

DIGITAL MIXING SYSTEM



RPio222

**Owner's Manual** 





#### **CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The above warning is located on the top of the unit. L'avertissement ci-dessus est situé sur le dessus de l'unité.

## **Explanation of Graphical Symbols Explication des symboles**



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.

L'éclair avec une flèche à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'une « tension dangereuse » non isolée à l'intérieur de l'appareil, pouvant être suffisamment élevée pour constituer un risque d'électrocution.



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.

Le point d'exclamation à l'intérieur d'un triangle équilatéral est destiné à attirer l'attention de l'utilisateur sur la présence d'instructions importantes sur l'emploi ou la maintenance (réparation) de l'appareil dans la documentation fournie.

# 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)

## PRÉCAUTIONS CONCER-NANT LA SÉCURITÉ

- 1 Lire ces instructions.
- 2 Conserver ces instructions.
- 3 Tenir compte de tous les avertissements.
- 4 Suivre toutes les instructions.
- 5 Ne pas utiliser ce produit à proximité d'eau.
- 6 Nettoyer uniquement avec un chiffon propre et sec.
- 7 Ne pas bloquer les orifices de ventilation. Installer l'appareil conformément aux instructions du fabricant.
- 8 Ne pas installer l'appareil à proximité d'une source de chaleur comme un radiateur, une bouche de chaleur, un poêle ou tout autre appareil (y compris un amplificateur) produisant de la chaleur.
- 9 Ne pas modifier le système de sécurité de la fiche polarisée ou de la fiche de terre. Une fiche polarisée dispose de deux broches dont une est plus large que l'autre. Une fiche de terre dispose de deux broches et d'une troisième pour le raccordement à la terre. Cette broche plus large ou cette troisième broche est destinée à assurer la sécurité de l'utilisateur. Si la fiche équipant l'appareil n'est pas compatible avec les prises de courant disponibles, faire remplacer les prises par un électricien.
- 10 Acheminer les cordons d'alimentation de sorte qu'ils ne soient pas piétinés ni coincés, en faisant tout spécialement attention aux fiches, prises de courant et au point de sortie de l'appareil.
- 11 Utiliser exclusivement les fixations et accessoires spécifiés par le fabricant.
- 12 Utiliser exclusivement le chariot, le stand, le trépied, le support ou la table recommandés par le fabricant ou vendus avec cet appareil. Si l'appareil est posé sur un chariot, déplacer le chariot avec précaution pour éviter tout risque de chute et de blessure.



- 13 Débrancher l'appareil en cas d'orage ou lorsqu'il doit rester hors service pendant une période prolongée.
- 14 Confier toute réparation à un personnel qualifié. Faire réparer l'appareil s'il a subi tout dommage, par exemple si la fiche ou le cordon d'alimentation est endommagé, si du liquide a coulé ou des objets sont tombés à l'intérieur de l'appareil, si l'appareil a été exposé à la pluie ou à de l'humidité, si l'appareil ne fonctionne pas normalement ou est tombé.

## **AVERTISSEMENT**

POUR RÉDUIRE LES RISQUES D'INCENDIE OU DE DÉCHARGE ÉLECTRIQUE, N'EXPOSEZ PAS CET APPAREIL À LA PLUIE OU À L'HUMIDITÉ.

## **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.

(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: Audio Interface
Model Name: RPio222

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

See user manual instructions if interference to radio reception is suspected.

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)

<sup>\*</sup> This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

## **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.
- 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, as long as the power cord is not unplugged from the wall
  AC outlet, the device will not be disconnected from the power
  source.
- Remove the electric plug from the outlet when the device is not to be used for extended periods of time, or during electrical storms.
- Be sure to connect to an appropriate outlet with a protective grounding connection.

## 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.

## **Hearing loss**

- 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.
- Before connecting the device to other devices, turn off the power for all devices. Also, before turning the power of all devices on or off, make sure that all volume levels are set to the minimum. Failing to do so may result in electric shock, hearing loss, or equipment damage.
- When turning on the AC power in your audio system, always turn on the power amplifier LAST, to avoid hearing loss and speaker damage. When turning the power off, the power amplifier should be turned off FIRST for the same reason.

## Fire warning

 Do not place any burning items or open flames near the device, since they may cause a fire.

## If you notice any abnormality

- If any of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet.
  - The power cord or plug becomes frayed or damaged.
  - Unusual smells or smoke are emitted.
  - Some object has been dropped into the device.
  - There is a sudden loss of sound during use of the device.
  - Cracks or other visible damage appear on the device. Then have the device inspected or repaired by qualified Yamaha service personnel.
- 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.



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.
- To disconnect the device from the mains, unplug both power cords.

## Location

- Do not place the device in an unstable position where it might accidentally fall over and cause injuries.
- Do not block the vents. This device has ventilation holes at the front/rear 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.

- When installing the device:
  - Do not cover it with any cloth.
  - Do not install it on a carpet or rug.
  - Make sure the top surface faces up; do not install on its sides or upside down.
  - Do not use the device in a confined, poorly-ventilated location.

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.
- Avoid being near the device during a disaster, such as an earthquake. Since the device may fall and cause injury, stay away from the device quickly and move to a safe place.
- Before moving the device, remove all connected cables.
- When transporting or moving the device, always use two or more people. Attempting to lift the device by yourself may damage your back, result in other injury, or cause damage to the device itself.
- If the device is mounted in an EIA standard rack, carefully read the section "Precautions for Rack Mounting" on page 7.
   Inadequate ventilation can result in overheating, possibly causing damage to the device(s), malfunction, or even fire.

## **Maintenance**

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

## **Handling caution**

- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into any gaps or openings on the device (vents, panel, etc.) If this happens, immediately turn off the power, unplug the power cord from the AC outlet, and have the device inspected by qualified Yamaha service personnel.
- Do not rest your weight on the device or place heavy objects on it. Avoid applying excessive force to the buttons, switches or connectors to prevent injuries.
- Avoid pulling the connected cables to prevent injuries or damage to the device.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the device.

## 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, AV 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 chemicalimpregnated 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.
- Always turn the power off when the device is not in use.

## **Information**

## About this manual

- The illustrations and LCD screens as shown in this manual are for instructional purposes only.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.
- Software may be revised and updated without prior notice.

The model number, serial number, power requirements, etc., may be found on or near the name plate, which is at the top of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model	No.
-------	-----

## Serial No.

(top\_en\_01)

## Contents

Introduction	7
Main Features	7
Accessories	7
Firmware Updates	7
Precautions for Rack Mounting	7
Recessed Installation	7
Part Names & Functions	8
Front Panel	8
Rear Panel	10
Installing and Removing Optional Cards	13
Installing an RY Card	
Removing the RY Card	14
Installing a Mini-YGDAI Card	14
Removing the Mini-YGDAI Card	14
Installing an HY Card	15
Removing the HY Card	15
Power Supply	16
Connecting the AC Power Cord	16
Turning the Power On and Off	16
Troubleshooting	16
Restoring the Factory Programmed Settings	16
Message List	17
Specifications	18
General Specifications	18
Pin Assignment Table	19
Dimensions	20
Index	22

6

## Introduction

Thank you for purchasing the Yamaha RPio222 I/O rack. The RPio222 is an audio interface that enables you to flexibly configure and expand I/Os for the RIVAGE PM10 system as required by your application or the scale of your system.

In order to take full advantage of the RPio222's superior functionality and enjoy years of trouble-free use, please read this manual before you begin using the product. After you have read the manual, keep it in a safe place together with the warranty for future reference.

## **Main Features**

- Two RY card slots that enable you to expand analog inputs and outputs, and/or digital inputs and outputs.
- Two HY card slots that are capable of transmitting and receiving up to 256 ins/outs of digital audio signals and control signals. HY card slot 1 features 256 ins/outs, and HY card slot 2 features 128 ins/outs.
- Two Mini-YGDAI slots to support various audio formats
- Two power supply units are provided as standard, so that you will be able to continue using the rack with one power supply unit in case a problem occurs with the other.

## Accessories

- Owner's Manual (this document)
- AC Power cords (x2)\*
- Euroblock plug
  - \* European model includes two types of four cords.

## **Firmware Updates**

You can update the unit firmware to improve the operation, add functions, and correct possible malfunctions.

Details on updating the firmware are available on the following Yamaha Pro Audio website:

http://www.yamahaproaudio.com/

For information on updating the firmware, please refer to the firmware update guide available on the website.

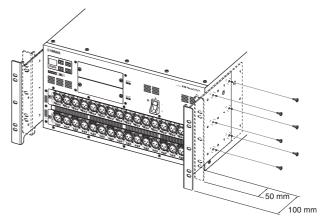
## Precautions for Rack Mounting

This unit is rated for operation at ambient temperatures ranging from 0 to 40 degrees Celsius. If you mount this unit along with other RPio222 unit(s) or other device(s) in an EIA standard equipment rack, temperatures inside the rack may rise, possibly resulting in impaired performance. 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 1U space or more between the RPio222 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 cannot be left open, install a commercially-available fan or similar ventilating option to secure sufficient airflow. If you have 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.

## **Recessed Installation**

If you want to recess the front panel surface of the unit from the front edge of the rack, you can adjust the position of the rack mount brackets to recess the unit by 50 mm or 100 mm, as shown in the illustration below.

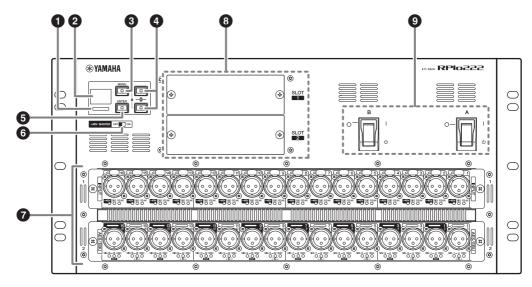


### NOTE

When you install the brackets, use the same screws that you just removed.

## **Part Names & Functions**

## **Front Panel**



This figure illustrates the rack with various RY cards already installed.

## Color Indicator

Indicates the status of the unit.

Red (flashing)	A critical error has occurred.
Yellow (lit steadily)	Indicates a minor issue, but you can continue using the unit.
Green	Normal

Refer to the Message List (page 17) for more information on errors.

## 2 LCD

Indicates the setting parameters for the unit.

## **③** [MENU] key

The following setting parameters are indicated on the LCD:

Unit ID	Specifies the Unit ID for the unit. You must set a unique ID for each device connected to the same I/O network so that they will be identified correctly.  For more information on setting the Unit ID, refer to "Setting the Unit ID" in the RIVAGE PM10 System Setup Guide.
Fan Spd	Specifies the speed of the cooling fans on the unit.  This setting does not affect the speed of the cooling fans on the power supply units.
Brightns	Adjusts the brightness of the LCD.
Contrast	Sets the contrast of the LCD screen.

FaultOut	Specifies the conditions under which an indication of abnormality is sent from the [FAULT OUTPUT] connector.  Red: An indication of abnormality is sent if an error occurs that causes the color indicator to flash red.  Y&R: An indication of abnormality is sent if an error occurs that causes the color indicator to light up yellow steadily or flash red.
F/W Ver.	Indicates the current firmware version number of the unit.
Initialz	Initializes the unit.

## **4** [▲]/[▼] keys

Enable you to select a setting parameter or value.

## **5** [ENTER] key

Confirms the setting parameter or the value.

## 6 [+48V MASTER] switch

This is the master switch for the unit's +48V phantom power supply.

If the [+48V MASTER] switch is off, no phantom power will be supplied to the unit's input connectors even if phantom power to individual channels is turned on.

[+48V MASTER] switch	Channel phantom power	Channel +48V indicator
On	On	Light up steadily
Off		Flash
On	Off	Dark
Off	Oii	Daik

#### **NOTICE**

- Make sure that the master switch for the phantom power is turned OFF unless it is needed.
- If you plan to turn phantom power ON, first make sure that no equipment other than phantom-powered devices are connected to the INPUT connectors. Applying phantom power to a device that does not require phantom power can damage the connected device.
- Do not connect or disconnect a device to an INPUT while phantom power is applied. Doing so can damage the connected device and/or the unit itself.
- To prevent possible damage to speakers, make sure that power amplifiers and/or powered speakers are turned OFF when switching phantom power ON or OFF. We also recommend that you set all output controls on the control surface to minimum when turning phantom power ON or OFF. Otherwise, sudden high level peaks caused by the switching operation can damage equipment as well as the hearing of those present.

## **7** RY card slots 1–2

Enables you to install optional RY cards to configure I/O ports.

The unit supports the following RY cards. (as of July 2016)

- RY16-ML-SILK
- RY16-DA
- RY16-AE

For the latest information, refer to the Yamaha Pro Audio website.

http://www.yamahaproaudio.com/

## Mini-YGDAI SLOT1/SLOT2

Enable you to install optional Mini-YGDAI I/O cards.

## [I]/[७] (Power switch)/ Power indicator

Toggles between power on (I) and off ( $\Phi$ ). When the power unit is turned on, the indicator lights up.

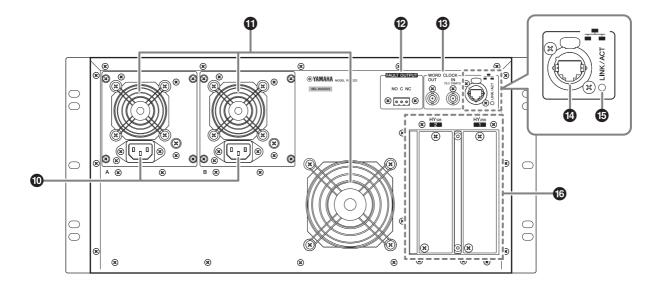
## NOTICE

- Rapidly turning the unit on and off in succession can cause it to malfunction. After turning the unit off, wait for at least 6 seconds before turning it on again.
- 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 both power cords from the AC outlets.

### **NOTE**

To maintain power supply redundancy, turn both power supply units A and B ON or OFF together. If only one power supply unit is ON, the LCD will display an error message and the color indicator will light up yellow.

## **Rear Panel**



## AC IN connectors

Use these sockets to connect the supplied power cords. First connect the AC power cords to this unit, and then insert the power cord plugs into AC outlets. Insert the cord plugs all the way until they lock in place securely. The supplied AC power cords feature a Vlock mechanism via a latch, which prevents the power cords from disconnecting accidentally.

## NOTE

Be sure to connect the power cords to power supply units A and B. In this way, if one of the power supply units malfunctions, the other unit will supply power to continue the operation.

## **A** CAUTION

Be sure to turn off the power to the unit before connecting or disconnecting the power cord.

To disconnect the power cord, remove it while pressing the latch on the plug.



## Vent

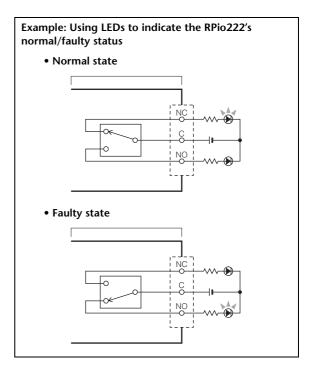
This unit is equipped with cooling fans. These vents let warm air out from the unit. Please make sure that you do not block the vents with any object.

## **1** [FAULT OUTPUT] connectors

This Euroblock connector is used to send an indication of abnormality to the outside of the unit. Connect a lamp or buzzer here. The NC and C terminals will short-circuit if the unit is operating normally. The NO and C terminals will short-circuit if an abnormality is detected.

### NOTE

The NO and C terminals will also short-circuit if you intentionally turn off the power to the unit, just as they will if a problem with power occurs.



## [WORD CLOCK IN/OUT] connectors

These are BNC connectors used to transmit/receive word clock signals to/from an external device. The [WORD CLOCK IN] connector is internally terminated by a 75 ohm resistor. (This feature will be supported by a future update.)

## Metwork connector

This RJ-45 connector enables you to connect an external device via an Ethernet cable (CAT5 or higher).

### NOTE

- Use an STP (Shielded Twisted Pair) cable to prevent electromagnetic interference. Make sure that the metal parts of the plugs are electrically connected to the STP cable's shield by conductive tape or comparable means.
- The use of Ethernet cables with Neutrik etherCON CAT5 compatible RJ-45 plugs is recommended. Standard RJ45 plugs can also be used.
- Cable length can span up to 100 meters between devices. Maximum practical distance may vary depending on the cable used.

## [LINK/ACT] indicator

This indicator flashes or lights up green, depending on the connection status.

## (B) HY card slots 1/2

Enables you to install optional HY cards to expand I/O ports.

HY card slot 1 features 256 ins/outs, and is used for a TWINLANe network card exclusively. HY card slot 2 features 128 ins/outs, and is used for a general-purpose I/O card. This unit supports the following HY cards (as of July 2016):

- HY256-TL (available only for HY card slot 1)
- HY144-D (available only for HY card slot 2)

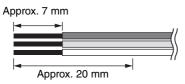
For the latest information, refer to the Yamaha Pro Audio website.

http://www.yamahaproaudio.com/

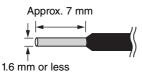
## Installing a Euroblock plug

You must use the supplied Euroblock plug to connect to the [FAULT OUTPUT] connector.

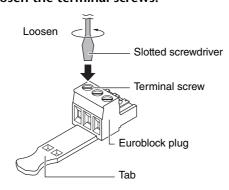
## Preparation (Cable preparation)



- Use strand wires for the Euroblock plug. First, strip the strand wire insulation as shown below. After the strand wires are connected to the Euroblock plug, the wires may break due to metal fatigue caused by the weight of the cable or vibration. For a rack mount, use wire binding bar if possible, to bind the wires together and secure them.
- If you plan to connect or disconnect the plug often, for example in mobile installations, we recommend that you use a rod terminal jack with insulating sleeves. Be sure to use a rod terminal jack that features a conducting part with an outer diameter of 1.6 mm or less, and a length of approx. 7 mm (such as AI0,5-6WH by Phoenix Contact).



## 1. Loosen the terminal screws.



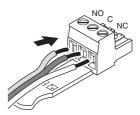
\* The following explanation uses a Euroblock plug that features a tab as an example.

## NOTE

Use a slotted screwdriver of 3 mm or less.



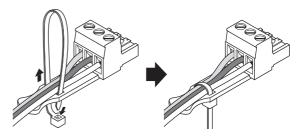
## 2. Insert the cables.



**3.** Securely tighten the terminal screws.

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

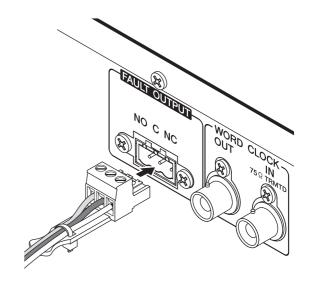
**4.** Affix the cables to the tab using the supplied cable binder.



#### NOTE

After affixing the cables, you can cut off the unnecessary part if you prefer.

**5.** Insert the Euroblock plug into the [FAULT OUTPUT] connector on the rear panel on the unit.



# **Installing and Removing Optional Cards**

## **Installing an RY Card**

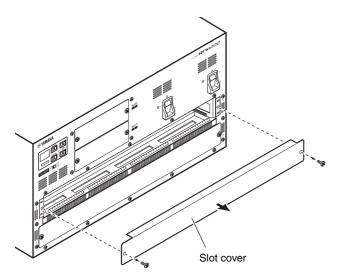
## **1.** Make sure that both power indicators are off.

## **A** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

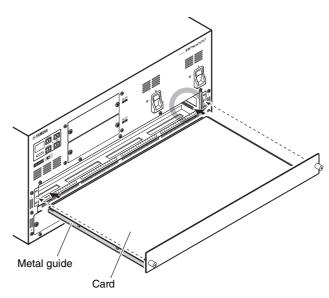
## 2. Remove the screws that fasten the slot cover to remove the slot cover.

Keep the cover and fixing screws in a safe place for future use.



# **3.** Align both edges of the metal guide with the guide rails inside the slot, and then insert the card into the slot.

Push the card all the way into the slot so that the connector at the end of the card is correctly inserted into the connector inside the slot.



## **4.** Fasten the card using the screws attached to the card.

If the card is not fastened securely, component failure or malfunction may occur.

### NOTE

Use a tool, such as a screwdriver, to tighten the screws securely and affix the card.

If the screws are tightened incorrectly or insufficiently, the shielding quality will fall short.

## **Removing the RY Card**

**1.** Make sure that both power indicators are off.

#### **↑** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

- 2. Completely loosen the screws that hold the card in place.
- **3.** Pull the card toward you while holding the screws on the card.
- **4.** Replace the stored slot cover and affix it with the screws.

## **Installing a Mini-YGDAI Card**

Before you install the card, you must check the Yamaha website to see whether the RPio222 supports that card, and to verify the number of other Yamaha cards or third-party cards that can be used in conjunction with this card.

http://www.yamahaproaudio.com/

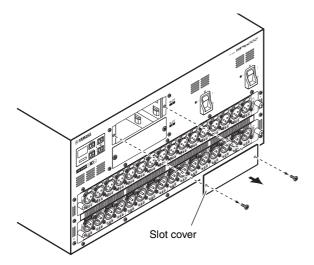
**1.** Make sure that both power indicators are off.

### **⚠** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

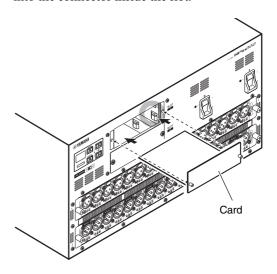
2. Remove the screws that fasten the slot cover to remove the slot cover.

Keep the cover and fixing screws in a safe place for future use.



**3.** Align both edges of the card with the guide rails inside the slot, and then insert the card into the slot.

Push the card all the way into the slot so that the connector at the end of the card is correctly inserted into the connector inside the slot.



**4.** Fasten the card using the screws attached to the card.

If the card is not fastened securely, component failure or malfunction may occur.

# Removing the Mini-YGDAI Card

**1.** Make sure that both power indicators are off.

## **↑** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

- 2. Completely loosen the screws that hold the card in place.
- **3.** Pull the card toward you while holding the screws on the card.
- **4.** Replace the stored slot cover and affix it with the screws.

## **Installing an HY Card**

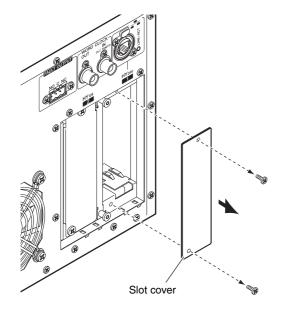
**1.** Make sure that both power indicators are off.

### **⚠** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

2. Remove the screws that fasten the slot cover to remove the slot cover.

Keep the cover and fixing screws in a safe place for future use.

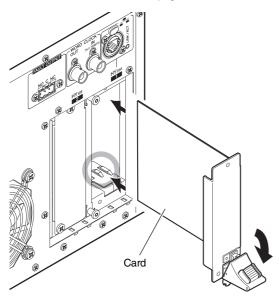


**3.** Align both edges of the HY card with the guide rails inside the slot, and then insert the card into the slot with the card installation lever pressed down.

Push the card all the way into the slot so that the connector at the end of the card is correctly inserted into the connector inside the slot.

## NOTE

For information on which cards support each slot, refer to "Part Names and Functions" on page 11.

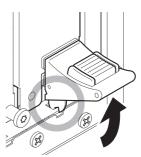


## **4.** Pull up the card installation lever to lock in the card.

Make sure that the lever claw is securely locked under the bottom part of the slot.

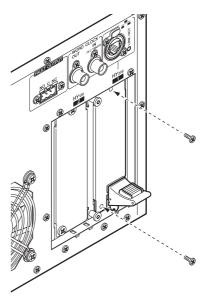
#### NOTE

If the lever claw does not lock in, pull up the card slightly, then push it in.



**5.** Affix the card using the screws that were previously used to affix the slot cover.

If the card is not fastened securely, component failure or malfunction may occur.



## **Removing the HY Card**

**1.** Make sure that both power indicators are off.

## **⚠** CAUTION

Installing or removing a card while the power is on may lead to component failure or electric shock.

- 2. Remove the screws that hold the card in place.
- **3.** Unlock the card by pressing the red button on the card installation lever.
- 4. Press down the card installation lever to pull out the card.
- **5.** Replace the stored slot cover and affix it with the screws.

## **Power Supply**

# Connecting the AC Power Cord

- 1. Turn off both power switches A and B on the unit.
- 2. Connect one of the supplied power cords to AC IN connector (A), and the other to AC IN connector (B).
- **3.** Connect the other end of each power cord to an AC outlet of a different power source.

#### NOTE

- To disconnect the power cords, remove the cables in the order of steps 1→3→2 in the procedure described above.
- To disconnect the power cord, remove it while pressing the latch on the plug.



## **⚠ WARNING**

Use only the supplied AC power cords. Using other cables may lead to overheating or electric shock.

## **⚠** CAUTION

Be sure to turn off the power to the unit before connecting or disconnecting the power cords.

## NOTICE

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, be sure to remove both power cords from the AC outlets.

# Turning the Power On and Off

When you turn on the power to the unit, be sure to turn on the power to the power amplifiers and/or powered speakers <u>last</u> to avoid speaker damage. Before you turn off the power to the unit, first turn off the power to the power amplifiers and/or powered speakers.

### NOTE

To maintain power supply redundancy, turn both power supply units A and B ON or OFF together. If only one power supply unit is ON, the LCD will display an error message and the color indicator will light up yellow.

## **Troubleshooting**

Please visit the Yamaha Pro Audio website for an FAQ list (Frequently Asked Questions).

http://www.yamahaproaudio.com/

## No audio input is present.

- O Make sure that the cables are connected properly.
- O Confirm that the SIG indicator for the input connector on the RY card is lit steadily.
- O If a phantom-powered microphone is connected, make sure that the [+48V MASTER] switch and channel's phantom power are set to on.
- O Confirm that the input port is patched to the proper input channel.
- O If you are using an optional I/O card, make sure that it is installed properly.
- O Make sure that the TWINLANe network card is installed in SLOT 1.

## The input level is too low.

O If a condenser microphone is being connected, make sure that phantom power for the corresponding channel is not turned OFF.

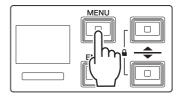
## Indicators or LCD on the front panel are too dark or too bright.

O You can adjust brightness using the setting parameter accessed via the [MENU] key.

# Restoring the Factory Programmed Settings

Follow the steps below to initialize the internal memory of the unit to the factory programmed settings.

 While the unit's power is on, press the [MENU] key on the front panel.



- 2. Use the [▲]/[▼] keys to select "Initialz."
- 3. Press the [ENTER] key.
- **4.** Press and hold the [ENTER] key for two seconds or longer.

Press&Hold [ENTER] to initialize

The internal memory is initialized and the unit

automatically restarts. After the unit restarts, the initialization process is complete.

To cancel the initialization process, press the [MENU],  $[\blacktriangle]$  or  $[\blacktriangledown]$  key, instead of pressing the [ENTER] key.

## **Message List**

An error message for caution or attention will be displayed on the front panel LCD, and will be indicated via the color indicator.

## **Error messages indicating caution**

Repair might be required. Contact your Yamaha dealer.

LCD Messages	Color Indicator Status	Description	
**[ERR R0*] H/W ERROR RY SLOT#	Red (flashing)	A card inserted in the RY card slot is not accessible.	
**[ERR M0*] H/W ERROR MY SLOT#	Red (flashing)	A card inserted in the MY card slot is not accessible.	
**[ERR H0*] H/W ERROR HY SLOT#	Red (flashing)	A card inserted in the HY card slot is not accessible.	
**[ERR T11] TWINLANe T V B OP IP	Red (flashing)	The optical transceiver module is faulty. T: Temperature, V: Voltage, B: Bias current, OP: Output Power, IP: Input Power * Only abnormal items will be displayed. This error may be resolved by the possible solution described below for **[ERR T12].	
**[ERR F01] COOLING FAN ERROR	Red (flashing)	The cooling fans are faulty.	

Double asterisks (\*\*) indicates the Unit ID.

A number mark (#) indicates the slot number affected by the corresponding error.

## Error messages indicating a need for attention

LCD Messages	Color Indicator Status	Description	Possible solution
**[ERR T0*] TWINLANE WRONG LOOP	Red (flashing)	Fiber optic cable is not connected properly. An asterisk mark (*) indicates the error description. T01: Signal is looped back to the unit itself. T02: Input connectors are connected to each other (IN-IN). T03: Output connectors are connected to each other (OUT-OUT).	Check the cable connection.
**[ERR T12] TWINLANe T V B OP IP	Yellow (lit steadily)	Optical input power has dropped. T: Temperature, V: Voltage, B: Bias current, OP: Output Power, IP: Input Power * Only abnormal items will be displayed.	Make sure that the cable is securely inserted.     Use a commercially-available cleaning tool for fiber optics to clean both ends of the cable and the connectors on the card.     Change to a different cable.  If the solutions above do not resolve the issue, have the unit checked by an authorized technician, although the problem will not affect operation of the unit. Please contact your Yamaha dealer.
**[ERR P01] POWER A OFF	Yellow (lit steadily)	Power is not supplied from power supply unit A.	Make sure that the power switch on power supply unit A is turned on, and that the power cord is connected to the unit and power supply unit A.
**[ERR P02] POWER B OFF	Yellow (lit steadily)	Power is not supplied from power supply unit B.	Make sure that the power switch on power supply unit B is turned on, and that the power cord is connected to the unit and power supply unit B.

Double asterisks (\*\*) indicates the Unit ID.

## NOTE

If multiple issues occur at the same time, press the  $[\blacktriangle]$  or  $[\blacktriangledown]$  key to view the corresponding error messages.

## **Specifications**

## **General Specifications**

## **Sampling frequency**

		Conditions	Min.	Тур	Max.	Unit
External Clock	Frequency Range	Fs= 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz	-1000	_	+1000	ppm
	Jitter of PLL*1	WORD CLOCK IN Fs= 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz	_	_	10	ns
Internal clock	Frequency	Word clock: int 44.1 kHz Word clock: int 48 kHz Word clock: int 88.2 kHz Word clock: int 96 kHz	_	44.1 48 88.2 96	_	kHz
	Accuracy	Word clock : int 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz	-50	_	+50	ppm
	Jitter*2	Word clock: int 44.1 kHz Word clock: int 48 kHz Word clock: int 88.2 kHz Word clock: int 96 kHz	_	_	4.5 4.1 2.3 2.1	ns

<sup>\*1.</sup> Input clock jitter must be 1ns or less.

## Power requirements

	Conditions	Min.	Тур	Max.	Unit
Power consumption	100–240V 50/60 Hz	_	_	115	W
Heating value	100–240V 50/60 Hz	_	_	99	kcal/h

## Power cord length and temperature range

	Conditions	Min.	Тур	Max.	Unit
Power cord length		_	250	_	cm
Temperature range	Operating temperature range	0	_	40	°C
	Storage temperature range	-20	_	60	°C

## Control I/O standards

Terminals		Format	Level	Connectors
WORD CLOCK	IN		TTL/75 $\Omega$ terminated	BNC
WORD CLOCK	NORD CLOCK — TTL/75Ω		BNC	
NETWORK		IEEE802.3	10BASE-T/100BASE-TX	etherCON CAT5*1
	NO	_	< DC30V, < 1A	
FAULT OUTPUT	ULT OUTPUT C <sup>*2</sup> — —		_	Euro Block Connector 3P
	NC	_	< DC30V, < 1A	

<sup>\*1.</sup> STP cables (CAT5 or higher) are recommended for connection.

<sup>\*2.</sup> Measured at the [WORD CLOCK OUT] connector.

<sup>\*2.</sup> The C terminal normally short-circuits with the NC terminal, but it short-circuits with the NO terminal in the event that a fault is detected.

<sup>\*</sup> The contents of this manual apply to the latest specifications as of the publishing date. To obtain the latest manual, access the Yamaha website then download the manual file.

## Dimensions (WxHxD), weight

480 mm x 232 mm x 491 mm (including the rubber feet), 19 kg (unit only)

## **Accessories**

Owner's Manual (this document), AC power cords (x2)\*, Euroblock plug (three-pin)

\* European model includes two types of four cords.

## **Optional items**

RY card, HY card, Mini-YGDAI card

## EIA rack mount size

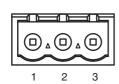
5U

## **NC** value

Low mode: NC=15 / High mode: NC=20 Measuring position: 100cm away from the unit's front panel

## **Pin Assignment Table**

## **FAULT OUTPUT**



Pin No.	Signal
1	NO (Normally Open)
2	C (Common)
3	NC (Normally Closed)

Relay Contact

## 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 and the Directives 2002/96/EC.

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]

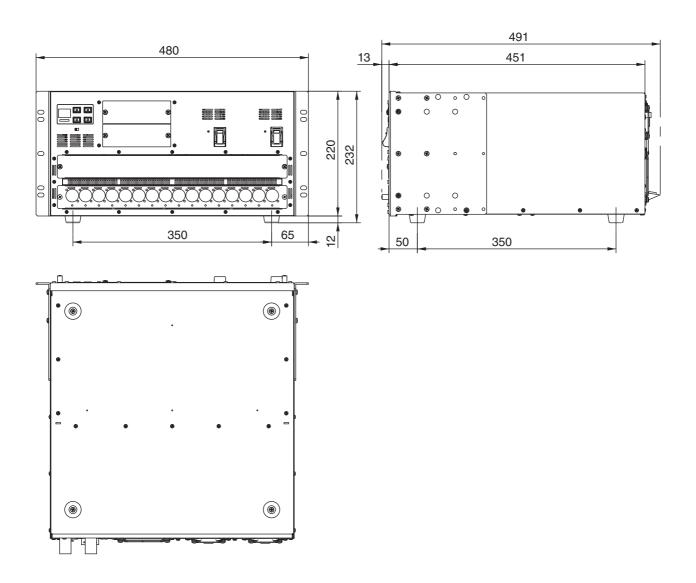
This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

(weee\_eu\_en\_01)

European Models

Purchaser/User Information specified in EN55103-2:2009. Conforms to Environments: E1, E2, E3 and E4

## **Dimensions**



Unit: mm

Approximate Munsell value of exterior color: N5

## **Software Licenses and Copyrights**

This product incorporates the following third party software.

For information (copyright, etc.) about each software, please read the terms and conditions stated below.

By using this product, you will be deemed to have accepted the terms and conditions.

## expat

Copyright (c) 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper

Copyright (c) 2001, 2002, 2003 Expat maintainers.

## SimpleFileWatcher

-- SimpleFileWatcher License --

The MIT License

Copyright (c) 2009 James Wynn (james@jameswynn.com)

## expat, SimpleFileWatcher

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

## uIP

Copyright (c) 2001-2003, Adam Dunkels.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- 3. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. This file is part of the uIP TCP/IP stack.

## Index

В	
	Brightns (Brightness)8
C	
	Card
	Installing
	HY card15
	MY card14
	RY card
	Installing/Removing
	Removing HY card15
	MY card 14
	RY card14
	Connecting the AC power cord
	Contrast
	Contrast
F	
	Error Messages
F	
	F/W Ver. (Firmware Version)8
	Fan Spd (Fan Speed)8
	FAULT OUTPUT10
	FaultOut (Fault Output)8
	Firmware Updates
	r
Н	
••	1777 1
	HY card
	Installing
	Removing15
ı	
	Initialization16
	Initialz (Initialize)8
	Installing a Euroblock plug12
L	
	Lock mechanism of power cord10
	Lock internation of power cord
М	1
IV	•
	MY card
	Installing14
	Removing14

0	
	Optional card
	Installing/Removing13
_	
_	Phantom power 8
	1 mancom power management
R	
	Rack Mounting
	Recess
	RY card
	Installing13
	Removing14
S	
	Settings
	Brightns (Brightness)8
	Contrast8
	F/W Ver. (Firmware Version) 8
	Fan Spd (Fan Speed)8
	FaultOut (Fault Output) 8
	Initialz (Initialize)8
	Unit ID8
Т	
_	Turning the Power On and Off16
.,	
J	Unit ID
	Undate 7

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

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

English

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

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

Deutsch

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

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

Français

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

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

Nederlands

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

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

Español

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

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

Italiano

Português

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

## 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

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

Ελληνικά

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

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

Svenska

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

#### Viktig merknad: Garantiinformasjon for kunder i EØS\* og Sveits

Norsk

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 Yamaha-kontoret i landet der du bor. \*EØS: Det europeiske økonomiske samarbeidsområdet

#### Vigtig oplysning: Garantioplysninger til kunder i EØO\* og Schweiz

Dansk

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

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

Suomi

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

## Ważne: Warunki gwarancyjne obowiązujące w EOG\* i Szwajcarii

Polski

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

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

Čocky

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

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

Magyar

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

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

Eesti keel

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

## Svarīgs paziņojums: garantijas informācija klientiem EEZ\* un Šveicē

Latviesu

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

## Dėmesio: informacija dėl garantijos pirkėjams EEE\* ir Šveicarijoje

Lietuvių kalba

Slovenčina

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

## 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 obrátte na zástupcu spoločnosti Yamaha vo svojej krajine. \* EHP: Európsky hospodársky priestor

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

Slovenščina

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

## 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

## Notificare importantă: Informații despre garanție pentru clienții din SEE\* și Elveția

Limba română

Български език

Pentru informații detaliate privind acest produs Yamaha și serviciul de garanție Pan-SEE\* și Elveția, vizitați site-ul la adresa de mai jos (fișierul imprimabil este disponibil pe site-ul nostru) sau contactați biroul reprezentanței Yamaha din țara dumneavoastră . \* SEE: Spațiul Economic European

### NORTH AMERICA

#### CANADA

Yamaha Canada Music Ltd.

135 Milner Avenue, Toronto, Ontario, M1S 3R1, Canada Tel: +1-416-298-1311

Yamaha Corporation of America

6600 Orangethorpe Avenue, Buena Park, CA 90620, 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

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 Tel: +54-11-4119-7000

#### VENEZUELA

Yamaha Musical de Venezuela, C.A. AV. Manzanares, C.C. Manzanares Plaza, Piso 4, Oficina 0401, Baruta, Caracas, Venezuela Tel: +58-212-943-1877

#### PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ **CARIBBEAN COUNTRIES**

Yamaha Music Latin America, S.A.

Edif. Torre Banco General, Piso 7, Urbanización Marbella, Calle 47 y Aquilino de la Guardia, Ciudad de Panamá, República de Panamá Tel: +507-269-5311

## **EUROPE**

## THE UNITED KINGDOM/IRELAND

Yamaha Music Europe GmbH (UK)

Sherbourne Drive, Tilbrook, Milton Keynes, MK7 8BL, U.K

Tel: +44-1908-366700

## GERMANY

Yamaha Music Europe GmbH

Siemensstrasse 22-34, 25462 Rellingen, Germany Tel: +49-4101-303-0

## SWITZERLAND/LIECHTENSTEIN

Yamaha Music Europe GmbH, Rellingen, Branch Switzerland in Zürich

Seefeldstrasse 94, 8008 Zürich, Switzerland

Tel: +41-44-3878080

## AUSTRIA/BULGARIA

Yamaha Music Europe GmbH Branch Austria Schleiergasse 20, 1100 Wien, Austria Tel: +43-1-60203900

## CZECH REPUBLIC/HUNGARY/ ROMANIA/SLOVAKIA/SLOVENIA

Yamaha Music Europe GmbH **Branch Austria** 

Schleiergasse 20, 1100 Wien, Austria Tel: +43-1-60203900

## POLAND/LITHUANIA/LATVIA/ESTONIA

Yamaha Music Europe GmbH Sp.z o.o. Oddzial w Polsce ul. Wrotkowa 14, 02-553 Warsaw, Poland

Tel: +48-22-880-08-88

#### **MALTA**

Olimpus Music Ltd.

Valletta Road, Mosta MST9010, Malta

Tel: +356-2133-2093

#### NETHERLANDS/BELGIUM/ LUXEMBOURG

Yamaha Music Europe Branch Benelux

Clarissenhof 5b, 4133 AB Vianen, The Netherlands Tel: +31-347-358040

#### FRANCE

Yamaha Music Europe

7 rue Ambroise Croizat, Zone d'activités de Pariest, 77183 Croissy-Beaubourg, France Tel: +33-1-6461-4000

#### ITALY

Yamaha Music Europe GmbH, Branch Italy

Viale Italia 88, 20020, Lainate (Milano), Italy Tel: +39-02-93577-1

### SPAIN/PORTUGAL

Yamaha Music Europe GmbH Ibérica, Sucursal en España

Ctra. de la Coruna km. 17,200, 28231 Las Rozas de Madrid, Spain Tel: +34-91-639-88-88

#### GREECE

Philippos Nakas S.A. The Music House 19th klm. Leof. Lavriou 190 02 Peania – Attiki, Greece

Tel: +30-210-6686168

## SWEDEN/FINLAND/ICELAND

Yamaha Music Europe GmbH Germany filial Scandinavia

JA Wettergrensgata 1, 400 43 Göteborg, Sweden Tel: +46-31-89-34-00

Yamaha Music Denmark,

Fillial of Yamaha Music Europe GmbH, Tyskland Generatorvej 8C, ST. TH., 2860 Søborg, Denmark Tel: +45-44-92-49-00

#### NORWAY

Yamaha Music Europe GmbH Germany -Norwegian Branch

Grini Næringspark 1, 1332 Østerås, Norway Tel: +47-6716-7800

## RUSSIA

Yamaha Music (Russia) LLC.

Room 37, entrance 7, bld. 7, Kievskaya street, Moscow, 121059, Russia Tel: +7-495-626-5005

## OTHER EUROPEAN COUNTRIES

Yamaha Music Europe GmbH

Siemensstrasse 22-34, 25462 Rellingen, Germany Tel: +49-4101-3030

## **AFRICA**

Yamaha Music Gulf FZE

JAFZA-16, Office 512, P.O.Box 17328, Jebel Ali FZE, Dubai, UAE Tel: +971-4-801-1500

## MIDDLE EAST

## TURKEY

Yamaha Music Europe GmbH

Merkezi Almanya Türkiye İstanbul Şubesi Maslak Meydan Sodak, Spring Giz Plaza Bagimsiz Böl. No:3, Sariyer Istanbul, Turkey

Tel: +90-212-999-8010

## **CYPRUS**

Yamaha Music Europe GmbH

Siemensstrasse 22-34, 25462 Rellingen, Germany Tel: +49-4101-303-0

## OTHER COUNTRIES

Yamaha Music Gulf FZE

JAFZA-16, Office 512, P.O.Box 17328, Jebel Ali FZE, Dubai, UAE Tel: +971-4-801-1500

#### ASIA

#### THE PEOPLE'S REPUBLIC OF CHINA

Yamaha Music & Electronics (China) Co.,Ltd.

2F, Yunhedasha, 1818 Xinzha-lu, Jingan-qu, Shanghai, China

Tel: +86-400-051-7700

#### INDIA

Yamaha Music India Private Limited

Spazedge Building, Ground Floor, Tower A, Sector-47, Gurgaon-Sohna Road, Gurgaon-122002, Harvana, India

Tel: +91-124-485-3300

## INDONESIA

PT. Yamaha Musik Indonesia (Distributor)

Yamaha Music Center Bldg. Jalan Jend. Gatot Subroto Kav. 4, Jakarta 12930, Indonesia Tel: +62-21-520-2577

#### KOREA

Yamaha Music Korea Ltd. 8F, Dongsung Bldg. 21, Teheran-ro 87-gil, Gangnam-gu, Seoul, 135-880, Korea Tel: +82-2-3467-3300

#### MALAYSIA

Yamaha Music (Malaysia) Sdn. Bhd.

No.8, Jalan Perbandaran, Kelana Jaya, 47301 Petaling Jaya, Selangor, Malaysia Tel: +60-3-78030900

#### SINGAPORE

Yamaha Music (Asia) Private Limited

Block 202 Hougang Street 21, #02-00, Singapore 530202, Singapore Tel: +65-6740-9200

#### TAIWAN

Yamaha Music & Electronics Taiwan Co.,Ltd.

2F., No.1, Yuandong Rd. Banqiao Dist. New Taipei City 22063, Taiwan, R.O.C. Tel: +886-2-7741-8888

#### THAILAND

Siam Music Yamaha Co., Ltd.

3, 4, 15, 16th Fl., Siam Motors Building, 891/1 Rama 1 Road, Wangmai, Pathumwan, Bangkok 10330, Thailand Tel: +66-2215-2622

## VIETNAM

Yamaha Music Vietnam Company Limited

15th Floor, Nam A Bank Tower, 201-203 Cach Mang Thang Tam St., Ward 4, Dist.3, Ho Chi Minh City, Vietnam Tel: +84-8-3818-1122

## OTHER ASIAN COUNTRIES

Yamaha Corporation

Sales & Marketing Division 10-1, Nakazawa-cho, Naka-ku, Hamamatsu,

Japan 430-8650

Tel: +81-53-460-2312

## **OCEANIA**

## **AUSTRALIA**

Yamaha Music Australia Pty. Ltd.

Level 1, 99 Queensbridge Street, Southbank, VIC 3006, Australia Tel: +61-3-9693-5111

## COUNTRIES AND TRUST TERRITORIES IN PACIFIC OCEAN

Yamaha Corporation

Sales & Marketing Division

10-1, Nakazawa-cho, Naka-ku, Hamamatsu, Japan 430-8650 Tel: +81-53-460-2312

> Yamaha Pro Audio global website http://www.yamahaproaudio.com/

Yamaha Downloads http://download.yamaha.com/

> Manual Development Group © 2016 Yamaha Corporation

PA42