Roland

FR-1x

V-Accordion

Owner's Manual

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

For EU countries

CE

This product complies with the requirements of European Directive EMC 2004/108/EC.
Dieses Produkt entspricht der europäischen Richtlinie EMC 2004/108/EC.
Ce produit est conforme aux exigences de la directive européenne EMC 2004/108/EC.
Questo prodotto è conforme alle esigenze della direttiva europea EMC 2004/108/EC.
Este producto cumple con la directrice EMC 2004/108/EC de la CE.
Dit product beantwoordt aan de richtlijn EMC 2004/108/EC van de Europese Unie.

For the USA

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

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

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

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

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

For Canada

NOTICE

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

AVIS

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

For the UK

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

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For the USA

DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : V-Accordion FR-1x
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

The technology used in the FR-1x is covered by U.S. Patent No. 6.946.594.

Roland

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Owner's Manual

Introduction

Thank you and congratulations on your choice of the Roland FR-1x V-Accordion.

To ensure that you obtain the maximum enjoyment and take full advantage of the FR-1x's functionality, please read this owner's manual carefully.

About this manual

You should first read the chapter "Before you start playing" (p. 15) of the owner's manual. It explains how to connect the AC adaptor or install batteries and turn on the power. This Owner's Manual explains everything, from the FR-1x's basic operations to more advanced functions.

Conventions in this manual

In order to explain the operations as clearly as possible, this manual uses the following conventions:

- Text enclosed in square brackets [ ] indicates the name of a button or knob. Example: the [USER PROGRAM] button.
- Lines that begin with "NOTE" are cautionary statements that you must read.
- The numbers of pages that you can turn to for additional, related information are given like this: (p. **).

The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., include newer sounds), so what you actually see in the display may not always match what appears in the manual.

Before using this instrument, carefully read "Using the unit safely" (p. 7) and "Important notes" (p. 9). Those sections provide information concerning the proper operation of the FR-1x. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, the manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

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1. Features

Stand-alone electronic instrument
Though the FR-1x is a fully electronic instrument, you do not need to connect it to an amplifier in order to produce sounds. Its onboard amplification system is powerful enough for small venues, restaurants, etc.

The FR-1x can also be powered using 8 commercially available rechargeable Ni-MH batteries, so that you don't need to connect it to a wall outlet.

PBM (Physical Behavior Modeling)
The FR-1x V-Accordion is based on Roland's sound generation technology called "PBM" (Physical Behavior Modeling) whose sonic result is very close to the sound of traditional accordions.

Super realistic accordion simulations
All sounds the FR-1x produces were obtained by sampling popular traditional acoustic accordions.

This V-Accordion allows you to switch from an Italian jazz accordion to German folk, French musette or a historic bandoneon sound – without changing your technique.

Different tuning systems are also available.

Orchestral sounds
Orchestral sounds can be used in combination with traditional accordion sounds – complete with full bellows articulation, and two keyboard modes (Solo and Dual).

Tonewheel organ sounds
The FR-1x allows you to play amazing organ sounds with a slow/fast rotary effect in almost the same way as an organ player using the treble section.

Drum sounds
You can also use the FR-1x to play simple drum parts with your left hand (bass and chord sections).

Sound expansion
The FR-1x provides two internal memories that allow you to add new sounds.

Sophisticated bellows response
Faster response and higher sensitivity and precision plus detection of bellows opening/closing with new bellows pressure sensing circuitry.

A bellows resistance regulator knob allows you to adjust the bellows' inertia to your preference.

USB-based audio player
The FR-1x contains an audio player function that allows you to play back mp3 and WAV files directly from a connected USB memory.

Save your settings to a USB memory
You can save your settings by connecting an optional USB memory to the FR-1x's USB port.

The digital advantage
The V-Accordion includes all functions and sounds of a traditional accordion, thus conveying a truly natural feel and sound. Yet it also provides the advantages only an electronic musical instrument can give you:

- reduced overall weight;
- possibility to choose among a wide variety of sounds;
- various selectable Free Bass modes (Minor 3rd, Bayan, North Europe, Finnish);
- tuning stability over time and wear resistance of all mechanical parts;
- you can sound in a different key than the one you are playing in (transpose function);
- you can play with headphones, i.e. without disturbing your neighbors or family.

MIDI connection
The FR-1x allows you to control external MIDI-compatible instruments. The Treble keyboard and chord/bass buttons are velocity-sensitive, while the bellows controller provides more articulation possibilities than any other MIDI keyboard, MIDI wind instrument, etc., you may know.

USING THE UNIT SAFELY

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

About ⚠WARNING and ⚠CAUTION Notices

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

About the Symbols

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

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Do not open (or modify in any way) the unit or its AC adaptor.
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never install the unit in any of the following locations.
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Exposed to steam or smoke; or are
  - Subject to salt exposure; or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty or sandy; or are
  - Subject to high levels of vibration and shakiness.
- Make sure you always have the FR-1x placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.
- 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 attached power-supply cord.
  Also, the supplied power cord must not be used with any other device.
- Do not excessively twist or bend the power cord, or place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

⚠WARNING

- The FR-1x, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.
- Do not place containers containing liquid (e.g., flower vases) on this product. Never allow foreign objects (e.g., flammable objects, coins, wires) or liquids (e.g., water or juice) to enter this product. Doing so may cause short circuits, faulty operation, or other malfunctions.
- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the FR-1x.
- Protect the FR-1x from strong impact.
  (Do not drop it!)

⚠ WARNING

- Do not force the FR-1x's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the FR-1x in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Batteries must never be recharged, heated, taken apart, or thrown into fire or water.

- Never expose batteries to excessive heat such as sunshine, fire or the like.

- Incorrect handling of batteries, rechargeable batteries, or a battery charger can cause leakage, overheating, fire, or explosion. Before use, you must read and strictly observe all of the precautions that accompany the batteries, rechargeable batteries, or battery charger. When using rechargeable batteries and a charger, use only the combination of rechargeable batteries and charger specified by the battery manufacturer.

⚠ CAUTION

- The unit and the AC adaptor should be located so its location or position does not interfere with their proper ventilation.

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, or place heavy objects on the unit.

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.

⚠ CAUTION

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (see p. 15).

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

- If used improperly, batteries may explode or leak and cause damage or injury. In the interest of safety, please read and observe the following precautions.
  - Carefully follow the installation instructions for batteries, and make sure you observe the correct polarity.
  - Avoid using new batteries together with used ones. In addition, avoid mixing different types of batteries.
  - Remove the batteries whenever the unit is to remain unused for an extended period of time.
  - If a battery has leaked, use a soft piece of cloth or paper towel to wipe all remnants of the discharge from the battery compartment. Then install new batteries. To avoid inflammation of the skin, make sure that none of the battery discharge gets onto your hands or skin. Exercise the utmost caution so that none of the discharge gets near your eyes. Immediately rinse the affected area with running water if any of the discharge has entered the eyes.
  - Never keep batteries together with metallic objects such as ballpoint pens, necklaces, hairpins, etc.

- Used batteries must be disposed of in compliance with whatever regulations for their safe disposal that may be observed in the region in which you live.

- Keep the included button caps in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.

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

2. Important notes

In addition to the items listed under "Using the unit safely" on p. 7, please read and observe the following:

Power supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- When installing or replacing batteries, always turn off the power on this unit and disconnect any other devices you may have connected. This way, you can prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow 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.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.
- Do not put anything that contains water (e.g., flower vases) on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

Maintenance

- For everyday cleaning wipe the FR-1x with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the instrument thoroughly with a soft, dry cloth.
- Never use benzine, thinner, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up to a USB memory, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland Europe S.p.a. assumes no liability concerning such loss of data.

Precautions for batteries (not supplied)

- The temperature range for use of the batteries depends on the battery type being used. Please see the documentation that came with the batteries.
- Do not use or store batteries at high temperature, such as in strong direct sunlight, in cars during hot weather or directly in front of heaters. This may cause battery fluid leakage, impaired performance and shorten the batteries' service life.
- Do not splash fresh or saltwater on a battery or allow the terminals to become damp. This may cause heat generation and formation of rust on the battery and its terminals.
- Keep the batteries out of reach of babies or small children.
- Do no strike or drop the batteries. Strong impact can cause leakage of battery fluid, heat generation, bursting or fire.
- Do not alter or remove protective mechanisms or other parts. Never disassemble the batteries.

Additional precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored inside the unit to a USB memory.
- Unfortunately, it may be impossible to restore the contents of data that was stored on a USB memory once it has been lost. Roland Europe S.p.a. assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- When connecting/disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the jack, secure the power cord using the supplied attachment strip. See p. 20 for details.

Storage devices that can be connected to the FR-1x's USB port

- The FR-1x allows you to connect commercially available USB memories. You can purchase such devices at a computer store, a digital camera dealer, etc.
- Use USB memory sold by Roland (M-UF series). We cannot guarantee operation if any other USB memory is used.

Before using external USB memories

- When connecting a USB memory, carefully insert it all the way into the FR-1x's USB port.
- Do not touch the pins of the FR-1x's USB port or allow them to become dirty.
- Never insert or remove a USB memory while this unit's power is on. Doing so may corrupt the unit's data or the data on the USB memory.
- USB memories are constructed using precision components; handle the storage devices carefully, paying particular note to the following.
  - To prevent damage from static electrical charges, discharge any static electricity that might be present in your body before handling a USB memory.
  - Do not touch the terminals with your fingers or any metal object.
  - Do not bend or drop a USB memory, or subject it to strong impact.
  - Do not leave a USB memory in direct sunlight or in locations such as a closed-up automobile.
- Do not allow a USB memory to become wet.
- Do not disassemble or modify your external USB memory.
- When connecting a USB memory, position it horizontally with the FR-1x's USB port and insert it without using excessive force. The USB port may be damaged if you use excessive force when inserting a USB memory.
- Do not insert anything other than a USB memory (e.g., wire, coins, other types of device) into the USB port. Doing so will damage the FR-1x's USB port.
- Never connect your USB memory to the FR-1x via a USB hub.

Notice

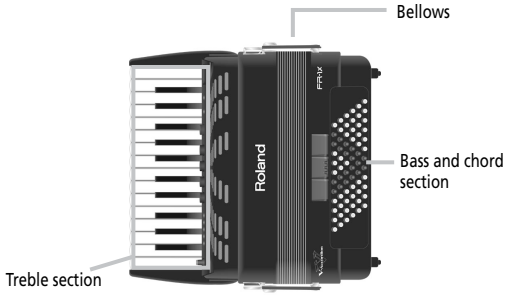
- MPEG Layer-3 audio compression technology is licensed from Fraunhofer IIS Corporation and THOMSON Multimedia Corporation.
- Roland and V-Accordion are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.
- MMP (Moore Microprocessor Portfolio) 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.
- Company and product names appearing in this document are trademarks or registered trademarks of their respective owners.

3. A first look at your FR-1x

Let us first take a look at how the FR-1x is organized and how it is operated.

The sections of your FR-1x

Let's briefly look at the various "sections" of your instrument, as that will help you understand how your V-Accordion works.



■ **Treble section (right-hand manual)**

This section is normally used for playing the melody. The FR-1x's treble section is velocity sensitive.

■ **Bass and chord section**

This section is normally used to play the accompaniment. There are two general categories: one is called "Stradella", and the other "Free Bass". The FR-1x allows you to use either type.

The "Stradella" system, also called the "standard bass system" uses the first 2 (or 3) button rows to play bass notes. The remaining button rows are used to play chords.

If you select the "Free Bass" system, all buttons are used to play single bass notes.

The FR-1x's bass and chord section is velocity sensitive.

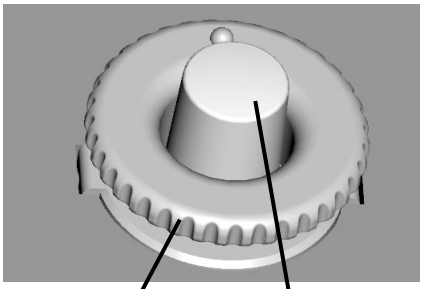
■ **Bellows**

The bellows is an important part of the accordion. The movement of the bellows indeed lends expression and dynamics to the sound. Several techniques are available, one of which is called "bellows shake" (rapid opening and closing movements).

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

Bellows resistance regulator

Your FR-1x is equipped with a bellows resistance regulator and an air button located next to one of the bellows clips.

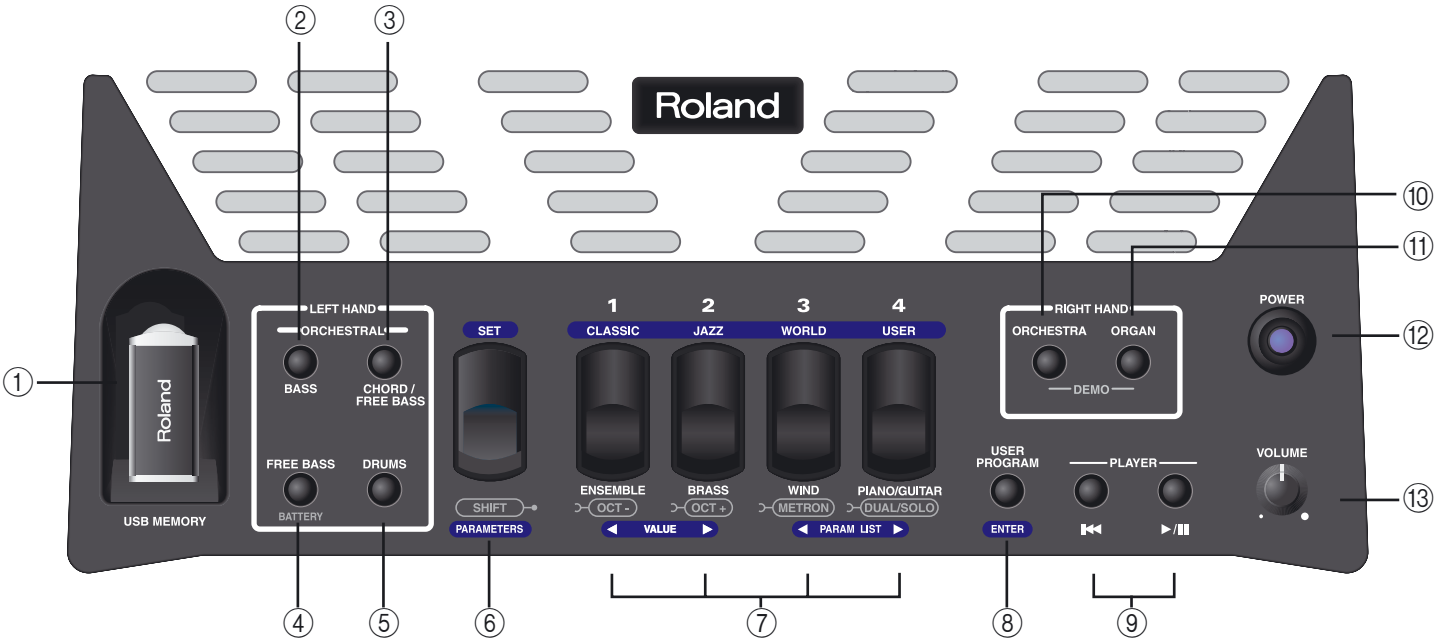


The air button allows you to release remaining air from the bellows without producing sound.

- Press the wheel and rotate it clockwise to select a stronger inertia.
- Press the wheel and rotate it counterclockwise to select a lighter inertia.
- Press the air button to purge the remaining air from the bellows after closing it.

4. Panel descriptions

Treble control panel



① USB MEMORY port

The FR-1x's USB port allows you to connect an optional USB memory. It can be used to save and load User Programs as well as to load User Sets and new sounds.

NOTE

Use USB memory sold by Roland (M-UF series). We cannot guarantee operation if any other USB memory is used.

② ORCHESTRAL BASS button

This button activates the orchestral section for the bass buttons, allowing you to play the bass notes using an orchestral sound instead of an accordion sound.

③ ORCHESTRAL CHORD/FREE BASS button

This button activates the orchestral section for the chord buttons, allowing you to play chords using an orchestral sound instead of an accordion sound. When the FREE BASS section is active, this button activates the orchestral section for the Free Bass section.

④ LEFT HAND FREE BASS button

Press this button if you want to use all buttons in the left hand to play bass notes (in which case no chords are available).

Press and hold this button to check the state of the batteries you installed.

⑤ LEFT HAND DRUMS button

Allows you to add drum/percussion sounds to the bass and chord section.

⑥ SET register

This register is used to recall one of 16 Sets from one of the 4 Set families: press the [SET] register and one of the 4 treble registers.

The [SET] register has additional functions:

- To edit function and MIDI parameters: press and hold [SET].
- To change octaves: press [SET] and [1/OCT–] or [2/OCT+].
- To activate the metronome: press [SET] and then treble register [3/(METRON)].
- To alternate between Dual and Solo modes: press [SET] and then treble register [4/(DUAL/SOLO)].

⑦ Treble registers

The treble section contains 4 registers that allow you to select accordion, orchestral and organ sounds, Sets and User Programs.

NOTE

By pressing and holding any register, you can switch off the treble or Treble Orchestra and Organ sections. Press another register to switch it back on.

⑧ USER PROGRAM/ENTER button

This button is used to recall one of the 8 User Program memories: first press [USER PROGRAM] and then one of the treble registers. See page 38.

It is also used to confirm settings and commands.

⑨ PLAYER buttons

These buttons are used to operate the FR-1x's built-in USB player. [⏮] allows you to return to the beginning of the current song. [▶/⏸] is used to start and pause playback of the selected song.

⑩ **RIGHT HAND ORCHESTRA button**
This button activates the orchestral section for the right hand (treble). Press it together with the [ORGAN] button to select the FR-1x's demo function.

⑪ **RIGHT HAND ORGAN button**
This button activates the organ section for the right hand (treble). Press it together with the [ORCHESTRA] button to select the FR-1x's demo function.

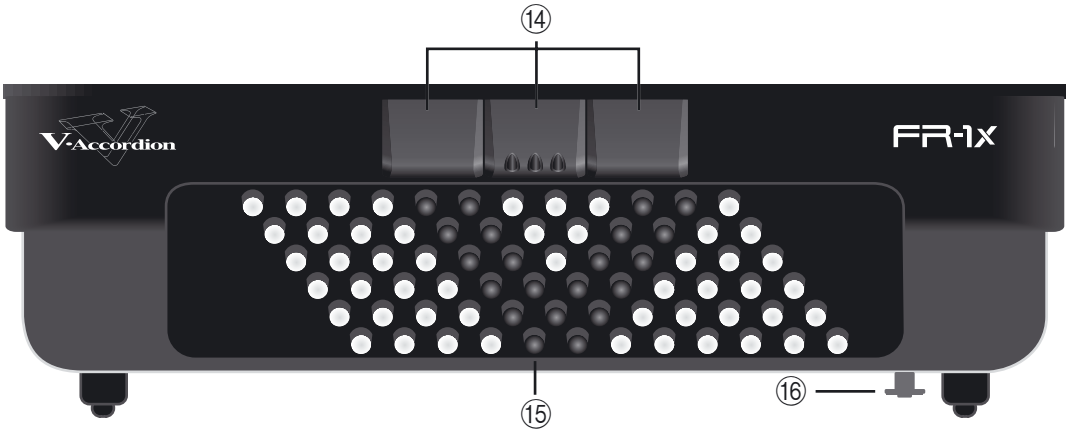
⑫ **POWER button**
Press this button to switch the V-Accordion on (the button lights) and off (button dark).

NOTE
If you need to turn off the power completely (when using the supplied AC adaptor), first turn off the [POWER] button, then disconnect the AC adaptor's plug from the wall outlet.

NOTE
With the factory settings, the FR-1x's power will automatically be switched off 10 minutes after you stop playing or operating the FR-1x.
If the unit's power has been turned off automatically, you can use the [Power] switch to turn the unit back on again. If you don't want the power to turn off automatically, change the "Auto Off" setting to "Off" as described on page 55.

⑬ **VOLUME knob**
This knob allows you to set the V-Accordion's overall volume.

Bass control panel



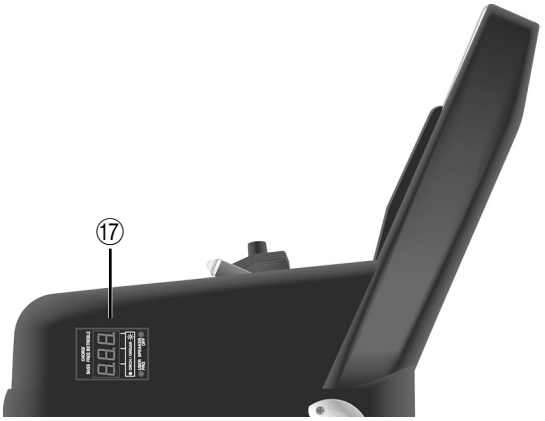
⑭ **Bass registers**
These registers allow you to select the desired bass sound.

NOTE
By pressing and holding any register, you can switch off the Bass/Chord (or Free Bass) section. Press another register to switch it back on.

⑮ **Bass and chord buttons**
These 72 buttons are used to play bass notes and chords (they are velocity-sensitive). They also allow you to play drum sounds.

⑯ **Bellows resistance regulator and air button**
This wheel allows you to specify the bellows' inertia (the force needed to push and pull it). See page 11.
By pressing it you can purge the air that still remains in the bellows after playing.

⑰ **Display**
The display keeps you informed about the FR-1x's status and helps you locate the functions you may wish to set.



Battery compartment

⑱ **Battery compartment**
This is where you install 8 commercially available rechargeable AA-type Ni-MH batteries (see p. 16).

Connection panel

⑲ **DC IN socket**
This is where you need to connect the supplied power adapter (PSB-1U). Note that you can also purchase 8 rechargeable AA-type Ni-MH batteries and use the FR-1x without the adapter.

⑳ **MIDI OUT socket**
This socket can be used to transmit MIDI data.

㉑ **USB COMPUTER port**
This port can be connected to one of your computer's USB ports (see p. 63). Please use a commercially available USB cable.

㉒ **OUTPUT L/MONO (TREBLE) & R/MONO (BASS) sockets**
These sockets can be connected to an amplifier, a mixing console or a commercially available wireless system. If you use both connectors, the FR-1x's output is stereo. In that case the signals of the Treble section are transmitted to the L/MONO socket, while the R/MONO socket transmits the bass (and chord) signal. If you only use one jack (connected to the "L" or "R" socket), the FR-1x's output is mono.

NOTE
On the FR-1x, connecting jacks to these sockets does not mute the internal speakers.

NOTE
Using these sockets and switching off the FR-1x's speakers (see "Speaker Mode" on p. 55) allows you to save battery power.

㉓ **PHONES socket**
This is where you can connect stereo headphones (Roland RH-series).

NOTE
Connecting a pair of headphones mutes the internal speakers.

5. Before you start playing

Getting ready to play

The FR-1x is an electronic instrument that requires some form of electrical power. This chapter explains how to power your FR-1x using the supplied adaptor or 8 commercially available rechargeable batteries (AA-type Ni-MH). In addition, you will learn how to connect your FR-1x to an external amplification system.

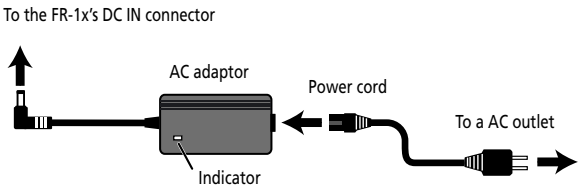
Connecting the AC adaptor

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

1. **Turn the [VOLUME] knob all the way towards the small dot to minimize the volume.**

2. **Connect the included power cord to the AC adapter.**
   The indicator will light once you plug the AC adapter into a wall outlet.



   Place the AC adaptor so the side with the indicator (see illustration) faces upwards and the side with textual information faces downwards.

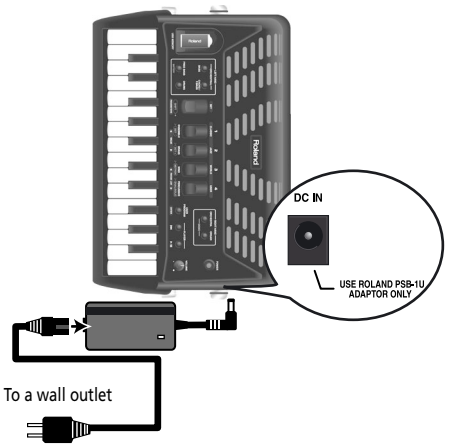
NOTE

Depending on your region, the included power cord may differ from the one shown above.

NOTE

Be sure to use only the AC adaptor supplied with the unit (PSB-1U). 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.

3. **Connect the AC adaptor to the FR-1x's DC IN jack.**



4. **Plug the power cord into a power outlet.**
   Now that the FR-1x is connected to a wall outlet, you can continue with the section "Switching the power on and off" on p. 21. To use the FR-1x with batteries, see "Installing and removing batteries" on p. 16.

NOTE

If the FR-1x is to remain unused for an extended period of time, unplug the adaptor.

NOTE

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 AC adaptor jack, anchor the power cord. See "Securing the adapter and/or MIDI cable" on p. 20.

Installing and removing batteries

The FR-1x has a compartment into which you can install 8 commercially available AA-type Ni-MH batteries (which are rechargeable). You can therefore play your instrument without connecting the supplied adaptor.

1. **Switch off the FR-1x.**
2. **Remove the cover from the FR-1x's battery compartment by pressing the two tabs and lifting the cover.**

3. **Insert 8 rechargeable AA-type Ni-MH batteries into the compartment (4 on either side), taking care to orient them in accordance with the "+" and "–" indications.**

4. **Close the FR-1x's battery compartment.**

NOTE
Though it is perfectly possible to use rechargeable batteries, be aware that they cannot be recharged simply by leaving them in the FR-1x's compartment and connecting the adapter. You will need an external charging unit.

NOTE
When replacing batteries, be sure to insert them correctly (ensure correct polarity).

NOTE
Remove the batteries whenever the FR-1x is to remain unused for an extended period of time.

Battery charge indication

If, while using batteries, the "bAt" message appears in the display, the remaining battery power is low. Replace the batteries at your earliest convenience.

A flashing "bAt" message means that you need to replace the batteries right away (or use the supplied adaptor).

The FR-1x also allows you to check the remaining battery charge at any time:

1. **Press and hold the [FREE BASS] (BATTERY) button.**

The FR-1x's display now shows the battery status.

"ooo" means that the charge is still at the maximum level, "oo" refers to a medium level, and "o" to a low charge level. If the "o" starts flashing, you need to replace or recharge the batteries. If the message "AdP" is displayed, the FR-1x is powered by the supplied adaptor.

NOTE
The battery charge indication is only an approximation.

Battery duration

New or fully charged batteries should last about 8 hours (for 2000mAh Ni-MH batteries) during continuous operation while the internal speakers are off (see "Speaker Mode" on p. 55), or 5 hours while the speakers are on.

NOTE
Actual battery life varies according to usage conditions, the quality of the batteries and the number of charging cycles.

NOTE
While the adaptor is connected to the DC IN socket without being connected to a wall outlet, the FR-1x cannot be switched on, regardless of whether or not it contains batteries.

Note about rechargeable batteries

Certain batteries can be recharged several times before they need to be replaced with new ones. Note that it is normal for the batteries to last increasingly shorter as time goes by. At the end of their life cycle, they may only last one hour, for example. But that is a gradual process.

NOTE
Though it is perfectly possible to use rechargeable batteries, be aware that they cannot be recharged simply by leaving them in the FR-1x's compartment and connecting the adapter. You will need an external charging unit.

NOTE
We recommend using rechargeable AA-type Ni-MH batteries.

Energy saving function

NOTE

This unit has an Auto Off function, which automatically switches off the power after a certain amount of time has passed without any buttons being operated.
One minute before the FR-1x shuts down automatically, the display starts counting down the seconds. If you want to keep using the FR-1x at this stage, press any button or register.
You can also disable the "Auto Off" function. For more about the Auto Off function, refer to "Auto Off" on p. 55.

Connecting the FR-1x to an amplifier, mixer, etc.

The FR-1x is equipped with an internal speaker system and thus does not need to be connected to an amplifier at all. There may be times, however when using an external amplification system is more convenient.

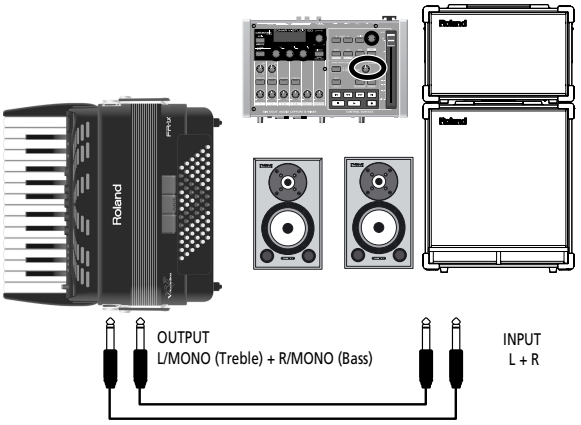
NOTE

If you are using optional batteries and need to connect the FR-1x to a PA system or mixer, we recommend using a commercially available wireless system to avoid having to use excessively long signal cables.

NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

1. **Turn the [VOLUME] knob all the way towards the small dot to minimize the volume.**
2. **Switch off all devices.**
3. **Connect the FR-1x's OUTPUT jacks to the inputs of your external device.**



Use either a long signal cable (10m or more) or an optional wireless system (recommended).

Please choose unbalanced (mono) cables with 1/4" jacks at one end (for the FR-1x). The connectors at the other end need to match the input sockets of the device to which you are connecting the FR-1x.

NOTE

If you use a commercially available wireless transmitter, the FR-1x's output signals may distort. In that case, change the FR-1x's output level (see "Output Level Attenuation" on p. 55).

NOTE

If your amplifier is monaural, you only need to connect the L/MONO (or R/MONO) socket.

Important remark

After connecting any cable to the FR-1x, be sure to never place it on the side when not using it.

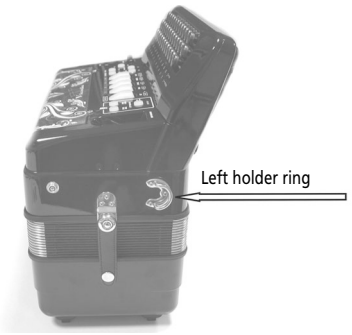
- Always stand the V-Accordion on its rubber feet (and in the corresponding direction) to avoid damaging the plugs.
- Always handle and move the FR-1x with care and pay special attention to the cable slack to avoid damaging or bending the cables.
- If you place the FR-1x on your lap, ensure that the audio and adapter cables run between your legs (not sideways) to avoid damaging or bending the cables.

Attaching the straps

Proceed as follows to attach the straps to your FR-1x:

1. **Unpack the straps.**
   The FR-1x comes with two straps, each with two ends: the upper end is fitted with a Velcro strip and the clip, the lower end is not. See the illustration below:

2. **Put the FR-1x on a stable surface as shown in the illustration below.**

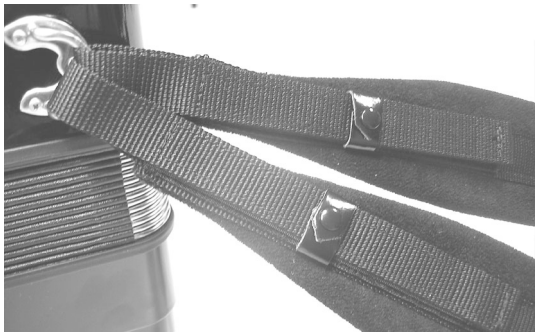


3. **Slide the upper end (with the Velcro strip) of one strap through the left holder ring (see the illustration).**

4. **Attach the strap's upper part to the Velcro layer below it.**

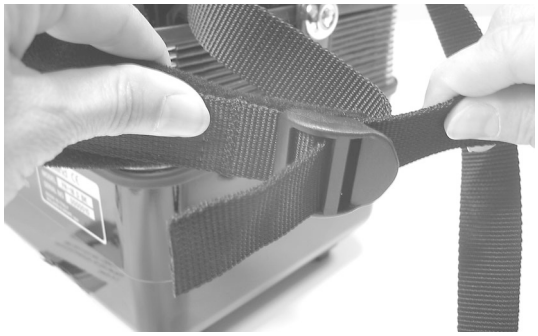
5. **Close the security clip to ensure that the strap cannot come loose.**

6. **Repeat steps (3)~(5) for the other strap.**
The upper strap ends should look as follows:

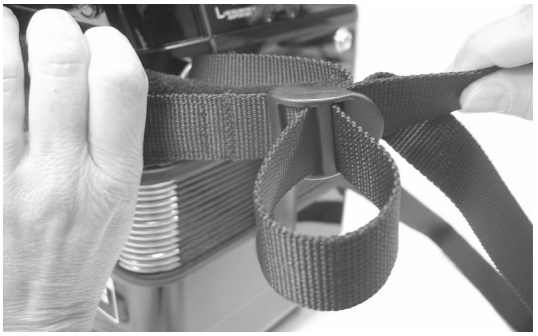


7. **Slide the lower end of one strap through the right holder ring as shown.**

8. **Slide the strap end through the upper eyelet of its plastic buckle (see the illustration).**



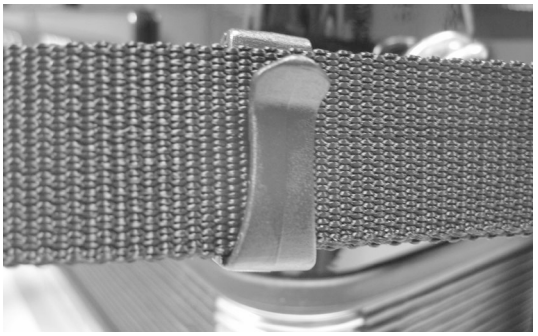
9. **Turn the strap end around and insert it into the lower eyelet, then pull it tight.**



NOTE

You may want to adjust the length first to suit your preference.

10. **Slide the plastic clip over the loose and long lower strap ends to secure the strap.**



11. **Repeat steps (7)~(9) for the other lower strap end.**

Bass strap

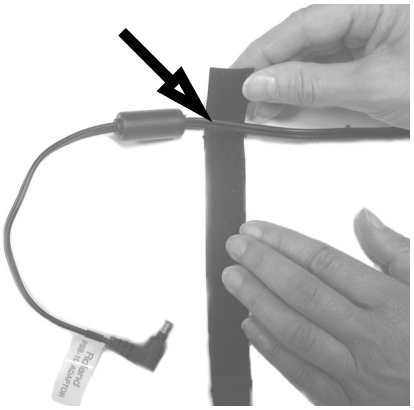
The FR-1x's bass strap (used to move the bellows in and out) is made of fabric and fitted with a Velcro strip that allows you to adjust its slack.

Securing the adapter and/or MIDI cable

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

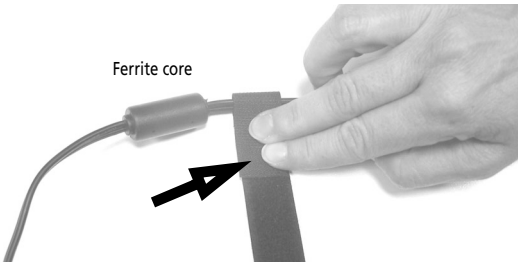
Your FR-1x comes with an adapter and an attachment strip that allows you to secure the adapter cable and optional MIDI as well as audio cables to the right strap.

1. **Prepare the adapter cable and the attachment strip as follows:**



Be sure to attach the strip *before* the ferrite core on the adapter cable. If you like, you can also add the MIDI cable and audio cables to this assembly.

2. **Secure the attachment strip as shown in the illustration, making sure that the ferrite core cannot slide out of the loop.**



3. **Hold the adapter cable close to the right strap and wind the attachment strip around it as shown.**

The strip is fitted with a Velcro layer that holds it in place.

4. **Keep winding the attachment strip around the strap until your assembly looks as follows:**

5. **Reverse these steps to remove and disconnect the adapter and/or MIDI and audio cables when you want to stop playing.**

Switching the power on and off

NOTE

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

NOTE

Always make sure the volume is turned down before switching on the power. Even with the volume all the way down, you may still hear some sound when the FR-1x is switched on, but this is normal and does not indicate a malfunction.

Turning on the power

1. **Turn the [VOLUME] knob all the way towards the small dot to minimize the volume.**
   If you connected the FR-1x to an amplifier, etc., set its volume to the minimum value as well.
2. **To switch the FR-1x on, press the [POWER] button.**
   The [POWER] button lights.

NOTE

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

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

4. **Adjust the volume of the receiving audio device (if connected).**

Turning off the power

1. **Turn the [VOLUME] knob all the way towards the small dot to minimize the volume.**
   If you connected the FR-1x to an amplifier, etc., set its volume to the minimum value as well.
2. **Press the FR-1x's [POWER] button (its indicator goes dark).**

NOTE

This unit has a function that automatically switches off the power after a certain amount of time has passed without any buttons being operated.
You can disable this function. See "Auto Off" on p. 55.

Using headphones

The FR-1x 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-1x's connection panel.**

NOTE

Use stereo headphones. Please use only Roland headphones. Headphones from other manufacturers may be unable to provide sufficient volume.

NOTE

The FR-1x's speakers are switched off when you connect headphones. In that case, the SPEAKER OFF indicator lights. See also "How to read the display" on p. 22.

2. **Use the FR-1x's [VOLUME] knob to adjust the headphone volume.**

■ Cautions when using headphones

- To prevent damage to the cord's internal conductors, avoid rough handling. When using headphones, mainly try to handle either the plug or the headset.
- Your headphones may be damaged if the volume of a device is already turned up when you plug them in. Minimize the volume before you plug in the headphones.
- Excessive input will not only damage your hearing, but may also strain the headphones. Please enjoy music at an appropriate volume.

How to read the display

The FR-1x's display keeps you informed about the FR-1x's status and helps you locate functions you may wish to set. The display can show up to three alphanumeric characters, either with or without a dot.

The main page contains the following information:

Digit	Explanation
First	Refers to the bass register you are currently using.
Second	The digit in the middle refers to the Chord/Free Bass register you are currently using.
Third	Refers to the treble register you are currently using.

A dot to the right of a digit has the following meaning:

Status	Explanation
Dark	You are using an accordion sound.
Lit	You are using an orchestral sound.
Flashes	You are using an organ sound. (Only in the Treble section.)

In addition to the above, the display also shows information that refers to the selected function. Messages (information) are displayed only temporarily.

There are also two indicators below the display that serve the following purposes:

Indicator	Explanation
USER PRG	Lights when you select User Program mode (see p. 37).
SPEAKER OFF	Lights when the internal speakers are off. This state can be selected using a PARAMETER function (see "Speaker Mode" on p. 55) or simply by connecting a jack to the PHONES socket.

6. Listening to the demo songs

The FR-1x contains several demo songs. Here is how to play back those demo songs and fully appreciate the sounds contained in the FR-1x.

1. **Switch on the FR-1x.**
   See "Switching the power on and off" on p. 21.
2. **Simultaneously press the [ORCHESTRA] and [ORGAN] buttons until the display looks as follows:**

   Playback starts automatically with the first demo song (there are 8 demo songs in all). At the end of the first song, the FR-1x starts playing songs "2", "3" etc.

   You can also directly jump to the song you're interested in:

3. **Use treble registers [1] and [2] (VALUE ◄ ►) to select the demo song you want to listen to.**

4. **Use the [VOLUME] knob to change the volume if it is too loud or too soft.**
5. **Press [ORCHESTRA] and [ORGAN] again to leave demo song mode.**

NOTE
During demo song playback, the FR-1x's keyboards cannot be used.

NOTE
No data for the music that is played back will be output from the MIDI OUT socket or USB COMPUTER port.

The following demo songs are available:

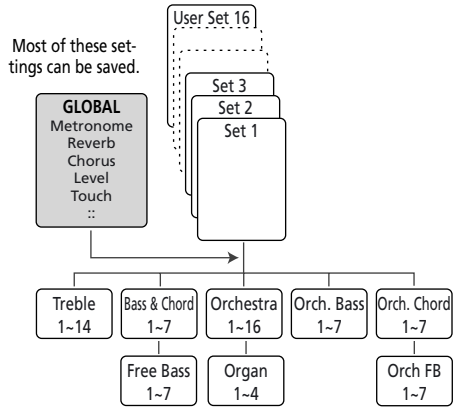
No.	Song title	Performed by
1	Forro de Janeiro	Ludovic Beier
2	Tango Dancers	Ludovic Beier
3	Sax on the Phone	Ludovic Beier
4	Sotto i ponti della Senna	Ludovic Beier
5	Funky Night	Ludovic Beier
6	Passionate Red Rose	Sergio Scappini
7	Carnival in Venice (traditional)	Sergio Scappini
8	Sonata in C Maj. by D. Scarlatti	Sergio Scappini

NOTE

7. Using Sets

The FR-1x is a "virtual" accordion. It recreates the sounds of various accordion instruments and can even generate orchestral sounds (like trumpet, flute, etc.), organ and drum sounds.

Recalling a Set is similar to switching to a different accordion.



The FR-1x contains 16 Sets divided over 4 families. All Set families have been programmed at the factory ("CLASSIC", "JAZZ", "WORLD" and "USER", see the legends above the treble registers). The "USER" family can be used to load User Sets from an optional USB memory.

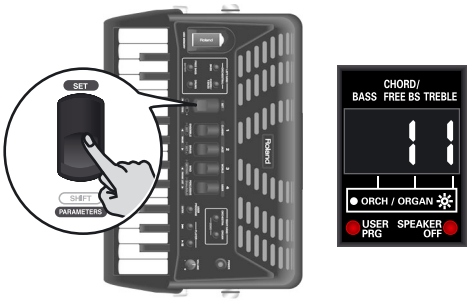
Each Set family comprises 4 Sets (see below). Recalling a Set immediately changes the settings of the sections presented on p. 26 and configures the treble and bass registers.

Treble register	
[1] CLASSIC	**[2] JAZZ**
11 Concerto	21 Jazz
12 Classic	22 FJazz
13 Bajan	23 Bandoneon
14 "I" Scala	24 Studio
Treble register	
[3] WORLD	**[4] USER**
31 "I" Folk	U1 Alpine
32 "F" Folk	U2 Cajun
33 "D" Folk	U3 Tex Mex
34 "SP" Folk	U4 Scottish

Selecting Sets

To select the desired Set, proceed as follows:

1. Press the [SET] register.



The number of the selected Set flashes in the display. The first digit from the left refers to the Set family, the second to the Set memory within that family. If, after pressing [SET] once, you do not press a treble register, the display returns to the main page after a while.

In that case, press [SET] again and proceed with step 2.

NOTE

If you hold down [SET] for more than 2 seconds without pressing another register, the FR-1x switches to PARAMETER mode. In that case, press [SET] again to leave that mode, then repeat step (1).

2. Press one of the treble registers [1]~[4] to select the Set family.

Set selection is handled in the following way:

- If the Set family you select is the same as the one you have been using so far, the FR-1x selects the next Set within that family.
  Example: Pressing [1] CLASSIC while the display shows "11" selects Set memory "12" (still within the "CLASSIC" family).

To go from Set "11" to Set "14", you therefore need to press register [1] three times after pressing [SET].

- If you select a different Set family, the FR-1x switches to the newly selected Set family and recalls the last memory you selected within that family.

NOTE

For the User Set memories, the display shows a "U". There are four User Sets.

NOTE

While the USER PRG indicator below the display lights, it is impossible to select Sets. In order to select a Set, you will have to press the [USER PROGRAM] button to leave User Program mode.

8. Selecting and playing sounds

Treble section

The treble section can be played using the 26-key "piano" keyboard or the 62 treble buttons.

The sound it produces is determined by the treble register [1]~[4] you pressed last. This section can be used to play accordion, orchestral and organ sounds.

Selecting sounds for the right hand

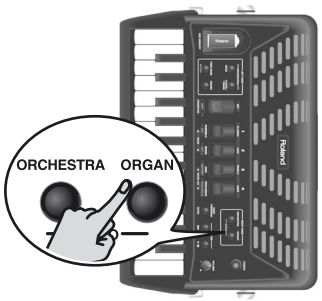
This section explains how to select accordion, orchestral and organ sounds for the treble section (right hand). On p. 27, you will learn how to combine accordion notes with an orchestral or organ sound.

Sounds are selected using treble registers [1]~[4]. To select an orchestral or organ sound, you first need to press the [ORCHESTRA] or [ORGAN] button, and then a treble register.

1. **Switch on the FR-1x.**
   See "Switching the power on and off" on p. 21.
2. **If you wish to select a treble accordion register, skip to step 4.**

   NOTE

   After switching on the FR-1x, the treble registers select accordion sounds.
3. **Press the [ORCHESTRA] or [ORGAN] button to activate the orchestral or organ section.**



(If you press [ORCHESTRA] or [ORGAN] again at this stage, the treble registers once again allow you to select accordion sounds.)

The number of the last sound you selected for that group (orchestra or organ) is indicated by the rightmost digit in the display.

In some cases, the display shows a dot to the right of the treble register number. Here is what that means:

Dot status	Explanation
Dark	You are using an accordion sound.
Lit	You are using an orchestral sound.
Flashes	You are using an organ sound.

4. **Press one of the treble registers ([1]~[4]) to select the desired sound.**
   The rightmost digit in the display changes and indicates the number of the sound you have just selected.
5. **Play a few notes to audition the sound (accordion, orchestral or organ).**
   Do not forget to move the bellows in order to hear the notes you are playing.
   If you did not select the correct sound family, return to step 3.

Additional information about the accordion section

The FR-1x allows you to select among 14 accordion sounds (even though there are only 4 treble registers).

Pressing register [1], [2] or [3] repeatedly selects one of the four available sounds (a~d, see the table below). Register [4] provides access to two sounds (a and b).

The following accordion sounds are available:

	Treble registers			
	1	2	3	4
a	Bassoon	Master	Clarinet	Piccolo
b	Bandon	Organ	Musette	Oboe
c	Cello	Accord	Celeste	–
d	Harmon	Violin	Tremolo	–

Example: To go from sound "1a" to sound "1c", you need to press treble register [1] twice.

When you select Set 32, "F Folk", the footages change as follows:

	Treble registers ("F Folk" set)	
	1 ENSEMBLE	2 BRASS
a	Basson	Tsigane
b	JazzA	Concerto
c	ArnoldX	4 Voix
d	JazzX!	Violon
	3 WIND	4 PIANO/GUITAR
a	SW Valse	Piccolo
b	Star 10	Mr Gus
c	Pro 8M	–
d	SOS Musette	–

Additional information about the orchestral section

The [ORCHESTRA] button allows you to use treble registers [1]~[4] to select from among 16 different orchestral sounds:

	Treble registers (ORCHESTRA)			
	1 ENSEMBLE	2 BRASS	3 WIND	4 PIANO/ GUITAR
a	Strings*	Twin Trump*	Flute 1*	Ac Piano
b	Jazz Scat 1**	Trombone*	Tenor Sax 2*	Ac Guitar
c	Jazz Doos*	French Horn*	Clarinet 1*	Mandolin
d	Str &Choir*	Brass*	Oboe*	HarpsStr

Each time you press a treble register [1]~[4], you select the next sound (always starting from "a" the first time the register is pressed).

Example: To go from sound "2a" to sound "2d", you need to press treble register [2] three times.

NOTE

The dynamics of sounds marked with an asterisk (*) can only be controlled by bellows movements. Those sounds are not velocity sensitive. The dynamics of sounds marked with a double asterisk (**) can be controlled by bellows movements and playing velocity. For the other sounds, see also "Orchestra Bass/Chord Touch" on p. 48.

Additional information about the organ sounds and the Rotary effect (organ section)

The FR-1x allows you to recall 4 organ sounds with treble registers [1]~[4].

Pressing the register of the selected organ sound again allows you to switch between the slow ("SLo") and fast ("FSt") speeds of the Rotary effect. The display briefly shows which one is selected.

The FR-1x contains the following organ sounds:

Treble registers (ORGAN)			
1	2	3	4
Jazz	Latin	HousPerc	Theatre

NOTE

The organ sounds can only be controlled with bellows movements.

Switching off the treble section

1. **To switch off the treble section, press and hold any single register ([1]~[4]) for a while.**
   The section in question must be assigned to the registers. See above for how to decide which section can be muted.
2. **To switch the treble section back on, briefly press any of its registers.**

NOTE

This only switches off the section that is currently selected. Remember that the treble section can control both an accordion and an orchestral or organ sound. While in Orchestra mode, you thus only switch off (or activate) the orchestral/organ section. And while in accordion mode, you only switch off the treble accordion section.

NOTE

Even if you switch off the treble section, it still transmits MIDI messages.

SOLO and DUAL

The orchestral or organ sound assigned to the treble section can be played in isolation or together with the treble accordion sound.

1. **Select an orchestral or organ sound.**
   See "Selecting sounds for the right hand" on p. 26.
2. **Hold down the [SET] register and press treble register [4] (DUAL/SOLO) to alternate between DUAL and SOLO modes.**

NOTE

If you hold down [SET] for more than 2 seconds without pressing another register, the FR-1x switches to PARAMETER mode. In that case, press [SET] again to leave that mode, then repeat step (1) above.

SOLO mode

DUAL mode

In SOLO mode, the treble keyboard only plays the selected accordion, orchestral or organ sound. DUAL mode means that the orchestral or organ sound is added to the treble accordion sound.

NOTE

You can change the volume level of the orchestral or organ sound to create the desired mix between the treble accordion and the organ or orchestral sound. See "Orchestra Level" on p. 46 or "Organ Level" on p. 46.

Transposing the treble section in octave steps

There may be times when you need to play higher or lower notes than the piano or button keyboard allows. Unlike an acoustic accordion, the FR-1x allows you to transpose the piano or button keyboard one octave up or down.

An additional advantage of this functionality is that you can play the selected orchestral or organ sound in a different octave in DUAL mode (see "SOLO and DUAL").

1. **To transpose one octave down, hold down the [SET] register and press treble register [1] (OCT–).**

NOTE

If you hold down [SET] for more than 2 seconds without pressing another register, the FR-1x switches to PARAMETER mode. In that case, press [SET] again to leave that mode, then repeat step (1).

2. **To transpose one octave up, hold down the [SET] register and press treble register [2] (OCT+).**

The display briefly confirms your setting:

One octave up

One octave down

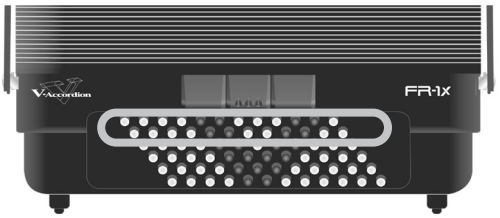
No octave transposition

NOTE

The transposition function does not apply to Bass-to-Treble mode (see "Bass to Treble" on p. 53).

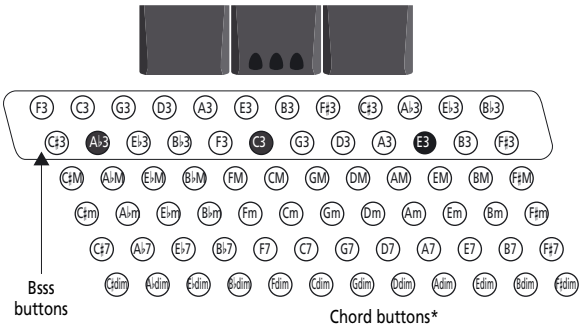
Bass and chord section

The Bass section can be played via the "Stradella" buttons.



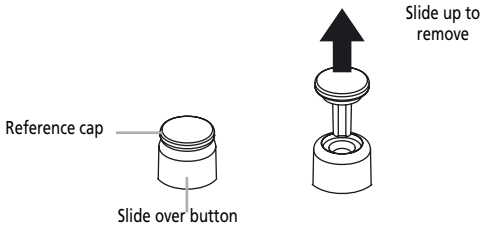
The buttons in this section allow you to play *both* bass notes *and* chords. The "real" bass notes are assigned to the two highlighted rows. The remaining buttons are used to play chords.

The FR-1x is supplied with *several reference caps* (concave and with lines) to help you locate the bass and chord buttons without looking at them. At the factory, three caps are installed on the buttons in the following illustration. Feel free to remove them and to slide them over other buttons if that feels more comfortable.



(*) This can be changed to 3 bass and 3 chord rows. See "Bass & Chord Mode" on p. 53.

Here is what the caps look like:



The overall sound the bass and chord section produces is determined by the register you pressed last. The bass and chord section can be used to play accordion or orchestral sounds.

Selecting accordion sounds for the left hand

Here is how to select an accordion sound for the bass and chord section (left hand). Accordion sounds for the left hand can be selected using the 3 registers shown below.

NOTE

The numbers shown in the illustrations above and below do not appear on the registers themselves. They have been added for your reference.

1. **Switch on the FR-1x.**
   See "Switching the power on and off" on p. 21.

NOTE

After switching on the FR-1x, the bass registers select accordion sounds.

2. **Press one of the 3 bass registers (1~3) to select the desired sound.**
   The display shows the number of the selected sound in the "BASS" and "CHORD/FREE BS" columns.

   This choice always applies to both the bass and the chord rows. The following accordion sounds can be selected for the bass and chord buttons:

	Bass & chord registers		
	1	2	3
a	8'/4'/2'	16'/8'/8-4'/4'/2'	16'/2'
b	8-4'	16'/8'/8-4'	4'
c	–	–	2'

Note that registers "1" and "2" allow you to select two sounds, while register "3" provides access to three sounds. You may therefore have to press the register in question repeatedly.

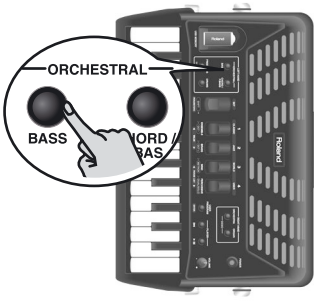
Selecting orchestral sounds for the left hand

Here is how to select an orchestral sound for the left hand. While the bass and chord accordion sections always use the same accordion sound, orchestral sounds can be assigned to only the bass buttons, only the chord buttons, or both (in which case you can select different orchestral sounds for the bass and chord rows).

1. **Switch on the FR-1x.**
   See "Switching the power on and off" on p. 21.

2. **Do one of the following:**

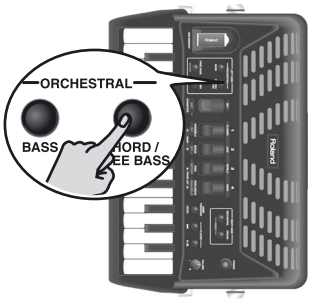
- To select an orchestral sound for the **bass rows**, press the ORCHESTRAL [BASS] button.



NOTE

If you prefer to assign an accordion sound to the bass rows (bass section) at this stage, again press the [BASS] button.

- To select an orchestral sound for the **chord rows**, press the ORCHESTRAL [CHORD/FREE BASS] button.



The last sound you selected for the section in question is recalled and its number is displayed in the "BASS" (left) or "CHORD/FREE BS" (middle) column of the display.

If you select an orchestral sound, the digit in question is displayed with a dot to its right:

The bass and chord buttons use an accordion sound (no dots).

The bass buttons use an accordion sound (no dot). The chord buttons use an orchestral sound (dot).

NOTE

If you prefer to assign an accordion sound to the chord rows (chord section) at this stage, again press the [CHORD/FREE BASS] button.

3. **Press one of the 3 bass registers to select the desired sound.**
   The display shows the number of the selected orchestral sound in the "BASS" or "CHORD/FREE BS" column (see the examples above).

   The following sounds can be selected for the bass or chord buttons:

	Orchestral bass sounds → [BASS]		
	1	2	3
a	Acoustic	Bowed*	Tuba Mix
b	Fingered	Jazz Pedal VTW*	Tuba*
c	–	–	Fretless

	Orchestral chord sounds → [CHORD/FREE BASS]		
	1	2	3
a	St. Strings*	Jazz VTW*	Steel Gtr
b	Jazz Doos*	R&B VTW*	Ac Guitar
c	–	–	Ac Piano

Note that registers "1" and "2" allow you to select two sounds, while register "3" provides access to three sounds. You may therefore have to press the register in question repeatedly.

NOTE

The dynamics of sounds marked with an asterisk (*) can only be controlled by bellows movements. Those sounds are not velocity sensitive. For the other sounds, see also "Orchestra Bass/Chord Touch" on p. 48.

NOTE

You can change the volume level of the orchestral bass or chord sound if it is too loud or too soft with respect to the other available sections. See "Orchestra Bass Level, Orchestra Chord Level, Orchestra Free Bass Level" on p. 46.

Switching off the bass and/or chord section

1. **To switch off a left-hand section you do not want to hear, press and hold any of the three bass registers for a while.**
   The section in question must be assigned to the associated registers. See the previous pages for how to decide which section can be muted.

   NOTE

   Even if you switch off the bass or chord section, it still transmits MIDI messages.

2. **To switch a muted section back on, briefly press any of the associated registers.**

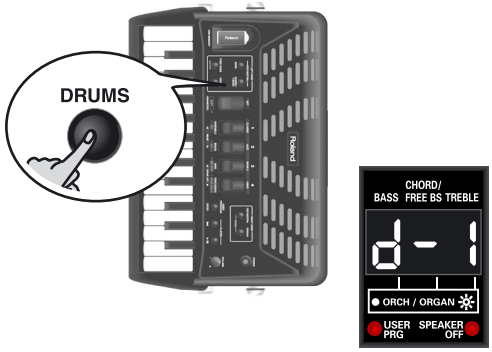
Playing drum/percussion sounds

The FR-1x allows you to play drum and percussion sounds with bass and chord buttons and to trigger the bass and chord sections simultaneously.

NOTE

This function is not available in Free Bass or Orchestra Free Bass mode.

1. **To add drum/percussion sounds to the bass and chord section (or to remove them again), press the [DRUMS] button.**



The display shows the number of the last Drum Set you selected ("d-x", where "x" represents a number) or "doF" if you switched off the drum/percussion function.

2. **Start playing in the left-hand section to hear the drum and percussion sounds.**
   Those sounds are added to the accordion or orchestral notes you play.

NOTE

See page 46 for how to select another Drum Set.

NOTE

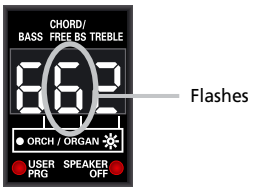
The drum/percussion sounds also remain active while an orchestral sound is selected in Bass-to-Treble mode.

Playing only bass notes with your left hand (Free Bass mode)

In Free Bass mode, all buttons of the left-hand keyboard—including the chord buttons—play bass notes.

1. **To select (or leave) Free Bass mode, press the [FREE BASS] button.**

The digit in the middle starts flashing to indicate that Free Bass mode has been activated:



If it does not flash, you are not/no longer in Free Bass mode.

NOTE

See page 52 for the assignment of the bass buttons to the available Free Bass notes.

2. **Use the three bass registers to select another registration (if necessary).**

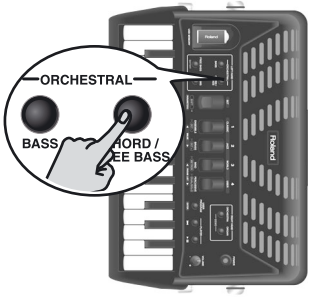
	Free Bass sounds		
	1	2	3
a	Low	Low + High	High
b	Low + High Low	Low Low + High	High Low + High
c	–	–	Low High

Note that registers "1" and "2" allow you to select two sounds, while register "3" provides access to three sounds. You may therefore have to press the register in question repeatedly.

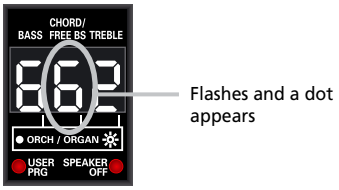
3. **Press the [FREE BASS] button again to return to normal bass mode.**

Selecting orchestral sounds in Free Bass mode

1. **To select (or leave) Free Bass mode, press the [FREE BASS] button.**
2. **Press the ORCHESTRAL [CHORD/FREE BASS] button.**



The flashing digit in the middle now shows the number of the last orchestral Free Bass sound you selected, along with a dot.



The dot means that you are in orchestral Free Bass mode. The number itself flashes to signal that the Free Bass section is active.

3. **Press one of the three bass registers to select the desired sound.**
In this mode, the following sounds are available:

	Orchestral Free Bass sounds → [CHORD/FREE BASS]		
	1	2	3
a	Strings*	Jazz VTW*	Ac Guitar
b	Jazz Doos*	Clarinet*	Ac Piano
c	–	–	Oboe*

NOTE

The dynamics of sounds marked with an asterisk (*) can only be controlled by bellows movements. Those sounds are not velocity sensitive. For the other sounds, see also "Orchestra Bass/Chord Touch" on p. 48.

Note that registers "1" and "2" allow you to select two sounds, while register "3" provides access to three sounds. You may therefore have to press the register in question repeatedly.

4. **To return to the accordion section, press the [CHORD/FREE BASS] button again.**

NOTE

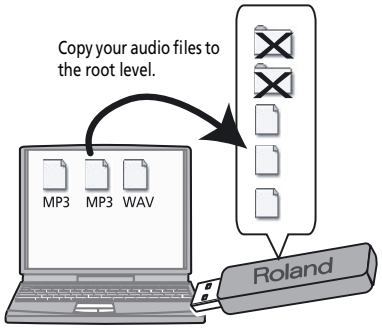
You can change the volume level of the orchestral Free Bass sound if it is too loud or too soft with respect to the other available sections. See "Orchestra Bass Level, Orchestra Chord Level, Orchestra Free Bass Level" on p. 46.

9. Using the FR-1x's audio player

The FR-1x can play back audio files in the mp3 and WAV formats directly from a USB memory you connect to its USB MEMORY port. See below for a description of the supported file types.

Copying audio files to a USB memory

Before being able to play back audio (mp3 or WAV) on the FR-1x, you must first copy them from your computer's hard disk to a USB memory that can be connected to the FR-1x.



Be aware that the FR-1x can only play back files located in the USB memory's root directory (i.e. on the same level as any folders the USB memory may contain). Never copy audio files to a folder if you wish to be able to play them back on the FR-1x.

About audio files

- Audio files in the following formats can be played back:
  - WAV format
  - 16-bit linear
  - Sampling frequency: 44.1kHz
  - Stereo/mono
- mp3 files:
  - MPEG-1 Audio Layer 3
  - Sampling frequency: 44.1kHz
  - Bit rate: 32/40/48/56/64/80/96/112/128/160/192/224/256/320kbps, VBR (variable bit rate)

Tip for naming audio files

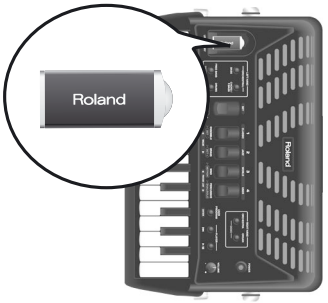
The FR-1x only displays the first three characters of the audio file names. If the USB memory contains several files whose first three characters are the same, we recommend renaming those files on your computer by adding a number to their names.

Here is an example: if the USB memory contains a file named "Amazing Grace.wav" and another one called "Amazing.mp3", consider renaming them as follows to be able to distinguish between them:

1Amazing Grace.wav
2Amazing.mp3

Playing back audio files

1. **Insert an optional USB memory into the FR-1x's USB MEMORY port.**



The USB memory can only be connected in one direction. Insert the USB memory without applying excessive force.

NOTE
Carefully insert the USB memory all the way in—until it is firmly in place.

NOTE
Use a USB memory sold by Roland (M-UF-series). We cannot guarantee operation if any other USB memory is used.

The FR-1x automatically loads the first audio file in alphabetical order that it detects in the USB memory's root folder.

2. **Press the PLAYER [▶/II] button to start playback.**

Playback of the first audio file in alphabetical order in the root folder starts. The display briefly shows the first three characters of the audio file's name as well as three dots that flash from left to right:

The "scrolling" dots (alternate flashing from left to right) mean that playback is running.

(In the example above, the display shows the first three characters of a file called "Amazing Grace.wav".)

The FR-1x only displays the first three characters of the audio file names. See "Tip for naming audio files" on p. 32 for how to ensure that you can tell the files apart.

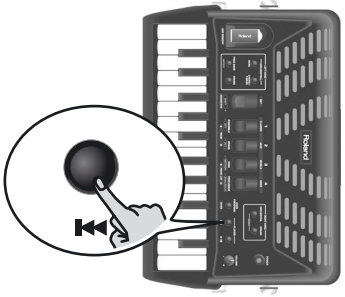
See page 71 for how the FR-1x displays the characters of the selected file name.

3. **If you are using the audio file as your accompaniment, start playing on the FR-1x as you normally would.**

4. **To pause playback of the audio file, press the [►/II] button again.**
   Playback of the selected audio file stops and the three dots flash simultaneously for a moment (after which the display returns to the main page):

If playback is stopped, the three dots flash simultaneously.

5. **To return to the beginning of the current song, press the PLAYER [⏮] button.**



NOTE

Press the PLAYER buttons [⏮] and [►/II] simultaneously to view the name of the currently selected audio file.

Selecting audio files

As stated above, the FR-1x automatically selects the first audio file it detects on the USB memory you insert. To select a different file, proceed as follows:

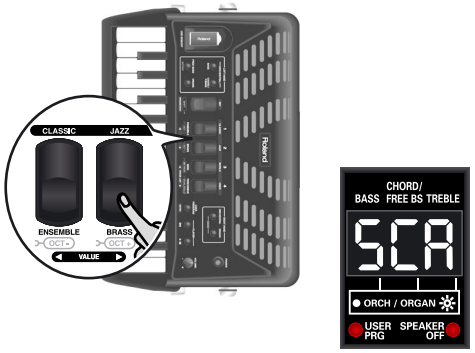
1. **Press and hold the [SET] register to enter PARAMETER mode.**
   The display shows the name of the last parameter you selected.

2. **If Parameter mode is not yet selected, press treble register [3] or [4] (PARAM LIST) until the display looks as follows:**

NOTE

Instead of performing steps (1) and (2) above, you can also press and hold the [►/II] button to jump to the first parameter of Parameter mode ("AUd").

3. **Use register [1] (◄ VALUE) or [2] (VALUE ►) to select the desired audio file.**



(In the example above, the display shows the first three characters of a file called "Scarborough.mp3".)

The display shows the first three characters of the file name you selected. If you select another audio file while playback of the previously selected file is still running, the audio player stops. See page 71 for how the FR-1x displays the characters of the selected file name.

To check whether you have selected the correct audio file, start playback ([►/II]).

NOTE

The audio files are displayed based on the following sorting order: numbers, capital letters, small letters.

NOTE

You can only select audio files in the USB memory's root directory. Audio files inside folders are not detected.

4. **Press the [SET] register to leave the FR-1x's PARAMETER mode.**

Adjusting the playback level

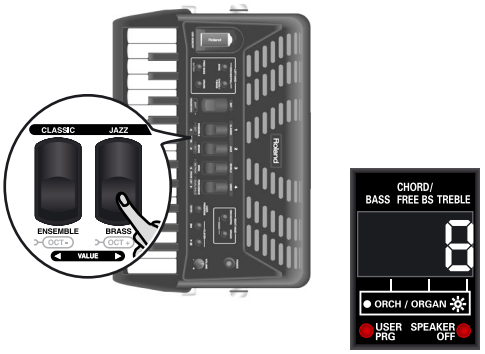
1. **Press and hold the [SET] register to enter PARAMETER mode.**
   The display shows the name of the last parameter you selected.

2. **Use treble register [3] or [4] (PARAM LIST) to select the following parameter:**

NOTE

Pressing registers [3] and [4] (PARAM LIST) simultaneously alternates between "AUd" (first parameter of the PARAMETER group) and "ESq" (first parameter of the MIDI group). This may come in handy to "close in" on the parameter you need.

3. **Use register [1] (◄ VALUE) or [2] (VALUE ►) to set the playback level.**



The setting range is: Off, 1~10. If you select "Off", the audio file will be inaudible.

4. **Press the [SET] register to leave the FR-1x's PARAMETER mode.**

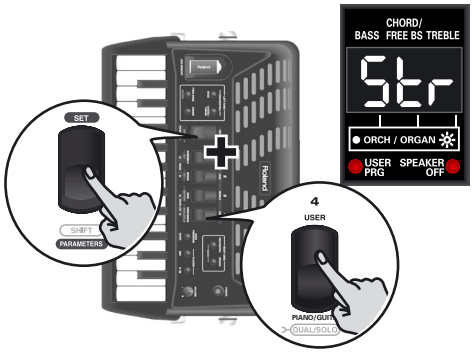
10. Highlighting some practical functions

This chapter discusses functions like the metronome, the transposition function, Musette detuning and the speaker switch function.

Using the metronome

Your FR-1x contains a metronome that may come in handy when you are practising new pieces, or during your accordion classes.

1. **To start or stop the metronome, hold down the [SET] register and press register [3] (METRONOME).**
   The display now briefly shows "Str" (start) or "StP" (stop) to indicate the status of the metronome.



NOTE

See "Metronome Time Sign" on p. 47 and "Metronome Tempo" on p. 47 as well as "Metronome Level" on p. 47 for how to set the metronome's time signature, tempo and level.

NOTE

If you hold down [SET] for more than 2 seconds without pressing another register, the FR-1x switches to PARAMETER mode. In that case, press [SET] again to leave PARAMETER mode, then continue with step 1.

NOTE

If the metronome does not start counting, check the "Metronome Function" setting on p. 47. It must be set to "1".

Changing the key of the keyboard (transpose)

The Transpose function lets you play a song in a different key. If you're accompanying a singer, you can use the Transpose function to shift the pitch to a key that's comfortable for the singer while you continue playing in the same familiar key (fingering).

The transposition interval can be set in semitones. See "Transpose" on p. 45 for how to set the transposition interval and page 44 for how to select the parameter.

Adjusting the balance

The FR-1x provides a parameter that allows you to set the balance between the treble and bass & chord sections.

See "Treble/Bass&Chord Balance" on p. 45 for details and page 44 for how to select the parameter.

Musette Detune

An accordion's 8' treble register may consist of 2 or even 3 reeds that are usually tuned apart to provide a richer sound (accordionists call it the "musette effect"). One reed is tuned slightly above, the other slightly below the correct pitch (and the third, if available, is tuned "properly").

The FR-1x allows you to choose from among 15 different detune settings. These are called "1" (Dry), "2" (Classic), "3" (F-Folk), "4" (American L), "5" (American_H), "6" (North Eur), "7" (German L), "8" (D-Folk L), "9" (Italian L), "10" (German H), "11" (Alpine), "12" (Italian H), "13" (D-Folk H), "14" (French), "15" (Scottish).

See "Musette Detune" on p. 45 for how to select the desired Musette detuning and page 44 for how to select the parameter.

NOTE

"Musette Detune" only affects registers that use the 8' reed.

Switching off the internal speakers (Speaker Mode)

When the FR-1x is connected to an external amplification system, it may be convenient to switch off its internal speakers. Doing so has the additional benefit that your batteries will last longer.

See "Speaker Mode" on p. 55 for how to switch off the speakers and page 44 for how to select the parameter.

The SPEAKER OFF indicator below the display lights when the speakers are off. It also lights when you connect headphones to the PHONES jack, because doing so switches off the speakers.

11. Saving your settings (User Program)

Your FR-1x contains 8 User Program memories where you can store the settings listed below. Working with those memories has the advantage that you can recall frequently used settings at the press of a button. The User Program settings also include the "address" of the last Set you selected.

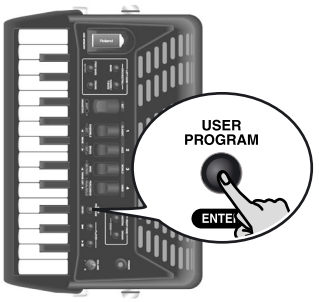
The following settings are saved to the User Programs:

Set	Number of the current Set
Treble section	Register
	Octave setting
	Bass-to-Treble mode
	Treble valve noise
Orchestra	Register
	Octave setting
	Level
Organ	Register
	Octave setting
	Level
Bass & Chord section	Register
	Bass button noise
	Bass reed growl
Orchestral Bass	On/Off
	Register
	Level
Orchestral Chord	On/Off
	Register
	Level
Orchestral Free Bass	On/Off
	Register
	Level
Drum mode	On/Off
	Drum Set number
	Level
Free Bass	On/Off
	Register
	Free Bass button noise
	Free Bass reed growl
Other parameters	Reverb Type
	Chorus Type
	Reverb Level
	Chorus Level
	Balance
MIDI parameters	Treble Octave Tx
	Bass/Free Bass Octave TX
	Chord Octave TX
	Orchestra/Organ Octave TX
	Orchestra Bass Octave TX
	Orchestra Chord Octave TX
	Orchestra Free Bass Octave TX

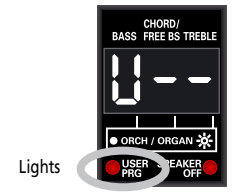
Saving the current settings

Here is how to save the current settings.

1. **Press and hold the [USER PROGRAM] button to select write mode.**



The display now shows a flashing "U--" message.



Lights

The USER PRG indicator below the display lights to indicate that the FR-1x is now in User Program mode.

NOTE

If you made a mistake and do not want to save your settings, press the [USER PROGRAM] button to leave this function.

2. **Press the treble register ([1]~[4]) that is assigned to the User Program memory where you want to save your settings.**

Each treble register provides access to two User Program memories (for a total of eight). To select the "A" memory, press the register in question once. Press it twice to select the "B" memory.

The "--" to the right of "U" changes to the number of the selected User Program.

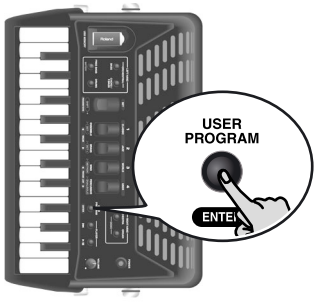
3. **Press the [SET] register to save your settings in the User Program memory you selected in step 2 above.**

4. **Press the [USER PROGRAM] button again to leave this mode.**
The USER PRG indicator below the display goes dark to indicate that the FR-1x is no longer in User Program mode. At this point, the FR-1x returns to the settings you were using before selecting User Program mode, and the display once again shows the main page.

Recalling a User Program

Proceed as follows to recall a User Program you saved earlier:

1. **Press the [USER PROGRAM] button.**



The display now shows a "U--" message.

The USER PRG indicator below the display lights to indicate that the FR-1x is now in User Program mode.

2. **Press the treble register ([1]~[4]) that is assigned to the User Program whose settings you want to use.**

Each treble register provides access to two User Program memories (for a total of eight). To select the "A" memory, press the register in question once. Press it twice to select the "B" memory.

The "--" to the right of "U" changes to the number of the selected User Program.

3. **Start playing with the new settings.**
If necessary, you can select a different User Program (see step 2 above).

4. **Press the [USER PROGRAM] button again to leave this mode.**
The USER PRG indicator below the display goes dark to indicate that the FR-1x is no longer in User Program mode. At this point, the FR-1x returns to the settings you were using before selecting User Program mode, and the display once again shows the main page.

NOTE

While the USER PRG indicator below the display lights, it is impossible to select Sets. In order to select a Set, you will have to press the [USER PROGRAM] button to leave User Program mode.

Editing a User Program

You can also edit existing User Programs.

1. **Recall the User Program you want to edit.**
See "Recalling a User Program".

2. **Press and hold the [USER PROGRAM] button to select User Program Edit mode.**
The USER PRG indicator flashes. The display shows the main page where the numbers of the selected registers are displayed.

3. **Change the settings you want to correct.**

4. **Press and hold the [USER PROGRAM] button to enter write mode.**

The display now shows a flashing "Uxx" message (the "xx" refers to the User Program you have been editing thus far).

5. Do one of the following:

- To replace (overwrite) the settings of the User Program you have been editing, press the [SET] register.
- To save the new version to a different User Program memory, press the assigned treble register (once or twice), then press [SET].

Your settings are saved to the selected User Program memory.

6. Press the [USER PROGRAM] button again to leave this mode.

The USER PRG indicator below the display goes dark to indicate that the FR-1x is no longer in User Program mode. At this point, the FR-1x returns to the settings you were using before selecting User Program mode, and the display once again shows the main page.

NOTE

While the USER PRG indicator below the display flashes, you can select another Set.

12. Data management via the FR-1x's USB port

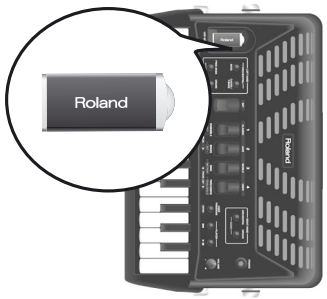
The FR-1x allows you to save and import User Program settings to/from an optional USB memory connected to its USB port. You can also import Sets and new sounds copied to your USB memory using your PC. The Sets and sounds are stored internally.

Saving User Program memories to USB memory (optional)

Here is how to archive the contents of the FR-1x's 8 internal User Program memories (file extension ".UP1") to an optional USB memory.

NOTE
Be sure to connect your USB memory before proceeding.

1. **Insert an optional USB memory into the FR-1x's USB MEMORY port.**



The USB memory can only be connected in one direction. Insert the USB memory without applying excessive force.

NOTE
Use a USB memory sold by Roland (M-UF-series). We cannot guarantee operation if any other USB memory is used.

2. **Press and hold down the [SET] register.**
The display shows the name of the last parameter you selected.

3. **Use treble register [3] or [4] (PARAM LIST) to select "SAv" (Save).**

4. **Use treble register [1] or [2] (VALUE) to see the number of the file where the data will be saved.**
The display shows the name of the first empty file on the USB memory.

NOTE
If the USB memory doesn't yet contain any User Program files, the display shows "000", which represents the file name of the data you are about to save.

NOTE
The FR-1x uses numbers as file names to save your User Programs to USB memory. It cannot display the file numbers that already are in the USB memory.

5. **Press the [USER PROGRAM] (ENTER) button to save the data.**
The display shows "Urt" (Write), then "don" (Done), after which the FR-1x returns to the main page.

Loading User Program memories from USB memory (optional)

The function discussed here allows you to load the settings of 8 User Programs from a USB memory to the FR-1x's internal memory.

1. **Insert an optional USB memory into the FR-1x's USB MEMORY port.**

2. **Press and hold down the [SET] register.**
The display shows the name of the last parameter you selected.

3. **Use treble register [3] or [4] (PARAM LIST) to select "UPG" (User Program).**

4. **Use treble registers [1] and [2] (VALUE) to select the file number of the User Programs you want to load.**
   If the USB memory doesn't contain any User Program files, the display shows "---" instead of a number.
5. **Press the [USER PROGRAM] (ENTER) button to load the selected User Programs.**
   The display shows "Lod" (Load), then "don" (Done), after which the FR-1x returns to the main page.

Loading User Set memories from USB memory (optional)

The FR-1x allows you to copy individual Sets from a USB memory to the four internal "USER" Set locations. The Set files (with the extension ".ST3") must first be copied to a USB memory's root directory before loading them into the FR-1x's "USER" area.

1. **Insert an optional USB memory into the FR-1x's USB MEMORY port.**
2. **Press and hold down the [SET] register.**
   The display shows the name of the last parameter you selected.
3. **Use treble register [3] or [4] (PARAM LIST) to select "USt" (User Set).**

4. **Use treble registers [1] and [2] (VALUE) to select the file number of the Set you want to load.**
   If the USB memory doesn't contain any Set files, the display will show "---" instead of a number.
5. **Press the [USER PROGRAM] (ENTER) button to confirm your selection.**
   The FR-1x suggests "USER" memory "1" as target for the Set file.
6. **Use treble registers [1] and [2] (VALUE) to select the desired target memory (1~4).**
7. **Press the [USER PROGRAM] (ENTER) button to load the selected Set.**

The display shows "Lod" (Load), then "don" (Done) to indicate that the file was loaded successfully. Next, the FR-1x returns to the main page. See "Selecting Sets" on p. 24 for how to recall the settings of the desired User Set.

NOTE

See "Restoring the User Sets to their factory defaults" on p. 64 if you want to recover the FR-1x's original User Sets at a later stage.

Loading new sounds from a USB memory (optional)

The FR-1x allows you to add new sounds to the internal sounds. The new sounds (files with the ".BI3" extension) must be copied to a USB memory's root directory, after which you can load them with the FR-1x. "Loading" means that they will be copied to a permanent internal memory area. There are two such memory areas ("1" and "2").

1. **Insert an optional USB memory into the FR-1x's USB MEMORY port.**
2. **Press and hold down the [SET] register.**
   The display shows the name of the last parameter you selected.
3. **Use treble register [3] or [4] (PARAM LIST) to select "Snd" (Sound).**

4. **Use treble registers [1] and [2] (VALUE) to select the number of the sound file you want to load from the connected USB memory.**
   If the USB memory doesn't contain any sound files, the display will show "---" instead of a number.
5. **Press the [USER PROGRAM] (ENTER) button to confirm your selection.**
   The FR-1x suggests memory area "1" as target for the selected file.
6. **Use treble registers [1] and [2] (VALUE) to select the desired target memory area (1 or 2).**
7. **Press the [USER PROGRAM] (ENTER) button to load the selected sound set.**
   The display shows "Lod" (Load) to indicate that the data are being loaded (this may take 1.5 minutes). Next, the "don" (Done) message appears to signal that the file was loaded successfully.

NOTE

The new sounds can only be used if you also load the associated User Sets and select one of those.

13. Other settings

The FR-1x has a mode that allows you to make various settings and perform certain operations. Below please find a list of the parameters you can set in this mode.

Display indication	Full name	Setting range	Default	See page
AUd	Audio file name	(file name, 3 characters)	–	p. 33 *3
AUL	Audio Level	Off, 1~10	8	p. 34
bAL	Treble/Bass&Chord Balance	b64~b1,Cen, t1~t63	t15	p. 45
dEt	Musette Detune	Off, 0~15	(variable)	p. 45
tUn	Master Tune	15.7~40.0~64.3	40.0	p. 45 *1
trP	Transpose	-6~0~5	0	p. 45 *1
drS	Drum Set	1~8	1	p. 46
drL	Drum Level	Low, Med, Hi, -40~Std~+40	Std	p. 46
o L	Orchestra Level	-40~Std~+40	Std	p. 46
oGL	Organ Level	-40~Std~+40	Std	p. 46
obL	Orchestra Bass Level	-40~Std~+40	Std	p. 46
oCL	Orchestra Chord Level	-40~Std~+40	Std	p. 46
oFL	Orchestra Free Bass Level	-40~Std~+40	Std	p. 46
trn	Treble Valve Noise	Off, -40~Std~+40	Std	p. 46
bbn	Bass Button Noise	Off, -40~Std~+40	Std	p. 46
brG	Bass Reed Growl	Off, -40~Std~+40	Std	p. 46
Fbn	Free Bass Button Noise	Off, -40~Std~+40	Std	p. 47
FrG	Free Bass Reed Growl	Off, -40~Std~+40	Std	p. 47
MtP	Metronome Tempo	20~250	120	p. 47
MtS	Metronome Time Sign	1~8	1	p. 47
M L	Metronome Level	OFF, 1~127	100	p. 47
MFn	Metronome Function	1, 2	1	p. 47
rEv	Reverb Type	1~8	2	p. 47
r L	Reverb Level	0~127	64	p. 48
Chr	Chorus Type	1~8	2	p. 48
C L	Chorus Level	0~127	64	p. 48
o t	Orchestra Touch	1~10	6	p. 48
obt	Orchestra Bass/Chord Touch	1~10	8	p. 48
bLC	Bellows Curve	1~8	6	p. 49
StE	Stereo Width	-63~-1, Nat, Ful	Nat	p. 49
trM	Treble Mode	1~6	1	p. 49 *2, *4
FbM	Free Bass Mode	1~5	1	p. 51 *4
bCM	Bass & Chord Mode	1~7	1	p. 53 *4
btt	Bass to Treble	Off, On	Off	p. 53
FnS	Function Switch	Off, On	Off	p. 53
AoF	Auto Off	Off, 1~3	1	p. 55
SP	Speaker Mode	Off, On	On	p. 55 *1
oLA	Output Level Attenuation	-12, -6, Off	Off	p. 55
USt	User Set load	000~999	–	p. 41 *3
UrC	User Set recover	1~4	1	p. 64 *3

Display indication	Full name	Setting range	Default	See page
UPG	User Program load	000~999	–	p. 40 *3
Snd	Sound Set load	000~999	–	p. 42 *3
SAu	User Program save	000~999	–	p. 41 *3

The "trn", "Fbn" and "bCn" parameters are not reset when you load the factory defaults.

*1 Reset when you switch off the FR-1x
*2 Only on the FR-1x button type
*3 These are functions.
*4 This parameter is not reset when you load the factory defaults.

NOTE

The FR-1x's "PARAMETERS" environment also contains MIDI parameters. For the sake of clarity, the following section only discusses parameters that are not related to MIDI. See "MIDI parameters" on p. 59 for the available MIDI parameters.

Important remark about saving your settings

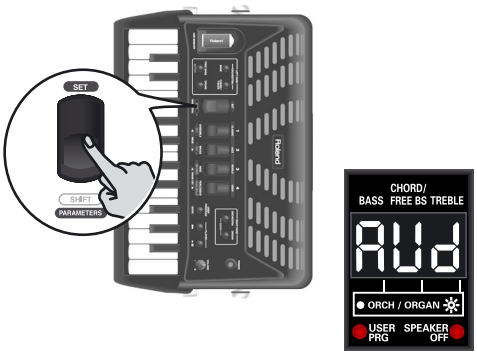
The FR-1x's internal memory remembers your settings while the FR-1x is switched on. While editing, there is no absolute need to save your settings.

Be aware, however, that all changes are lost when the FR-1x is switched off. This includes situations where the FR-1x is switched off by the "Auto Off" function.

Remember to save all settings as soon as you are sure that you want to keep them.

Selecting the desired parameter

1. **Press and hold the [SET] register to enter PARAMETER mode.**
   The display shows the name of the last parameter you selected ("AUd" in our example).



2. **Use treble register [3] or [4] (PARAM LIST) to select the desired parameter.**

(Here, we selected the "Orchestra Chord Level" parameter.)

NOTE

Pressing registers [3] and [4] (PARAM LIST) simultaneously alternates between "AUd" (first parameter of the PARAMETER group) and "ESq" (first parameter of the MIDI group). This may come in handy to "close in" on the parameter you need.

3. **Use treble register [1] (◄ VALUE) or [2] (VALUE ►) to set the desired value.**

To return to the last setting you saved for this parameter, press registers [1] and [2] simultaneously.

4. **If you want to use this change only temporarily, press the [SET] register to leave this mode.**
   Otherwise, proceed to save your changes:

Saving your changes

1. **Press and hold the [SET] register until the display looks as follows:**

2. **Press register [2] (VALUE ►) to save your settings.**
   The display now looks as follows:

   If you don't want to save your changes, press [1] (◄ VALUE). The display briefly shows the "no" message.

3. **Press the [USER PROGRAM] (ENTER) button to confirm your intention.**
   The settings are stored internally and the display briefly shows the "y.E.S." message (the three dots flash), then "don" when the settings are stored.
   Next, the display returns to the master page.

PARAM LIST parameters

Audio file name

This parameter allows you to select the audio file you want to play back. See "Selecting audio files" on p. 33.

Value	(file name, 3 characters)
	Default setting: –

NOTE
You can only select audio files in the USB memory's root directory. Audio files inside folders are not detected.

Audio Level

This parameter allows you to set the volume level of the selected audio file. See "Adjusting the playback level" on p. 34.

Value	Off, 1~10
	Default setting: 8

Treble/Bass&Chord Balance

This parameter allows you to adjust the volume balance between the bass/chord and treble sections. Any setting with a "b" means that the bass & chord section is louder than the treble section ("t").

Value	b64~b1,Cen, t1~t63
	Default setting: t15

Musette Detune

This parameter allows you to choose the detuning preset. See "Musette Detune" on p. 35 for details. You can select one of the following detuning presets:

Value	Setting	Value	Setting
0	No detune	8	D-Folk L
1	Dry	9	Italian L
2	Classic	10	German H
3	F-Folk	11	Alpine
4	American L	12	Italian H
5	American_H	13	D-Folk H
6	North Eur	14	French
7	German L	15	Scottish

The deafult setting is "2". If the "oFF" message is displayed, the selected register cannot be detuned.

NOTE
Musette Detune only affects registers that use more than one 8' reed.

Master Tune

This parameter allows you to change the FR-1x's overall tuning, which may be necessary when you play with acoustic instruments that cannot be tuned easily. The factory default is 440.0Hz.

Value	15.7~64.3 (415.7~464.3Hz)
	Default setting: 40.0 (440.0Hz)

NOTE
The display only shows the last three digits. The setting "464.3" is therefore displayed as "64.3".

Transpose

This parameter allows you to transpose all sections of the FR-1x. See "Changing the key of the keyboard (transpose)" on p. 35.

Value	-6~0~+5
	Default setting: 0

Drum Set

This parameter allows you to select the type of drum/percussion instruments you wish to play simultaneously with the bass and chord section. See also "Playing drum/percussion sounds" on p. 30.

Value	1~8
	Default setting: 1

Set	Type	Set	Type
1	Folk1	5	Latin1
2	Folk2	6	Latin2
3	Jazz	7	V-Dance
4	March Band	8	Ethnic

Drum Level

This parameter allows you to set the audio level of the drum sounds.

Value	Lo, Med, Hi, -40~Std~+40
	Default setting: Std

Select "Lo" (low), "Med" (medium) or "Hi" (high) to use a preset level value. If you select a value, it is added to, or subtracted from, the standard value ("Std").

Orchestra Level

This parameter allows you to set the level of the orchestral sounds. It can be useful to create the desired "mix" (volume balance) with the treble accordion sounds.

Value	-40~Std~+40
	Default setting: Std

This is a relative parameter, which means that its value is added to, or subtracted from, the standard value ("Std").

Organ Level

This parameter allows you to set the level of the organ sounds. It can be useful to create the desired "mix" (volume balance) with the treble accordion sounds.

Value	-40~Std~+40
	Default setting: Std

This is a relative parameter, which means that its value is added to, or subtracted from, the standard value ("Std").

Orchestra Bass Level, Orchestra Chord Level, Orchestra Free Bass Level

These parameters allow you to set the audio level of the Orchestra Bass, Orchestra Chord and Orchestra Free Bass sections.

Value	-40~Std~+40
	Default setting: Std

Treble Valve Noise

You will probably agree that electronic sounds must not only reproduce the basic timbre of an existing sound, but also the original instrument's behavior and typical "noises" in order to be perceived as authentic. In the case of a guitar that would be the sliding noise of the fingers. An accordion, on the other hand, produces mechanical valve noises that cannot be suppressed on an acoustic instrument.

Use this parameter to specify how prominent the noise produced by the simulated treble valves should be.

Value	Off, -40~Std~+40
	Default setting: Std

Bass Button Noise

The bass section of almost all accordion instruments can be played via buttons. Such buttons produce a typical noise when pressed.

Use this parameter to specify how prominent that button noise should be.

Value	Off, -40~Std~+40
	Default setting: Std

Bass Reed Growl

This parameter allows you to simulate the typical noise a bass reed makes just before it stops vibrating altogether (a kind of "musical flatulence" if you will). Each instrument of the accordion family produces its own typical growl.

Use this parameter to specify how prominent that growl should be.

Value	Off, -40~Std~+40
	Default setting: Std

Free Bass Button Noise

The bass section of almost all accordion instruments can be played via buttons. Such buttons produce a typical noise when pressed.

Use this parameter to specify how prominent that button noise should be in Free Bass mode.

Value	Off, –40~Std~+40
	Default setting: Std

Free Bass Reed Growl

This parameter allows you to simulate the typical noise a bass reed makes just before it stops vibrating altogether (a kind of "musical flatulence" if you will). Each instrument of the accordion family produces its own typical growl.

Use this parameter to specify how prominent that growl should be in Free Bass mode.

Value	Off, –40~Std~+40
	Default setting: Std

Metronome Tempo

This parameter allows you to set the metronome tempo. See page 35 for how to activate the metronome.

Value	20~250
	Default setting: 120

Metronome Time Sign

This parameter allows you to set the metronome's time signature. See page 35 for how to activate the metronome.

Value	1~8
	Default setting: 1

Here is what the displayed values correspond to:

Value	Time signature	Value	Time signature
1	1/4	5	5/4
2	2/4	6	6/4
3	3/4	7	6/8
4	4/4	8	9/8

Metronome Level

This parameter allows you to change the metronome's level when it is too loud or too soft. See page 35 for how to activate the metronome.

Value	Off, 1~127
	Default setting: 100

Metronome Function

This parameter allows you to choose the function to combine when you hold down the [SET] register and press treble register [3] (METRONOME). See "Using the metronome" on p. 35.

Value	1, 2
	Default setting: 1

The available options are:

Value	Setting
1	Metronome
2	MIDI Start/Stop

■ **Metronome**
Select this setting to take advantage of the internal metronome.

■ **MIDI Start/Stop**
This option means that the register combination acts as a MIDI remote control that starts and stops playback of an external sequencer or arranger module.

Reverb Type

This effect creates the impression that you are playing in a concert hall, a church or a room. It adds "depth" to the sound. This is where you can specify what kind of effect the Reverb processor should generate.

Value	1~8
	Default setting: 2

This parameter is a "Macro" function that recalls suitable preset values for all reverb parameters (which have been preset at the factory). The available options are:

Value	Type	Meaning
1 2 3	Room1 Room2 Room3	These reverbs simulate the reverberation of a room. They provide a well-defined spacious reverberation.
4 5	Hall1 Hall2	These reverbs simulate the reverberation of a concert hall with a deeper reverberation than the Room Reverbs.
6	Plate	This effect type simulates a plate reverb (a studio device using a metal plate to simulate natural Reverb).
7	Delay	This is a conventional delay that produces echo effects.
8	PanningDly	This is a special delay in which the delayed sounds move left and right. It is effective when you are listening in stereo.

Reverb Level

This parameter allows you to set the level of the reverb effect with respect to the unprocessed signal. Set it to "0" if you don't want to use the reverb effect.

Value	0~127
	Default setting: 64

Chorus Type

Chorus broadens the spatial image of the sound, adding richness. You can choose from 8 types of chorus.

This parameter is a "Macro" function that recalls suitable preset values for all Chorus parameters (which have been preset at the factory).

Value	1~8
	Default setting: 7

The available options are:

Value	Type	Meaning
1 2 3 4	Chorus 1 Chorus 2 Chorus 3 Chorus 4	These are conventional Chorus effects that add spaciousness and depth to the sound.
5	FBack Chr	This is a Chorus with a Flanger-like effect and a soft sound.
6	Flanger	This is an effect that sounds somewhat like a jet airplane taking off or landing.
7	Short Delay	This is a delay with a short Delay time.
8	ShortDly FB	This is a short delay with many repeats.

Chorus Level

This parameter allows you to set the level of the chorus effect with respect to the unprocessed signal. Set it to "0" if you don't want to use the chorus effect.

Value	0~127
	Default setting: 64

Orchestra Touch

This parameter allows you to specify the velocity sensitivity of the treble keys/buttons when they are used to play orchestral percussive sounds.

Value	1~10
	Default setting: 6

The available options are:

Value	Setting	Value	Setting
1	Fixed Low	6	High
2	Fixed Medium	7	Fixed L + Bellows
3	Fixed High	8	Fixed M + Bellows
4	Low	9	Fixed H + Bellows
5	Medium	10	Bellows

■ **Fixed Low, Fixed Medium, Fixed High**
These three fixed curves use the same velocity value, no matter how hard or lightly you press the keys. "Low" means that a low value is used, "Med" represents a medium value and "High" a high value.

■ **Low, Medium, High**
The "Low" curve means that even relatively light presses already allow you to play loud notes. The "High" curve represents the most responsive velocity curve. It requires a considerable amount of strength for fortissimo notes, but it also provides more expressive options. The "Med" curve is in the middle.

■ **Fixed L+Bellows, Fixed M+Bellows**
Fixed H+Bellows
These curves mean that the orchestral sound uses fixed velocity values but can also be controlled by bellows movements.

■ **Bellows**
"Bellows" means that the Orchestra section's expression is controlled by the bellows movements – not the velocity values generated by the keys.

NOTE

By selecting a "Fixed" option for "Bellows Curve" on p. 49, you effectively switch off the bellows sensor. This also means that any setting that includes "Bellows" no longer works, because the FR-1x no longer "listens" to the bellows' movements.

Orchestra Bass/Chord Touch

This parameter allows you to specify the velocity sensitivity (curve) of the bass and chord buttons, which are used to play orchestral percussive sounds.

Value	1~10
	Default setting: 8

The available options are: Fixed Low, Fixed Medium, Fixed High, Low, Medium, High, Fixed L + Bellows, Fixed M + Bellows, Fixed H+ Bellows, Bellows. See "Orchestra Touch" on p. 48 for details about these settings.

NOTE

By selecting a "Fixed" option for "Bellows Curve" on p. 49, you effectively switch off the bellows sensor. This also means that any setting that includes "Bellows" no longer works, because the FR-1x no longer "listens" to the bellows' movements.

Bellows Curve

This parameter allows you to specify how the FR-1x should respond to the bellows' movements. Use it to adapt the FR-1x's expressive potential to your playing style.

Value	1~8
	Default setting: 6

The available options are:

Value	Setting	Value	Setting
1	Fixed Low	5	Light
2	Fixed Medium	6	Standard
3	Fixed High	7	Heavy
4	X Light	8	X Heavy

■ **Fixed Low, Fixed Medium, Fixed High**
These three fixed curves always use the same expression value, no matter how hard or lightly you push/pull the bellows (no dynamic control). "Low" means that a low value is used, "Med" represents a medium value and "High" a high value.

■ **X Light, Light**
"Light" means that you do not need to push/pull hard to achieve a meaningful effect. The "X-Light" requires even less strength (the "X" stands for "extra").

■ **Standard**
The "Standard" curve refers to a normal response.

■ **Heavy and X Heavy**
"Heavy" provides a greater variety of nuances. "X-Heavy" is even more detailed.

Stereo Width

Much care has been taken to provide a natural stereo image for the accordion sounds. If you think the stereo image is too wide for comfort (or if you prefer to set the Pan controls on your mixing console differently), you can use this parameter to reduce the stereo image.

Value	–63~–1, Nat, Ful
	Default setting: Nat

"**Ful**" (full) represents the widest stereo image.
"**Nat**" (natural) means that the original stereo image is used.
"**–63**" corresponds to an extremely narrow stereo image.
All other values represent slight (or increasingly drastic) reductions of the stereo width.

Treble Mode (only on the button type)

Like for the accordion instrument itself, there are different varieties of chromatic instruments, with different treble button layouts.

Value	1~6
	Default setting: 1

The available options are:

Value	Setting	Value	Setting
1	C-Griff Europe	4	B-Griff Fin
2	C-Griff 2	5	D-Griff 1
3	B-Griff Bajan	6	D-Griff 2

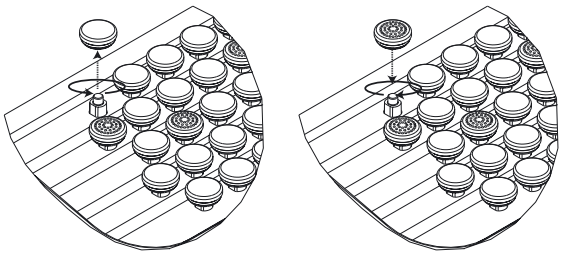
Since your FR-1x is an electronic musical instrument, changing the note assignments to the buttons is a matter of selecting the preset that best suits your playing style. You'll probably only change this setting once. But it's nice to know that it exists in case you let a fellow accordion player from another country play your FR-1x.

Please look at the illustrations on pages 50 and 51 to identify the setting you need. Pay attention to the note names (all Cs appear on a grey background) and look at how they are arranged, then make your selection. The numbers next to the letters refer to the octave. The numbers below the note names represent the corresponding MIDI note numbers.

You may have noticed that the treble buttons are colored white (for notes without alteration) and black (notes with alteration, i.e. ♯/♭). This coloring doesn't change when you select another system.

The FR-1x is supplied with additional white and black buttons. You can use these additional buttons to adapt the black and white treble buttons to reflect the selected treble mode.

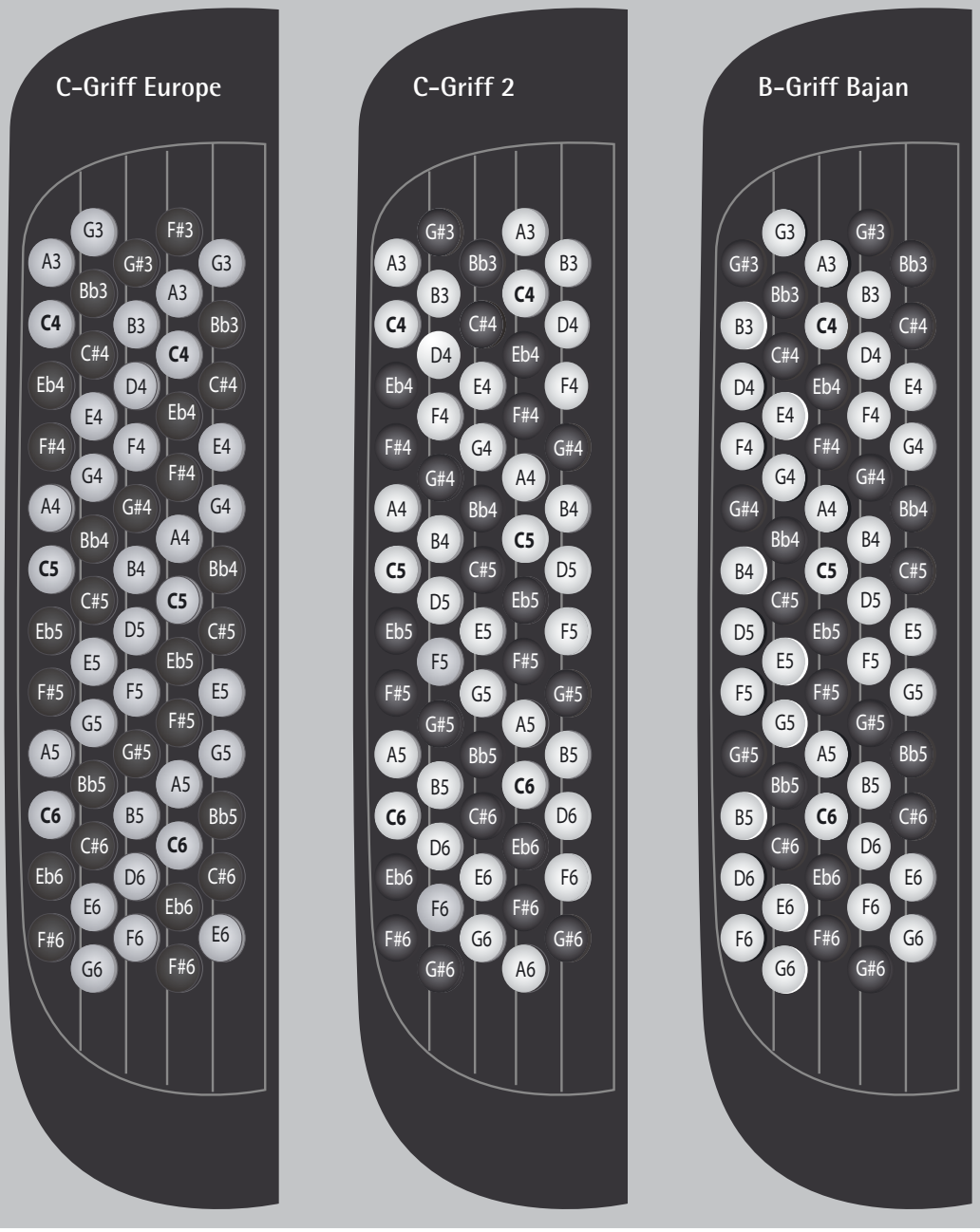
To do this, first remove the button you wish to replace by turning it counterclockwise, then install the new button and screw it clockwise.



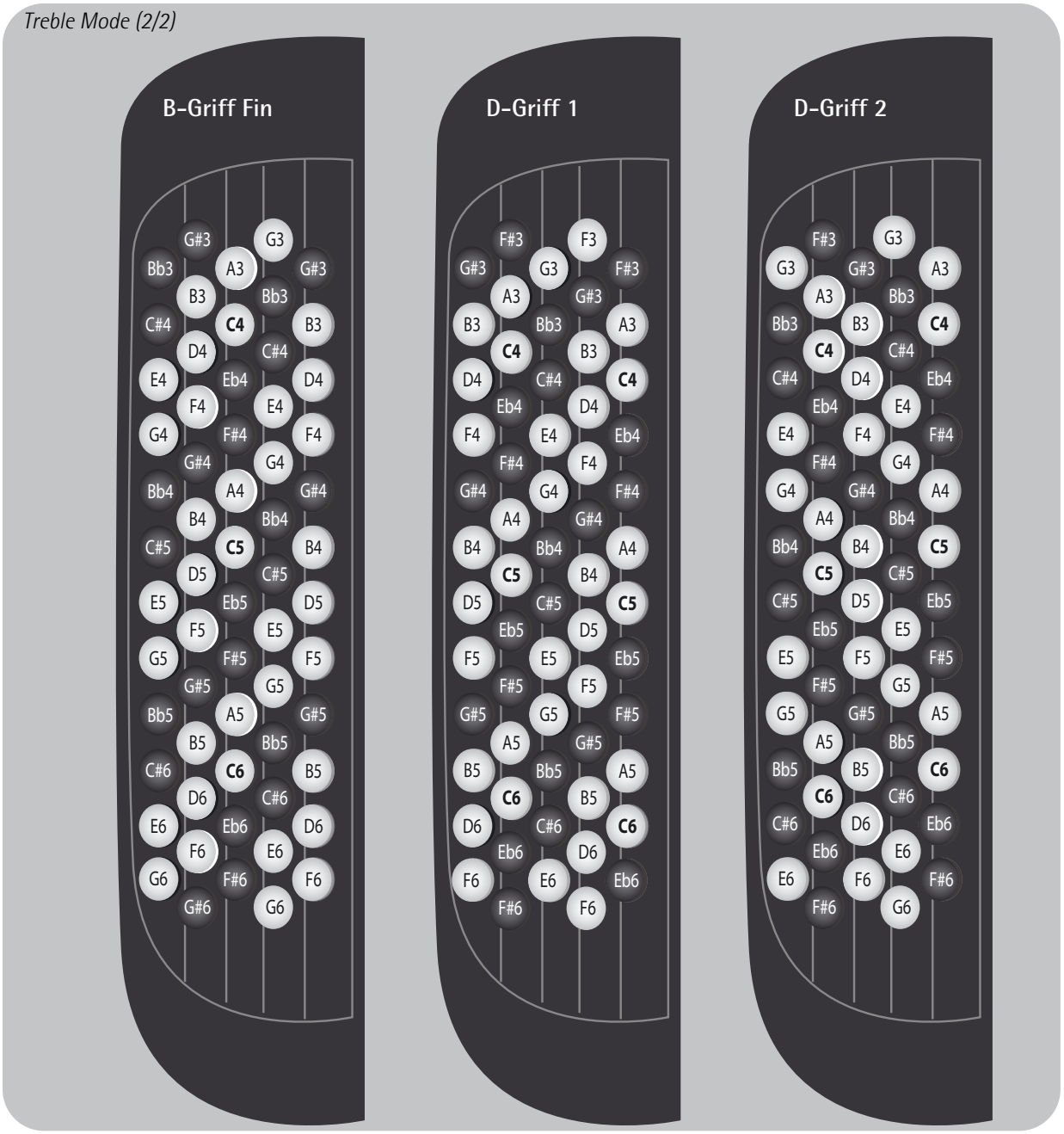
NOTE

This parameter is not reset when you load the factory defaults (page 64).

Treble Mode (1/2)



Treble Mode (2/2)



Free Bass Mode

This parameter allows you to choose the note system used in Free Bass mode. We already mentioned that there are a vast number of accordion varieties. The same is true of Free Bass systems.

Value	1~5
	Default setting: 1

The available options are:

Value	Setting	Value	Setting
1	Minor 3rd	4	N. Europe
2	Bajan	5	Finnish
3	Fifth		

Your FR-1x contains the 5 most popular modes (see the illustration on page 52). Be aware that the system you select here is only used when you activate the FR-1x's Free Bass mode. It is of no consequence for "regular" Bass mode.

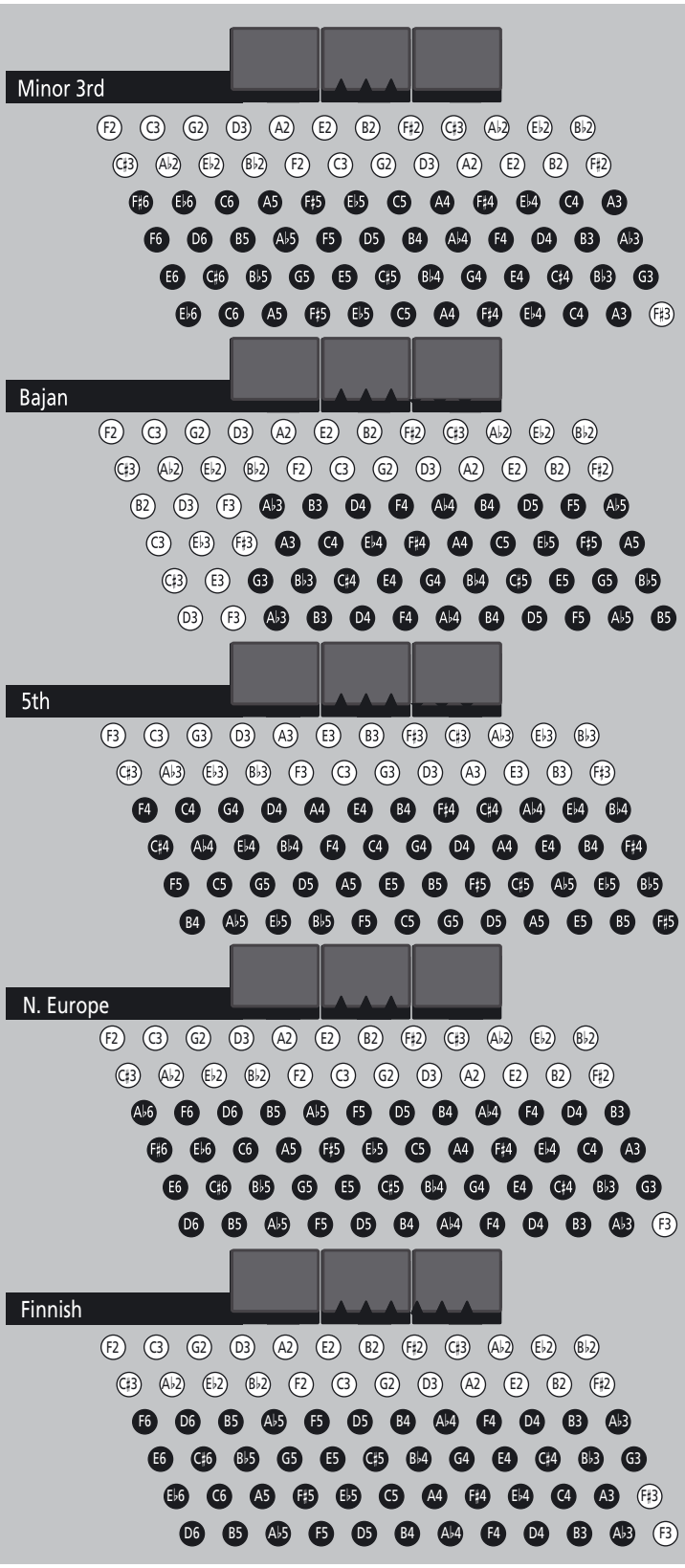
NOTE

The FR-1x is supplied with several reference caps designed to help you locate the bass buttons without looking at them. See also page 28.

NOTE

This parameter is not reset when you load the factory defaults (page 64).

Free Bass Mode



(C3= note number 48)

NOTE

The note names on the bass buttons correspond to the MIDI note numbers. The note range of the Bass part is 1 octave.

NOTE

The actual sound range depends on the type of reed and footage.

Bass & Chord Mode

This parameter allows you to specify the number of button rows available for playing bass notes. The default is 2 bass rows and 4 chord rows.

Value	1~7
	Default setting: 1

The available options are:

Value	Setting	Value	Setting
1	2 Bass Rows	5	3 Bass Rows B-5dim
2	3 Bass Row A-7th	6	3 Bass Rows Bx-7th
3	3 Bass Rows A-5dim	7	3 Bass Rows Belgium
4	3 Bass Rows B-7th		

■ **2 Bass Rows**
Using this selection, you have 2 bass rows and 4 chord rows available (default).

■ **3 Bass Rows A-7th, 3 Bass Rows A-5dim**
3 Bass Rows B-7th, 3 Bass Rows B-5dim
With this selection you gain 12 bass buttons (an entire row), but you lose the dim chords.

The "**A-7th**" and "**B-7th**" options mean that the 6th chord row plays seventh chords ("7") that don't contain the fifth.
In the case of a C7 chord, you therefore hear C-E-B♭ (but not the G). "A-7th" and "B-7th" differ in the arrangement of the bass notes (see the illustration on page 54).

The "**A-5dim**" and "**B-5dim**" options mean that seventh chords don't contain the root note. A C7 chord is therefore sounded with the notes E-G-B♭ (but not the C). "A-5dim" and "B-5dim" differ in the arrangement of the bass notes (see the illustration on page 54).

■ **3 Bass Rows Bx-7th**
This option reverses the "B-7th" settings (from right to left), so that the C3 note shifts from 6th to 9th position.

■ **3 Bass Rows Belgium**
This option simulates a "straight" Belgian bass & chord keyboard. See the illustration on p. 54 for the note assignments.

NOTE
The FR-1x is supplied with several reference caps designed to help you locate the bass and chord buttons without looking at them. See also page 28.

NOTE
This parameter is not reset when you load the factory defaults (page 64).

Bass to Treble

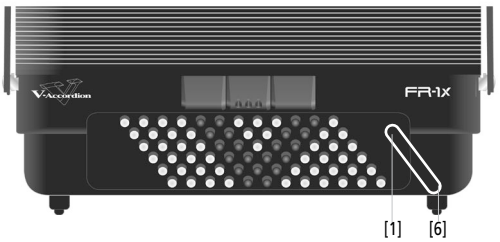
When this function is switched on, the FR-1x can be used like a bassoon accordion. In this mode, the bass part is played with the right hand. The bass and chord buttons are inactive (a real bassoon accordion doesn't have bass/chord buttons and can only be played with one hand).

Value	Off, On
	Default setting: Off

Function Switch

This parameter allows you to use the bass buttons closest to the FR-1x logo to select or control the desired functions. When this parameter is set to "On", the buttons in question can no longer be used to play notes or chords.

Value	Off, On
	Default setting: Off

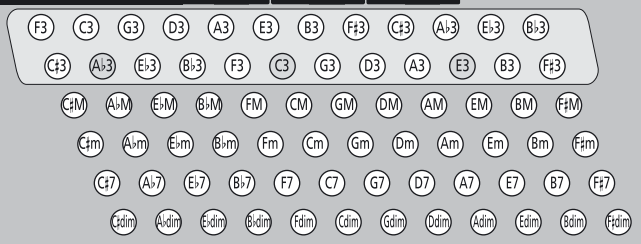


The buttons have the following factory default settings.

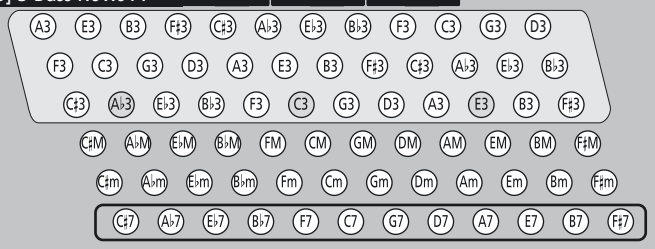
Bass button	Function	Bass button	Function
1	Pitch Down	4	Brake Off
2	Pitch Up	5	Brake On
3	Modulation	6	Rotary Slow/ Fast

Bass & Chord Mode

[1] 2 Bass Rows

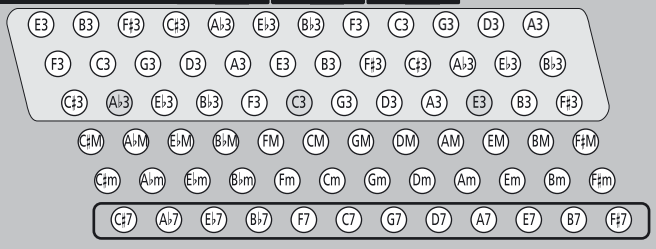


[2] & [3] 3 Bass Rows A



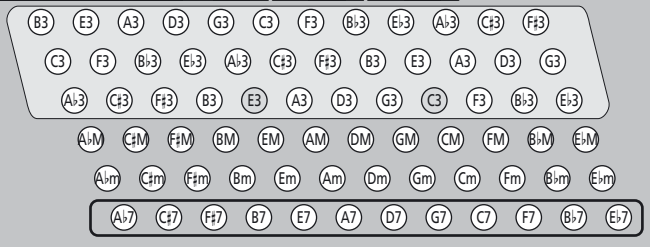
"7th"= 1-3-7; "5dim"= 3-5-7

[4] & [5] 3 Bass Rows B



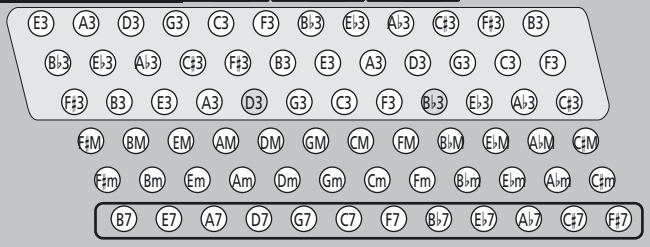
"7th"= 1-3-7; "5dim"= 3-5-7

[6] 3 Bass Rows Bx 7th



"7th"= 1-3-7

[7] 3 Bass Rows Belgium



"7th"= 1-3-7

Auto Off

This parameter allows you to specify how long the FR-1x should wait before switching itself off while you are not using it.

Value	Off, 1~3
	Default setting: 1

The available options are:

Setting	Meaning	Setting	Meaning
Off	Disabled	2	15 minutes
1	10 minutes	3	20 minutes

WARNING: Be aware that any unsaved changes are lost when the FR-1x is switched off by this function. Be sure to save all important settings as soon as you can (page 45).

Speaker Mode

When you use the FR-1x for live performances and therefore connect it to an external amplification system, it may be convenient to switch off the FR-1x's internal speakers, because doing so preserves battery power. See also "Switching off the internal speakers (Speaker Mode)" on p. 36.

Value	Off, On
	Default setting: On

The "**Off**" setting means that the internal speakers are off. The "**On**" setting means that the internal speakers are active.

Output Level Attenuation

The FR-1x has a level attenuation function that allows you to adapt its output level to the audio device you wish to connect it to. The attenuation value is expressed in dB.

Value	–12, –6, Off
	Default setting: Off

NOTE

This parameter has no effect on the FR-1x's internal speakers.

Other functions

The following functions are covered in the chapter "Data management via the FR-1x's USB port" on p. 40.

■ User Set load

This function allows you to load Sets from a USB memory to one of the four internal User memories. See "Loading User Set memories from USB memory (optional)" on p. 41.

■ User Set recover

This function allows you to recover the factory settings of the desired User Set memory. This function only loads one set at a time. See also page 64.

■ User Program load

This function allows you to load 10 User Program settings from a USB memory (provided you have already saved User Programs to that USB memory). See also "Loading User Program memories from USB memory (optional)" on p. 40.

■ Sound Set load

This function allows you to add new sounds to the FR-1x original sounds. See "Loading new sounds from a USB memory (optional)" on p. 42 for details.

■ User Program save

This function allows you to save the contents of the User Program memories to a USB memory (optional) connected to the USB port. See "Saving User Program memories to USB memory (optional)" on p. 40.

14. Connecting to MIDI devices

By connecting an external MIDI device and exchanging performance data, you can control one device from another. For instance, you can output sound from other instruments, switch sounds or transmit MIDI data from the FR-1x that cause an external sound module to play.

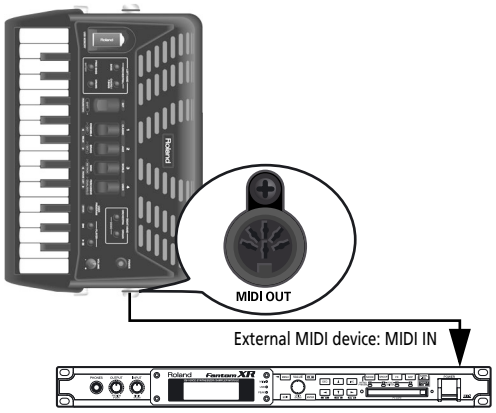
■ **What's MIDI?**
MIDI, short for "Musical Instrument Digital Interface", was developed as a universal standard for exchange of performance data with external devices. This connector can be used to connect the FR-1x to an external device for even greater versatility.

Connecting an external MIDI device to the FR-1x

The FR-1x has one MIDI socket that can be used to transmit MIDI data.

1. **Turn the volume all the way down on the FR-1x and the MIDI device you are about to connect.**

2. **Use a MIDI cable (commercially available) to connect the FR-1x's MIDI OUT socket to the MIDI IN socket of an external device.**
Connection to transmit MIDI data to an external device:



NOTE
MIDI reception is only possible via the USB COMPUTER port.

3. **Adjust the volume level on the FR-1x and the connected device.**

4. **Set the MIDI channel on the FR-1x and the external device if necessary.**
The FR-1x's sections transmit on the following MIDI channels (default):

Part	TX/RX Channel
Treble	1
Bass/Free Bass	2
Chord	3
Orchestra/Organ (Treble)	4
Orchestra Bass	5
Orchestra Chord	6
Orchestra Free Bass	7
Drum Set (note messages)	10*
Basic channel (for selecting Sets)	13

[*] This channel number cannot be changed.

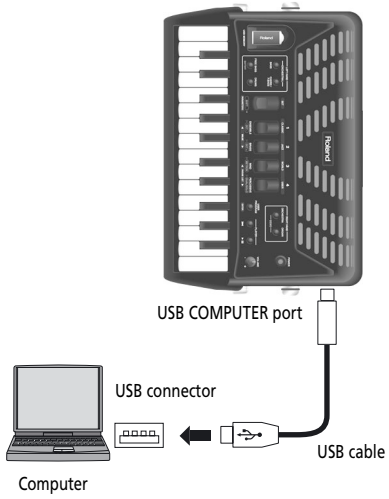
NOTE
See the external device's owner's manual for how to set its MIDI channel.

Communication via the USB COMPUTER port

If you use a USB cable (commercially available) to connect the FR-1x's USB COMPUTER port to a USB port of your computer, you'll be able to do the following.

By transferring MIDI data between the FR-1x and your sequencer software, you'll be able to enjoy a wide range of possibilities for music production and editing.

1. **Use a standard USB cable (A→B-type connectors, commercially available) to connect the FR-1x to your computer as shown below.**



2. **Select the USB driver you want to use (see p. 63).**

3. **Refer to the Roland website for system requirements.**
   Roland website: http://www.roland.com/

If the computer doesn't "see" the FR-1x

Normally, you don't need to install a driver in order to connect the FR-1x to your computer. However, if some problem occurs, or if the performance is poor, using the Roland original driver may solve the problem.

For details on downloading and installing the Roland original driver, refer to the Roland website: http://www.roland.com/

Specify the USB driver you want to use, and then install the driver. For details, refer to page 63.

■ Caution

- To avoid the risk of malfunction and/or damage to external speakers, always turn the volume all the way down and switch off the power on all devices before you make any connections.
- Only MIDI data can be transmitted and received via USB. Audio data cannot be transmitted or received.
- Switch on the power to the FR-1x before you start up the MIDI application on your computer. Never turn the FR-1x's power on/off while your MIDI application is running.

MIDI parameter list

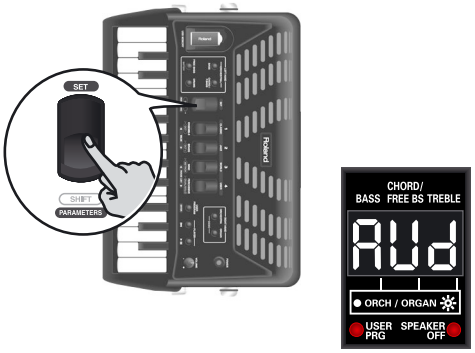
The parameters shown below are in fact the continuation of the parameters listed on page 45

Display indication	Full name	Setting range	Default	See page
E59	External Sequencer	No, Yes	No	p. 59*
trb	Treble TX/RX channel	1~16, Off	1	p. 60
tro	Treble Octave Tx	–3~0~3	0	p. 60
bFr	Bass/Free Bass TX/RX Channel	1~16, Off	2	p. 60
bFo	Bass/Free Bass Octave TX	–3~0~3	0	p. 60
Chd	Chord TX/RX Channel	1~16, Off	3	p. 60
Cho	Chord Octave TX	–3~0~3	0	p. 61
orC	Orchestra/Organ TX/RX Channel	1~16, Off	4	p. 61
oro	Orchestra/Organ Octave TX	–3~0~3	0	p. 61
obS	Orchestra Bass TX/RX Channel	1~16, Off	5	p. 61
obo	Orchestra Bass Octave TX	–3~0~3	0	p. 61
oCh	Orchestra Chord TX/RX Channel	1~16, Off	6	p. 61
oCo	Orchestra Chord Octave TX	–3~0~3	0	p. 61
oFb	Orchestra Free Bass TX/RX Channel	1~16, Off	7	p. 61
oFo	Orchestra Free Bass Octave TX	–3~0~3	0	p. 61
bCh	Basic Channel TX/RX	1~16, Off	13	p. 61
PCh	Program Change TX	Off, On	On	p. 62
bEA	Bellows Expression TX ALL	Off, On	Off	p. 62
bE1	Bellows Expression TX TREBLE	Off, On	Off	p. 62
bE2	Bellows Expression TX BASS/CHORD/ FREE BASS	Off, On	Off	p. 62
bE3	Bellows Expression TX ORCHESTRA/ ORGAN	Off, On	Off	p. 62
bE4	Bellows Expression TX ORCHESTRA BASS	Off, On	Off	p. 62
bE5	Bellows Expression TX ORCHESTRA CHORD	Off, On	Off	p. 62
bE6	Bellows Expression TX ORCHESTRA FREE BASS	Off, On	Off	p. 62
vEL	Velocity TX	On, 1~127	On	p. 62
brE	Bellows TX Resolution	1~4	2	p. 63
UFd	USB function driver	Gen, Ven	Gen	p. 63

*: Reset when you switch off the FR-1x.

Selecting the desired MIDI parameter

1. **Press and hold the [SET] register to enter PARAMETER mode.**
   The display shows the name of the last parameter you selected ("AUd" in our example).



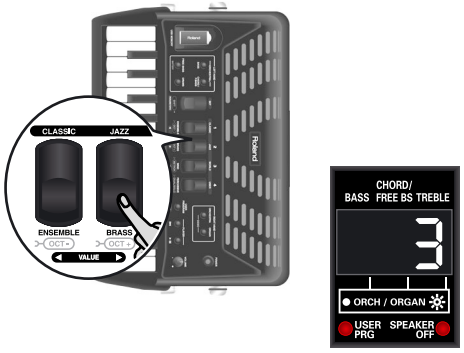
2. **Use treble register [3] or [4] (PARAM LIST) to select the desired parameter.**

   (Here, we selected the "Chord TX/RX Channel" parameter.)

NOTE

Pressing registers [3] and [4] (PARAM LIST) simultaneously alternates between "AUd" (first parameter of the PARAMETER group) and "ESq" (first parameter of the MIDI group). This may come in handy to "close in" on the parameter you need.

3. **Use register [1] (◄ VALUE) or [2] (VALUE ►) to set the desired MIDI channel.**



   To return to the last setting you saved for this parameter, press registers [1] and [2] simultaneously.

4. **If you need to change another MIDI parameter, repeat steps 2 and 3.**

5. **If you want to use this change only temporarily, press the [SET] register to leave this mode.**
   Otherwise, proceed to save your changes:

Saving your changes

1. **Press and hold the [SET] register until the display looks as follows:**

2. **Press register [2] (VALUE ►) to save your settings.**
   The display now looks as follows:

   If you don't want to save your changes, press [1] (◄ VALUE). The display briefly shows the "no" message.

3. **Press the [USER PROGRAM] (ENTER) button to confirm your intention.**
   The settings are stored internally and the display briefly shows the "y.E.S." message (the three dots flash), then "don" when the settings are stored. Next, the display returns to the master page.

MIDI parameters

External Sequencer

This parameter is used to establish the FR-1x's MIDI communication when its USB COMPUTER port is connected to a computer..

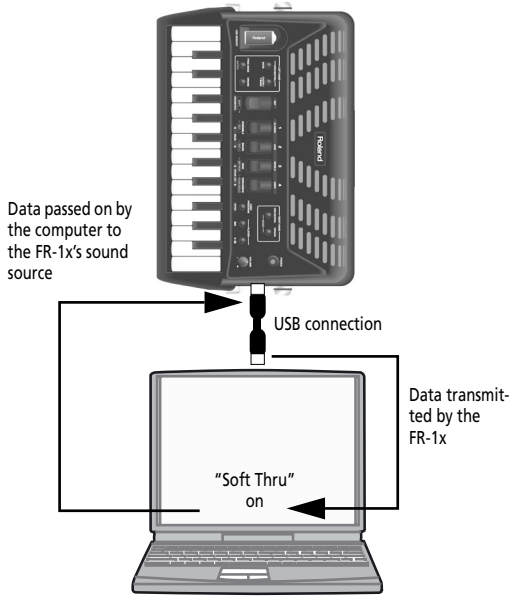
Value	No, Yes
	Default setting: No

■ **No**

Select this setting if you want to play on the FR-1x's keyboards and transmit the MIDI data generated by your playing to an external device. In this case, the FR-1x does not receive MIDI data.

■ **Yes**
Select this setting if you want to receive MIDI data generated by an external device.

If you select "YES" here, the FR-1x's sound source can no longer be played via its keyboards (Local Off). If you connect the FR-1x's USB COMPUTER port to a USB port of your computer and set the DAW/ sequencer software to "Soft Thru", the notes you play on the keyboards will be transmitted to the FR-1x's sound source via the computer.



NOTE
See "Communication via the USB COMPUTER port" on p. 57 for the required connection.

Treble TX/RX channel

This parameter allows you to define the MIDI channel for the Treble (accordion) section. The assignment set here applies both to the transmission ("TX") and reception ("RX") of MIDI data.

Value	1~16, Off
	Default setting: 1

■ **1~16**
Specifies the treble accordion's MIDI channel.

■ **Off**
Select "Off" if the treble section should neither receive nor transmit MIDI data.

NOTE
Though it is perfectly possible to assign the same MIDI channel to several sections, the result is usually disappointing and may lead to a lot of confusion.

Treble Octave Tx

This parameter allows you to transpose the Note-on messages transmitted by the treble section up to three octaves up or down.

Value	-3~0~3
	Default setting: 0

This can be used for songs where an accordion register of the treble section (for example) should be doubled by a piccolo flute played by an external module whose notes would be far too low if they were used as is. As stated above, each MIDI note has a unique number. This parameter allows you to add (or subtract) 12 ("1" octave), 24 ("2" octaves) or 36 ("3" octaves) to (from) the note numbers generated by your playing.

Bass/Free Bass TX/RX Channel

This parameter allows you to define the MIDI channel for the bass buttons or Free Bass (accordion) part, depending on which mode is currently active.

Value	1~16, Off
	Default setting: 2

The assignment set here applies both to the transmission ("TX") and reception ("RX") of MIDI data.

■ **1~16**
Specifies the bass or Free Bass accordion's MIDI channel.

■ **Off**
Select this setting if the bass or Free Bass section should neither receive nor transmit MIDI data.

Bass/Free Bass Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the bass buttons or Free Bass section up to three octaves up or down.

Value	-3~0~3
	Default setting: 0

Chord TX/RX Channel

This parameter allows you to define the MIDI channel for the chord buttons when they are used to play the selected accordion register.

Value	1~16, Off
	Default setting: 3

■ **1~16**
Specifies the chord part's MIDI channel.

■ **Off**
Select this setting if the chord part should neither receive nor transmit MIDI data.

Chord Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the chord buttons up to three octaves up or down.

Value	–3~0~3
	Default setting: 0

Orchestra/Organ TX/RX Channel

This parameter allows you to set the MIDI channel for the orchestral/organ part.

Value	1~16, Off
	Default setting: 4

■ **1~16**
Specifies the orchestral/organ part's MIDI channel.

■ **Off**
Select this setting if the treble orchestral/organ part should neither receive nor transmit MIDI data.

Orchestra/Organ Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the Orchestra section.

Value	–3~0~3
	Default setting: 0

Orchestra Bass TX/RX Channel

This parameter allows you to define the MIDI channel for the ORCH BASS part.

Value	1~16, Off
	Default setting: 5

■ **1~16**
Specifies the orchestral bass part's MIDI channel.

■ **Off**
Select this setting if the orchestral bass part should neither receive nor transmit MIDI data.

Orchestra Bass Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the orchestral bass part.

Value	–3~0~3
	Default setting: 0

Orchestra Chord TX/RX Channel

This parameter allows you to define the MIDI channel for the orchestral chord part.

Value	1~16, Off
	Default setting: 6

■ **1~16**
Specifies the orchestral chord part's MIDI channel.

■ **Off**
Select this setting if the orchestral chord part should neither receive nor transmit MIDI data.

Orchestra Chord Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the orchestral chord part.

Value	–3~0~3
	Default setting: 0

Orchestra Free Bass TX/RX Channel

This parameter allows you to define the MIDI channel for the orchestral Free Bass part.

Value	1~16, Off
	Default setting: 7

■ **1~16**
Specifies the orchestral Free Bass part's MIDI channel.

■ **Off**
Select this setting if the orchestral Free Bass part should neither receive nor transmit MIDI data.

Orchestra Free Bass Octave TX

This parameter allows you to transpose the Note-on messages transmitted by the orchestral Free Bass part.

Value	–3~0~3
	Default setting: 0

Basic Channel TX/RX

This parameter allows you to set the basic MIDI channel.
The "Basic Channel" can be used for selecting Sets from an external MIDI device (using program change numbers). Please see "MIDI implementation" on p. 72 for the program change numbers of the Sets.

Value	1~16, Off
	Default setting: 13

The assignment set here applies both to the transmission ("TX") and reception ("RX") of MIDI data.

■ **1~16**
Specifies the Basic Channel number.

■ **Off**
Select this setting if no MIDI data should be transmitted/received on the Basic Channel.

Program Change TX

The FR-1x transmits program changes when you select Sets and registers (on the MIDI channel assigned to the section for which you are selecting a different register).

This is the first of a series of MIDI filters, i.e. parameters that allow you to specify whether or not the given MIDI type should be transmitted.

Value	Off, On
	Default setting: On

■ **Off**
Select this setting if you don't want the FR-1x to transmit program change messages.

■ **On**
Select this setting if the FR-1x should transmit program change messages.

Bellows Expression TX Filters

You probably noticed that the strength/speed with which the bellows is pressed or pulled influences the sound – which corresponds to an acoustic accordion's response. This effect can be translated into a MIDI message most external instruments understand.

The MIDI standard provides a message ("control change") for remotely controlling the volume of an external instrument: CC11. It is chiefly used for expression purposes (similar to the way in which a guitarist or organ player uses a volume pedal).

The FR-1x can filter expression messages for the following sections:

■ **Bellows Expression TX ALL**


This function allows you to set all filters (bE1~bE6) to "Off" or "On". It acts like a master switch.

■ **Bellows Expression TX TREBLE**


Filters (suppresses) expression messages for the treble accordion channel.

■ **Bellows Expression TX BASS/ CHORD/FREE BASS**


Filters (suppresses) expression messages for the bass/chord/free bass accordion channel.

■ **Bellows Expression TX ORCHESTRA/ ORGAN**


Filters (suppresses) expression messages for the treble orchestra/organ channel.

■ **Bellows Expression TX ORCHESTRA BASS**


Filters (suppresses) expression messages for the orchestral bass channel.

■ **Bellows Expression TX ORCHESTRA CHORD**


Filters (suppresses) expression messages for the orchestral chord channel.

■ **Bellows Expression TX ORCHESTRA FREE BASS**


Filters (suppresses) expression messages for the orchestral free bass channel.

Value	Off, On
	Default setting: Off

■ **Off**
Select this setting if you don't want the selected section to transmit expression messages.

■ **On**
Select this setting if the selected section should transmit expression messages.

Velocity TX

Your FR-1x is velocity sensitive. That is a very learned term for the fact that the volume and brightness of the notes you play on the treble or bass keyboard depend on how hard (or fast) you press the buttons. Velocity information is transmitted via MIDI.

This parameter allows you to specify whether you want to transmit fixed or dynamic velocity values (i.e. the values translating how hard/fast you press a key or button).

Value	On, 1~127
	Default setting: On

■ **On**
Select this setting if you want to transmit MIDI velocity values proportional to the key pressure.

■ **1~127**
Specifies the fixed velocity value to be transmitted for all notes.

NOTE
Fixed velocity values can be useful for playing organ sounds on an external module.

Bellows TX Resolution

This parameter allows you to specify how many data the FR-1x's bellows may transmit for expression purposes.

Value	1~4
	Default setting: 2

- **1:** Represents the highest bellows resolution (double-byte resolution).
- **2:** Represents a high bellows resolution.
- **3:** Represents the normal bellows resolution.
- **4:** Represents the lowest (coarsest) bellows resolution.

NOTE

If the external sequencer you work with displays a "MIDI buffer overflow" message, select a lower resolution. If your sequencer accepts the complete data amount, use the "4" setting, because it will lead to even more nuances being captured.

USB Function driver

The FR-1x's USB COMPUTER port can be connected to a USB port on your computer. Doing so allows you to transmit MIDI data to the computer (which can be recorded using sequencer software) and to receive MIDI data from the computer.

Normally, you don't need to install a driver in order to connect the FR-1x to your computer. However, if some problem occurs, or if the performance is poor, using the Roland original driver may solve the problem.

To do so, first specify the USB driver you want to use (see below), and then install the driver on your computer. .

Value	Gen, Ven
	Default setting: Gen

NOTE

For details on downloading and installing the Roland original driver, refer to the Roland website:
http://www.roland.com/

- **Gen (generic)**
  Choose this if you want to use the standard USB driver that was included with your computer. Normally, you should use this mode.
- **Ven (vendor)**
  Choose this if you want to use a USB driver downloaded from the Roland website (www.roland.com).

- **Caution**
  - To avoid the risk of malfunction and/or damage to external speakers, always turn the volume all the way down and switch off the power on all devices before you make any connections.
  - Only MIDI data can be transmitted and received via USB. Audio data cannot be transmitted or received.
  - Switch on the power to the FR-1x before you start up the MIDI application on your computer. Never turn the FR-1x's power on/off while your MIDI application is running.

15. Restoring the factory defaults

You can reset the FR-1x to its factory settings, which means that your own Global settings are replaced by the settings the FR-1x contained when you first got it. You may wish to archive your settings before initializing the FR-1x (see "Saving User Program memories to USB memory (optional)" on p. 40).

Loading all factory settings

1. **Switch on the FR-1x while holding down the treble registers [3] and [4].**

The display changes to:

When all settings have been initialized, the display briefly shows the following message:

2. **Switch off the FR-1x, then switch it back on again.**
   The FR-1x now again sounds and behaves like when you first bought it.

Restoring the User Sets to their factory defaults

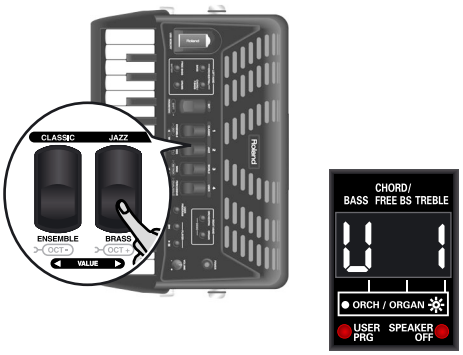
This function allows you to restore the factory settings of one of the four User Set memories (see also page 24).

1. **Press and hold down the [SET] register.**

The display shows the name of the last parameter you selected.

2. **Use treble register [3] or [4] (PARAM LIST) to select "UrC".**

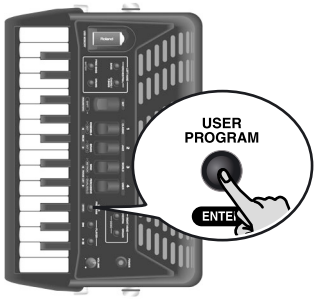
3. **Use treble register [1] (◄ VALUE) or [2] (VALUE ►) to select a User Set memory (U1~U4).**



NOTE

If you change your mind about restoring a factory Set, press the [SET] register to abort the operation.

4. **Press the [USER PROGRAM] (ENTER) button to confirm your selection.**



The display shows "rCu" (recovering), then "don" (Done), after which the FR-1x returns to the main page.

16. Troubleshooting

This section provides an overview of points to check and actions to take when the FR-1x does not function as you expect. Feel free to contact your Roland dealer if your issue remains unsolved after reading through this section.

No sound

■ **Did you turn the [VOL] knob all the way to the small dot?**
Set it to a higher value.

■ **Did you select an extreme "Treble/Bass&Chord Balance" value?**
Choosing "b63" (or "t63") means that you won't hear the treble (or bass & chord) section. See p. 45.

■ **Are you moving the bellows while triggering accordion sounds?**
The treble and bass/free bass sections only produce sound if you move the bellows while playing notes (like on an acoustic accordion).

No sound is heard when an external amplifier is connected

■ **Did you switch on the connected amplifier?**
Please check this.

■ **Did you connect the audio cables to the correct sockets?**
If so, check the cables for possible damage.

No sound when you play on the treble keyboard

You may have muted the treble section. See "Switching off the treble section" on p. 27 for how to activate it again.

No sound when you play on the bass keyboard

You may have muted the bass/chord section. See "Switching off the bass and/or chord section" on p. 30 for how to activate it again.

No sound and the display shows "---"

■ **Did you set the "External Sequencer" parameter to "YES"?**
In that case, the FR-1x only responds to MIDI messages received via its USB COMPUTER port—not the notes you play on its keyboards. Set the parameter to "no" (page 59).

No power

■ **Did you disconnect the adapter?**
Connect the supplied adapter, or install optional batteries.

■ **Did the FR-1x go off after several seconds?**
The "Auto Off" function may be active. Set it to "Off" (page 55).

The FR-1x does not respond to your playing

■ **Did you set the "External Sequencer" parameter to "YES"?**
In that case, the FR-1x only responds to MIDI messages received via its USB COMPUTER port—not the notes you play on its keyboards. Set the parameter to "no" (page 59).

■ **Are you moving the bellows while triggering accordion sounds?**
The treble and bass/free bass sections only produce sound if you move the bellows while playing notes (like on an acoustic accordion).

Issues related to the bass buttons

■ **Why do the bass buttons only provide three chord rows?**
Because you set the "Bass & Chord Mode" parameter to "2", "3", "4" or "5" (page 53). Set it to "1".

■ **Why can't I play diminished chords using the bass buttons?**
Because you set the "Bass & Chord Mode" parameter to "2", "3", "4" or "5" (page 53). Set it to "1".

■ **In Free Bass mode, the bass buttons play the wrong notes.**
You may have changed the "Free Bass Mode" setting. Be sure to select the system that best suits your playing style (page 51).

MIDI-related issues

■ **What MIDI channels does the FR-1x use by default?**
See the table on page 56.

■ **The FR-1x does not change sounds when my sequencer transmits program change numbers.**
The program change number is probably outside the range of the FR-1x's registers (see "Program change messages" on p. 72). Such "excess" program numbers are ignored by the FR-1x.

■ **The FR-1x does not receive the MIDI messages I recorded for it.**
That's because the "External Sequencer" parameter is currently set to "no". Set it to "YES" (page 59).

■ **The external sequencer keeps displaying a "MIDI Buffer Overflow" message**
The bellows sends too many data at once (its data are transmitted on five channels simultaneously). Select a different setting ("2" or "1"). This leads to a coarser resolution, and maybe to audible steps, but at least, your sequencer will be able to record the data. See "Bellows TX Resolution" on p. 63.

Other issues

■Can't read the/write to USB memory

Are you using a USB memory made by another manufacturer than Roland? Use a USB memory sold by Roland (M-UF-series).

■The bellows exhibits an erratic behavior

If the bellows doesn't work as expected, causing notes to sound even while it is not moved, its sensors may need resetting.

To do so, close the bellows, switch off the FR-1x, then press and hold the ORCHESTRAL [BASS] and [CHORD/FREE BASS] buttons while switching the FR-1x back on. After a few seconds, the display shows the "don" message (Done) and then returns to the main page. If this operation doesn't solve the problem, contact your Roland dealer.

17. Error messages

The FR-1x may display one of the following messages to signal that it has detected an error. In that case, please read the following and take the appropriate action.

Message	Meaning	Action
E01	The FR-1x already contains these sounds	The sound set you wanted to load already resides in the FR-1x's internal memory. See "Loading new sounds from a USB memory (optional)" on p. 42.
E02	Missing sound	The User Set (1~4) you recalled requires a sound that the FR-1x no longer contains.
E03	File format error	The file you want to load appears to be corrupt.
E04	USB read/write error	1) The USB memory is full. Use a different USB memory or delete files you no longer need. 2) You removed the USB memory while the FR-1x was accessing it. Connect it to the FR-1x's USB port. 3) The USB memory you connected is not properly formatted or not compatible. 4) The data could not be written to the USB memory or the file you selected cannot be read.
E05	Write protected	The USB memory you connected is write protected. See the manual that came with the storage device for how to disable its protection.
E06	Invalid mp3 or WAV file	The FR-1x doesn't recognize the selected audio file. See "About audio files" on p. 32 for the supported file types.
E07	Internal error	The last operation failed. Please perform it again. If the error persists, please contact your Roland dealer or Roland distributor (see "Information" on page 75).

18. Specifications

■ Keyboards

Piano-type	Right hand: 26 keys, velocity sensitive Left hand: 72 velocity-sensitive bass buttons Modes: Standard, Free Bass, Orch.Bass, Orch.Chord, Orch. Free Bass
Button-type	Right hand: 62 buttons, velocity sensitive Treble modes: C Griff Europe, C Griff 2, B Griff Bajan, B Griff Fin, D Griff 1, D Griff 2 Left hand: 72 velocity-sensitive bass buttons Modes: Standard, Free Bass, Orch.Bass, Orch.Chord, Orch. Free Bass

■ Bellows

New sensor for the detection of bellows pressure (high-resolution pressure sensor)

Bellows resistance regulator: wheel with fine adjustment

■ Sound source

Max polyphony: 128 voices

Wave ROM: 64MB of waveforms (8+8MB expansion sounds)

Tones: 16 accordion Sets (4 User Sets), each including: 14 treble registers, 7 bass registers, 7 free bass registers, 7 Orchestra Bass registers, 7 Orchestra Chord registers, 7 Orchestra Free Bass registers, 16 orchestral sounds, 4 organ sounds with slow/fast Rotary effect

Treble reed footages: 7

Bass reed footages: 5

Chord reed footages: 3

Free bass reed footages: 2

■ PBM (Physical Behavior Modeling)

Noises: stopping-reed growl, closing valve noise, left button noise

Individual reed simulation: Hysteresis Threshold, Expression Curve, Pressure-Variant Filter, Pressure-Variant Pitch Deviation

Reed sound wave switching: by bellows acceleration, by note repetition speed

Bellows opening/closing sound change: by bellows opening/closing detection

■ Musette tuning

Micro tuning presets: 16 (Off, Dry, Classic, F-Folk, American L/H, North Europe, German L/H, D-Folk L/H, Alpine, Italian L/H, French, Scottish)

■ Effects

Reverb: 8 types, Chorus: 8 types,
Rotary (Slow/Fast) for organ sounds

■ Panel controls

Knobs: VOL

Registers and buttons: SET register, 4 treble registers, 3 bass registers, ORCHESTRA and ORGAN buttons, USER PROGRAM button, ORCHESTRAL BASS and CHORD/FREE BASS buttons, FREE BASS button, [▶/⏸] and [⏮] buttons, DRUM button, POWER button

■ Audio player

Plays back mp3 and WAV files on a USB memory

WAV files	16-bit linear Sampling frequency: 44.1 kHz Stereo/mono
mp3 files	MPEG-1 Audio Layer 3 Sampling frequency: 44.1 kHz Bit rate: 32/40/48/56/64/80/96/112/128/160/192/224/256/320 kbps, VBR (variable bit rate)

■ Operation modes

ORCHESTRA/ORGAN modes: Solo, Dual

Bass & Chord modes: 2 Bass Rows, 3 Bass Rows A-7th, 3 Bass Rows A-5dim, 3 Bass Rows B-7th, 3 Bass Rows B-5dim, 3 Bass Rows Bx-7th, 3 Bs Row Belgium

Free Bass modes: Minor 3rd, Bajan, Fifth, N. Europe, Finnish

Bass-to-Treble mode: On/off

Bass & Chord with drum/percussion sounds: On/off

Octave: Down, 0, Up (for Treble and Organ/Orchestra)

8 User Program memories

■ Display

7 segments, 3 character (LED)

■ Rated power output

2 x 7 W RMS

■ Speakers

2 x 9 cm

■ Power supply

AC adaptor (PSB-1U)

Batteries (AA-type rechargeable Ni-MH x 8), not included

■ Current draw

1800 mA

■ Expected battery life under continuous use (using Ni-MH 2000mAh batteries):

Speakers on	5* hours
Speakers off	8* hours

* Actual battery life varies according to usage conditions, the quality of the batteries and the number of charging cycles.
Be sure to only use rechargeable Ni-MH batteries.

■ Connectors

OUTPUT jacks (L/Mono, R/Mono): 1/4" phone type

PHONES jack: stereo 1/4" phone type

MIDI connector (OUT)

USB COMPUTER connector: type B

USB MEMORY connector: type A
DC IN connector (use Roland PSB-1U AC adaptor only)

■ Dimensions
FR-1x piano type: 405 (H) x 365 (W) x 195 (D) mm
16 (H) x 14-3/8 (W) x 7-11/16 (D) inches

FR-1x button type: 380 (H) x 365 (W) x 195 (D) mm
15 (H) x 14-3/8 (W) x 7-11/16 (D) inches

■ Weight
FR-1x piano type: 6.5 kg, 14 lbs 6 oz
FR-1x button type: 6.4 kg, 14 lbs 2 oz

■ Supplied accessories
PSB-1U AC adaptor
Power cord (for connecting the AC adaptor)
Owner's Manual
Reference caps for the bass buttons
Reference caps for the treble buttons (only for FR-1x button type)
Straps
Strip for securing the adapter, MIDI and/or audio cables

■ Options
Accordion soft bag
USB flash memory (M-UF-series)
AMC-3 audio/MIDI cable
AAP-1 music rest and throne

NOTE

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

19. Appendix

Ways in which the FR-1x displays alphabetic characters of file names

Character	A	B	C	D	E	F	G	H	I	J	K	L	M
Display													

Character	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Display													

MIDI implementation

1. Received data

■ Channel Voice Messages

● Note off

Status	2nd byte	3rd byte
8nH	kkH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
kk = note number: 00H~7FH (0~127)
vv = note off velocity: 00H~7FH (0~127)

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
kk = note number: 00H~7FH (0~127)
vv = note on velocity: 01H~7FH (1~127)

● Control Change

- The value specified by a Control Change message is not reset by a Program Change, etc.

❍ Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

n = MIDI channel number: 0H~FH (Ch.1~16)
mm = Bank number MSB: 00H~7FH
ll = Bank number LSB: 00H~7FH

- Only for Free Bass.

❍ Expression (Controller number 11)

Status	2nd byte	3rd byte
BnH	0BH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Expression: 00H~7FH (0~127)

- This adjusts the volume of a Part. It can be used independently from Volume (CC07) messages. Expression messages are used for musical expression within a performance, e.g., expression pedal movements, crescendo and decrescendo.

❍ Program Change

Status	2nd byte
CnH	ppH

n = MIDI channel number: 0H~FH (Ch.1~16)
pp = Program number: See "3. Program change messages". For the Sets, see "SET RX" on p. 73

■ System Realtime Messages

❍ Active Sensing

Status
FEH

- When Active Sensing is received, the FR-1x starts monitoring the intervals of all further messages. While monitoring, if the interval between messages exceeds 420 ms, the same processing will be carried out as when All Sounds Off, All Notes Off and Reset All Controllers are received, and message interval monitoring will be halted.

2. Transmitted data

■ Channel Voice Messages

● Note off

Status	2nd byte	3rd byte
8nH	kkH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
kk = note number: 00H~7FH (0~127)
vv = note off velocity: 00H~7FH (0~127)

● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
kk = note number: 00H~7FH (0~127)
vv = note on velocity: 01H~7FH (1~127)

● Control Change

❍ Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

n = MIDI channel number: 0H~FH (Ch.1~16)
mm = Bank number MSB: 00H~7FH
ll = Bank number LSB: 00H~7FH

❍ Modulation number (Controller number 01)

Status	2nd byte	3rd byte
BnH	01H	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Modulation depth: 00H~7FH (0~127)

❍ Volume (Controller number 7)

Status	2nd byte	3rd byte
BnH	07H	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Volume: 00H~7FH (0~127)

- Volume messages are used to adjust the level of the Orchestra, Organ and Drum parts.

❍ Pan (Controller number 10)

Status	2nd byte	3rd byte
BnH	0AH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Pan: 00H~40H~7FH (0~127) (left–center–right); Initial value: 40H (center)

- The stereo position can be adjusted in 127 steps.

❍ Expression (Controller number 11)

Status	2nd byte	3rd byte
BnH	0BH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Expression: 00H~7FH (0~127)

- This adjusts the volume of a Part. Expression messages are used for musical expression within a performance, e.g., expression pedal movements, crescendo and decrescendo.

❍ Program Change

Status	2nd byte
CnH	ppH

n = MIDI channel number: 0H~FH (Ch.1~16)
pp = Program number: 00H~7FH: program no. 1~128

❍ Pitch Bend Change

Status	2nd byte	3rd byte
EnH	llH	mmH

n = MIDI channel number: 0H~FH (Ch.1~16)
mm, ll= Pitch Bend value 00 00H~40 00H~7F 7FH (–8192~0~+8191)

❍ Effect 1 (Reverb Send level; Controller number 91)

Status	2nd byte	3rd byte
BnH	5BH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Reverb Send level: 00H~7FH (0~127)

- This message adjusts the Reverb Send level of all parts.

❍ Effect 3 (Chorus Send level; Controller number 91)

Status	2nd byte	3rd byte
BnH	5DH	vvH

n = MIDI channel number: 0H~FH (Ch.1~16)
vv = Reverb Send level: 00H~7FH (0~127)

- This message adjusts the Chorus Send level of all parts.

■ System Realtime Messages

❍ Active Sensing

Status
FEH — Transmitted about every 250ms.

❍ Start

Status
FAH — This message is transmitted when the [METRONOME] switch is pressed after assigning the "2" option to the "MFn" parameter.

❍ Stop

Status
FCH — This message is transmitted when the [METRONOME] switch is pressed after assigning the "2" option to the "MFn" parameter.

3. Program change messages

CC00	CC32	Program Change	Register	Name
TREBLE REGISTER TX/RX				
0	0	1	1a	Bassoon
0	0	2	1b	Bandon
0	0	3	1c	Cello
0	0	4	1d	Harmon
0	0	8	2a	Master
0	0	5	2b	Organ
0	0	6	2c	Accord
0	0	7	2d	Violin

CC00	CC32	Program Change	Register	Name
0	0	12	3a	Clarinet
0	0	9	3b	Musette
0	0	10	3c	Celeste
0	0	11	3d	Tremolo
0	0	14	4a	Piccolo
0	0	13	4b	Oboe
ORCHESTRA (Treble) TX/RX				
0	0	1	1a	Strings
0	0	2	1b	JazzScat1
0	0	3	1c	JazzDoos
0	0	4	1d	Str&Choir
0	0	5	2a	Twin Trump
0	0	6	2b	Trombone
0	0	7	2c	French Horn
0	0	8	2d	Brass
0	0	9	3a	Flute1
0	0	10	3b	Tenor Sax2
0	0	11	3c	Clarinet
0	0	12	3d	Oboe
0	0	13	4a	Ac. Piano
0	0	14	4b	Ac. Guitar
0	0	15	4c	Mandolin
0	0	16	4d	HarpsStr
ORGAN (Treble) TX/RX (slow rotary efect)				
0	0	27	1	Full
0	0	28	2	Jazz
0	0	29	3	R&B
0	0	30	4	Perc.
ORGAN (Treble) TX/RX (fast rotary effect)				
0	0	37	1	Full Fast
0	0	38	2	Jazz Fast
0	0	39	3	R&B Fast
0	0	40	4	Perc. Fast
BASS AND CHORD REGISTER TX/RX				
0	0	5	1a	8'/4'/2'
0	0	3	1b	8-4'
0	0	4	2a	16'/8'/8-4'/4'/2'
0	0	6	2b	16'/8'/8-4'
0	0	7	3a	16'/2'
0	0	2	3b	4'
0	0	1	3c	2'
FREE BASS REGISTER TX/RX				
0	1	1	1a	Low
0	1	4	1b	Low +High Low
0	1	3	2a	Low + High
0	1	5	2b	Low Low + High
0	1	2	3a	High
0	1	6	3b	High Low + High
0	1	7	3c	Low High
ORCHESTRA BASS TX/RX				
0	0	1	1a	Acoustic
0	0	2	1b	Fingered
0	0	3	2a	Bowed
0	0	4	2b	JazzPedalVTW
0	0	5	3a	Tuba Mix
0	0	6	3b	Tuba
0	0	7	3c	Fretless
ORCHESTRA CHORD TX/RX				
0	0	1	1a	St. Strings
0	0	2	1b	Jazz Doos
0	0	3	2a	Jazz VTW
0	0	4	2b	R&B VTW
0	0	5	3a	Steel Gtr
0	0	6	3b	Ac. Guitar
0	0	7	3c	Ac. Piano
ORCHESTRA FREE BASS TX/RX				
0	0	1	1a	Strings
0	0	2	1b	Jazz Doos
0	0	3	2a	Jazz VTW
0	0	4	2b	Clarinet
0	0	5	3a	Ac. Guitar
0	0	6	3b	Ac. Piano
0	0	7	3c	Oboe

CC00	CC32	Program Change	Register	Name
SET RX				
1 CLASSIC				
0	0	1	11 Concerto	
0	0	2	12 Classic	
0	0	3	13 Bajan	
0	0	4	14 “I” Scala	
2 JAZZ				
0	0	5	21 Jazz	
0	0	6	22 FJazz	
0	0	7	23 Bandoneon	
0	0	8	24 Studio	
3 WORLD				
0	0	9	31 “I” Folk	
0	0	10	32 “F” Folk	
0	0	11	33 “D” Folk	
0	0	12	34 “SP” Folk	
4 USER				
0	0	13	U1 Alpine	
0	0	14	U2 Cajun	
0	0	15	U3 Tex Mex	
0	0	16	U3 Scottish	

MIDI Implementation Chart

[V-Accordion]
Model: FR-1x

Date: July 2011
Version: 1.00

	Function...	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1~16 1~16, Off	1~16 1~16, Off	7 Parts: 1= Treble, 2= Bass/Free Bass, 3= Chord, 4= Orchestra, 5= Orchestra Bass, 6= Orchestra Chord, 7= Orchestra Free Bass, 10 Drum Set (note messages) 1 Logical part: 13= Basic MIDI Channel for SET change
Mode	Default Message Altered	Mode 3 ***** *****	Mode 3 *****	
Note Number	 True Voice	0~127 *1 *****	0~127 0~127	
Velocity	Note ON Note OFF	O O	O O	
After Touch	Key's Ch's	X X	X X	
Pitch Bend		O	X	
Control Change	0,32 1 7 10 11 64 91 93	O *1 O O O O X O O	O X X X O X X X	Bank Select Modulation Volume Panpot Expression Hold 1 Reverb Send Chorus Send
Program Change	 True #	O *1 0~39	O 0~39	Program Number 1~40 transmitted See the table under "Program change messages" on p. 72. See "SET RX" on p. 73. for the Sets
System Exclusive		X	X	
System Common	Song Position Pointer Song Sel Tune	X X X	X X X	
System Real Time	Clock Commands	X O *2	X X	
Aux Messages	All Sounds Off Reset All Controllers Local On/Off All Notes Off Active Sense Reset	X X X O O X	X X X X O X	
Notes		*1 O X is selectable *2 Transmit Start (FA) and Stop (FC)		

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
O: Yes
Mode 3: OMNI OFF, POLY
Mode 4: OMNI OFF, MONO
X: No

20. Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

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SULTANATE OF OMAN
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As of Feb. 1, 2011 (ROLAND)

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MEMO

6020005l8

For EU countries

UK This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

DE Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.

FR Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.

IT Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.

ES Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.

PT Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

NL Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

DK Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

NO Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

SE Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

FI Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

HU Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

PL Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

CZ Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

SK Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.

EE See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

LT Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

LV Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.

SI Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjskimi odpadki.

GR Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。

环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。

不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

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

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

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

For C.A. US (Proposition 65)

WARNING

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

Roland

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