BOSS

Owner's Manual

Acoustic Amplifier
AC-22LX

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.
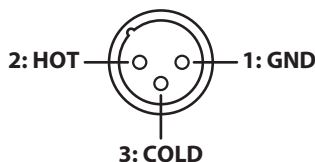
Panel Descriptions

Top Panel

① MIC CHANNEL

MIC jack

Connect your microphones and related devices here.

* Pin assignment of MIC connector/jack

2: HOT — 1: GND

3: COLD

[PHANTOM] button

Switches phantom power on/off.

Long-press the [PHANTOM] button to switch between ON/OFF.

When connecting a mic that requires phantom power (such as a condenser mic), set this to "ON".

Make sure this is set to "OFF" when you connect a mic that doesn't require phantom power.

NOTE

- When connecting a mic that requires phantom power, connect the mic and operate this device in the following order.
  1. Long-press the [PHANTOM] button to turn it off.
  2. Connect the microphone.
  3. Long-press the [PHANTOM] button to turn it on.

- Supplying phantom power to a mic that doesn't require it may cause the device to malfunction.
  Make sure to switch the button OFF before you connect the mic.

- To protect the circuitry of this unit, the sound from the Mic channel is muted for a period of time after you switch the [PHANTOM] button ON or OFF.

- You may hear a noise if you unplug or plug a connector into this jack while phantom power is turned on.

- If the condenser mic's volume is too loud, use the attenuator (PAD) on the mic to adjust the volume. Refer to the owner's manual of your condenser mic for details.
  You can use the dedicated app for the AC-22LX to operate the AC-22LX's preamp PAD.

[VOLUME] knob

Adjusts the volume before equalization and effects are applied to the mic and related devices.

[BASS] knob

Adjusts the low-end volume of the mic and related devices connected to the MIC connector.

[TREBLE] knob

Adjusts the high-end volume of the mic and related devices connected to the MIC connector.

[REVERB] knob

The knob position adjusts the depth of the mic channel reverb.

When this is off, reverb effect is not applied.

2 GUITAR/INSTRUMENT CHANNEL

GUITAR/INSTRUMENT jack

Connect an acoustic guitar or other acoustic instrument here.

[AIR FEEL] knob

This gives you a reverberation and ambience that's like recording the sound of an acoustic instrument through a mic.
You can use the knob to select between five different types of mic recording (miking).

Type	Explanation
DRY	This is the traditional amp system used to directly play back the sound from the pickups, which emphasizes the character of the pickup sound. Used for fully conveying the expressiveness of your performance.
XY	Offers the advantages of the XY miking technique. This picks up the body resonance of acoustic instruments and the direct sound of their strings playing, which gives percussive playing effects like muting the chord strokes or the bridge with the palm of your hand.
AB	Offers the advantages of the AB miking technique. This naturally extends the reverberations of the guitar into the sound space, and gives acoustic instruments a wider range of resonance.
ORTF	Offers the advantages of the ORTF miking technique. Ambience is added to the reverberations of acoustic instruments, giving them a deeper, atmospheric sound.
MID SIDE	Offers the advantages of the mid-side miking technique. This offers an ambience that sounds like being at a slight distance from the acoustic instrument, and is suitable for emphasizing vocals and other musical instruments when playing accompaniment.

[VOLUME] knob

Adjusts the volume before equalization and effects are applied to the acoustic instrument.

[BASS] knob

Adjusts the low-end volume of instruments that are connected to the GUITAR/INSTRUMENT jack.

[MIDDLE] knob

Adjusts the midrange volume of instruments that are connected to the GUITAR/INSTRUMENT jack.

[TREBLE] knob

Adjusts the high-end volume of instruments that are connected to the GUITAR/INSTRUMENT jack.

[REV/REV&CHO] knob

Use this knob to switch between reverb, reverb & chorus for the GUITAR/INSTRUMENT channel.

Type	Explanation
OFF	Effects are not applied.
REVERB	Adjusts the reverb depth.
REVERB & CHORUS	Adjusts the reverb & chorus depth.

3 RHYTHM BOX

This amp features built-in rhythm patterns that use realistic percussion and drum sounds.
Enjoy playing along with these rhythm patterns as you like (p. 6).

[PATTERN] knob

Selects the genre of the rhythm pattern.

[START/STOP] button

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

[TAP TEMPO]/[VARIATION] button

When you long-press the [TAP TEMPO] button, it functions as the [VARIATION] button. You can switch it back to the [TAP TEMPO] button by long-pressing the button again.

[TAP TEMPO] button

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

[VARIATION] button

Selects the rhythm pattern variation.
Each rhythm pattern has three rhythm variations.
The [VARIATION] button color changes from green to red to orange each time you press it, and the variation changes accordingly.

[VOLUME] knob

Adjusts the volume of the rhythm box.

4 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).

5 PHONES/REC OUT jack

Connect your headphones here.

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

6 [MEMORY] button

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

7 [MASTER] knob

Adjusts the output volume.

8 POWER indicator

This indicator lights when the unit is turned on.

* When operating on battery power only, the indicator blinks when battery power gets too low. Replace the battery as soon as possible. (p. 5).
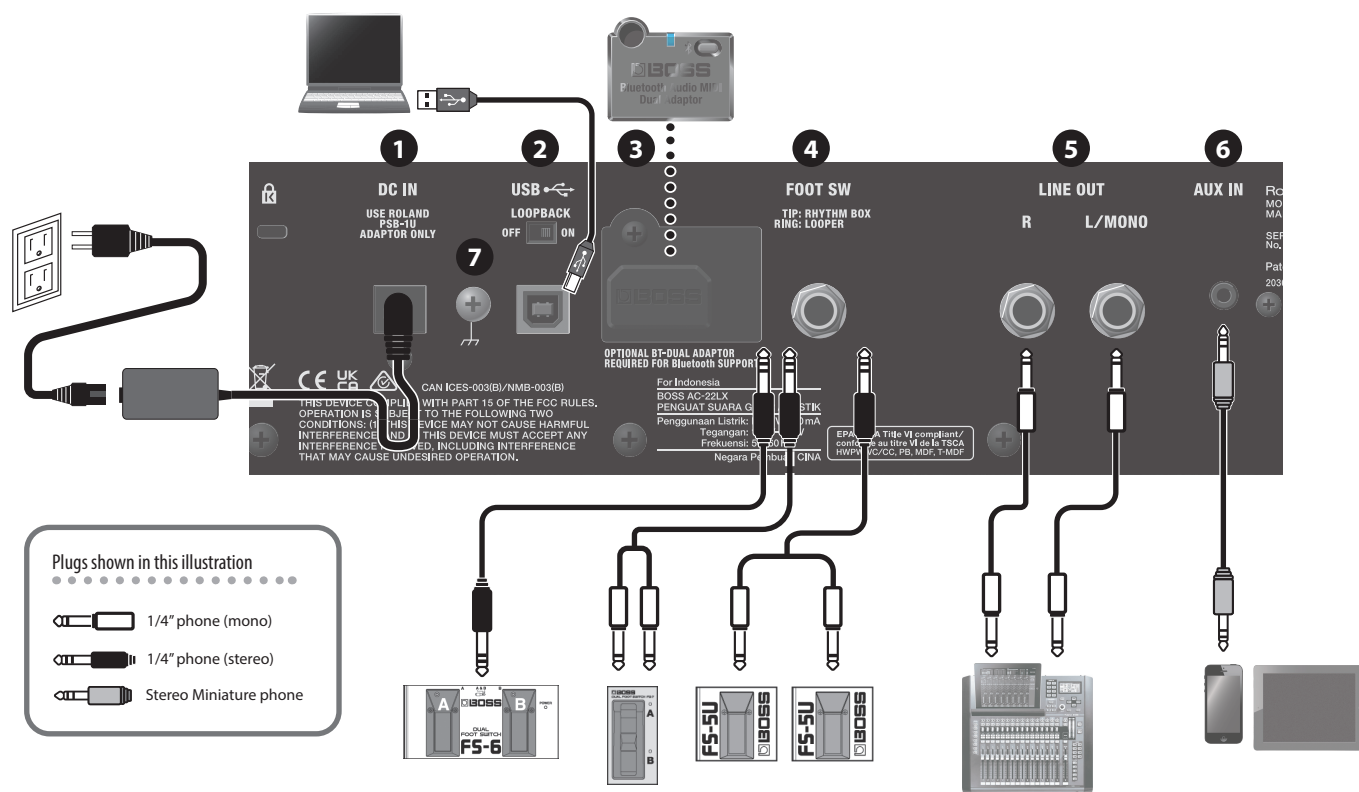
9 [POWER] switch

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

* 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.

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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.

Plugs shown in this illustration

1/4" phone (mono)	
1/4" phone (stereo)	
Stereo Miniature phone	

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 app 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.

MEMO

You can use your iPad or iPhone to adjust the volume (when using system program ver. 1.02 or later).

Download the AC-22LX system program from the BOSS website.

Using the dedicated app

When using the dedicated app, 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.

BOSS website

https://roland.cm/dl/425141A

Configuring the USB driver to use

USB driver	What to do
Dedicated USB driver	Set the [AIR FEEL] knob to "DRY", and turn on the power while holding down the [MEMORY] button.
Standard OS USB driver	Set the [AIR FEEL] knob to "XY", 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 connector

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).

* Do not touch any of the printed circuit pathways or connection terminals.

* When circuit board installation is complete, double-check your work.

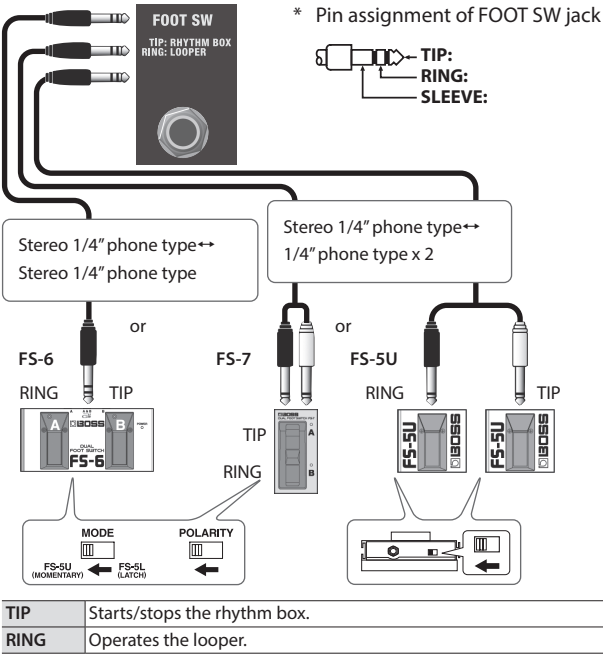## Using the AC-22LX's dedicated app

You can connect the AC-22LX via USB to your computer and use it with dedicated app. Using the dedicated app 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 app from the BOSS website (**https://roland.cm/dl/425141A**).

4 **FOOT SW jack**

You can start/stop the rhythm box (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).

* Pin assignment of FOOT SW jack

TIP	Starts/stops the rhythm box.
RING	Operates the looper.

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 app (p. 4) or an app on your mobile device (p. 9) to adjust the output volume.

If you're outputting in mono, connect to the L/MONO jack.

6 **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.

7 **Ground terminal**

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

If you hear noise when connecting an acoustic instrument or another external device, connect the ground terminal to reduce the noise.
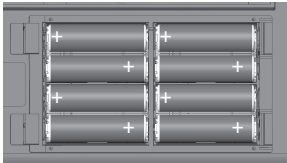
Operating on Battery Power

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. *1

*1 When using rechargeable Ni-MH batteries with a capacity of 2,500 mAh.

* 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 only, the indicator blinks when battery power gets too low. Replace the battery 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.
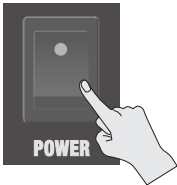
Installing the Batteries

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.**

POWER

3. **Turn on the power of the devices connected to the LINE OUT and PHONES/REC OUT jacks.**

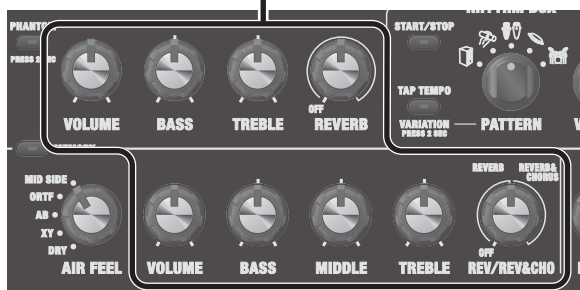**4.** **Adjust the volume levels of the devices.**

* 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 AIR FEEL 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 app (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 [AIR FEEL] knob to select the AIR FEEL 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.
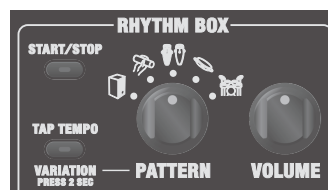
MEMO

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 Box

This amp features built-in rhythm patterns that use realistic percussion and drum sounds. Enjoy playing along with these rhythm patterns as you like.

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

Patterns	CAJON, SHAKER, CONGA, TAMBOURINE, DRUMS

2. **Press the [START/STOP] button to start the rhythm box.**

When you start the rhythm box, the [START/STOP] button blinks.

3. **Use the [VOLUME] knob of the rhythm box to adjust the rhythm box volume.**

4. **Long-press the [TAP TEMPO] button to change it to the [VARIATION] button.**

* When you long-press the [TAP TEMPO] button, it functions as the [VARIATION] button. You can switch it back to the [TAP TEMPO] button by long-pressing the button again.

5. **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→orange→green with each press.

6. **Adjust the tempo you want to use.**

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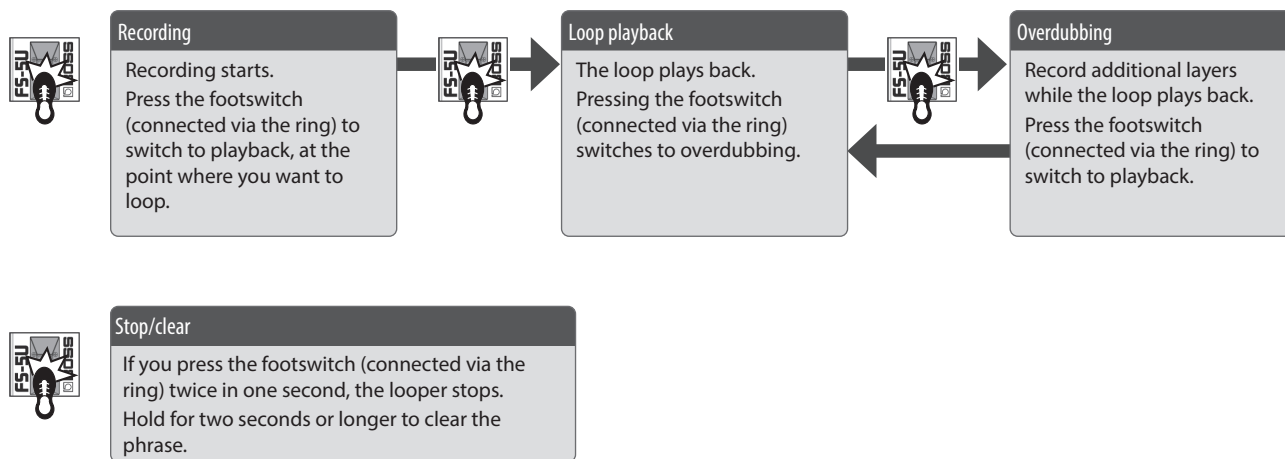
MEMO

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

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 app (p. 4) or mobile device app (p. 9), you can select up to a maximum of 90 seconds (mono).

Recording

Recording starts.
Press the footswitch (connected via the ring) to switch to playback, at the point where you want to loop.

Loop playback

The loop plays back.
Pressing the footswitch (connected via the ring) switches to overdubbing.

Overdubbing

Record additional layers while the loop plays back.
Press the footswitch (connected via the ring) to switch to playback.

Stop/clear

If you press the footswitch (connected via the ring) twice in one second, the looper stops.
Hold for two seconds or longer to clear the phrase.

* 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

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Wireless Connection with a Mobile Device

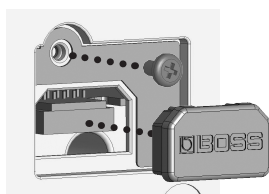Here's what you can do when the BT-DUAL (sold separately) is connected to the AC-22LX.

- 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)
- Connect an FS-1-WL wireless footswitch (sold separately) to this unit to wirelessly start/stop the rhythm box, switch between memories and more

* Note that the AC-22LX does not offer Bluetooth functionality. You'll need to attach the BT-DUAL (sold separately) to use Bluetooth.
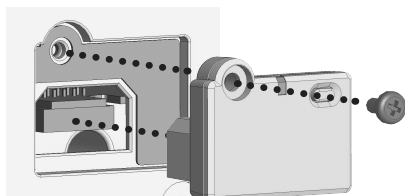
Attaching the BT-DUAL

Attach the BT-DUAL to the Bluetooth ADAPTOR connector of the AC-22LX.

1. Power down the AC-22LX 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 AC-22LX, you can use Bluetooth audio functionality to listen to music or music video played back on a mobile device through this unit's speakers.

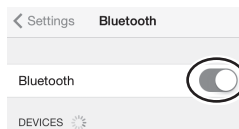## Registering a Mobile Device (Pairing)

"Pairing" involves registering the mobile device that you want to use with the AC-22LX (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 AC-22LX.

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 AC-22LX.

2. Place the mobile device that you want to connect close to the AC-22LX.

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.

Bluetooth indicator

MEMO

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

5. Tap "AC-22LX Audio", shown on the Bluetooth device screen of your mobile device.

This pairs the BT-DUAL with your mobile device. When pairing succeeds, "AC-22LX 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 "AC-22LX 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 AC-22LX from a Mobile Device App

Use the "AC-22LX Editor" app to edit effects and save settings on this unit.

By connecting the EV-1-WL wireless MIDI expression pedal, you can control parameters such as the volume; and with the FS-1-WL wireless footswitch, you can wirelessly start/stop the rhythm box, switch between memories and more.

For details on the AC-22LX 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 AC-22LX.**

2. **Place the mobile device that you want to connect close to the AC-22LX.**

3. **Turn on the Bluetooth function of the mobile device.**

‹ Settings	**Bluetooth**
Bluetooth	⬭
DEVICES	

* 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.

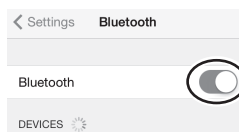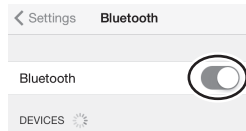**4.** **In the app's settings, connect to AC-22LX MIDI.**

NOTE

Do not tap "AC-22LX 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
"AC-22LX" 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 "AC-22LX Audio" appears. Connected to an app: A device named "AC-22LX MIDI" appears. Check these settings from within the app, such as the AC-22LX Editor.	p. 8
Can't connect to Bluetooth audio	If your mobile device's Bluetooth device list shows "AC-22LX"	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 "AC-22LX"	Turn the mobile device's Bluetooth function off and then on again, and initiate pairing from the AC-22LX to re-establish pairing.	
Can't connect to an app	Remove the "AC-22LX 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 (AC-22LX Editor).		p. 9
In your mobile device's Bluetooth setting screen, you tap "AC-22LX MIDI" but can't connect to the app	Make the connection from the settings of the app (AC-22LX 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 (AC-22LX 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 app (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 app or app on your mobile device to perform a backup.

1. **Set the [AIR FEEL] knob to "MID SIDE", and turn on the power while holding down the [MEMORY] button.**

The [TAP TEMPO] button blinks.

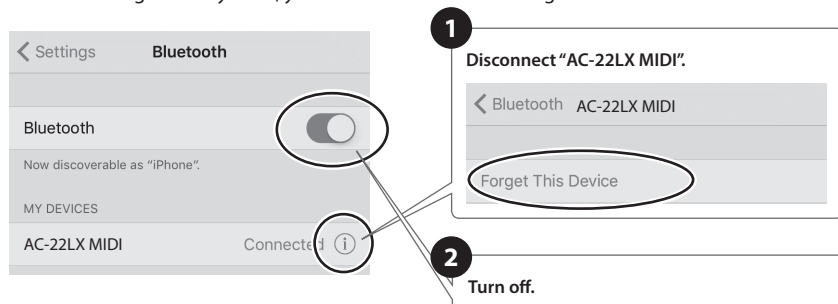**2.** **Press the [TAP TEMPO] button.**

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

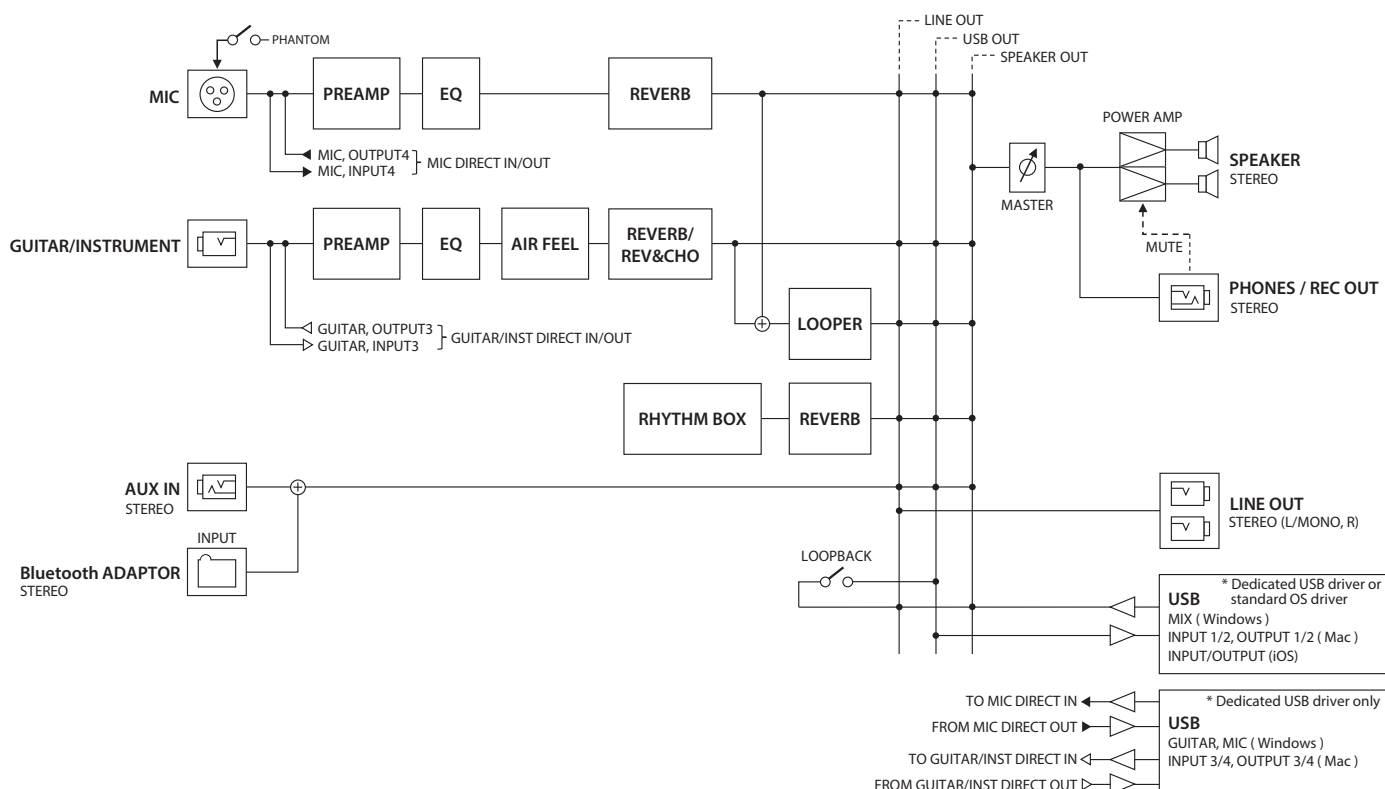Don't turn off the power while the factory reset is in progress.

Note when using an already-paired iOS device

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

Settings	Bluetooth
Bluetooth	⬤
Now discoverable as "iPhone".	
MY DEVICES	
AC-22LX MIDI	Connected ⓘ

1 Disconnect "AC-22LX MIDI".

Bluetooth   AC-22LX MIDI

Forget This Device

2 Turn off.

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

Block Diagram

MIC — PHANTOM — PREAMP — EQ — REVERB
MIC, OUTPUT4 / MIC, INPUT4 } MIC DIRECT IN/OUT

GUITAR/INSTRUMENT — PREAMP — EQ — AIR FEEL — REVERB/REV&CHO
GUITAR, OUTPUT3 / GUITAR, INPUT3 } GUITAR/INST DIRECT IN/OUT

LINE OUT
USB OUT
SPEAKER OUT

MASTER — POWER AMP — SPEAKER STEREO

MUTE

PHONES / REC OUT STEREO

LOOPER

RHYTHM BOX — REVERB

AUX IN STEREO

INPUT

Bluetooth ADAPTOR STEREO

LINE OUT STEREO (L/MONO, R)

LOOPBACK

USB * Dedicated USB driver or standard OS driver
MIX (Windows)
INPUT 1/2, OUTPUT 1/2 (Mac)
INPUT/OUTPUT (iOS)

TO MIC DIRECT IN
FROM MIC DIRECT OUT
TO GUITAR/INST DIRECT IN
FROM GUITAR/INST DIRECT OUT

USB * Dedicated USB driver only
GUITAR, MIC (Windows)
INPUT 3/4, OUTPUT 3/4 (Mac)

Main Specifications

Rated Power Output	10 W (5 W+5 W)
Nominal Input Level	GUITAR/INSTRUMENT: -10 dBu (10 M ohm) MIC: -40 dBu (5 k ohm) AUX IN: -20 dBu (15 k ohm)
Nominal Output Level	LINE OUT L/MONO, R: -10 dBu
Speakers	12 cm (5 inches) x 2
Controls	[POWER] switch [MASTER] knob [MEMORY] button USB [LOOPBACK] switch < GUITAR/INSTRUMENT > [AIR FEEL] knob (DRY, XY, AB, ORTF, MID SIDE) [VOLUME] knob [BASS] knob [MIDDLE] knob [TREBLE] knob [REV/REV&CHO] knob (REVERB, REVERB&CHORUS) < MIC > [PHANTOM] button [VOLUME] knob [BASS] knob [TREBLE] knob [REVERB] knob < RHYTHM BOX > [START/STOP] button [TAP TEMPO]/[VARIATION] button [PATTERN] knob (CAJON, SHAKER, CONGA, TAMBOURINE, DRUMS) [VOLUME] knob
Indicators	POWER PHANTOM MEMORY START/STOP TAP TEMPO/VARIATION REC PLAY DUB
Connectors	GUITAR/INSTRUMENT jack: 1/4-inch phone type MIC connector: XLR type, phantom power (DC 48 V, 14 mA Max) PHONES/REC OUT jack: Stereo Miniature phone type AUX IN jack: Stereo Miniature phone type LINE OUT L/MONO, R jacks: 1/4-inch phone type FOOT SW jack: 1/4-inch TRS phone type Bluetooth ADAPTOR connector: Dedicated connector USB port: USB B type 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	400 mA
Expected battery life under continuous use	Alkaline battery: Approximately 8 hours Ni-MH battery: Approximately 10 hours (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	317 (W) x 210 (D) x 265 (H) mm 12-1/2 (W) x 8-5/16 (D) x 10-7/16 (H) inches
Weight (excluding AC adaptor)	4.0 kg 8 lbs 14 oz
Accessories	Owner's Manual Leaflet USING THE UNIT SAFELY AC adaptor Power cord
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 Wireless Foot Switch: FS-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.

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 expansion boards

Before installing the BT-DUAL, you must first always turn off the AC-22LX 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

   BT-DUAL cover (p. 8)

   Screws for BT-DUAL (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.

⚠ CAUTION

Precautions concerning use of phantom power supply

Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.
(This instrument's phantom power: 48 V DC, 14 mA Max)

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

• If the batteries run extremely low, the sound may distort / interruptions in the sound may occur at high volume levels, but this does not indicate a malfunction. If this occurs, please replace the batteries / use the included AC adaptor.

• If operating this unit on batteries, please use alkaline batteries, Ni-MH batteries.

• If operating this unit on batteries, please disconnect the AC adaptor from this unit.

Placement

• 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.

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

Maintenance

• To clean the unit, use a dry, soft cloth; or one that is slightly dampened. Try to wipe the entire surface using an equal amount of strength, moving the cloth along with the grain of the wood. Rubbing too hard in the same area can damage the finish.

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.

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