YAMAHA

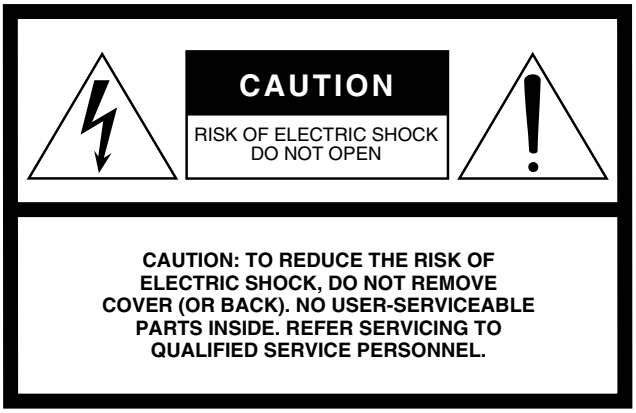
POWER AMPLIFIER

XMV8280
XMV8140
XMV8280-D
XMV8140-D

Owner's Manual
Bedienungsanleitung
Mode d'emploi
Manual de instrucciones
Manuale di istruzioni
Руководство пользователя
使用说明书
取扱説明書

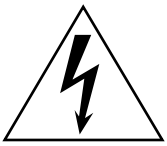
English
Deutsch
Français
Español
Italiano
Русский
中文
日本語

EN
DE
FR
ES
IT
RU
ZH
JA



The above warning is located on the top of the unit.

Explanation of Graphical Symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

IMPORTANT SAFETY INSTRUCTIONS

1 **Read these instructions.**
2 **Keep these instructions.**
3 **Heed all warnings.**
4 **Follow all instructions.**
5 **Do not use this apparatus near water.**
6 **Clean only with dry cloth.**
7 **Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.**
8 **Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.**
9 **Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.**
10 **Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.**
11 **Only use attachments/accessories specified by the manufacturer.**
12 **Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.**



13 **Unplug this apparatus during lightning storms or when unused for long periods of time.**
14 **Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.**

WARNING
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

(UL60065_03)

ADVARSEL!
Lithiumbatteri—Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandoren.

VARNING
Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS
Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

(lithium caution)

FCC INFORMATION (U.S.A.)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. **NOTE:** This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

   Relocate either this product or the device that is being affected by the interference.

   Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

   In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

   If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park, CA90620

   The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA. (class B)

COMPLIANCE INFORMATION STATEMENT (DECLARATION OF CONFORMITY PROCEDURE)

Responsible Party :	Yamaha Corporation of America
Address :	6600 Orangethorpe Ave., Buena Park, Calif. 90620
Telephone :	714-522-9011
Type of Equipment :	Power Amplifier
Model Name :	XMV8280/XMV8140/XMV8280-D/ XMV8140-D

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1) this device may not cause harmful interference, and

2) this device must accept any interference received including interference that may cause undesired operation.

See user manual instructions if interference to radio reception

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA. (FCC DoC)

IMPORTANT NOTICE FOR THE UNITED KINGDOM

Connecting the Plug and Cord

WARNING: THIS APPARATUS MUST BE EARTHED IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

GREEN-AND-YELLOW	:	EARTH
BLUE	:	NEUTRAL
BROWN	:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol ⏚ or colored GREEN or GREEN-and-YELLOW.

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

(3 wires)

In Finland: Laite on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan.
In Norway: Apparatet må tilkoples jordet stikkontakt.
In Sweden: Apparaten skall anslutas till jordat uttag.

(class I hokuo)

This product contains a battery that contains perchlorate material.
Perchlorate Material—special handling may apply,
See www.dtsc.ca.gov/hazardouswaste/perchlorate.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA. (Perchlorate)

이 기기는 가정용(B급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.

(class b korea)

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

* Please keep this manual in a safe place for future reference.

⚠ *WARNING*

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

Power supply/power cord

- Do not place the power cord near heat sources such as heaters or radiators, and do not excessively bend or otherwise damage the cord, place heavy objects on it, or place it in a position where anyone could walk on, trip over, or roll anything over it.
- Only use the voltage specified as correct for the device. The required voltage is printed on the name plate of the device.
- Use only the supplied power cord/plug.
  If you intend to use the device in an area other than in the one you purchased, the included power cord may not be compatible. Please check with your Yamaha dealer.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Be sure to connect to an appropriate outlet with a protective grounding connection. Improper grounding can result in electrical shock, damage to the device(s), or even fire.

Do not open

- This device contains no user-serviceable parts. Do not open the device or attempt to disassemble the internal parts or modify them in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

Water warning

- Do not expose the device to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the device, turn off the power immediately and unplug the power cord from the AC outlet. Then have the device inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

Fire warning

- Do not put burning items, such as candles, on the unit. A burning item may fall over and cause a fire.

If you notice any abnormality

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. Then have the device inspected by Yamaha service personnel.
  - The power cord or plug becomes frayed or damaged.
  - It emits unusual smells or smoke.
  - Some object has been dropped into the device.
  - There is a sudden loss of sound during use of the device.
- If this device should be dropped or damaged, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the device inspected by qualified Yamaha service personnel.

⚠ *CAUTION*

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the device or other property. These precautions include, but are not limited to, the following:

Power supply/power cord

- When removing the electric plug from the device or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the device is not to be used for extended periods of time, or during electrical storms.

Location

- Do not place the device in an unstable position where it might accidentally fall over.
- Do not block the vents. This device has ventilation holes at the front/rear/sides to prevent the internal temperature from becoming too high. In particular, do not place the device on its side or upside down. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), or even fire.
- Do not use the device in a confined, poorly-ventilated location. If this device is to be used in a small space other than an EIA-standard rack, make sure that there is adequate space between the device and surrounding walls or other devices: at least 10 cm at the sides, 10 cm behind and 40 cm above. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), or even fire.
- Do not place the device in a location where it may come into contact with corrosive gases or salt air. Doing so may result in malfunction.
- Keep device away from the reach of children.
- Before moving the device, remove all connected cables.
- When setting up the device, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch and disconnect the plug from the outlet. Even when the power switch is turned off, electricity is still flowing to the product at the minimum level. When you are not using the product for a long time, make sure to unplug the power cord from the wall AC outlet.
- If the device is mounted in an EIA standard rack, carefully read the section “Precautions for Rack Mounting” on page 8. Inadequate ventilation can result in overheating, possibly causing damage to the device(s), malfunction, or even fire.

Connections

- Before connecting the device to other devices, turn off the power for all devices. Before turning the power on or off for all devices, set all volume levels to minimum.
- Use only speaker cables for connecting speakers to the speaker connectors. Use of other types of cables may result in fire.

Maintenance

- Remove the power plug from the AC outlet when cleaning the device.

Handling caution

- Do not insert your fingers or hands in any gaps or openings on the device (vents).
- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into any gaps or openings on the device (vents) If this happens, turn off the power immediately and unplug the power cord from the AC outlet. Then have the device inspected by qualified Yamaha service personnel.
- Do not rest your weight on the device or place heavy objects on it, and avoid use excessive force on the buttons, switches or connectors.
- Do not use speakers for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Backup battery

- This device has a built-in backup battery. When you unplug the power cord from the AC outlet, the internal data is retained. However, if the backup battery fully discharges, this data will be lost. When the backup battery is running low, the display indicates "012." and the ALERT indicator is flashing. In this case, immediately save the data to external device such as a computer, then have qualified Yamaha service personnel replace the backup battery.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the device, or data that is lost or destroyed.

Always turn the power off when the device is not in use.

European Models

Inrush Current based on EN 55103-1:2009
13A (on initial switch-on)
5A (after a supply interruption of 5s)
Conforms to Environments: E1, E2, E3 and E4

NOTICE

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

■ Handling and maintenance

- Do not use the device in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the device, TV, or radio may generate noise.
- Do not expose the device to excessive dust or vibration, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day), in order to prevent the possibility of panel disfiguration, unstable operation, or damage to the internal components.
- Do not place vinyl, plastic or rubber objects on the device, since this might discolor the panel.
- When cleaning the device, use a dry and soft cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.
- Condensation can occur in the device due to rapid, drastic changes in ambient temperature—when the device is moved from one location to another, or air conditioning is turned on or off, for example. Using the device while condensation is present can cause damage. If there is reason to believe that condensation might have occurred, leave the device for several hours without turning on the power until the condensation has completely dried out.
- Do not use this device for any purpose other than driving loudspeakers.
- When turning on the AC power in your audio system, always turn on tthe device LAST, to avoid speaker damage. When turning the power off, the device should be turned off FIRST for the same reason.

■ Saving data

This device has a built-in backup battery that maintains data in internal memory even when the device's power is switched off. The backup battery will eventually become depleted, however, and when that happens the contents of the internal memory will be lost.* To prevent loss of data be sure to replace the backup battery before it becomes fully depleted. When the remaining capacity of the backup battery becomes so low that it needs to be replaced a "012." message will appear on the display during operation or when the device is powered on. If either of these messages appears do not turn off the power and immediately transfer any data you want to save to a computer or other external storage device, then have qualified Yamaha service personnel replace the backup battery. The average life of the internal backup battery is approximately 5 years, depending on operating conditions.

* Data items maintained in the internal memory by the backup battery are as follows:
- Device parameters (Attenuator values, Polarity settings, HPF settings, Analog/digital input setting, and [SIGNAL] indicator display setting).
- Event log.

Data items other than those described above are stored in memory that does not require backup power, and will be retained even if the backup battery fails.

Information

■ About this manual

- The illustrations as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your device.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

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* The contents of this manual apply to the latest specifications as of the printing date. Since Yamaha makes continuous improvements to the product, this manual may not apply to the specifications of your particular product. To obtain the latest manual, access the Yamaha website then download the manual file. Since specifications, equipment or separately sold accessories may not be the same in every locale, please check with your Yamaha dealer.

Introduction

Thank you for your purchase of the Yamaha XMV8280, XMV8140, XMV8280-D or XMV8140-D power amplifier. Please read through this manual carefully before beginning use, so that you will be able to take full advantage of your power amplifier's superlative features and enjoy trouble-free operation for years to come. After you have read the manual, keep it in a safe place for reference when needed.

NOTE

- When there are differences in the specifications of the XMV8280/XMV8280-D and the XMV8140/XMV8140-D, this manual will use curly brackets { } to enclose information that applies only to the XMV8140/XMV8140-D. (Example: 280W {140W}).
- Unless otherwise specified, illustrations are taken from the XMV8280/XMV8280-D.
- For the remainder of this manual, the XMV8280, XMV8140, XMV8280-D and XMV8140-D are referred to as "XMV" collectively.
- In this book, the matrix processor MTX series units are reffered to as "MTX" collectively.

Features

The XMV is a multi-channel power amplifier with the following features.

- **Both high-impedance and low-impedance connections are supported**
  Both high-impedance connections to 70V/100V lines and 4Ω/8Ω low-impedance connections are supported. A rear panel DIP switch allows this setting to be specified for every two channels.
- **Newly-developed "Double Power mode"**
  The newly-developed "Double Power mode" doubles the amplifier output of each channel when low-impedance connections are used.
  * The number of available channels will be halved.
- **Settings can be made via application software**
  Although settings such as mute on/off and attenuator values can be edited from the panel of the amplifier itself, you can use an MTX series matrix processor and computer to edit the settings of multiple XMV units.
- **Support for the newly-developed "YDIF" digital audio transmission format (XMV8280/XMV8140 only)**
  This allows up to 16 channels of audio and word clock to be transmitted and received via an Ethernet cable.
  This model can receive eight channels of audio signals via YDIF.
- **Dante network for large-scale systems (XMV8280-D/XMV8140-D only)**
  This enables audio signal transfer over long-distance with Dante equipped devices (such as the MTX5-D) with standard Ethernet cables.
- **High efficiency**
  The newly-developed output circuits allows high efficiency.
- **Redundancy between the digital and analog inputs**
  When the pilot tone of a digital input is interrupted or an analog input reaches the specified level or higher, the input switches from digital to analog.
  * This function can be set from the Amp Editor.

Included items (please check)

- Owner's Manual
- Power cord
- Euroblock plugs (3-pin, 3.50mm pitch) x 2
- Euroblock plugs with tabs (3-pin, 5.08mm pitch) x 8
- Cable ties x 8

Related Manuals and Software

Use the MTX-MRX Editor for building a system in which the MTX/MRX and XMV are combined. Use the Amp Editor for a system consisting only of the XMV(s). Related manuals, of the MTX-MRX Editor or Amp Editor (heretofore collectively referred to as "the editor") can be downloaded from the download page of the following website.

http://www.yamahaproaudio.com/

- **List of related manuals**

MTX or MRX owner's manual	This explains how to use the processor (MTX or MRX).
MTX-MRX Editor User Guide	This explains how to use MTX-MRX Editor.
MTX Setup Manual MRX Setup Manual	This explains how to use and set up the matrix processor MTX and MRX series that is used along with the XMV power amp.
Amp Editor Owner's Manual	This explains how to use Amp Editor.

The "MTX-MRX Editor User Guide," "MTX Setup Manual," "MRX Setup Manual," and "Amp Editor Owner's Manual" are electronic files in PDF format.
You can read the books on a computer. Use Adobe® Reader® to read the books on screen, search for words very quickly, print specific pages, or click links to display sections of special interest. The ability to search for words, or to follow links directly to relevant sections in the document, are helpful attributes of this electronic file format. We encourage you to take advantage of these benefits.
You can download the latest Adobe Reader application from the website listed below.

http://www.adobe.com/

Firmware Updates

Use the MTX-MRX Editor or the Amp Editor to update the firmware of the XMV or check the firmware version. For operation details, refer to the related manuals.
You can download the latest firmware from the "Downloads" page on the following website.

http://www.yamahaproaudio.com/

About Dante

The XMV8280-D/XMV8140-D units feature Dante technology as a protocol to transmit audio signals. Dante is a network protocol developed by Audinate. It is designed to deliver multi-channel audio signals at various sampling and bit rates, as well as device control signals over a Giga-bit Ethernet (GbE) network. Dante also offers the following benefits:

- It transmits up to 512 in/512 out, for a total 1024 channels (theoretically) of audio over a GbE network.
  (The XMV8280-D/XMV8140-D features eight inputs with a 24/32-bit resolution.)
- Dante-enabled devices will automatically configure their network interfaces and find each other on the network. You can label Dante devices and their audio channels with names that make sense to you.
- Dante uses high accuracy network synchronization standards to achieve sample-accurate playback with extremely low latency and jitter.
  (Four types of latency are available on the XMV8280-D/XMV8140-D: 0.25 msec, 0.5 msec, 1.0 msec, and 5.0 msec.)
- Dante supports redundant connections via primary and secondary circuits to defend against unforeseen difficulties.
- Connecting a Dante-enabled device to a computer over Ethernet enables you to directly input or output audio signals without using any audio interface devices.

Visit Audinate website for more details on Dante.

http://www.audinate.com/

More information on Dante is also posted on the Yamaha Pro Audio website:

http://www.yamahaproaudio.com/

NOTE

Please do not use the EEE function (*) of network switches in a Dante network.

Although power management should be negotiated automatically in switches that support EEE, some switches do not perform the negotiation properly.
This may cause EEE to be enabled in Dante networks when it is not appropriate, resulting in poor synchronization performance and occasional dropouts.

Therefore we strongly recommend that:

- If you use managed switches, ensure that they allow EEE to be disabled. Make sure that EEE is disabled on all ports used for real-time Dante traffic.
- If you use unmanaged switches, make sure to not use network switches that support the EEE function, since EEE operation cannot be disabled in these switches.

* EEE (Energy Efficient Ethernet) is a technology that reduces switch power consumption during periods of low network traffic. It is also known as Green Ethernet and IEEE802.3az.

Precautions for Rack Mounting

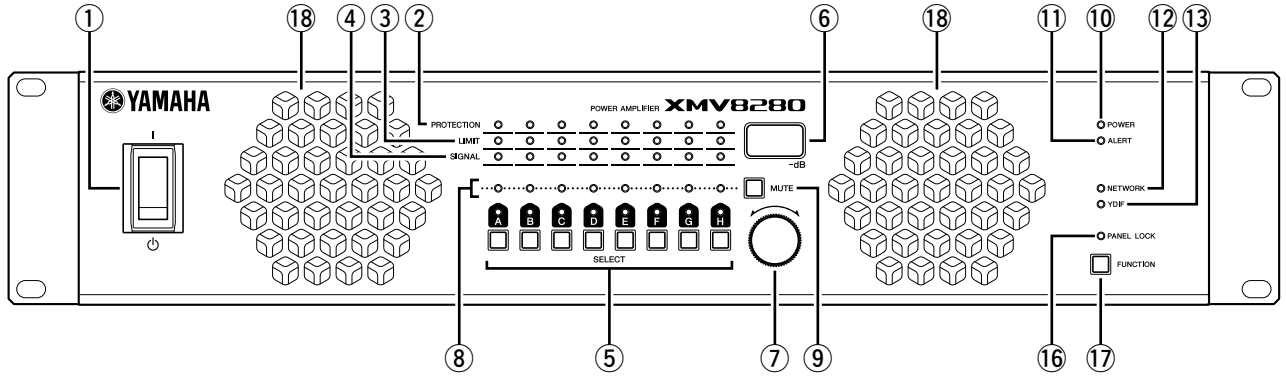
This unit is rated for operation at ambient temperatures ranging from 0 to 40 degrees Celsius. When mounting the unit with other XMV unit(s) or other device(s) in an EIA standard equipment rack, internal temperatures can exceed the specified upper limit, resulting in impaired performance or failure. When rack mounting the unit, always observe the following requirements to avoid heat buildup:

- When mounting the unit in a rack with devices such as power amplifiers that generate a significant amount of heat, leave more than 1U of space between the XMV and other equipment. Also either leave the open spaces uncovered or install appropriate ventilating panels to minimize the possibility of heat buildup.
- To ensure sufficient airflow, leave the rear of the rack open and position it at least 10 centimeters from walls or other surfaces. If the rear of the rack can't be left open, install a commercially available fan or similar ventilating option to secure sufficient airflow. If you've installed a fan kit, there may be cases in which closing the rear of the rack will produce a greater cooling effect. Refer to the rack and/or fan unit manual for details.

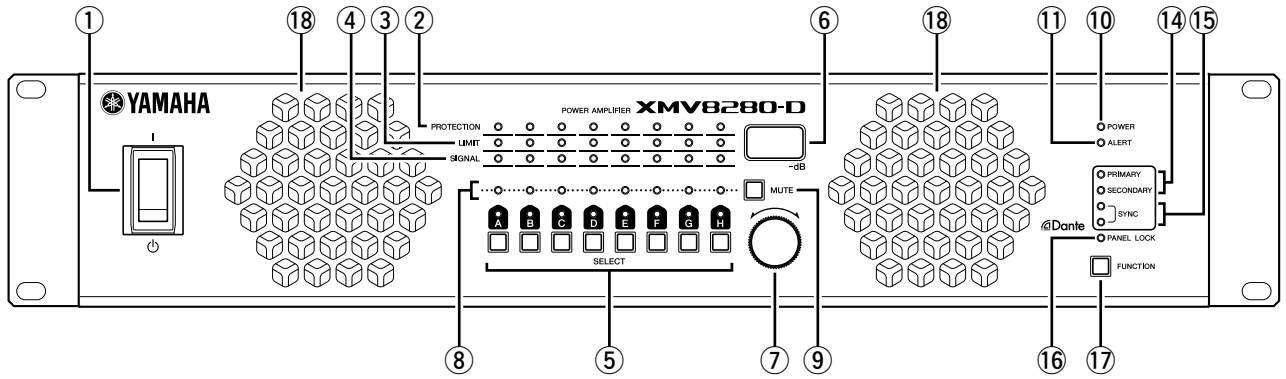
Controls and Functions

Front Panel

XMV8280/XMV8140



XMV8280-D/XMV8140-D



① Power switch

Turns power to the unit ON or OFF. Setting the switch to the upward position turns the power on; the [POWER] indicator ⑩ will light green. Setting the switch to the downward position turns the power off. If the switch is in the upward position and the [POWER] indicator is flashing, the unit is in standby mode.

⚠ CAUTION

- **To ensure that high-volume noise is not output from the speakers, power-on the equipment starting with the audio sources, then the mixer and processors (such as the MTX), and finally the amplifiers. Reverse this order when turning the system off.**
- **Rapidly turning the power switch ON and OFF in succession can cause the unit to malfunction. After turning the power switch OFF, wait for about 5 seconds before turning it ON again.**
- **If you modified parameter settings, do not turn the power switch OFF for at least one second. Otherwise, the changes to the settings may be lost.**
- **Even when the power switch is turned off, a small amount of current is flowing through the unit. If you plan not to use the unit for a long period of time, remove the power cable from the AC outlet.**

② [PROTECTION] A–H indicators

When the protection system is active, the indicator will light orange. If the audio output is muted, turn off the power and wait for the XMV to cool before turning the power on again. The protection circuit will operate and the [PROTECTION] indicator will light in the following situations.

- **If the amplifier overheats and the output limiter operates**

  The speaker output will be attenuated if the heat sink of the amplifier section exceeds 80°C, and will be muted if the heat sink exceeds 90°C. The [PROTECTION] indicator will light at 80°C or higher.

- **If the power supply overheats and shuts-down**

  The fan will rotate at high speed if the power supply section exceeds 90°C, and the analog circuits will shut down if it exceeds 100°C.
  The [PROTECTION] indicator will light at 100°C or higher.

- **When overcurrent is detected**
  If for any reason the impedance falls below the specification for the mode, the speaker output is muted to prevent overcurrent; muting will be cancelled after approximately one second. If overcurrent is detected after muting is cancelled, the output will be muted again.
- **If DC output is detected**
  The power supply section will be shut down.
- **If excessive total current or maximum current is detected**
  The output signal will be lowered.

③ [LIMIT] A–H indicators

When the limiter operates, the speaker output will be limited and the indicator will light red. Lower the attenuator value so that the limiter does not activate, referring to "Changing the attenuator setting" (page 20). The limiter will operate in the following situations.

- When an instantaneous input overload is detected
- When an input overload has been occurring for a specific duration
- When the heat sink of the amplifier section exceeds the allowable temperature

④ [SIGNAL] A–H indicators

The [SIGNAL] indicator will light in green when the input/output signal level exceeds a certain level.

Connector	[SIGNAL] indicators used for (*1)	Indicator illumination status
Analog input connectors ㉔	input	-40dBFS or more
[YDIF] connectors ⑳ (XMV8280/XMV8140)		
Dante [PRIMARY] connector ㉑ Dante [SECONDARY] connector ㉑ (XMV8280-D/XMV8140-D)		
[SPEAKERS] output connectors ㉖	output	*2

*1 For details on switching the indicator between input and output, refer to "Front Panel Operations" (page 23).
*2 Depends on the condition. Refer to "[SIGNAL] Indicator Lit Level" (page 235).

⑤ [SELECT] A–H buttons/indicators

Use these buttons to select the output channel that you want to control. The indicator of the selected channel will light in green.
By using these in conjunction with the [FUNCTION] button ⑰, you can change the parameter that is controlled by the encoder. Refer to "Front Panel Operations" (page 23).
When the [PANEL LOCK] indicator ⑯ is lit, front panel operations are locked, and output channel operations are not possible. Defeat the lock if you want to perform these operations.

⑥ Display

This is a 3-digit 7-segment display that shows information such as the attenuator value of the channel selected by the [SELECT] button ⑤ or the alert number (page 27).

⑦ Encoder

This encoder is used to edit parameters. For details on the available parameters, refer to "Front Panel Operations" (page 23).
When the [PANEL LOCK] indicator ⑯ is lit in orange, front panel operations are locked, and settings cannot be edited. Defeat the lock if you want to perform these operations.

⑧ [MUTE] A–H indicators

When you mute an output channel by operating the unit itself or by operations via the [REMOTE] connector ㉗ or the editor, the indicator of the corresponding channel will light yellow.

⑨ [MUTE] button

By holding down the [MUTE] button and pressing the [SELECT] button ⑤, you can switch muting on/off for the channel selected by the [SELECT] button. When muting turns on, the [MUTE] indicator ⑧ will light in yellow.
When the [PANEL LOCK] indicator ⑯ is lit, front panel operations are locked, and channel mute operations are not possible. Defeat the lock if you want to perform these operations.

⑩ [POWER] indicator

This will light in green when the power supply is turned on by the power switch ①.
It will flash when the unit is switched to standby mode via the [REMOTE] connector or the editor.

⑪ [ALERT] indicator

This will flash or light when an abnormality occurs in the unit.
If this is flashing, note the indication in the display and refer to "Alert Numbers and Content" (page 27).
If it is lit, stop operating the unit. After a time, the indicator will change to flashing, and an alert number will appear in the display.

⑫ [NETWORK] indicator (XMV8280/XMV8140 only)

This will light green if the XMV is in a linked state with an external device via the network connector ⑲. It will flash while data is being communicated.

⑬ [YDIF] indicator (XMV8280/XMV8140 only)

This will light green when the [YDIF] connector ⑳ is connected normally and a valid word clock is being input.

⑭ [PRIMARY]/[SECONDARY] indicators (XMV8280-D/XMV8140-D only)

These show the communication status of the Dante [PRIMARY]/[SECONDARY] connectors ㉑. They flash rapidly in green if the Ethernet cables are connected properly.

⑮ [SYNC] Indicators (XMV8280-D/XMV8140-D only)

These show the operating status of the Dante network. If the green (upper) indicator lights, the unit is operating as a word clock slave and synchronizing to the word clock. If the green indicator flashes, the unit is operating as the word clock master. If the power to the unit is turned on but the green indicator is turned off, the unit is not functioning properly. In this case, refer to the "Warning Messages" section (see page 29). If the orange indicator lights or flashes, refer to the "Warning Messages" section.

⑯ [PANEL LOCK] indicator

This lights or flashes according to the state of the front panel lock. To specify the front panel lock setting, use the Device setup DIP switch ㉓.

Indicator	Status
Lit	Front panel operations are locked. Lock will be temporarily defeated if you press the [FUNCTION] button ⑰ and the [SELECT] A button ⑤.
Unlit	Front panel operations are not locked.
Flashing	Lock is temporarily defeated. When the XMV is restarted, it will be in a locked state.

⑰ [FUNCTION] button

Use this to check or change the operating mode of the XMV's front panel. For details on how to perform front panel operations, refer to "Front Panel Operations" (page 23).

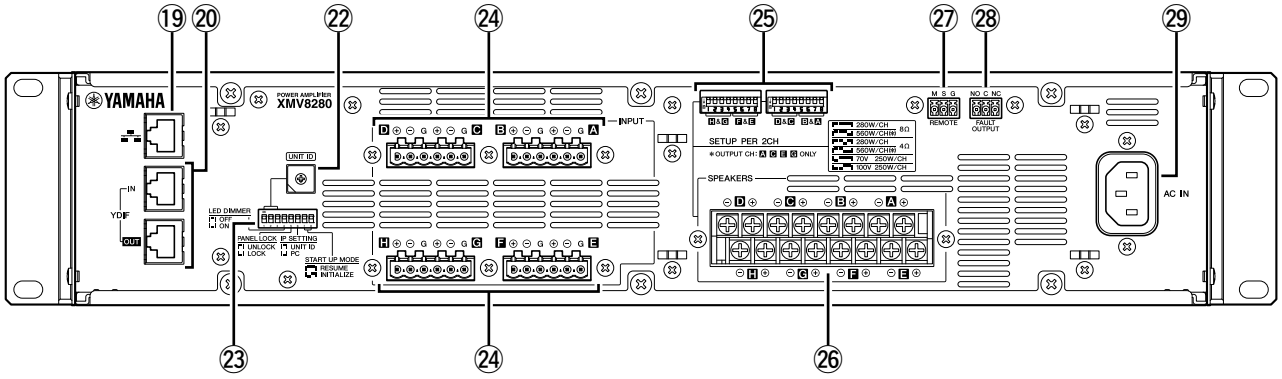
⑱ Cooling vent

Located behind the vent is a variable speed cooling fan that draws air in from the front and exhausts it through the rear. The fan speed will automatically vary according to the temperature.

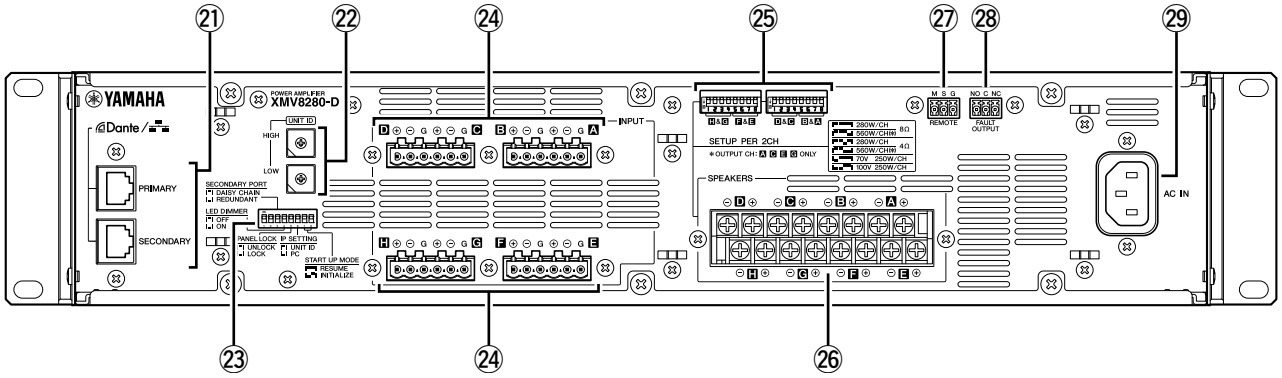
Please be sure that you do not block the air intakes or exhaust vents. You should also clean the air intakes and exhaust vents regularly. If the air intakes are clogged with dust or debris, the unit will overheat, which may result in the unit shutting down.

Rear Panel

XMV8280/XMV8140



XMV8280-D/XMV8140-D



⑲ Network connector (XMV8280/XMV8140 only)

This is a 100BASE-TX Ethernet connector that allows the unit to be connected to a computer via an Ethernet cable.

NOTE

- Use a CAT5e or better STP (Shielded Twisted Pair) cable for the network connection to prevent electromagnetic interference.
- When using MTX-MRX Editor to control the XMV, you must connect the MTX.

⑳ [YDIF] connectors (XMV8280/XMV8140 only)

These are RJ-45 connectors that allow the unit to be connected via an Ethernet cable to another YDIF-equipped device so that audio signals and word clock signals can be transmitted and received. Using a ring connection (YDIF connection), you can connect to other devices equipped with a [YDIF] connector. For details on settings for receiving audio signals via the [YDIF] connector, refer to “Front Panel Operations” (page 23).

Cables used for this connection should be 30 meters or less between devices. Up to eight devices can be connected in a network with YDIF connection.

For information on connections that use [YDIF] connectors, refer to the “MTX Setup Manual.”

NOTE

To prevent electromagnetic interference, make connections to the [YDIF] connector using a CAT5e or better STP (Shielded Twisted Pair) cable in which all pins are connected with a straight connection.

㉑ Dante [PRIMARY]/[SECONDARY] connectors (XMV8280-D/XMV8140-D only)

These are RJ-45 connectors that allow the unit to be connected to another Dante device such as the MTX5-D via an Ethernet cable. The Dante [PRIMARY] connector can also be used to connect to a computer via an Ethernet cable. To connect, refer to the "MTX-MRX Editor User Guide."

NOTE

- Use a CAT5e or better STP (Shielded Twisted Pair) cable for the connection to the Dante [PRIMARY]/[SECONDARY] connectors to prevent electromagnetic interference. Make sure that the metal parts of the plugs are electrically connected to the STP cable shield by conductive tape or comparable means.
- Connect only Dante-compatible devices or GbE-compatible devices (including a computer).
- Since Dante-compatible equipment made by Yamaha such as the XMV8280-D/XMV8140-D contains a built'-in network switch, the number of hops will be two or more. For this reason, the 0.15 msec Latency setting in Dante Controller will be grayed-out and unavailable.

㉒ [UNIT ID] rotary switch

If multiple devices such as XMVs or MTXs are connected on the same network, this rotary switch enables you to specify the UNIT ID that identifies each unit individually.

XMV8280/XMV8140

With the combination of the device setup DIP switches 1–3 ㉓ for upper digits and the rotary switch for lower digits, the UNIT ID can be specified in a maximum of 127 values, from "01" to "7F."

XMV8280-D/XMV8140-D

With the rotary switch (HIGH) used for upper digits and the rotary switch (LOW) for lower digits, the UNIT ID can be specified in a maximum of 254 values, from "01" to "FE."

NOTE

- Do not use "00" or "FF" as the UNIT ID.
- After you set the [UNIT ID] rotary switch, turn the power to the unit off and then on.

㉓ Device setup DIP switch

This DIP switch is used to make settings for the XMV. Refer to the following for details on the settings.

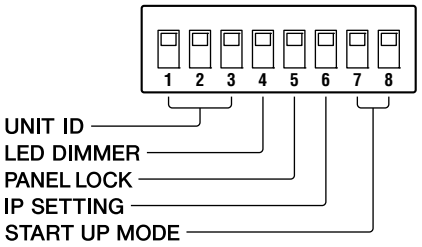
NOTE

To change the switch settings, turn off the power to the unit. If you change the settings while the power is on, the change will not be effective until you turn the unit off and then on.

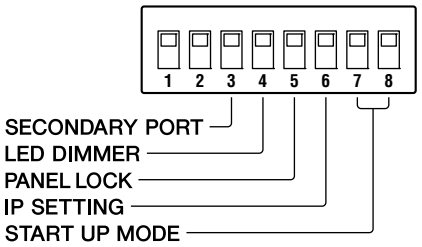
Refer to the following for details.

Switch	Status
	Indicates the switch is in the upward position.
	Indicates the switch is in the downward position.

XMV8280/XMV8140



XMV8280-D/XMV8140-D



NOTE

Switch 1 and 2 are not used for the XMV8280-D/XMV8140-D. Use the swiches in the factory set state (upward).

- **Switch 1–3 (UNIT ID) (XMV8280/XMV8140 only)**

  Use the DIP switches 1–3 to specify the upper digit, and use the [UNIT ID] rotary switch ㉒ to specify the lower digit to set a maximum of 127 combinations of UNIT ID in the range of 01 through 7F (127).

DIP Switches	Setting	Description
	The UNIT ID's upper digit is set to 0.	The setting range of the [UNIT ID] rotary switch is from 01 through 0F.
	The UNIT ID's upper digit is set to 1.	The setting range of the [UNIT ID] rotary switch is from 10 through 1F.
	The UNIT ID's upper digit is set to 2.	The setting range of the [UNIT ID] rotary switch is from 20 through 2F.
	The UNIT ID's upper digit is set to 3.	The setting range of the [UNIT ID] rotary switch is from 30 through 3F.
	The UNIT ID's upper digit is set to 4.	The setting range of the [UNIT ID] rotary switch is from 40 through 4F.
	The UNIT ID's upper digit is set to 5.	The setting range of the [UNIT ID] rotary switch is from 50 through 5F.
	The UNIT ID's upper digit is set to 6.	The setting range of the [UNIT ID] rotary switch is from 60 through 6F.
	The UNIT ID's upper digit is set to 7.	The setting range of the [UNIT ID] rotary switch is from 70 through 7F.

- **Switch 3 (SECONDARY PORT) (XMV8280-D/XMV8140-D only)**

  This sets the Dante [SECONDARY] connector ㉑ on the rear panel as to whether it will be used for daisy chain connection or redundant. For details on the connection, refer to the "MTX-MRX Editor User Guide."

DIP Switches	Setting	Description
	DAISY CHAIN	The Dante [SECONDARY] connector is used for a daisy chain connection. A signal at the Dante [PRIMARY] connector will be transmitted to the next device in the chain as is.
	REDUNDANT	The Dante [SECONDARY] connector is used for a redundant network. It will function as backup connection, independent of the network to which the Dante [PRIMARY] connector is connected.

- **Switch 4 (LED DIMMER)**

  This specifies the brightness of the front panel indicators and display.

DIP Switches	Setting	Description
	OFF	Normal brightness.
	ON	Reduced brightness. Use this setting if the indicators and the display are too bright.

NOTE

The brightness of the [POWER] indicator ⑩ will not be reduced.

- **Switch 5 (PANEL LOCK)**

  This specifies the front panel lock setting (locks all panel operations including the [MUTE] button ⑨ and attenuation adjustments). By selecting the LOCK setting after you've completed all settings, you can prevent the volume or mute settings from being inadvertently changed. Even if the LOCK setting is selected, you can temporarily unlock the panel by pressing the [FUNCTION] button ⑰ and the [SELECT] A button ⑤. The panel will be re-locked when one minute has passed without any operation being performed, or when you once again press the [FUNCTION] button and the [SELECT] A button, or when you turn off the power.

DIP Switches	Setting	Description
	UNLOCK	The front panel will not be locked.
	LOCK	Front panel operations other than the power will be locked.

- **Switch 6 (IP SETTING)**

  This selects whether the UNIT ID value will be used as the IP address for the unit to communicate with a computer, or whether the IP address will be assigned by the editor or the DHCP server.

DIP Switches	Setting	Description
	UNIT ID	The IP address will be specified using the UNIT ID value. The IP address will be 192.168.0.xxx (xxx is the UNIT ID value). However, if the UNIT ID is "FF," xxx is 127.
	PC	The IP address will be specified by the editor or the DHCP server.

NOTE

Set this to the "UNIT ID" position the first time you connect this device to a computer after purchase. After specifying the IP address from the editor, change this switch to the "PC" position.

- **Switches 7 and 8 (START UP MODE)**

  These specify the startup mode.

DIP Switches	Setting	Description
7 8	RESUME	The unit will start up normally.
7 8	INITIALIZE	The internal memory will be initialized. For details on the memory that will be initialized, refer to "Initializing the Internal Memory" (page 25).

㉔ Analog input connectors

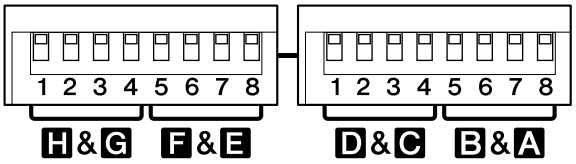
These are Euroblock 3-pin analog audio input connectors. For details on settings for receiving audio signals via the analog input connectors, refer to "Front Panel Operations" (page 23).

For details on how to attach Euroblock connectors, refer to the "Connections and Setting Up" section entitled "Connecting the Analog Inputs (Euroblock)" (page 16).

㉕ [SPEAKERS] DIP switches

This DIP switch makes settings for the XMV's amplifier in groups of two channels.

The left set of switches 1 through 4 specify the output setting for channels G and H, and switches 5 through 8 specify the output setting for channels E and F. The right switches 1 through 4 specify the output setting for channels C and D, and switches 5 through 8 specify the output setting for channels A and B.



Use these switches to make the following settings. The output signals from the output connectors under each setting are as follows.

Description	Amplifier output type	Switches 1–4 (channels C, D, G and H) Switches 5–8 (channels A, B, E and F)	Output from each connector			
			Channels A, C, E and G		Channels B, D, F and H	
			+	–	+	–
Low-impedance connection						
280W{140W}, 8Ω	Unbalanced output		Nrm	G	G	Inv
560W{280W}*, 8Ω	Balanced output (BTL)		Nrm	Inv	N/A	N/A
280W{140W}, 4Ω	Unbalanced output		Nrm	G	G	Inv
560W{280W}*, 4Ω	Unbalanced output		Nrm	G	N/A	N/A
High-impedance connection						
70V, 250W{125W}	Balanced output (BTL)		Nrm	Inv	Nrm	Inv
100V, 250W{125W}	Balanced output (BTL)		Nrm	Inv	Nrm	Inv

In "Output from each connector," the meaning of the indications is as follows: G: ground, Nrm: normal output, Inv: inverted output, N/A: connection prohibited (not available).

* If this setting is chosen, Double Power mode is turned on and input/output will be disabled for channels B, D, F and H.

NOTE

- To change the switch settings, turn off the power to the unit. If you change the settings while the power is on, the change will not be effective until you turn the unit off and then back on again.
- Do not connect negative connectors of different channels. It may cause the device to malfunction.
- For information on BTL connection, refer to "BTL (Balanced Transformer Less) Connection" (page 31).

- **Low impedance connection / high impedance connection (switches 1 and 5)**

  These select either a low impedance connection or a high impedance connection. Set them as appropriate for the connected speakers and the way in which the speakers are connected. For details on connections, refer to "High-impedance and Low-impedance Connections" (page 30).

- **Impedance (switches 3 and 7)**

  When using a low impedance connection, set these as appropriate for the impedance of the speakers that are connected. Check the specifications of the speakers. For example if two 8Ω speakers are connected in parallel, the total impedance will be 4Ω.

- **Double Power mode (switches 4 and 8)**

  When a low impedance connection is used, these switches specify the output of the amplifier. If the 280W {140W} setting is selected, input/output is enabled for both channels. If the 560W {280W} setting is selected, the output from the amplifier will be doubled, but input/output will be disabled for channels B, D, F and H.

- **70V/100V (switches 2 and 6)**

  When a high impedance connection is used, these switches specify the maximum output voltage (Vrms) of the amplifier.

㉖ [SPEAKERS] output connectors

These are barrier strip type speaker output connectors. For details on how to make connections to a barrier strip, refer to the "Connections and Setting Up" section entitled "Connecting Speaker Cables" (page 18).

㉗ [REMOTE] connector

This is a Euroblock 3-pin connector that allows muting/unmuting of all channels and power-on/standby to be controlled remotely. For details, refer to "[REMOTE] and [FAULT OUTPUT] Connectors" (page 21).

㉘ [FAULT OUTPUT] connector

This is a Euroblock 3-pin connector that allows an external device to be notified when a fatal malfunction occurs in this unit. NC and C will be shorted when the amplifier is operating normally; NO and C will be shorted when a problem occurs (page 21).

If a problem occurs, the [PROTECTION] indicator ② will light in orange.

㉙ [AC IN] connector

Connect the supplied AC power cord here. First connect the AC power cord to the connector on the rear panel of this unit, then plug it into an appropriate AC power outlet.

⚠ CAUTION

Before connecting or disconnecting the power cord, make sure that the power to the unit is turned OFF.

Setup for Analog Signal Input

This chapter explains how to set up the XMV to input analog signals.

If you are using the XMV along with the MTX, refer to the "MTX Setup Manual." Refer to this manual for details regarding the following items, even if you are using the XMV along with the MTX.

- Making settings for speaker output
- Connecting the speaker output connectors
- Making high pass filter (HPF) settings
- Lowering the brightness of the indicators and the display
- Locking the panel

Here we will make and verify the input/output settings as outlined below.

Explanation	Page
Rack-mounting the Unit	16
Checking the Device Setup DIP Switch Settings	16
Connecting the Analog Inputs (Euroblock)	16
Making Settings for Speaker Output	17
Connecting Speaker Cables	18
Connecting the Power Cord	19
Turning the Power On	19
Enabling Analog Input	19
Making High Pass Filter (HPF) Settings	19
Checking the Wiring	20
Lowering the Brightness of the Indicators and the Display	20
Locking the Front Panel	20

⚠ CAUTION

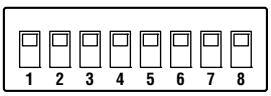
Steps earlier than "Turning the Power On" must be performed with the power off. If you perform these steps with the power on, the settings might not be applied, or you might be subject to electrical shock if you touch the connectors.

■ Rack-mounting the Unit

Refer to "Precautions for Rack Mounting" (page 8), and mount the XMV in your rack.

■ Checking the Device Setup DIP Switch Settings

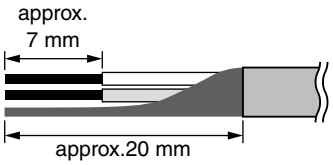
Make sure that all of the rear panel's device setup DIP switches (page 13) are in the upward position.



■ Connecting the Analog Inputs (Euroblock)

Connect the analog outputs of your mixer or other device to the analog input connectors (page 15).
You must use the supplied Euroblock plugs with tabs.
If these have been lost, please contact your Yamaha dealer.

Cable preparation

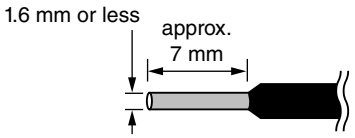


- To prepare the cable for attachment to a Euroblock connector, strip the wire as shown in the illustration using stranded wire to make connections. With a Euroblock connection, stranded wires may be prone to breakage because of metal fatigue due to the weight of the cable or due to vibration. Bundle the cables and the Euroblock tabs using the supplied cable ties (page 17). When rackmounting your equipment, use a lacing bar when possible to bundle and fasten the cables.

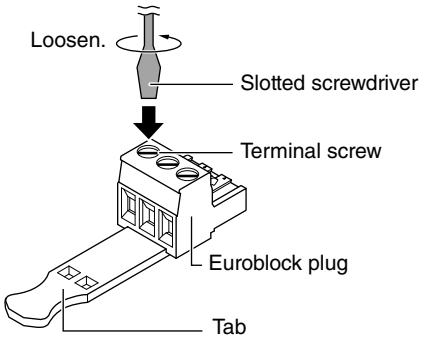
  NOTE

  Do not tin (plate with solder) the exposed end.

- If cables will be frequently connected and disconnected, as in the case of a portable installation, we recommend that you use ferrules with insulation sleeves. Use a ferrule whose conductor portion has an external diameter of 1.6 mm or less, and a length of approximately 7 mm (such as the AI0,5-6WH made by the Phoenix Contact corporation).

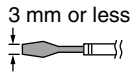


1. Loosen terminal screws.

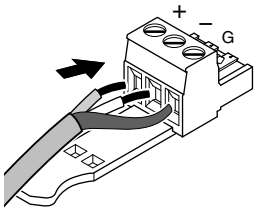


NOTE

A slotted screwdriver with a blade width of about 3 millimeters is recommended.



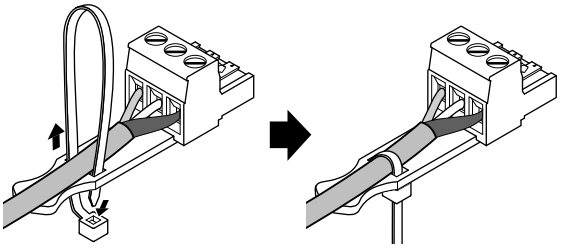
2. Insert cables.



3. Securely tighten terminal screws.

Pull the cables (not too strongly) to confirm that they are securely connected.

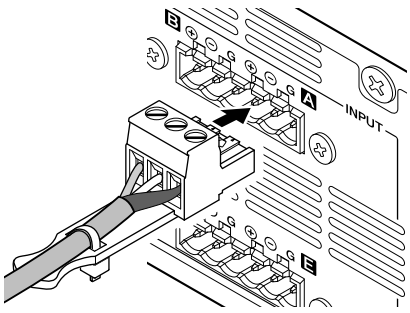
4. Bundle the cables and the Euroblock tab using the supplied cable tie.



NOTE

Trim any excess part of the cable tie as necessary.

5. Insert the Euroblock plug into the Analog input connector of the device.



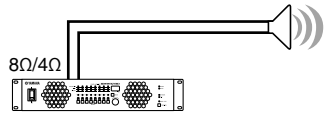
■ Making Settings for Speaker Output

Use the rear panel [SPEAKERS] DIP switches to make the appropriate settings for the XMV's speaker output.
The method of connection will differ depending on whether you're using a low impedance connection or a high impedance connection.

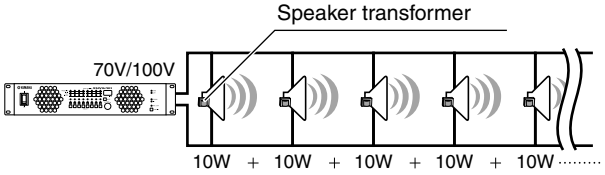
NOTE

To change the switch settings, turn off the power to the unit. If you change the settings while the power is on, the change will not be effective until you turn the unit off and then back on again.

Low-impedance connection



High-impedance connection



For details, refer to "High-impedance and Low-impedance Connections" (page 30).

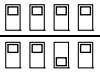
The explanation of the settings is divided into the following sections.

- **When using low impedance connections (page 17)**
- **When using low impedance connections with Double Power mode (page 18)**
- **When using high impedance connections (page 18)**

Since these settings can be made independently for channels A/B, channels C/D, channels E/F and channels G/H, you can use more than one of the above methods

● When using low impedance connections

Depending on the impedance (4Ω or 8Ω) of the connected speakers, set the [SPEAKERS] DIP switches as follows.

Setting	Switches 1–4 (channels C, D, G and H) Switches 5–8 (channels A, B, E and F)
280W{140W}, 8Ω	
280W{140W}, 4Ω	

NOTE

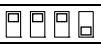
If you make settings for low impedance connections, the HPF will automatically be turned OFF.

The XMV features a switch function between 8Ω and 4Ω to guarantee the output in case it is connected to a speaker with an impedance of 8Ω or higher.
If you connect a speaker with an impedance of 8Ω or higher, set the [SPEAKERS] DIP switches to 8Ω. If you connect a speaker with an impedance of 4Ω or higher, but lower than 8Ω, set the [SPEAKERS] DIP switches to 4Ω.

Total impedance(x)	Setting
4Ω≦ x <8Ω	4Ω
8Ω≦ x	8Ω

● When using low impedance connections with Double Power mode

If you use Double Power mode, input/output will be disabled for channels B, D, F and H.
Depending on the impedance (4Ω or 8Ω) of the connected speakers, set the [SPEAKERS] DIP switches as follows.

Setting	Switches 1–4 (channels C and G) Switches 5–8 (channels A and E)
560W{280W}, 8Ω	
560W{280W}, 4Ω	

NOTE
If you make settings for low impedance connections, the HPF will automatically be turned OFF.

● When using high impedance connections

Depending on the specifications (70V or 100V) of the system in which this unit is being installed, set the [SPEAKERS] DIP switches as follows.

Setting	Switches 1–4 (channels C, D, G and H) Switches 5–8 (channels A, B, E and F)
70V	
100V	

NOTE
When the device is turned on, it will set HPF to 80 Hz, if the device is set to high impedance connection. If the device is set to low impedance connection, HPF will be not set.

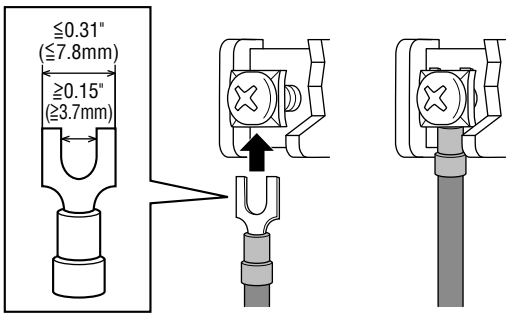
■ Connecting Speaker Cables

The [SPEAKERS] output connectors (page 15) on the rear panel are barrier strip type connectors. We will explain connections using a spade lug and connections using a bare conductor.

⚠ CAUTION
Make sure that the power is turned off. If the power is on, you risk electrical shock.

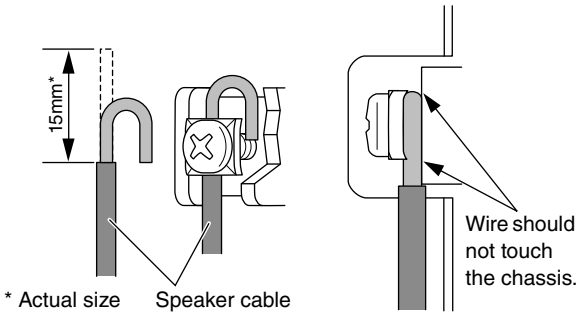
● If using a spade lug

From below, insert the spade lug all the way, and tighten the screw.



● If using a bare conductor

Wrap the conductor around the barrier strip terminal as shown below, and tighten the screw. Be sure that the bare wire does not touch the chassis.



NOTE
- If the [SPEAKERS] DIP switches (page 15) are in Double Power mode (switch 4 or 8 is in the lowered position), audio will not be output from the corresponding channel (channel B, D, F or H).
- Ensure that tension is not applied to the speaker cable.
- Connect the cables so that the amplifier's "+" and "-" symbols match those of the speaker. If they are reversed, the polarity will be reversed.

TIPS
Since a large amount of current can flow in a speaker cable, a magnetic field will be generated. If sensitive circuits such as a microphone input cable or a microphone amp are located near a speaker cable, electromagnetic induction may produce noise in the input cable or circuit. Input cables and devices that contain sensitive circuits should be kept at a distance from speaker cables; we also recommend that you fasten the cables in place.

■ Connecting the Power Cord

Connect the included power cord to the [AC IN] connector (page 15) on the rear panel. First connect the AC power cord to the connector on this unit, then plug it into an appropriate AC power outlet.

⚠ CAUTION
You must turn off the power before connecting the power cord.

■ Turning the Power On

Use the front panel power switch (page 9) to turn the power on.

⚠ CAUTION
Before you turn the power on, make sure that audio signals are not being input to the analog input connectors. If audio signals are being input, excessive input will be applied to the speakers when the power is turned on, possibly damaging the speaker system or damaging your hearing by high-volume sound. If there is a problem with the speakers or the wiring, the protection circuit will operate immediately when the power is turned on. Check whether there might be a problem with the wiring.

■ Enabling Analog Input

Using the front panel, enable analog input as follows.

1. While holding down the [FUNCTION] button, turn the encoder to make the display indicate "Src."

The control mode will change to "Analog/digital input selection."

2. Press the [SELECT] button of the channel for which you want to enable the analog input.

The [SELECT] indicator of the selected channel will light.

3. Take your finger off the [FUNCTION] button, and turn the encoder to make the display indicate "AnA."

Input from the analog input connectors will be enabled.

NOTE
If a certain period of time elapses without any operation being performed, the unit will return to Attenuation setting operating mode.

■ Making High Pass Filter (HPF) Settings

If the unit is set for low impedance connections, the HPF will be OFF. If the unit is set for high impedance connections, the 80 Hz HPF will be enabled.
If you want to change this setting, proceed as follows.

1. While holding down the [FUNCTION] button, turn the encoder to make the display indicate "HPF."

The control mode will change to "HPF."

2. Press the [SELECT] button of the channel for which you want to make HPF settings.

The [SELECT] indicator of the channel whose HPF you are setting will light.

3. Turn the encoder to select the desired HPF setting.

The available HPF settings are OFF / 40 Hz / 80 Hz.

NOTE
- In order to protect the amplifier, the HPF cannot be turned OFF if high impedance connections are used.
- If you're using a sub-woofer with high-impedance connections, we recommend that you change the HPF setting to 40 Hz.
- If you're using a full-range speaker with high-impedance connections, the amplifier's protection circuit may operate if the HPF is set to other than 80 Hz. We recommend that you use the 80 Hz setting.
- If a certain period of time elapses without any operation being performed, the unit will be placed in Attenuation setting operating mode.

NOTE
If the device is set as follows, the HPF settings will be changed automatically.

Previous startup	Current startup		HPF
[SPEAKERS] DIP switches (page 15)	Device setup DIP switches 7 and 8 (page 15)	[SPEAKERS] DIP switches (page 15)	
Hi impedance	RESUME	Low impedance (changed)	Off
		Hi impedance (not changed)	Same as the previous startup
Low impedance		Low impedance (not changed)	Same as the previous startup
		Hi impedance (changed)	80 Hz
(Unrelated to the setting at previous startup)	INITIALIZE	Low impedance	Off
		Hi impedance	80 Hz

■ Checking the Wiring

Here we'll explain how to change the attenuation settings and switch muting on/off, which you will need to do when checking the wiring.
Before you check the wiring, we recommend that you set the attenuator of all channels to the lowest setting (-99 dB) to prevent speaker damage.
To check the wiring, you'll need to be outputting an audio signal from the mixer or other device that's connected to the analog input connectors.

NOTE

If the speakers are remotely located and you are unable to check the signal output easily, changing the [SIGNAL] indicator (page 10) setting to "output" will allow you to check whether current is flowing to the speakers. For details on switching the indicator setting, refer to "Front Panel Operations" (page 23).

● Changing the attenuator setting

Here's how to change the attenuator setting.

1. While holding down the [FUNCTION] button, turn the encoder to make the display indicate "ATT."

2. Press the [SELECT] button of the channel whose setting you want to adjust.

The [SELECT] indicator of the selected channel will light.

3. Turn the encoder to gradually raise the attenuator setting from -99, and verify that sound is produced from the speaker.

● Switching the mute setting on/off

While holding down the [MUTE] button, press the [SELECT] button of the channel that you want to control.

When mute is on, the [MUTE] indicator will light; when mute is off, the [MUTE] indicator will be unlit.

■ Lowering the Brightness of the Indicators and the Display

If the front panel LED indicators are too bright, you can lower their brightness.
After turning the power off, set the rear panel device setup DIP switch 4 (LED DIMMER) to the lower position (ON). The next time you turn the power on, the unit will start up with decreased indicator brightness.

NOTE

The brightness of the [POWER] indicator will not be reduced.

■ Locking the Front Panel

By locking the panel you can disable front panel operations other than controlling the power (front panel lock).
When this unit is used as part of an installed system, you can lock down the settings by disabling operations from the front panel, thus preventing inadvertent changes.
After turning the power off, set the rear panel device setup DIP switch 5 (PANEL LOCK) to the lower position (LOCK). The next time you turn the power on, the unit will start up with the front panel locked.
Even in the locked state, you can temporarily defeat the panel lock by pressing the [FUNCTION] button and the [SELECT] A button. However, it will be re-locked when any of the following conditions occur.

- One minutes elapses without any operation being performed after the panel is temporarily unlocked
- You press the [FUNCTION] button and the [SELECT] A button
- You turn the power off

The lock status is shown by the front panel [PANEL LOCK] indicator.

- Locked: lit
- Not locked: unlit
- Temporarily unlocked: flashing

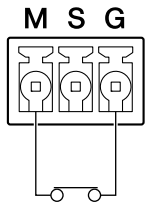
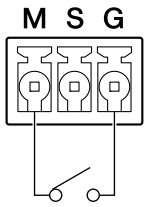
[REMOTE] and [FAULT OUTPUT] Connectors

This chapter explains how to use and connect the [REMOTE] connector and [FAULT OUTPUT] connector located on the rear panel of the XMV.

■ Using the [REMOTE] Connector (Euroblock 3-pin)

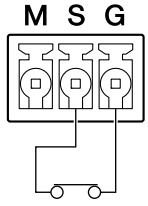
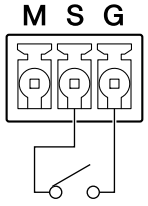
You can connect switches to the rear panel [REMOTE] connector (page 15), and use them to remotely mute/unmute all channels or switch the power standby/on status.
From the left, the [REMOTE] connector consists of MUTE ALL, STANDBY, and GND pins.
The [REMOTE] connector uses a Euroblock plug.
For details on how to connect Euroblock plugs, refer to "Connecting the [REMOTE] Connector or [FAULT OUTPUT] Connector" (page 22).

• Muting/unmuting all channels

Turning mute on	Turning mute off
	

NOTE
When all channels are muted via the [REMOTE] connector, the [MUTE] button on the front panel cannot be operated.

• Switching the power standby/on status

Switching the power to standby	Turning the power on
	

NOTE
When the power is set to standby via the [REMOTE] connector, turning on the power switch will place the unit in standby mode.

■ Using the [FAULT OUTPUT] Connector (Euroblock 3-pin)

A lamp or other indicator can be connected to the rear panel [FAULT OUTPUT] connector to inform an operator when a problem occurs.



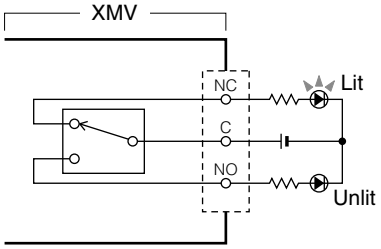
The [FAULT OUTPUT] connector (page 15) consists of NO (Normally Open), C (Common), and NC (Normally Closed) pins. The [FAULT OUTPUT] connector is a relay circuit that operates as follows.

	Normal state	Fault condition	Power off
NO	Open	Closed	Closed
NC	Closed	Open	Open

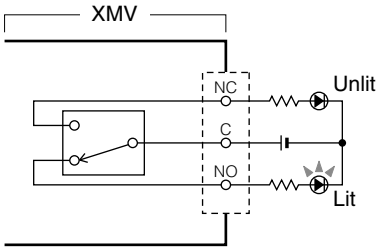
The [FAULT OUTPUT] connector uses a Euroblock plug. For details on how to connect Euroblock plugs, refer to "Connecting the [REMOTE] Connector or [FAULT OUTPUT] Connector" (page 22).

Example: Using an LED to indicate the XMV's normal/fault status

● **Normal state**



● **Shut-down state**

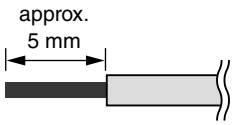


⚠ CAUTION
The rated load of the relay contacts is 1A, DC 30 V for a resistive load.
Do not apply a load that exceeds this rating.

■ Connecting the [REMOTE] Connector or [FAULT OUTPUT] Connector

You must use the supplied Euroblock plugs when making connections to the [REMOTE] connector or [FAULT OUTPUT] connector.
If these have been lost, please contact your Yamaha dealer.

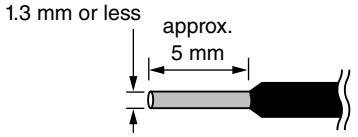
Cable preparation



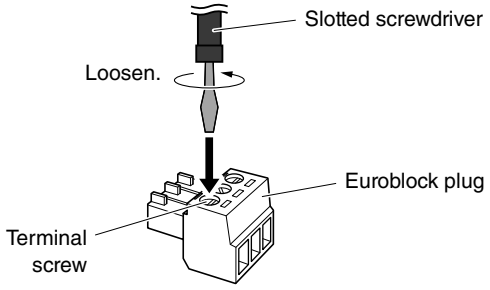
- To prepare the cable for attachment to a Euroblock connector, strip the wire as shown in the illustration using stranded wire to make connections. With a Euroblock connection, stranded wires may be prone to breakage because of metal fatigue due to the weight of the cable or due to vibration.

  NOTE
  Do not tin (plate with solder) the exposed end.

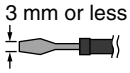
- If cables will be frequently connected and disconnected, as in the case of a portable installation, we recommend that you use ferrules with insulation sleeves. Use a ferrule whose conductor portion has an external diameter of 1.3 mm or less, and a length of approximately 5 mm (such as the AI0,5-6WH made by the Phoenix Contact corporation).



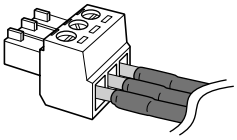
1. Loosen terminal screws.



NOTE
A slotted screwdriver with a blade width of about 3 millimeters is recommended.

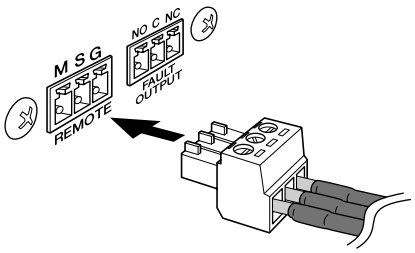


2. Insert cables.



3. Securely tighten terminal screws.
Pull the cables (not too strongly) to confirm that they are securely connected.

4. Insert the Euroblock plug into the [REMOTE] connector or [FAULT OUTPUT] connector of the device.



Operations

Front Panel Operations

This chapter describes the operations you can perform from the front panel.

NOTE

If you modify the parameter settings, do not turn the power switch OFF for at least one second. Otherwise, the changes to the settings may be lost.

■ Basic Operations

To do this...	Operation	Description
Checking the current operating mode	[FUNCTION]	While you hold down the [FUNCTION] button, the current operating mode will be shown in the display. The modes are indicated as follows. Att: Attenuation setting Pol: Polarity setting HPF: Turn the high pass filter on/off and change the cutoff frequency Src: Analog/digital input selection SIG: [SIGNAL] indicator display selection dIS: Digital input sensitivity selection
Changing the operating mode	[FUNCTION] + encoder *1	Use the encoder to change the operating mode. When you release the [FUNCTION] button, the operating mode shown at that time will be selected; the display will show the parameter value. If a certain period of time elapses without any operation being performed, the operating mode will be switched back to "Attenuation setting."
Turning Mute on/off	[MUTE] + [SELECT] (of the channel to be muted) *1	When muting turns on, the [MUTE] indicator of the selected channel will lit. When muting turns off, the [MUTE] indicator will go unlit.
Temporarily disabling or re-enabling front panel lock	[FUNCTION] + [SELECT] A *1	When front panel lock is temporarily disabled, the [PANEL LOCK] indicator will flash. When front panel lock is enabled, the [PANEL LOCK] indicator will lit. While the front panel is locked, "Loc" is shown in the display. Even if front panel lock is temporarily disabled, it will be relocked when one minute passes without any operation being performed or when the power is turned off.

*1: "X+Y" means "operate Y while operating X." For example, "[SELECT] A + encoder" means that you should hold down the [SELECT] A button and operate the encoder.

■ Parameter Operations

To do this...	Operating mode (indication)	Operation	Description
Changing the attenuator value (volume)	attenuator (AtE)	[SELECT] (of the channel to be changed) → encoder *2	The [SELECT] indicator of the selected channel will lit, and the attenuator value can be edited by the encoder. The range of adjustment is -99 dB–0 dB in 1 dB steps.
Changing the polarity	polarity (Pol)	[SELECT] (of the channel to be changed) → encoder *2	The [SELECT] indicator of the selected channel will light, and the polarity can be changed by using the encoder. **Indication** / **Polarity** nor — Normal polarity inU — Inverted polarity
Changing the high pass filter (HPF) cutoff frequency **Turning off the high pass filter (HPF)**	HPF (HPF)	[SELECT] (of the channel to be changed) → encoder *2	The [SELECT] indicator of the selected channel will light, and the high pass filter (HPF) on/off setting and cutoff frequency can be changed by using the encoder. This will be set to 80 Hz if a high impedance connection is specified; it will be turned OFF if a low impedance connection is specified. **Indication** / **Meaning** oFF — HPF is off H40 — Cutoff frequency is 40 Hz H80 — Cutoff frequency is 80 Hz In order to protect the amplifier, the HPF of the selected channel cannot be turned OFF if a high impedance connection is specified.
Switching between analog/ digital input	analog/digital input selection (Src)	Encoder operation	The [SELECT] indicator of the selected channel will light, and you can use the encoder to change the analog/digital input selection. **Indication** / **Input connectors** AnA — Analog input connectors diG — [YDIF] connectors (XMV8280/XMV8140); Dante [PRIMARY]/ [SECONDARY] connectors (XMV8280-D/XMV8140-D) Do not select “analog” if your audio network has been configured using the [YDIF] connectors or Dante [PRIMARY]/[SECONDARY] connectors. Selecting “analog” will interrupt audio transmission to and from the devices that are connected via the YDIF connectors or Dante connectors.
Switching whether the [SIGNAL] indicators are used for input or for output	[SIGNAL] indicator switching (SiG)	Encoder operation	Use the encoder to specify whether the [SIGNAL] indicators will show the input signal level or the output signal level. **Indication** / **Lit condition** in — Input out — Output
Digital input sensitivity selection * Digital input sensitivity: the digital input level at which the input attenuator is 0 dB (volume maximum) and the amplifier is at maximum output; refer to “Block Diagram” (page 236).	digital input sensitivity (diS)	Encoder operation	Use the encoder to change the digital input sensitivity setting. To prevent inadvertent setting, the value does not change right away when the encoder is turned. Until the input sensitivity changes, “---” appears in the display. **Indication** / **Digital input sensitivity** d20 — -20 dBFS d03 — -3 dBFS --- — (value in process of being changed)

*2: “X→Y” means “operate X, and then operating Y.” For example, “[SELECT] A → encoder” means that you should press the [SELECT] A, and then operate the encoder.

Initializing the Internal Memory

Execute the following procedure when you return the internal memory settings to their factory set state (initialize the internal memory), such as when the amplifier has been moved to a different location.

1. Turn off the power.

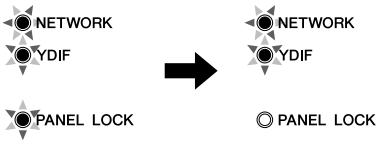
2. Set device setup DIP switch 7 to the downward position and switch 8 to the upward position.



3. Turn on the power. The initializing operation will start.

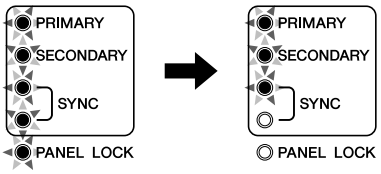
- **In the case of the XMV8280/XMV8140**

  During initialization, the [NETWORK], [YDIF], and [PANEL LOCK] indicators will flash. When initialization is complete, the [NETWORK] and [YDIF] indicators will flash.



- **In the case of the XMV8280-D/XMV8140-D**

  During initialization, the [PRIMARY], [SECONDARY], [SYNC] (green), [SYNC] (orange) and [PANEL LOCK] indicators will flash. When initialization is complete, the [PRIMARY], [SECONDARY] and [SYNC] (green) indicators will flash.



  If the unit fails to initialize, the [POWER] indicator will light, the [ALERT] indicator will flash, and other indicators will turn off. Please contact your Yamaha dealer.

4. Make sure the initializing operation is complete and turn off the power.

5. Set device setup DIP switches 7 and 8 to the upward position (RESUME).



6. Turn on the power.

The following parameters held in memory are initialized.

- Attenuator values
- Polarity settings
- HPF settings
- Analog/digital input setting
- [SIGNAL] indicator display setting
- Event log

* When the unit is shipped from the factory, the device setup DIP switches are all in the upward position.

Appendix

Troubleshooting

Symptom	Possible causes	Possible solution
The power won't turn on	The power cord is disconnected	Connect the power cord.
No sound is heard	The analog/digital input setting is incorrect	From the front panel, check the analog/digital input setting.
	Double Power mode is selected	In Double Power mode, no audio signals will be output from channel B, D, F or H. Either turn off Double Power mode, or re-connect the cables.
	An input/output cable is disconnected	Connect the input/output cables. Also, make sure that the cables are securely connected.
	The mute function is turned on	Make sure that the [MUTE] indicator is unlit. If it is lit, turn Mute off.
	The attenuator value is too low	Change to "Attenuation setting" (page 23), and check whether the attenuator value is appropriate on the display (page 10).
	No audio signal is being input	Make sure that an audio signal is being output from the mixer or other device that is outputting audio to the XMV.
	The protection circuit has operated (the [PROTECTION] indicator is lit)	Turn off the power, wait for the XMV to cool, and then turn the power on again.
	The unit is in standby mode (the [POWER] indicator is flashing)	Make sure that the switch connected to the [REMOTE] connector is turned on. Alternatively, use the editor to check that this is turned on.
	Some abnormality has occurred at digital input from the MTX (on XMV8280/XMV8140: [YDIF] indicator is unlit; on XMV8280-D/ XMV8140-D: green [SYNC] indicator is unlit)	Check the MTX. For details, refer to MTX manuals.
	"Analog" input has been selected on a device that is connected via a YDIF connector (XMV8280/XMV8140 only)	Select "digital" input on the device. If you wish to use the device for analog input, disconnect the device from the YDIF network.
The [ALERT] indicator remains flashing or lit even after you've turned the power on/off	The device has failed	The device has failed. Contact your Yamaha dealer for repair.

* If taking the above steps does not solve the problem, contact your Yamaha dealer for repair.

The Yamaha Pro Audio website provides a FAQ (a list of frequently asked questions, with answers).
http://www.yamahaproaudio.com/

Alert Numbers and Content

If a problem occurs in the XMV, the [ALERT] indicator will flash and an alert number will appear in the display.
The alert numbers, the corresponding content, and the appropriate actions are listed below.

Alert number	Meaning	Response
No display (only [ALERT] is lit)	The device has not started up correctly.	Turn the power off, then turn on after waiting at least 5 seconds. If this does not solve the problem, please initialize the memory. Should this also fails, contact your Yamaha dealer.
001.–008.		
010.	The internal backup battery has been completely exhausted or is not installed.	When you turn off the power, the current settings will be lost, and will return to the default values. Please stop use immediately, and contact your Yamaha dealer.
011.	The internal backup battery has run extremely low, and it is possible that the internal memory has been cleared.	
012.	The internal backup battery has only a small amount of power remaining.	This does not affect the operation of the device. However, if you continue using the device, the settings may be lost and reset to the default values. Contact your Yamaha dealer as soon as possible.
013.	A problem has occurred with the internal clock, and it has been initialized (January 1, 2000, 0:00)	If this occurs each time you turn on the power, it is possible that the internal backup battery has run down or that the device has malfunctioned. Contact your Yamaha dealer. If this occurs only once, an abnormality was detected with the clock setting and it was initialized; use the editor to set the time.
015.	The settings saved in internal memory have been lost.	Either the internal backup battery has run low, or the device has malfunctioned. Contact your Yamaha dealer.
016.	A memory problem has occurred.	Contact your Yamaha dealer.
021.	The word clock master has become unlocked.	Make sure that the word clock signal is being input correctly.
022.	The digital signal being input to the [YDIF IN] connector is not synchronized to the word clock of this device.	Make sure that YDIF cables are properly connected. Use cables that meet the required specifications.
023.	The digital signal being input to the [YDIF IN] connector is not continuously synchronized to the word clock of this device.	
030.	There is a problem with the connection of the [YDIF IN] connector.	Make sure that YDIF cables are properly connected. Use cables that meet the required specifications.
040.	Duplicate IP addresses.	Change the IP addresses so that there are no duplicates.
041.	IP address was not set within 60 seconds of startup.	Please check rear panel DIP switch 6 (IP Setting). If DIP switch 6 is set to “PC,” use the editor or DHCP server to specify the device IP address.
043.	Too many devices are connected to the network.	Reduce the number of devices connected to the network.
046.	Dante transmission flow count exceeded the limit.	Maximum Dante Flow rate exceeded. Try changing parts of transmission flows to Multicast using Dante Controller.
050.	The UNIT ID is set to “00.”	Set the UNIT ID to something other than “00.”
051.	Devices with identical UNIT IDs were found connected within the same network.	Change the UNIT ID so that there are no duplicates.
072.	Because this device has Dante Device Lock enabled, the settings of device DIP switches and MTX-MRX Editor do not match current Dante settings.	If you have Dante Device Lock enabled, please disable using Dante Controller, review device DIP switch settings and MTX-MRX Editor’s Dante settings, and edit as necessary to match the current situation.
100.	The power supply was shut down because d.c. was detected on a speaker output.	It is likely that the device has malfunctioned; immediately stop using the device and contact your Yamaha dealer.

Alert number	Meaning	Response
101.	The power supply was shut down because its temperature exceeded the allowed limit.	Turn the power off, let the power supply cool down, then turn the power on again. Continuous high-power output will cause high temperatures, so please lower the output level. If the temperature is still high, check whether dirt or a foreign object could have clogged the cooling fan, and clean the fan if necessary.
103.	Protection has been activated, and the power supply was shut down.	Continuous high-power output may have activated protection; lower the output level. For details on the reason that protection was activated, refer to “[PROTECTION] A–H indicators” (page 9).
104.	Protection has been activated, and muted.	
105.	A short circuit was detected in the speaker output connector, so the output signal has been muted.	It may be that the speaker output connector’s “+” and “-” are shorted, or that the connected speaker has malfunctioned.
106.	The temperature of the amp section (heat sink) has changed, and the speaker output is now ****. **** = 0dB and OK -1dB and in protection muted and in protection	Continuous high-power output will cause high temperatures, so please lower the input level or attenuator. If the temperature is still high, check whether dirt or a foreign object could have clogged the cooling fan’s air intake, and clean it if necessary.
110.	The Redundant Backup function has been activated, and the input signal has been switched.	There is a problem in the digital signal. Check the digital line connection and check whether the pilot tone is being input.

Dante Messages (XMV8280-D/XMV8140-D only)

Warnings and certain other types of information are displayed via the XMV8280-D/XMV8140-D front panel indicators.
Messages are also displayed in the Dante Controller Error Status field.
Each indicator lights or flashes as described below:

Unlit	The indicator is off.
Lit	The indicator remains lit steadily.
Flash	The indicator continues to flash.
Flash x 2	The indicator flashes twice cyclically.

■ Information Messages

The status is shown by the lit/flashing state of the indicator.
If the orange [SYNC] indicator is unlit, the unit is operating normally.
If the green [SYNC] indicator is unlit, the unit's clock is unconfirmed.

SYNC Indicators	Description	Explanation
(green) Unlit (orange) Lit SYNC	Synchronization is occurring.	Please wait until the unit synchronizes completely. It may take approximately 60 seconds for synchronization to be completed.
(green) Flash (orange) Unlit SYNC	The unit is functioning correctly as the word clock master.	The unit is operating as the word clock master.
(green) Lit (orange) Unlit SYNC	The unit is functioning correctly as the word clock slave.	The unit is operating as the clock slave and the clock is synchronized.

■ Warning Messages

The indicator will remain lit or continue flashing cyclically until the problem is solved.
If the green [SYNC] indicator is unlit, the unit's clock is unconfirmed.

SYNC Indicators	Description	Possible Solution
(green) Unlit (orange) Flash SYNC	The word clock is not set correctly.	Set the clock master and sampling frequency correctly on the MTX-MRX Editor or in Dante Controller.
(green) Unlit (orange) Flash x2 SYNC	Dante Network circuit is broken.	Make sure that the Ethernet cables are not removed or short-circuited.

If the green indicator is flashing, the unit is the clock master.
If the green indicator is lit, the unit is the clock slave and the clock is synchronized.

SYNC Indicators	Description	Possible Solution
(green) Lit or flash (orange) Lit SYNC	A non-GbE-compatible device is connected.	When transferring audio via Dante, use device that supports GbE.
(green) Lit or flash (orange) Flash SYNC	The Dante [SECONDARY] connector has taken over communications during redundant network operation.	Check the circuit connected to the Dante [PRIMARY] connector.
(green) Lit or flash (orange) Flash x 2 SYNC	An abnormality has occurred on the circuit connected to the Dante [SECONDARY] connector during redundant network operation.	Check the circuit connected to the Dante [SECONDARY] connector.

High-impedance and Low-impedance Connections

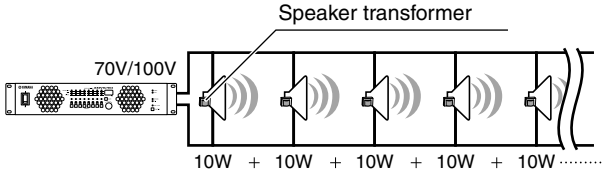
For a high-impedance connection a speaker transformer that raises the impedance to several hundred or thousand ohms is added to the speaker system. This allows the speaker system to be effectively driven with much lower current than is required for a low-impedance system. That, in turn, makes it possible to connect a larger number of speaker systems to each power amplifier output. High-impedance speaker connections work at a specific maximum voltage—usually 70 or 100 volts—and are therefore also referred to as "constant voltage" speaker systems (the label "constant voltage" is somewhat misleading: the actual output voltage fluctuates according to the input signal).
For a low-impedance speaker connection, the power amplifier is directly connected to a speaker system that has an inherent impedance of 4–16Ω.
The difference between these types of connection are outlined below.

■ Multiple Speaker System Drive Capability

● High impedance

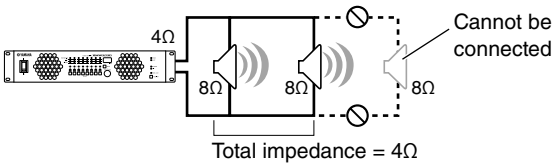
As long as the total nominal power input rating for all speakers is within the power output capability of the amplifier, any number of speaker systems can be connected in parallel. In a high-impedance installation, the power input rating is determined by the speaker transformers used.
If the 280W output XMV8280 is used with a speaker system having speaker transformers that make the rated input 10W, you can connect a speaker system with a maximum of 24 speakers per channel based on the calculation (*), giving you a total of up to 192 speakers for the eight channels. In a high-impedance installation it is also possible to simultaneously drive speaker systems that have different input power ratings.

(*) Yamaha recommends that you allow a 20% margin to this number, considering variations in the transformer's primary impedance, possible tap changes in the future, and the addition of speakers.

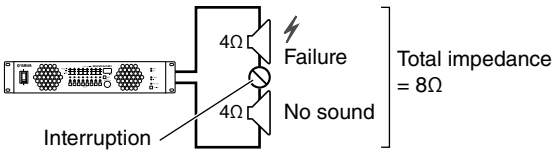


● Low impedance

Normally only one speaker system is connected to each amplifier channel, as shown in the diagram.
This means that the number of speaker system that can be connected to an XMV is limited to eight.
However, even with low impedance connections, there is a way by which multiple speaker systems can be connected to one channel.
When multiple speakers systems having the same impedance are connected in parallel, the total impedance becomes the individual speaker system impedance divided by the number of systems connected. This means that if the XMV is set to 4Ω, up to two 8Ω speaker systems can be connected to one channel.



The second method is series connection. In this case the total impedance is simply the sum of the impedances of the speaker systems connected. But as you can see in the series connection wiring diagram, if one speaker system fails the second speaker system will be affected as well.

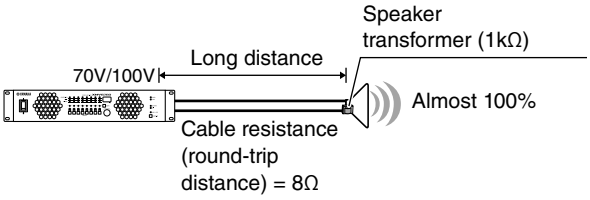


■ Transmission Distance and Efficiency

The cables that transmit electric signals have resistance. The resistance in short cables is small enough that it can be ignored, but as transmission distance and cable length increase, resistance can increase to the point that signal loss and degradation occur. That can mean reduced output level and sound quality. Below we examine the merits and demerits of low-impedance and high-impedance connections in relation to transmission over significant distances.

● High impedance

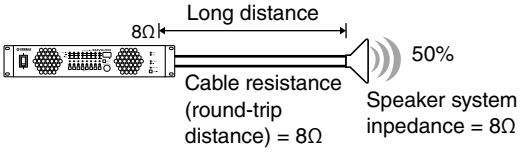
Even if the cable resistance reaches 8Ω due to an extended transmission distance, this is an amount that can be ignored relative to the impedance of the speaker system, meaning that transmission loss due to the cable will be insignificant, and thus will have little effect on the transmission efficiency of the electrical signal.



● Low impedance

For short distances over which cable resistance is insignificant, low-impedance connection allows the power amp to be directly connected to the speaker system without the need for speaker transformers. That means that the full performance potential of amp and speakers can be taken advantage of for sound quality that is superior to high-impedance installations. And since only one speaker system is usually connected to each amplifier channel, different audio signals can be sent to each speaker system, or "zone," as required.

But in a situation like the one shown in the diagram, where a long cable with a resistance of 8Ω is required, transmission loss will theoretically result in the output level being reduced by half because the impedance of the speaker system itself is only 8Ω. Half of the power gets absorbed by the cable, and only the remaining half is available to drive the speaker. So for low-impedance installations it is necessary to either keep the cables short enough that cable resistance is not an issue, or use thicker cables that have lower resistance for longer runs, for example.



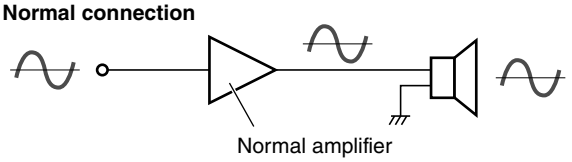
BTL (Balanced Transformer Less) Connection

BTL connection doubles the output power since the two amplifier channels are used as one amplifier.

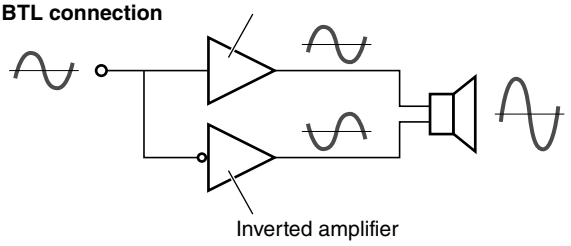
NOTE

Since the amplifier outputs are connected to both the plus connector and the minus connector, contact with the other connectors or the chassis may result in malfunction.

Normal connection



BTL connection



Specifications

General Specifications

		XMV8280	XMV8140	XMV8280-D	XMV8140-D
Output Power					
1kHz, THD+N=1% (20 ms Burst)	4 Ω	280W	140W	280W	140W
	8 Ω	280W	140W	280W	140W
	4 Ω / DOUBLE POWER MODE	560W	280W	560W	280W
	8 Ω / DOUBLE POWER MODE	560W	280W	560W	280W
High Impedance	100V (RL=40Ω/XMV8280) (RL=80Ω/XMV8140)	250W	125W	250W	125W
	70V (RL=20Ω/XMV8280) (RL=40Ω/XMV8140)	250W	125W	250W	125W

Amplifier Type (Output Circuitry)		Class D			
THD+N	1kHz, half power, 4Ω All channel output	≦0.2%			
	1kHz, half power, 100V, 70V All channel output	≦0.2%			
Frequency Response	1W, 280W/8Ω, 20Hz–20kHz (XMV8280)	0dB, ±1.0dB			
	1W, 140W/8Ω, 20Hz–20kHz (XMV8140)				
	1W, 100V/70V, 55Hz–20kHz				
Crosstalk	1kHz, half power, 8Ω Att. max, input 150Ω shunt	≦-60dB			
Residual Noise	A-weighted 280W, 8Ω	≦-65dBu			
S/N Ratio	A-weighted 280W or 140W mode	≧100dB			
Input Sensitivity		+4 dBu (1.23V)			
Voltage Gain	100V	38.2dB	38.2dB	38.2dB	38.2dB
	70V	35.2dB	35.2dB	35.2dB	35.2dB
	280W (140W)/8Ω	31.7dB	28.7dB	31.7dB	28.7dB
	560W (280W)/8Ω	34.7dB	31.7dB	34.7dB	31.7dB
Load Protection	Power switch on/off	Mute the output			
	DC-fault	Power supply shutdown			
Amplifier Protection	Thermal	Mute the output (heatsink temp. ≧90°C) (return automatically.)			
	Overcurrent	Mute the output (return automatically.)			
	Low load impedance	Mute the output (return automatically.)			
Power Supply Protection	Thermal	Power supply shutdown (heatsink temp. ≧100°C)			
	Integrated power	Gain reduction (return automatically.)			
Limiter Circuit	Clip limiting	Cilp limiter			
Cooling		3 speed fan x 2, front-to-back airflow			
Maximum Input Level		+24dBu			
Input Impedance		20kΩ (balanced) 10kΩ (unbalanced)			
Sampling Frequency		48kHz			
A/D, D/A Converters		AD: 24-bit linear, 128 times over sampling DA: 24-bit linear, 128 times over sampling			
Signal Processing		32 bit digital signal processing			
Latency	Analog input → [SPEAKERS] output	1.85msec			
	[YDIF] input → [SPEAKERS] output (fs=48kHz)	1.08msec		—	
	[YDIF] input → [SPEAKERS] output (fs=44.1kHz)	1.17msec		—	
	Dante [PRIMARY]/[SECONDARY] input → [SPEAKERS] output (fs=48kHz, Dante latency setup = 0.25msec)	—		1.33msec	
	Dante [PRIMARY]/[SECONDARY] input → [SPEAKERS] output (fs=44.1kHz, Dante latency setup = 0.25msec)	—		1.42msec	

		XMV8280	XMV8140	XMV8280-D	XMV8140-D
Controls	Front panel	Power switch (rocker), Rotary encoder x 1, [FUNCTION] button x 1, [SELECT] button x 8, [MUTE] button x 1			
	Front panel (software)	ATT (-99dB to 0dB, 1dB step), POLARITY, HPF (OFF, 40Hz, 80Hz), *40Hz or 80Hz for Hi-Z output setup INPUT SOURCE (ANALOG/DIGITAL), SIGNAL LED (INPUT/OUTPUT)			
	Rear panel	AMP SETTING switch x 2 (OUTPUT FORMAT, IMPEDANCE, DOUBLE POWER MODE, HI-Z LEVEL, per 2 channels), SETUP switch (UNIT ID, LED DIMMER, PANEL LOCK, IP SETTING, START UP MODE), Rotary switch (UNIT ID)		AMP SETTING switch x 2 (OUTPUT FORMAT, IMPEDANCE, DOUBLE POWER MODE, HI-Z LEVEL, per 2 channels), SETUP switch (SECONDARY PORT, LED DIMMER, PANEL LOCK, IP SETTING, START UP MODE), Rotary switch x 2 (UNIT ID HIGH, UNIT ID LOW)	
Connectors	Analog input	Euroblock (5.08mm pitch, balanced) /ch			
	Digital I/O	RJ45 x 2 ([YDIF] IN/OUT)		RJ45 x 2 (Dante [PRIMARY]/[SECONDARY])	
	Speakers	Barrier strip /ch			
	Network	RJ45 x 1		—	
	Remote	Euroblock (3.50mm pitch) x 1			
	Fault output	Euroblock (3.50mm pitch) x 1			
	Power	AC inlet x1			
Indicators		[POWER] x 1 (green), [ALERT] x 1 (red), [PANEL LOCK] x 1 (orange), [PROTECTION] x 8 (orange), [LIMIT] x 8 (red), [MUTE] x 8 (yellow), [SIGNAL] x 8 (green), [SELECT] x 8 (green), [NETWORK] x 1 (green), [YDIF] x 1 (green)		[POWER] x 1 (green), [ALERT] x 1 (red), [PANEL LOCK] x 1 (orange), [PROTECTION] x 8 (orange), [LIMIT] x 8 (red), [MUTE] x 8 (yellow), [SIGNAL] x 8 (green), [SELECT] x 8 (green), [PRIMARY] x 1 (green), [SECONDARY] x 1 (green), [SYNC] x 2 (green, orange)	
Display		3 digit, 7 segment numeric display			

AC Power Requirement		100V, 120V, 230V–240V 50Hz/60Hz			
Power Consumption	1/8 MAX power (4Ω)	450 W	250 W	450 W	250 W
	Idle (4Ω)	73 W	73 W	73 W	73 W
	Standby	23 W	23 W	23 W	23 W
Operating Temperature		0°C to +40°C			
Storage Temperature		-20°C to +60°C			

Dimensions (W x H x D, including knob)	480 x 88 x 422 mm (18.9 x 3.5 x 16.6 inches)
Net Weight	10.1 kg (22.3 lbs)
Included Accessories	AC power cord (2.5m) x 1, Euroblock plug (3-pin, 3.50mm pitch) x 2, Euroblock plug with tabs (3-pin, 5.08mm pitch) x 8, Cable tie x 4, Owner's Manual x 1
Optional Accessories	—

■ [SIGNAL] Indicator Lit Level

XMV8280/XMV8280-D

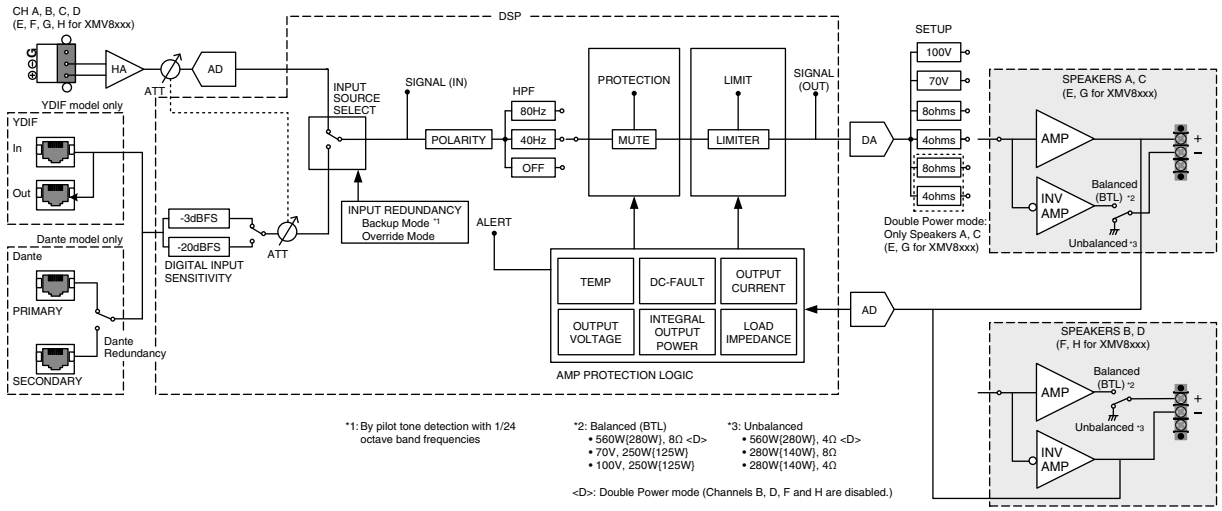
	Lit level		
	dBu	**Vrms**	**W**
100V	8.7	2.11	—
70V	5.6	1.48	—
560W/8Ω	5.2	1.41	0.249
560W/4Ω	2.2	1.00	0.250
280W/8Ω	2.2	1.00	0.125
280W/4Ω	-0.8	0.71	0.125

XMV8140/XMV8140-D

	Lit level		
	dBu	**Vrms**	**W**
100V	8.7	2.11	—
70V	5.6	1.48	—
280W/8Ω	2.2	1.00	0.125
280W/4Ω	-0.8	0.71	0.125
140W/8Ω	-0.8	0.71	0.063
140W/4Ω	-3.8	0.50	0.063

Block Diagram

XMV Series Block Diagram YDIF model: XMV4140, XMV4280, XMV8140, XMV8280
Dante model: XMV4140-D, XMV4280-D, XMV8140-D, XMV8280-D



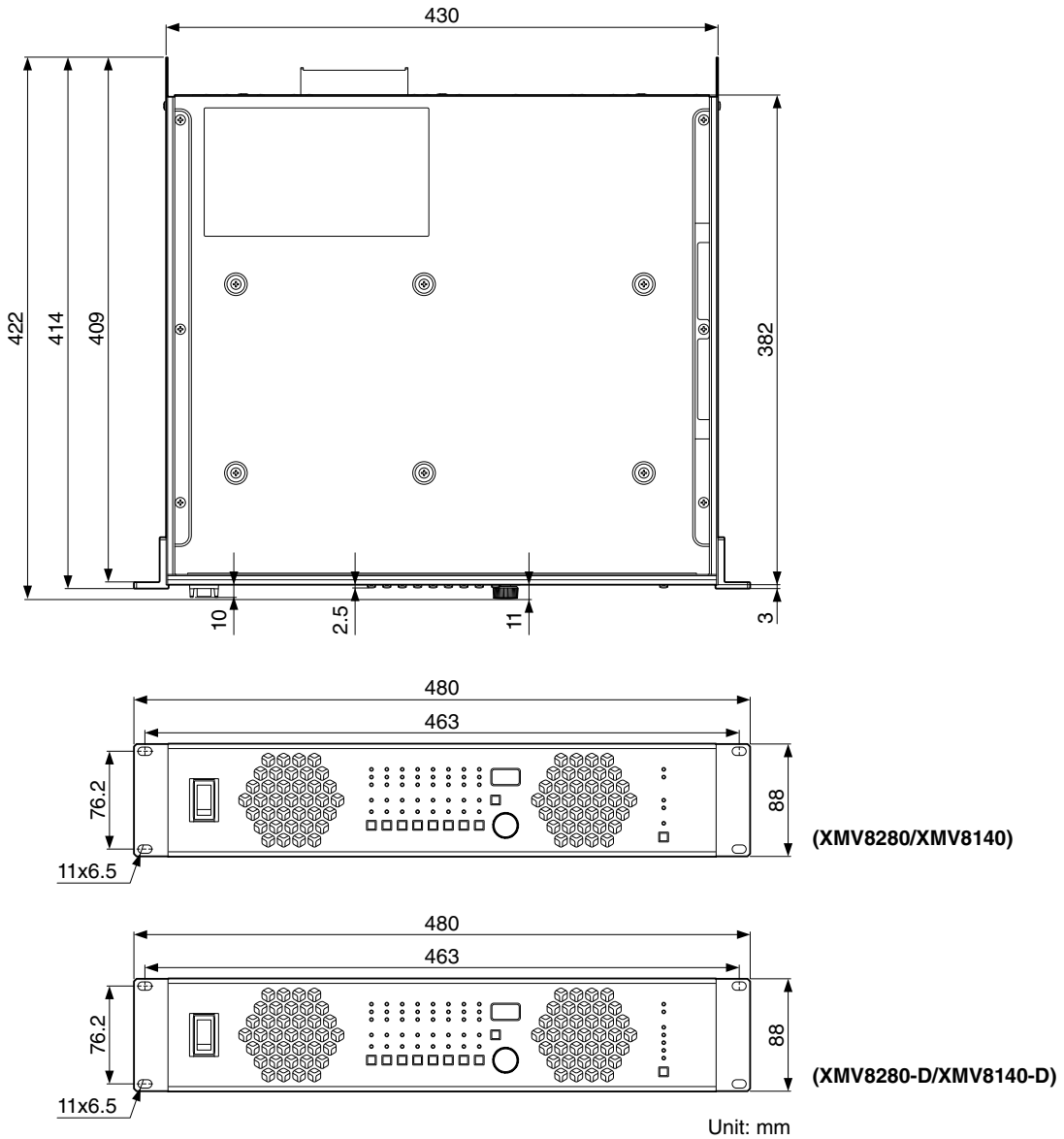
*1: By pilot tone detection with 1/24 octave band frequencies

*2: Balanced (BTL)
- 560W{280W}, 8Ω <D>
- 70V, 250W{125W}
- 100V, 250W{125W}

*3: Unbalanced
- 560W{280W}, 4Ω <D>
- 280W{140W}, 8Ω
- 280W{140W}, 4Ω

<D>: Double Power mode (Channels B, D, F and H are disabled.)

Dimensions



Unit: mm

Current Draw and Heat Dissipation

● XMV8280/XMV8280-D

Power Specifications (PINK NOISE, 100V/50Hz mains)

	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	280W/4Ω	0.4	23	23	77	20
	280W/8Ω					
	560W/4Ω					
	560W/8Ω					
	100V					
	70V					
idle	280W/4Ω	0.8	70	70	238	60
	280W/8Ω	0.8	70	70	238	60
	560W/4Ω	0.7	56	56	189	48
	560W/8Ω	0.8	67	67	228	58
	100V	1.0	95	95	323	82
	70V	1.0	94	94	320	81
1/8 output power	280W/4Ω	4.3	418	138	469	119
	280W/8Ω	4.1	397	117	398	101
	560W/4Ω	4.2	404	124	422	107
	560W/8Ω	4.3	416	136	462	117
	100V	3.8	375	125	425	108
	70V	3.9	382	132	449	114
1/3 output power	280W/4Ω	10.8	1031	284	967	245
	280W/8Ω	10.3	980	233	793	201
	560W/4Ω	10.7	1016	269	916	232
	560W/8Ω	10.8	1040	293	997	253
	100V	9.1	873	206	702	178
	70V	9.4	905	238	810	205

Power Specifications (PINK NOISE, 120V/60Hz mains)

	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	280W/4Ω	0.4	23	23	77	20
	280W/8Ω					
	560W/4Ω					
	560W/8Ω					
	100V					
	70V					
idle	280W/4Ω	0.7	70	70	238	60
	280W/8Ω	0.7	70	70	236	60
	560W/4Ω	0.6	57	57	195	49
	560W/8Ω	0.7	67	67	228	58
	100V	0.9	94	94	318	81
	70V	0.9	94	94	319	81
1/8 output power	280W/4Ω	3.6	415	135	459	116
	280W/8Ω	3.4	394	114	388	98
	560W/4Ω	3.4	401	121	411	104
	560W/8Ω	3.5	412	132	449	114
	100V	3.2	371	121	411	104
	70V	3.2	377	127	432	109
1/3 output power	280W/4Ω	8.8	1014	267	909	230
	280W/8Ω	8.3	955	208	708	179
	560W/4Ω	8.6	990	243	827	210
	560W/8Ω	8.8	1010	263	895	227
	100V	7.4	857	190	647	164
	70V	7.6	882	215	732	185

Power Specifications (PINK NOISE, 230V/50Hz mains)

	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	280W/4Ω	0.4	23	23	77	20
	280W/8Ω					
	560W/4Ω					
	560W/8Ω					
	100V					
	70V					
idle	280W/4Ω	0.5	67	67	229	58
	280W/8Ω	0.5	67	67	226	57
	560W/4Ω	0.5	53	53	181	46
	560W/8Ω	0.5	65	65	220	56
	100V	0.6	90	90	306	77
	70V	0.6	90	90	307	78
1/8 output power	280W/4Ω	1.9	405	125	425	108
	280W/8Ω	1.8	385	105	357	90
	560W/4Ω	1.8	392	112	381	96
	560W/8Ω	1.9	403	123	418	106
	100V	1.7	363	113	384	97
	70V	1.7	370	120	408	103
1/3 output power	280W/4Ω	4.4	961	214	729	185
	280W/8Ω	4.2	914	167	569	144
	560W/4Ω	4.3	939	192	654	166
	560W/8Ω	4.4	959	212	722	183
	100V	3.7	821	154	525	133
	70V	3.9	846	179	610	154

1/8 power is typical of program material with occasional clipping. Refer to these figures for most applications.
1/3 power represents program material with extremely heavy clipping.
Test signal: Pink Noise, bandwidth limited from 22Hz to 22kHz
All channels driven
1W = 0.860kcal/h, 1BTU = 0.252kcal
Note that Line Voltage [V] x Line Current [A] = [VA], not equals to [W].

● XMV8140/XMV8140-D

Power Specifications (PINK NOISE, 100V/50Hz mains)

	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	140W/4Ω	0.4	23	23	77	20
	140W/8Ω					
	280W/4Ω					
	280W/8Ω					
	100V					
	70V					
idle	140W/4Ω	0.8	73	73	247	63
	140W/8Ω	0.8	73	73	247	62
	280W/4Ω	0.7	58	58	198	50
	280W/8Ω	0.8	70	70	239	61
	100V	1.1	96	96	326	83
	70V	1.1	96	96	326	83
1/8 output power	140W/4Ω	2.5	241	101	343	87
	140W/8Ω	2.4	230	90	306	77
	280W/4Ω	2.4	230	90	306	77
	280W/8Ω	2.6	249	109	371	94
	100V	2.4	233	108	367	93
	70V	2.4	237	112	381	96
1/3 output power	140W/4Ω	5.4	525	152	516	131
	140W/8Ω	5.1	502	129	437	111
	280W/4Ω	5.3	515	142	482	122
	280W/8Ω	5.4	525	152	516	131
	100V	4.8	467	134	454	115
	70V	4.9	482	149	505	128

Power Specifications (PINK NOISE, 120V/60Hz mains)

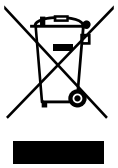
	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	140W/4Ω	0.4	23	23	77	20
	140W/8Ω					
	280W/4Ω					
	280W/8Ω					
	100V					
	70V					
idle	140W/4Ω	0.8	72	72	244	62
	140W/8Ω	0.8	72	72	244	62
	280W/4Ω	0.7	59	59	201	51
	280W/8Ω	0.7	70	70	236	60
	100V	0.9	96	96	328	83
	70V	0.9	96	96	327	83
1/8 output power	140W/4Ω	2.1	240	100	340	86
	140W/8Ω	2.0	229	89	303	77
	280W/4Ω	2.0	229	89	303	77
	280W/8Ω	2.2	249	109	371	94
	100V	2.0	233	108	367	93
	70V	2.1	237	112	381	96
1/3 output power	140W/4Ω	4.4	520	147	499	126
	140W/8Ω	4.2	495	122	414	105
	280W/4Ω	4.3	508	135	458	116
	280W/8Ω	4.4	520	147	499	126
	100V	3.9	463	130	441	112
	70V	4.1	478	145	492	125

Power Specifications (PINK NOISE, 230V/50Hz mains)

	MODE	Line Current (A)	Power Consumption (W)	Watts Dissipated (W)	Heat Dissipation	
					Btu/h	kcal/h
standby	140W/4Ω	0.4	23	23	77	20
	140W/8Ω					
	280W/4Ω					
	280W/8Ω					
	100V					
	70V					
idle	140W/4Ω	0.5	69	69	236	60
	140W/8Ω	0.5	69	69	234	59
	280W/4Ω	0.5	55	55	188	48
	280W/8Ω	0.5	67	67	227	58
	100V	0.6	94	94	318	81
	70V	0.6	94	94	319	81
1/8 output power	140W/4Ω	1.2	234	94	320	81
	140W/8Ω	1.1	223	83	282	71
	280W/4Ω	1.1	223	83	282	71
	280W/8Ω	1.2	244	104	354	90
	100V	1.2	228	103	350	89
	70V	1.2	232	107	364	92
1/3 output power	140W/4Ω	2.3	506	133	451	114
	140W/8Ω	2.2	482	109	369	94
	280W/4Ω	2.3	495	122	414	105
	280W/8Ω	2.3	505	132	448	113
	100V	2.1	452	119	403	102
	70V	2.2	465	132	448	113

1/8 power is typical of program material with occasional clipping. Refer to these figures for most applications.
1/3 power represents program material with extremely heavy clipping.
Test signal: Pink Noise, bandwidth limited from 22Hz to 22kHz
All channels driven
1W = 0.860kcal/h, 1BTU = 0.252kcal
Note that Line Voltage [V] x Line Current [A] = [VA], not equals to [W].

Information for users on collection and disposal of old equipment:



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.
For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

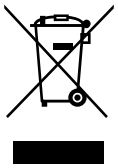
For more information about collection and recycling of old products, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

For business users in the European Union:
If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

Information on Disposal in other Countries outside the European Union:
This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

(weee_eu_en_02)

Verbraucherinformation zur Sammlung und Entsorgung alter Elektrogeräte



Befindet sich dieses Symbol auf den Produkten, der Verpackung und/oder beiliegenden Unterlagen, so sollten benutzte elektrische Geräte nicht mit dem normalen Haushaltsabfall entsorgt werden.
In Übereinstimmung mit Ihren nationalen Bestimmungen bringen Sie alte Geräte bitte zur fachgerechten Entsorgung, Wiederaufbereitung und Wiederverwendung zu den entsprechenden Sammelstellen.

Durch die fachgerechte Entsorgung der Elektrogeräte helfen Sie, wertvolle Ressourcen zu schützen, und verhindern mögliche negative Auswirkungen auf die menschliche Gesundheit und die Umwelt, die andernfalls durch unsachgerechte Müllentsorgung auftreten könnten.

Für weitere Informationen zum Sammeln und Wiederaufbereiten alter Elektrogeräte kontaktieren Sie bitte Ihre örtliche Stadt- oder Gemeindeverwaltung, Ihren Abfallentsorgungsdienst oder die Verkaufsstelle der Artikel.

Information für geschäftliche Anwender in der Europäischen Union:
Wenn Sie Elektrogeräte ausrangieren möchten, kontaktieren Sie bitte Ihren Händler oder Zulieferer für weitere Informationen.

Entsorgungsinformation für Länder außerhalb der Europäischen Union:
Dieses Symbol gilt nur innerhalb der Europäischen Union. Wenn Sie solche Artikel ausrangieren möchten, kontaktieren Sie bitte Ihre örtlichen Behörden oder Ihren Händler und fragen Sie nach der sachgerechten Entsorgungsmethode.

(weee_eu_de_02)

Informations concernant la collecte et le traitement des déchets d'équipements électriques et électroniques



Le symbole sur les produits, l'emballage et/ou les documents joints signifie que les produits électriques ou électroniques usagés ne doivent pas être mélangés avec les déchets domestiques habituels.
Pour un traitement, une récupération et un recyclage appropriés des déchets d'équipements électriques et électroniques, veuillez les déposer aux points de collecte prévus à cet effet, conformément à la réglementation nationale.

En vous débarrassant correctement des déchets d'équipements électriques et électroniques, vous contribuerez à la sauvegarde de précieuses ressources et à la prévention de potentiels effets négatifs sur la santé humaine qui pourraient advenir lors d'un traitement inapproprié des déchets.

Pour plus d'informations à propos de la collecte et du recyclage des déchets d'équipements électriques et électroniques, veuillez contacter votre municipalité, votre service de traitement des déchets ou le point de vente où vous avez acheté les produits.

Pour les professionnels dans l'Union européenne :
Si vous souhaitez vous débarrasser des déchets d'équipements électriques et électroniques, veuillez contacter votre vendeur ou fournisseur pour plus d'informations.

Informations sur la mise au rebut dans d'autres pays en dehors de l'Union européenne :
Ce symbole est seulement valable dans l'Union européenne. Si vous souhaitez vous débarrasser de déchets d'équipements électriques et électroniques, veuillez contacter les autorités locales ou votre fournisseur et demander la méthode de traitement appropriée.

(weee_eu_fr_02)

Información para usuarios sobre la recogida y eliminación de los equipos antiguos



Este símbolo en los productos, embalajes y documentos anexos significa que los productos eléctricos y electrónicos no deben mezclarse con los desperdicios domésticos normales.
Para el tratamiento, recuperación y reciclaje apropiados de los productos antiguos, llévelos a puntos de reciclaje correspondientes, de acuerdo con la legislación nacional.

Al deshacerse de estos productos de forma correcta, ayudará a ahorrar recursos valiosos y a impedir los posibles efectos desfavorables en la salud humana y en el entorno que de otro modo se producirían si se trataran los desperdicios de modo inapropiado.

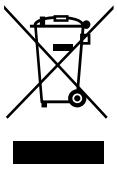
Para obtener más información acerca de la recogida y el reciclaje de los productos antiguos, póngase en contacto con las autoridades locales, con el servicio de eliminación de basuras o con el punto de venta donde adquirió los artículos.

Para los usuarios empresariales de la Unión Europea:
Si desea desechar equipos eléctricos y electrónicos, póngase en contacto con su vendedor o proveedor para obtener más información.

Información sobre la eliminación en otros países fuera de la Unión Europea:
Este símbolo solo es válido en la Unión Europea. Si desea desechar estos artículos, póngase en contacto con las autoridades locales o con el vendedor y pregúnteles el método correcto.

(weee_eu_es_02)

Informazioni per gli utenti sulla raccolta e lo smaltimento di vecchia attrezzatura



Questi simboli sui prodotti, sull'imballaggio e/o sui documenti che li accompagnano, indicano che i prodotti elettrici ed elettronici non devono essere mischiati con i rifiuti generici.
Per il trattamento, il recupero e il riciclaggio appropriato di vecchi prodotti, si prega di portarli ai punti di raccolta designati, in accordo con la legislazione locale.

Smaltendo correttamente questi prodotti si potranno recuperare risorse preziose, oltre a prevenire potenziali effetti negativi sulla salute e l'ambiente che potrebbero sorgere a causa del trattamento improprio dei rifiuti.

Per ulteriori informazioni sulla raccolta e il riciclaggio di vecchi prodotti, si prega di contattare l'amministrazione comunale locale, il servizio di smaltimento dei rifiuti o il punto vendita dove sono stati acquistati gli articoli.

Per utenti imprenditori dell'Unione europea:
Se si desidera scartare attrezzatura elettrica ed elettronica, si prega di contattare il proprio rivenditore o il proprio fornitore per ulteriori informazioni.

Informazioni sullo smaltimento negli altri Paesi al di fuori dell'Unione europea:
Questi simboli sono validi solamente nell'Unione Europea; se si desidera scartare questi articoli, si prega di contattare le autorità locali o il rivenditore e richiedere informazioni sulla corretta modalità di smaltimento.

(weee_eu_it_02)

NEDERLAND / THE NETHERLANDS

- Dit apparaat bevat een lithium batterij voor geheugen back-up.
- This apparatus contains a lithium battery for memory back-up.
- Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u het apparaat ann het einde van de levensduur of gelieve dan contact op te nemen met de vertegenwoordiging van Yamaha in uw land.
- For the removal of the battery at the moment of the disposal at the end of life please consult your retailer or Yamaha representative office in your country.
- Gooi de batterij niet weg, maar lever hem in als KCA.
- Do not throw away the battery. Instead, hand it in as small chemical waste.

(lithium disposal)

Important Notice: Guarantee Information for customers in European Economic Area (EEA) and Switzerland

English

Important Notice: Guarantee Information for customers in EEA* and Switzerland

For detailed guarantee information about this Yamaha product, and Pan-EEA* and Switzerland warranty service, please either visit the website address below (Printable file is available at our website) or contact the Yamaha representative office for your country. * EEA: European Economic Area

Deutsch

Wichtiger Hinweis: Garantie-Information für Kunden in der EWR* und der Schweiz

Für nähere Garantie-Information über dieses Produkt von Yamaha, sowie über den Pan-EWR*- und Schweizer Garantieservice, besuchen Sie bitte entweder die folgend angegebene Internetadresse (eine druckfähige Version befindet sich auch auf unserer Webseite), oder wenden Sie sich an den für Ihr Land zuständigen Yamaha-Vertrieb. *EWR: Europäischer Wirtschaftsraum

Français

Remarque importante: informations de garantie pour les clients de l'EEE et la Suisse

Pour des informations plus détaillées sur la garantie de ce produit Yamaha et sur le service de garantie applicable dans l'ensemble de l'EEE ainsi qu'en Suisse, consultez notre site Web à l'adresse ci-dessous (le fichier imprimable est disponible sur notre site Web) ou contactez directement Yamaha dans votre pays de résidence. * EEE : Espace Economique Européen

Nederlands

Belangrijke mededeling: Garantie-informatie voor klanten in de EER* en Zwitserland

Voor gedetailleerde garantie-informatie over dit Yamaha-product en de garantieservice in heel de EER* en Zwitserland, gaat u naar de onderstaande website (u vind een afdrukbaar bestand op onze website) of neemt u contact op met de vertegenwoordiging van Yamaha in uw land. * EER: Europese Economische Ruimte

Español

Aviso importante: información sobre la garantía para los clientes del EEE* y Suiza

Para una información detallada sobre este producto Yamaha y sobre el soporte de garantía en la zona EEE* y Suiza, visite la dirección web que se incluye más abajo (la version del archivo para imprimir esta disponible en nuestro sitio web) o póngase en contacto con el representante de Yamaha en su país. * EEE: Espacio Económico Europeo

Italiano

Avviso importante: informazioni sulla garanzia per i clienti residenti nell'EEA* e in Svizzera

Per informazioni dettagliate sulla garanzia relativa a questo prodotto Yamaha e l'assistenza in garanzia nei paesi EEA* e in Svizzera, potete consultare il sito Web all'indirizzo riportato di seguito (è disponibile il file in formato stampabile) oppure contattare l'ufficio di rappresentanza locale della Yamaha. * EEA: Area Economica Europea

Português

Aviso importante: informações sobre as garantias para clientes da AEE* e da Suíça

Para obter uma informação pormenorizada sobre este produto da Yamaha e sobre o serviço de garantia na AEE* e na Suíça, visite o site a seguir (o arquivo para impressão está disponível no nosso site) ou entre em contato com o escritório de representação da Yamaha no seu país. * AEE: Área Econômica Européia

Ελληνικά

Σημαντική σημείωση: Πληροφορίες εγγύησης για τους πελάτες στον ΕΟΧ* και Ελβετία

Για λεπτομερείς πληροφορίες εγγύησης σχετικά με το παρόν προϊόν της Yamaha και την κάλυψη εγγύησης σε όλες τις χώρες του ΕΟΧ και την Ελβετία, επισκεφτείτε την παρακάτω ιστοσελίδα (Εκτυπώσιμη μορφή είναι διαθέσιμη στην ιστοσελίδα μας) ή απευθυνθείτε στην αντιπροσωπεία της Yamaha στη χώρα σας. * ΕΟΧ: Ευρωπαϊκός Οικονομικός Χώρος

Svenska

Viktigt: Garantiinformation för kunder i EES-området* och Schweiz

För detaljerad information om denna Yamahaprodukt samt garantiservice i hela EES-området* och Schweiz kan du antingen besöka nedanstående webbaddress (en utskriftsvänlig fil finns på webbplatsen) eller kontakta Yamahas officiella representant i ditt land. * EES: Europeiska Ekonomiska Samarbetsområdet

Norsk

Viktig merknad: Garantiinformasjon for kunder i EØS* og Sveits

Detaljert garantiinformasjon om dette Yamaha-produktet og garantiservice for hele EØS-området* og Sveits kan fås enten ved å besøke nettadressen nedenfor (utskriftsversjon finnes på våre nettsider) eller kontakte kontakte Yamaha-kontoret i landet der du bor. *EØS: Det europeiske økonomiske samarbeidsområdet

Dansk

Vigtig oplysning: Garantioplysninger til kunder i EØO* og Schweiz

De kan finde detaljerede garantioplysninger om dette Yamaha-produkt og den fælles garantiserviceordning for EØO* (og Schweiz) ved at besøge det websted, der er angivet nedenfor (der findes en fil, som kan udskrives, på vores websted), eller ved at kontakte Yamahas nationale repræsentationskontor i det land, hvor De bor. * EØO: Det Europæiske Økonomiske Område

Suomi

Tärkeä ilmoitus: Takuutiedot Euroopan talousalueen (ETA)* ja Sveitsin asiakkaille

Tämän Yamaha-tuotteen sekä ETA-alueen ja Sveitsin takuuta koskevat yksityiskohtaiset tiedot saatte alla olevasta nettiosoitteesta. (Tulostettava tiedosto saatavissa sivustollamme.) Voitte myös ottaa yhteyttä paikalliseen Yamaha-edustajaan. *ETA: Euroopan talousalue

Polski

Ważne: Warunki gwarancyjne obowiązujące w EOG* i Szwajcarii

Aby dowiedzieć się więcej na temat warunków gwarancyjnych tego produktu firmy Yamaha i serwisu gwarancyjnego w całym EOG* i Szwajcarii, należy odwiedzić wskazaną poniżej stronę internetową (Plik gotowy do wydruku znajduje się na naszej stronie internetowej) lub skontaktować się z przedstawicielstwem firmy Yamaha w swoim kraju. * EOG — Europejski Obszar Gospodarczy

Česky

Důležité oznámení: Záruční informace pro zákazníky v EHS* a ve Švýcarsku

Podrobné záruční informace o tomto produktu Yamaha a záručním servisu v celém EHS* a ve Švýcarsku naleznete na níže uvedené webové adrese (soubor k tisku je dostupný na našich webových stránkách) nebo se můžete obrátit na zastoupení firmy Yamaha ve své zemi. * EHS: Evropský hospodářský prostor

Magyar

Fontos figyelmeztetés: Garancia-információk az EGT* területén és Svájcban élő vásárlók számára

A jelen Yamaha termékre vonatkozó részletes garancia-információk, valamint az EGT*-re és Svájcra kiterjedő garanciális szolgáltatás tekintetében keresse fel webhelyünket az alábbi címen (a webhelyen nyomtatható fájlt is talál), vagy pedig lépjen kapcsolatba az országában működő Yamaha képviseleti irodával. * EGT: Európai Gazdasági Térség

Eesti keel

Oluline märkus: Garantiiteave Euroopa Majanduspiirkonna (EMP)* ja Šveitsi klientidele

Täpsema teabe saamiseks selle Yamaha toote garantii ning kogu Euroopa Majanduspiirkonna ja Šveitsi garantiiteeninduse kohta, külastage palun veebisaiti alljärgneval aadressil (meie saidil on saadaval prinditav fail) või pöörduge Teie regiooni Yamaha esinduse poole. * EMP: Euroopa Majanduspiirkond

Latviešu

Svarīgs paziņojums: garantijas informācija klientiem EEZ* un Šveicē

Lai saņemtu detalizētu garantijas informāciju par šo Yamaha produktu, kā arī garantijas apkalpošanu EEZ* un Šveicē, lūdzu, apmeklējiet zemāk norādīto tīmekļa vietnes adresi (tīmekļa vietnē ir pieejams drukājams fails) vai sazinieties ar jūsu valsti apkalpojošo Yamaha pārstāvniecību. * EEZ: Eiropas Ekonomikas zona

Lietuvių kalba

Dėmesio: informacija dėl garantijos pirkėjams EEE* ir Šveicarijoje

Jei reikia išsamios informacijos apie šį „Yamaha" produktą ir jo techninę priežiūrą visoje EEE* ir Šveicarijoje, apsilankykite mūsų svetainėje toliau nurodytu adresu (svetainėje yra spausdintinas failas) arba kreipkitės į „Yamaha" atstovybę savo šaliai. *EEE – Europos ekonominė erdvė

Slovenčina

Dôležité upozornenie: Informácie o záruke pre zákazníkov v EHP* a Švajčiarsku

Podrobné informácie o záruke týkajúce sa tohto produktu od spoločnosti Yamaha a garančnom servise v EHP* a Švajčiarsku nájdete na webovej stránke uvedenej nižšie (na našej webovej stránke je k dispozícii súbor na tlač) alebo sa obráťte na zástupcu spoločnosti Yamaha vo svojej krajine. * EHP: Európsky hospodársky priestor

Slovenščina

Pomembno obvestilo: Informacije o garanciji za kupce v EGP* in Švici

Za podrobnejše informacije o tem Yamahinem izdelku ter garancijskem servisu v celotnem EGP in Švici, obiščite spletno mesto, ki je navedeno spodaj (natisljiva datoteka je na voljo na našem spletnem mestu), ali se obrnite na Yamahinega predstavnika v svoji državi. * EGP: Evropski gospodarski prostor

Български език

Важно съобщение: Информация за гаранцията за клиенти в ЕИП* и Швейцария

За подробна информация за гаранцията за този продукт на Yamaha и гаранционното обслужване в паневропейската зона на ЕИП* и Швейцария или посетете посочения по-долу уеб сайт (на нашия уеб сайт има файл за печат), или се свържете с представителния офис на Yamaha във вашата страна. * ЕИП: Европейско икономическо пространство

Limba română

Notificare importantă: Informaţii despre garanţie pentru clienţii din SEE* şi Elveţia

Pentru informaţii detaliate privind acest produs Yamaha şi serviciul de garanţie Pan-SEE* şi Elveţia, vizitaţi site-ul la adresa de mai jos (fişierul imprimabil este disponibil pe site-ul nostru) sau contactaţi biroul reprezentanţei Yamaha din ţara dumneavoastră . * SEE: Spaţiul Economic European

http://europe.yamaha.com/warranty/

URL_4

ADDRESS LIST

NORTH AMERICA

CANADA
Yamaha Canada Music Ltd.
135 Milner Avenue, Toronto, Ontario,
M1S 3R1, Canada
Tel: +1-416-298-1311

U.S.A.
Yamaha Corporation of America
6600 Orangethorpe Avenue, Buena Park, CA 90620,
U.S.A.
Tel: +1-714-522-9011

CENTRAL & SOUTH AMERICA

MEXICO
Yamaha de México, S.A. de C.V.
Av. Insurgentes Sur 1647 Piso 9, Col. San José
Insurgentes, Delegación Benito Juárez, México,
D.F., C.P. 03900, México
Tel: +52-55-5804-0600

BRAZIL
Yamaha Musical do Brasil Ltda.
Rua Fidêncio Ramos, 302 – Cj 52 e 54 – Torre B – Vila
Olímpia – CEP 04551-010 – São Paulo/SP, Brazil
Tel: +55-11-3704-1377

ARGENTINA
Yamaha Music Latin America, S.A.,
Sucursal Argentina
Olga Cossettini 1553, Piso 4 Norte,
Madero Este-C1107CEK,
Buenos Aires, Argentina
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Manual Development Group
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Published 12/2017 改版 POES-G0

ZZ42570