



Owner's Manual

Bass Amplifier

DUAL CUBE BASS LX

English

日本語

Deutsch

Français

Italiano

Español

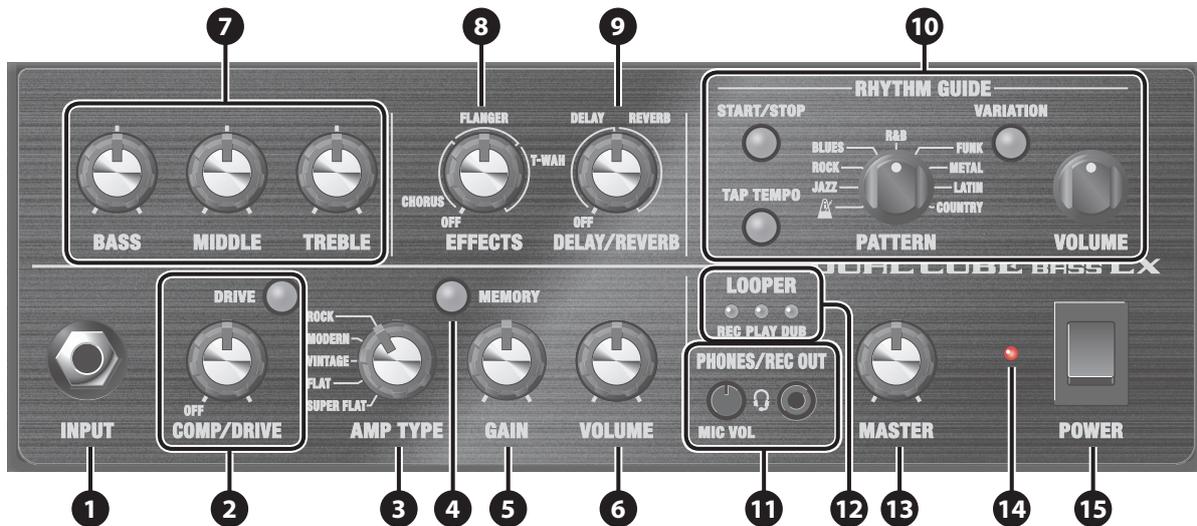
Português

Nederlands

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY" and Owner's Manual (p. 12)). After reading, keep the document(s) where it will be available for immediate reference.

Panel Descriptions

Top Panel



1 INPUT jack

Connect your bass guitar here.

2 [COMP/DRIVE] button

Sets the comp and distortion effects.
If this is "OFF", these effects are not applied.

[DRIVE] button

To use the distortion effects, press the [DRIVE] button to make it light up.

3 [AMP TYPE] knob

Selects the amp type.

Type	Explanation
SUPER FLAT	An amp with flat tonal characteristics.
FLAT	An amp with a classic bass sound.
VINTAGE	An amp with a fat but sweet vintage sound.
MODERN	An amp with a tight low end and a crisp high end.
ROCK	An amp with a characteristic overdrive sound.

4 [MEMORY] button

Use the memory feature to store three different sets of knob configurations for each amp type (p. 6).

5 [GAIN] knob

Adjusts the gain (amount of distortion).

6 [VOLUME] knob

Adjusts the volume before equalization and effects are applied.

7 EQUALIZER

[BASS] knob

Adjusts the sound level of the low-frequency range.

[MIDDLE] knob

Adjusts the sound level of the middle-frequency range.

[TREBLE] knob

Adjusts the sound level of the high-frequency range.

8 [EFFECTS] knob

Use this knob to switch between effects such as chorus or flanger, depending on the knob's position.

Type	Explanation
OFF	Effects are not applied.
CHORUS	Chorus is an effect that creates a beautiful tonal spaciousness and depth by adding a slightly modulated sound.
FLANGER	Gives a twisting, flanged character to the sound.
T-WAH	You can produce a wah effect with the filter changing in response to the bass level.

9 [DELAY/REVERB] knob

Use this knob to switch between effects such as delay or reverb, depending on the knob's position.

Type	Explanation
OFF	Effects are not applied.
DELAY	Changes the delay time and effect.
REVERB	Adjusts the volume of the reverb.

10 RHYTHM GUIDE

The rhythm guide built into this amp features drum and percussion rhythm patterns that are useful when you're practicing by yourself. Set this to the pattern you like when you practice, or use it as a metronome (p. 6).

[PATTERN] knob

Selects the genre of the rhythm pattern.

[START/STOP] button

Starts/stops the rhythm guide. When you start the rhythm guide, the [START/STOP] button blinks in time with the tempo.

[TAP TEMPO] button

Sets the tempo for the rhythm guide. Press this button twice at the tempo you desire to make the rhythm guide play back at that tempo.

[VARIATION] button

Selects the rhythm pattern variation. There are three types of rhythm variations available for each genre.

The [VARIATION] button color changes from green→red→unlit with each press, and the variation changes accordingly.

[VOLUME] knob

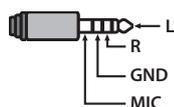
Adjusts the volume of the rhythm guide.

11 PHONES/REC OUT jack

Connect your headphones or headset mic here.

Adjust the headset mic volume with the [MIC VOL] knob.

- * No sound is played through the unit's speaker while the PHONES/REC OUT jack is in use.
- * You may hear feedback with some headset mics if you raise the volume too much. Also keep in mind that feedback may occur between the headset mic and the speakers connected to the LINE OUT jacks.
- * Turn down the [MIC VOL] knob when plugging or unplugging a cable into the PHONES/REC OUT jack. Also, make sure that the plug is inserted fully into the jack. If a plug is not fully inserted with the volume turned up, an unpleasant loud noise may be heard.
- * Pin arrangement for PHONES/REC OUT jack (stereo, CTIA)

**12 LOOPER indicator**

You can use the looper by connecting a footswitch (FS-5U, FS-6, FS-7; sold separately) to the FOOT SW jack (p. 7).

13 [MASTER] knob

Adjusts the output volume.

14 POWER indicator

This indicator lights when the unit is turned on.

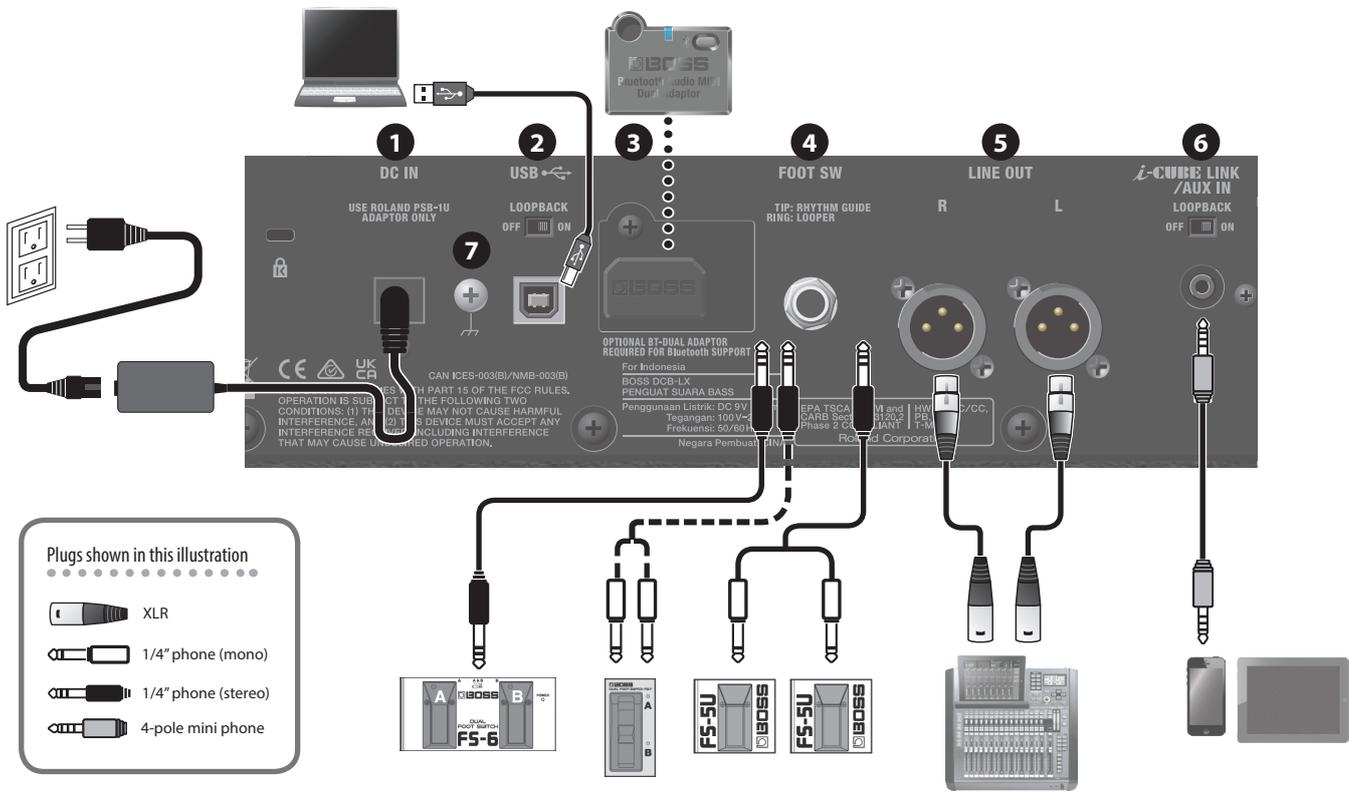
- * When operating on battery power, the unit's POWER indicator blinks if the batteries are nearly depleted. Replace the batteries as soon as possible (p. 5).

15 [POWER] switch

Turns the power of this unit on/off (p. 5).

Rear Panel (Connecting Your Equipment)

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.



1 DC IN jack

Connect the included AC adaptor to this jack.

* Use only the AC adaptor that came with this unit.

2 USB port

Connect a commercially available USB 2.0 cable to play back and record the sound from this unit on your computer. You can also use dedicated software to edit the settings of the internal effects.

Playing back/recording the sound of this unit using your computer, iPad or iPhone

Use the standard driver provided by the operating system. When using a computer, you can also use the dedicated USB driver. When connecting an iPad or iPhone, use a commercially-available USB B type adaptor or cable.

Using the dedicated software

When using the dedicated software, use the dedicated USB driver. Download the USB driver from the BOSS website. For details, refer to the "Readme.htm" file included with the download.

<https://www.boss.info/support/>

Configuring the USB driver to use

USB driver	What to do
Dedicated USB driver	Set the [AMP TYPE] knob to "SUPER FLAT", and turn on the power while holding down the [MEMORY] button.
Standard OS USB driver	Set the [AMP TYPE] knob to "FLAT", and turn on the power while holding down the [MEMORY] button.

[LOOPBACK] switch

When the [LOOPBACK] switch is on, the USB audio input sound can be sent back to your computer, iPad or iPhone.

3 Bluetooth ADAPTOR jack

Connect the **Bluetooth®** Audio MIDI Dual Adaptor (model: BT-DUAL) to wirelessly play back music from your mobile device such as a smartphone or tablet (hereafter "mobile device"), or to edit the effects using an app on your mobile device (p. 8).

Using the DUAL CUBE BASS LX's dedicated software

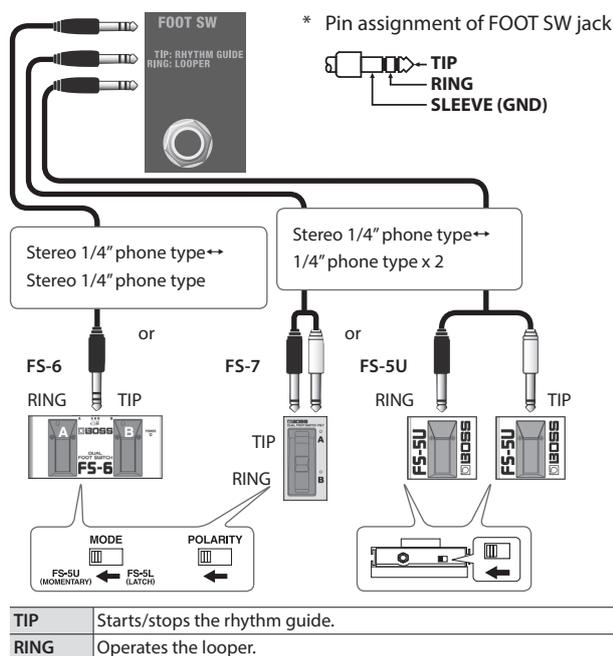
You can connect the DUAL CUBE BASS LX via USB to your computer and use it with dedicated software. Using the dedicated software lets you do the following:

- Edit the effect settings.
- Back up effects and other internal settings, or restore settings from a backup.

Download the dedicated software from the BOSS website (<https://www.boss.info/support/>).

4 FOOT SW jack

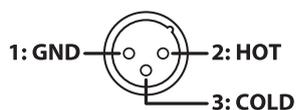
You can start/stop the rhythm guide (p. 6) and control the looper (p. 7) using your foot by connecting a footswitch (BOSS FS-6, FS-7 or FS-5U; sold separately).



5 LINE OUT jacks

You can connect an audio interface or recorder to record your playing, or output the sound to a mixer. You can also use dedicated software (p. 4) or an app on your mobile device (p. 9) to adjust the output volume.

* LINE OUT jack pin arrangement



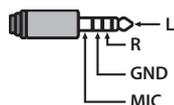
6 i-CUBE LINK/AUX IN jack

Use a stereo miniature phone type cable to connect your mobile device or other device to this jack, which lets you output its sound from the speakers of this unit.

You can also use this unit as an audio interface for your mobile device (via i-CUBE LINK) (p. 7). Use the mini cable (4-pole) included with this unit to connect.

If your mobile device does not have an earphones jack, use a commercially available adaptor.

* Pin arrangement for mini cable (4-pole; stereo, CTIA)



[LOOPBACK] switch

By turning the [LOOPBACK] switch on, you can send the input sound from the i-CUBE LINK/AUX IN jack back to your mobile device.

7 Ground terminal

Connect this to an external earth or ground. This should be connected when necessary.

If you hear noise when connecting a bass guitar or another external device, connect the ground terminal to reduce the noise.

Operating on Battery Power

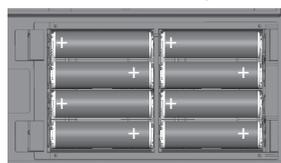
This unit can be used with alkaline batteries or rechargeable Ni-MH batteries.

Type of battery	Operating time
Alkaline batteries	Approx. 8 hr.
Rechargeable Ni-MH batteries	Approx. 10 hr.

- * Times are approximate, and differ depending on the conditions of use.
- * If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY" and the Owner's Manual p. 12).
- * When operating on battery power, the unit's POWER indicator blinks if the batteries are nearly depleted. Replace the batteries as soon as possible.
- * Sounds may distort easily or cut off when played at high volume as the battery power is nearly depleted, but this is not a malfunction. In such instances, replace the batteries or use the AC adaptor included with the unit.

Installing the Batteries

1. Remove the rear panel battery cover.
2. Insert the batteries, making sure they face the right way.



Turning the Power On/Off

Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

1. Make sure that the [MASTER] knob of this unit as well as the volume of any connected devices are turned down all the way.
2. Turn on the power of this unit.



3. Turn on the power of the devices connected to the LINE OUT and PHONES/REC OUT jacks.
4. Adjust the volume levels of the devices.

* Before switching off the power, lower the volume on each of the devices in your system and then turn off the power of this unit (the reverse of when you switch this unit on).

Useful Functions

Using the Memories

You can use the memory feature to store the current settings of the knobs, in three different sets of knob configurations for each amp type.

Settings are saved for these knobs



Storing the Knob Settings to Memory

Here's how to store the current knob positions to memory.

1. Press the [MEMORY] button to select the memory where the settings are to be stored.

Each press of the button cycles through the memory numbers (green→red→orange→unlit→green), and the LED color changes accordingly.

Button color or state	Explanation
Unlit (off)	The amp produces sound using the current knob settings.
Green (memory 1)	The amp produces sound using the knob positions (settings) stored in memory.
Red (memory 2)	
Orange (memory 3)	

2. Turn the knob to the setting you like.
3. Hold down the [MEMORY] button for several seconds.

The [MEMORY] button blinks. Once the settings are stored, the [MEMORY] button lights up continuously.

NOTE

- Once you store settings in a memory, any existing settings that were stored in that memory are lost.
- The settings you store can be lost if you take the unit in for repair or due to equipment failure, incorrect operations or other such causes. To avoid the nuisance of losing your data, back up the important data you've stored in the unit, or write the settings down by hand. You can use the dedicated software (p. 4) or an app on your mobile device (p. 9) to back up the settings stored on this unit.

Recalling a Memory

Here's how to recall the knob settings that are stored in memory.

1. Turn the [AMP TYPE] knob to select the amp type.
2. Press the [MEMORY] button to select the memory to recall.

This changes the unit's knob settings to the settings stored in the memory you selected.

- * Note that the volume may change abruptly when switching between memories, depending on the settings stored in the memories.

MEMO

If you move a knob after recalling a memory, the setting or value for that knob changes to the knob's current position.

Once the knob's actual position matches the position that's stored in memory, the [MEMORY] button immediately goes dark.

Using the Rhythm Guide

The rhythm guide built into this amp features drum and percussion rhythm patterns that are useful when you're practicing by yourself. Set this to the pattern you like when you practice, or use it as a metronome.



1. Turn the [PATTERN] knob to select a pattern.

Patterns	(Metronome), JAZZ, ROCK, BLUES, R&B, FUNK, METAL, LATIN, COUNTRY
----------	--

2. Press the [START/STOP] button to start the rhythm guide. When you start the rhythm guide, the [START/STOP] button blinks.
3. Use the [VOLUME] knob of the rhythm guide to adjust the rhythm guide volume.
4. Press the [VARIATION] button to select a rhythm variation. There are three types of rhythm variations available for each pattern. The button color changes from green→red→unlit→green with each press.
5. Adjust the tempo you want to use.

Set the tempo as desired, and press the [TAP TEMPO] button twice to make the rhythm guide play back at that tempo.

MEMO

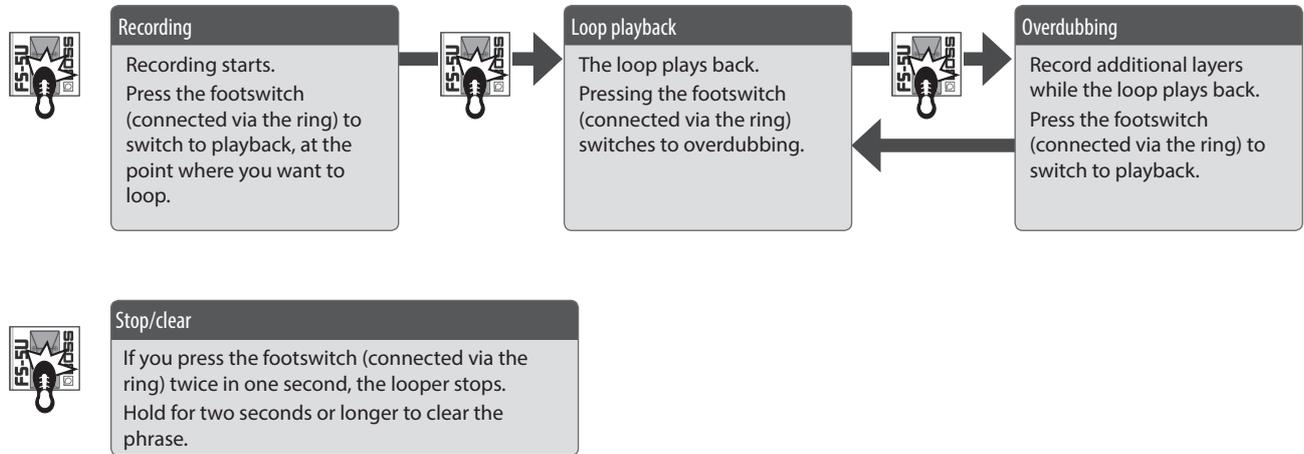
You can connect a footswitch (FS-5U, FS-6, FS-7; sold separately) to the FOOT SW jack for starting/stopping the rhythm guide.

Using the Looper

You can use the looper by connecting a footswitch (FS-5U, FS-6, FS-7; sold separately) to the FOOT SW jack.

You can record up to 90 seconds (in mono) and play back the recorded section over and over. You can also layer additional performances with the recording as it plays back (overdubbing). This lets you create real-time backing performances on the fly.

* The factory default setting is set to a maximum of 45 seconds (stereo). With the dedicated software (p. 4) or mobile device app (p. 9), you can select up to a maximum of 90 seconds (mono).



* Once you reach the maximum available recording time, the unit automatically switches to playback mode.

* Anything you record is lost once you turn off the power.

LOOPER indicators



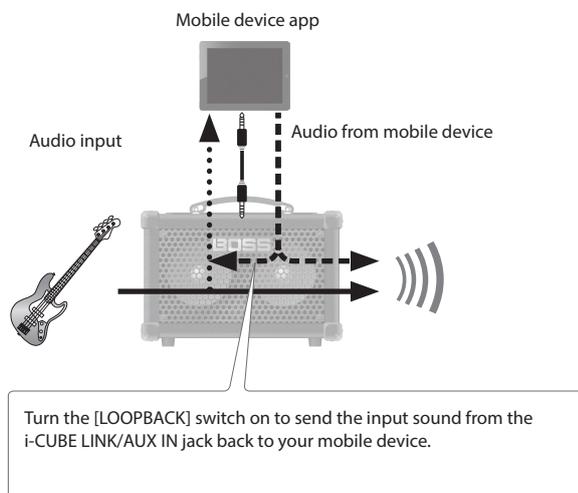
Indicator	Explanation
REC	Lights up during recording
PLAY	Lights up during playback, and blinks when stopped
DUB	Lights up while overdubbing

Using This Unit with Other Mobile Devices (i-CUBE LINK)

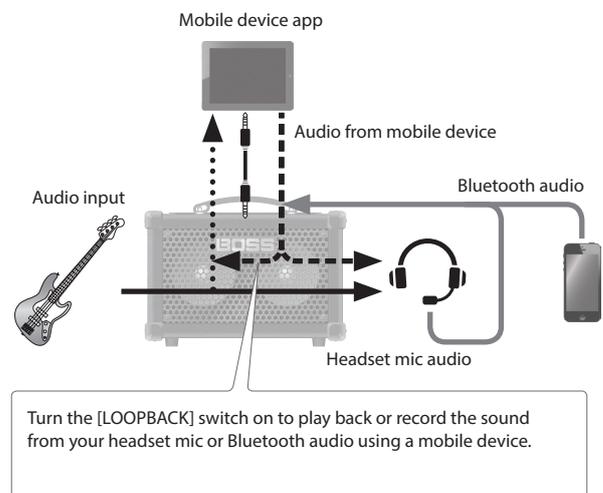
With the "i-CUBE LINK" feature, you can connect your mobile device with the included mini cable (4-pole) and play back audio from that device, at the same time that the sound inputted into this unit is sent to the mobile device.

Use this to play back or record the sound inputted into this unit on your mobile device by means of an app, or to livestream your performance.

When using the built-in speakers



When using a headset mic or Bluetooth audio



For details on i-CUBE LINK and on mobile device apps that can use i-CUBE LINK, visit the BOSS website.

<https://www.boss.info/>

Wireless Connection with a Mobile Device

Here's what you can do when the BT-DUAL (sold separately) is connected to the DUAL CUBE BASS LX.

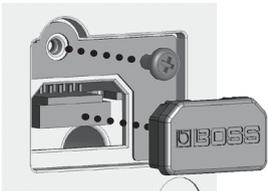
- Play music wirelessly from a mobile device
- Edit the effects using an app on your mobile device
- Control the volume and other parameters from an EV-1-WL wireless MIDI expression pedal (sold separately)

* Note that the DUAL CUBE BASS LX does not offer Bluetooth functionality. You'll need to attach the BT-DUAL (sold separately) to use Bluetooth.

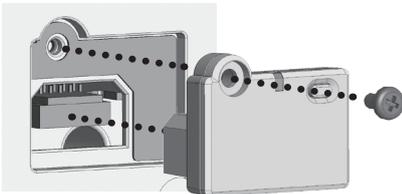
Attaching the BT-DUAL

Attach the BT-DUAL to the Bluetooth ADAPTOR connector of the DUAL CUBE BASS LX.

1. Power down the DUAL CUBE BASS LX and unplug the AC adaptor from the AC outlet.
2. Remove the cover and screw from the Bluetooth ADAPTOR connector on the rear panel.



3. Attach the BT-DUAL and fasten the screw that you removed in step 2 in place.



NOTE

- Be sure to use only the screw that was originally mounted on the Bluetooth ADAPTOR connector. If you use a different screw, the unit may malfunction.
- Do not touch any of the printed circuit pathways or connection terminals.
- After you have attached the BT-DUAL, check again whether it is properly installed.

Listening to Sound via Wireless Connection with a Mobile Device

Bluetooth® Audio

With the DUAL CUBE BASS LX, you can use Bluetooth audio functionality to listen to music or music video played back on a mobile device through this unit's speakers.

Registering a Mobile Device (Pairing)

"Pairing" involves registering the mobile device that you want to use with the DUAL CUBE BASS LX (making the two devices recognize each other). Here we'll configure the settings so that music data saved on your mobile device can be played wirelessly via the DUAL CUBE BASS LX.

MEMO

The following explanation is only one example. For details, refer to the owner's manual of your mobile device.

1. Turn on the power of the DUAL CUBE BASS LX.
2. Place the mobile device that you want to connect close to the DUAL CUBE BASS LX.
3. Hold down the pairing button on the BT-DUAL until the Bluetooth indicator blinks rapidly.
4. Turn on the Bluetooth function of the mobile device.



MEMO

This explanation uses the iPhone as an example. For details, refer to the owner's manual of your mobile device.

5. Tap "DUAL CUBE Audio", shown on the Bluetooth device screen of your mobile device.

This pairs the BT-DUAL with your mobile device. When pairing succeeds, "DUAL CUBE Audio" is added to the list of "Paired Devices" on your mobile device.

* If you don't complete the pairing within a certain time, the Bluetooth indicator goes dark and the unit exits pairing standby mode.

Connecting an Already-Paired Mobile Device

1. With the BT-DUAL's Bluetooth indicator off, press the pairing button.
2. Turn on the Bluetooth function of the mobile device.



MEMO

- If you were unable to connect using the steps above, tap "DUAL CUBE Audio", displayed in the Bluetooth device screen of the mobile device.
- To disconnect, press the pairing button on the BT-DUAL to make the Bluetooth indicator go dark, or turn off the mobile device's Bluetooth function.

Adjusting the Volume

1. Adjust the volume on the mobile device.
Adjust the volume of Bluetooth audio.

Controlling the DUAL CUBE BASS LX from a Mobile Device App

Use the "DUAL CUBE BASS LX Editor" app to edit effects and save settings on this unit.

By connecting an EV-1-WL wireless MIDI expression pedal (sold separately), you can control the volume and other parameters.

For details on the DUAL CUBE BASS LX Editor, see the BOSS website.

<https://www.boss.info/>

Connecting to the App

Here are the settings to make in order to use an app on your mobile device.

* Make the connection from the app's settings, not from your mobile device's Bluetooth settings.

1. Turn on the power of the DUAL CUBE BASS LX.
2. Place the mobile device that you want to connect close to the DUAL CUBE BASS LX.
3. Turn on the Bluetooth function of the mobile device.



* When connected to Bluetooth audio, the Bluetooth indicator on the BT-DUAL lights up. Note that the unit has not finished connecting with the app at this time.

MEMO

This explanation uses the iPhone as an example. For details, refer to the owner's manual of your mobile device.

4. In the app's settings, connect to DUAL CUBE MIDI.

NOTE

Do not tap "DUAL CUBE MIDI" shown in the Bluetooth settings of the mobile device.

Disabling Bluetooth Functionality

If you want to disconnect the Bluetooth connection between the BT-DUAL and your mobile device, disable Bluetooth functionality.

When this unit is not connected to the mobile device via Bluetooth, we recommend you turn off Bluetooth to save on battery power.

1. Press the pairing button on the BT-DUAL.

The Bluetooth indicator goes dark.

Troubleshooting (Troubles with Bluetooth Functionality)

Problem	What to check and do	Page	
"DUAL CUBE" does not show up in the Bluetooth device list on my mobile device	The Bluetooth function might be turned off (disabled). The Bluetooth function is enabled when you press the BT-DUAL's pairing button. Bluetooth Audio: A device named "DUAL CUBE Audio" appears. Connected to an app: A device named "DUAL CUBE MIDI" appears. Check these settings from within the app, such as the DUAL CUBE BASS LX Editor.	p. 8	
Can't connect to Bluetooth audio	If your mobile device's Bluetooth device list shows "DUAL CUBE"	Deregister the device in the mobile device's Bluetooth settings. Turn the Bluetooth function off and then on again, and try pairing again.	p. 8
	If your mobile device's Bluetooth device list does not show "DUAL CUBE"	Turn the mobile device's Bluetooth function off and then on again, and initiate pairing from the DUAL CUBE BASS LX to re-establish pairing.	
Can't connect to an app	Remove the "DUAL CUBE MIDI" device first that was registered on your mobile device, turn the mobile device's Bluetooth function off and then back on, and then connect using the settings in the app (DUAL CUBE BASS LX Editor).	p. 9	
In your mobile device's Bluetooth setting screen, you tap "DUAL CUBE MIDI" but can't connect to the app	Make the connection from the settings of the app (DUAL CUBE BASS LX Editor), not from your mobile device's Bluetooth settings.		
You pressed the BT-DUAL's pairing button, but can't connect to the app	You cannot connect simply by press the pairing button on the BT-DUAL. In the Bluetooth settings of your mobile device, turn the Bluetooth function on, and then connect from the settings of the app (DUAL CUBE BASS LX Editor).		
Can't connect to a paired mobile device	If the connection breaks immediately after it is established, turning the mobile device's Bluetooth switch off and then on again may fix the connection.		

MEMO

If you've checked these points and the problem still occurs, please refer to the BOSS support website.

<https://www.boss.info/support/>

Restoring the Factory Settings

Here's how to restore the settings of the to their factory-set condition (factory reset).

MEMO

You can use the dedicated software (p. 4) or an app on your mobile device (p. 9) to back up the settings stored on this unit. To save the settings, use the dedicated software or app on your mobile device to perform a backup.

1. Set the [AMP TYPE] knob to "ROCK", and turn on the power while holding down the [MEMORY] button.

The [DRIVE] button blinks.

2. Press the [DRIVE] button.

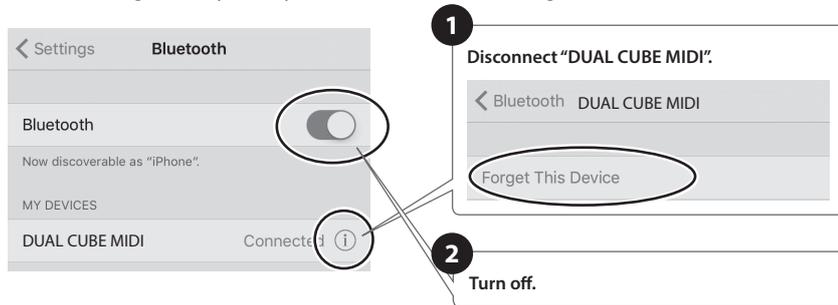
The REC→PLAY indicators repeatedly blink in sequence. When the blinking stops, all of this unit's settings return to the factory-set state.

NOTE

Don't turn off the power while the factory reset is in progress.

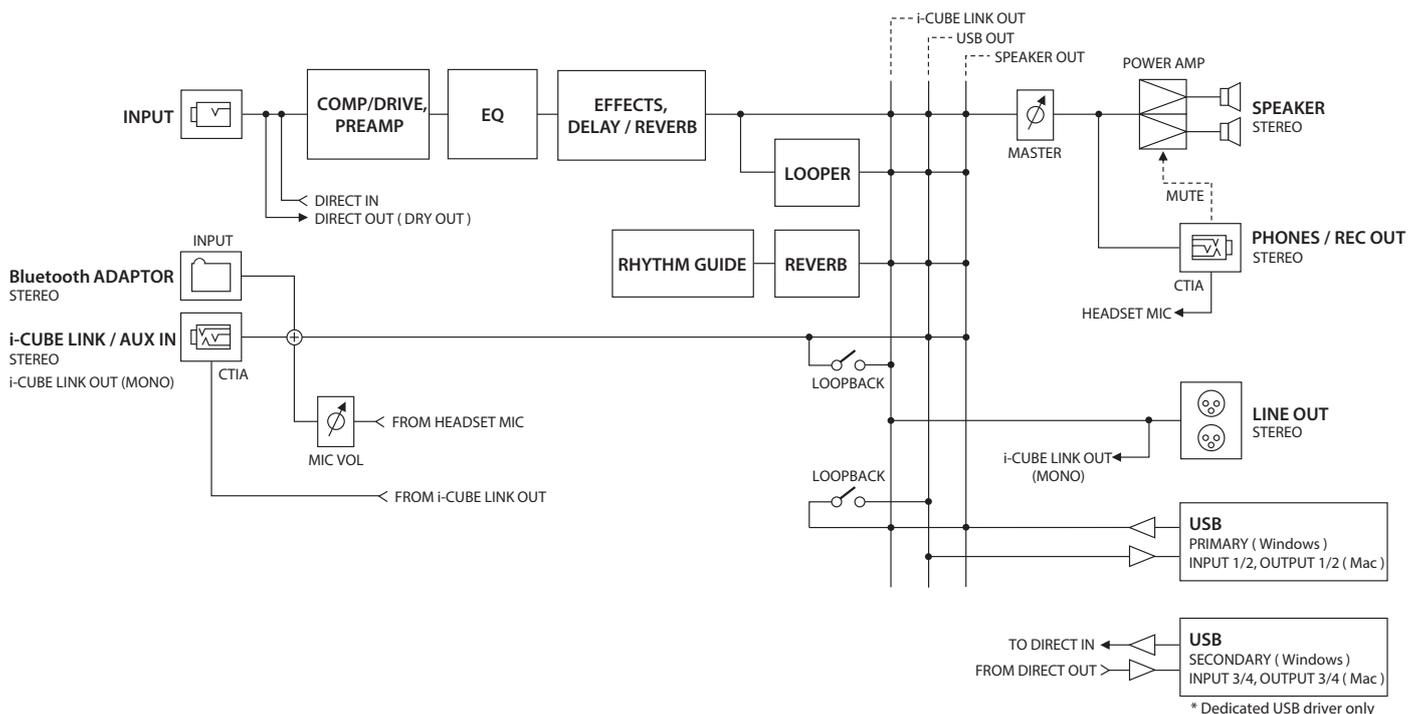
Note when using an already-paired iOS device

After executing a factory reset, you'll need to do the following.



For details, refer to the owner's manual of your iOS device.

Block Diagram



Main Specifications

Rated Power Output	10 W (5 W+5 W)
Nominal Input Level	INPUT: -10 dBu (1 M Ω) i-CUBE LINK/AUX IN: -20 dBu (15 k Ω)
Nominal Output Level	LINE OUT L, R: -10 dBu
Speakers	12 cm (5 inches) x 2
Controls	[POWER] switch [COMP/DRIVE] knob [DRIVE] button [AMP TYPE] knob (SUPER FLAT, FLAT, VINTAGE, MODERN, ROCK) [MEMORY] button [GAIN] knob [VOLUME] knob [BASS] knob [MIDDLE] knob [TREBLE] knob [EFFECTS] knob (CHORUS, FLANGER, T-WAH) [DELAY/REVERB] knob [START/STOP] button [PATTERN] knob (METRONOME, JAZZ, ROCK, BLUES, R&B, FUNK, METAL, LATIN, COUNTRY) [VARIATION] button [TAP TEMPO] button [VOLUME] knob (RHYTHM GUIDE) [MIC VOL] knob [MASTER] knob [LOOPBACK] switch (i-CUBE LINK/AUX IN) [LOOPBACK] switch (USB)
Indicators	POWER DRIVE MEMORY START/STOP VARIATION REC PLAY DUB
Connectors	INPUT jack: 1/4-inch phone type PHONES/REC OUT jack: Stereo Miniature phone type (Stereo, CTIA) i-CUBE LINK/AUX IN jack: Stereo Miniature phone type (Stereo, CTIA) LINE OUT L, R connectors: XLR type FOOT SW jack: 1/4-inch TRS phone type Bluetooth ADAPTOR connector: Dedicated connector USB port: USB B DC IN jack
Power Supply	AC adaptor (DC 9 V) Alkaline battery (AA, LR6) x 8 Ni-MH battery (AA, HR6) x 8
Current Draw	370 mA
Expected battery life under continuous use	Alkaline battery: Approximately 8 hours Ni-MH battery: Approximately 10 hours (*1) *1 When using batteries having a capacity of 2,500 mAh. * These can vary depending on the specifications of the batteries, capacity of the batteries, and the conditions of use.
Dimensions	341 (W) x 205 (D) x 261 (H) mm 13-7/16 (W) x 8-1/8 (D) x 10-5/16 (H) inches
Weight (excluding AC adaptor)	4.4 kg 9 lbs 12 oz
Accessories	Owner's Manual Leaflet "USING THE UNIT SAFELY" AC adaptor Power cord Mini cable (4-pole miniature phone type)
Options (sold separately)	Footswitch: FS-5U, FS-6, FS-7 Bluetooth® Audio MIDI Dual Adaptor (Model: BT-DUAL) Wireless MIDI Expression Pedal: EV-1-WL

* 0 dBu = 0.775 Vrms

* This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.

English

日本語

Deutsch

Français

Italiano

Español

Português

Nederlands

USING THE UNIT SAFELY

WARNING

Use only the supplied AC adaptor and the correct voltage

Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



Use only the supplied power cord

Use only the attached power cord. Also, the supplied power cord must not be used with any other device.



Turn the unit off before installing BT-DUAL

Before installing the BT-DUAL, you must first always turn off the DUAL CUBE BASS LX and unplug the AC adaptor.



CAUTION

Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.



- Removable Parts
Bluetooth ADAPTOR cover, screw (p. 8)

Handle the ground terminal carefully

If you remove the screw from the ground terminal, be sure to replace it; don't leave it lying around where it could accidentally be swallowed by small children. When refastening the screw, make that it is firmly fastened, so it won't come loose.



Take care not to get burned

Batteries may reach a high temperature; please be careful to avoid burning yourself.



IMPORTANT NOTES

Power Supply

- Place the AC adaptor so the side with the indicator faces upwards. The indicator will light when you plug the AC adaptor into an AC outlet.

Power Supply: Use of Batteries

- Sounds may distort easily or may cut off when played at high volume as the battery power begins to fade, but this is normal and does not indicate a malfunction. In such instances, either replace the batteries or use the AC adaptor included with the unit.
- If operating this unit on batteries, please use alkaline batteries or Ni-MH batteries.
- If operating this unit on batteries, please disconnect the AC adaptor from this unit.

Placement

- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.

Repairs and Data

- Before sending the unit away for repairs, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information. Although we will do our utmost to preserve the data stored in your unit when we carry out repairs, in some cases, such as when the memory section is physically damaged, restoration of the stored content may be impossible. Roland assumes no liability concerning the restoration of any stored content that has been lost.

Additional Precautions

- Any data stored within the unit can be lost as the result of equipment failure, incorrect operation, etc. To protect yourself against the irretrievable loss of data, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Do not use connection cables that contain a built-in resistor.

Intellectual Property Right

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform or broadcast it without the permission of the copyright owner.
- Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.
- The copyright of content in this product (the sound waveform data, style data, accompaniment patterns, phrase data, audio loops and image data) is reserved by Roland Corporation.
- Purchasers of this product are permitted to utilize said content (except song data such as Demo Songs) for the creating, performing, recording and distributing original musical works.
- Purchasers of this product are NOT permitted to extract said content in original or modified form, for the purpose of distributing recorded medium of said content or making them available on a computer network.
- ASIO is a trademark and software of Steinberg Media Technologies GmbH.

- The **Bluetooth**® word mark is registered trademark owned by **Bluetooth SIG, Inc.** and any use of such marks by Roland is under license.
- This product includes third party open source software. Copyright (c) 2009-2017 ARM Limited. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>
- This Product uses the Source Code of µT-Kernel under T-License 2.0 granted by the T-Engine Forum (www.tron.org).
- Roland and BOSS are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.
- Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.