODE×4, PORT×16×2*, SFP×2 *The LED MODE button allows the PORT lamps to be switched between indicating LINK/ACT-SPEED, STATUS, or VLAN.                                                                                                                                                                                                                                                                                          |                                               |                                                   |
| Operating temperature                                                   | 0 to 40°C                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0 to 40°C                                     | 0 to 40°C                                         |
| Storage temperature                                                     | -20 to 60°C                                                                                                                                                                                                                                                                                                                                                                                                                                        | -20 to 60°C                                   | -20 to 60°C                                       |
| Power supply (AC IN inlet)                                              | AC100V-240V, 50/60Hz, Internal power supply (no power switch), Power supply inlet: locking type                                                                                                                                                                                                                                                                                                                                                    |                                               |                                                   |
| Power supply (EXT DC INPUT inlet)                                       | External power supply requirements: 24VDC±2V, 1A, XLR-4-32 type Connector                                                                                                                                                                                                                                                                                                                                                                          |                                               |                                                   |
| Maximum power consumption                                               | 16 W, 0.29 A                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11 W, 0.21 A                                  | 11 W, 0.21 A                                      |
| Heat dissipation                                                        | 14.0 kcal/h                                                                                                                                                                                                                                                                                                                                                                                                                                        | 9.5 kcal/h                                    | 9.5 kcal/h                                        |
| Chassis                                                                 | Metal case, no fan                                                                                                                                                                                                                                                                                                                                                                                                                                 | Metal case, no fan                            | Metal case, no fan                                |
| Hazardous substances management                                         | RoHS compliant                                                                                                                                                                                                                                                                                                                                                                                                                                     | RoHS compliant                                | RoHS compliant                                    |
| Dimensions W x H x D                                                    | 480x44x362 mm                                                                                                                                                                                                                                                                                                                                                                                                                                      | 480x44x362 mm                                 | 480x44x362 mm                                     |
| Weight                                                                  | 4.6 kg                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4.2 kg                                        | 4.2 kg                                            |
| Accessories                                                             | Power cord, Owner's manual                                                                                                                                                                                                                                                                                                                                                                                                                         | Power cord, Owner's manual                    | Power cord, Owner's manual                        |
| Options                                                                 | MMF-SWP1 (Optical expansion unit)                                                                                                                                                                                                                                                                                                                                                                                                                  |                                               |                                                   |

### INTERFACE SPECIFICATIONS

| Terminal             | Format    | Level                              | Connector        |
|----------------------|-----------|------------------------------------|------------------|
| 1-8*1 1-8, 13-16*2*3 | IEEE802.3 | 10BASE-T/100BASE-TX/<br>1000BASE-T | etherCON CAT5e   |
| 9-12*2*3             | IEEE802.3 | 10BASE-T/100BASE-TX/<br>1000BASE-T | RJ-45            |
| 9, 10*4 17, 18*5*8   | IEEE802.3 | 1000BASE-SX                        | opticalCON       |
| CONSOLE (RS-232C)    | -         | RS-232C                            | RJ-45 *6         |
| EXT DC INPUT         | -         | -                                  | XLR-4-32 type *7 |

\*1 SWP1-8MMF, SWP1-8

\*2 SWP1-16MMF

\*3 These terminals support AutoMDI/MDI-X

\*4 The SWP1-8MMF supports the option for port 10, and the SWP1-8 supports the option for both ports 9 and 10

\*5 The SWP1-16MMF supports the option for port 18

\*6 For the pin assignments, refer to CONNECTOR PIN ASSIGNMENTS

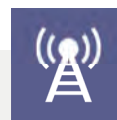
\*7 Pin 4=+24VDC, pin 1=GND, pins 2 and 3=N.C.

External power supply requirements: 24VDC±2V, 1A

\*8 Conforming cable: GI-type multi-mode fiber cables with a core diameter /cladding diameter of approximately 50 μm/125 μm.

Maximum cable length: 300 m





BROADCAST



**Dante™**



RSio64-D

- Accepts a wide range of Mini-YGDAI input/output and processing cards
- Seven general routing presets, including routing between Mini-YGDAI cards
- Supports matrix patching from R Remote V3 or a CL/QL series console
- Sample rate converters for all four Mini-YGDAI slots
- EXT DC INPUT for redundant power supplies
- Supports Dante redundancy (primary/secondary)



## CL SERIES

Sound, operation, function, and reliability all took a notable evolutionary leap forward with the **CL SERIES** digital live sound consoles. High-end effects created through a convergence of Yamaha VCM technology and expertise from Rupert Neve Designs, refined operability based on the acclaimed Centralogic concept, and flexible remote control functionality provide the most advanced capabilities available for live sound and live recording applications.



## QL SERIES

With natural sound inherited from the CL series, outstanding operability, and built-in Dante digital audio network support for flexible system setup, all-in-one **QL SERIES** digital consoles are favorites in a wide variety of sound applications.

**NUAGE**

First-class control surfaces that bring out the best in Steinberg DAW software plus audio interfaces that thoroughly satisfy the needs of professionals combine in a superior commercial production system solution.



## 64 CHANNEL DANTE / MINI YGDAI AUDIO INTERFACE

### RSio64-D

SAMPLING FREQUENCY (EXT. CLOCK) 44.1kHz, 48kHz, 88.2kHz, 96kHz

SIGNAL DELAY SLOT IN TO SLOT OUT, 96KHZ less than 0.2 ms

SAMPLE RATE CONVERTOR SRC clock range 39.7 kHz - 101.7 kHz  
SRC ratio 1:2.6 to 2.6:1

DANTE 64ch Input / 64ch Output @ 48kHz, 24 bit or 32 bit  
32ch Input / 32ch Output @ 96kHz, 24 bit or 32 bit

CONNECTORS etherCON CAT5e x 2 (Primary, Secondary)  
Wordclock IN BNC x 1  
ext. DC input XLR-4-32 x 1  
MY slot x 4

DIMENSIONS (W x H x D) 480 x 88 x 365 mm

WEIGHT 6.1 kg



### SEVEN GENERAL ROUTING PRESETS, INCLUDING ROUTING BETWEEN MINI-YGDAI CARDS

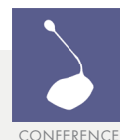
To make the **RSio64-D** even more convenient and easy to use as a format converter and router, presets for seven basic routing patterns are built in, including routing between Mini-YGDAI cards. A rotary switch on the front panel allows direct selection of one-to-one Dante/Mini-YGDAI routing, branched Mini-YGDAI/Mini-YGDAI routing, and other options designed to suit a variety of applications. One programmable user setup is also provided.



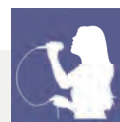
### SUPPORTS MATRIX PATCHING FROM R-REMOTE V3 OR A CL/QL SERIES CONSOLE

Used with the R Remote software application or a CL or QL series console, full matrix patching is supported so that more complex routing can be set up as required.

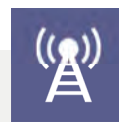
# R-I/O SERIES



CONFERENCE



LIVE



BROADCAST



## HIGH-PERFORMANCE REMOTE I/O FOR CL SERIES AND OTHER DIGITAL MIXING CONSOLES

- Sonic performance that brings out the best in any system
- Dante network protocol contributes to greater system scalability and flexibility
- Support for CL series consoles as well as other Dante based systems
- Automatic digital-stage compensation for analog gain changes (CL series only)
- Four models flexibly accommodate any system requirements Rio3224-D2, Rio1608-D2, Ri8-D, Ro8-D



Rio3224-D2



Rio1608-D2



Ri8-D



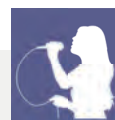
Ro8-D

INTERFACES

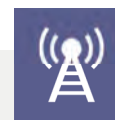
### DANTE RACK I/O

|                              | Rio3224-D2                                                  | Rio1608-D2                              | Ri8-D                         | Ri8-DEC                       | Ro8-D                 | Ro8-DEC                  |
|------------------------------|-------------------------------------------------------------|-----------------------------------------|-------------------------------|-------------------------------|-----------------------|--------------------------|
| ANALOGUE INPUTS              | 32                                                          | 16                                      | 8                             | 8                             | -                     | -                        |
| ANALOGUE OUTPUTS             | 16                                                          | 8                                       | -                             | -                             | 8                     | 8                        |
| DIGITAL OUTPUTS              | 4 pair AES/EBU                                              | -                                       | -                             | -                             | -                     | -                        |
| NETWORK I/O                  | 32X24 Dante (AES67)                                         | 16x8 Dante (AES67)                      | 8x0 Dante (AES67)             | 8x0 Dante (AES67)             | 0x8 Dante (AES67)     | 0x8 Dante (AES67)        |
| CONNECTORS                   | 32 XLR In /<br>16 XLR Out<br>4 x AES/EBU XLR<br>2x EtherCON | 16 XLR In /<br>8 XLR Out<br>2x EtherCON | 8 XLR In<br>2 x RJ45          | 8 XLR in<br>2 x EtherCON      | 8 XLR Out<br>2 x RJ45 | 8 XLR Out<br>2x EtherCON |
| HEAD AMP CONTROL             | QL/CL/TF/<br>Rivage, R-Remote                               | QL/CL/TF/<br>Rivage, R-Remote           | QL/CL/TF/<br>Rivage, R-Remote | QL/CL/TF/<br>Rivage, R-Remote | n/a                   | n/a                      |
| DANTE DEVICE LOCK / DDM      | yes                                                         | yes                                     | yes                           | yes                           | yes                   | yes                      |
| REDUNDANT POWER SUPPLY UNITS | yes                                                         | yes                                     | no                            | no                            | no                    | no                       |
| DISPLAY                      | yes                                                         | yes                                     | no                            | no                            | no                    | no                       |

# |RMio64-D



LIVE



BROADCAST

## DANTE/MADI CONVERSION FOR BROADCAST AND LIVE APPLICATIONS

- Bridging formats with seamless efficiency
- Dante Redundancy for resilient infrastructure
- MADI redundancy via alternative cable types
- Dual MADI connectors offer more than just conversion
- Tight integration for QL, CL and Nuage series



RMio64-D

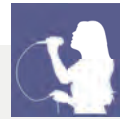
INTERFACES

### DANTE / MADI BRIDGE

#### RMio64-D

|                         |                                                                                                          |
|-------------------------|----------------------------------------------------------------------------------------------------------|
| AUDIO FORMAT            | MADI (AES10-2008), 64 channels i/o 24-bit @ 48kHz                                                        |
| AUDIO NETWORK PROTOCOL: | Dante, 64 channels i/o 24-bit                                                                            |
| SUPPORTED SAMPLE RATES  | 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz                                                         |
| SRC                     | SRC lock range 38.59kHz – 216kHz, SR ratio limit 6:1                                                     |
| CONNECTORS              | MADI IN/OUT: BNC, SC<br>Dante Primary & Secondary: etherCON 1000Base-T<br>Wordclock: BNC IN, IN SRC, OUT |

# | Nio SERIES



LIVE



BROADCAST

## HIGH PERFORMANCE AES/EBU AND LINE LEVEL AUDIO I/O UNITS

- \* SONIC PERFORMANCE UP TO 192KHZ
- \* DANTE NETWORK PROTOCOL CONTRIBUTES TO GREATER SYSTEM SCALABILITY AND FLEXIBILITY
- \* AES/EBU, ANALOGUE LINE LEVEL AND COMBINED MODELS
- \* WORDCLOCK AND SYSTEM LINK, REDUNDANT DANTE CONNECTION



Nio-A16



Nio-D16

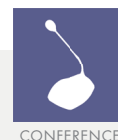




Nio-A8D8

|                              | Nio-A16                                                                                                  | Nio-D16                                                                                                | Nio-AD8D8                                           |
|------------------------------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| CONFIGURATION                | 16 analogue line level I/O                                                                               | 16 AES/EBU I/O (8 pairs)                                                                               | 8 analogue line level I/O + 8 AES/EBU I/O (4 pairs) |
| SAMPLING FREQUENCY           | Internal<br>External                                                                                     | 44.1kHz/48kHz/88.2kHz/96kHz/176.4kHz/192kHz<br>44.1kHz/48kHz/88.2kHz/96k ±200ppm<br>Hz/176.4kHz/192kHz |                                                     |
| FREQUENCY RESPONSE           | ±0.5dB, 20Hz-20kHz, ref to the nominal output level @1kHz, Input&Output Gain:0dB, Input level +4dBu(typ) |                                                                                                        |                                                     |
| THD+N <sup>1</sup>           | Less than 0.005%, input to output, GAIN:0dB                                                              |                                                                                                        |                                                     |
| DYNAMIC RANGE                | 120dB typ.,ADC                                                                                           |                                                                                                        |                                                     |
| CROSSTALK@1KHZ               | -100dB, CH1-16, adjacent inputs                                                                          |                                                                                                        |                                                     |
| POWER REQUIREMENTS (WATTAGE) | 51W                                                                                                      | 51W                                                                                                    | 51W                                                 |
| POWER REQUIREMENTS           | Other: 110-240V 50/60Hz                                                                                  |                                                                                                        |                                                     |
| DIMENSIONS (W X D X H)       | 480 x 369 x 88 mm (18-7/8" x 14-1/2" x 3-1/2")                                                           |                                                                                                        |                                                     |
| NET WEIGHT                   | 6.4 kg                                                                                                   | 6.7 kg                                                                                                 | 6.7 kg                                              |
| INCLUDED ACCESSORIES         | Power cable, Ferrite core, Rubber stoppers (4), Operation Manual                                         |                                                                                                        |                                                     |

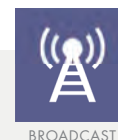
# | MLA8



CONFERENCE



PRODUCTION



BROADCAST

## 8-CHANNEL MIC/LINE AMPLIFIER

### EIGHT-CHANNEL MICROPHONE AND LINE PREAMPLIFIER INHERITS ACCLAIMED DM2000 HEAD-AMP TECHNOLOGY

- Unparalleled articulation and sonic quality descended from Yamaha's internationally acclaimed digital mixing consoles.
- 26 dB pad, adjustable 44 dB gain trim, 80 Hz high-pass filter, and phantom-power switch on each channel in a space-saving 1U design.
- Convenient color-coded control interface.
- XLR connectors are provided for audio input, while output connections can be made via either D-sub 25-pin or Euroblock connectors.
- The D-sub 25-pin connector is compatible with the MY8-AD96 8-channel Mini-YGDAI A/D card, providing seamless connectivity with Yamaha digital mixers.

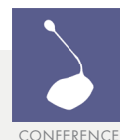


MLA8

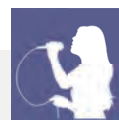
### 8-CHANNEL MIC/LINE PRE-AMPLIFIER

| MLA8              |                                 |
|-------------------|---------------------------------|
| ANALOGUE INPUTS   | 8                               |
| ANALOGUE OUTPUTS  | 2 x 8 (splitter)                |
| INPUT CONNECTORS  | 8x XLR                          |
| OUTPUT CONNECTORS | 8x EuroBlock<br>8x D-Sub 25 pin |

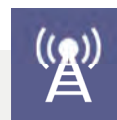
# |DA824



CONFERENCE



LIVE



BROADCAST

## D/A CONVERTER

### RELIABLE, HIGH-QUALITY 24 BIT/48 KHZ CONVERSION OF 8-CHANNEL DIGITAL AUDIO INPUT INTO ANALOG OUTPUT

- High quality 24-bit digital-to-analog converters
- Balanced XLR and 1/4" phone jack output connectors
- Maximum +4, +15, +18, or +24 dBm output level individually selectable for each channel
- Expansion slot supports optional mini-YGDAI cards for AES/EBU, ADAT and TASCAM digital format
- Word clock input and thru connectors
- Signal, nominal, and peak LED indicators



DA824

#### 8 CHANNEL D/A CONVERTER

##### DA824

|                  |                                                                    |
|------------------|--------------------------------------------------------------------|
| ANALOGUE OUTPUTS | 8 line level                                                       |
| INPUTS           | MY8 compatible slot                                                |
| CONNECTORS       | outputs: XLR, jack<br>D-Sub 9 pin (COM)<br>BNC (Wordclock In, Out) |

NEXT 

# SIGNAL PROCESSORS





EXPANDER **EXi8**

|              | 1                                | 2                                | 3                                | 4                                | 5                                | 6                                | 7                                | 8                                |
|--------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| PEAK         | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| INPUT SIGNAL | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |

- ☒ ALERT ☐ POWER  
☐ NETWORK  
☐ YDIF

EXPANDER **EXo8**

|               | 1                     | 2                     | 3                     | 4                     | 5                     | 6                     | 7                     | 8                     |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| OUTPUT SIGNAL | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- ☒ ALERT ☐ POWER  
☐ NETWORK  
☐ YDIF

PROCESSOR **MTX3**

|               | 1                                | 2                                | 3                                | 4                                | 5                                | 6                                | 7                                | 8                                |
|---------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| PEAK          | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| INPUT SIGNAL  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| OUTPUT SIGNAL | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |

PRESET

01

ENTER

- ☒ ALERT ☐ POWER  
☐ NETWORK  
☐ YDIF  
☐ SCHEDULER  
☐ SD/ACT

PROCESSOR **MTX5-D**

|               | 1                                | 2                                | 3                                | 4                                | 5                                | 6                                | 7                                | 8                                |
|---------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| PEAK          | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| INPUT SIGNAL  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| OUTPUT SIGNAL | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |

PRESET

01

ENTER

- ☒ ALERT ☐ POWER  
☐ PRIMARY  
☐ SECONDARY  
☐ SYNC  
☐ YDIF  
☐ SCHEDULER  
☐ SD/ACT

Dante

PROCESSOR **MRX7-D**

|               | 1                                | 2                                | 3                                | 4                                | 5                                | 6                                | 7                                | 8                                |
|---------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| PEAK          | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> | <input checked="" type="radio"/> |
| INPUT SIGNAL  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| OUTPUT SIGNAL | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |

PRESET

01

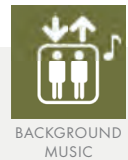
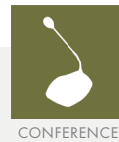
ENTER

- ☒ ALERT ☐ POWER  
☐ PRIMARY  
☐ SECONDARY  
☐ SYNC  
☐ YDIF  
☐ SCHEDULER  
☐ SD/ACT

Dante

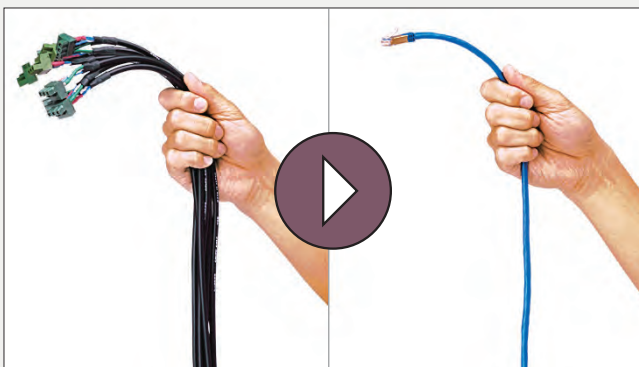


# | MTX SERIES



## MTX – THE IDEAL DIGITAL SIGNAL PROCESSOR FOR SMALL TO MID-SIZE COMMERCIAL APPLICATIONS

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 conference 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-MRX Editor software applications. 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.



## YDIF – AT THE HEART OF THE CIS SERIES LINE-UP

MTX processors feature the newly developed YDIF digital transmission format; a unique proprietary Yamaha technology that delivers 16ch audio and word clock transmission via standard 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.



**YDIF**

**Dante™**

**AMX®**

**CRESTRON®**

**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. The Dan Dugan automixer (4ch on MTX3, 8ch on MTX5-D) provides world class automixing functionality. 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.



Control of MTX based systems can be offered through the WIRELESS DCP app for iOS and Android devices, through the PROVISIONAIRE TOUCH and PROVISIONAIRE TOUCH KIOSK apps for iPad and through the PROVISIONAIRE CONTROL app for Windows.



Download on the  
**App Store**

GET IT ON  
**Google play**

Download on the  
**App Store**

## DCP SERIES

Up to 8 DCP series control panel units can be daisy-chained over distances of up to 200 meters via CAT5e Ethernet cable. Power is also supplied via the CAT5e cable, allowing control panels to be installed at any convenient locations.



US STANDARDIZED SIZE MODLES



EU STANDARDIZED SIZE MODELS

## PGM1 PAGING STATION

The PoE powered Dante enabled paging station PGM1 comes with with eight buttons and gooseneck microphone for use with MTX5-D and MRX7-D, and can be expanded to 24 buttons by adding up to two PGX1 expansion units.



## MCP LCD WALL MOUNT PANEL

Up to 16 MCP1 PoE powered wall mount panels can be used with MTX and MRX7-D systems. The MCP1's dot matrix display and 6 buttons support multiple languages and dynamic labelling.

## MATRIX PROCESSOR EQUIPPED WITH A VARIETY OF PROGRAMMABLE FEATURES DESIGNED TO MAXIMIZE THE PERFORMANCE OF SOUND SYSTEMS IN COMMERCIAL INSTALLATIONS.

- Inputs; 8 mono (mic/line), 2 stereo (line), 16 digital (via YDIF\*) .
- Outputs; 8 mono (line), 16 digital (via YDIF\*) .
- I/O configuration can be expanded by Exi/Exo expanders via the YDIF\* interface
- 16 Channel I/O on-board Dante network port for larger installations. (MTX5-D only)
- MY card slot offers further expandability and compatibility with other audio formats. (MTX5-D only)
- SD Card Slot for playback of MP3/WAV files stored on an SD Memory Card.
- Functions for worry-free operation; Feedback Suppressor, Auto Gain Control, Priority Ducker, Ambient Noise Compensator.
- Two useful digital processors "Reverb" and "Echo" for entertainment applications.
- Remotely control the volume and presets of multiple zones with DCP and MCP series wall mount digital controllers.
- Up to 24 zone paging with the PGM1 paging station (MTX5-D and MRX7-D only).
- Dan Dugan automixer: 4 channels on MTX3, 8 channels on MTX5-D.
- Wireless DCP for iPhone, iPod Touch and Android devices are available on the App store and Google Play store.
- ProVisionaire Touch, ProVisionaire Touch Kiosk iPad apps and the ProVisionaire Control Windows app provide free programmable graphic user interfaces.
- Equipped with Network port and GPI ports that offer compatibility with touch panel controllers such as AMX/CRESTRON®.
- Easy setup and parameter control with MTX-MRX Editor.



MTX5-D



MTX3

|                        | MTX5-D                     | MTX3                       |
|------------------------|----------------------------|----------------------------|
| MATRIX INPUT CHANNELS  | 34                         | 26                         |
| MATRIX OUTPUT CHANNELS | 16                         | 8                          |
| MIC/LINE INPUTS        | 8 Euroblock                | 8 Euroblock                |
| STEREO INPUTS          | 2 RCA Pin Jack             | 2 RCA Pin Jack             |
| ANALOGUE OUTPUTS       | 8 Euroblock                | 8 Euroblock                |
| MY CARD SLOT           | 1                          | -                          |
| YDIF I/O INTERFACE     | 2 x RJ45                   | 2 x RJ45                   |
| DANTE I/O INTERFACE    | 2 x RJ45 (16/16)           | -                          |
| GPI I/O                | 16/8 Mini Euroblock        | 8/4 Mini Euroblock         |
| DCP INTERFACE          | 1 x RJ45                   | 1 x RJ45                   |
| RS232/RS422            | 1 x D-Sub 9 pin            | 1 x D-Sub 9 pin            |
| SD CARD SLOT           | 1                          | 1                          |
| DIMENSIONS (W x H x D) | 480 x 88 x 366 mm (19" 2U) | 480 x 44 x 362 mm (19" 1U) |
| WEIGHT                 | 6.3 kg                     | 4.8 kg                     |

\*YDIF: the newly developed digital transmission format; a unique propriety Yamaha technology that delivers 16ch audio and word clock transmission via standard CAT5 Ether cable.

## INPUT EXPANDER/OUTPUT EXPANDER

### \* EXi8 INPUT EXPANDER

**YDIF** 1U

**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 EXPANDER

**YDIF** 1U

**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

EXo8

|                        | EXi8                       | EXo8                       |
|------------------------|----------------------------|----------------------------|
| MIC/LINE INPUTS        | 8                          | -                          |
| ANALOGUE OUTPUTS       | -                          | 8                          |
| INPUT CONNECTORS       | 8 x Euroblock              | -                          |
| OUTPUT CONNECTORS      | -                          | 8 x Euroblock              |
| YDIF I/O INTERFACE     | 2 x RJ45                   | 2 x RJ45                   |
| DIMENSIONS (W x H x D) | 480 x 44 x 351 mm (19" 1U) | 480 x 44 x 351 mm (19" 1U) |
| WEIGHT                 | 4.3 kg                     | 4.3 kg                     |

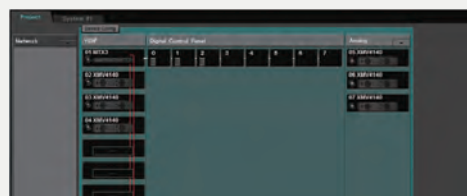
# | MTX-MRX EDITOR FOR MTX

**MTX-MRX 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-MRX Editor's wizard guides you through a simple yet thorough step process. What's more, in addition to the MTX Series, MTX-MRX Editor lets you incorporate EXi8 and EXo8 expanders, DCP series and MCP1 wall-mount controllers, PGM1 and PGX1 paging stations, and even XMV Series power amplifiers into your system and adjust parameter settings accordingly. With MTX-MRX 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-MRX EDITOR

### DEVICE CONFIGURATION

By simply following the instructions of the MTX-MRX 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 and MCP1 wall-mount controllers, Rio/Tio series i/o racks, PGM1 and PGX1 paging stations, or EXi8/ EXo8 expanders.



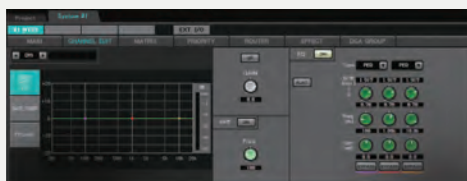
### MTX SERIES PARAMETER SETTINGS

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/PRIORITY 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.

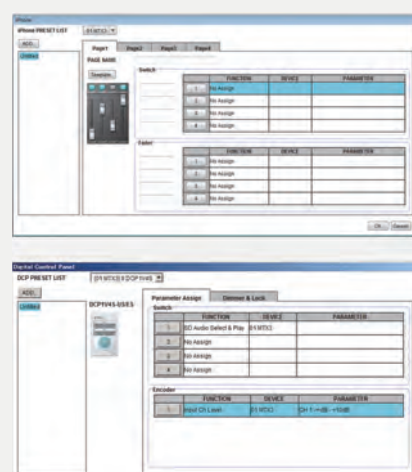


The signal from the matrix mixer is sent to 8 units of Priority Processor. Here, you can make detailed adjustments to the parameter settings of the Ducker function as well the Ambient Noise Compensator.



### OUTPUT PROCESSING SETTINGS

After Priority 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-MRX 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 and MCP1 wall-mounted controllers, PGM1 and PGX1 paging station, or to the dedicated PC/iPhone/Android software application.



### DAN DUGAN AUTOMIXER

Dan Dugan automixers are available to support conference applications. 4 channels can be used on MTX3, 8 channels can be used on MTX5-D.

# |MRX7-D

SIGNAL PROCESSOR

## MRX7-D



CONFERENCE



BACKGROUND  
MUSIC



LIVE



ACOUSTICS



BROADCAST



### SIMPLE, FLEXIBLE CONTROL FOR COMPLEX, HIGH-CAPACITY SOUND SYSTEMS

Sound system requirements for corporate conference rooms, educational facilities, shopping malls, and a variety of other environments are becoming increasingly large and complex. The MRX7-D offers outstanding control efficiency and flexibility for a broad spectrum of audio installations.



### FEATURES FOR A WIDE RANGE OF INSTALLATION NEEDS

AEC (Acoustic Echo Canceller) for remote conferencing systems, automatic mixing for multiple microphone inputs, a speech privacy function that can mask conversations in hospital or corporate systems where confidential information must be protected, and more. The MRX7-D offers a comprehensive range of components that offer effective solutions for a variety of issues faced in today's audio installations.



### LARGE SCALE SYSTEM SUPPORT

Built-in Dante digital audio networking capability makes it easy to set up systems of just about any scale while significantly reducing cabling cost and labor. Dante capable devices can be added to the system at any time, allowing flexible reconfiguration and expansion as needed.



### FLEXIBILITY AND OPERATION EASE

As the scale and control requirements of an audio system grow, the number of devices required and overall complexity increase correspondingly. With the MRX7-D and dedicated MTX-MRX Editor software, input and output devices can be quickly arranged via a software wizard and internal MRX7-D processing components can be combined as needed. One simple software application provides everything needed for comprehensive system design and management.



## MRX7-D

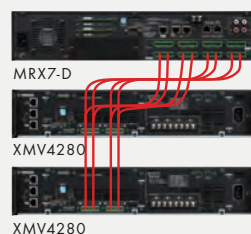
### AMPLE I/O AND EXPANSION CAPABILITY

- 8 mono microphone/line inputs and 2 stereo line inputs, 8 analog mono outputs
- 64 in/out Dante capacity supports large digital audio networks
- I/O expansion via YDIF connected MTX series matrix processor, EXi8 input expander, and EXo8 output expander units
- High expandability offered by Mini-YGDAY card slot

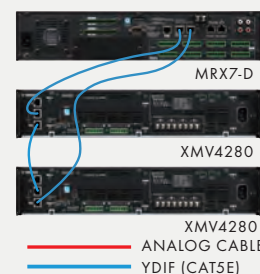


**DANTE** – The MRX7-D, MTX series matrix processors, XMV series power amplifiers, and other Dante equipped devices can be easily connected via CAT5e or better Ethernet cables and gigabit switches to provide audio data networking in streamlined sound systems of any scale.

ANALOG CABLING



YDIF CONNECTIONS



**YDIF** is an original Yamaha digital audio protocol that allows standard CAT5e Ethernet cable to be used for bidirectional transfer up to 16 channels of audio plus word clock signals over distances of up to 30 meters. It allows cascading of multiple MTX series units as well as signal transfer to XMV series power amplifiers via connections that are fast and simple to set up.



The MRX7-D features one Mini-YGDAL card slot that can accommodate cards supporting a variety of audio formats, and expansion by up to 16 I/O channels.



An SD memory card slot allows direct playback of MP3/WAV format audio files.

### MRX7-D

|                            |                                                                                                  |
|----------------------------|--------------------------------------------------------------------------------------------------|
| MEMORY BANK                | PRESET: 50                                                                                       |
| SAMPLING FREQUENCY RATE    | 48kHz/44.1kHz                                                                                    |
| SIGNAL DELAY               | 1.9 msec (AD-DA @48kHz)                                                                          |
| TOTAL HARMONIC DISTORTION* | 0.05% (+4dBu, Gain:-6dB, 48kHz) 0.1% (+4dBu, Gain: +66dB, 48kHz)"                                |
| FREQUENCY RESPONSE         | 20Hz to 20kHz: max:+0.5dB, min:-1.5dB                                                            |
| DYNAMIC RANGE              | 107dB (typ. Gain:-6dB)                                                                           |
| PHANTOM POWER              | +48V                                                                                             |
| CROSSTALK (@1KHZ)          | -100dB                                                                                           |
| HEAT DIFFUSION             | 55.9kcal/h max                                                                                   |
| POWER REQUIREMENTS         | AC100V-240V 50Hz/60Hz                                                                            |
| POWER CONSUMPTION          | 65W                                                                                              |
| DIMENSIONS WEIGHT          | 480W x 88H x 366Dmm 6.5kg                                                                        |
| INCLUDED ITEMS             | Power cord, Euroblock plugs (3-pin, tabbed) x16, Euroblock plugs (16-pin) x2, Cable Ties, Manual |

# BROAD SUPPORT FOR EXTERNAL CONTROLLERS

**CONTROLLER COMPATIBILITY CHART**

|                                     | ProVisionaire<br>Control | ProVisionaire<br>Control KIOSK | ProVisionaire<br>Touch | ProVisionaire<br>Touch KIOSK | MCP1     | PGM1     | DCP      | Wireless<br>DCP                         |
|-------------------------------------|--------------------------|--------------------------------|------------------------|------------------------------|----------|----------|----------|-----------------------------------------|
| UI DESIGN                           | ✗                        |                                | ✗                      |                              |          |          |          |                                         |
| CONTROL                             | ✗                        | ✗                              | ✗                      | ✗                            | ✗        | ✗        | ✗        | ✗                                       |
| SIGNAL PROCESSOR MTX,<br>MRX SERIES | ✗                        | ✗                              | ✗                      | ✗                            | ✗        | ✗*       | ✗        | ✗                                       |
| POWER AMP XMV SERIES                | ✗                        | ✗                              | ✗                      | ✗                            |          |          |          |                                         |
| POWER AMP MA/PA SERIES              |                          |                                |                        |                              |          |          | ✗        |                                         |
| DIGITAL MIXER CL, QL, TF SERIES     | ✗                        | ✗                              | ✗                      | ✗                            |          |          |          |                                         |
| I/O DEVICE EXI/O, R SERIES          | ✗                        | ✗                              | ✗                      | ✗                            |          |          |          |                                         |
| MUSICCAST**                         |                          |                                | ✗                      | ✗                            |          |          |          |                                         |
| BLU-RAY DISK PLAYER***              |                          |                                | ✗                      | ✗                            |          |          |          |                                         |
| DISKLAVIER****                      |                          |                                | ✗                      | ✗                            |          |          |          |                                         |
| SUPPORT OS                          | Windows                  | Windows                        | iPad                   | iPad                         | Hardware | Hardware | Hardware | iPhone, iPod<br>touch, iPad,<br>Android |

\* MRX7-D, MTX5-D only \*\* CD-NT670, CD-NT670D, WXA-50, WXC-50, MusicCast compatible AV receiver

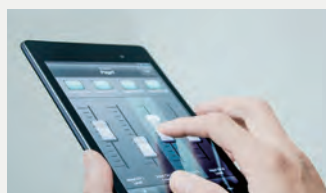
\*\*\* BD-A1060, BD-S681 \*\*\*\* Upright Pianos: YUS1ENST, YUS1Wn-ENST, YUS1MhC-ENST, YUS3ENST, YUS3Wn-ENST, YUS3MhC-ENST, YUS5ENST, YUS5Wn-ENST, YUS5MhC-ENST, Grand Pianos: C1X-ENST, C2X-ENST, C2XCP-ENST, C3X-ENPRO, C5X-ENPRO, C6X-ENPRO, C7X-ENPRO

## DCP

**DIGITAL CONTROL PANELS** – DCP Series Digital Control Panel provide flexible external control of several functions such as preset recall, levels, and SD card playback. All three models are available in either US or EU standardized sizes, built to meet the specifications of most regions around the globe.



| DCP1V4S                                                                                                                                                             | DCP4S                                                                                                                                                    | DCP4V4S                                                                                                                                                             | DCH8                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| 1 Volume & 4 Switch equipped Wall Mount Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series | 4 Switch equipped Wall Mount Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series | 4 Volume & 4 Switch equipped Wall Mount Control panel for MTX Series Easy connection by CAT5 carrying RS485 + power Maximum 8 DCPs can be connected to 1 MTX Series | DCP Hub for star topology connection of up to 8 DCP panels |



### WIRELESS DCP

Wireless DCP allows remote control from Apple iOS devices or Android smart device. This is an easy, intuitive way to control volume, select presets, and control SD player operation from a convenient location.

\* Wireless DCP can be downloaded from Apple's App Store and Google Play at no charge. App Store is a service mark of Apple Inc. Android and Google Play are trademarks of Google Inc.



# | MCP1/PGM1

## MCP1 PoE WALL MOUNT CONTROLLER

The Yamaha **MCP1** is an advanced wall-mount control panel for controlling MTX and MRX systems. Its dot-matrix display and universal character support facilitates dynamic labelling. Up to 36 parameters can be assigned to either the main Home page or any of the six sub pages. Any of these pages can be secured from unauthorized access by using a programmable PIN code. Up to 16 units of MCP1 can be added to an MTX/MRX system.



MCP1

- 6 buttons can be assigned to any function
- MTX/MRX series functions (components) are specified via the MTX-MRX Editor
- Multi-language displays supported
- Four user levels for access management
- Up to 16 units can be connected per system
- PoE powered
- On and In-Surface mount adaptor supplied



PGM1

## PGM1 PAGING STATION

The **PGM1** is a Dante enabled paging station with 8 buttons and gooseneck microphone for use with Yamaha MTX5D and MRX7-D processors. By adding up to 2 PGX1 expansion panels, the PGM1 can be used to support up to 24 paging destinations. The microphone paging signal is available over the network through Dante.

- Dante network support
- PoE powered
- Up to 2 PGX1 Function Expansion panels can be added
- Up to 24 buttons can be assigned to any destination via the MTX-MRX Editor design software
- Up to 4 units can be connected per system



PGX1

# | SWR2100P

## SWR2100P SERIES LAYER 2 SWITCHES

The **SWR2100P** series, the **SWR2100P-5G** (5 ports) and **SWR2100-10G** (10 ports) support PoE to connect the MCP1 and PGM1 paging stations.

### SWR2100P-5G

- Ports available for PoE power supply: 1-4
- Up link port: 5
- Maximum 30W can be supplied from each PoE-compliant port (All ports 70W)



SWR2100-5G

### SWR2100-10G

- Ports available for PoE power supply: 1-9
- Up link port: 10
- Maximum 30W can be supplied from each PoE-compliant port (All ports 70W)



SWR2100-10G



# |PROVISIONAIRE TOUCH & PROVISIONAIRE CONTROL

## FLEXIBLE DESIGN AND A VARIETY OF CUSTOM CONTROL PANELS

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 wall panel remotes to fully customizable software based control for either iOS or Windows based platforms.



**PROVISIONAIRE SERIES** – ProVisionaire provides an easy, intuitive way to create original controllers that are ideally configured for the target installation. Multiple design pages are available so that different control panels can be provided for different audio zones and/or users, with presets and parameter settings optimized for each. No specialized programming skills are required. An intuitive interface makes it easy to create faders for volume control and switches for source selection.

**PROVISIONAIRE CONTROL** – ProVisionaire Control can operate a wide range of Yamaha PA equipment such as MTX/MRX series signal processors, CL/QL/TF series digital mixers, the he Rio and Tio series I/O racks and the XMV series power amplifiers. The software programmer can define which parameters from their selection of products are to be included in the ProVisionaire Control design, thus creating a completely customized control surface for their client. ProVisionaire Control offers a total Yamaha control solution.

ProVisionaire Control can be downloaded free of charge from the Yamaha website.



## PROVISIONAIRE TOUCH

This handy iPad application allows MTX/MRX system control via a Wi-Fi network, also supporting XMV power amplifiers, Ex/R I/O units, CL, QL and TF-rack mixing consoles and MusicCast devices such as WXC50, Receivers, Blue Ray players and Disklavier Enspire. A variety of control widgets can be arranged as required to create custom control panel layouts that are ideally configured for individual systems.

ProVisionaire Touch can be downloaded from Apple's App Store at no charge. (Apple, iPad are trademarks of Apple Inc., registered in the U.S and other countries. App Store is a service mark of Apple Inc.).



## AMX / CRESTRON®

The MRX7-D includes RS232C and Ethernet connectors that facilitate connection to a variety of external controllers such as those manufactured by AMX and CRESTRON®.



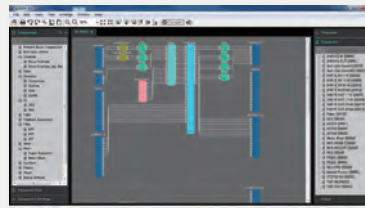
# | MTX-MRX EDITOR FOR MRX

The **MTX-MRX EDITOR** software facilitates sound system design with a workflow that simulates standard installation procedure. An easy-to-use wizard lets you start by arranging the devices to be used in the desired layout, then processing components can be added wherever needed. MTX series matrix processors, EXi8 input expanders, EXo8 output expanders, XMV series power amplifiers, DCP series and MCP1 wall-mount controllers, PGM1 and PGX1 paging stations, can be added according to the needs and scale of the application. The **MTX-MRX EDITOR** provides comprehensive, intuitive tools for designing sound systems from input to output. The **MTX-MRX EDITOR** incorporates the MRX Designer software. It is freely configurable and allows simple to operate, yet very flexible and powerful audio systems to be created.



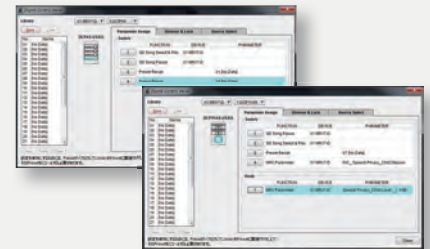
## DEVICE LAYOUT WIZARD

In addition to the MRX7-D, the wizard allows MTX series matrix processors, XMV series power amplifiers, DCP and MCP1 digital control panels, Rio and Tio series i/o racks, PGM1 and PGX1 paging stations and EXi8/EXo8 input and output expanders to be added and arranged as needed.



## COMPONENT CONFIGURATION

The MRX7-D features a versatile range of built-in processing components: faders, ON/OFF switches, matrix source selectors, GEQ, Dugan automatic mixing, speech privacy, echo canceller, and more. Simply select the required components and arrange them via a graphical interface.



## EXTERNAL CONTROLLER SETUP

Parameters that will be available to the end user can be specified via the MTX-MRX Editor. A variety of external controllers can be accommodated to ideally match the requirements of each installation.

## COMPONENT

- Ambient Noise Compensator
- Auto Gain Control
- Acoustic Echo Canceller
- Combiner (Room Combiner, Room Combiner plus Automixer, Delay)
- Dynamics (Compressor, Ducking, Gate, Limiter)
- EQ (GEQ, PEQ)
- Fader
- Feedback Suppressor \*Notch type
- Filter (HPF, BPF, LPF)
- Meter
- Mixer (Dugan Automixer, Matrix Mixer)
- Oscillator
- Polarity
- Router
- Source Selector
- Speaker Processor
- Speech Privacy
- Paging
- Audio detector
- Delay
- Feedback Suppressor (Pitch shift)

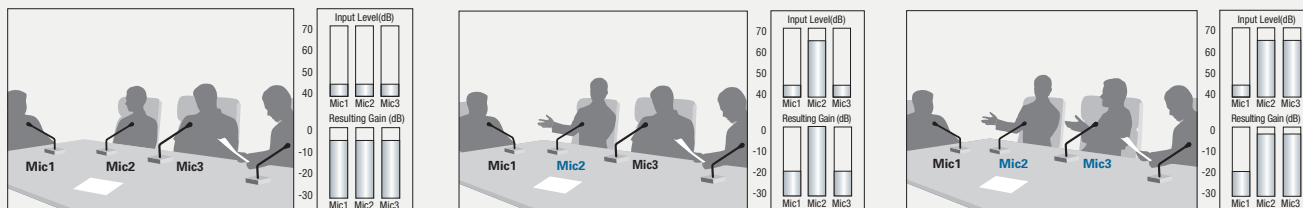


# |MRX7-D COMPONENTS



## CONFERENCE ROOMS, BANQUET HALLS, HOSPITALS, AND MORE: BUILT-IN SOLUTIONS FOR DIVERSE NEEDS

### DUGAN AUTOMIXER – PREVENT FEEDBACK AND UNWANTED PICKUP WITH MULTIPLE MICROPHONES



When nobody is speaking the input level at all microphones is low and the gain is equal. Rather than being muted, gain is distributed equally between all microphones.

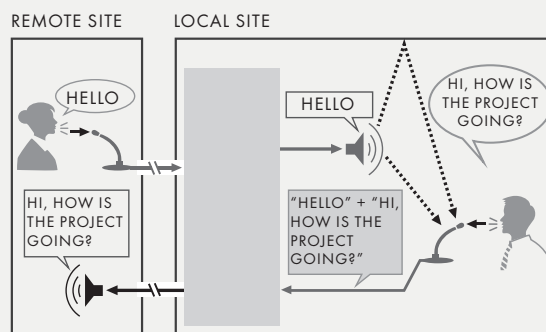
When one person is speaking the gain of that person's microphone is instantly increased to 0dB while the gain of the remaining microphones is lowered. The same occurs when any other one person is speaking.

If two people speak simultaneously the gain distribution between the active microphones is adjusted to achieve consistent overall gain, while the gain of the remaining microphone is lowered.

### ACOUSTIC ECHO CANCELLER – ELIMINATE REMOTE CONFERENCING ECHO FOR MAXIMUM INTELLIGIBILITY

In remote conferencing situations speech from the remote location emanating from the local speaker can be pickup 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.



### SPEECH PRIVACY SYSTEM – KEEP CONFIDENTIAL INFORMATION IN THE CONFERENCE ROOM

The need to protect privacy in conference rooms and meeting areas, particularly in financial or medical institutions, is a growing concern. The Speech Privacy System uses an original sonic masking technique to prevent leakage of confidential information.

Rather than masking the conversation with high volume noise, an "information masking tone" synthesized from elements of human speech using an original process effectively camouflages spoken information. This approach allows the information to be protected by relatively low volume masking, helping to maintain the comfort of the conference environment.



Sound synthesized from human speech renders conversation unintelligible to eavesdroppers. This function does not silence the sound of the conversation.



**YAMAHA**

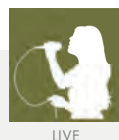




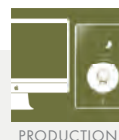
CONFERENCE



BACKGROUND  
MUSIC



LIVE



PRODUCTION



BROADCAST

## FREE CONFIGURABLE PROCESSORS

With unparalleled DSP power the Yamaha **DME64N** and **DME24N** Digital Mixing Engines offer customizable audio system solutions for a wide range of applications. These versatile mixing engines offer an impressive array of DSP components that can be combined and programmed to precisely accommodate just about any audio requirements – even in highly complex systems. Superior sound quality, generous DSP power, extensive scalability, and network capability – all supported by an intuitive interface – offer unprecedented freedom and efficiency for designing audio systems for installations and live sound.



DME24N



DME64N

|                         | DME24N                      | DME64N                      |
|-------------------------|-----------------------------|-----------------------------|
| PROCESSING I/O CHANNELS | 24                          | 64                          |
| MIC/LINE INPUTS         | 8                           | -                           |
| LINE OUTPUTS            | 8                           | -                           |
| MY CARD SLOTS           | 1                           | 4                           |
| GPI                     | 8 in / 8 out                | 16 in / 16 out              |
| MIDI                    | in / out / thru             | in / out / thru             |
| RS232C/RS422            | D-Sub 9 pin                 | D-Sub 9 pin                 |
| USB                     | Yes                         | Yes                         |
| ETHERNET                | 100Mb                       | 100Mb                       |
| DIMENSIONS (W x H x D)  | 480 x 101 x 412 mm (19" 2U) | 480 x 145 x 412 mm (19" 3U) |
| WEIGHT                  | 8 kg                        | 9.5 kg                      |



### CP4SF

wall mount control panel for DME series: 4 faders + 4 switches + 4 LEDs. GPI connection through Euroblock I/O



### CP4SW

wall mount control panel for DME series: 4 switches + 4 LEDs. GPI connection through Euroblock I/O



### CP1SF

wall mount control panel for DME series: 1 switch + 1 LED. GPI connection through Euroblock I/O

✱ **ATTENTION:** The hardware specification for DME Firmware V3.8x or later differs from the one for Firmware V3.5x or earlier. Therefore firmware V3.5x or earlier cannot be upgraded to V3.81 or later. Also, firmware V3.81 or later cannot be downgraded to V3.5x or earlier.

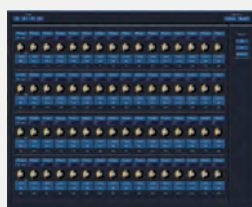
# | DME DESIGNER

## A COMPONENT APPROACH TO VERSATILE SYSTEM DESIGN

Yamaha DME processors include a variety of components for an extensive range of applications. There are crossovers and other speaker processing essentials. Dynamics processors such as compressors, compressors, and gates are indispensable for general audio processing. EQ is necessary in most applications, so a dazzling array of equalizers is provided. WAV players, event schedulers, and other functions provide advanced capabilities and operability for commercial installations. For effortless speech processing there's Auto Gain Control. A Room Combiner facilitates flexible zoning for applications such as hotels and banquet halls. And automated functions like the Program Ducker can be a huge advantage for live broadcasts. No matter what the application, there are DME components that will significantly enhance performance and efficiency.

### MATRIX MIXER

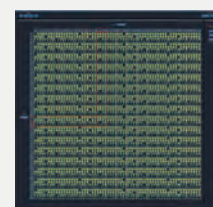
A number of matrix mixers with up to 64 x 64 matrix mixing capability are included. There's also a Delay Matrix Mixer that provides delay parameters for each matrix point, enabling level control and time alignment in a single convenient component.



INPUT MASTER



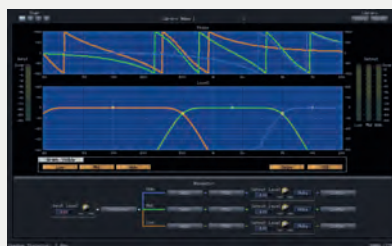
OUTPUT MASTER



64 X 64

### SPEAKER PROCESSING

Speaker processing can be essential for achieving maximum performance from professional speaker systems as well as for delivering optimum sound quality throughout the listening area. DME processors include everything needed for precision speaker tuning and room matching: versatile crossover processors with APF (All Pass Filter for phase control), horn EQ, delay, limiter functions and more.



SPEAKER PROCESSOR



PEQ8

### ROOM COMBINER

The Room Combiner component adds multiple audio signals to "virtually" combine the acoustic spaces of multiple rooms. Mono and stereo components that combine 4, 8, 12, or 16 rooms are available. This component provides an effective solution for situations in which several rooms or areas can be physically partitioned or combined to handle different types of events or numbers of participants. Sources and outputs can easily be switched as required, and the processing for multiple areas can be handled by a single DME unit.



ROOM COMBINER





AUTO GAIN CONTROL

### AUTO GAIN CONTROL

This function automatically adjusts gain to maintain a consistent level even if the volume of a speaker's voice varies, for example. An indispensable function for meeting rooms and conferences.



PROGRAM DUCKER

### PROGRAM DUCKER

The Program Ducker component features significantly longer attack and release times. Mono and stereo types can be flexibly configured to accommodate a wide range of applications. The Program Ducker offers all the versatility required for installations ranging from banquet halls to theme parks, while additionally providing camera tally link capability for broadcasting - a field in which the DME series is finding increasing acceptance.

## SPX

**Yamaha SPX EFFECTS** are recognized as being some of the best and most "musical" in the industry. In the DME processing engines you have full-featured SPX multi-effect processors that are on a par with those provided in top-line Yamaha production and live sound consoles.

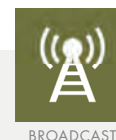
## EVENT SCHEDULER & WAV FILE PLAYER

As their names imply the Wav File Player component plays specified Wav audio files, and the Event Scheduler can be used to trigger it at predefined times and repeating cycles. This could be used to play opening and closing themes for a retail outlet or mall, for example. Event Scheduler triggering is not limited to Wav File Player operation, however, and it could be used to schedule a GPI output that could start an external CD player or other device, for example. Programming the scheduler is easy, and can be done by the end user simple via wall-mounted remote control units or other remote controllers. Playback level and on/off switching can also be accomplished via the same type of controller.

# COMPONENT LIST

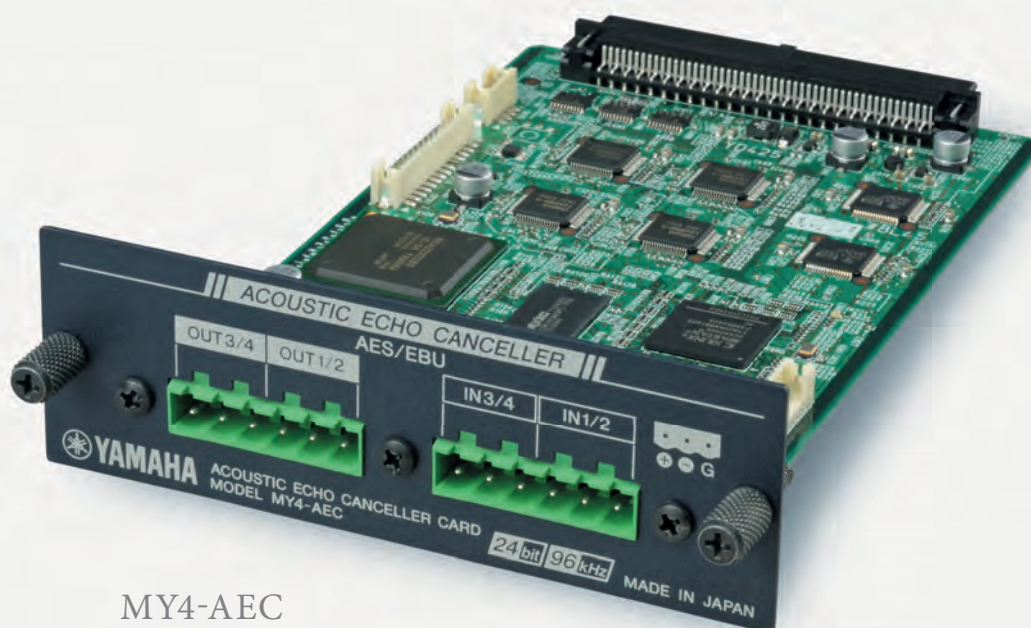
| CATEGORY          | COMPONENT                     |                                                                   | DME64N | DME24N |
|-------------------|-------------------------------|-------------------------------------------------------------------|--------|--------|
| Processors        | Remote Controlled Internal HA |                                                                   |        | Yes    |
|                   | Delay                         | Long, Short                                                       | Yes    | Yes    |
|                   | Dynamics                      | Gate, Ducking, Expander, Compander, Compressor, De-Esser, Limiter | Yes    | Yes    |
|                   | Filter                        | BPF, HPF, LPF, Notch                                              | Yes    | Yes    |
|                   | EQ                            | PEQ, GEQ                                                          | Yes    | Yes    |
|                   | Fader                         |                                                                   | Yes    | Yes    |
|                   | Pan                           | LR, LCR, 3-1, 5.1, 6.1                                            | Yes    | Yes    |
|                   | Meter                         |                                                                   | Yes    | Yes    |
| Mixers            | Simple Mixer                  |                                                                   | Yes    | Yes    |
|                   | Auto Mixer (II)               |                                                                   | Yes    | Yes    |
|                   | Matrix Mixer                  |                                                                   | Yes    | Yes    |
|                   | Delay Matrix                  |                                                                   | Yes    | Yes    |
| I/O functions     | Analog I/O                    |                                                                   |        | Yes    |
|                   | Cascade I/O                   |                                                                   | Yes    |        |
|                   | MY card I/O                   |                                                                   | Yes    | Yes    |
|                   | CobraNet I/O (16IN/16OUT)     |                                                                   |        |        |
|                   | EtherSound I/O (16IN/16OUT)   |                                                                   |        |        |
| Source            | Oscillator                    |                                                                   | Yes    | Yes    |
|                   | Wav File Player               |                                                                   | Yes    | Yes    |
| Routing functions | Source Selector               |                                                                   | Yes    | Yes    |
|                   | Router                        |                                                                   | Yes    | Yes    |
| Crossover         | Crossover                     |                                                                   | Yes    | Yes    |
|                   | Crossover processor (II)      |                                                                   | Yes    | Yes    |
| Speaker Processor | Speaker processor             |                                                                   | Yes    | Yes    |
| Other functions   | Acoustic Echo Cancellor       |                                                                   | Yes    | Yes    |
|                   | Room Combiner                 |                                                                   | Yes    | Yes    |
|                   | Feedback suppressor           |                                                                   | Yes    | Yes    |
|                   | Ambient Noise Compensator     |                                                                   | Yes    | Yes    |
|                   | Program Ducker                |                                                                   | Yes    | Yes    |
|                   | Audio Detector                |                                                                   | Yes    | Yes    |
|                   | Auto Gain Control             |                                                                   | Yes    | Yes    |
|                   | Event Scheduler               |                                                                   | Yes    | Yes    |
|                   | SPX                           |                                                                   | Yes    | Yes    |

# | MY4-AEC



The **MY4-AEC** card provides 4 channels of acoustic echo cancellation for remote conferencing using Yamaha's DME 24N / DME 64N digital mixing engines and the MTX7-D and MTX5-D Matrix Processor. As well as the echo cancellation function, the **MY4-AEC** card also offers a noise reduction function which removes steady-state background noise such as air conditioning and projector fans etc. The card also has a feedback suppressor with 42 notch filters per channel to aid the suppression of feedback in PA systems. Any of the 8 internal mic/line inputs of the DME24N can be routed to the **MY4-AEC**. In the case of the DME64N, any of the MY card slots or CASCADE bus can route to the **MY4-AEC**. The AES/EBU inputs and outputs(with sample rate conversion) can route to either the **MY4-AEC** or be used independently in a DME design.

\*For details about Yamaha AEC technology, please refer to [www.yamahaproaudio.com](http://www.yamahaproaudio.com)



MY4-AEC

## High Performance Conference System Solution with Yamaha AEC technology\*

- 4ch Acoustic Echo Canceller
- Maximum echo time delay (Tail length) 400ms
- High definition sound (frequency range 20Hz-20kHz)
- 4ch far-end input for multipoint meeting
- 4ch Noise Reduction
- 4ch Feedback Suppressor
- Additional 4ch AES/EBU I/O with SRC

### MY4-AEC

|                              |                                                                                   |
|------------------------------|-----------------------------------------------------------------------------------|
| SAMPLING FREQUENCY           | 44.1kHz, 48kHz, 88.2kHz, 96kHz (-10%, +6%)                                        |
| DSP FUNCTIONS                | adaptive AEC<br>Feedback Suppressor<br>Ambient Noise Compensation<br>Matrix Mixer |
| CONNECTORS                   | AES/EBU Euroblock (4in/4out)                                                      |
| COMPATIBLE EQUIPMENT         | DME24N, DME64N firmware 4.0 or higher                                             |
| FREQUENCY RANGE              | 20Hz - 20kHz                                                                      |
| ARRIVAL TIME OF DIRECT SOUND | 120ms maximum                                                                     |
| ECHO TIME DELAY              | 400ms maximum                                                                     |
| ECHO CANCELLATING CAPACITY   | 60dB maximum                                                                      |
| NOISE REDUCTION              | 17dB maximum                                                                      |

#### \* **ACOUSTIC ECHO CANCELLER**

The balance between echo reduction level and sound quality can be easily evaluated and maximized during installation. Echo suppression is maximized by setting the Distance parameter to reflect the physical distance between microphone and loudspeaker.

#### \* **MATRIX MIXER**

Multi-point conference systems are easily incorporated using the Matrix Mixer which allows up to 4 far-end inputs for each channel of AEC.

#### \* **FEEDBACK SUPPRESSOR**

There are 42 notch filter bands whose width and depth parameters can be adjusted for best gain before feedback depending on the room acoustics. Each band will analyze suppression point automatically.

#### \* **NOISE REDUCTION**

Any constant and disturbing fan or HVAC noise can be attenuated using the Noise Reduction feature.

## GENERAL SPECIFICATIONS

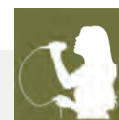
- Compatible Hosts DME24N, DME64N (V4.0 or later software is required), MTX5-D, MTX7-D
- Sampling Frequency 44.1kHz, 48kHz, 88.2kHz, 96kHz (-10%, +6%)

### DIGITAL INPUT/OUTPUT CHARACTERISTICS

| TERMINAL             | FORMAT                        | AUDIO DATA LENGTH | LEVEL | CONNECTOR |
|----------------------|-------------------------------|-------------------|-------|-----------|
| AES/EBU In 1/2, 3/4  | AES/EBU                       | 24bit             | RS422 | Euroblock |
| AES/EBU Out 1/2, 3/4 | AES/EBU<br>(Professional use) | 24bit             | RS422 | Euroblock |

### AUDIO

|                              |                                                                               |
|------------------------------|-------------------------------------------------------------------------------|
| SIGNAL PROCESSING            | Adaptive Echo Canceller, Feedback Suppressor<br>Noise Reduction, Matrix Mixer |
| FREQUENCY RANGE              | 20Hz to 20kHz                                                                 |
| ARRIVAL TIME OF DIRECT SOUND | 120ms                                                                         |
| ECHO TIME DELAY              | 400ms maximum                                                                 |
| ECHO CANCELLING CAPACITY     | 60dB maximum                                                                  |
| NOISE REDUCTION              | 17dB maximum                                                                  |



# |SP2060

## DIGITAL SPEAKER PROCESSOR

### ADVANCED SPEAKER PROCESSING PERFORMANCE IN A COMPACT 1U UNIT THAT IS IDEAL FOR LIVE SOUND OR INSTALLATIONS

- All of the functionality required for most speaker processing applications in a compact 1U unit.
- An impressive array of built-in functions: gain, delay, PEQ, comp, crossover, and limiter.
- All-Pass Filter precisely controls phase without affecting gain.
- Two analog inputs, six analog outputs, and two AES/EBU digital inputs.
- Original audio processing LSI provides full 24-bit, 96-kHz processing capability for outstanding sound quality with a dynamic range in excess of 110 dB.
- Detailed programming can be accomplished using the DME Designer application software running on a personal computer.
- Ethernet port and comprehensive panel interface.
- Optimized for Yamaha Installation Series Speakers.



SP2060



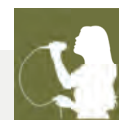
1U

### SP2060

|                                               |                                                                                                                     |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| SCENE                                         | 99 (PRESET: 12, USER: 87)                                                                                           |
| SAMPLING FREQUENCY RATE                       | Internal: 96kHz<br>External: Normal rate: 44.1kHz, 48kHz (±0.1%)<br>Double rate: 88.2kHz, 96kHz (±0.1%)             |
| SIGNAL DELAY                                  | Less than 761µs INPUT to OUTPUT (@fs=96kHz)                                                                         |
| TOTAL HARMONIC DISTORTION                     | Less than 0.05%, 20Hz to 40kHz @+4dBu into 600Ω (@fs=96kHz)<br>Less than 0.007%, 1kHz @+22dBu into 600Ω (@fs=96kHz) |
| FREQUENCY RESPONSE                            | 20Hz - 20kHz, +0.5, -1.0dB, @+4dBu into 600Ω (@fs=96kHz)                                                            |
| DYNAMIC RANGE                                 | 106dB typ. AD+DA                                                                                                    |
| HUM & NOISE LEVEL<br>(20HZ TO 20KHZ), RS=150Ω | -82dBu residual noise                                                                                               |
| CROSSTALK (@1KHZ)                             | -80dB input to output                                                                                               |
| POWER CONSUMPTION                             | 30W                                                                                                                 |
| DIMENSIONS (W x H x D)                        | 480 x 44 x 360.2mm (18.7" x 1.75" x 14.1"), 1U                                                                      |
| WEIGHT                                        | 4.2kg (9.7lbs)                                                                                                      |



# |SPX2000



LIVE

## LATEST GENERATION SPX EFFECT UNIT WITH 24-BIT 96-KHZ PROCESSING AND ADVANCED REV-X REVERB ALGORITHMS

- Superb sonic quality with 24-bit/96-kHz processing throughout.
- 96-kHz DSP LSI with 32-bit internal processing (58-bit accumulator).
- 24-bit, 128-times oversampling AD and DA converters achieve 106 dB dynamic range and flat response from 20 Hz to 40 kHz at the 96-kHz sampling rate.
- REV-X reverb programs deliver the richest reverberation tone and smoothest decay available.
- In addition to a large range of ambience programs, including many that use the acclaimed REV-X reverb algorithms, the SPX2000 includes popular SPX programs such as gate reverbs, delays, pitch effects, modulation and other special effects.
- Other advanced algorithms – such as Multi-band Dynamic Processors – are inherited from the DM series Digital Production Consoles
- Professional analog and digital audio I/O and control connectors.
- SPX2000 Editor software provides a common operating environment and interface for the SPX2000 and Yamaha digital mixing consoles.



**SPX2000**  
PROFESSIONAL MULTI-EFFECT PROCESSOR



SPX2000

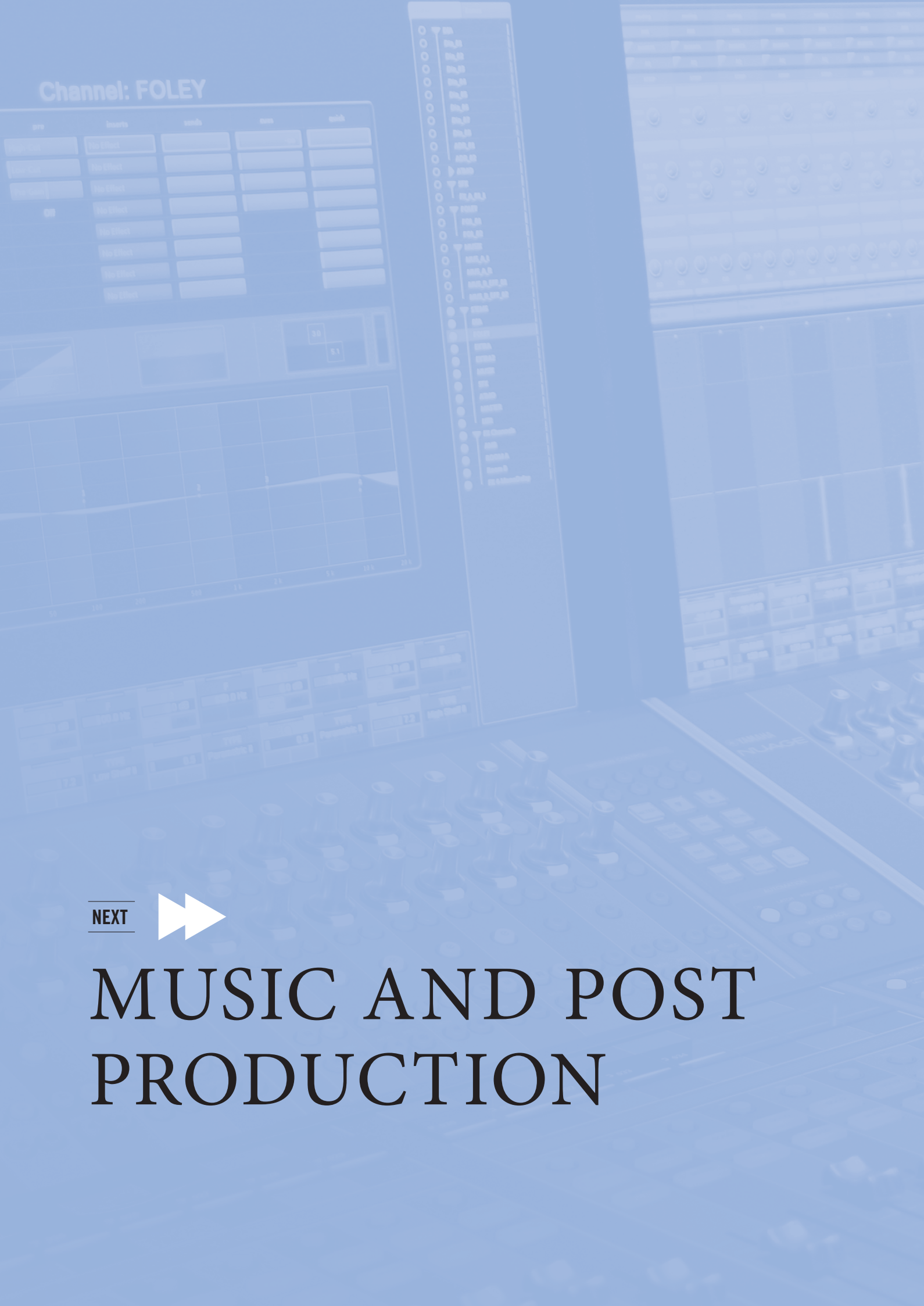


| SPX2000                |                            |
|------------------------|----------------------------|
| DIGITAL INPUT          | 1 x XLR (AES/EBU, AES-3)   |
| ANALOGUE INPUT         | 2 x XLR + 2 x jack         |
| DIGITAL OUTPUT         | 1 x XLR (AES/EBU, AES-3)   |
| ANALOGUE OUTPUT        | 2 x XLR + 2 x jack         |
| USB                    | Yes                        |
| MIDI                   | in / out / thru            |
| WORDCLOCK INPUT        | 1 x BNC                    |
| DIMENSIONS (W x H x D) | 480 x 44 x 360 mm (19" 1U) |
| WEIGHT                 | 4 kg                       |

## EFFECT PROGRAM NO. LIST

| NO. | EFFECT NAME      | CLASSIFICATION      | LCD COLOR |
|-----|------------------|---------------------|-----------|
| 1   | REV-X LARGE HALL | HALL                | CYAN      |
| 2   | REV-X MED HALL   |                     |           |
| 3   | REV-X SMALL HALL |                     |           |
| 4   | REV-X TINY HALL  |                     |           |
| 5   | REV-X WARM HALL  |                     |           |
| 6   | REV-X BRITE HALL |                     |           |
| 7   | REV-X HUGE HALL  |                     |           |
| 8   | AMBIENCE         |                     |           |
| 9   | STEREO HALL      |                     |           |
| 10  | VOCAL CHAMBER    |                     |           |
| 11  | BRIGHT HALL      |                     |           |
| 12  | BREATHY REVERB   |                     |           |
| 13  | CONCERT HALL     |                     |           |
| 14  | REVERB FLANGE    |                     |           |
| 15  | REVERB STAGE     |                     |           |
| 16  | REV-X VOCAL PLT  | PLATE               |           |
| 17  | REV-X BRIGHT PLT |                     |           |
| 18  | REV-X SNARE PLT  |                     |           |
| 19  | VOCAL PLATE      |                     |           |
| 20  | ECHO ROOM 1      |                     |           |
| 21  | ECHO ROOM 2      |                     |           |
| 22  | PRESENCE REVERB  |                     |           |
| 23  | ARENA            |                     |           |
| 24  | THIN PLATE       |                     |           |
| 25  | OLD PLATE        |                     |           |
| 26  | DARK PLATE       |                     |           |
| 27  | REV-X CHAMBER    | ROOM                |           |
| 28  | REV-X WOOD ROOM  |                     |           |
| 29  | REV-X WARM ROOM  |                     |           |
| 30  | REV-X LARGE ROOM |                     |           |
| 31  | REV-X MED ROOM   |                     |           |
| 32  | REV-X SMALL ROOM |                     |           |
| 33  | REV-X SLAP ROOM  |                     |           |
| 34  | FAT REFLECTIONS  |                     |           |
| 35  | BIG SNARE        |                     |           |
| 36  | BAMBOO ROOM      |                     |           |
| 37  | REFLECTIONS      |                     |           |
| 38  | STONE ROOM       |                     |           |
| 39  | CONCRETE ROOM    |                     |           |
| 40  | REVERSE PURPLE   | GATE REVERB         |           |
| 41  | FULL METAL GATE  |                     |           |
| 42  | REVERSE GATE     |                     |           |
| 43  | DRUM MACH. AMB S | DRUM MACHINE REVERB |           |
| 44  | DRUM MACH. AMB L |                     |           |
| 45  | ELECT. SNR PLAT  |                     |           |
| 46  | MONO DELAY       | DELAYS              | WHITE     |
| 47  | 120 BPM MONO DDL |                     |           |
| 48  | 120 BPM X-DDL    |                     |           |
| 49  | STEREO DELAY     |                     |           |
| 50  | DELAY LCR        |                     |           |
| 51  | KARAOKE ECHO     |                     |           |

| NO. | EFFECT NAME      | CLASSIFICATION | LCD COLOR |
|-----|------------------|----------------|-----------|
| 52  | GOOD OL P.CHANGE | PITCH EFFECTS  | MAGENTA   |
| 53  | VOCAL SHIFT      |                |           |
| 54  | STEREO PITCH     |                |           |
| 55  | PITCH SLAP       |                |           |
| 56  | HALO COMB        |                |           |
| 57  | GRUMPY FLUTTER   |                |           |
| 58  | ROGER ON THE 12  |                |           |
| 59  | BOTTOM WHACKER   | MODULATION     |           |
| 60  | VOICE DOUBLER    |                |           |
| 61  | SYMPHONIC        |                |           |
| 62  | REV+SYMPHONIC    |                |           |
| 63  | DETUNE CHORUS    |                |           |
| 64  | CHORUS & REVERB  |                |           |
| 65  | BASS CHORUS      |                |           |
| 66  | STEREO PHASING   |                |           |
| 67  | CLASSY GLASSY    |                |           |
| 68  | SILKY SWEEP      |                |           |
| 69  | UP DOWN FLANGE   |                |           |
| 70  | TREMOLO          |                |           |
| 71  | ROTARY SPEAKER   |                |           |
| 72  | AUTO PAN         |                |           |
| 73  | PHASER           |                |           |
| 74  | RING MODULATION  |                |           |
| 75  | MOD FILTER       |                |           |
| 76  | DYNA FLANGE      |                |           |
| 77  | DYNA PHASER      |                |           |
| 78  | DYNA FILTER      | FILTER         | YELLOW    |
| 79  | M. BAND DYNA     |                |           |
| 80  | MULTI FILTER     |                |           |
| 81  | FILTERED VOICE   | DISTORTION     |           |
| 82  | DISTORTION       |                |           |
| 83  | AMP SIMULATOR    |                |           |
| 84  | DIST -> FLANGE   | MULTIPLE       |           |
| 85  | DIST -> DELAY    |                |           |
| 86  | REV -> CHORUS    |                |           |
| 87  | REV+FLANGE       |                |           |
| 88  | REV -> SYMPHONIC |                |           |
| 89  | REV -> PAN       |                |           |
| 90  | DELAY+ER 1       |                |           |
| 91  | DELAY+ER 2       |                |           |
| 92  | DELAY -> ER 1    |                |           |
| 93  | DELAY -> ER 2    |                |           |
| 94  | DELAY+REV        |                |           |
| 95  | DELAY -> REV     |                |           |
| 96  | RESO DRONE       |                |           |
| 97  | FREEZE           | SAMPLING       |           |



NEXT



# MUSIC AND POST PRODUCTION





# | NUENDO8



PRODUCTION



SOFTWARE

## ADVANCED POST AND AUDIO PRODUCTION SYSTEM



**NUENDO8**  
Advanced Audio Post-Production System

**steinberg**  
Creativity First



ADR



EDITING



MIXING

- The world's most innovative audio post-production environment, featuring industry-leading tools for TV, film, advertising and game audio productions
- World-class mixing console with up to 13.1 support, including Channel Strip, automatable mix buses, VCA fader support and a fully integrated loudness measurement and processing toolset
- ReConform: Integrated re-conforming solution for automatic audio-to-picture alignment, including preview functions
- Game Audio Connect provides a direct connection with the Audiokinetic Wwise game audio middleware, including integration with Perforce
- Professional ADR taker and foley solution for voice and foley recording, including video (text) overlay
- Advanced multitrack audio-to-picture editing, providing the best audio editing environment to date, including TrackVersion playlists and video-follows-audio editing
- Automated Batch Export for exporting several versions of a mix in one go, including many user-definable attributes
- Cutting-edge plug-in collection features more than 70 high-class VST 3 plug-ins, including EQs, reverbs, surround panners, compressors and more
- State-of-the-art post-production environment comes with MediaBay content management, monitoring matrix, a superior automation system for film and TV production plus networking capabilities
- Full system integration with the Yamaha Nuage post-production system, seamless connection to the Nuendo SyncStation synchronizer and EuCon support
- Immersive 3D surround panner supporting native Dolby Atmos mixing





MIXER HISTORY



LOUDNESS METER



IOSONO ANYMIX PRO



CHANNEL SETTINGS



VOXENGO CURVEEQ



ADR TAKER



BRICKWALL LIMITER



DOLBY ATMOS PANNER

## NUENDO SYNCSTATION



**NUENDO SYNCSTATION** is a hardware synchronizer that facilitates sample-accurate timecode synchronization between audio and video equipment. All Nuage interfaces include BNC and AES/EBU connectors for direct connection to Syncstation, as well as full support for the sample-accurate VST System Link.

- Sample-accurate time code synchronization when used with Nuendo.
- Allows MTP synchronization with many other DAWs (restrictions may apply according to DAW specifications and version).
- Cross-platform support for Nuendo SyncStation together with Nuendo on Mac OS X, Windows 7, Windows Vista and Windows XP

✱ MORE DETAILS ABOUT NUENDO AND NUENDO SYNCSTATION CAN BE FOUND AT THE STEINBERG WEB PAGE:  
[HTTP://WWW.STEINBERG.NET](http://www.steinberg.net)

# | NUAGE




## NUAGE

Yamaha & Steinberg

- \* NUAGE FADER
- \* NUAGE MASTER
- \* NUAGE I/O (16A•16D•8A8D)
- \* NUAGE WORKSPACE (LARGE • SMALL)

\* Custom desk, monitor displays, and keyboard are sold separately by third-party vendors.

MUSIC AND POST PRODUCTION

DANTE ACCELERATOR PCIe CARD




NUAGE I/O



NUAGE WORKSPACE



NUAGE FADER



NUAGE MASTER



| Ncs500-CT          | Ncs500-FD      | Nio500-A16      | Nio500-A8D8                  | Nio500-D16 | Nws500-LG                | Nws500-SM                |
|--------------------|----------------|-----------------|------------------------------|------------|--------------------------|--------------------------|
| central controller | 16 fader panel | 16 analogue I/O | 8 analogue,<br>8 AES/EBU I/O | 16 AES/EBU | large workspace<br>panel | small workspace<br>panel |

## SUPPORT FOR NUENDO 7 AND ITS IMPROVED WORKFLOW

At the heart of the Nuage system is Steinberg Nuendo, an audio post production DAW that is a favorite with sound designers, mixing/recording engineers, and editors for its blazing editing speed, efficiency enhancing convenience, unrivalled sonic quality, and rock-solid stability. The latest version of Nuendo adds VCA faders, support for game audio middleware, and other advanced features that provided an enhanced workflow.

## SPEED AND CONVENIENCE – ENHANCED OPERATION

Nuage has always been more than just a DAW controller because of its deep integration with high-level DAW software, but Nuage version 1.8 goes even further with improved access to a variety of important functions. The following are a few of the improvements included in the version 1.8 update that contribute to greater control and efficiency.

- Automation mode setup and switching from the Nuage Master Channel Control page.
- Multi Function Knob click level and click pan can be changed from the Nuage Master
- Control Room and Cue pages. Plug-ins can be inserted in the Control Room buses.
- Section Control and Channel View Control can be customized. (for VCA assignments, etc.)
- Support for the JL Cooper eBOX and eBOX GPI8 GPI interfaces. Remotely controllable from the Nuage Master.

## IMPROVED AVID PRO TOOLS CONTROL

Nuage can switch between as many as three connected DAWs. Of course those DAWs can be Steinberg Nuendo or Cubase, but with the dedicated NUAGE PT Bridge driver Avid Pro Tools installations can be used as well. In response to requests from Pro Tools users, Nuage version 1.8 expands the functionality of the NUAGE PT Bridge driver for even greater control and convenience.

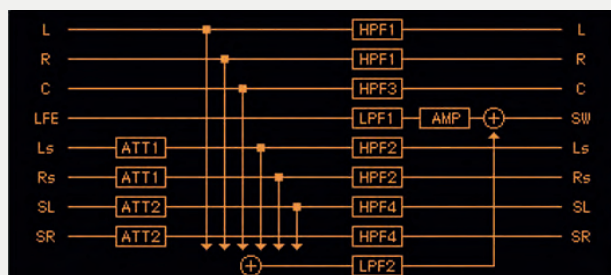
- Using the Plug-in Panel shown on the monitor display as a guide, the Nuage Fader Multi Function Knobs can be used for Pro Tools plug-in control.
- The twelve Nuage Master User Assignable Buttons can be assigned to Pro Tools shortcut keys, allowing the user to use familiar shortcuts directly from the Nuage system.
- Supported versions of Pro Tools are: Pro Tools 10,11 and Pro Tools HD 10,11 (Mac versions only).
- A maximum of two Pro Tools instances can be connected to a Nuage system.

## NUAGE – POST PRODUCTION SYSTEM

Digital audio workstations, controllers, interfaces: professional post-production capabilities can only be realized when all components work together in perfect harmony. **NUAGE** Integrated Audio Production System brings it all together in a collaboration that defines new standards of quality and workflow efficiency for virtually every aspect of the production process. Yamaha control and interface hardware seamlessly integrates with Steinberg Nuendo DAW software in a purpose-built system that offers unprecedented productivity and flexibility as well as premium audio quality. Discerning engineers and artists who already depend on the sonic quality and intuitive workflow of Steinberg's native-processing Nuendo DAW will be pleased to learn that Nuendo 6, included with Nuage, takes that performance to a new level. And for maximum system versatility the dedicated Yamaha control surface and audio interface hardware is modular, so you can easily create a custom configuration that ideally matches your application. Nuage for mixing, editing, dialog replacement in audio post production applications. Top-class hardware and software in perfect harmony at last.



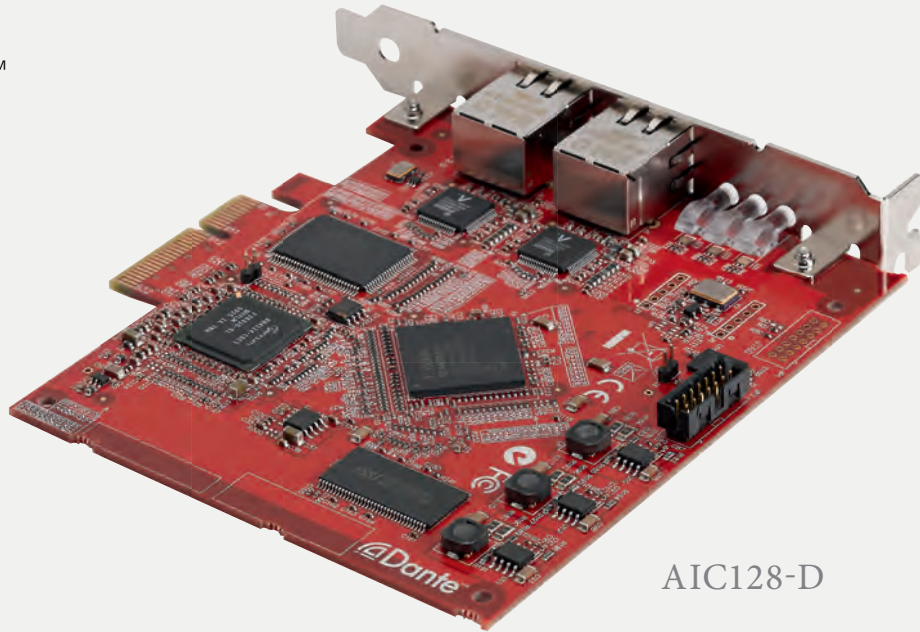
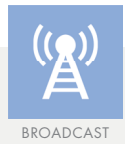
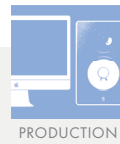
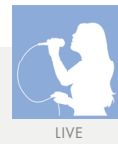
LOW LATENCY MONITORING



SURROUND STUDIO MONITOR SECTION



# | DANTE ACCELERATOR



AIC128-D



## ULTRA-LOW LATENCY AND SOLID RELIABILITY WITH HIGH CHANNEL COUNTS

The **DANTE ACCELERATOR** audio interface card can be installed in the computer running the Nuendo DAW to provide extra low-latency transfer of as many as 128 simultaneous channels of audio data, for a distinct performance advantage when communicating with Nuage I/O units. The **DANTE ACCELERATOR** card also features a secondary port that can be used to provide redundant connections for failsafe reliability.

## GENERAL SPECIFICATIONS

| AIC128-D                |                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------|
| PCI EXPRESS CARD        | Compatible with PCI Express X4 slots v1.0 and above                                               |
| PCI EXPRESS CARD        | Compatible with PCI Express X4 slots v1.0 and above                                               |
| AUDIO INTERFACE         | ASIO (Windows 7/8.1/10) or Core Audio (OS X 10.7.5/10.8/10.9/10.10/10.11*1)                       |
| AUDIO CHANNELS          | 256 channels (128 in/128 out @ 96 kHz or less)<br>128 channels (64 in/64 out @ 176.4 kHz or more) |
| SUPPORTED SAMPLE RATES  | 44.1, 48, 88.2, 96, 176.4, and 192kHz                                                             |
| PULL-UP/PULL-DOWN       | +4.1667, +0.1, -0.1, and -4.0 %                                                                   |
| SAMPLE BIT-DEPTH        | 24 bit                                                                                            |
| DANTE NETWORK INTERFACE | Gigabit (1000Mbps; 1Gbps) Ethernet RJ45 port x2                                                   |

## SYSTEM REQUIREMENT

|           | WIN                                                                                                                                                                                                                      | MAC                                             |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| OS        | Windows 10/8.1/7 SP1 (64-bit)                                                                                                                                                                                            | Mac OS X 10.7.5/10.8.x*2/10.9.x/10.10.x/10.11.x |
| PC        | 32-bit: Intel Core i5 / Intel Core i7<br>(2nd Generation "Sandy Bridge" Core i7<br>or later recommended)<br><br>64-bit: Intel Core i5 / Intel Core i7<br>(2nd Generation "Sandy Bridge" Core i7<br>or later recommended) | Mac Pro (Early 2009) or later                   |
| MEMORY    | 8GB or more                                                                                                                                                                                                              | 6GB or more                                     |
| HDD       | 64M Cache (recommended) 7200rpm                                                                                                                                                                                          | 64M Cache (recommended) 7200rpm                 |
| PCIE SLOT | x4 lane or above                                                                                                                                                                                                         | x4 lane or above2                               |

<sup>1</sup> Also compatible with OSX 10.6.8 for use without Nuage or Nuendo without Nuage or Nuendo when using Dante Accelerator Driver v1.0.1 or earlier for Mac. Pull up/down function for the audio sample rate is not supported in OSX 10.8. Noise may occur when pull up/down function is used. Please use OSX 10.7 if you need to use the pull up/down function

<sup>2</sup> The Dante Accelerator must be installed in slot 2(directly above the graphic card)

<sup>3</sup> However, PT Bridge is supported for up to 10.12.x.



# | NUAGE & NUENDO

## CONFIGURATIONS

\* SMALL SCALE SETUP WITH 1X NUAGE FADER



\* SMALL SCALE SETUP WITH 1X NUAGE MASTER



\* SMALL SCALE SETUP WITH 1X NUAGE FADER & 1X NUAGE MASTER



\* MID SCALE SETUP WITH 2X NUAGE FADER & 1X NUAGE MASTER



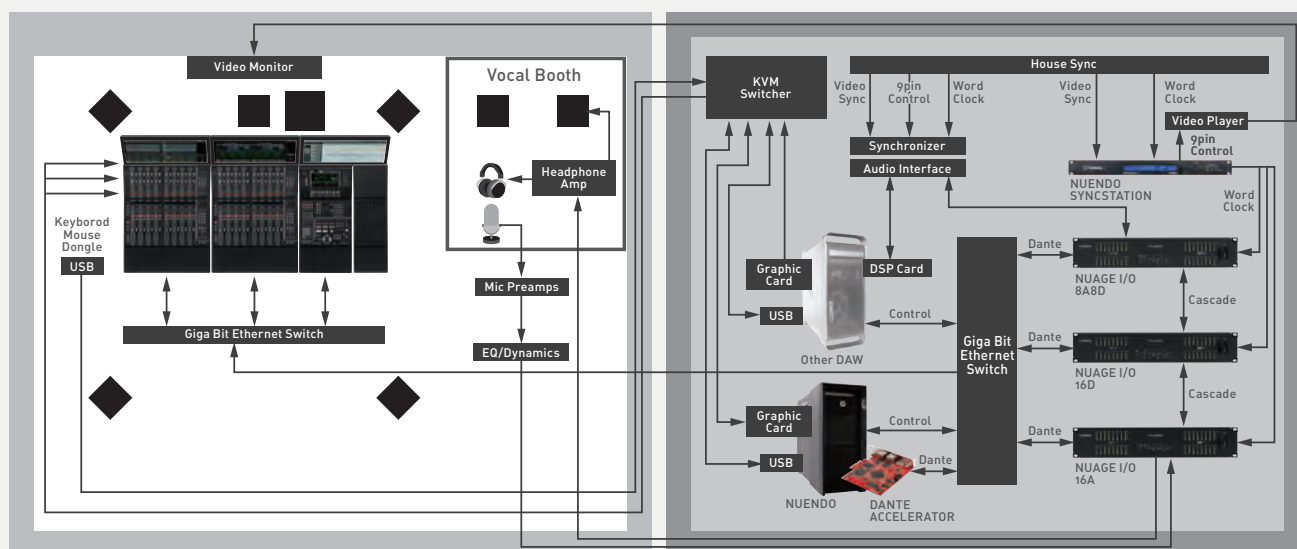
\* LARGE SCALE SETUP WITH 3X NUAGE FADER & 1X NUAGE MASTER



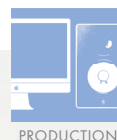
# SYSTEM EXAMPLE

## \* CONTROL ROOM

## \* MACHINE ROOM



## | MMP1



PRODUCTION



BROADCAST

# MMP1

Studio Monitor Management System

Audio production is evolving rapidly. Many functions that were previously handled by the mixing console are now built into high-performance DAW systems. But even today's most practical in-the-box mixing systems require a number of peripheral devices for full studio functionality, including some sort of monitor controller. Immersive audio formats have made the requirements for monitor control and management even more varied and complex. Yamaha has applied a great deal of time and effort to developing

monitoring environments and studio systems for current and future audio production needs, and has come up with an ideal one-stop solution. The **MMP1 STUDIO MONITOR MANAGEMENT SYSTEM** offers all essential audio processing functionality for DAW-based production environments in one streamlined, versatile, great-sounding, space-saving unit that provides efficient overall system management at surprisingly low cost. The heart of the **MMP1** is a 40 x 36 channel monitor matrix\* that can handle stereo, 5.1 channel, and 7.1 channel formats with ease, while also providing plenty of capacity for the rapidly growing array of immersive audio formats such as Dolby Atmos. To accommodate the widest possible range of installations, the **MMP1** includes eight cue outputs and eight studio speaker outputs, with two talkback systems that function with those outputs. Comprehensive, integrated management of monitoring, cue, and talkback functions allows this powerful matrix to efficiently connect and route all essential audio throughout the studio. Two software applications contribute to stress-free MMP1 setup and operation. The **MMP1 Editor**\* for Windows and Mac computers provides all-function access for everything from system design through file management to day-to-day operation. A setup wizard makes setup fast, easy, and precise. When the system is up and running the MMP1 Controller\*\* app for iPad offers convenient, intuitive control of essential parameters.



## FEATURES



### COMPREHENSIVE MONITOR CONTROL

Up to 32 channels of monitor processing supports formats from stereo to immersive audio, plus comprehensive management of studio communication and audio devices.



### OUTSTANDING SPEAKER MANAGEMENT PRECISION

Time alignment delay, EQ, and other final-stage audio output adjustment tools are provided on all channels.



### POST-PRODUCTION RECORDING SUPPORT

In addition to an ample selection of talkback, cue, and GPI functions, commentary functions provide extended voice-over recording support.



### FLEXIBLE BASS MANAGEMENT

Bass management using standard or FIR crossover filters can be flexibly configured within a 32 x 32 channel speaker matrix.



### FULL-FEATURED CHANNEL PROCESSING

Eight channel strips feature four types of EQ, VCM vintage compressors, and more, for extensive processing capability in a remarkably compact space.

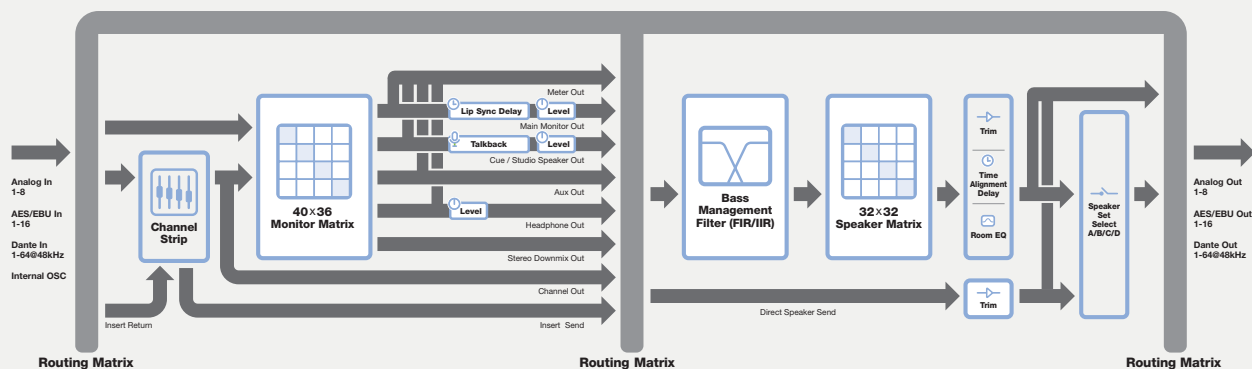


The MMP1 can be controlled directly from the monitor section of Yamaha's NU-AGE DAW system, supporting monitor source selection and level control, mute and dim functions, talkback, user-assignable functions, and channel strip control.

\* The MMP1 Editor can be downloaded from the Yamaha Pro Audio website.

\*\* The MMP1 Controller app can be downloaded from the Apple App Store.

## DSP BLOCK DIAGRAM



## SPECIFICATIONS



MMP1

| MMP1                             |                                                                                                                                                                               |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INPUTS                           | Analogue Inputs 1-8: D-SUB 25P (female)<br>Digital AES/EBU Inputs 1-16: D-SUB 25P (Female)                                                                                    |
| OUTPUTS                          | Analogue Outputs 1-8: D-SUB 25P (female)<br>Digital AES/EBU Outputs 1-16: D-SUB 25P (Female)                                                                                  |
| NETWORK                          | Dante 64ch@48kHz, 32ch@96kHz, 16ch@192kHz: Ethercon x2                                                                                                                        |
| CONTROL I/O                      | 16 GPI Inputs, 10 GPI Outputs: D-SUB 25P (Female)                                                                                                                             |
| MONITOR MATRIX                   | (32 inputs + 8 DSP channel inputs) x (32 outputs + stereo downmix outputs + stereo headphone outputs) @44.1, 48, 88.2, and 96kHz<br>20 inputs x 20 outputs @176.4 and 192 kHz |
| SPEAKER MATRIX                   | 32 inputs x 32 outputs @44.1, 48, 88.2, and 96kHz<br>16 inputs x 16 outputs @176.4 and 192 kHz                                                                                |
| BASS MANAGEMENT CROSSOVER FILTER | LPF 80Hz / HPF 80Hz                                                                                                                                                           |
| TIME ALIGNMENT DELAY             | Up to 30msec                                                                                                                                                                  |
| ROOM EQ                          | 6-band parametric EQ                                                                                                                                                          |
| LIP SYNC DELAY                   | Up to 50msec                                                                                                                                                                  |
| CHANNEL STRIP                    | Comp260, EQ (Precise, Aggressive, Smooth, Legacy)                                                                                                                             |
| SCENES                           | 20 Scenes                                                                                                                                                                     |
| SNAPSHOTS                        | 20 Snapshots                                                                                                                                                                  |



NEXT



# ACTIVE FIELD CONTROL





ACTIVE FIELD CONTROLLER **AFC3**

LEVEL

MUTE



PHONES



0 +10  
PHONES  
LEVEL

MONITOR



POWER



# | AFC3



For over 125 years Yamaha craftsmen have created some of the world's finest musical instruments. Superior sound quality has always been the driving force behind Yamaha products and systems. Whether manufacturing instruments, developing state-of-the-art audio technologies or designing performance halls and theatres, the company is always seeking new ways to deliver the best possible listening experience.

First implemented by Yamaha in 1985, Active Field Control (AFC) is an acoustic conditioning system designed to adjust and enhance the architectural acoustic characteristics of facilities such as performing arts venues, houses of worship, theatres and concert halls, while maintaining the natural sonic characteristics of the space. AFC3 represents the third generation of innovative AFC systems from Yamaha, the most trusted name in audio.



AFC3





With increasing pressure for facilities to become more multi-purpose and accommodate a wider range of applications, AFC3 provides a cost-effective alternative to mechanical means of modifying room acoustics. It is a truly scalable solution which can be installed in a wide range of venues, including concert halls, opera houses, theatres, cultural community centres, small churches, auditoriums and even sports venues and stadiums. Acoustics changes can be made at the push of a button, allowing the performance environment to be adjusted almost instantly. Yamaha AFC systems are currently installed in over 100 facilities worldwide.

As a 'hybrid regenerative' system, AFC3 is able to deliver the same high quality acoustics to both the onstage performers and the audience. This is crucial where performers and listeners need to be in the same acoustic space - meaning they not only have a visible connection, but also an audible one. To support such a close connection, not only does the quality of the early reflections and the diffuse reverberation field need to be uniformly excellent, but the response of the system to any sound source (on the stage, in the orchestra pit and in the audience) also needs to be exactly as it would in an original acoustic environment. AFC3 offers all this and more.

✱ OPERA NA ZAMKU, SZCZECIN, POLAND

## WHAT IS AFC?

**ACTIVE FIELD CONTROL** is an acoustic enhancement system that is used to improve or enhance the architectural acoustic characteristics of a room and optimise reverberation, while all the time preserving that room's natural acoustic 'signature'. An AFC system consists of multiple microphones, Digital Signal Processors (DSP), power amplifiers and loudspeakers. AFC uses a 'hybrid regenerative' technique that adjusts acoustic conditions by using acoustic feedback combined with DSP reverberation and early reflection algorithms. This makes AFC different from, and superior to, other techniques that are based on pure feedback or the dedicated use of digital reverbs to simulate room characteristics. Yamaha was the first to apply the hybrid regenerative technique to a commercial product range in 1987, developed as a unique collaboration between engineers from Yamaha's digital processing research and development laboratories with acousticians from Yamaha's spatial audio department, who had long experience in the architectural design of concert halls in Japan.



### ACOUSTICS

Yamaha AFC3 is not a PA system. Instead, it fully respects the original acoustics, applying the hybrid regenerative technology to shape both the sound field and the response to sound sources in the acoustic space in a completely natural way. This is why AFC3 is being applied in concert halls and opera houses that need their acoustics to be improved – sometimes a subtle touch-up, in other cases a more extensive enhancement, for example after a renovation. In that case, the architect has more design freedom in shaping the hall and achieving usage and cost efficiency.



### VARIABILITY

AFC3 systems are highly variable. Firstly in system scope; they can be applied in very small rooms such as rehearsal rooms and conference rooms, using just a few microphones and loudspeakers, up to very large venues such as opera houses and concert halls with thousands of seats - in which case a system may comprise several hundred loudspeakers. Secondly, in enhancement scope; AFC3 can support a broad range of reverberation time enhancement ratios. These range from small enhancements for concert halls and opera houses that need a delicate 'touch up' in their reverberation time and acoustic connection between the stage, orchestra pit and hall, all the way through to full multi-purpose venues designed to support cinema, amplified music, a philharmonic orchestra or even a church organ. In these cases, variability of reverberation time may easily span a range of 0.5 seconds up to 3 seconds, with several easily selectable presets that all support a fully natural sound and response.



## RELIABILITY

Reliability is a fundamentally important quality, as acoustic enhancement systems are installed as part of the fabric of a venue. A system's life expectancy needs to span decades, with many performances to be enjoyed by critical audiences listening to world famous soloists and orchestras - therefore nothing must go wrong. Don't worry, AFC3 is built on rock solid hardware, using components that have proven their reliability for more than 50 years in the global professional audio market. This is possible because AFC3 uses the same hardware platform as Yamaha's sound reinforcement digital signal processors and digital mixing consoles - a field where Yamaha is the market leader, with millions of units sold. As a result of Yamaha's rigorous, fully ISO9001-certified manufacturing quality control, the reputation of its products for both quality and reliability is unique.

## OPEN PLATFORM

The AFC3 infrastructure is based on extremely powerful DSP engines that can support any audio functionality as well as AFC3. This means that AFC3 systems can easily share their amplifiers and loudspeakers with other systems, such as mixing consoles and immersive sound systems like Dolby 5.1 and 7.1 Cinema Surround, Dolby Atmos and BARCO Iosono. Sharing multi-channel functionality can be done through Dante and AES67 audio networking, but also through legacy audio protocols such as AES/EBU and MAD1, supporting virtually any external sound system.

## QUALITY

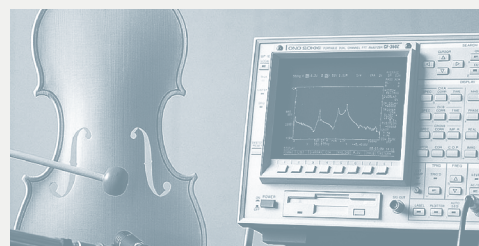
AFC3 system hardware is recognised by the global audio professional community for its outstanding sound quality. However, an acoustic enhancement system also relies on acoustic design and tuning. This is why AFC3 systems are designed and tuned by international teams of experienced professionals, each with a track record of projects in opera houses, concert halls and multi-purpose venues with enhanced acoustics, ensuring both performers and audiences are satisfied with every performance.

## OPERATION

AFC3 systems come as standard with both a bespoke iPad-based graphic user interface, as well as one or more optional wall-mounted panels, both offering easy selection of the system's presets. No technically skilled staff are required for operation, systems can be switched to the required mode by the simple touch of a button. In addition, AFC3 systems can support media control systems such as Crestron and AMX, responding as an integral part of a venue's overall control infrastructure.

## THE MUSIC

Yamaha is the largest manufacturer of musical instruments on the planet, producing virtually any musical instrument imaginable - from a concert grand piano to a marimba, from a flute to a French horn, acoustic and electric guitars to Latin percussion. It's that background that is the motivation for Yamaha to have also become the world's largest manufacturer of professional audio and AV components, including AFC systems. Although Yamaha is regarded as the world's most innovative pioneer in professional audio technology, the unique DNA of everything that the company does is the sound source: a human being playing an instrument, which includes the human voice. All Yamaha professional audio products pay tribute and respect the sound source and music. This 'musical DNA', combined with innovative DSP technology and decades of knowledge and experience in acoustics, has shaped the third generation of Active Field Control systems: AFC3.





# | RECENT AFC3 INSTALLATIONS

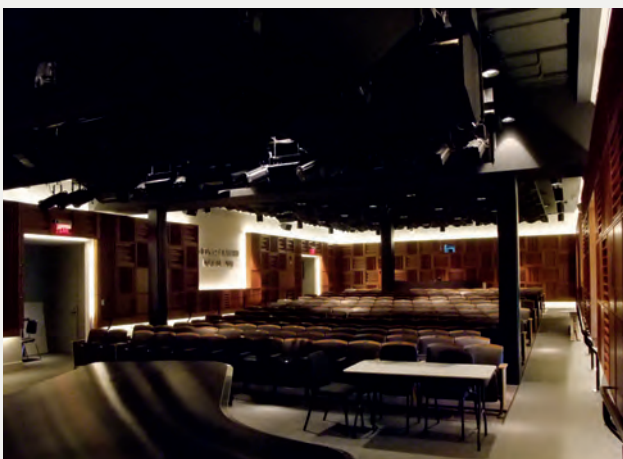
- \* REHEARSAL HALL AT ROYAL SWEDISH OPERA, STOCKHOLM, SWEDEN



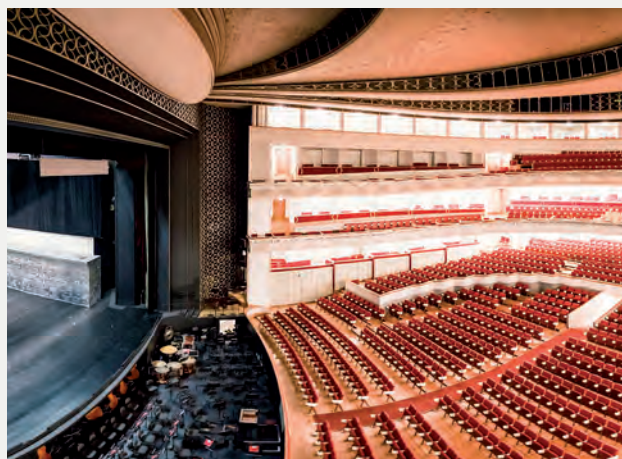
- \* MIŃSK MAZOWIECKI, POLAND



- \* CIMINELLI RECITAL HALL, BUFFALO, NY



- \* GRAND THEATRE OF THE NATIONAL OPERA, WARSAW, POLAND



- \* NANYANG TECHNOLOGICAL UNIV., SINGAPORE



- \* AMSTERDAM HOGESCHOOL VOOR DE KUNSTEN, AMSTERDAM, THE NETHERLANDS





✱ PLAZA VERDE, NUMAZU, JAPAN



✱ TYUMEN PHILHARMONIE, RUSSIA



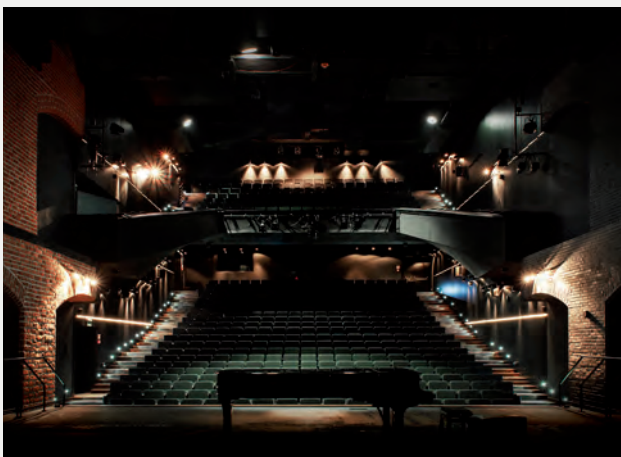
✱ THE GOTHENBURG OPERA, GOTHENBURG, SWEDEN



✱ HIGH COURT AUDITORIUM, SEOUL, KOREA



✱ THE CASTLE OPERA, SZCZECIN, POLAND



✱ PARKGEBOUW, RIJSSSEN, THE NETHERLANDS



NEXT



# AUDIO VISUAL PRODUCTS





# | WXC-50 & WXA-50



CONFERENCE



BACKGROUND  
MUSIC

## SIMPLE AND FLEXIBLE, FOR ULTIMATE LISTENING FREEDOM

The **WXC-50** is a new-concept audio component that goes beyond conventional audio thinking. It let you access a wide variety of audio content such as music from streaming services or stored on a smartphone, and enjoy high quality sound and style thanks to the ability to network with Yamaha's exclusive MusicCast multi-room audio system. High functionality and performance bring you musical enjoyment for domestic, retail, hospitality, conference, presentation and many more applications



WXC-50



WXA-50

|                                          | WXC-50                                                          | WXA-50                                                          |
|------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|
| NETWORK SECTION                          | DLNA version 1.5                                                | DLNA version 1.5                                                |
| FILE FORMAT                              | MP3, WMA, MPEG4, AAC, WAV, FLAC, AIFF, ALAC, DSD                | MP3, WMA, MPEG4 AAC, WAV, FLAC, AIFF, ALAC, DSD                 |
| WI-FI / AIRPLAY / BLUETOOTH              | Yes / Yes / Yes (SBC / AAC)                                     | Yes / Yes / Yes (SBC / AAC)                                     |
| RATED OUTPUT POWER                       | -                                                               | 70 W + 70 W (6 ohms, 20 Hz-20 kHz, 0.06 % THD, 2-ch driven)     |
| MAXIMUM OUTPUT POWER                     | -                                                               | 85W (8 ohms, 1 kHz, 10% THD, 1 ch driven)                       |
| TOTAL HARMONIC DISTORTION (20 HZ-20 KHZ) | 0.003 % (Pre out)                                               | 0.02 % (SP out)                                                 |
| SIGNAL-TO-NOISE RATIO                    | 112 dB (Opt / Net / USB / Bluetooth in) / 98 dB (AUX in)        | 110 dB (Opt / Net / USB / Bluetooth in) / 98 dB (AUX in)        |
| AUDIO IN / OUT                           | 1/1                                                             | 1/1                                                             |
| DIGITAL IN / OUT                         | 1 (Optical) / 1 (Optical, Coaxial)                              | 1 (Optical) / -                                                 |
| USB INPUT / ETHERNET / PRE OUT           | 1 / 1 / 1                                                       | 1 / 1 / -                                                       |
| SUBWOOFER OUT                            | 1                                                               | 1                                                               |
| REMOTE IN / OUT                          | 1 / 0                                                           | 1 / 0                                                           |
| CONTROL (TRIGGER) IN / OUT               | 1/1                                                             | 1/1                                                             |
| STANDBY POWER CONSUMPTION                | 1.8 W (Network Standby On, Bluetooth Standby On)                | 1.8 W (Network Standby On, Bluetooth Standby On)                |
| DIMENSIONS (W X H X D)                   | 215 x 51.5 x 245.9 mm<br>(with antenna: 214 x 123.6 x 245.9 mm) | 215 x 51.5 x 251.4 mm<br>(with antenna: 214 x 123.6 x 251.4 mm) |
| WEIGHT                                   | 1.44 kg                                                         | 1.94 kg                                                         |

## STREAMING SERVICE PROVIDERS: SPOTIFY, SPOTIFY CONNECT, DEEZER, TIDAL

\*Streaming service availability varies by region.



# | CD PLAYER



CONFERENCE



BACKGROUND  
MUSIC



AUDIO / VIDEO



CD-S300RK



CD-C600RK



CD-N301

|                          | CD-S300RK                  | CD-C600RK                     | CD-N301                                       |
|--------------------------|----------------------------|-------------------------------|-----------------------------------------------|
| COMPATIBLE MEDIA         | CD-R, CD-RW                | 5-CD changer :<br>CD-R, CD-RW | CD-DA, CD-R, CD-RW,<br>Streaming DLNA Ver 1.5 |
| COMPATIBLE AUDIO FORMATS | CDA, MP3, WMA , CD Text    | CDA, MP3, WMA , CD Text       | MP3, WMA, AAC, WAV, FLAC                      |
| D/A CONVERTOR            | 24bits/192kHz              | 24bits/192kHz                 | 32bit/192 kHz                                 |
| USB                      | 1 front, iPod 1 compatible | 1 front, iPod 1 compatible    | -                                             |
| DIGITAL OUTPUTS          | Optical + Coaxial          | Optical                       | Optical x 1, Coaxial x 1                      |
| ANALOGUE OUTPUTS         | 1                          | 1                             | 1                                             |
| ETHERNET PORTS           | -                          | -                             | 1                                             |
| PORT RS-232C             | -                          | Yes                           | -                                             |
| DIMENSIONS (W X H X D)   | 480 x 86 x 260 mm          | 480 x 116 x 405 mm            | 435 x 86 x 260 mm                             |
| WEIGHT                   | 4.3 kg                     | 7.3 kg                        | 3.2 kg                                        |
| RACK EARS                | Yes                        | Yes                           | -                                             |

# | AMPLIFIER



AUDIO / VIDEO



A-S301



A-S501

|                        | A-S301                                           | A-S501                                           |
|------------------------|--------------------------------------------------|--------------------------------------------------|
| OUTPUT POWER           | 2x 60 W (8 ohms, 20 Hz to 20 kHz,<br>0.019% THD) | 2x 85 W (8 ohms, 20 Hz to 20 kHz,<br>0.019% THD) |
| CHASSIS                | TopArt anti-resonance                            | TopArt anti-resonance                            |
| INPUTS                 | 8 including 1 phono                              | 8 including 1 phono                              |
| OUTPUTS                | 4 including 1 subwoofer out                      | 4 including 1 subwoofer out                      |
| HEADPHONES             | 1 x front                                        | 1 x front                                        |
| REMOTE CONTROL         | Infrared                                         | Infrared                                         |
| DIMENSIONS (W x H x D) | 435 x 151 x 387 mm                               | 435 x 151 x 387 mm                               |
| WEIGHT                 | 9 kg                                             | 10.3 kg                                          |

# |TUNER AMPLIFIERS

MusicCast



RX-V485

MusicCast



RX-V685

|                        | RX-V485                                                                                                                                                                                                                                          | RX-V685                                                                                      |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| RATED OUTPUT POWER     | <p>U.S AND CANADA:<br/>115W (1ch driven, 1kHz, 8 ohms, 0.9% THD)<br/>80W (2ch driven, 20Hz-20kHz, 8 ohms, 0.09% THD)</p> <p>OTHER REGIONS:<br/>115W (1ch driven, 1kHz, 6 ohms, 0.9% THD)<br/>80W (2ch driven, 20Hz-20kHz, 6 ohms, 0.09% THD)</p> | 125W (1ch driven, 1kHz, 8 ohms, 0.9% THD)<br>90W (2ch driven, 20Hz-20kHz, 8 ohms, 0.06% THD) |
| POST BI-AMPING         | -                                                                                                                                                                                                                                                | Yes                                                                                          |
| DECODING FORMATS       | Dolby TrueHD, DTS-HD Master Audio                                                                                                                                                                                                                | Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD Master Audio                                        |
| D/A CONVERTER          | Burr-Brown 32bit/384kHz                                                                                                                                                                                                                          | Burr-Brown 32bit/384kHz                                                                      |
| AUDIO FORMATS          | DSD up to 11.2MHz, FLAC, WAV, AIFF 192kHz/32Bit, ALAC 96kHz/24Bit, MP3, WMA, AAC                                                                                                                                                                 | DSD up to 11.2MHz, FLAC, WAV, AIFF 192kHz/32Bit, ALAC 96kHz/24Bit, MP3, WMA, AAC             |
| MULTI-ZONE             | Zone B                                                                                                                                                                                                                                           | Zone 1 (surround) + zone 2 (stereo)                                                          |
| DIGITAL INPUTS         | 3                                                                                                                                                                                                                                                | 4                                                                                            |
| ANALOGUE INPUTS        | 5                                                                                                                                                                                                                                                | 5                                                                                            |
| ANALOGUE OUTPUTS       | 0                                                                                                                                                                                                                                                | 0                                                                                            |
| PRE-OUTPUTS            | Subwoofer                                                                                                                                                                                                                                        | 2.2 channel (Front L, Front R, Subwoofer × 2)                                                |
| AIR PLAY (STREAMING)   | PC, Mac, iPop, iPhone, iPad                                                                                                                                                                                                                      | PC, Mac, iPop, iPhone, iPad                                                                  |
| HDMI                   | 4 Inputs + 1 output                                                                                                                                                                                                                              | 5 Inputs + 2 outputs                                                                         |
| UPSCALING VIDEO        | -                                                                                                                                                                                                                                                | UHD / 4K to Full HD1080p                                                                     |
| RS232C/RS422           | -                                                                                                                                                                                                                                                | -                                                                                            |
| MusicCast COMPATIBLE   | Yes                                                                                                                                                                                                                                              | Yes                                                                                          |
| DIMENSIONS (W X H X D) | 435 x 161 x 327 mm                                                                                                                                                                                                                               | 435 x 171 x 378 mm                                                                           |
| WEIGHT                 | 7.7 kg                                                                                                                                                                                                                                           | 10.5 kg                                                                                      |

MusicCast



RX-A880

MusicCast



RX-A3070

|                              | RX-A880                                                                                                    | RX-A3070                                                                                                           |
|------------------------------|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| RATED OUTPUT POWER           | 130W (1ch driven, 1kHz, 8 ohms, 0.9% THD)<br>100W (2ch driven, 20Hz-20kHz, 8 ohms, 0.06% THD)              | 185W (1ch driven, 1kHz, 8 ohms, 0.9% THD)<br>150W (2ch driven, 20Hz-20kHz, 8 ohms, 0.06% THD)                      |
| DECODING FORMATS             | Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD Master Audio                                                      | Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD Master Audio                                                              |
| BI-AMP CAPABILITY            | Yes                                                                                                        | Yes                                                                                                                |
| D/A CONVERTER                | 32bit / 384KHz (Burr-Brown)                                                                                | 32bit / 192KHz ESS SABRE32™ Ultra DAC (for main 7 channels)                                                        |
| CONNECTIVITY                 | HDMI Input/Output: 7/2                                                                                     | HDMI Input/Output: 8/2                                                                                             |
| USB INPUT                    | USB Memory, Portable Audio Player                                                                          | USB Memory, Portable Audio Player                                                                                  |
| NETWORK PORT                 | Yes                                                                                                        | Yes                                                                                                                |
| WI-FI                        | Yes (with Wireless Direct)                                                                                 | Yes (with Wireless Direct)                                                                                         |
| AIRPLAY                      | Yes                                                                                                        | Yes                                                                                                                |
| BLUETOOTH                    | Yes (SBC / AAC)                                                                                            | Yes (SBC / AAC)                                                                                                    |
| FRONT AV INPUT               | USB / Analogue Audio                                                                                       | HDMI / USB / Analogue Audio / Composite                                                                            |
| COMPOSITE VIDEO INPUT/OUTPUT | 1/0                                                                                                        | 4/0                                                                                                                |
| APP CONTROL                  | Yes (iPhone / iPad / Android phone / tablet)                                                               | Yes (iPhone / iPad / Android phone / tablet)                                                                       |
| WEB BROWSER CONTROL          | Yes                                                                                                        | Yes                                                                                                                |
| REMOTE CONTROL UNIT          | Yes                                                                                                        | Yes (Preset)                                                                                                       |
| RS-232C INTERFACE            | Yes                                                                                                        | Yes                                                                                                                |
| DIMENSIONS (W X H X D)       | 435x171x382 mm (with antenna up: 435x248x382 mm); 17-1/8"x6-3/4"x15" (with antenna up: 17-1/8"x9-3/4"x15") | 435x192x474 mm (with antenna up: 435x247x474 mm); 17-1/8"x7-1/2"x18-5/8" (with antenna up: 17-1/8"x9-3/4"x18-5/8") |
| WEIGHT                       | 11 kg; 23.4 lbs.                                                                                           | 19.6 kg; 43.2 lbs.                                                                                                 |
| MusicCast COMPATIBLE         | Yes                                                                                                        | Yes                                                                                                                |

# | DIGITAL SOUND PROJECTOR



musicCast



YSP-5600

## YSP-5600

|                      |                                                                                                                        |
|----------------------|------------------------------------------------------------------------------------------------------------------------|
| SOUND PROJECTOR      | 7.1.2 channel                                                                                                          |
| DECODING FORMATS     | Dolby Atmos, DTS:X, Dolby True HD, DTS HD Master Audio                                                                 |
| SPEAKERS             | vertical sound beam: 1-1/8" x 6 x 2 beam drivers, horizontal sound beam: 1-1/2" x 32 beam drivers, 4-1/2" x 2 woofers. |
| RATED OUTPUT POWER   | Array speaker: 74.8W (1kHz, 4 ohms, 1% THD), Woofer: 34W (100Hz, 4 ohms, 1% THD)                                       |
| DIGITAL INPUTS       | 2 optical, 1 coaxial                                                                                                   |
| ANALOGUE INPUTS      | 1 in                                                                                                                   |
| HDMI                 | 4 in, 1 out                                                                                                            |
| MUSICCAST COMPATIBLE | Yes                                                                                                                    |
| DIMENSIONS (HxWxD)   | 1100 x 212 x 93mm                                                                                                      |
| WEIGHT               | 11.7kg                                                                                                                 |

# | MusicCast HOTEL AV COMPONENTS

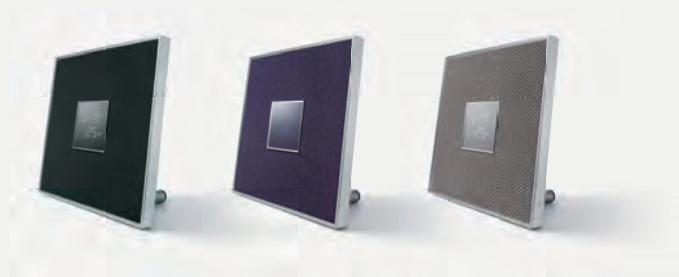
## INTERIOR AUDIO

### ISX-80 – INTEGRATED AUDIO SYSTEM

#### STYLISH AND WIRELESS – THE NEW Restio

- Beautiful art frame design enhances any living space.
- Luxuriously textured expanded metal and aluminium frame.
- Hang it on a wall like a picture.

musicCast Restio



ISX-80

musicCast



WX-030

## WIRELESS STREAMING SPEAKER

### WX-030

#### SAY HELLO TO MusicCast

- Hang it on a wall vertically or horizontally.
- Compact size lets you enjoy music anywhere in your home.
- Passive radiator design provides surprisingly strong bass output.
- Stereo Pairing lets you connect two units for wider stereo sound.

## NETWORK POWERED SPEAKER

### NX-N500

#### ALL-IN-ONE MusicCast SPEAKERS

- 140W total output power for thrilling sound and profound musicality.
- Bi-amp drive and XLR cable provide superb sound quality.
- DSD 5.6 MHz native, PCM 384 kHz playback compatibility.

musicCast



NX-N500





BACKGROUND  
MUSIC

# |NS-AW SERIES

## LOW IMPEDANCE ALL WEATHER WALL MOUNT SPEAKERS

- \* HIGH QUALITY 2-WAY SPEAKER ENCLOSURES FOR AV USE
- \* IPX3 FOR OUTDOOR USE
- \* AVAILABLE IN UV RESISTANT BLACK OR WHITE COATING
- \* INCLUDING WALL MOUNT BRACKET
- \* ROTATABLE Yamaha LOGO



NS-AW392B / NS-AW592B



NS-AW392W / NS-AW592W

| NS-AW392                     |       |                                       | NS-AW592                              |
|------------------------------|-------|---------------------------------------|---------------------------------------|
| COMPONENTS                   | LF    | 5" Cone                               | 6.5" Cone                             |
|                              | HF    | 0.75" Soft dome                       | 1" Soft dome                          |
| NOMINAL IMPEDANCE            |       | 6Ω                                    | 6Ω                                    |
| POWER RATING                 | NOISE | 40W                                   | 50W                                   |
|                              | MAX   | 120W                                  | 150W                                  |
| SENSITIVITY (1W,1M)          |       | 86dB SPL                              | 88dB SPL                              |
| MAXIMUM SPL (CALCULATED, 1M) |       | 106dB SPL                             | 109dB SPL                             |
| FREQUENCY RANGE              | -10dB | 60Hz - 25kHz                          | 55Hz - 20kHz                          |
| CROSSOVER FREQUENCY          |       | 6kHz                                  | 5kHz                                  |
| CONNECTORS                   |       | binding post                          | binding post                          |
| COLOR (GRILLE)               |       | NS-AW392BL: Black                     | NS-AW592BL: Black                     |
|                              |       | NS-AW392W: White                      | NS-AW592W: White                      |
| DIMENSIONS (W x H x D)       |       | 170 x 273 x 136mm                     | 206 x 340 x 170mm                     |
| WEIGHT                       |       | 1.8kg (4lbs)                          | 2.4kg (5.3lbs)                        |
| INCLUDED ACCESSORIES         |       | wall-mount adaptor,<br>Owner's Manual | wall-mount adaptor,<br>Owner's Manual |
| PACKAGING                    |       | per pair                              | per pair                              |

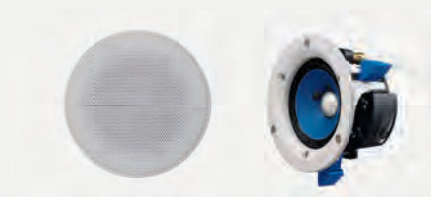
# |NS-IC SERIES



BACKGROUND  
MUSIC

## LOW IMPEDANCE CEILING SPEAKERS

- \* CEILING SPEAKERS FOR AV USE, LOW IMPEDANCE ONLY
- \* MAGNETIC GRILLE MOUNT



NS-IC400



NS-IC600



NS-IC800

|                              |       | NS-IC800       | NS-IC600       | NS-IC400       |
|------------------------------|-------|----------------|----------------|----------------|
| SPEAKER TYPE                 |       | 2-way          | 2-way          | Full range     |
| COMPONENTS                   | LF    | 8" Cone        | 6.5" Cone      | 4" Cone        |
|                              | HF    | 1" Soft dome   | 1" Soft dome   |                |
| NOMINAL IMPEDANCE            |       | 8Ω             | 8Ω             | 8Ω             |
| POWER RATING                 | NOISE | 50W            | 40W            | 30W            |
|                              | MAX   | 140W           | 110W           | 90W            |
| SENSITIVITY (1W,1M)          |       | 90dB SPL       | 90dB SPL       | 85dB SPL       |
| MAXIMUM SPL (CALCULATED, 1M) |       | 111dB SPL      | 110dB SPL      | 104dB SPL      |
| FREQUENCY RANGE (-10dB)      |       | 50Hz - 28kHz   | 65Hz - 28kHz   | 95Hz - 40kHz   |
| CROSSOVER FREQUENCY          |       | 3.5kHz         | 3.2kHz         | -              |
| CONNECTORS                   |       | wire-end clamp | wire-end clamp | wire-end clamp |
| COLOR (GRILLE)               |       | White          | White          | White          |
| DIMENSIONS                   |       | Ø283 x 120mm   | Ø242 x 119mm   | Ø150 x 86.5mm  |
| WEIGHT                       |       | 1.9 kg         | 1.5 kg         | 0.8 kg         |
| PACKAGING                    |       | per pair       | per pair       | per pair       |

# | MusicCast

BACKGROUND  
MUSIC

AUDIO / VIDEO

## musicCast

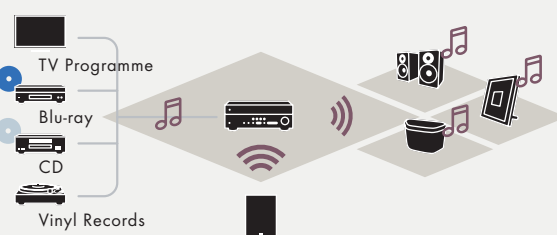
Enjoy wireless streaming of all your music from your Bluetooth® and AirPlay® compatible smart devices.



Bluetooth®

WiFi  
CERTIFIED

Enjoy TV broadcasts, Blu-ray videos, CD music – even vinyl records – in any room of your house.



### TOTAL MUSIC/AUDIO BRAND WITH 130 YEARS EXPERIENCE

With its long and storied history of 130 years, Yamaha has established itself as a premier brand that embraces and embodies sound and music – a brand that knows all about music, and has led the industry in the fields of audio components, musical instruments, professional recording equipment, and even the acoustic design of concert halls. Now, Yamaha has gathered all its technologies and extensive know-how, nurtured through its long history and rich experience, and poured them into MusicCast.



**SUPPORTS  
HIGH-RESOLUTION  
MUSIC CONTENT**



**STRONG AND  
STABLE NETWORK  
PERFORMANCE**



**ENVIRONMENTALLY  
FRIENDLY, TOO.  
WITH SUPERB ECO  
PERFORMANCE.**

All models support for high-resolution formats (WAV/FLAC/AIFF, Apple Lossless), letting you play back high-resolution streaming sound sources and fully maintain the sound quality of the original. And, since each device is equipped with an equaliser function, you can fine-tune the sound just as you desire.

Each MusicCast device has built-in signal transmitters, letting you build a solid network through linking to the device with the strongest radio waves. And thanks to superior network technology created by the development of network audio and routers within the group, you can enjoy stable multi-room audio anywhere in your home.

All MusicCast devices feature exceptionally low standby power consumption of less than 3 watts. They also have an Auto Standby function that turns off the power if no signal is received for a certain amount of time. Designed with eco performance in mind, the MusicCast components are environmentally friendly.

# | MusicCast & DISKLAVIER ENSPIRE



BACKGROUND  
MUSIC



AUDIO / VIDEO



## PLAY AND STREAM TRUE PIANO SOUND ANYWHERE

Combine Yamaha's famed entertainment piano, the Disklavier, with the MusicCast wireless music system, and you can enjoy the sound and music of a real acoustic piano – in a hotel lobby, reception, living room. In fact, bask in the music just as if you are holding a concert. Introducing a new world of musical entertainment that could only come from Yamaha, the world's foremost musical instrument and audio brand.

## THE LUXURY OF ENJOYING LIVE PIANO PERFORMANCES WHENEVER YOU LIKE. Yamaha's AUTOMATIC PERFORMANCE PIANO, THE DISKLAVIER

The Disklavier is a full entertainment piano, one that can not only be played as a genuine acoustic piano, but one that also automatically plays any of the 500 built-in music pieces, as well as songs downloaded from the internet (more than 4000 titles). Yamaha's proprietary high-precision digital control system reproduces the action of the keyboard and pedals with complete accuracy, just as it was recorded by a professional pianist. The music that flows to you is the sound of an acoustic piano itself. This is truly the ultimate musical system, letting you enjoy actual performances by professional pianists – with all the genuine touch, nuance and emotion as intended by the artists – in real acoustic sound.

## DISKLAVIER STREAMING RADIO SERVICES

Disklavier offers revolutionary streaming radio services, allowing you to select from and enjoy thousands of piano performances. Disklavier Radio gives you instant access to over 30 channels, in a variety of genres including jazz, classical and pop.

## MusicCast PLAYS THE SOUND OF DISKLAVIER DISTRIBUTED TO OTHER ROOMS

By linking the Disklavier to a MusicCast compatible device, the music and performances of the Disklavier can be spread throughout a venue's locations wirelessly. Enjoy elegant piano performances in the bar from the Piano performance in the lobby.

## IOS AND ANDROID GRAPHIC USER INTERFACE APPS FOR MusicCast AND DISKLAVIER ENSPIRE

MusicCast and Disklavier Enspire components can be controlled from the Musiccast Controller app, as well as from a Graphic User Interfaced programmed with the Pro Visionaire Touch app, allowing integrated control of Disklavier Enspire, MusicCast and MRX/MTX based Commercial Installed Systems in a single user interface. The MusicCast controller app is available for iOS and Android devices. The ProVisionaire Touch app is available for iOS devices only.

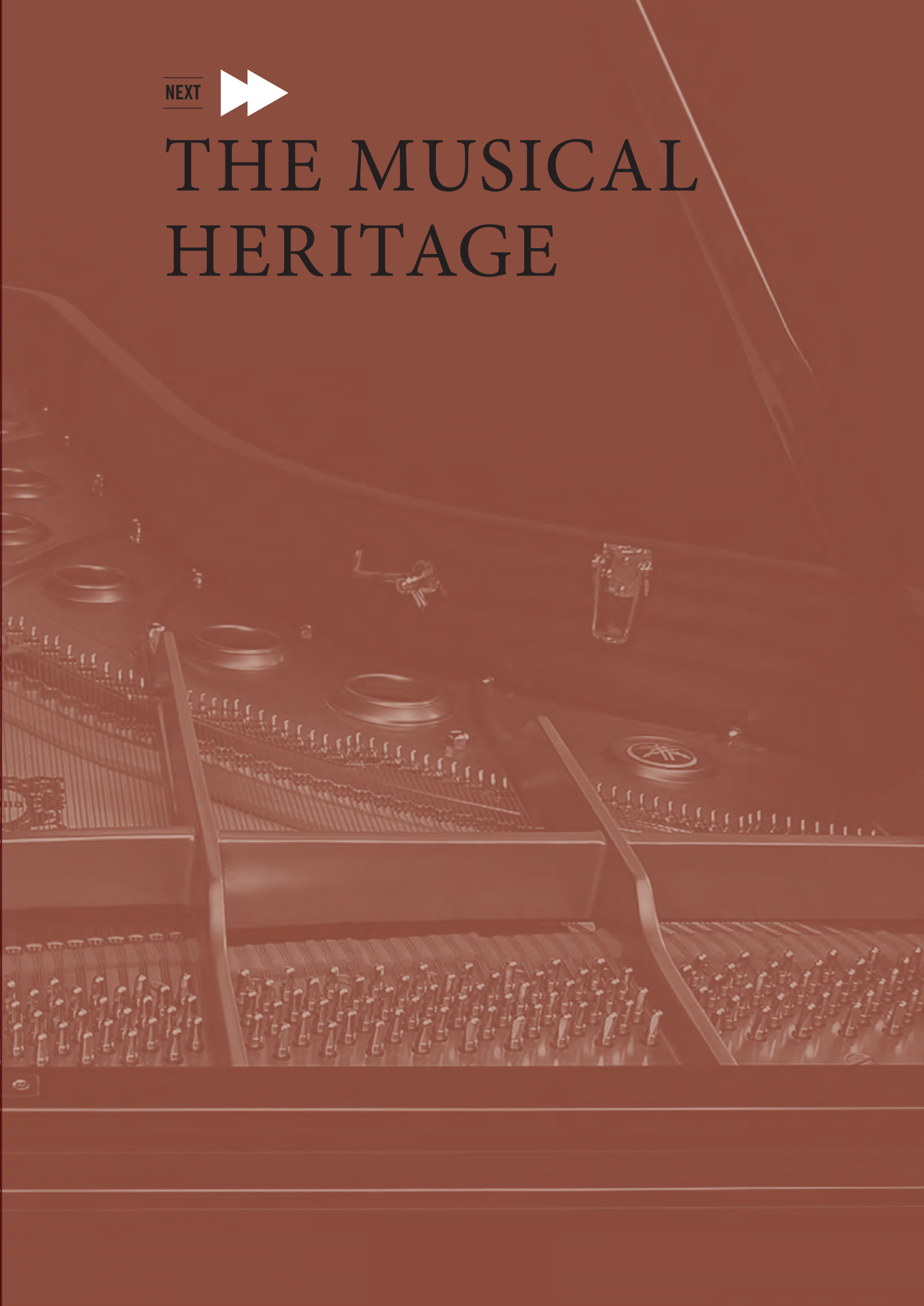




NEXT



# THE MUSICAL HERITAGE



# | BACKGROUND MUSIC

The combination of practicality, convenience, sound quality and keyboard touch make **Yamaha HYBRID AND DISKLAVIER PIANOS** the perfect solution for hotel lobbies, lounges, restaurants, and also in educational institutions.



## AVANTGRAND

Yamaha's breakthrough AvantGrand hybrid range offer visually attractive digital instruments with the mechanical advantages of a traditional acoustic instruments, featuring piano actions like those found in Yamaha grand and upright pianos providing a superb playing experience.



## DISKLAVIER

Disklavier is a range of modern, yet traditional acoustic pianos that allow the player to record and playback performances with the instrument acting and sounding exactly as it would as if being played; with keys and pedals moving precisely in real time - ideal as a visually attractive stand-in in the breaks for background music pianists in hotel lounges, lobbies and restaurants.

# | JAZZ

Yamaha has been a supplier of **JAZZ AND COMBO INSTRUMENTS** for many decades, used by artists all over the world. Yamaha is the only company in the world that can provide a complete musical instrument set for a jazz combo – including drums, acoustic as well as digital pianos, guitars, bass guitars and of course wind instruments.

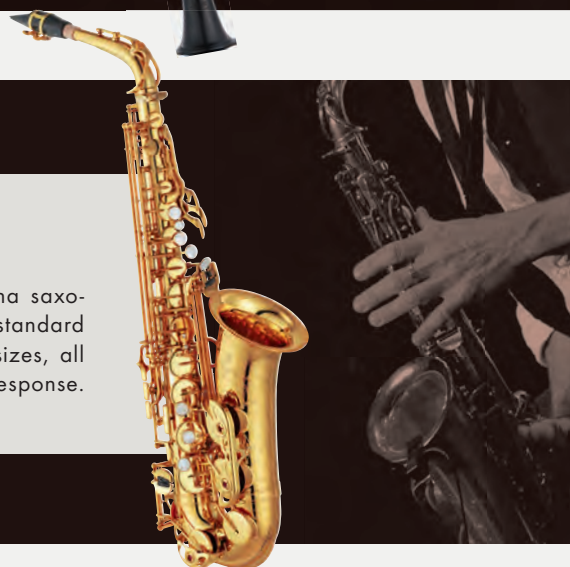
## CLARINET

No other manufacturer makes clarinets like Yamaha. Five different models are produced, all with superb playability, precise intonation and a beautifully resonant, musical timbre.



## SAXOPHONE

Considered by many to be the best in the world, Yamaha saxophones range from Custom and Pro to intermediate and standard models. Available in soprano, alto, tenor and baritone sizes, all feature highly accurate intonation, warm tone and a quick response.



## TRUMPET

A staple of traditional jazz, Yamaha trumpets feature hand-craftsmanship augmented by cutting edge manufacturing technology. This unique combination delivers instruments of remarkable quality, with a clear sound and excellent projection.





# | ROCK & POP

**DRUMS, GUITARS, BASS GUITARS AND KEYBOARDS** – along with their backline and monitor speakers: nearly every pop and rock band has played a Yamaha instrument one time or the other. Manufacturing high quality guitars and drums since 1963, Yamaha introduced the first analogue synthesisers in 1976, and digital synthesisers in 1981 – with the famous flagships CS80 and DX7 shaping the sound of the decades that followed.



## DRUMS

Yamaha drum kits are a fixture of stages and studios throughout the world. With acoustic drum kit shells produced in a range of woods, complemented by the DTX range of electronic kits, there is a Yamaha drum kit for every type of music.



## GUITARS

Yamaha produces guitars and basses suitable for everyone from young beginners to seasoned professionals, and music styles ranging from classical to heavy rock. The finest tone woods and high quality components combine to deliver instruments of supreme quality.



## KEYBOARDS AND STAGE PIANOS

Whether its an arranger workstation, synthesiser, stage piano or portable home keyboard, Yamaha digital keyboard instruments deliver sounds of exceptional quality from highly responsive keyboards, all with very user friendly controls.



# | SYMPHONY ORCHESTRA

Yamaha is renowned world wide for the high quality of the **CONCERT PIANOS, BRASS AND WOODWIND INSTRUMENTS**, and concert percussion, used by symphony orchestras, brass bands, conservatoires and music schools – and of course by millions of amateur musicians: with more than 6 million pianos and more than 100 million wind instruments sold, Yamaha's impact on the world music is second to none.

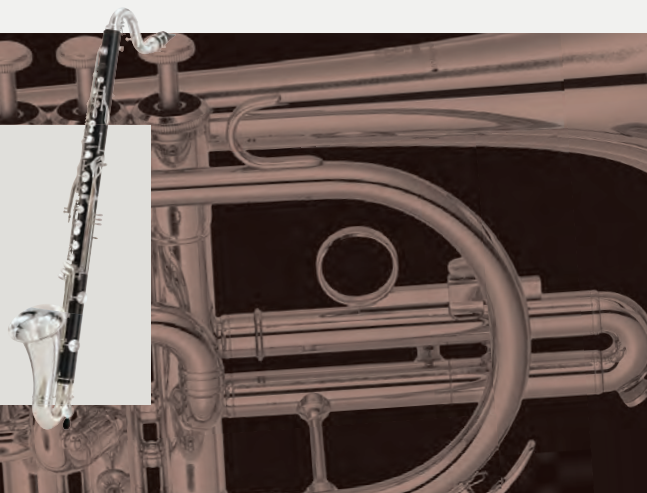
## CONCERT PIANOS

Yamaha's reputation as one of the world's best concert piano manufacturers is well founded. Crafted with exceptional attention to detail, the sound and playability of Yamaha grand and upright pianos ensure that the loudest chords and the quietest passages are all delivered with equal quality.



## BRASS AND WOODWIND

From oboes and bassoons to tubas and trombones, Yamaha's extensive range of carefully crafted brass and woodwind instruments deliver a consistent sound and playability that is unmatched anywhere else.



## PERCUSSION

A vital part of any orchestra, Yamaha percussion is carefully manufactured to deliver pure sound quality, while being robust enough to cope with the most thunderous composition!





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YAMAHA

commercial audio

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| VXS8W    | 12 |                  |          |
| VXS10ST  | 12 |                  |          |
| VXS10STW | 12 |                  |          |

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**W**

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| WIRELESS DCP    | 182 |
| WMB-L1B/WMB-L1W | 19  |
| WX-030          | 223 |
| WXA-50          | 218 |
| WXC-50          | 218 |

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**X**

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| XH200     | 88 |
| XM4080    | 87 |
| XM4180    | 87 |
| XMV4140   | 84 |
| XMV4140-D | 84 |

## NOTES

[illegible]



