Roland

FR-4x

V-Accordion

Owner's Manual

English 日本語 Deutsch Français Italiano Español Português Nederlands Norsk

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Owner's Manual (this document)

Read this first. It explains the basic things you need to know in order to use the FR-4x.

PDF Manual (download from the Web)

- **Reference Manual**
  This explains all functions of the unit.
- **MIDI Implementation**
  This is detailed information about MIDI messages.

To obtain the PDF manual

1. Enter the following URL in your computer.
http://www.roland.com/manuals/

▼

2. Choose "FR-4x" as the product name.

Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY" and the Owner's Manual (p. 20)). After reading, keep the document(s) where it will be available for immediate reference.

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Attaching the Straps

1. Remove the strap.

The FR-4x comes with two shoulder straps that have Velcro fasteners on each end.



2. Place the FR-4x in a stable location.

3. Pass one strap through the holder ring on the display side.



MEMO

The two straps are of different lengths. Attach the shorter strap to the left shoulder side.

4. Place the Velcro fasteners together to secure the strap.

5. Firmly press together the entire surface of the Velcro fastener so that the strap does not come loose.

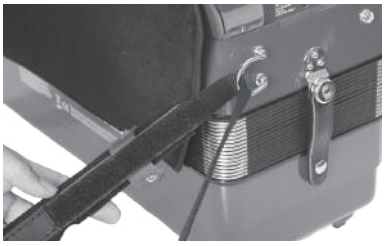


6. In the same way, attach the other strap by repeating steps 3–5.

The ends of the straps will be as shown in the illustration.



7. Pass the opposite end of the strap through the holder ring on the side of the jacks.



8. Place the Velcro fastener together to secure the strap.

9. Firmly press together the entire surface of the Velcro fastener so that the strap does not come loose.

10. Use the buckle to adjust the length of the shoulder strap.



11. In the same way, attach the other strap by repeating steps 7–10.

Adjusting the Bass Strap

On the left-hand button keyboard side, there is a belt through which you can pass your left hand to open and close the bellows.

Use the Velcro fastener to adjust the length of the bass strap as appropriate for the size of your hand.



Connecting the AC Adaptor

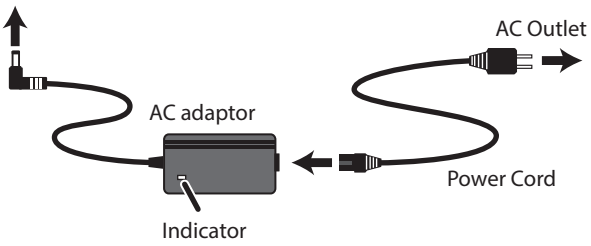
* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
* We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidentally disconnected from the unit.

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.



2. Connect the included power cord to the AC adaptor.

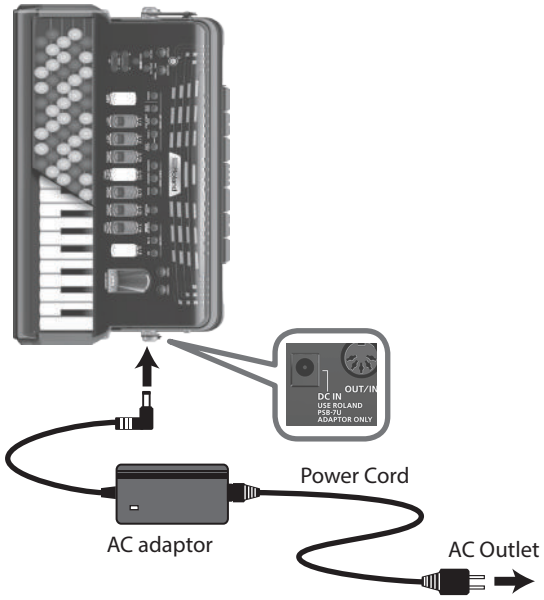
* Place the AC adaptor so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards. The indicator will light when you plug the AC adaptor into an AC outlet.



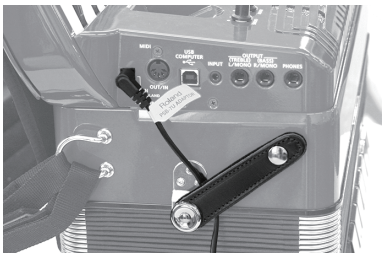
NOTE

Be sure to use the AC adaptor supplied with the unit (PSB-7U).

3. Connect the AC adaptor to the FR-4x's DC IN jack.



4. Use the bellows clip to secure the cord of the AC adaptor.



* To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the jack, anchor the power cord using the bellows clip, as shown in the illustration.

5. Plug the power cord into a power outlet.

To use the FR-4x with batteries, see "Installing Batteries" (p. 4).

Installing Batteries

If you install ten AA rechargeable nickel-metal hydride batteries, you'll be able to perform without connecting the AC adaptor. By using the FR-4x with its built-in speaker on battery power, you can play it like an acoustic accordion without connecting a cable.

About the batteries that can be used

- When using rechargeable nickel-metal hydride batteries (2000 mAh batteries), you can use the instrument for approximately five hours if the speaker is on, or approximately nine hours if the speaker is off (operating time depends on the conditions of use).
- When the batteries run low, the display indicates "Battery Low."



NOTE

Do not use alkaline batteries or zinc-carbon batteries.

About battery handling

Improper handling of batteries, rechargeable batteries, or chargers can cause hazards such as electrolyte leakage, overheating, ignition, or bursting.

Before use, you must read and observe all of the cautions included with the batteries, rechargeable batteries, or charger, and use them as directed.

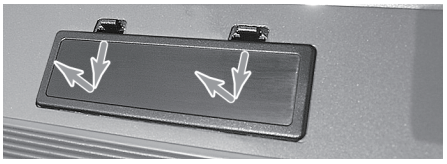
* Rechargeable batteries and chargers must be used only in the combination of rechargeable battery and charger that is specified by the manufacturer.

* Power-off the FR-4x when installing or removing batteries.

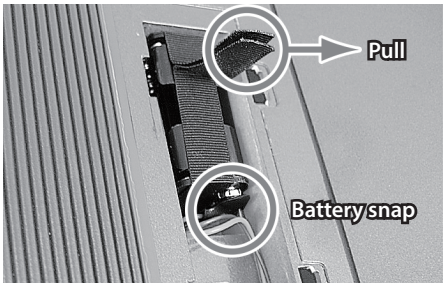
1. Remove the cushion from the back of the FR-4x.

2. Remove the battery case cover.

While pressing downward on the two knobs of the cover, pull it toward yourself.



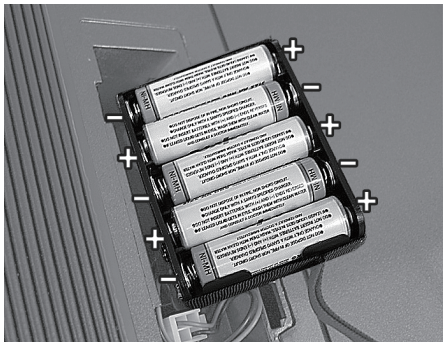
3. Pull the end of the belt that is wrapped around the battery holder, and remove the battery holder from the battery case.



4. Remove the battery snap of the cord from the battery holder.

5. Insert ten rechargeable nickel-metal hydride batteries into the battery holder.

Insert each battery correctly in accordance with the "+""-" polarity markings.



6. Connect the battery snap to the battery holder.

7. Insert the battery holder into the FR-4x's battery case.

8. Attach the battery case cover, and attach the cushion.

* 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" (leaflet "USING THE UNIT SAFELY" and Owner's manual (p. 20)).

* The batteries will not be charged even if you connect the AC adaptor when rechargeable batteries are installed in the FR-4x. You must use a commercially available charger to charge rechargeable batteries.

Turning On the Power

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.

If you connect the FR-4x to an amplifier, etc., set its volume to the minimum value as well.

2. Press the [⏻] button.

The [⏻] button lights.

* 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.

3. Turn the [VOLUME] knob clockwise to set the volume to an appropriate level.

4. Adjust the volume of the connected audio system (if connected).

* The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function).

If you do not want the power to be turn off automatically, disengage the Auto Off function (p. 5).

NOTE

- Any settings that you are in the process of editing will be lost when the power is turned off. If you have any settings that you want to keep, you should save them beforehand.
- To restore power, turn the power on again.

Turning off the power

1. Turn the [VOLUME] knob all the way to the left to minimize the volume.

If you connected the FR-4x to an amplifier, etc., set its volume to the minimum value as well.

2. Hold down the [⏻] button until the indications in the display disappear.

Release your finger, and the power will turn off.

Auto Off Setting

This parameter allows you to specify how long the FR-4x should wait before switching itself off while you are not using it.

If you don't want to use this function, turn it "OFF."

1. Press the [MENU/WRITE] button.

2. Use the cursor [◄] [►] buttons to select "System," and then press the [ENTER/YES] button.

3. Use the cursor [◄] [►] buttons to select "Auto Off."

4. Use the VALUE [-] [+] buttons to edit the value.



Parameter	Value
Auto Off	OFF, 10 (min), 30 (min), 240 (min)

This setting is lost when the FR-4x is powered-off.

If you want to keep the setting, save the system settings as follows.

5. Long-press the [MENU/WRITE] button.

The Write screen appears.

6. Use the VALUE [-] [+] buttons to select "SYS."



7. Press the cursor [►] button.

A confirmation message appears.



8. Press the [ENTER/YES] button to save.

When saving is finished, the screen indicates "Complete."

If you decide to cancel, press the [EXIT/NO] button.

9. Press the [EXIT/NO] button several times to return to the previous screen.

Listening to the Demo Songs

Several demo songs are built into the FR-4x.

1. Hold down the [SONG LIST] button.

The demo songs begin playing.

2. To change demo songs, use the VALUE [-] [+] buttons.

3. When you press the [EXIT] button or the [SONG LIST] button, playback stops and you return to the previous screen.

Connecting Headphones

The FR-4x has one jack for plugging in headphones. This allows you to play without having to worry about bothering others around you, even at night.

1. Plug the headphones into the PHONES jack located on the FR-4x's connection panel.

Use stereo headphones.

The FR-4x's speakers are switched off when you connect headphones.

If desired, you can make the FR-4x's speakers stay on even if headphones are connected.

➡ [SHIFT] + [5/12] button (p. 17)

NOTE

If headphones are connected, do not place the FR-4x with its jacks downward.

Restoring the Factory Settings (FACTORY ALL RESET)

Here's how to restore all of the FR-4x's settings to their factory-set state.

1. Press the [MENU/WRITE] button.

2. Use the cursor [◄] [►] buttons to select "Utility," and then press the [ENTER/YES] button.

3. Use the cursor [◄] [►] buttons to select "FctryALL."

4. To restore the settings of the FR-4x to their factory-set state, press the [ENTER/YES] button.

A message is displayed during the factory reset process; when finished, the screen indicates "Complete."

If you decide to cancel, press the [EXIT/NO] button.

5. Press the [EXIT/NO] button several times to return to the previous screen.

Adjusting the Sensitivity of the Bellows

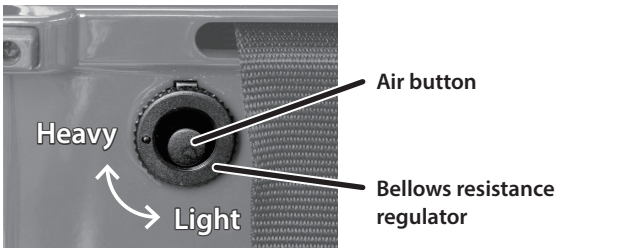
Like acoustic accordions, the FR-4x/FR-4xb produce sound when you use your left hand to open and close (expand and contract) the bellows. In general, sound is not produced unless you move the bellows.

On the FR-4x/FR-4xb, you can adjust the sensitivity of the bellows to your preference.

To adjust the sensitivity of the bellows, you'll use the bellows resistance regulator located at the side of the left-hand bellows strap, and a setting within the FR-4x (bellows curve).

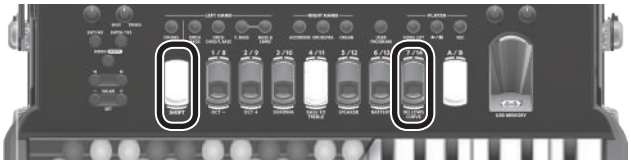
1. Use the bellows resistance regulator to adjust the resistance of the bellows to being opened or closed.

Turning the bellows resistance regulator changes the resistance when opening or closing the bellows.



Next, change the internal setting (bellows curve) as follows.

2. Hold down the [SHIFT] button and press the right-hand register [7/14] button.



The following screen appears.



3. Use the VALUE [-] [+] buttons to change the value.

Value	Explanation
FIX.L (Fixed Low) **FIX.M (Fixed Med)** **FIX.H (Fixed High)**	The volume is fixed, regardless of bellows movement. This is convenient when you want to play without moving the bellows. "Fixed Low" is a low volume, "Fixed High" is a high volume, and "Fixed Med" is an intermediate volume.
X-LT (X-Light)	Adequate volume change can be obtained by moving the bellows even more gently than the "Light" setting.
LIGT (Light)	Volume change can be obtained even by moving the bellows gently. This setting allows easy playing when the bellows resistance regulator is set to a light setting.
STD (Standard)	This is the standard setting. This setting allows easy playing when the bellows resistance regulator is set to a medium setting.
HEVY (Heavy)	Although the bellows must be moved strongly to obtain volume change, this setting allows a broad range of nuances to be added. This setting allows easy playing when the bellows resistance regulator is set to a heavy setting.
X-HV (X-Heavy)	This setting requires the bellows to be moved even more strongly than the "Heavy" setting.

4. Press the [EXIT] button to return to the previous screen.

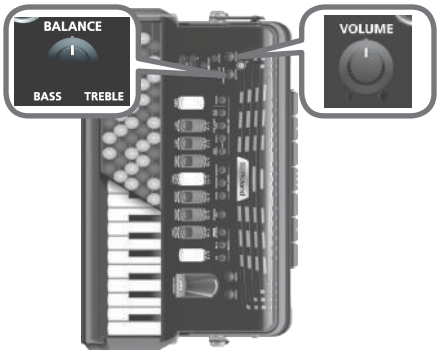
MEMO

The bellows curve setting is automatically saved when you turn off the power.

Air button

Pressing the air button lets you open or close the bellows quickly. Use this if the bellows are open when you've finished playing.

Adjusting the Volume



To change the volume, turn the [VOLUME] knob located at the right-hand keyboard side.

Turn the knob toward the right to increase the volume, or toward the left to decrease it.

Adjusting the Balance

Turn the [BALANCE] knob to change the volume balance between the right-hand keyboard (TREBLE) and the left-hand button keyboard (BASS).

Normally, you'll leave this in the center.

Selecting an Accordion Set

When you switch the accordion set, the sounds of the right-hand keyboard and left-hand button keyboard will all change.

If we use the analogy of an acoustic accordion, this is like switching to a different accordion.

Go ahead and compare different accordion sets to find your favorites.

1. Press the VALUE [-] [+] buttons.



The set changes each time you press a button.



Accordion set number

MEMO

If you hold down the [SHIFT] button and press a [-] [+] button, the value changes in steps of 10. If you hold down one of the [-] [+] buttons and press the other button, the value increases or decreases more quickly.

The FR-4x contains 100 sets, and when shipped from the factory, several sets are already provided.

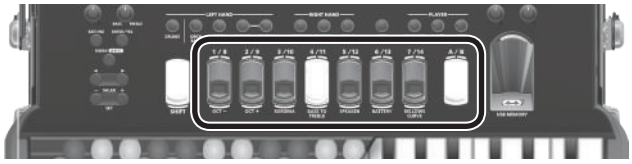
You can select and play the built-in sets, or create sets to your own preference and save them.

➡ For a list of the sets that are included when the FR-4x is shipped from the factory, refer to "Reference Manual" (PDF).

Selecting an Accordion Sound for the Right-Hand Keyboard

Select the accordion sound that is played by the right-hand keyboard.

1. Press a right-hand register button.

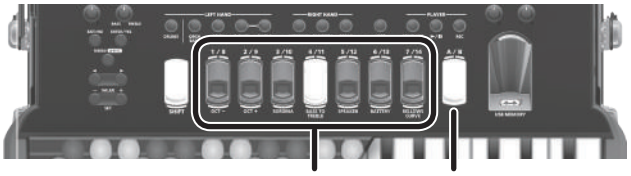


The sound of the button you pressed is selected.

The number at the right edge of the upper line in the display changes to the number of the button that you pressed.



The right-hand (treble) provides 14 registers for each accordion set.



Register buttons [A/B] button



A: Select 1–7 (LED unlit)
B: Select 8–14 (LED lit)

By pressing the [A/B] button you can switch the seven register buttons between selecting registers 1–7 (the LED in the lower right of the display is unlit) or selecting registers 8–14 (the LED in the lower right of the display is lit).

About the reeds played by right-hand accordion sounds

On acoustic accordions, metal reeds vibrate to produce the sound.

On a V-accordion, the sound of the reeds is produced electronically.

The round marks shown below indicate the reeds that are played by that sound.

The vertical arrangement ( ) indicates reeds of different octaves.

- Upper row: 4′ reed (high region, one octave above the 8′ reed)
- Middle row: 8′ reed (middle region)
- Lower row: 16′ reed (low region, one octave below the 8′ reed)

The " ′ " symbol following the number is read as "feet."

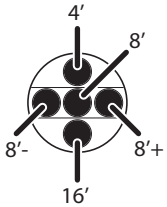
The horizontal dots ( ) indicate reeds of slightly differing pitch.

The reeds of slightly differing pitch are available only for the middle region reed (8′ reed).

Register number		Reed combination	Register number		Reed combination
A	1		B	8	
	2			9	
	3			10	
	4			11	
	5			12	
	6			13	
	7			14	

MEMO

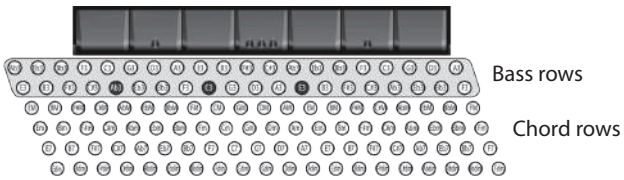
Reed combinations differ slightly for each accordion set.



Selecting an Accordion Sound for the Left-Hand Button Keyboard

The left-hand button keyboard plays bass and chords.

The two rows of buttons enclosed by gray shading play bass, and the remaining buttons play chords.



Some of the bass rows have reference caps with concave tops to help you determine the position of the bass and chord rows without looking at them.

At the factory, these reference caps are installed on the three black buttons shown in the above illustration, but if you prefer, you can remove these and reinstall them elsewhere if another location is more convenient for you.

➡ "Reference Manual" (PDF)

Selecting a sound

Here's how to select the accordion sound that's played by the left-hand button keyboard.

1. Press a left-hand register button.



* The numbers shown on the left-hand register buttons in the illustration above are for explanatory purposes; they do not exist on the actual instrument.

The register of the button you pressed is selected, and the number in the display changes to the number of the button you pressed. The numbers of the bass row and the chord row both change.



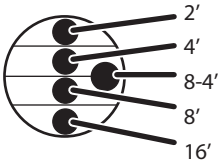
About the reeds played by the left-hand accordion sound

In the left hand (bass), there are seven registers for each accordion set.

The reeds played by the left-hand accordion sound are as follows.

The vertical arrangement indicates the pitch of the reed sound.

Register number	Reed combination	
1		2′
2		4′
3		8-4′
4		16′/8′/8-4′/4′/2′
5		8′/4′/2′
6		16′/8′/8-4′
7		16′/2′



MEMO

Reed combinations differ slightly for each accordion set.

For the left-hand button keyboard, you can also select a Free Bass mode for advanced players as an alternative to the standard bass mode typically used for performing. These two modes each have a different arrangement of left-hand button keyboard.

➡ For details on the Free Bass mode, refer to the "Reference Manual" (PDF).

Adding Depth and Richness to the Sound

[REVERB] knob

This produces acoustic ambience that is reminiscent of a performance in a concert hall, adding depth to the sound.

Turning the knob toward the right makes the effect stronger. If the knob is turned all the way to the left, no reverb is applied.

[CHORUS] knob

This produces a sound reminiscent of multiple units of the same instrument playing in unison.

Turning the knob toward the right makes the effect stronger. If the knob is turned all the way to the left, no chorus is applied.

Reverb and chorus apply to both the right-hand and left-hand sounds.

* You can choose the types of reverb and chorus.

➡ "Reference Manual" (PDF)

NOTE

Depending on the type of sound and the settings, it might be difficult to detect the result of applying reverb or chorus.

Changing the Note Layout of the Left-Hand Button Keyboard and Right-Hand Keyboard (FR-4xb)

Here's how to specify the number of rows of the left-hand button keyboard that play bass and the note layout of the right-hand keyboard.

1. Press the [MENU] button.

2. Use the cursor [◄] [►] buttons to select "System," and then press the [ENTER/YES] button.

3. Use the cursor [◄] [►] buttons to select either "TrblMode" (right-hand keyboard) or "B&C Mode" (left-hand button keyboard).

4. Use the VALUE [-] [+] buttons to change the value.

➡ "Treble Mode (TrblMode) (FR-4xb only)" ("Reference Manual" (PDF))

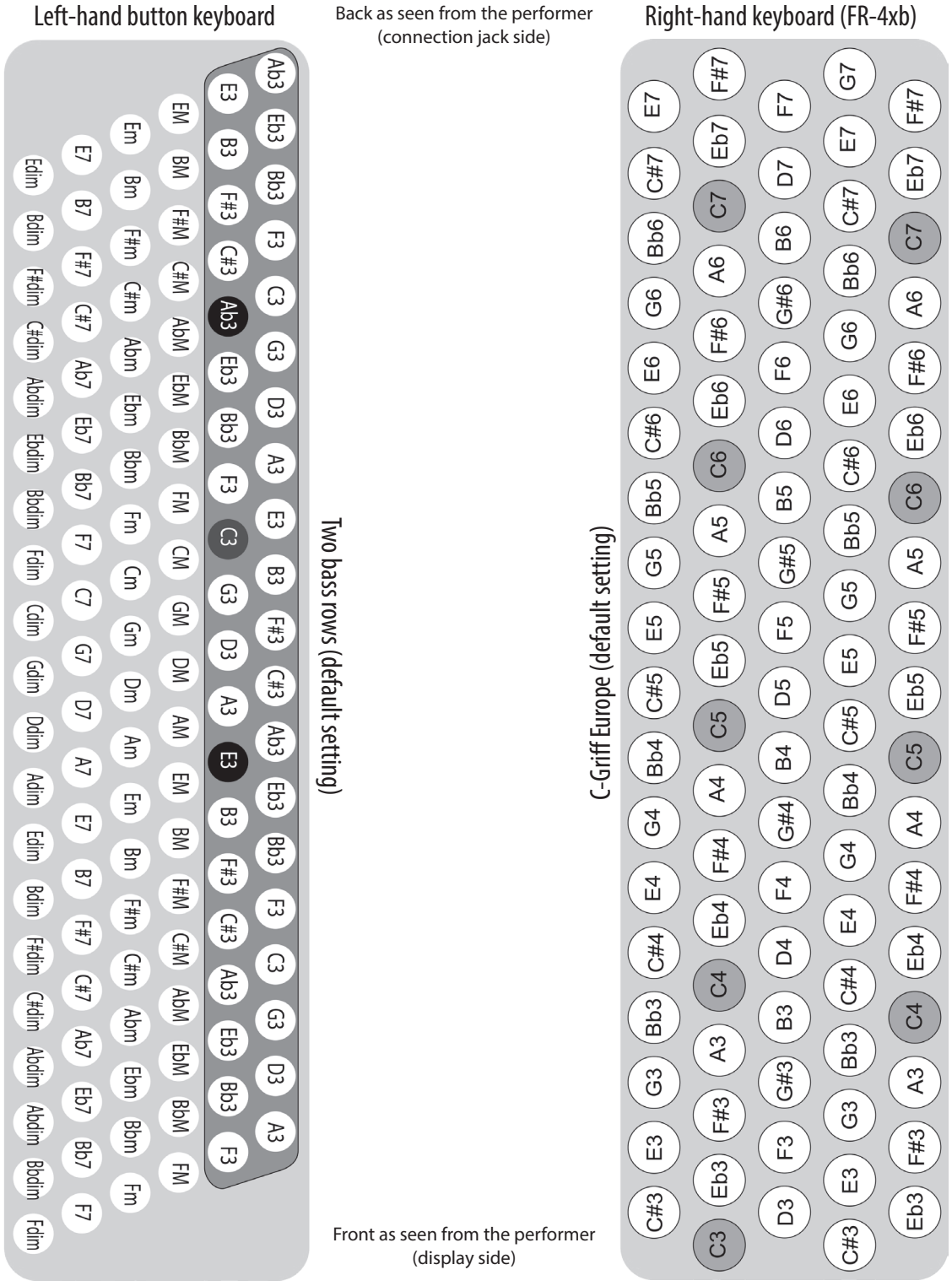
➡ "Bass & Chord Mode (B&C Mode)" ("Reference Manual" (PDF))

Press the [EXIT/NO] button several times to return to the previous screen.

MEMO

This setting is remembered even if you turn off the power. It is not initialized even if you execute a Factory Reset.

Left-Hand Button Keyboard and Right-Hand Keyboard (FR-4xb) Note Layout



- On the left-hand button keyboard, the buttons enclosed in dark gray shading are the bass rows, and the others are chord rows.

* You can also extend the bass rows to be three rows.

➡ "Reference Manual" (PDF)

- On the FR-4xb, you can also change the note layout of the right-hand keyboard.

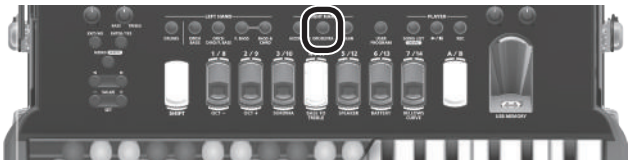
➡ "Reference Manual" (PDF)

Playing Non-Accordion Sounds

In addition to accordion sounds, the FR-4x/FR-4xb contain orchestral sounds such as trombone, flute, and piano, as well as organ sounds.

Selecting an Orchestral Sound for the Right-Hand Keyboard

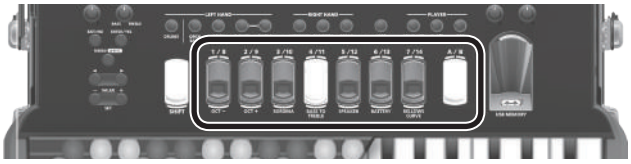
1. Press the [ORCHESTRA] button.



An "o" is shown in the display at the position marked in the illustration, indicating that an orchestral sound is selected for the right-hand keyboard.

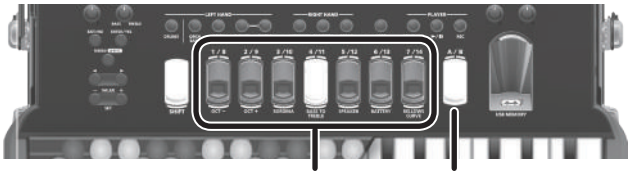


2. Press a right-hand register button.



The orchestral sound of the button you pressed is selected; the number at the far right of the top line in the display changes to the number of the button that you pressed.

You can use the right-hand register buttons to instantly switch between 14 orchestral sounds.





A: Select 1–7 (LED unlit)
B: Select 8–14 (LED lit)

By pressing the A/B button, you can switch the seven register buttons between selecting sounds 1–7 (the LED in the lower right of the display is unlit) and selecting sounds 8–14 (the LED in the lower right of the display is lit).

ORCHESTRA sounds			
1	Natural Piano (NatrlPno)	8	Clean Solid Guitar (ClnSolid)
2	Pure EP	9	Symphonic Strings (SynphStr)
3	Steel Drums (SteelDrm)	10	Jazz Scat 3 (Jz Scat3)
4	Vibraphone (Vibe)	11	Octave Brass (OctBrass)
5	Mid Pipe	12	Tenor Sax 2 (Ten Sax2)
6	Harmonica	13	Clarinet
7	Flamenco Guitar (Flmnc Gt)	14	Flute 1

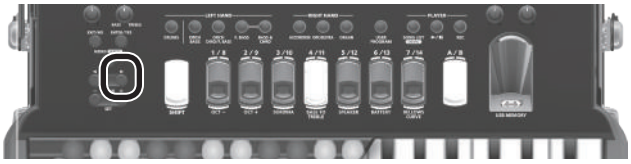
Selecting an Orchestral Sound Not Assigned to a Register Button

The FR-4x/FR-4xb contain more than 150 orchestral sounds. To select an orchestral sound that's not assigned to a register button, proceed as follows.

➡ For details on the tone name, refer to the "Reference Manual" (PDF).

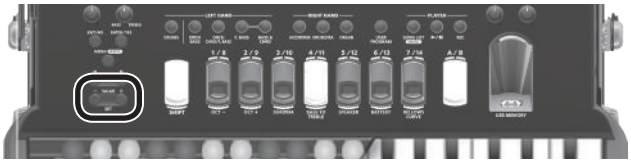
1. If the [ORCHESTRA] button is not lit, press the [ORCHESTRA] button to make it light.

2. Press the cursor [►] button several times to access the orchestral sound select screen.





3. Use the VALUE [-] [+] buttons to switch orchestral sounds.



4. When you've selected a sound, press the cursor [◄] button several times to return to the previous screen.

You can also return to the previous screen by pressing the [EXIT] button.

MEMO

You can use the above procedure to assign any desired orchestral sound to the currently selected register button.

However, this setting is lost when you turn off the power or perform another operation.

You can save your favorite settings and recall them instantly.

➡ "Saving and Recalling Favorite Sounds and Settings (User Programs)" (p. 14)

Returning to Accordion Sounds

1. Press the [ACCORDION] button.

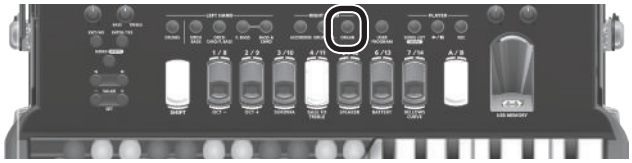
The character at the location shown in the illustration disappears from the display.

The number at the far right of the top line in the display is the register number of the last-selected accordion sound.

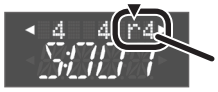


Selecting an Organ Sound for the Right-Hand Keyboard

1. Press the [ORGAN] button.



In the display, an "r" appears in the position shown by the illustration, indicating that an organ sound is selected for the right-hand keyboard.



2. Press a right-hand register button.

The organ sound of the button you pressed is selected, and the number at the far right of the top line in the display changes to the number of the button that you pressed.

You can use the right-hand register buttons to instantly switch between seven different organ sounds.

By once again pressing the button of the organ sound that you selected, you can switch the speed of the rotary effect between fast and slow.



A: Select 1–7 (LED unlit)

B: Select 8–14 (LED lit)

By pressing the A/B button, you can switch the seven register buttons between recalling sounds 1–7 (the LED in the lower right of the display is unlit) and recalling sounds 8–14 (the LED in the lower right of the display is lit).

ORGAN sounds			
1	TYPLJAZZ	8	BOSSA
2	JZBALLAD	9	LATIN
3	DISTORT	10	LATINVAR
4	FULLDRAW	11	HOUSPERC
5	OVD2ndPR	12	ROCK
6	POPULAR	13	CHURCH
7	LIGHTJAZ	14	BLUES

Selecting an Organ Sound Not Assigned to a Register Button

The FR-4x/FR-4xb contain 32 different organ sounds.

To select an organ sound that's not assigned to a register button, proceed as follows.

➡ For details on the tone name, refer to the "Reference Manual" (PDF).

1. If the [ORGAN] button is not lit, press the [ORGAN] button to make it light.

2. Press the cursor [►] button several times to access the organ sound select screen.



3. Use the VALUE [-] [+] buttons to switch organ sounds.

4. When you've selected a sound, press the cursor [◄] button several times to return to the previous screen.

You can also return to the previous screen by pressing the [EXIT] button.

MEMO

You can use the above procedure to assign any desired organ sound to the currently selected register button.

However, this setting is lost when you turn off the power or perform another operation.

You can save your favorite settings and recall them instantly.

➡ "Saving and Recalling Favorite Sounds and Settings (User Programs)" (p. 14)

Returning to Accordion Sounds

1. Press the [ACCORDION] button.

The character at the location shown in the illustration disappears from the display.

The number at the far right of the top line in the display is the register number of the last-selected accordion sound.



Selecting an Orchestral Sound for the Left-Hand Button Keyboard (Bass Rows)

Here's how to select an orchestral sound for the bass rows of the left-hand button keyboard.

1. Press the [ORCH BASS] button.



An "o" is shown in the display at the position marked in the illustration, indicating that an orchestral sound is selected for the left-hand bass rows.



2. Press a left-hand register button.



* The numbers shown in the above illustration of the left-hand register buttons are for explanatory purposes; they do not exist on the actual instrument.

The orchestral sound of the button you pressed is selected for the bass rows, and the number in the left of the upper line of the display changes to the number of the button you pressed.

The sound of the chord rows does not change at this time.

Orchestral sound (bass rows)			
1	XV Acoustic Bass (XVAcBass)	5	Picked Bass 1 (PickdBs1)
2	Bowed Bass (Bowed)	6	Fretless Bass 1 (FrtlsBs1)
3	Fingered Bass 1 (FingrBs1)	7	Tuba Mix
4	JAZZORGAN		

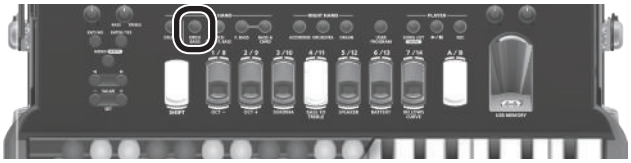
NOTE

While the bass rows are selected, you can't use the left-hand register buttons to select a sound for the chord rows.

Selecting an Orchestral Sound Not Assigned to a Register Button

An internal orchestral sound can also be selected for the left-hand register buttons.

1. If the [ORCH BASS] button is not lit, press the [ORCH BASS] button to make it light.



2. Press the cursor [◄] button several times to access the bass rows sound selection screen.



3. Use the VALUE [-] [+] buttons to switch orchestral sounds.

4. When you've chosen a sound, press the cursor [►] button several times to return to the previous screen.

You can also return to the previous screen by pressing the [EXIT] button.

MEMO

You can use the above procedure to assign any desired orchestral sound to the currently selected register button.

However, this setting is lost when you turn off the power or perform another operation.

You can save your favorite settings and recall them instantly.

➡ "Saving and Recalling Favorite Sounds and Settings (User Programs)" (p. 14)

Returning to Accordion Sounds

1. Press the [ORCH BASS] button once again.

The character at the location shown in the illustration disappears from the display, and you'll return to accordion sounds.

The number at the left of the top line in the display is the register number of the last-selected accordion sound.



Selecting an Orchestral Sound for the Left-Hand Button Keyboard (Chord Rows)

Here's how to select an orchestral sound for the chord rows of the left-hand button keyboard.

1. Press the [ORCH CHRD/F.BASS] button.



An "o" is shown in the display at the position marked in the illustration, indicating that an orchestral sound is selected for the left-hand chord rows.



2. Press a left-hand register button.



* The numbers shown in the above illustration of the left-hand register buttons are for explanatory purposes; they do not exist on the actual instrument.

The orchestral sound of the button you pressed is selected for the chord rows, and the number in the center of the top line of the display changes to the number of the button that you pressed.

The sound of the bass rows does not change at this time.

ORCH sounds (chord rows)			
1	Nylon Guitar (Nylon Gt)	5	Pure EP
2	OVD2ndPR	6	Tamburica Bassprim Tremolo (TamBPtrl)
3	Pad Voices (PadVoice)	7	Natural Piano (NatrlPno)
4	Velocity Strings (Velo Str)		

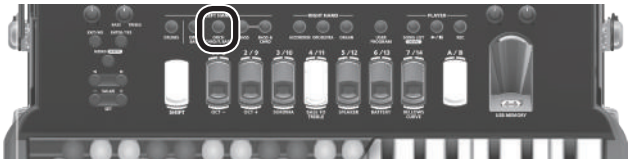
NOTE

While chord rows is selected, you can't use the left-hand register buttons to select a sound of the bass rows.

Selecting an Orchestral Sound Not Assigned to a Register Button

An internal orchestral sound can also be selected for the left-hand register buttons.

1. If the [ORCH CHRD/F.BASS] button is not lit, press the [ORCH CHRD/F.BASS] button to make it light.



2. Press the cursor [◄] button several times to access the chord rows sound selection screen.



3. Use the VALUE [-] [+] buttons to switch orchestral sounds.

4. When you've chosen a sound, press the cursor [►] button several times to return to the previous screen.

You can also return to the previous screen by pressing the [EXIT] button.

MEMO

You can use the above procedure to assign any desired orchestral sound to the currently selected register button.

However, this setting is lost when you turn off the power or perform another operation.

You can save your favorite settings and recall them instantly.

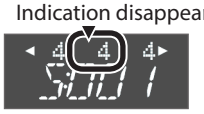
➡ "Saving and Recalling Favorite Sounds and Settings (User Programs)" (p. 14)

Returning to Accordion Sounds

1. Press the [ORCH CHRD/F.BASS] button once again.

The character at the location shown in the illustration disappears from the display, and you'll return to accordion sounds.

The number in the center of the display is the register number of the last-selected accordion sound.



Saving and Recalling Favorite Sounds and Settings (User Programs)

On the FR-4x/FR-4xb you can save your favorite sounds and settings, and recall them instantly.

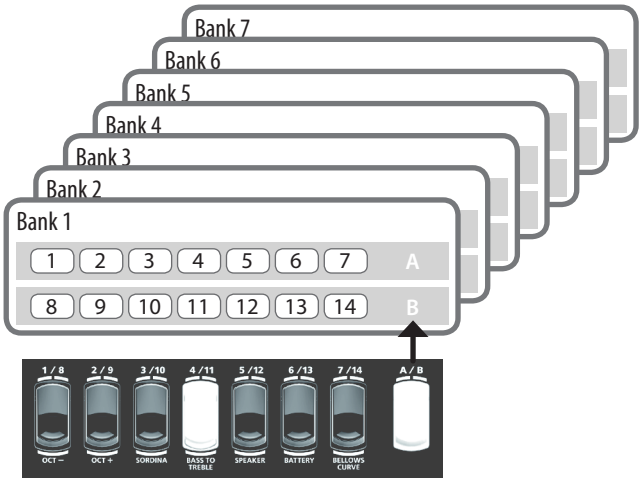
The saved data is called a "user program."

This is convenient when you want to quickly switch between favorite sounds during a live performance.

The FR-4x can store up to 98 user programs.

You can store 14 user programs in each of seven groups, and use the right-hand register buttons to recall these 14 user programs.

By switching groups you can switch the 14 user programs that are recalled by the register buttons. On the FR-4x, these groups are called "banks."



Saving a User Program

1. Select a desired accordion sound or orchestral sound.

2. Long-press the [MENU/WRITE] button.



MEMO

If the lower line of the display does not indicate "UPG," use the VALUE [-] [+] buttons to make the display indicate "UPG."

3. Press the cursor [►] button.



Use the VALUE [-] [+] buttons to select the save-destination bank.

4. Press the cursor [►] button.



Use the VALUE [-] [+] buttons to select the save-destination number.

5. Press the cursor [►] button several times.



Use the cursor [◄] [►] buttons and VALUE [-] [+] buttons to enter a name.

6. Use the cursor [►] button to move the cursor to the far right, and then press the cursor [►] button again.

A confirmation message appears.



7. Press the [ENTER/YES] button to save the user program.

When saving is complete, the display indicates "Complete."

If you decide to cancel, press the [EXIT/NO] button.

MEMO

Factory-default initialized settings are saved in several of the user programs, but you can overwrite these.

Recalling a User Program

1. Press the [USER PROGRAM] button.

The "USER PROGRAM" indicator below the display is lit.



The display changes; now you can recall user programs.



Bank Number



If no user program has been selected after turning the power on, the display indicates "Select! UPG."

2. Use the cursor [◄] [►] buttons to switch to the bank in which the user program you want to recall is saved.

3. Press a right-hand register button to recall a user program.

You can also use the VALUE [–] [+] buttons to switch between user programs.

MEMO

To return from the state of recalling user programs to the normal state, press the [USER PROGRAM] button once again. The "USER PROGRAM" indicator below the display goes dark.

At this time, the lower line of the display indicates "W.A." When you re-select an accordion set, this switches to the selected set number.

Using the USB Audio Player

You can play back audio files from a USB flash drive (sold separately). In advance, use your computer to save the audio files that you want to play on the USB flash drive.

By using this function, you can perform while playing back a song.

Getting Ready to Use the FR-4x as an Audio Player

1. Using your computer, copy the audio song to your USB flash drive (sold separately).

NOTE

- Use a commercially available USB flash drive or a USB flash drive sold by Roland. However, we cannot guarantee that all commercially available USB flash drives will work with this unit.
- Never turn off the power or remove the USB flash drives or the power cord while the USB flash drive's access indicator is blinking.

2. Connect your USB flash drive to the FR-4x's USB MEMORY port.



The FR-4x can play back MP3 files or WAV files.

➡ "Reference Manual" (PDF)

Note when playing audio files

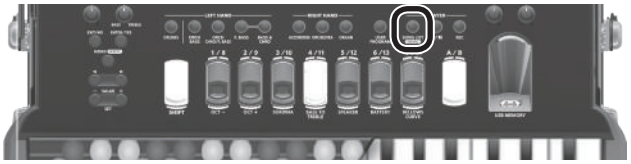
Performing while playing back MP3 data places a processing load on the FR-4x, and may cause problems with the keyboard performance.

If this occurs, you might be able to solve the problem by using a WAV file instead of MP3 data.

Selecting a Song from a USB Flash Drive

1. Connect your USB flash drive (sold separately) to the FR-4x's USB MEMORY port.

2. Press the [SONG LIST] button.



The display shows the contents of the USB flash drive.



If the lower line of the display shows "Fld," the upper line shows the name of the folder.



3. Use the VALUE [-] [+] buttons to select the song that you want to play back.

The name of the selected song is shown in the upper line of the display.

MEMO

If the song that you want to select is inside a folder, select that folder and press the [ENTER] button to open the contents of that folder.

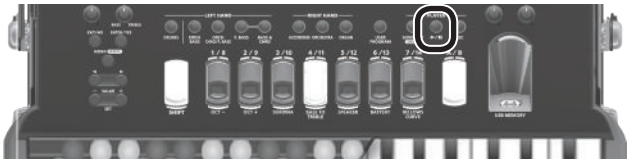
Pressing the [EXIT] button takes you back to the next level up. If you continue pressing the [EXIT] button, you'll return to the main screen.

Playing a Song from a USB Flash Drive

1. Select a song from the USB flash drive.

➡ "Selecting a Song from a USB Flash Drive" (p. 15)

2. Press the [►/II] button to play back the song.



The [►/II] button indicator is lit, and song playback starts.

MEMO

The playback volume of an audio file can be adjusted by "A. FileLv (Audio File Level)."

➡ "Reference Manual" (PDF)

3. Press the [►/II] button once again to pause the song.

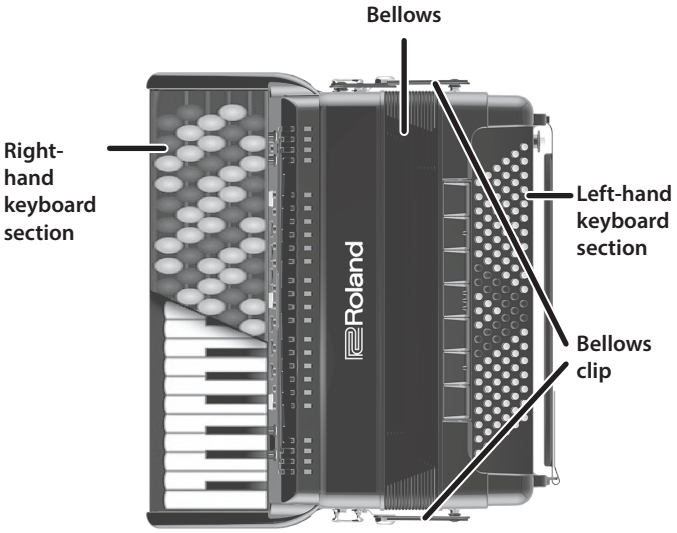
The indicator goes dark.

MEMO

If the song's playback position is at 1 second or later, you can press the VALUE [-] button to return the playback position to the beginning.

Panel Descriptions

The sections of your FR-4x



Right-hand keyboard section

This section is normally used for playing the melody.

The FR-4x's right-hand keyboard sectionn is velocity sensitive.

Left-hand keyboard section

This section normally plays accompaniment parts.

The left-hand button keyboard has two modes.

In Bass and Chord mode, two or three rows of buttons play bass and the remaining buttons play chords.

In Free Bass mode, two rows of buttons play bass and the remaining buttons play melody using the Free Bass button layout. The left-hand button keyboard is velocity-sensitive.

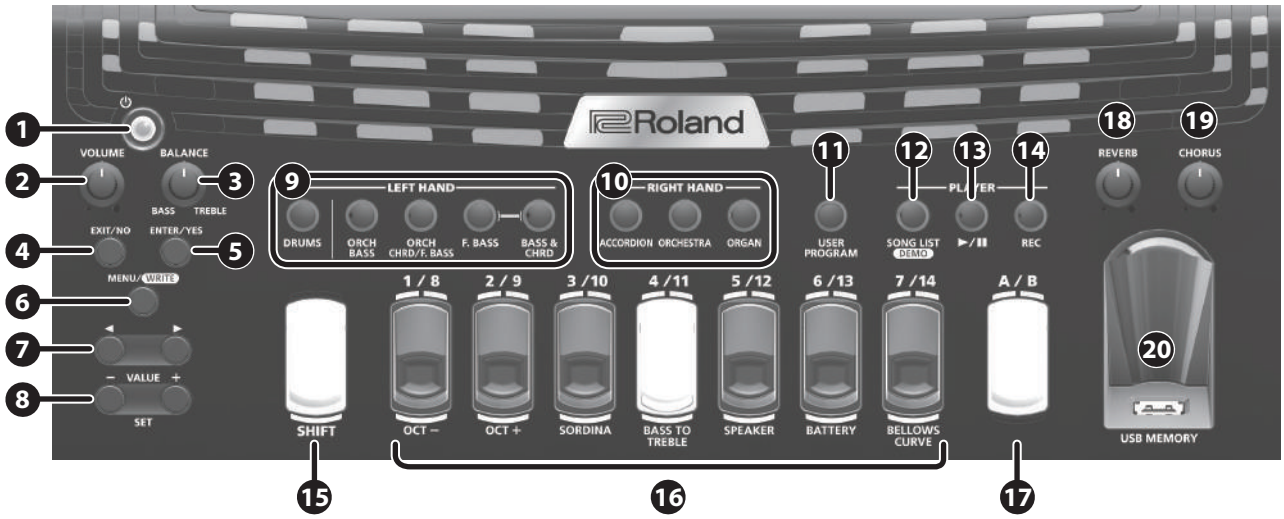
Bellows

By moving the bellows you can add expression and dynamics to the sound. A variety of performance techniques are possible, including "bellows shake" (rapidly opening and closing the bellows).

The bellows' inertia can be set with the resistance regulator and air button.

When playing or carrying the instrument, please be careful not to get your fingers pinched between the movable part and the panel. In places where small children are present, make sure that an adult provides supervision and guidance.

Right-hand keyboard section



1 [⏻] button

This turns the power on/off.

2 [VOLUME] knob

Adjusts the overall volume of the FR-4x.

3 [BALANCE] knob

Adjusts the volume balance of the right-hand keyboard and left-hand button keyboard.

4 [EXIT/NO] button

Returns to the main screen.

In a menu screen, press this once to return to the screen of a higher level.

In a menu screen, continuing to press this button takes you directly back to the main screen.

In some screens, this button cancels the function that's being executed.

5 [ENTER/YES] button

Confirms a value or executes an operation.

6 [MENU/WRITE] button

Displays the MENU screen.

By continuing to press this button, you can save a user program or set, or various settings.

⑦ Cursor [◄] [►] buttons

Switch between screens.

In the main screen, these buttons switch to the orchestral sound or organ sound selection screen.

⑧ VALUE [-] [+] buttons (SET [-] [+] buttons)

Change sounds or values.

In the main screen, these buttons switch accordion sets.

If you hold down the [SHIFT] button and use the [-] [+] buttons, the selection or value changes in units of ten.

If you press a [-] [+] button while holding down the other button, the change becomes faster.

⑨ LEFT HAND part

Switch the sounds of the part played by the left hand.

DRUMS, ORCH BASS, ORCH CHRD/F.BASS, F.BASS, BASS & CHRD

For more about DRUMS and F.BASS, refer to "Reference Manual" (PDF).

⑩ RIGHT HAND part

Switch the sounds of the part played by the right hand.

ACCORDION, ORCHESTRA, ORGAN

⑪ [USER PROGRAM] button

Recalls user program (p. 14).

⑫ [SONG LIST] button

Displays songs saved on a USB flash drive (p. 15).

By long-pressing the [SONG LIST] button you can play back the demo songs. To stop the demo song, press the [SONG LIST] button once again (p. 5).

⑬ [►/II] button

Plays back a song, or pauses the currently-playing song.

⑭ [REC] button

Records your performance.

⑮ [SHIFT] button

You can access various functions by holding down the [SHIFT] button and pressing another button.

Button to press simultaneously	Explanation
[1/8] button	**OCT-:** Lowers the range of the right-hand keyboard by one octave.
[2/9] button	**OCT+:** Raises the range of the right-hand keyboard by one octave.
[3/10] button	**SORDINA:** Turns the sordina effect on/off. On an acoustic accordion, this closes the wooden resonance chamber inside the instrument. The FR-4x simulates this effect electronically.
[4/11] button	**BASS TO TREBLE:** Lets you play the bass part using the right-hand keyboard.
[5/12] button	**SPEAKER:** Turns the speakers on/off each time you press the button. "Off": Internal speaker is off. "On": Internal speaker is on. However, the speaker turns off if you connect headphones. "On+Phones": The internal speaker stays on even if headphones are connected.
[6/13] button	**BATTERY:** Displays the remaining battery capacity.
[7/14] button	**BELLOWS CURVE:** Shows a screen where you can specify the response to bellows movement.
Cursor [◄] [►] buttons	**Transpose:** Transposes the range of the right-hand keyboard in semitone steps. To reset this setting to "0," press the cursor [◄] [►] buttons simultaneously.

⑯ Right-hand register buttons

Select the register that is played by the right-hand keyboard.

⑰ [A/B] button

Two banks of sounds, A (1–7) and B (8–14) are assigned to the right-hand register buttons.

Press the [A/B] button to switch between bank A (1–7) and bank B (8–14).

⑱ [REVERB] knob

Adjusts the amount of reverb.

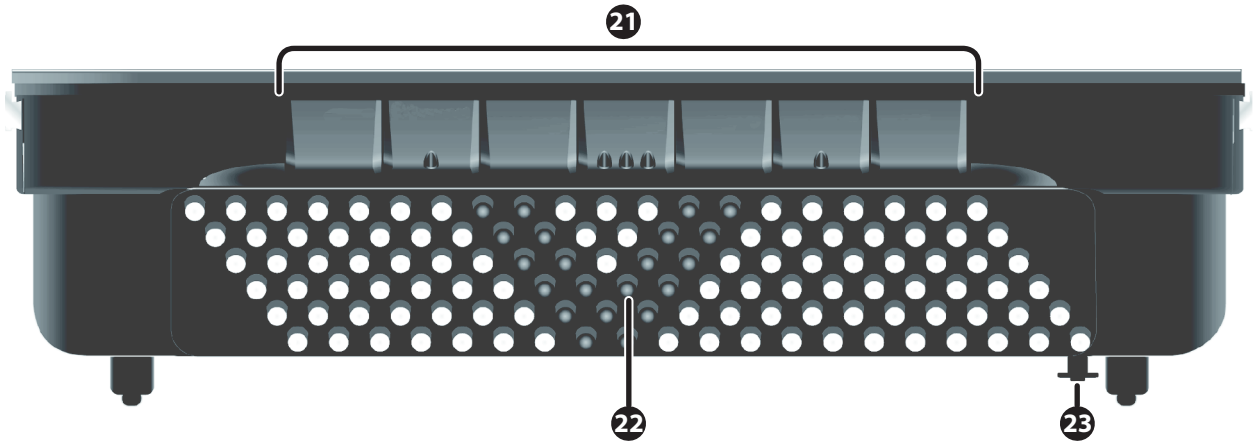
⑲ [CHORUS] knob

Adjusts the amount of chorus.

⑳ USB MEMORY port

Connect a USB flash drive (separately sold) here.

Left-hand button keyboard section



21 Left-hand register buttons

Select the register that is played by the left-hand keyboard.

22 Left-hand button keyboard

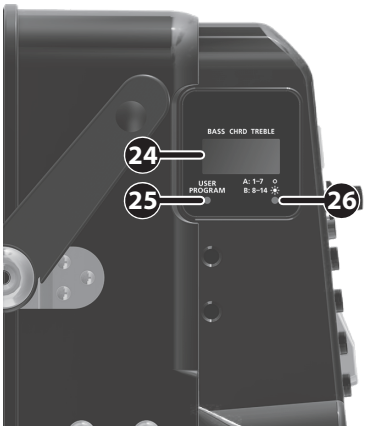
These 120 buttons are used to play bass notes and chords (they are velocity-sensitive). They also allow you to play drum sounds.

23 Bellows resistance regulator and air button

The bellows resistance regulator allows you to specify the bellows' inertia (the force needed to push and pull it).

By pressing the air button you can purge the air that still remains in the bellows after playing (p. 6).

Display



24 Display

Shows information related to your operations.

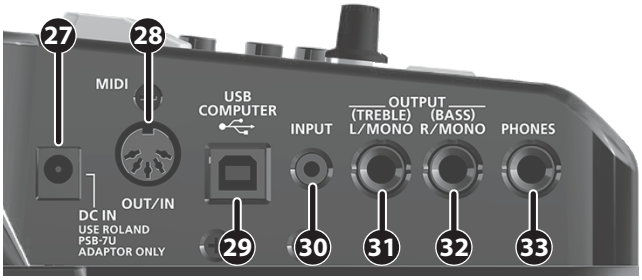
25 [USER PROGRAM] indicator

This is lit if a user program is selected.

26 [A: 1-7/B: 8-14] indicator

This is unlit if a bank A sound is selected for the right-hand register buttons, and lit if a bank B sound is selected. Use the [A/B] button to switch between banks A and B.

Connection panel



27 DC IN jack

Connect the included AC adaptor here.

By installing separately sold rechargeable nickel-metal hydride batteries (10 batteries), you can use the instrument without an AC adaptor.

28 MIDI OUT/IN jack

This connector transmits or receives MIDI data. You can switch it between input and output.

➡ "Reference Manual" (PDF)

29 USB COMPUTER (⇔) port

This port can be connected to one of your computer's USB ports. Please use a commercially available USB cable.

In order to use the FR-4x with your computer, you'll need to download the driver from the following URL and install it.

For details on installation, refer to the following URL.

➡ **http://www.roland.com/support/**

30 INPUT jack

Devices such as an audio player can be connected to this jack via a stereo mini-plug.

* To adjust the volume, use the controls of the connected device (e.g., audio player).

31 OUTPUT L/MONO (TREBLE) jack

32 OUTPUT R/MONO (BASS) jack

These jacks can be connected to an amplifier, a mixing console or a wireless system. If you use both connectors, the FR-4x's output is stereo. In that case the signals of the right-hand keyboard section are transmitted to the L/MONO jack, while the R/MONO jack transmits the bass (and chord) signal. If you only use one jack (connected to the "L" or "R" jack), the FR-4x's output is mono.

MEMO

- On the FR-4x, connecting to these jacks does not mute the internal speakers.
- By holding down the [SHIFT] button and pressing the [5/12] button you can turn the speakers on/off (p. 17). Switching off the FR-4x's speakers allows you to save battery power.

33 PHONES jack

This is where you can connect stereo headphones.

Connecting a pair of headphones mutes the internal speakers.

MEMO

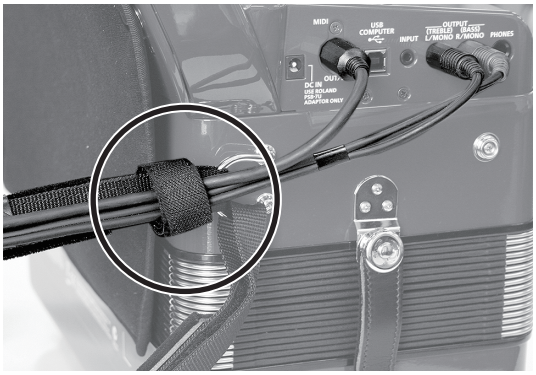
You can change a setting so that the internal speakers produce sound even when headphones are connected (p. 17).

Securing the Cable

Proceed as follows to ensure that a MIDI cable–or an audio cable–doesn't come loose while you are playing.

Your FR-4x comes with an attachment strip that allows you to secure optional MIDI as well as audio cables to the right strap.

1. Wind the attachment strip around the cable and the strap.



Main Specifications

Roland FR-4x: V-Accordion
Roland FR-4xb: V-Accordion

Keyboards	Piano-type Right-hand keyboards: 37 keys (with velocity) Left-hand button keyboards: 120 buttons (with velocity) Button-type Right-hand button keyboards: 92 buttons (with velocity) Left-hand button keyboards: 120 buttons (with velocity)
Power Supply	AC adaptor Batteries (ten AA rechargeable nickel-metal hydride batteries)
Current Draw	2000 mA
Dimensions	Piano-type: 481 (W) x 270 (D) x 430 (H) mm 18-15/16 (W) x 10-11/16 (D) x 16-15/16 (H) inches Button-type: 470 (W) x 240 (D) x 390 (H) mm 18-9/16 (W) x 9-1/2 (D) x15-3/8 (H) inches
Weight (excluding strap, AC adaptor and batteries)	Piano-type: 8.9 kg/19 lbs 10 oz Button-type: 8.6 kg/19 lbs
Accessories	Owner's Manual, AC adaptor, Power cord, Reference caps for left-hand button keyboard, Reference caps for right-hand button keyboard (FR-4xb only), Accordion cover, Strap, attachment strip
Options	USB flash drive, Soft case for accordion, Headphones, MIDI foot controller (FC-300)

* 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

Concerning the Auto Off function



The power to this unit will be turned off automatically after a predetermined amount of time has passed since it was last used for playing music, or its buttons or controls were operated (Auto Off function). If you do not want the power to be turned off automatically, disengage the Auto Off function (p. 5).

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.

⚠ WARNING

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.

⚠ CAUTION

Take care so as not to get fingers pinched



When handling the following moving parts, take care so as not to get fingers, toes, etc., pinched. Whenever a child uses the unit, an adult should be on hand to provide supervision and guidance.

- Bellows (p. 16)
- Bellows clip (p. 16)

⚠ 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.

- Included Parts/Removable Parts
  Reference caps for left-hand button keyboard
  Reference caps for right-hand button keyboard (FR-4xb only)

IMPORTANT NOTES

Power Supply: Use of Batteries

- If operating this unit on batteries, please use AA rechargeable Ni-MH batteries.

Placement

- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.
- 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, try to make a habit of creating regular backups of the data you've stored in the unit.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Never strike or apply strong pressure to the display.
- Do not use connection cables that contain a built-in resistor.
- Do not use excessive force to operate the bellows.

Using External Memories

- Please observe the following precautions when handling external memory devices. Also, make sure to carefully observe all the precautions that were supplied with the external memory device.
  - Do not remove the device while reading/writing is in progress.
  - To prevent damage from static electricity, discharge all static electricity from your person before handling the device.

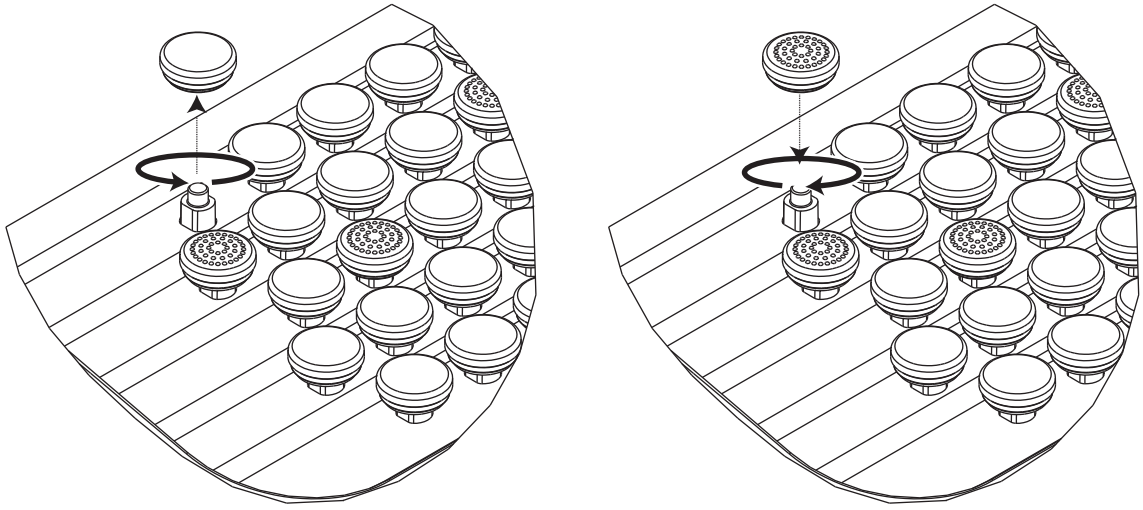
Intellectual Property Right

- 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.
- MMP (Moore Microprocessor Portfolio) refers to a patent portfolio concerned with microprocessor architecture, which was developed by Technology Properties Limited (TPL). Roland has licensed this technology from the TPL Group.
- MPEG Layer-3 audio compression technology is licensed from Fraunhofer IIS Corporation and THOMSON Multimedia Corporation.
- Roland and V-Accordion 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.

MEMO

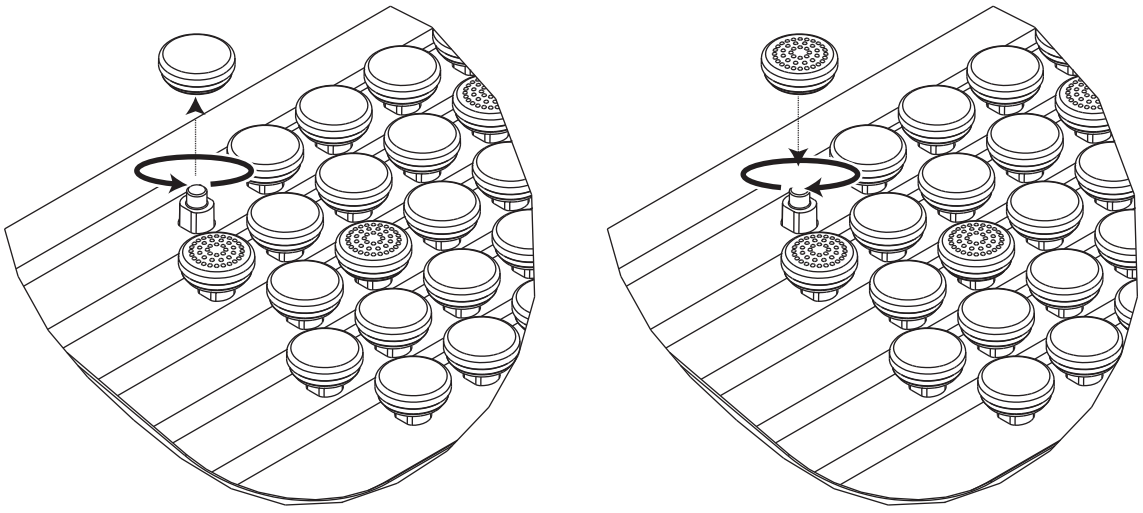
Reference Cap

To do this, first remove the button you wish to replace by turning it counterclockwise, then install the new button and screw it clockwise.



リファレンス・キャップ

ボタンを付け替えるには、交換するボタンを左に回して取りはずし、新しいボタンを取り付けて右に回して固定します。



For the USA

DECLARATION OF CONFORMITY
Compliance Information Statement

Model Name : FR-4X, FR-4XB
Type of Equipment : Digital Accordion
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue Los Angeles, CA 90040-2938
Telephone : (323) 890-3700

Roland

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