

# CUBE-30 BASS

## Owner's Manual

Thank you, and congratulations on your choice of the Roland CUBE-30 BASS Bass Amplifier.

Before using this unit, carefully read the sections entitled:

- IMPORTANT SAFETY INSTRUCTIONS (p. 2)
- USING THE UNIT SAFELY (p. 3–4)
- IMPORTANT NOTES (p. 4)

These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

This unit is equipped with a protection circuit.

The protection circuit helps ensure safety by operating when excessive input continues for a long time while the device is at a location with a high ambient temperature. Sound drop-out may occur when the protection circuit is actuated during use.

Please read through the documentation carefully to ensure correct use.

### Main Features



- Adopting Roland's original FFP technology, this highly functional DSP bass amp features 30-watt sound output through a 25 cm (10-inch) coaxial 2-way wide-range speaker.
- The amp is equipped with a total of seven COSM amp model types, including six of the most popular bass amps along with an original amp sound that mixes in doubled bass sounds an octave below those being played.
- In addition to an easy-to-use "3-band equalizer," this amp features a "Shape" function for even greater flexibility in creating sounds and rich sound variation.
- The amp is equipped with a total of three bass effect systems, including "COMPRESSION," an "EFX" system with CHORUS, FLANGER, and T-WAH, and basic "DELAY/REVERB".
- Equipped with RECORDING OUT jack convenient for use in recording and for use as headphone out.
- Auxiliary input jack allows you to connect a CD player or other backing device.

**FFP (Feed Forward Processing)** is system control technology that optimizes the performance of the amp, speakers, and cabinet characteristics according to the signals being input, based on the results of analyses of the operation and behavior of each section of existing amp systems.

**COSM (Composite Object Sound Modeling)** is Roland's innovative and powerful sound modeling technology. COSM analyzes the many factors that make up the original sound, such as the electrical and physical characteristics of the original, and then produces a digital model that can reproduce the same sound.

\* All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

 <b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	
<b>ATTENTION:</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	
<b>CAUTION:</b> 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 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.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

## IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

**WARNING** - When using electric products, basic precautions should always be followed, including the following:


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 a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers 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. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. 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.

For the U.K.

**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 coloured 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.

# USING THE UNIT SAFELY

## INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

### About ⚠ WARNING and ⚠ CAUTION Notices

<b>⚠ WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b>⚠ CAUTION</b>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

### About the Symbols

	The ⚠ symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⓧ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ⚡ symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

### ALWAYS OBSERVE THE FOLLOWING

#### ⚠ WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.
- Connect mains plug of this model to a mains socket outlet with a protective earthing connection.
- Do not open or perform any internal modifications on the unit.
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.
- The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the rear side of unit.
- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!
- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.





#### ⚠ WARNING

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.
- Immediately turn the power off, remove the power cord from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.
- Protect the unit from strong impact. (Do not drop it!)
- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.
- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Do not put anything that contains water (e.g., flower vases) on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

#### ⚠ CAUTION

- The unit should be located so that its location or position does not interfere with its proper ventilation.

## ⚠ CAUTION

- Always grasp only the plug on the power-supply cord when plugging into, or unplugging from an outlet. 
- At regular intervals, you should unplug the power plug and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the unit. 

## IMPORTANT NOTES

In addition to the items listed under “IMPORTANT SAFETY INSTRUCTIONS” and “USING THE UNIT SAFELY” on pages 2, 3 and 4, please read and observe the following:






### Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- Although the LEDs are switched off when the POWER switch is switched off, this does not mean that the unit has been completely disconnected from the source of power. If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. For this reason, the outlet into which you choose to connect the power cord’s plug should be one that is within easy reach and readily accessible.

### Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.

## ⚠ CAUTION

- Never handle the power cord or its plug with wet hands when plugging into, or unplugging from, an outlet. 
- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices. 
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet. 
- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet. 
- Do not remove the speaker grille and speaker by any means. Speaker not user replaceable. Shock hazardous voltages and currents are present inside the enclosure. 

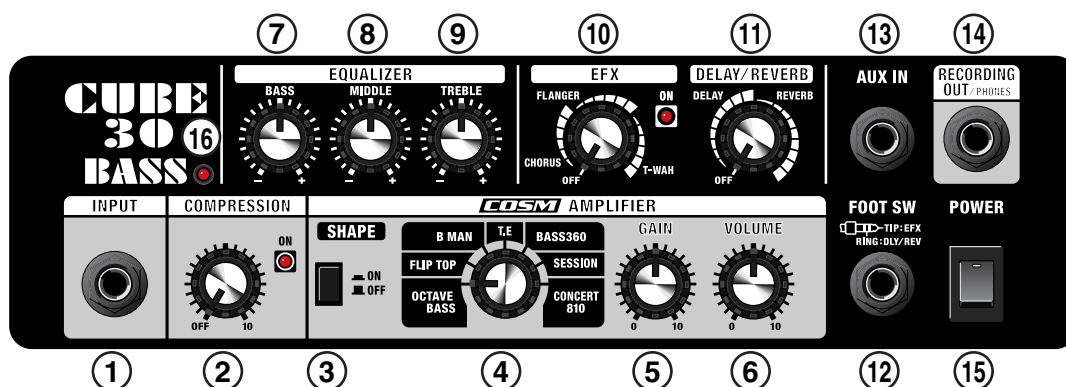
### Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

### Additional Precautions

- Use a reasonable amount of care when using the unit’s buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable’s internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit’s volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
- When connection cables with resistors are used, the volume level of equipment connected to the inputs (INPUT, AUX IN jacks) may be low. If this happens, use connection cables that do not contain resistors.
- Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.  
**When powering up:**
  - Turn on the power to the CUBE-30 BASS **last**.**When powering down:**
  - Turn off the power to the CUBE-30 BASS **first**.
- Wrap the AC cord around the cord hook when trans-portioning or storing the unit.

# Panel Descriptions



## 1. INPUT Jack

Connect your bass here.

## 2. COMPRESSION Knob

This is an effect that compresses overly high signals while boosting lower-level input.

Turning the knob to the right increases the compression effect.

When compression is on, the ON indicator lights up; the indicator is unlit when the effect is turned off.

## COSM AMPLIFIER

### 3. SHAPE Switch

This effect alters the COSM amps' tonal qualities. The particular effect obtained varies according to the amp selected with the Type switch (4).

### 4. Type Switch

You can select from the following seven amp types:

#### OCTAVE BASS

This original amp type creates sounds one octave below the input sounds and layers them together to create a fatter bass sound.

**SHAPE** Offers more edge in the octave sound.

\* This function may not work properly when inputting chords; for example, sounds may not play, or they may be played at incorrect pitches. Always input a single note.

#### FLIP TOP

Models the Ampeg B-15 (1 x 15"). This amp provided the underpinning for many of the most famous Motown hits. It features a fat sound, while the amp's compact cabinet produces a distinct contour.

**SHAPE** Offers more nuances of your picking expression.

#### B MAN

Models the Fender Bassman 100 (4 x 12").

This amp has been a favorite since the inception of electric basses. It features the sonic characteristics of tube amps, whereby increasing the distortion slightly yields a fatter sound.

**SHAPE** Offers a tone with boosted midrange "fatness."

#### T.E

Models the Trace Elliot AH600SMX + 1048 (4 x 10") + 1518 (1 x 15"). This amp was used widely by rock bands in the 1980s. Its wide range, clear attack, and other features make it a great amp for all kinds of performance situations.

**SHAPE** Offers more attack.

#### BASS360

Models the acoustic 360 (1 x 18").

This amp was used in the '70s not only by jazz bassists, but by funk and hard rock players as well. The tone features a warm low end with a midrange that maintains a clear contour, even with finger picking.

**SHAPE** Offers more nuances of your picking expression.

#### SESSION

Models the SWR SM-400 + Goliath (4 x 10") + Big Ben (1 x 18"). This tweeter-equipped amp is representative of the "L.A. Sound" of the eighties. It features a wide-range tone that balances presence in the low end with a clear, open sound.

**SHAPE** Offers a tight tone with a cut midrange.

#### CONCERT 810

Models the Ampeg SVT + 810E (8 x 10").

This amp typifies the rock sound that relied heavily on combinations of high-output tube amp sections and large-sized cabinets.

The characteristic sound is one of overwhelming low-frequency sound pressure.

**SHAPE** Offers extra heavy bottom sound.

\* All product names mentioned in this document are trademarks or registered trademarks of their respective owners, and are not related to Roland Corporation.

In this manual, these names are used as appropriate ways to indicate sounds that are simulated using COSM technology.

## 5. GAIN Knob

This adjusts the preamp section's input level.

Turning the knob to the right increases the gain.

**HINT**

Using a high gain setting allows you to get an overdrive sound.

**HINT**

Set the knob to as high a value as possible before the sound distorts to get the best signal-to-noise ratio.

## 6. VOLUME Knob

Adjusts the overall volume.

## EQUALIZER

### 7. BASS Knob

Adjusts the tone quality of the lower range.

### 8. MIDDLE Knob

Adjusts the tone quality of the midrange.

### 9. TREBLE Knob

Adjusts the tone quality of the upper range.

### 10. EFX (Effects) Knob

Turn this knob to chorus, flanger, or T-wah to select the corresponding effect. Turn the knob to adjust the amount of effect applied.

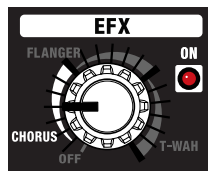
The ON indicator lights up when EFX is turned on, and goes out when EFX is turned off. You can also turn EFX on and off using an optional foot switch (the BOSS FS-5U).

\* Graduations for CHORUS, FLANGER and T-WAH on a panel are for reference. Be sure to check the sound as you adjust the effects.

#### CHORUS

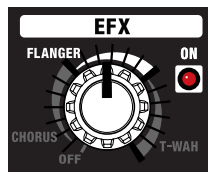
In this effect, a slightly detuned sound is added to the original sound, giving the sound greater breadth and fullness.

Turning the knob to the right increases the rate and deepens the chorus effect.



#### FLANGER

This creates a flanging effect that creates a sort of spinning sensation with the sound. Turning the knob to the right increases the rate and deepens the flanging effect.



#### T-WAH

The frequency response of the filter changes according to the input level, producing unique changes in the timbre. Turning the knob to the right increases the sensitivity to the input level.

Adjust this to obtain the optimal effect, which is matched with the output level of your bass.



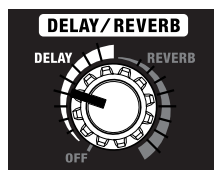
### 11. DELAY/REVERB Knob

Turn this knob to DELAY or REVERB to switch to that effect. Turn the knob to adjust the amount of effect applied.

\* Graduations for DELAY, REVERB on a panel are for reference. Be sure to check the sound as you adjust the effects.

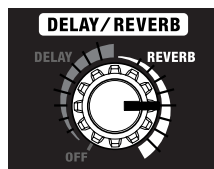
#### DELAY

Turn the knob to change the delay time.



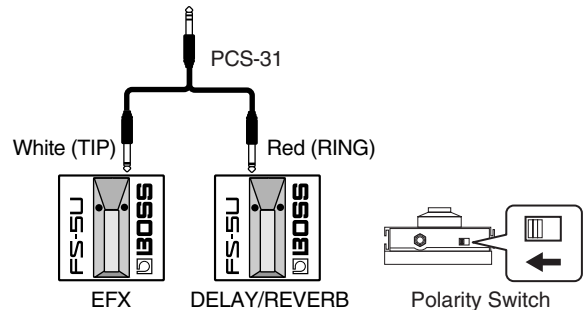
#### REVERB

Turn the knob to adjust the reverb level.



### 12. FOOT SW (Foot Switch) Jack

You can use foot switches (the optional BOSS FS-5U) connected using a connection cable (the optional PCS-31) to turn EFX on and off, and to turn DELAY/REVERB on and off.



\* When you connect only one foot switch by mono cable, you can only use it to turn EFX on and off.

### 13. AUX IN Jack

You can connect a CD player or other kind of device and have it play along with your bass.

This accepts a 1/4" stereo phone plug. However, the speaker and RECORDING OUT/PHONES output is monaural.

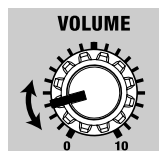
\* Determine the volume level by adjusting the volume control of the connected device.

### 14. RECORDING OUT/PHONES Jack

#### When Using This as RECORDING OUT

Use mono 1/4" phone plugs when connecting to this jack.

The RECORDING OUT volume level can be set easily by turning the VOLUME knob to a position within the range shown in the figure.



#### When Using This as PHONES

Connect headphones to this jack.

\* No sound is played through the unit's speaker while the RECORDING OUT/PHONES jack is in use.

### 15. POWER Switch

Turns the power on and off.

- Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.
- This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.
- Always make sure to have the volume level turned down before switching on power. Even with the volume all the way down, you may still hear some sound when the power is switched on, but this is normal, and does not indicate a malfunction.
- If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. Refer to **Power Supply** (p. 4).

### 16. Power Indicator

This indicator lights when the unit is turned on.

# Main Specifications

## Rated Power Output

30 W

## Nominal Input Level (1kHz)

INPUT: -20 dBu

AUX IN: -10 dBu

## Speaker

25 cm (10 inches) + Tweeter (Coaxial, 2-way)

## Controls

POWER Switch

<COMPRESSION>

COMPRESSION Knob

<COSM AMPLIFIER>

SHAPE Switch

TYPE Knob (OCTAVE BASS, FLIP TOP, B MAN, T.E, BASS 360,

SESSION, CONCERT 810)

GAIN Knob

VOLUME Knob

<EQUALIZER>

BASS Knob

MIDDLE Knob

TREBLE Knob

<EFX>

EFX Knob (CHORUS, FLANGER, T-WAH)

<DELAY/REVERB>

DELAY/REVERB Knob

## Indicators

Power

COMPRESSION

EFX

## Connectors

INPUT Jack (1/4 inch phone type)

AUX IN Jack (1/4 inch TRS phone type)

RECORDING OUT/PHONES Jack (STEREO 1/4 inch phone type)

FOOT Switch Jack (EFX, DELAY/REVERB) (1/4 inch TRS phone type)

## Power Supply

AC 117 V, 230 V or 240 V

## Power Consumption

34 W

## Dimension

380 (W) x 300 (D) x 385 (H) mm

15-3/16 (W) X 9-1/2 (D) X 15 (H) inches

## Weights

12 kg / 20 lbs 5 oz

## Accessories

Owner's Manual

## Options

Foot switch FS-5U (BOSS)

Connection cable PCS-31

\* 0 dBu = 0.775 V<sub>rms</sub>

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.



This product must be disposed of separately at your local waste recycling centre. Do not dispose of in household waste bin.



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/EEC.

For EU Countries

## FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

For the USA

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

## NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

## AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

