

POWER SUPPLY PW8

Owner's Manual



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: POWER SUPPLY

Model Name: PW8

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 is suspected.

(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:

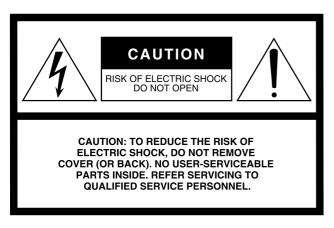
The wire which is coloured GREEN-and-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the safety earth symbol $\textcircled{\oplus}$ or colored GREEN or GREEN-and-YELLOW.

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.

^{*} This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

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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)

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

- 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 included 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
- Be sure to connect to an appropriate outlet with a protective grounding connection. Improper grounding can result in electrical shock.

Do not open

 Do not open the device or attempt to disassemble the internal parts or modify them in any way. The device contains no user-serviceable parts. 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 containers on it 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.

If you notice any abnormality

- If the power cord or plug becomes frayed or damaged, or if there is a sudden
 loss of sound during use of the device, or if any unusual smells or smoke
 should appear to be caused by it, immediately turn off the power switch,
 disconnect the electric plug from the outlet, and have the device inspected 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.



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

- Remove the electric plug from the outlet when the device is not to be used for extended periods of time, or during electrical storms.
- 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.

Location

- · 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 this device is to be mounted in an EIA-standard rack, leave the back of the rack open and make sure that it is at least 10 cm away from walls or surfaces to provide better airflow.
 - In such a situation, these devices can be stacked on top of each other if necessary. Also, if this device is to be mounted with devices that tend to generate heat, such as power amplifiers made by another manufacturer, be sure to keep an adequate gap between this device and the heat-generating devices, or install ventilation panels or forced ventilation fans to prevent high temperatures from developing inside this device.

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 behind and 10 cm above. Inadequate ventilation can
 result in overheating, possibly causing damage to the device(s), or even fire.
- Do not expose the device to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- 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 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 the vicinity of a TV, radio, stereo equipment, mobile
 phone, or other electric devices. Doing so may result in noise, both in the device
 itself and in the TV or radio next to it.

Connections

 Be sure to turn the POWER switch off before connecting the PW8 to the device to be powered. Connecting the PW8 to the device to be powered while the POWER switch is on can damage the device.

Handling caution

- When turning on the AC power in your audio system, always turn on the power amplifier LAST, to avoid speaker damage. When turning the power off, the power amplifier should be turned off FIRST for the same reason.
- Do not insert your fingers or hands in any gaps or openings on the device (vents, ports, etc.).
- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into any
 gaps or openings on the device (vents, ports, etc.) 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.

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.

Do not turn the POWER switch on and off repeatedly and rapidly. Be sure to wait 10 seconds or more between turning the power to the unit off and then on.

The performance of components with moving contacts, such as switches, and connectors, deteriorates over time. Consult qualified Yamaha service personnel about replacing defective components.

Specifications and descriptions in this owner's manual are for information purposes only.

Yamaha Corp. reserves the right to change or modify products of specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

European models

Purchaser/User Information specified in EN55103-1 and EN55103-2.

Inrush Current: 70 A

Conforms to Environments: E1, E2, E3, E4

The PW8 has been specifically designed for use with Yamaha professional equipment. Refer to the owner's manual supplied with your mixer to determine if it is compatible with the PW8.

Use the cable supplied with the mixer to be connected to connect the PW8 to your mixer.

When parallel-connecting two PW8 units, use the optional PSL1010 Power Supply Link Cable to connect the second PW8 to the main PW8 unit.

Thank you for your purchase of the Yamaha Power Supply PW8. The PW8 has been specifically designed for use with Yamaha professional audio equipment.

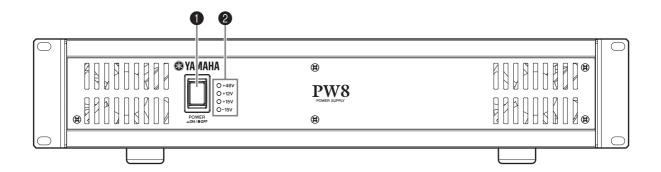
Please read through this manual carefully before beginning use, so that you will be able to take full advantage of the features it provides and enjoy trouble-free operation for years to come.

Accessories

- Power cord
- Owner's manual (this book)

Controls and Functions

Front panel



POWER Switch

The PW8 supplies power to the connected mixer when this switch is on.

PW8 Power-on Procedure

- 1 Make sure that the PW8 power switch is OFF.
- **2** Connect the PW8 to the mixer to be powered using the cable supplied with the mixer.
- **3** Plug the PW8 power cord into an appropriate AC outlet.
- Turn the POWER switch ON.



/ Be sure to turn the POWER switch OFF before connecting the PW8 to the mixer to be powered. Connecting the power supply to the mixer to be powered while the POWER switch is ON can damage the mixer.

NOTE

The power to the PW8 will not be turned on unless the PW8 is connected to the mixer using the power supply cable included in the mixer.

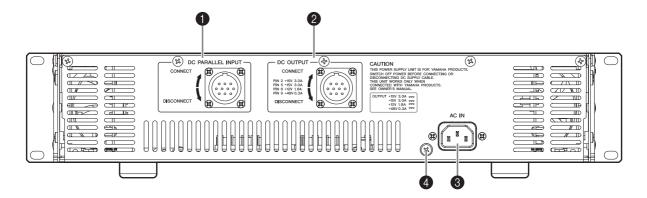
Operation Monitor (+48V, +12V, +15V, -15V)

Displays the status of the four independent power supply lines to the mixer. Normally (i.e., when no malfunction has occurred), the green LEDs light. If a malfunction occurs, the corresponding LED turns off. If this happens, turn the POWER switch OFF, and contact your Yamaha dealer or maintenance personnel.



Never obstruct the cooling vents located on the front and rear panels of the PW8.

Rear Panel



1 DC PARALLEL INPUT Connector

This connector is used to connect two PW8 units in parallel. Two PW8s can be connected in this way to supply power from the two PW8 to the connected mixer in normal operation. In the event that one unit shuts down, the other unit will supply 100% of the power, ensuring an uninterrupted power supply. Use only the optional PSL1010 Power Supply Link Cable for this connection. Rotate the connector ring to the right to connect, or to the left to disconnect.

2 DC OUTPUT Connector

This connector supplies power from the PW8 to the connected mixer. Always use the cable included in the mixer to be connected to connect the PW8 to your mixer.

When using parallel-connected PW8 units, this connector connects to the DC PARALLEL INPUT connector on the main PW8 unit. Use only the optional PSL1010 Power Supply Link Cable to connect two PW8 units in parallel. Rotate the connector ring to the right to connect, or to the left to disconnect.

3 AC IN Connector

Connects the included power cord here. First, connect the power cord to the PW8, then insert the power cord plug into the AC outlet.

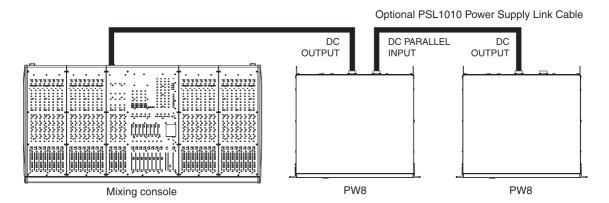


Be sure to use the included power cord. Use of other cords may result in malfunction, heat generation, or fire.

4 Ground Screw Terminal

For maximum safety be sure to securely attach a confirmed ground line to this terminal. The included power cord has a three-pin plug, so the unit will be properly grounded if the AC outlet used is grounded. If the AC outlet is not grounded be sure to properly connect the GROUND terminal. Proper grounding not only ensures safety, but it also guarantees minimum noise from hum and interference.

■ Parallel-connected PW8 Power Supplies

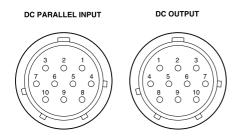


Specifications

■ General Specifications

Secondary Voltage	+15V	Green LED: On (+15 V), Off (less than +10 V or more than +21 V)
	-15V	Green LED: On (-15 V), Off (less than -21 V or more than -10 V)
	+12V	Green LED: On (+12 V), Off (less than +7.6 V or more than +18 V)
	+48V (Phantom Voltage)	Green LED: On (+48 V), Off (less than +32 V)
Power Consumption		265 W (IM8-40), 230 W (IM8-32), 200 W (IM8-24)
Dimensions		Height: 100.5 mm, Depth: 412 mm, Width: 480 mm
Net Weight		11 kg

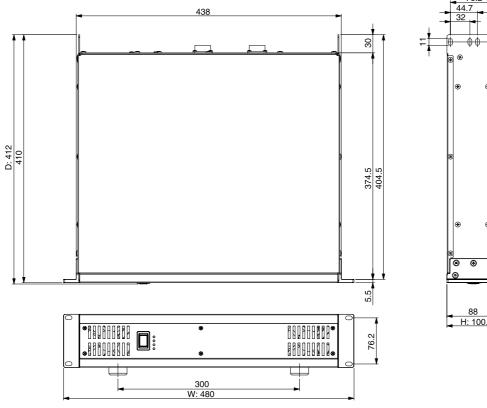
■ Power Connector Pin Diagram

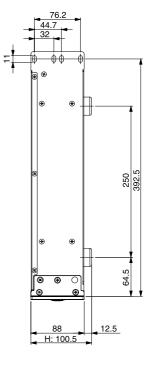


■ Power Supply Cable Pin Assignments

No.	Function	
1	Power supply remote	
2	+15 V	
3	±15 V GND	
4	+48 V GND	
5	-15 V	
6	+12 V	
7	+12 V GND/power supply remote	
8	Power supply remote	
9	+48 V	
10	FRAME GND	

Dimensions





Units: mm

NORTH AMERICA

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Yamaha Manual Library http://www.yamaha.co.jp/manual/english/