

Roland



Owner's Manual

Guitar Amplifier

CUBE 20XL

Owner's Manual

Bedienungsanleitung

Mode d'emploi

Manuale dell'utente

Manual del usuario

Manual do proprietário

Gebruikershandleiding

English

Deutsch

Français



Italiano

Español

Português

Nederlands

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

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

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

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 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.

Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.



Owner's Manual

Guitar Amplifier

CUBE 20XL

20-watt output, high-performance, DSP guitar amp with built-in 20 cm (8-inch) speaker

- Compact size that's perfect for anything from at-home practice to rehearsing in the studio, and is conveniently portable.

Switchable between two channels: JC CLEAN and LEAD (p. 4)

- Channel switching can be done via optional foot switch.

The "LEAD" offers six different COSM pedal effects (p. 4)

- The LEAD channel provides six types of pedal effects, including ACOUSTIC SIM, OVERDRIVE, DISTORTION, METAL, METAL STACK, and the original EXTREME effect, giving you sounds for a broad range of styles.

Composite Object Sound Modeling (COSM) 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.

Effects include EFX/SOLO and an independent DELAY/REVERB (p. 5)

- Onboard EFX section includes 5 types of digital effect, CHORUS, FLANGER, PHASER, TREMOLO, and HEAVY OCTAVE.
- Foot switch (optional) can be used to switch EFX/SOLO on and off (p. 5).

Power Squeezer function (p. 5)

- This allows you to obtain a good tonal balance even at low volume, letting you enjoy powerful sound even when you're at home.

A tuner function is included (p. 7)

- This feature allows you to tune your guitar while the instrument is connected to the CUBE-20XL.
- The tuning reference function sounds a reference pitch for your tuning convenience.

Equipped with an AUX IN jack, which is convenient for your practice sessions (p. 5)

- Use this to play along with sounds from CD players and digital audio players.

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (inside front cover), "USING THE UNIT SAFELY" (p. 2), and "IMPORTANT NOTES" (p. 3). 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.



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USING THE UNIT SAFELY

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

About ⚠ WARNING and ⚠ CAUTION Notices

 WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
 CAUTION	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

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 install the unit in any of the following locations.

- Damp (e.g., baths, washrooms, on wet floors); or are
- Exposed to steam or smoke; or are
- Subject to salt exposure; or are
- Humid; or are
- Exposed to rain; or are
- Dusty or sandy; or are
- Subject to high levels of vibration and shakiness.



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 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.



Do not place containers containing liquid on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.



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.



WARNING

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.



CAUTION

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



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.



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 (p. 6).



Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.



The cooling vents on either side of the unit may become hot, so take care to avoid burns.



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.



IMPORTANT NOTES

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 this 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.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface. You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.
- 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.

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 benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional Precautions

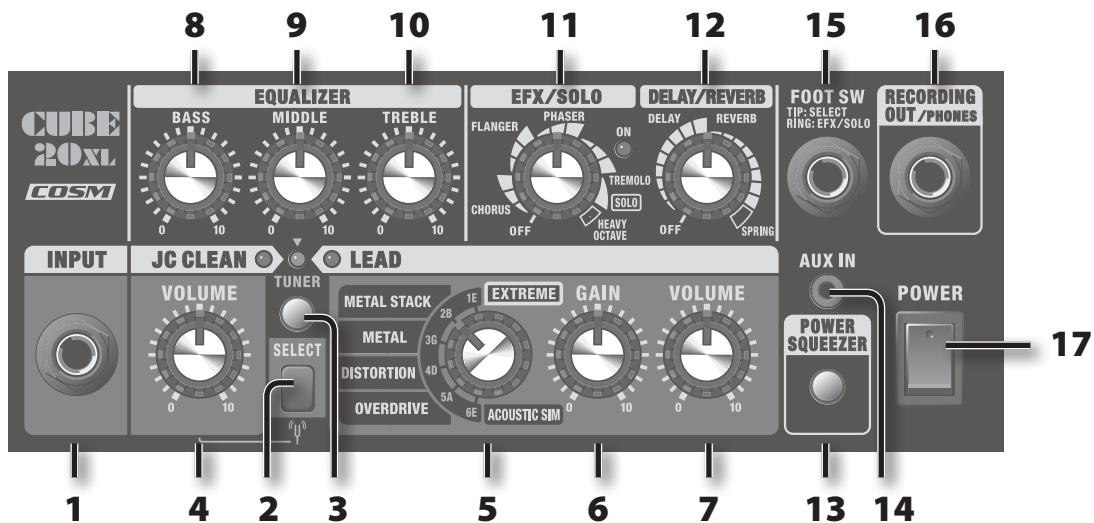
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing 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.
- 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.
- Wrap the power cord around the cord hook when transporting or storing the unit.

Trademarks

- The 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 because it is the most practical way of describing the sounds that are simulated using COSM technology.

Panel Descriptions

Control Panel



1. INPUT Jack

Connect your electric guitar here.

2. [SELECT] Switch

Switches between the JC CLEAN and LEAD channels. You can confirm which channel is selected by checking which red indicator is lit. (JC CLEAN: left; LEAD: right). Channels can be switched using optional BOSS FS-5U or FS-6 foot switches.

3. [TUNER] Switch

Use this when you want to tune your guitar. When you turn on the switch, it will light red, and you'll be able to use the Tuner function. For more detailed information, refer to "Using the Tuner Function" (p. 7).

JC CLEAN Channel

This is a model of Roland's famous JC-120 Jazz Chorus guitar amplifier. The ultra-clean, ultra-flat sound offers a smooth feel. This amp is ideal for creating sounds in combination with a multi-effects device.

4. [VOLUME] Knob

Adjusts the JC CLEAN channel volume.

LEAD Channel

5. Type Switch

You can select from the following six types. When the tuner function is on, you can use this to select the name of the string to be tuned (p. 7).

Type	Description
ACOUSTIC SIM	This original amp model gives you a dynamic acoustic guitar sound using a standard electric guitar.
OVERDRIVE	Natural distortion sound similar to that obtained by turning an amp's volume up completely.
DISTORTION	Harder distortion than OVERDRIVE.
METAL	Even harder and heavier than DISTORTION, which can get long sustained notes.
METAL STACK	Very fat sound of a Heavy Metal full amp stack.
EXTREME	High-gain sound delivering thick lows and intense distortion while still preserving the sound's clear definition.

6. [GAIN] Knob

Adjusts the LEAD channel's distortion level.

7. [VOLUME] Knob

Adjusts the LEAD channel volume.

EQUALIZER

8. [BASS] Knob

Adjusts the tone quality of the lower range.

9. [MIDDLE] Knob

Adjusts the tone quality of the midrange.

10. [TREBLE] Knob

Adjusts the tone quality of the upper range.

EFX/SOLO (Effects/Solo)

11. [EFX/SOLO] (Effects/Solo) Knob

Turn this knob to CHORUS, FLANGER, PHASER, TREMOLO, or HEAVY OCTAVE to select the corresponding effect, or to SOLO. 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 optional foot switches

Graduations for CHORUS, FLANGER, PHASER, TREMOLO, SOLO, HEAVY OCTAVE on a panel are for reference. Be sure to check the sound as you adjust the effects.



Type	Description
CHORUS	In this effect, a slightly detuned sound is added to the original sound, giving the sound greater breadth and fullness.
FLANGER	This creates a flanging effect that creates a sort of spinning sensation with the sound.
PHASER	This effect adds a variable phaseshifted signal to the direct sound, giving the sound a swirling character.
TREMOLO	Tremolo is an effect that creates a cyclic change in volume.
SOLO	This applies a boost effect to the original sound. By using a foot switch to turn SOLO on/off individually for the JC CLEAN and LEAD channels, you can vary the volume and distortion of your sound.
HEAVY OCTAVE	This adds sound lowered by an octave to the original sound. Since you can play chords even when using this effect, you can use it to fatten the sound of your chordal playing as well.

DELAY/REVERB

12. [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. Set the knob to the SPRING position to enjoy the sound of a spring reverb unit.

* Graduations for DELAY, REVERB on a panel are for reference.



Type	Description
DELAY	Turn the knob to change the time and amount of delay effects.
REVERB	Turn the knob to adjust the reverb level.

13. [POWER SQUEEZER] Switch

The switch lights in red when the power squeezer function is on; the switch is unlit when the power squeezer is off.



Switching on the Power Squeezer function allows you to reduce the amp's output to 2 watts.

Switching this on allows you to produce a sound that preserves the same tone and balance at an output of 2 watts, for volume levels that are more suitable for the average home.

* The Power Squeezer function affects only sounds input through the INPUT jack. It has no effect on sounds input via the AUX IN jack.

14. AUX IN Jack

You can connect a CD player, digital audio player or other kind of device and have it play along with your guitar.

This accepts a stereo miniature phone plug. However, the speaker and RECORDING OUT/PHONES output is monaural. Use a cable (sold separately) that's appropriate for the device you're connecting.

- * Determine the volume level by adjusting the volume control of the connected device.
- * When connection cables with resistors are used, the volume level of equipment connected to the AUX IN jack may be low. If this happens, use connection cables that do not contain resistors.

15. FOOT SW (Foot switch) Jack

You can use foot switches (optional BOSS FS-5U or FS-6) to switch channels (JC CLEAN/LEAD), and to turn EFX/SOLO on and off.

- * CUBE-20XL is equipped with a TRS-type FOOT SW jack that accepts plugs of the configuration shown in the figure. To connect a foot switch pedal, use a TRS-compatible cable.



TIP : SELECT



RING : EFX/SOLO

- * For details on connecting foot switches, refer to "Connections" (p. 6).
- * If you use a monaural cable to connect only one foot switch, it can be used to switch channels (JC CLEAN/LEAD).

16. RECORDING OUT/PHONES Jack

- When Using RECORDING OUT

Use mono 1/4" phone plugs when connecting to this jack. Volume level of RECORDING OUT can be easily adjusted if you set the JC CLEAN or LEAD Channel [VOLUME] knob as shown in the diagram on the right.



- When Using Headphones

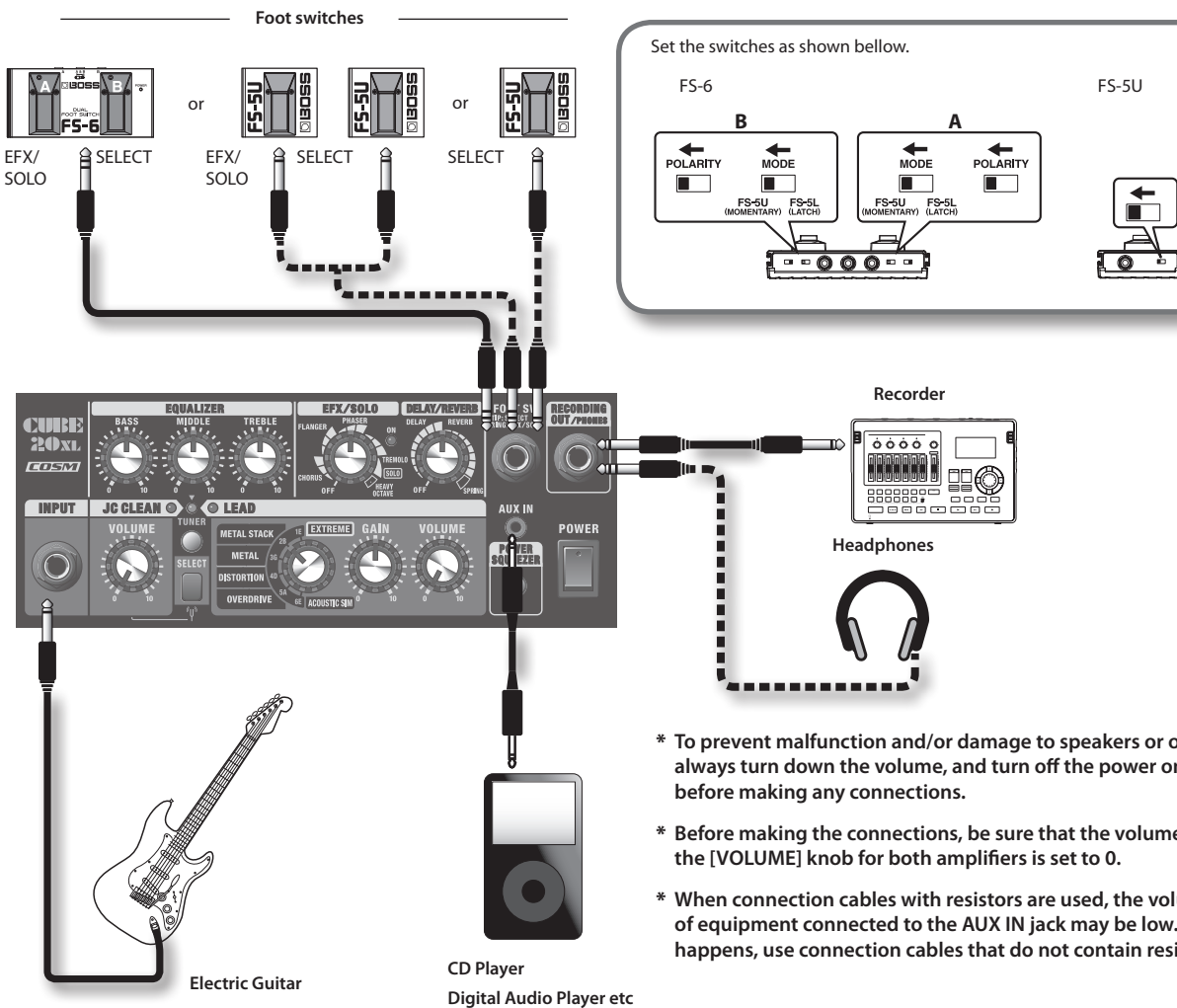
Connect headphones to this jack.

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

17. [POWER] Switch

This switches the power on and off.

Connections



- * 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.
- * Before making the connections, be sure that the volume setting of the [VOLUME] knob for both amplifiers is set to 0.
- * When connection cables with resistors are used, the volume level of equipment connected to the AUX IN jack may be low. If this happens, use connection cables that do not contain resistors.

Switching 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.

1. Make sure that all [VOLUME] knobs on the CUBE-20XL and all the connected devices are set to 0.



2. Turn on all the devices connected to the CUBE-20XL's input jacks (INPUT jack and AUX IN jack).
3. Turn on the CUBE-20XL.

* 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.



* 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.

4. Adjust the volume levels for the devices.
 5. Before switching off the power, lower the volume on each of the devices in your system and then TURN OFF the devices in the reverse order to which they were switched on.
- * 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. 3).

Using the Tuner Function

CUBE-20XL is equipped with a tuner function. In addition to manual tuning, you can also use it as a chromatic tuner.

When tuning manually, the sound of the guitar will be output from the speaker and from the RECORDING OUT/PHONES jack. In chromatic tuner mode, sound will not be output from the speaker nor from the RECORDING OUT/PHONES jack.

When tuning manually, you can press the [SELECT] switch to activate a tuning reference tone.



Manual Tuning

Use manual tuning when the strings are substantially out of tune (such as after changing strings).

In manual tuning mode, you can tune while listening to the sound of your guitar through the speakers or headphones.

The volume can be adjusted with the JC CLEAN's [VOLUME] knob. If you don't want the sound of your guitar to be output from the speakers or headphones, set the JC CLEAN's [VOLUME] knob to 0.

1. Press the [TUNER] switch.

CUBE-20XL enters the Tuner mode and the [TUNER] switch lights up.

2. Use the Type switch to select the string that you want to tune.

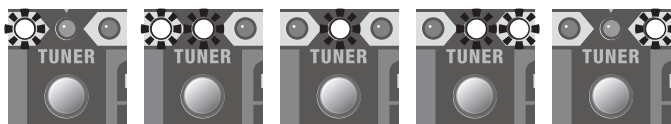
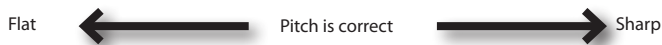
Knob Position	Description
6E	Open sixth string (E)
5A	Open fifth string (A)
4D	Open fourth string (D)
3G	Open third string (G)
2B	Open second string (B)
1E	Open first string (E)

* The reference pitch is A=440 Hz. This cannot be changed.

3. Use the JC CLEAN channel's [VOLUME] knob to adjust the volume.

4. Play a single note on the open string that you want to tune.

Tune the string until the green indicator lights.



Lights red

Lights green

Lights red

* The red indicator flashes if the pitch is substantially out of tune.

* Press the [SELECT] switch, and you'll hear a reference tone of the pitch selected by the Type switch. (This is the Tuning Fork function.)

5. When you have finished tuning, press the [TUNER] switch once again.

Chromatic Tuning

If you press the [TUNER] switch for one full second or more, the [TUNER] switch flashes and the unit becomes usable as a "chromatic tuner," which automatically determines the name of the note closest to the one played.

Once in the Chromatic Tuner mode, no sound is played from the speaker or the RECORDING OUT/PHONES jack.

1. Press and hold the [TUNER] switch for at least one second.

[TUNER] switch flashes and CUBE-20XL enters the chromatic tuner mode.

2. Play a single note on the open string that you want to tune.

Tune the string until the green indicator lights.

Using the Tuning Fork Function

When using manual tuning, you can press the [SELECT] switch to sound a tuning reference tone at the pitch selected by the Type switch.

1. Press the [TUNER] switch.

CUBE-20XL enters the Tuner mode and the [TUNER] switch lights up.

2. Use the Type switch to select the string that you want to tune.

* The reference pitch is A=440 Hz. This cannot be changed.

3. Use the JC CLEAN channel's [VOLUME] knob to adjust the volume.

4. Press the [SELECT] switch.

The reference tone will sound at the pitch of the string selected by the Type switch.

5. Play a single note on the open string that you want to tune.

Play an open string or a harmonic, and tune your guitar to match the reference tone.

6. When you have finished tuning, press the [TUNER] switch once again.

Sample Settings

EXTREME



[SELECT] switch : LEAD

This is an extreme sound with intense distortion.

This is a high-gain sound that packs a lot of punch in the low end, while delivering a great deal of edge in the upper range.

You can obtain variations in the sound by moving the [MIDDLE] knob.

If you turn on HEAVY OCTAVE, you can achieve an even greater sense of distortion in the low end.

Space Clean



[SELECT] switch : JC CLEAN

This is a transparent sound using spacial effects.

Select the JC CLEAN amp, modeled on the Roland JC-120, then add chorus and long delay.

Using this setting with a guitar equipped with single coil pickups makes great sounding arpeggios and chord strumming.

Depending on the phrase being played, it can be effective to set the delay sound's delay time slightly slower than the phrase's tempo.

Power Grunge



[SELECT] switch : LEAD

This produces a raging distortion sound that is very trebly and roughly textured.

Setting the [GAIN] knob to prevent excessive distortion of the guitar sound results in a straight guitar sound with brilliant harmonics and powerful chord sounds.

You can also add the FLANGER to produce a sound with a powerful swirling effect, much like the sound from a jet.

Additionally, using the guitar's front pickup and raising the [GAIN] and [MIDDLE] knobs results in a fat lead sound with long sustain.

Alternative Metal



[SELECT] switch : LEAD

The perfect sound for heavy, sharp riffs.

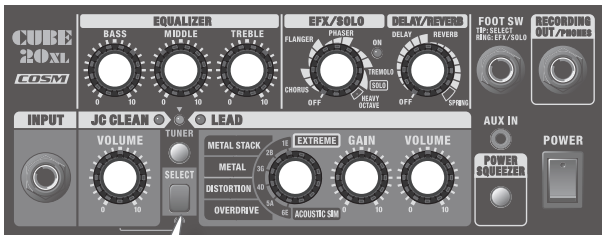
Select the high-gain METAL STACK, then use the equalizer to boost the low end even more.

Used with a humbucking pickup in the rear position, it results in an extreme distortion effect.

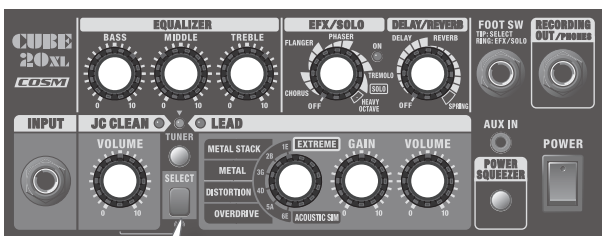
Plus, you can add a long delay to use this as a lead sound with great sustain.

Adding a short delay produces a doubling sound like that from two performers playing the same phrases simultaneously.

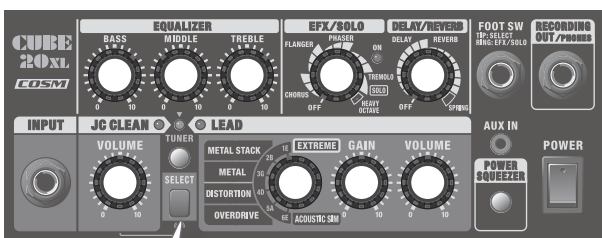
Setting Memo



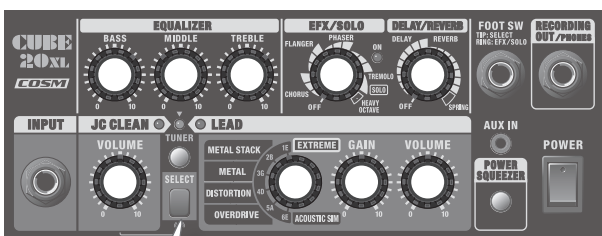
[SELECT] switch :



[SELECT] switch :



[SELECT] switch :



[SELECT] switch :

Specifications

CUBE-20XL

Rated Power Output	20 W	
Nominal Input Level	INPUT (JC CLEAN channel)	-10dBu/1MΩ
	AUX IN	-10dBu
Speakers	20 cm (8 inch)	
Controls	[POWER] Switch	
	[SELECT] Switch	
	[TUNER] Switch	
	[POWER SQUEEZER] Switch	
	<JC CLEAN Channel>	[VOLUME] Knob
	<LEAD Channel>	Type switch (ACOUSTIC SIM, OVERDRIVE, DISTORTION, METAL, METAL STACK, EXTREME), [GAIN] Knob, [VOLUME] Knob
	<EQUALIZER>	[BASS] Knob, [MIDDLE] Knob, [TREBLE] Knob
<EFX/SOLO>	[EFX /SOLO] Knob (CHORUS, FLANGER, PHASER, TREMOLO, SOLO, HEAVY OCTAVE)	
<DELAY/REVERB>	[DELAY/REVERB] Knob (DELAY, REVERB, SPRING)	
Indicators	JC CLEAN Channel, LEAD Channel, EFX/SOLO, TUNER, POWER SQUEEZER	
Connectors	INPUT Jack, AUX IN Jack, FOOT SW Jack (SELECT, EFX/SOLO), RECORDING OUT/PHONES Jack	
Power Consumption	24 W	
Dimensions	385 (W) x 240 (D) x 385 (H) mm	
	15-3/16 (W) x 9-1/2 (D) x 15-3/16 (H) inches	
Weight	9 kg / 19 lbs 14 oz	
Accessories	Owner's Manual	

* 0 dBu = 0.775 Vrms

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

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限



此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定的期限内，产品中所含的有害物质不致引起环境污染，不会对人体、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳(壳体)	×	○	○	○	○	○
电子部件(印刷电路板等)	×	○	×	○	○	○
附件(电源线、交流适配器等)	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。
 ×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。
 因根据现有的技术水平，还没有什么物质能够代替它。

For EU Countries



- UK** This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.
- DE** Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.
- FR** Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.
- IT** Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.
- ES** Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como está regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.
- PT** Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.
- NL** Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.
- DK** Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.
- NO** Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.
- SE** Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.
- FI** Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.
- HU** Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbóllummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.
- PL** Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.
- CZ** Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.
- SK** Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhazovať spolu s domovým odpadom.
- EE** See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.
- LT** Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinėti produktai neturi būti išmetami kartu su buitiniomis atliekomis.
- LV** Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.
- SI** Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjstkih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjstskimi odpadki.
- GR** Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.



This product complies with the requirements of EMCD 2004/108/EC and LVD 2006/95/EC.

For EU Countries

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

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 the USA

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.

For Canada

WARNING

This product contains chemicals known to cause cancer, birth defects and other reproductive harm, including lead.

For C.A. US (Proposition 65)

Roland

