

Roland®

FR-1



Owner's Manual

For EU Countries



This product complies with the requirements of European Directive EMC 89/336/EEC.
Dieses Produkt entspricht der europäischen Richtlinie EMC 89/336/EEC.
Ce produit est conforme aux exigences de la directive européenne EMC 89/336/EEC.
Questo prodotto è conforme alle esigenze della direttiva europea EMC 89/336/EEC.
Este producto cumple con la directrice EMC 89/336/EEC de la CE.
Dit product beantwoordt aan de richtlijn EMC 89/336/EEC 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 U.K.

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

BLUE: NEUTRAL
BROWN: LIVE

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



This product must be disposed of separately at your local waste recycling centre.
Do not dispose of in household waste bin.

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

Roland

FR-1



Owner's Manual

Thank you for purchasing the Roland FR-1 V-Accordion. The FR-1 is an amazingly versatile electronic instrument that can emulate the sounds of a vast array of accordions. The major advantage of the FR-1 is that it allows you to change sounds without changing instruments. Apart from the financial benefit (the FR-1 costs only a fraction of all emulated originals), this also means that you can use your familiar playing style and techniques while covering a host of different musical genres.

Before using the FR-1, carefully read the sections entitled "Using the unit safely" on p. 5 and "Important notes" on p. 6. These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new FR-1, the (printed) Quick Start document and Owner's Manual should be read in their entirety. Those documents should be saved and kept on hand for future reference.

This manual applies to two instruments:

FR-1 (the keyboard version)

FR-1 (the button version)

1. Features

PBM (Physical Behavior Modeling)

The FR-1 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

The FR-1 contains sounds that were obtained by sampling popular traditional acoustic accordions. Different tuning systems are also available.

Orchestral sounds

4 orchestral and 4 organ sounds are available for use instead of the traditional accordion sounds. The FR-1 also provides 3 orchestral bass and chord sounds for the Bass and Chord sections.

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;

- 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.

Superb performance flexibility

The V-Accordion 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.

Useful accessory

The FR-1 has a compartment for optional rechargeable Ni-MH (AA-type) batteries. Consider purchasing such batteries (you will need 8) when performing on stage.

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- All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

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USING THE UNIT SAFELY

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

About ⚠ WARNING and ⚠ CAUTION Notices

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

About the Symbols

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

ALWAYS OBSERVE THE FOLLOWING

⚠ WARNING

- Before using this instrument, read the instructions below and the Owner's Manual.
- Do not open (or modify in any way) the unit or its AC adaptor.
- Do not attempt to repair the FR-1 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 use or store the FR-1 in places that are:
 - 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
 - Humid; or are
 - Exposed to rain; or are
 - Dusty; or are
 - Subject to high levels of vibration.
- Make sure you always have the FR-1 placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces. When not in use, do not place the FR-1 vertically due to instability. If placed in the vertical position on the floor/stage, ensure that it leans against a stable vertical surface e.g. a wall or a heavy musical instrument.
- 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.








⚠ WARNING






- Do not excessively twist or bend the adaptor cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!
- This instrument, 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 FR-1 and consult an audiologist.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the FR-1.
- Immediately turn the power off, remove the 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's cord or plug has been damaged; or
 - Objects have fallen into or liquid has been spilled onto the FR-1; or
 - The unit has been exposed to rain (or otherwise has become wet); or
 - The FR-1 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 rules essential for the safe operation of the FR-1.
- Protect the FR-1 from strong impact. (Do not drop it!)
- Do not force the adaptor 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-1 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 heated, taken apart, or thrown into fire or water.
- DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.
- Never expose rechargeable Ni-MH batteries to excessive heat, such as sunshine, fire, or the like.

⚠ CAUTION

- The FR-1 and the adaptor should be located so that their location or position does not interfere with its 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 FR-1 is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire. 
- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children. 
- Never climb on top of, nor place heavy objects on the FR-1. 
- Never handle the adaptor or its plugs with wet hands when plugging into or unplugging from, an outlet or this unit. 
- Before moving the FR-1, disconnect the AC adaptor and all cords coming from external devices. 
- Before cleaning the FR-1, turn off the power and unplug the adaptor from the outlet. 
- Whenever you suspect the possibility of lightning in your area, disconnect the 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 any screws, reference caps, the hexagonal wrench and other small parts you may remove in a safe place out of children's reach, so there is no chance of them being swallowed accidentally. 

2. Important notes

Power supply

- Do not connect the FR-1 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.
- The use of an AC adaptor is recommended as the unit's power consumption is relatively high. Should you prefer to use batteries, please use the rechargeable Ni-MH type.
- 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 malfunction and/or damage to speakers or other devices.
- Before connecting the FR-1 to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- 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 the FR-1. 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.

Placement

- Do not expose the FR-1 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 FR-1. Damage or malfunction may result if you attempt to use the FR-1 in this condition. Therefore, before using the FR-1, 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 or buttons. This can be the cause of malfunction, such as keys or buttons ceasing to produce sound.

Maintenance

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

Additional precautions

- Please be aware that the memory contents can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory (see p. 26).
- 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 (see p. 26), 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 assumes no liability concerning such loss of data.
- Unfortunately, it may be impossible to restore the contents of data that was stored in the FR-1 memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the FR-1's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the FR-1'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.

- Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty CD-ROM discs may not be read properly. Keep your discs clean using a commercially available CD cleaner.
- 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.
- To prevent an 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 using the cable strip, as shown in the illustration.



- Once the connections have been completed (see p. 11), 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.
- 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.
- Expected battery life under continuous use: rechargeable Ni-MH batteries (2100mA): ± 5.5 hours. This figure will vary depending on the actual conditions of use.
- In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.
- No data for the music that is played will be output from MIDI OUT.

Precautions for optional batteries

- 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.
- If newly purchased batteries exhibit rust, generate heat or seem abnormal in any other way, do not use them. Take them back to your dealer.
- Keep the batteries out of reach of babies or small children.
- Be sure to carefully instruct any person on the proper way of handling a battery.
- Never dispose of the battery in a fire. Never heat it. Doing so may melt the insulation, damage the gas release vents or protective devices, cause combustion through chemical reaction with generated hydrogen, ejection of battery fluid, bursting or fire.
- Do not use batteries with the positive (+) and negative (-) terminals reversed, as this may drain the batteries or cause abnormal chemical reactions.
- Do not strike or drop the batteries. Strong impact can cause leakage of battery fluid, heat generation, bursting or fire.
- Never try to connect several batteries in parallel as this may cause leakage of battery fluid, heat generation, bursting or fire.
- Do not alter or remove protective mechanisms or other parts. Never disassemble the batteries.
- If any fluid from a battery comes in contact with the eyes, flush the eyes immediately, washing them thoroughly with clean water from a tap or other source and consult a doctor. Strong alkaline fluid can damage the eyes and lead to permanent loss of eyesight.

- If skin or clothing comes in contact with any fluid from the battery, wash the area immediately with clean water from a tap. Battery fluid can cause skin damage.
- When a battery is no longer usable, dispose of it in accordance with all applicable local laws and regulations.
- If a battery leaks fluid, changes color or shape or changes in any other way, do not use it, otherwise it may cause heat generation, bursting or fire.

Battery handling

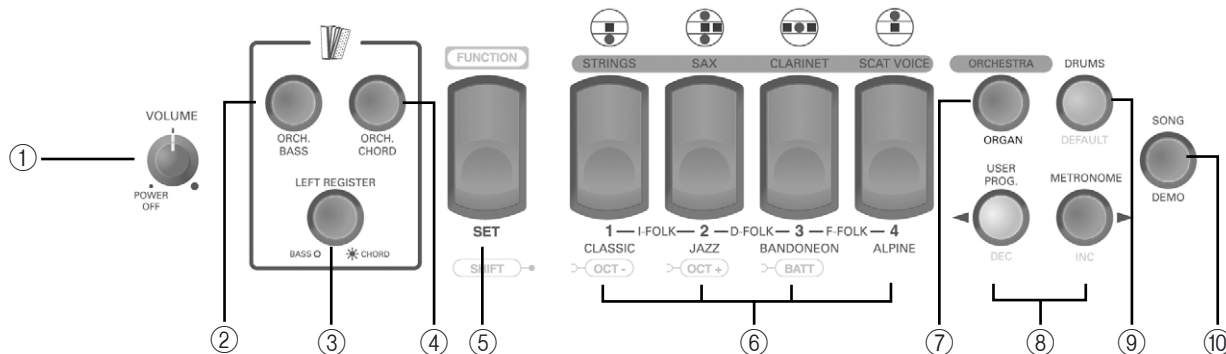
- Incorrect handling of batteries, rechargeable batteries, or a battery charger can cause leakage, overheating, fire, or explosion. Before use, you must read and strictly observe all of the precautions that accompany the batteries, rechargeable batteries, or battery charger. When using rechargeable batteries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

Strap holder precaution

- Never unscrew the strap holder rings to avoid damaging the FR-1's plastic housing, which eventually compromises overall stability and safety.

3. Panel descriptions

Treble control panel



- ① **VOLUME knob**
This knob allows you to set the V-Accordion's overall volume. Turn it all the way to the left ("POWER OFF") to switch the FR-1 off. Turn it towards the right to switch it on.
- ② **ORCH BASS button**
This button is used to switch the ORCHESTRAL BASS section on and off.
- ③ **LEFT REGISTER button**
This button is used to assign the 3 Bass registers to the BASS (light off) or CHORD section (light on). See page 16 for details.
- ④ **ORCH CHORD button**
This button is used to switch the ORCHESTRAL CHORD section on and off.
- ⑤ **FUNCTION/SET register**
This register has three functions: after pressing **[SET]** (it flashes in blue), you can use the Treble registers to select one of the following Sets. The Sets have been programmed at the factory and cannot be changed.

| | | | |
|---|-----------|-----|--------|
| 1 | CLASSIC | 1+2 | I FOLK |
| 2 | JAZZ | 2+3 | D FOLK |
| 3 | BANDONEON | 3+4 | F-FOLK |
| 4 | ALPINE | | |

By pressing and holding **[FUNCTION/SET]**, you gain access to "hidden" parameters and MIDI functions. Press it together with register **[1]** or **[2]** to change octaves. Press it together with register **[3]** to check the battery status (see p. 31)

- ⑥ **Treble registers (1~8)**
The Treble section provides the following 4 switches ("registers") that allow you to select 8 different accordion footages.

| Treble registers | | | | | |
|------------------|--|---------|----|--|----------|
| 1a | | Bassoon | 3a | | Clarinet |
| 1b | | Bandon | 3b | | Musette |
| 2a | | Master | 4a | | Piccolo |
| 2b | | Organ | 4b | | Oboe |

Each register **[1]~[4]** allows you to select two registrations. When you select an accordion registration, the corresponding register lights green.

When you select **Set 3+4, "F FOLK"**, the footages change as follows. This is not printed on the front panel, so please refer to the table below:

| Treble registers (Set 7= 3+4) | | | | | |
|-------------------------------|--|---------|----|--|-------------|
| 1a | | Bassoon | 3a | | Sw Valse |
| 1b | | Jazzy | 3b | | Mr Gus |
| 2a | | Arnold | 4a | | Av Musette |
| 2b | | 4 Voix | 4b | | SOS Musette |

Registers **[1]~[4]** can be used to select the following orchestral sounds (various musical instruments that are not related to the accordion):

| Orchestral registers ([ORCHESTRA] lights) | | | |
|---|---------|---|------------|
| 1 | Strings | 3 | Clarinet |
| 2 | Sax | 4 | Scat Voice |

And finally, registers **[1]~[4]** allow you to select the following organ sounds:

| Organ registers ([ORCHESTRA] flashes) | | | |
|---|------|---|-------|
| 1 | Full | 3 | R & B |
| 2 | Jazz | 4 | Perc |

Pressing the register of the selected sound again will change the speed of the Rotary effect (fast or slow).

⑦ **ORCHESTRA/ORGAN button**

Press this button once (it lights) to be able to select an orchestral sound for the treble keyboard (or buttons). Press it again (it flashes) if you want to play an organ sound with your right hand.

Press it yet again to return to the accordion sounds (the button goes dark).

Note: The Treble section can be assigned one accordion sound, OR one orchestral sound, OR one organ sound. Combinations (accordion + orchestral, for example) are not available.

⑧ **USER PROG/DEC and METRONOME/INC buttons**

The **USER PROG** button allows you to activate/switch off the FR-1's memory function (see p. 27). In FUNCTION mode, this button is used to decrease the value of the selected parameter.

The **METRONOME** button is used to switch the FR-1's metronome on and off (see p. 17). In FUNCTION mode, this button is used to increase the value of the selected parameter.

⑨ **DRUMS/DEFAULT button**

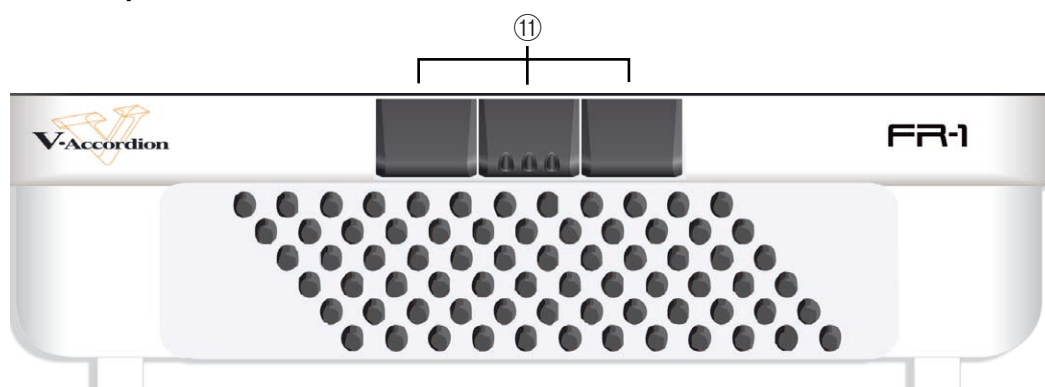
This button is used to switch the DRUMS function (see p. 19) on and off. While FUNCTION mode is active (see p. 21), this button allows you to recall the factory setting for the selected parameter.

⑩ **SONG/DEMO button**

This button allows you to switch to SONG mode where you can practice your left- or right-hand playing using one of the 4 internal songs (the FR-1 plays the part of the other hand). See page 18.

Press and hold this button to listen to the FR-1's 8 demo songs.

Bass control panel



⑪ **Bass registers**

These registers allow you to select the desired bass (and chord) mix. They include the following accordion footages:

| Bass registers | |
|----------------|-------------------|
| 1 | 8'/4'/2' |
| 2 | 16'/8'/8-4'/4'/2' |
| 3 | 16'/2' |

Note: Each register is assigned to only one registration or sound (unlike the treble registers, which allow you to select from two sounds).

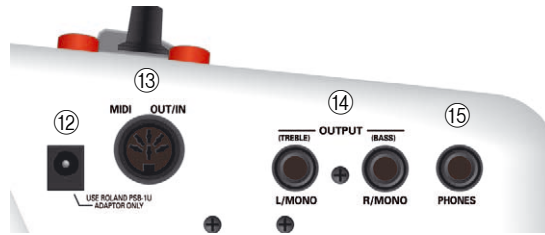
The FR-1 allows you to play:

- accordion chord and bass sounds (like on an acoustic accordion);
- accordion bass lines with orchestral chords (but no accordion chords);
- accordion chord parts with orchestral bass notes (but no accordion bass notes).

• one orchestral bass sound and one chord sound
That explains why the bass registers' assignments sometimes depend on the status of the **LEFT REGISTER** button. See p. 16 for details.

The bass registers are also used to select orchestral sounds for the Bass or Chord section.

Connection panel



⑫ DC IN socket

This is where you can connect the supplied power adaptor (PSB-1U). Note that you can also purchase 8 optional batteries and use the FR-1 without the adaptor.

⑬ MIDI OUT/IN socket

This socket can be used to receive or transmit MIDI data. Its function depends on the setting of the "MIDI OUT/IN" parameter (see p. 26).

Note: After selecting the "MIDI IN" setting, you will hear nothing when you play on the FR-1's keyboards: it will only respond to MIDI messages received from an external device.

⑭ OUTPUT L/MONO (TREBLE) & R/MONO (BASS) sockets

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

⑮ PHONES socket

This is where you can connect the supplied earphones or optional stereo headphones (Roland RH-A30, RH-200s or RH-300). Doing so does not mute the OUTPUT sockets.

Note: When using the supplied earphones, do not set the volume too high (i.e. past "12 o'clock") to avoid distortion.

Important remark

After connecting any cable to the FR-1, 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-1 with care and pay special attention to the cable slack to avoid damaging or bending the cables.
- If you place the FR-1 on your lap, ensure that the audio and adaptor cables run between your legs (not sideways) to avoid damaging or bending the cables.

Personalizing your FR-1

The artwork you see behind the treble registers (above the Roland logo) can be replaced either with one of the six sheets supplied with the FR-1 or with a graphic you create yourself. To do so, proceed as follows:

- (1) Use the supplied hexagonal wrench to loosen the two screws holding the "traforo" cover:



There is one screw on either side.



Be careful not to turn the screws too far—they should remain in the traforo cover.

- (2) After loosening both screws, you can open the traforo cover:



Note: Be careful not to scratch the housing of your FR-1.

- (3) Remove the sheet from underneath the traforo cover and insert another one.
While creating your own sheet, pay attention to the following:
 - You can use your color printer and a graphic program to create your own artwork.
 - Be sure to use paper or rather thin media—cardboard is usually too thick.
 - For a professional look, be sure to prepare a sheet with the following dimensions: 297mm (L) x 89mm (H).
- (4) Secure the traforo cover by tightening the two screws using the supplied hexagonal wrench.

4. Setting up

Connections

The FR-1 has a compartment for 8 optional rechargeable Ni-MH (AA-type) batteries. Consider purchasing such batteries when performing on stage.

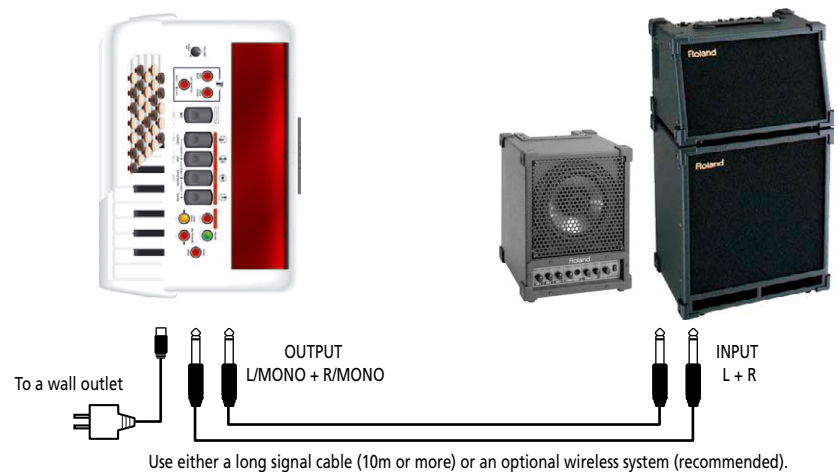
Using the OUTPUT sockets

The FR-1 needs to be connected to an amplification system. If you are using optional batteries and need to connect the FR-1 to a PA system or mixer, we recommend using a wireless system to avoid having to use excessively long signal cables.

You can also use the supplied earphones or a pair of optional headphones (Roland RH-30A, RH-200, RH-200S or RH-300).

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.

Note: When using the supplied earphones, do not set the volume too high (i.e. past "12 o'clock") to avoid distortion.



Attaching the straps

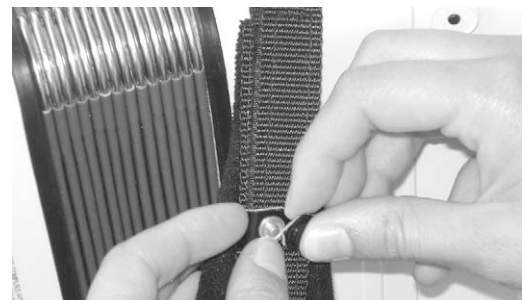
Proceed as follows to attach the straps to your FR-1:

- (1) Unpack the straps.
- (2) Put the FR-1 on a stable surface.
The connection panel must face down.
- (3) Slide the upper end of one strap through the holder ring (see the illustration).
The upper end is the part with the Velcro portions and the clip.



- (4) Fasten the strap's upper part to the Velcro layer below it.

- (5) Close the security clip to ensure that the strap cannot come loose.

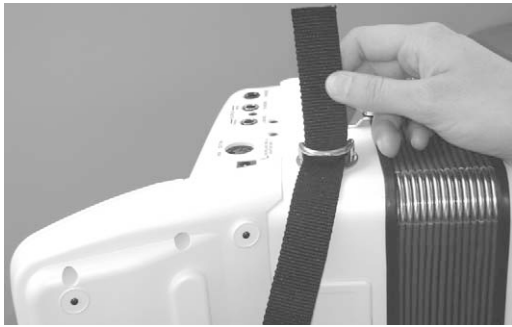


- (6) Repeat steps (3)~(5) for the other strap.
The upper strap ends should look as follows:

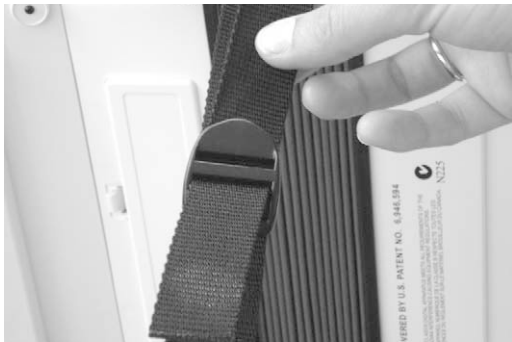


- (7) Turn the FR-1 around (with the connection panel on the left side, see below).

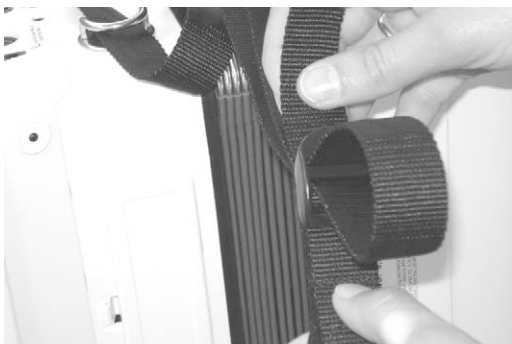
- (8) Slide the lower end of one strap through the holder ring as shown.



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



- (10) Turn the strap end around and insert it into the lower eyelet, then pull it tight.



- (11) Slide the plastic clip over the loose and long lower strap ends to secure the strap.



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

- (12) Repeat steps (8)~(11) for the other lower strap end.

Strap holder precaution

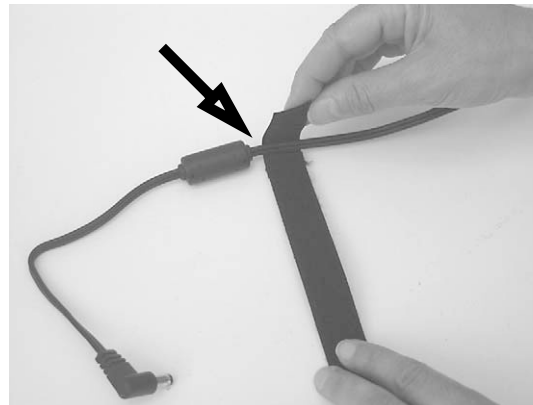
Never unscrew the strap holder rings to avoid damaging the FR-1's plastic housing, which eventually compromises overall stability and safety.

Securing the adapter, MIDI and/or audio cables

Proceed as follows to ensure that the adapter cable, a MIDI cable or the audio cables doesn't/don't come loose while you are playing.

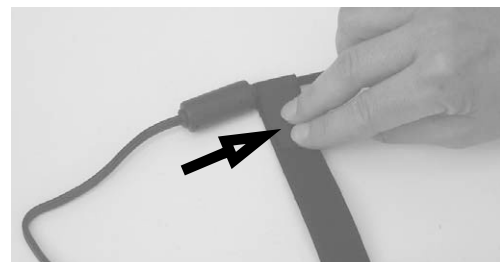
Your FR-1 comes with an adapter and an attachment strip that allows you to secure the adapter cable and optional MIDI as well as audio cables to the right strap.

- (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.

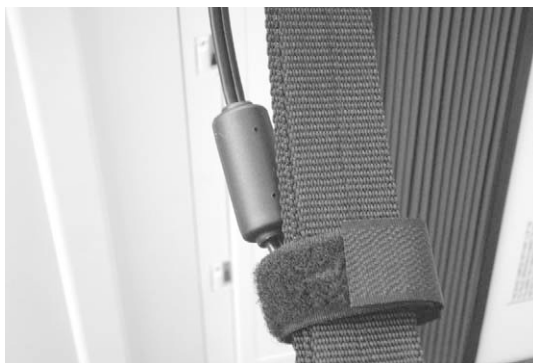


- (3) Hold the adapter cable close to the right strap and wind the attachment strip around it as shown.



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

The power-on procedure depends on whether or not you are using optional batteries.

Note: If you decide to use rechargeable AA batteries, be aware that they cannot be recharged simply by leaving them in the FR-1's compartment and connecting the adaptor. You will need an external charging unit.

Note: Once the connections have been completed, turn on the 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.

If you are using the supplied adaptor

- (1) Connect the supplied adaptor to the FR-1's DC IN socket.
- (2) Connect the adaptor to a wall outlet that meets the specifications (see p. 32).



The adaptor should only be connected to a power source of the type marked on its label. For details on the power consumption, please refer to page 32.

- (3) Turn down the output volume of the receiving audio device.

You can also simply switch it off.

- (4) Connect the FR-1's OUTPUT sockets to the external audio device using one or two 1/4" guitar cables. (One 1/4" cable is supplied with the FR-1.)

Note: You can also connect headphones to the PHONES socket, in which case you do not need to establish an audio connection.

- (5) Turn the FR-1's **VOLUME** knob ① from the "POWER OFF" position towards the right.

- (6) Switch on the receiving audio device.

- (7) Start playing.

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.

—To switch off your system—

- (8) Turn down the output volume of the receiving audio device or switch it off.

- (9) Turn the FR-1's **VOLUME** knob ① all the way to the left ("POWER OFF").

If you are using batteries

The FR-1 needs to be connected to an amplification system of some sort (unless you want to use headphones).

- (1) Install the required batteries into the FR-1's compartment (see p. 31).

- (2) Turn down the output volume of the receiving audio device.

You can also simply switch it off.

- (3) Connect the FR-1's OUTPUT sockets to the external audio device using one or two 1/4" guitar cables. (One 1/4" cable is supplied with the FR-1.)

Note: You can also connect headphones to the PHONES socket, in which case you do not need to establish an audio connection.

- (4) Turn the FR-1's **VOLUME** knob ① from the "POWER OFF" position towards the right.

- (5) Switch on the receiving audio device.

- (6) Start playing.

—To switch off your system—

- (7) Turn down the output volume of the receiving audio device, or switch it off.

- (8) Turn the FR-1's **VOLUME** knob all the way to the left ("POWER OFF").

Listening to the demo songs

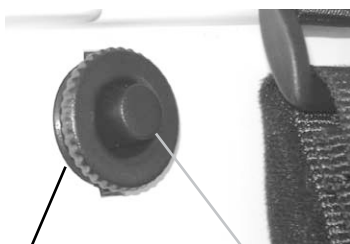
One of the most striking aspects of your V-Accordion may be that it can play all by itself! It contains a series of demo songs that illustrate its wide variety of sounds and applications. Here is how to listen to the demo songs:

- (1) Switch on the FR-1.
See "Switching the power on and off" on p. 13.
- (2) Switch off the Song function if it is active (page 18).
- (3) Press and hold the **SONG/DEMO** button ⑩ (it lights yellow).
Playback starts automatically with the first demo song (there are 8 demo songs in all). At the end of the first song, the FR-1 starts playing songs 2, 3 etc. You can also directly jump to the song you're interested in:
- (4) Use the **USER PROG/DEC** and **METRONOME/INC** buttons ⑧ to select the demo song you want to listen to.
- (5) Use the **VOLUME** knob ① to change the volume if it is too loud or too soft.
Note: During demo song playback, the FR-1's keyboards cannot be used.
Note: All demo songs are copyright by Roland Europe. Public performance or recording of these songs is prohibited.
Note: The performance data of the demo songs are not transmitted to the MIDI socket.
- (6) Press **SONG/DEMO** ⑩ again to leave demo song mode.

Touring the FR-1's sections

Bellows resistance regulator

Your FR-1 is equipped with a bellows resistance regulator knob that allows you to specify the bellows' inertia (the force needed to push and pull it). It is located next to one of the bellows clips and mounted onto the air button (which allows you to release remaining air from the bellows without producing sound).



Bellows resistance regulator. Turn to select the bellows' resistance.

Air button. Press to purge remaining air after playing.

Setting it allows you to choose a lighter or stronger inertia. Choose the setting that feels most comfortable for you.

Bass strap

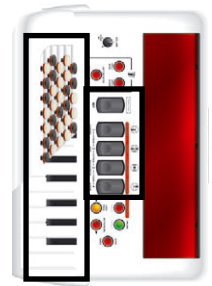
The FR-1's bass strap (used to move the bellows in and out) is made of fabric and fitted with a Velcro strip that allows you to adjust its slack:



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 register (1~4) you pressed last. This section can be used as "accordion" or to play an orchestral or organ sound.



- (1) Connect the FR-1 to an amplifier and switch it on.
See p. 11.
- (2) Grab the FR-1, press a Treble register and start playing on the keyboard.
Though the FR-1 is an electronic musical instrument, it only produces sound when you move the bellows.
Note: When the FR-1 is controlled via MIDI, there is no need to move the bellows.
- (3) Press the **SET** register ⑤ (it flashes blue).
- (4) Check whether the **ORCHESTRA/ORGAN** button is dark. If it isn't, press it once or twice.
- (5) Press one of the registers 1~4 ⑥ to select a Set memory. Additional Set memories can be selected by pressing registers 1+2, 2+3 or 3+4 simultaneously. The **SET** button goes dark.
Note: If you don't press any register while the **SET** register flashes in blue, it will go dark again after a while. If you pressed the **SET** register by accident, press it again so that it goes dark.
Note: See also the note about Set "3+4" on page 8.
- (6) Play a few notes to audition the sound.
- (7) Press one of the registers 1~4 to select another registration. See page 8.
- (8) Press the same register again to select the "b" sound. Press it yet again to revert to the "a" sound.
Each time you press a different register, the FR-1 will automatically select the "a" sound.
- (9) If you think the sound is too loud or too soft, you can change the setting of the **VOLUME** knob ①.

■ Using the FR-1's digital effects

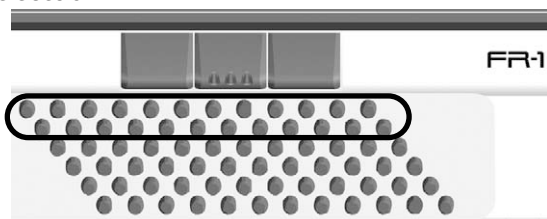
While playing on the Treble keyboard, you may have noticed that the accordion sounds are enhanced by effects (probably reverb). The FR-1 contains 2 digital effects:

Reverb: This effect creates the impression that you are playing in a concert hall, a church or a room. It adds "depth" to the sound.

Chorus: This effect creates the impression that several instruments of the same type are playing at the same time. You can change the type and the level settings of these

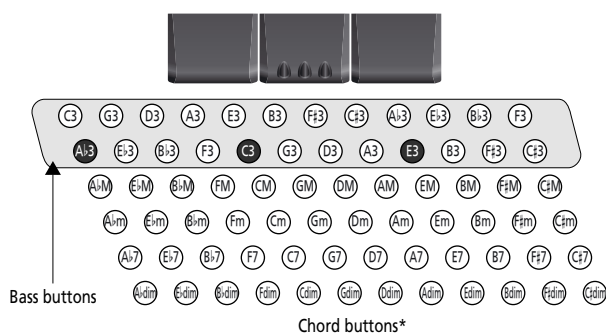
two effects (see p. 22). Those settings apply to all sections and all Sets.

Bass section



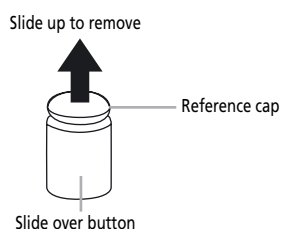
The buttons in this section allow you to play *both* bass notes *and* chords. The chords use the (sound) register selected for the Bass section – hence the name of this section. The “real” bass notes are assigned to the two highlighted rows. The remaining buttons are used to play chords.

At the factory, three reference caps are installed on the black 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. 23.

Here is what the caps look like:



The overall sound the Bass section produces is determined by the register you activated last. This section can be used as “accordion”, to play orchestral sounds, or both.

- (1) Connect the FR-1 and switch it on.
See page 11.
- (2) Grab the FR-1, press a register and start playing on the Bass (button) keyboard.
When you only use the accordion sounds (i.e. while the **ORCH BASS** ② and **ORCH CHORD** ④ buttons are dark), the bass and chord buttons use the same register, because they belong to the same accordion section.
- (3) If you think the sound is too loud or too soft, you can change the setting of the **VOLUME** knob ①.

Using the orchestral sounds

Your FR-1 contains PCM sounds (samples) of various instruments that are not related to accordion sounds. Those sounds allow you to expand your musical endeavours.

The FR-1’s Orchestra functionality comprises three sections: one for the Treble keyboard (called “Orchestra”), another for the Bass buttons (first two rows, called “ORCH BASS”), and a third for the chord buttons (remaining rows, called “ORCH CHORD”).

In addition, there is an Organ function for the Treble keyboard, which can be used instead of the orchestral (or accordion) section.

Orchestral sounds for the Treble section

Note: Only one orchestral sound can be selected at any one time.

- (1) Press the **ORCHESTRA/ORGAN** button once or twice until it lights red.
- (2) Press one of the registers ①~④ once or twice (it lights red).
- (3) Play a few notes on the Treble keyboard.



Switching off the Orchestra part

To return to a state where the Treble accordion section sounds:

- (4) Press the **ORCHESTRA** button twice (it goes dark).

Organ sounds for the Treble section

Note: Only one organ sound can be selected at any one time.

- (1) Press the **ORCHESTRA/ORGAN** button once or twice until it flashes.
- (2) Press one of the registers ①~④ (it lights red).
See page 8 for the available sounds.
- (3) Play a few notes on the Treble keyboard to audition the organ sound.
- (4) Press the lit register again to change the speed of the Rotary effect (modulation) that is added to the selected organ sound.



Switching off the organ part

To return to a state where the Treble accordion section sounds:

- (5) Press the **ORCHESTRA** button again (it goes dark).

Orchestral sounds for the Bass section

The orchestral bass part can be used instead of the Bass section (thus replacing the accordion sound assigned to the bass rows). **It only applies to the bass rows** (the ones closest to the bellows) and has no effect on the chord buttons.

- (1) Press the **ORCH BASS** ② button (it must light).
- (2) Check whether the **LEFT REGISTER** ③ button is dark. If it is not, press it.
- (3) Use the Bass registers to select the desired sound.

| ORCH BASS sounds | |
|------------------|-----------|
| 1* | Acoustic* |
| 2 | Bowed |
| 3* | Fingered* |

Note: The dynamics of all sounds can be controlled by bellows movements. The sound marked with an asterisk (*) can also be played (at a lower level) while the bellows is closed. The sounds are not velocity-sensitive.

■ Switching off the Orchestra Bass part

- (4) Press the **ORCH BASS** button again to return to normal Bass mode.

Orchestral sounds for the Chord section

The orchestral chord part can replace the accordion sound played by the chord rows of the button keyboard. **It only applies to the chord rows** and has no effect on the bass buttons.

- (1) Press the **ORCH CHORD** ④ button (it lights).
- (2) Check whether the **LEFT REGISTER** ③ button lights. If it doesn't, press it.
- (3) Use the Bass registers to select the desired sound.

| ORCH CHORD sounds | |
|-------------------|---------------|
| 1 | St. Strings |
| 2 | Chorus Organ |
| 3* | Steel Guitar* |

While ORCH CHORD mode is active, you can assign a different accordion register to the bass rows by pressing **LEFT REGISTER** (it must be dark) and the desired Bass register.

■ Switching off the ORCH CHORD part

- (4) Press the **ORCH CHORD** button again to return to normal Chord mode.

■ Using two different sounds for the Bass button keyboard

The FR-1 allows you to assign one orchestral sound to the bass rows, and another to the chord rows, or to play one orchestral sound (bass or chords) and one accordion sound via the bass keyboard.

- (1) Use the **ORCH BASS** ② and **ORCH CHORD** ④ buttons to activate (button lights) or switch off (button dark) orchestral mode for the bass and/or chord rows.
- (2) To assign a different orchestral sound (or accordion register) to one of the two parts, assign the bass registers to the desired section.

This is usually done automatically, but you can also use the **LEFT REGISTER** ③ button to switch between the two.

If **LEFT REGISTER** lights, you can select an accordion register or orchestral sound for the **chord** rows of the bass keyboard.

If it is **dark**, you can select an accordion register or orchestral sound for the **bass** rows of the bass keyboard.

Note: The **LEFT REGISTER** button has no function when neither the **ORCH BASS** nor the **ORCH CHORD** button lights.

5. Other practical functions

Switching off sections you don't need

If, for some reason, you do not want one of the currently active parts to respond to your playing, you can switch it off:

- To switch off a section you do not want to hear, hold down one of the following registers for a while:

| Section to mute | Press |
|--|-----------------------------------|
| Treble accordion, Treble orchestra –or– Treble organ | Treble register [1]~[4] (any one) |
| Bass part, Chord part (accordion or orchestral) | Bass register [1]~[3] (any one) |

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

Using the metronome

Your FR-1 contains a metronome that may come in handy when you are practising new pieces, or during your accordion classes. You can set the time signature, the tempo and the level.

■ Setting the time signature

To set the time signature, proceed as follows:

- Before changing this value, it might be a good idea to switch the metronome on by pressing the **[METRONOME/INC]** [8] button (it lights).
- Press and hold the **[SET]** register until it starts flashing. The Treble keyboard can now be used to select the desired function.
- Press the G#2 key or button number "10". See p. 21 for the location. The **[SET]** [5] register flashes rapidly, and the Treble keyboard can once again be used to play notes.
- Use registers [1]~[4] [6] to select one of the following settings.

| Metronome time signature | | | |
|--------------------------|-----|----|-----|
| 1 | 2/4 | 3• | 4/4 |
| 2 | 3/4 | 5 | 6/8 |



Alternatively, use the **[DEC]** or **[INC]** [8] button to select a setting that cannot be set by pressing one of the registers.

Note: Press the **[DRUMS/DEFAULT]** [9] button or register [3] to return to the factory setting of the currently selected parameter.

- Press the **[SET]** [5] register once (so that it flashes slowly) and proceed with the next parameter. (Press the **[SET]** register twice to leave the FR-1's FUNCTION mode.)

■ Setting the tempo

We'll assume that you are still in "FUNCTION" mode (**[SET]** [5] flashes slowly). To set this parameter at a later stage, press and hold the **[SET]** register until it starts flashing slowly.

- Press the G2 key (i.e. the lowest G) or button "9". See p. 21 for the location.

The **[SET]** register now flashes rapidly, and the Treble keyboard can once again be used to play notes.

Note: You can also select this parameter by pressing and holding the **[METRONOME/INC]** [8] button.

- Use registers [1]~[4] [6] to select one of the following suggested values.

| Metronome tempo | | | |
|-----------------|--------------------|---|-------------------|
| 1 | Adagio (72 BPM) | 3 | Allegro (144 BPM) |
| 2• | Moderato (120 BPM) | 4 | Presto (192 BPM) |

Alternatively, use the **[DEC]** or **[INC]** [8] button to decrease or increase the value in steps of "1".

You can also press and hold these buttons to quickly select a significantly higher or lower value. The setting range is ♩ = 20~250.

Note: Press the **[DRUMS/DEFAULT]** [9] button or register [2] to return to the factory setting of the currently selected parameter.

- Press the **[SET]** [5] register once (so that it flashes slowly and) proceed with the next parameter. (Press the **[SET]** register twice to leave the FR-1's FUNCTION mode.)

■ Setting the metronome level

Here's how to set the desired metronome level to ensure that it is neither too loud, nor too soft. We'll assume that you are still in "FUNCTION" mode (**[SET]** [5] flashes slowly). To set this parameter at a later stage, press and hold the **[SET]** register until it starts flashing slowly.

- Press the A2 key or button "11". See p. 21 for the location.
- Use registers [1]~[4] to select one of the following settings.

| Metronome level | | | |
|-----------------|-----|----|--------|
| 1 | Off | 3• | Medium |
| 2 | Low | 4 | High |

Note: Press the **[DRUMS/DEFAULT]** [9] button or register [3] to return to the factory setting of the currently selected parameter.

- Press the **[SET]** [5] register twice to leave the FR-1's FUNCTION mode.

Using the metronome

After setting the metronome parameters to your liking, you can start using the metronome:

- (4) Press the **METRONOME/INC** ⑧ button (it lights) to start the metronome.
- (5) Press it again to switch the metronome back off.

Pitch-related functions

Transpose function

The FR-1 contains a Transpose function that allows you to change the key of the music you are playing. The advantage of this system is that you can play a song in E major (for example), while using the fingering of the C major scale (for example). This may come in handy when you are used to playing a given song in one key and suddenly need to play it in a different key. Let's look at an example:

This is what you play...

...and this is how it sounds.

- (1) Press and hold the **SET** ⑤ register until it starts flashing. The Treble keyboard can now be used to select the desired function.

- (2) Press the C#2 key or button "3". See p. 21 for the location. The **SET** ⑤ register now flashes rapidly, and the Treble keyboard can once again be used to play notes.



- (3) Use the **DEC** and **INC** ⑧ buttons to set the desired interval. You can also use registers **1~4** ⑥ to set one of the following values.

| Transpose | | | |
|-----------|--------|---|--------|
| 1 | -5 (G) | 3 | +2 (D) |
| 2 | 0 (C2) | 4 | +4 (E) |

The setting range is -6~0~5 (where "0" means that no transposition is used). The value refers to the interval. This can be calculated as follows:

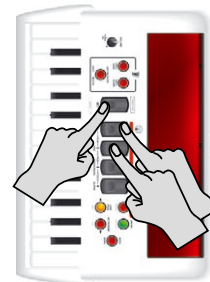
- In what key do you want to play? (This is your "0" value.)
Example → C major
- What key does the song use?
Example → E major
- How many semitones do you need to "shift" the notes?
Example → [C#, D, Eb, E] = 4 up, so register 4.

- (4) Press the **SET** register twice to leave the FR-1's FUNCTION mode.

Note: This parameter is reset when you switch off the FR-1.

Transposing the Treble keyboard in octave steps

The parameter discussed here allows you to transpose the Treble accordion or Orchestra section one octave up or down.



- (5) Simultaneously press the **SET** ⑤ and **1** (OCT-, one octave down) or **2** (OCT+, one octave up) register.

Musette Detune

You probably know that 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").

Tuning those reeds is a specialist job and usually not performed by accordion players themselves.

On the FR-1, however, "tuning" the "reeds" (that do not really exist) is a matter of pressing a few buttons.

There are, in fact, more options than can be selected with the 4 registers: Dry, Classic, F-Folk, American L, American H, Nord Eur, German L, D-Folk L, Italian L, German H, Alpine, Italian H, D-Folk H, French, Scottish. See also page 22.

Note: This parameter is saved automatically for every register that contains the 8' footage.

Song function

Your FR-1 contains 4 popular accordion songs that have been prepared for educational purposes. The left- and right-hand parts are on separate tracks, which allows you to mute one part (left or right hand) to play it yourself. The FR-1 will play the other part.

Note: The Song function is not available while "Bellows Curve" on p. 23 is set to "Fixed Low", "Fixed Med" or "Fixed High".

Selecting a song

The FR-1 contains the following educational songs:

| | | | |
|---|----------------------|---|------------|
| 1 | Can Can | 3 | Oh Susanna |
| 2 | Carnevale di Venezia | 4 | Furusato |

- (1) Briefly press the **SONG/DEMO** ⑩ button (it lights red).
- (2) Press and hold the **SONG/DEMO** ⑩ button.
- (3) It flashes, and the register assigned to the last song you selected lights red.
- (4) Use registers **1~4** to select the desired song (see the table above).
- (5) Move the bellows.

The first movement of the bellows starts the song after a short while, subsequent moves allow you to control the song's volume (expression).

Playback stops at the end of the song. To stop it before the end of the song...

- (6) Select a different song or proceed with the following.
Note: The metronome is not available while the Song function is used.
- (7) Press the **SONG/DEMO** button twice to leave the Song function.

Muting a part

The real purpose of the FR-1's Song function is to encourage you to play along with the FR-1. To do so, you need to mute (switch off) the song part you want to play yourself.

- (1) Select the song you want to play (see above).
- (2) Mute either the Treble or the Bass keyboard.
- Muting the right-hand part: Press and hold any treble register (1~4).
- Muting the left-hand part: Press and hold any bass register (1~3).

Note: You can only mute one part at a time.

- (3) Move the bellows.
The first movement of the bellows starts the song, subsequent moves allow you to control the song's volume (expression).
This time, the FR-1 only plays the part you didn't switch off. You can change registers (or sounds) for the section you are playing. It is also possible to use an orchestral sound instead of an accordion register.
- (4) To switch the muted part back on, press and hold any Treble or Bass register.
- (5) Press the **SONG/DEMO** button again to leave the Song function.

DRUMS function

Your FR-1 contains a drum part that can be played in real-time. There are 4 sets of one or more drum and/or percussion sounds each. Those sounds can be played in real-time using the bass and chord buttons or via MIDI (channel 10).

Here is how to add drum/percussion sounds to each bass note and chord you play with your left hand.

- (1) Press the **DRUMS** ⑨ button (it lights) to enter Drums mode.
- (2) Press the **DRUMS** button again to leave Drums mode.

Selecting a sound set

You can assign sound combination "2" (see below) of the selected set to the bass rows, and the "1" combination to the chord rows.

- (1) Press the **DRUMS** ⑨ button (it lights) to enter Drums mode.
- (2) Press and hold the **DRUMS** ⑨ button until it starts flashing.
- (3) Use Treble registers 1~4 ⑥ to select the desired set (i.e. a collection of 2 sounds or sound combinations).

| | |
|----------------------------|--------------------------|
| Set 1 (Folk) | Set 3 (Tarantel) |
| 1 Snare + Tambourine | 1 Tamorra 1 |
| 2 Bass Drum + HiHat | 2 Tamorra 2 |
| Set 2 (Jazz) | Set 4 (Latin) |
| 1 Ride Cymbal | 1 Pandeiro 5 |
| 2 Jazz Snare + Pedal HiHat | 2 Pandeiro 3 + Bass Drum |

- (4) Press the **DRUMS** button again to leave DRUMS assign mode (the button lights steadily).
Note: Do not perform the next step if you want to use your new setting right away.
- (5) Press the **DRUMS** button again to leave DRUMS mode when you no longer want to use the drum sounds (the button goes dark).

Adding drum sounds to your bass notes and chords

- (1) Press the **DRUMS** ⑨ button (it lights) to enter Drums mode.
- (2) Press and hold the **DRUMS** ⑨ button until it starts flashing.
- (3) Press and hold register 2 until it starts flashing.
- (4) Start playing bass notes and chords.
Each button press also triggers the "2" sound (bass rows) or the "1" sound (chord rows) of the selected DRUMS set.
- (5) Press the **DRUMS** button again to leave DRUMS assign mode (the button lights steadily).
Note: Do not perform the next step if you want to use your new setting right away.
- (6) Press the **DRUMS** button again to leave DRUMS mode when you no longer want to use the drum sounds (the button goes dark).

Playing only drum sounds via the bass and chord buttons

- (1) Press the **DRUMS** ⑨ button (it lights) to enter Drums mode.
- (2) Press and hold the **DRUMS** ⑨ button until it starts flashing.
- (3) Press and hold Treble register 1 ⑥ until it starts flashing.
- (4) Start playing bass notes and chords.
Each button now only triggers the "2" sound (bass rows) or the "1" sound (chord rows) of the selected DRUMS set. The bass and chord sounds are not played.
- (5) Press the **DRUMS** button again to leave DRUMS assign mode (the button lights steadily).
Note: Do not perform the next step if you want to use your new setting right away.
- (6) Press the **DRUMS** button again to leave DRUMS mode when you no longer want to use the drum sounds (the button goes dark).

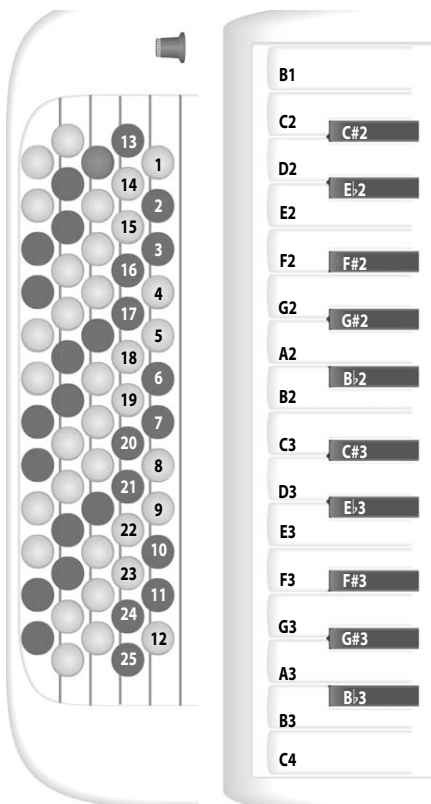
6. Editing FUNCTION settings

The FR-1 provides a series of specialized parameters that may come in handy when you need to fine-tune the FR-1's response to your playing style. Some of these settings can be saved to the FR-1's User Programs (see p. 27).

Selecting the desired function

- (1) Press and hold the **SET** ⑤ register until it starts flashing.

The Treble keyboard can now be used to select the desired function. If you own an **FR-1 with a button-type keyboard**, please refer to the following illustration for the Treble buttons you need to press (depending on the selected Treble mode, the buttons may be assigned to different notes). For the sake of convenience, the note names of the keyboard version are also shown.



- (2) Press the indicated key or Treble button.

(Key names with a "#" or "b" symbol refer to black keys.)

The **SET** register now flashes rapidly, and the Treble keyboard can once again be used to play notes.

- (3) Use registers ①~④ ⑥ to select one of the suggested values.

Alternatively, use the **DEC** or **INC** button to select the desired value.

Sometimes, there are more options than can be selected with the 4 registers.



You can also press and hold these buttons to quickly select a significantly higher or lower value. Each time you select a setting that is also assigned to a register, the register in question lights.

While changing the setting with the **DEC/INC** buttons, use the registers as a guide. You will notice that one of the registers lights for each setting that can also be selected by pressing a register.

Note: Press the **DRUMS/DEFAULT** ⑨ button or the register flagged with a "•" in the discussion below to return to the factory setting of the currently selected parameter.

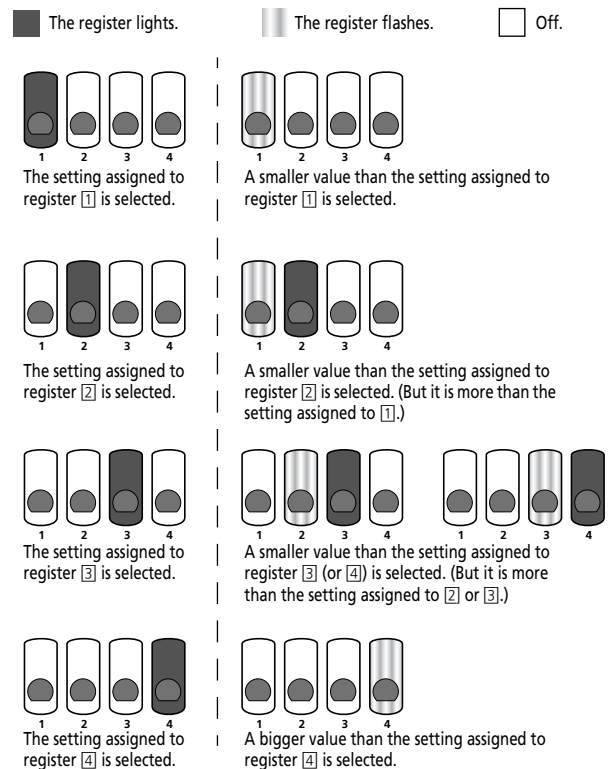
- (4) Press the **SET** register twice to leave the FR-1's FUNCTION mode.

If you want to set another FUNCTION parameter, press **SET** once (it flashes slowly), followed by the desired key, then proceed with step (3) above.

About the indications provided by the registers

While the FR-1's four Treble registers are used to select some of the available FUNCTION settings, each parameter usually provides more settings than there are Treble registers (settings not directly available need to be selected using the **DEC/INC** buttons).

That is why the FR-1 uses the following system to provide at least a clue of the value you selected:



→ In the following, the messages at the right edge of the gray bars have the following meaning:

"OK": Can be saved in the Global area (common to all Sets).

"POW": Reset when you switch off the FR-1.

Parameters

| | | |
|--------------------|----------------------|----|
| Master Tune | [B1]/[1] | OK |
| 415~440~466 (Hz) | Default setting: 440 | |

This parameter allows you to change the FR-1's overall tuning. The factory default, "440", represents the reference pitch used by all electronic musical instruments. The settings you can select with the registers are:

| | | | |
|----|-----|---|-----|
| 1 | 415 | 3 | 448 |
| 2• | 440 | 4 | 466 |

| | | |
|--|--------------------------|----|
| Musette Detune | [C2]/[2] | OK |
| Dry, Classic, F-Folk, American L, American H, Nord Eur, German L, D-Folk L, Italian L, German H, Alpine, Italian H, D-Folk H, French, Scottish | Default setting: Classic | |

This parameter allows you to choose the system used for detuning the 8' reeds of the selected register. The settings you can select with the registers are:

| Musette Detune | | | |
|----------------|----------|---|-----------|
| 1• | Classic | 3 | Italian L |
| 2 | Nord Eur | 4 | French |

| | | |
|------------------|--------------------|-----|
| Transpose | [C#2]/[3] | POW |
| -6~0~5 | Default setting: 0 | |

This parameter allows you to transpose all sections of the FR-1, so as to play in one key and sound in another. The settings you can select with the registers are:

| Transpose | | | |
|-----------|--------|---|--------|
| 1 | -5 (G) | 3 | +2 (D) |
| 2• | 0 (C2) | 4 | +4 (E) |

| | | |
|--|--------------------|-----|
| Treble/Bass & Chord Balance | [D2]/[4] | POW |
| b1~63,0, t1~63 | Default setting: 0 | |

This parameter is used to set the balance between the Treble and Bass sections. When you press register [1], the Treble section is inaudible, while pressing register [4] means that the Bass and Chord section is no longer audible. The settings you can select with the registers are:

| | | | |
|----|-----------------|---|-----------|
| 1 | Bass & Chord 60 | 3 | Treble 30 |
| 2• | Equal balance | 4 | Treble 60 |

| | | |
|------------------------------|------------------|----|
| Orchestra/Organ Level | [E♭2]/[5] | OK |
| Drums Sound Level | [E2]/[6] | OK |
| Orchestra Bass Level | [F2]/[7] | OK |
| Orchestra Chord Level | [F#2]/[8] | OK |

-40~Std~40

Default setting: Std

These parameters allow you to set the level of the ORCHESTRA, BASS or CHORD orchestral sound, or of the DRUMS function for a better balance with the other available sections. The settings you can select with the registers are (for all parameters):

| | | | |
|----|-----|---|-----|
| 1 | -40 | 3 | +20 |
| 2• | 0 | 4 | +40 |

The value "0" means that the factory-set balance setting is used.

| | | |
|------------------------|----------------------|----|
| Metronome Tempo | [G2]/[9] | OK |
| 20~250 | Default setting: 120 | |

This parameter allows you to set the metronome tempo. The settings you can select with the registers are:

| | | | |
|----|--------------------|---|-------------------|
| 1 | Adagio (72 BPM) | 3 | Allegro (144 BPM) |
| 2• | Moderato (120 BPM) | 4 | Presto (192 BPM) |

| | | |
|--|----------------------|----|
| Metronome Time Signature | [G#2]/[10] | OK |
| 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 6/8, 9/8 | Default setting: 4/4 | |

This parameter allows you to set the metronome's time signature. The settings you can select are:

| | | | |
|---|-----|----|-----|
| 1 | 2/4 | 3• | 4/4 |
| 2 | 3/4 | 5 | 6/8 |

| | | |
|------------------------|-------------------------|----|
| Metronome Level | [A2]/[11] | OK |
| Off, Low, Medium, High | Default setting: Medium | |

This parameter allows you to change the metronome's level when it is too loud or too soft. See page 17 for details.

| | | | |
|---|-----|----|--------|
| 1 | Off | 3• | Medium |
| 2 | Low | 4 | High |

| | | |
|---------------------|---------------------|----|
| Reverb Level | [B♭2]/[12] | OK |
| 0~127 | Default setting: 48 | |

This parameter allows you to set the volume of the reverb effect with respect to the accordion and/or orchestral sounds. It applies to all sections that are currently switched on. The settings you can select with the registers are:

| | | | |
|----|---------------|---|-----|
| 1 | 0 (no reverb) | 3 | 96 |
| 2• | 48 | 4 | 127 |

| | | |
|---|------------------------|----|
| Reverb Type | [B2]/[13] | OK |
| Room 1~3, Hall 1~2, Plate, Delay, Panning Dly | Default setting: Plate | |

This parameter allows you to specify what kind of effect the Reverb processor should generate. The available options are:

| | |
|-----------------------------|---|
| Room1 [1] Room2 Room3 | These effects simulate the reverberation of a room. They provide a well-defined spacious reverberation. |
| Hall1 [2] Hall2 | These types simulate the reverberation of a concert hall with a deeper reverberation than the Room reverbs. |

| | |
|----------------|--|
| Plate [3] • | This effect type simulates a plate reverb (a studio device using a metal plate to simulate natural Reverb). |
| Delay | This is a conventional delay that produces echo effects. |
| PanningDly [4] | This is a special delay in which the delayed sounds move left and right. It is effective when you are listening in stereo. |

(The numbers between [] refer to the Treble registers.)

Chorus Level [C3]/[14] OK

0~127 Default setting: 16

This parameter allows you to set the volume of the chorus effect with respect to the accordion and/or orchestral sounds. It applies to all sections that are currently switched on. The settings you can select with the registers are:

| | | | |
|----|---------------|---|-----|
| 1 | 0 (no chorus) | 3 | 64 |
| 2• | 16 | 4 | 127 |

Chorus Type [C#3]/[15] OK

Chorus 1~4, FBack Chr, Flanger, Short Delay, Short Dly FB Default setting: Short Delay

Chorus broadens the spatial image of the sound, adding richness. You can choose from 8 types of chorus. The available options are:

| | |
|--|---|
| Chorus 1 [1] Chorus 2 Chorus 3 Chorus 4 | These are conventional chorus effects that add spaciousness and depth to the sound. |
| FBack Chr | This is a chorus with a flanger-like effect and a soft sound. |
| Flanger [2] | This is an effect that sounds somewhat like a jet airplane taking off or landing. |
| Short Delay [3]• | This is a delay with a short delay time. |
| ShortDly FB [4] | This is a short delay with many repeats. |

Bellows Curve [D3]/[16] OK

Fixed Low, Fixed Med, Fixed High [1], X-Light, Light [2], Standard [3•], Heavy [4], X-Heavy Default setting: Standard

This parameter allows you to adapt the FR-1's expressive potential to your playing style. If you think the sounds don't respond the way you would like them to, try another curve that better "translates" your movements.

There are three "Fixed" curves that always use the same 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.

The remaining settings do depend on the strength with which you push/pull the bellows, but in different ways: "Light" means that you do not need to push/pull hard to achieve a meaningful effect. "X-Light" requires even less strength (the "X" stands for "extra"). "Standard" refers to a normal response. "Heavy" provides a greater variety of nuances and "X-Heavy" is even more detailed. It would be a good idea to select each curve without the "Fixed" addition, play a few notes, select the next curve, etc. until you find the response that feels just right.

Note: The "Song function" on p. 18 is not available while this parameter is set to "Fixed Low", "Fixed Med" or "Fixed High".

Treble Valve Noise [E#3]/[17] OK

Off, -40~0~+40 Default setting: 0

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. The settings you can select with the registers are:

| | | | |
|----|-----|---|-----|
| 1 | Off | 3 | +20 |
| 2• | 0 | 4 | +40 |

Bass Button Noise [E3]/[18] OK

Off, -40~0~+40 Default setting: 0

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. The settings you can select with the registers are:

| | | | |
|----|-----|---|-----|
| 1 | Off | 3 | +20 |
| 2• | 0 | 4 | +40 |

Bass & Chord Mode [F#3]/[20] OK

2 Bass Rows, 3 Bass Rows B-7th, 3 Bass Rows A-7th, 3 Bass Rows B-5dim, 3 Bass Rows A-5dim, 3 Bass Rows Bx-7th, Default setting: 2 Bass Rows

This parameter allows you to select the number of button rows for playing bass notes. The default is 2 bass rows and 4 chord rows. By selecting "3 Bs Rows", you lose the "dim" chord buttons – but that may just be more convenient for you. See also the illustration on page 24.

There are four "3 Bs Rows" options: "A-7th" and "B-7th" mean that the 6th chord row plays seventh chords ("7") without 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 24).

The "A-5dim" and "B-5dim" options mean that those seventh chords don't contain the root note. A C7 chord is 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 24).

The "Bx-7th" option reverses the "B-7th" settings (from right to left).

The settings you can select with the registers are:

| | |
|----|--------------------|
| 1• | 2 Bass Rows |
| 2 | 3 Bass Rows A-7th |
| 3 | 3 Bass Rows A-5dim |
| 4 | 3 Bass Rows B-7th |

(See the illustration below for the locations of the notes.)

Bass & Chord Mode

[1] 2 Bass Rows

[2] & [3] 3 Bass Rows A

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

[1]+[2]/[1]+[3] 3 Bass Rows B

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

[2]+[3] 3 Bass Rows Bx

"7th" = 1-3-7

| | | |
|------------------------------|----------------------|-----------|
| Bellows Expression TX | [G3]/[21] | OK |
| Off [1•], On [2] | Default setting: Off | |

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.

If you want to use the bellows for expressive purposes, switch this parameter on (register [2]). If you don't (because the external instrument is too sensitive and therefore changes its volume too often), switch it off (register [1]).

| | | |
|--------------------------|----------------------|-----------|
| Program Change TX | [G#3]/[22] | OK |
| Off [1•], On [2] | Default setting: Off | |

This is a MIDI filter, i.e. a parameter that allows you to specify whether or not the given MIDI type should be transmitted. "TX", as you know, is short for "transmission". This means two things: (1) the filter only applies to program changes sent by the FR-1, and (2) it is only meaningful when the "MIDI OUT/IN" parameter is set to "Out".

Program change messages are used to select sounds or memories on the receiving instrument simply by recalling another sound (or memory) on the transmitting instrument. The FR-1 transmits program changes when you select Sets (on the Basic Channel) and registers (on the MIDI channel assigned to the section for which you are selecting a different register). Select "Off" if you don't need that.

All of the FR-1's registers transmit program change/bank select clusters when pressed. And when you set the "MIDI OUT/IN" parameter to "IN", the FR-1 also receives those messages.

| | | |
|-------------------------|---------------------|-----------|
| Arranger Control | [A3]/[23] | OK |
| Off [1], On [2•] | Default setting: On | |

This parameter specifies which MIDI note numbers are sent by the Chord row buttons. You may have noticed that the chords generated by the FR-1 (and indeed any accordion) are incomplete, because players are expected to supply the bass notes via the bass rows.

That information is fine if the resulting MIDI events you record with a sequencer are sent back to the FR-1. But if you want to control an arranger keyboard (like Roland's E-series), the "patchy" chord information may cause the music style patterns to play in the wrong key.

If you experience such problems, switch this parameter on (register [2]). To record chord information that will be sent back to the FR-1 at a later stage (with the bass notes sent on channel 2), however, switch this parameter off (register [1]).

Note: The chord notes are transmitted on MIDI channel 3.

| | | |
|--------------------|----------------------|------------|
| MIDI OUT/IN | [B#3]/[24] | POW |
| OUT [1•], IN [2] | Default setting: Out | |

This parameter allows you to set the function of the FR-1's MIDI socket. Select "Out" (register [1]) if you want to play on the FR-1's keyboards and transmit the MIDI data generated by your playing to an external device.

If you select "In" (register [2]) here, the FR-1's sound source can no longer be played via its keyboards.

Note: See p. 25 for the MIDI channels the FR-1's parts use.

Archiving your settings via MIDI (Dump TX)

MIDI can also be used for transmitting parameter settings from the FR-1 to an external MIDI device and back.

■ Archiving your settings with a sequencer

The "Dump TX" parameter allows you to transmit the contents of the global area (which contains the FUNCTION settings), and the User Programs to a second FR-1, an external sequencer, computer or data filer. Sending these data to other instruments (a digital piano, synthesizer, etc.) does nothing at all. That's because the setting data are special MIDI messages only one model (or model family) understands. They are called "system exclusive messages" – or "SysEx" for short. By transmitting them to a second FR-1, however, you can "copy" the settings of your V-Accordion to that of a friend, colleague or student.

A sequencer or data filer does not know what the messages mean and so does not use them in any way. It merely records them. Afterwards, you only need to start playback on your sequencer or data filer to transmit the settings back to the FR-1.

- Connect the FR-1's MIDI OUT/IN socket to the sequencer's/computer's MIDI IN socket.
Note: Your computer needs to be equipped with (or connected to) an appropriate MIDI interface.
- Set the "MIDI Out/In" parameter to "OUT".
- If you are working with a computer, launch the sequencer program.
- Create or select an empty song.
- Create (or select) an empty track.
The track's MIDI channel is of no importance here. You need to ensure, however, that the sequencer/program accepts SysEx data. If necessary, switch off the MIDI filter in question (see the manual of your sequencer or software).
- Activate the record-ready mode of the track you selected/created.
Note: Do not change the tempo on your sequencer/in the software. By default, most sequencers/programs use the tempo value ♩ = 120. Leave it that way (or else do whatever is necessary to ensure that the new tempo value is stored along with the data).
- Press and hold the **[SET]** [5] register until it starts flashing.
- Press the B3 key or button "25".
See p. 21 for the location.
The **[SET]** [5] register now flashes rapidly, and register [1] also flashes.
- Start recording on your sequencer/computer.
Wait until the count-in (one or two measures) is finished, then...
- Press register [1] on the FR-1 to start the transmission of the bulk data.
Register [1] now flashes at a faster rate.
Note: Press the **[SET]** register if you do not want to transmit your settings after all.
- Wait until register [1] stops flashing and the **[SET]** register's flashing pattern returns to normal speed, then stop recording on your sequencer.



- (12) Name the "song" (it may only contain data so far) and save it to hard or floppy disk.
See below for how to transmit the settings back to the FR-1 at a later stage.
- (13) Press the **[SET]** register twice to leave the FR-1's FUNCTION mode.

■ Sending Bulk data (back) to the FR-1

The FR-1 not only sends SysEx data to external devices (see above), it also receives them.

- Connect the FR-1's MIDI socket to the sequencer's/computer's MIDI OUT socket.
Note: Your computer needs to be equipped with (or connected to) an appropriate MIDI interface.
- Set the "MIDI Out/In" parameter (page 26) to "IN".
- If you are working with a computer, launch the sequencer program.

- Load the song that contains the data you want to transmit.
- On your sequencer, perform all necessary actions to ensure that it transmits SysEx data.
See its manual for details.
Note: Be aware that by proceeding, you replace all internal settings.
- Start playback of the data file or song on your sequencer, etc.
- Wait until the register **[1]** starts flashing rapidly, then stop playback of your sequencer.

Note: Wait until the sequencer's or computer's data transmission is completed before stopping playback on your sequencer. Failure to do so will render your FR-1 inoperable. If that happens, you need to initialize it (see "Restoring the factory defaults" on p. 30).

Note: At the end of bulk data reception the "MIDI Out/In" parameter is automatically set to "Out" so that you can normally play the FR-1.

8. Saving your settings (User Program)

Your FR-1 contains 4 memories where you can store the FUNCTION 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:

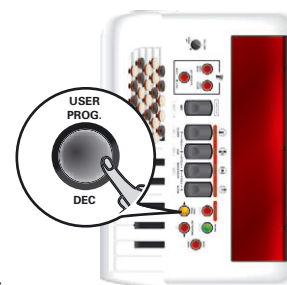
| Set | Number (1~7) |
|-------------------|-------------------------------|
| Treble section | Register |
| | Balance (with Bass section) |
| | Octave setting |
| Orchestra section | Register |
| | Octave setting |
| Organ section | Register |
| | Octave setting |
| Bass section | Register |
| | Balance (with Treble section) |
| Chord section | Register |
| | On/Off* |
| Orchestral Bass | Register |
| | Level |
| Orchestral Chord | On/Off* |
| | Register |
| | Level |
| Reverb | Type |
| | Level |
| Chorus | Type |
| | Level |
| Drums | On or off |
| | Selected set |
| | Volume |
| Others | Arranger control (on or off) |
| | Musette Detune (page 22) |

[*] Mutually exclusive with corresponding accordion (or orchestral) setting.

Saving the current settings

Here is how to save the current settings of the eligible parameters (see above) to the desired User Program memory.

- Select the Set whose number should be memorized.
- Set everything the way you want it to be when you recall the User Program you want to save.
- Press and hold the **[USER PROG]** button until it starts flashing.
The Treble register corresponding to the last User Program you selected flashes red.
- Press the Treble register (**[1]~[4]** **[6]**) of the User Program memory where you want to save your settings.
Both the selected register and the **[USER PROG]** button light steadily.
- Press the **[USER PROG]** button again to leave this mode.



Recalling a User Program

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

- Press the **[USER PROG]** **[8]** button (it lights).
The register of the last User Program you selected flashes red.
- Press the Treble register (**[1]~[4]**) that is assigned to the User Program you want to use.
- Press the **[USER PROG]** button again to leave this mode.

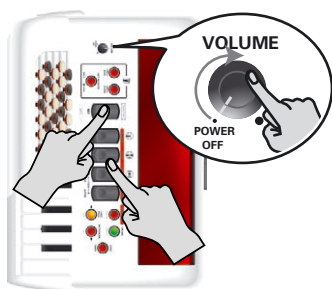
9. Treble Mode (only on the model with button-type keyboard)

Like for the accordion instrument itself, there are different varieties of chromatic (button-type) instruments, with different Treble button layouts. Your FR-1 can simulate them.

Please look at the illustrations on page 28 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.

Here is how to select the desired setting:

- (1) Switch off the FR-1 by turning the **VOLUME** ① knob all the way to the left ("POWER OFF").
- (2) Hold down **SET** and one of the following registers while switching the FR-1 back on to select the desired setting.



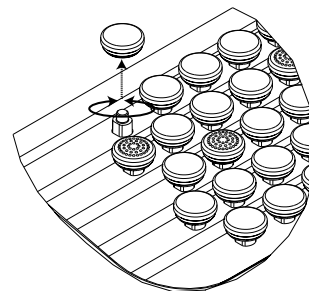
| | | | |
|----|----------------|-----|-------------|
| 1• | C-Griff Europe | 1+2 | B-Griff Fin |
| 2 | C-Griff 2 | 1+3 | D-Griff 1 |
| 3 | B-Griff Bajan | 2+3 | D-Griff 2 |

- (3) Start playing.
(See pages 29 and 30 for the locations of the notes.)

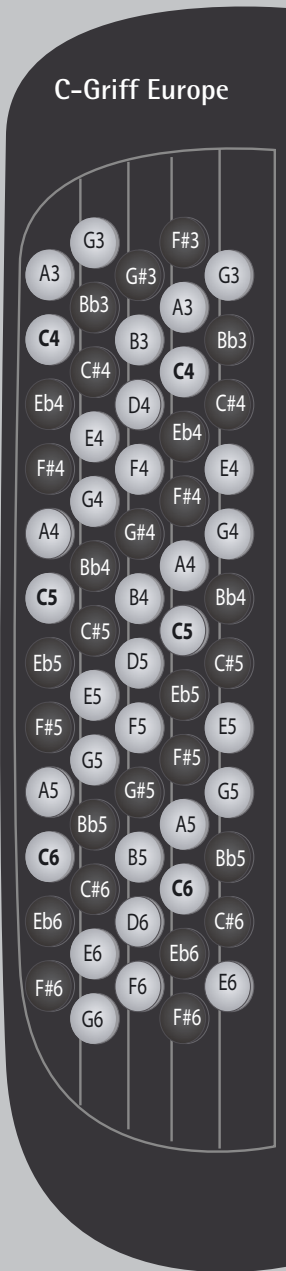
You may have noticed that the Treble buttons are colored white (for notes without alteration) and black (notes with alteration, i.e. #/♭). This coloring doesn't change when you select another system.

(You can, however, unscrew the buttons and install them in the right places so as to make the white and black buttons correspond to the notes being played.)

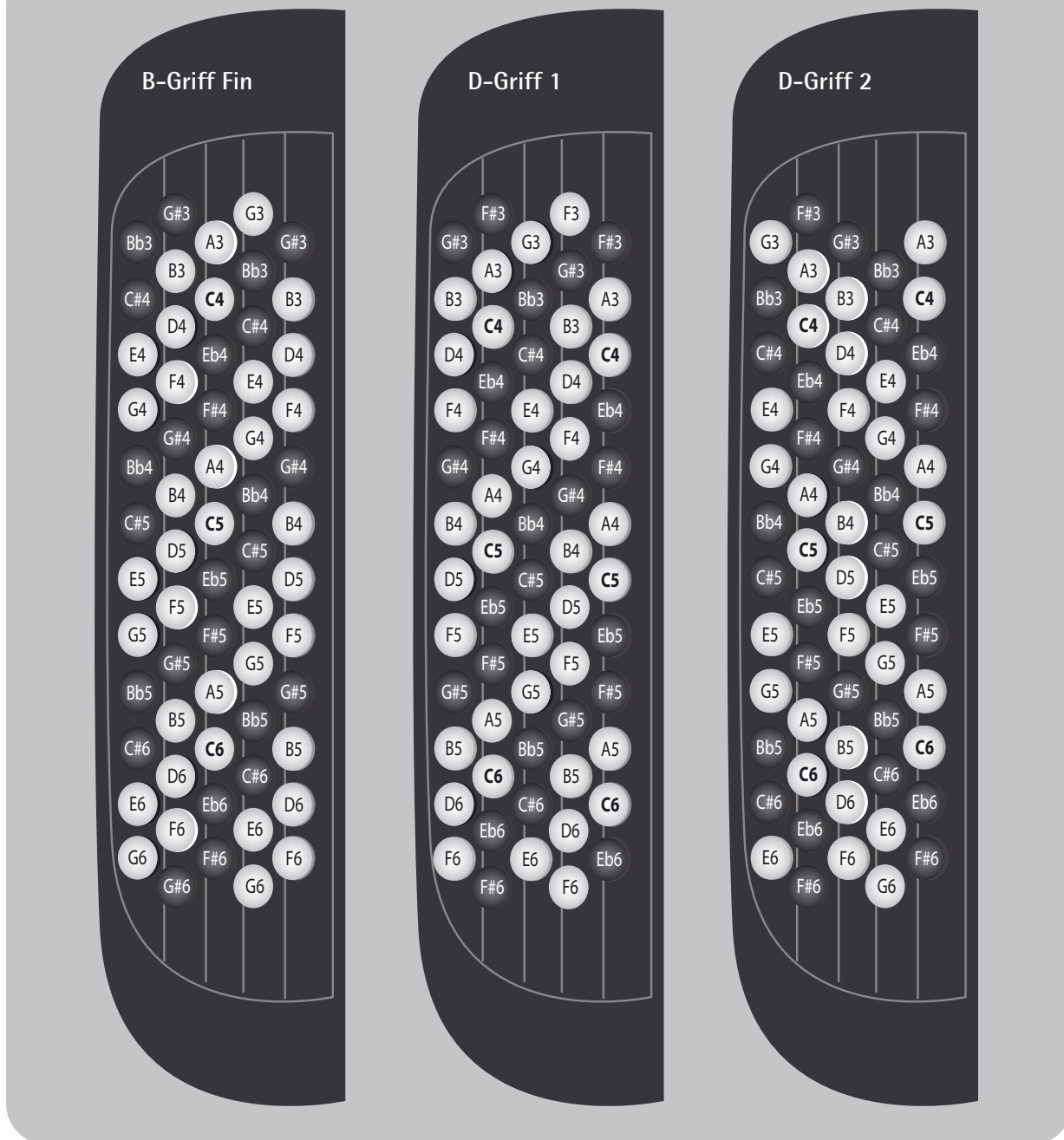
The FR-1 is supplied with additional white and black buttons. The white buttons come in two varieties: normal buttons and knurled buttons. The latter are usually used to indicate the "C" and "F" notes.



Treble Mode table (1/2)



Treble Mode table (2/2)



10. Restoring the factory defaults

You can reset the FR-1 to its factory settings, which means that your own settings (including the User Programs) are replaced by the settings the FR-1 contained when you first got it. Consider archiving your settings (see p. 26) before loading the factory defaults.

- (1) Switch off the FR-1 by turning the **VOLUME** ① knob all the way to the left ("POWER OFF").

- (2) Hold down **SET** and Treble register **4** while switching the FR-1 back on.

When all settings have been initialized, all Treble registers briefly flash in red.

The FR-1 now again sounds and behaves like when you first bought it.



11. Using optional batteries

Your FR-1 has a compartment into which you can install 8 optional rechargeable AA-type batteries. You can therefore play your instrument without connecting the supplied adaptor.

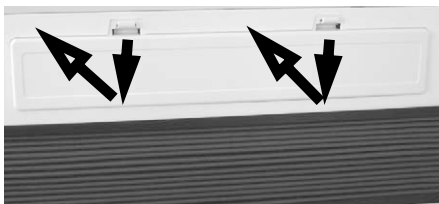
Installing and removing batteries

The FR-1 provides a battery compartment into which 8 rechargeable Ni-MH (AA-type) batteries can be installed.

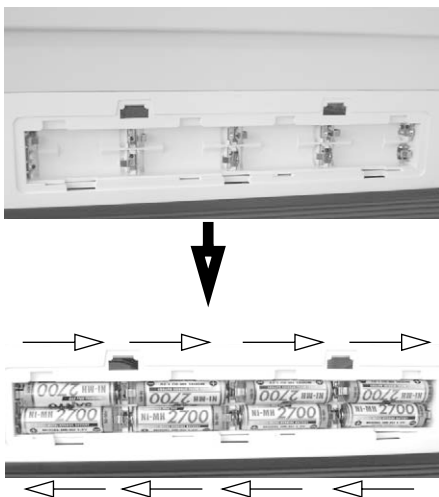
By pressing **[SET]** + register **[3]** (BATT), you can check the battery status. If all registers (the green and red ones) are lit, the batteries are fully charged. If only the red registers light, the remaining battery life is about 1 hour. (You may need to hold down **[SET]** to check the battery status.) If the **[DRUM]** button and only the first two registers light during this operation, the FR-1 is powered by the supplied adaptor. If the **[ORCHESTRA]** button lights, the batteries are used to power the FR-1.

Note: Please see page 7 for notes on battery handling.

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



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



- (4) Close the FR-1's battery compartment.

Note about rechargeable batteries

Certain batteries can be recharged several times before they need to be replaced with a 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.

12. Specifications

■ Keyboards

Right hand: FR-1 (piano) 26 piano-type keys, velocity sensitive (starting at a B key)

FR-1 (buttons) 62 buttons, velocity sensitive

Left hand: 72 velocity-sensitive bass buttons

■ Bellows

Real pneumatic detection of bellows pressure (high-resolution pressure sensor)

Bellows resistance regulator

■ Sound source

Max polyphony: 128 voices

Wave ROM: 16MB of waveforms

Tones: 7 accordion Sets, each including:

8 Treble registers, 3 Bass registers, 3 Orchestra Bass registers, 3 Orchestra Chord registers, 4 Orchestra sounds, 4 Organ sounds

Treble reed footages: 4

Bass reed footages: 5

Chord reed footages: 3

■ 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

■ Musette tuning

Micro tuning presets: 15 (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

Knob: VOLUME/POWER

Registers: 4x Treble, Set, 3x Bass

Buttons: ORCHESTRA/ORGAN, ORCH BASS, ORCH CHORD, LEFT REGISTER, DRUMS/DEFAULT, SONG/DEMO, USER PROG/DEC, METRONOME/INC

■ Operation modes

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

Treble modes (button-type): C-Griff Europe, C-Griff 2, B-Griff Bajan, B-Griff Fin, D-Griff 1, D-Griff 2

Octave: Down (-), 0, Up (+) (for Treble and Orchestra)

DRUMS: 4 drum/percussion sets

SONG function: 4 preset songs with selectable mute function for left- or right-hand part

■ Power supply

Supplied external adaptor or optional batteries

■ Power consumption

375mA (using external adaptor)

■ Expected battery life under continuous use:

Ni-MH 2000mAh ±5.5 hours

This varies depending on the actual conditions of use.

Note: Carbon and alkaline batteries should not be used. Be sure to only use rechargeable Ni-MH AA-type batteries.

■ Others

Connectors: HEADPHONE socket (stereo), OUTPUT sockets (L/Mono(Treble), R/Mono(Bass)), MIDI socket (Out/In function adjustable via FUNCTION parameter), DC IN socket

Power supply: external AC adaptor (100~240V, universal)

Dimensions (mm):

FR-1 (piano): 395 (H) x 365 (W) x 195 (D) mm

FR-1 (button-type): 375 (H) x 365 (W) x 195 (D) mm

Weight (without straps or optional batteries):

FR-1 (piano): 5.5kg

FR-1 (button-type): 5.5kg

■ Supplied accessories

1/4"→1/4" phone (guitar) cable

Earphones (with 1/8"→1/4" adaptor plug)

External AC adaptor

Quick Start manual, CD-ROM with Owner's Manual

Reference caps for the treble buttons (FR-1 button-type)

Strip for securing the adapter, MIDI and/or audio cables

Hexagonal wrench

Straps

Replaceable "traforo" inlay sheets: 5

■ Options

Accordion soft bag

Rechargeable Ni-MH (AA-type) batteries (8) from third-party suppliers (max. 2500mAh)

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

Scores of the internal educational songs

1

CAN CAN

J. Offenbach

$\text{♩} = 120$

The musical score is presented in a system of seven pairs of staves. Each pair consists of a treble clef staff (top) and a bass clef staff (bottom). The time signature is 2/4, and the tempo is marked as quarter note = 120. The key signature is one flat (B-flat major or D minor). The score includes various musical notations such as eighth and sixteenth notes, rests, and dynamic markings. Fingerings are indicated by numbers 7 and M (middle finger). The piece concludes with a double bar line and repeat dots.

2

CARNEVALE DI VENEZIA

Italian Traditional

$\text{♩} = 190$

The musical score is written in 3/4 time with a tempo of 190 beats per minute. It consists of seven systems, each with a treble and bass staff. The key signature has one sharp (F#). The score includes various musical notations such as chords, accidentals, and fingerings (7 and M). The piece concludes with a double bar line.

3

OH SUSANNA

American Traditional

$\text{♩} = 160$

The musical score is written in 4/4 time with a tempo of quarter note = 160. It consists of six systems of two staves each. The treble clef staff contains the melody, and the bass clef staff contains the bass line. The key signature has one sharp (F#). The bass line includes various chords and fingerings, with 'M' for major and 'm' for minor. The melody includes eighth and quarter notes, rests, and a final double bar line.

4

FURUSATO

Japanese Traditional

$\text{♩} = 80$

The musical score for 'Furusato' is presented in four systems, each with a treble and bass staff. The time signature is 3/4, and the tempo is marked as quarter note = 80. The melody is written in the treble clef, and the bass line is in the bass clef. The score includes various fingering and articulation markings: 'M' for mezzo-forte, 'm' for mezzo-piano, and '7' for the seventh finger. The piece concludes with a double bar line and repeat dots.

13. Appendix

Demo Songs

| # | SONG TITLE* | PERFORMED BY |
|----|--------------------|-----------------|
| 01 | Bal Musette | Ludovic Beier |
| 02 | Dreaming of Organ | Ludovic Beier |
| 03 | Swingin' The Blues | Ludovic Beier |
| 04 | Forro de Janeiro | Ludovic Beier |
| 05 | Tango Dancers | Ludovic Beier |
| 06 | Eastern Wind | Ludovic Beier |
| 07 | Sax On The Phone | Ludovic Beier |
| 08 | O Sole Mio | Sergio Scappini |

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DRUMS Sets

| Set 1 (Folk) 0-4-8* | Note no. | Set 2 (Jazz) 0-4-44 | Note no. |
|------------------------|----------|---------------------|----------|
| 1 Snare | 38 | 1 Jazz Snare | 38 |
| Tambourine | 54 | Pedal HiHat | 32 |
| 2 Bass Drum | 36 | 2 Ride Cymbal | 59 |
| HiHat | 42 | | |
| Set 3 (Tarantel) 0-4-8 | Note no. | Set 4 (Latin) 0-4-8 | Note no. |
| 1 Tamorra 1 | 2 | 1 Pandeiro 5 | 14 |
| Tamorra 2 | 3 | Pandeiro 3 | 12 |
| | | Bass Drum | 36 |

[*] Drum Kit address. First digit= CC00, second digit= CC32, third digit= PC

MIDI Program change messages

| BANK SELECT | | PROGRAM CHANGE | SECTION |
|-----------------------------------|-----------|----------------|--|
| MSB CC00 | LSB CC 32 | | |
| BANK SELECT AND PROGRAM CHANGE TX | | | |
| 0 | 0 | 1~8 | Treble Register |
| 0 | 0 | 1~3 | Bass Register |
| 0 | 0 | 1~3 | Orch Bass Register |
| 0 | 0 | 1~3 | Orch Chord Register |
| 0 | 0 | 1~4 | Orchestra Register |
| 0 | 0 | 5~12 | Organ Register |
| 0 | 0 | 1~7 | Set |
| TREBLE REGISTER RX | | | |
| — | — | 1 | Bassoon  |
| — | — | 2 | Bandon  |
| — | — | 3 | Master  |
| — | — | 4 | Organ  |
| — | — | 5 | Clarinet  |
| — | — | 6 | Musette  |
| — | — | 7 | Piccolo  |
| — | — | 8 | Oboe  |
| ORCHESTRA REGISTER RX | | | |
| — | — | 1 | String |
| — | — | 2 | Sax |
| — | — | 3 | Clarinet |
| — | — | 4 | Scat Voice |

| ORGAN REGISTER RX | | | |
|------------------------|---|----|---|
| — | — | 5 | Full (Rotary Slow) |
| — | — | 6 | Jazz (Rotary Slow) |
| — | — | 7 | R & B (Rotary Slow) |
| — | — | 8 | Perc (Rotary Slow) |
| — | — | 9 | Full (Rotary Fast) |
| — | — | 10 | Jazz (Rotary Fast) |
| — | — | 11 | R & B (Rotary Fast) |
| — | — | 12 | Perc (Rotary Fast) |
| BASS REGISTER RX | | | |
| — | — | 1 | 8'/4'/2'  |
| — | — | 2 | 16'/8'/8-4'/4'/2'  |
| — | — | 3 | 16'/2'  |
| ORCH BASS REGISTER RX | | | |
| — | — | 1 | Acoustic |
| — | — | 2 | Bowed |
| — | — | 3 | Tuba Mix |
| ORCH CHORD REGISTER RX | | | |
| — | — | 1 | St. Strings |
| — | — | 2 | Chorus Organ |
| — | — | 3 | Steel Guitar |
| SET RX | | | |
| — | — | 1 | CLASSIC |
| — | — | 2 | JAZZ |
| — | — | 3 | BANDONEON |
| — | — | 4 | ALPINE |
| — | — | 5 | I FOLK |
| — | — | 6 | D FOLK |
| — | — | 7 | F FOLK |

MIDI Implementation Chart

[V-Accordion]
Model: FR-1

Date: July 2008
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, 3= Chord, 4= Orchestra, 5= Orchestra Bass, 6= Orchestra Chord, 10= Pad, 1 Logical part: 13= Basic MIDI Channel for SET change |
| Mode Default Message Altered | Mode 3 ***** ***** | Mode 3 ***** | |
| Note Number True Voice | 0~127 ***** | 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 | X | X | |
| Control Change | 00,32 O 07 X 10 X 11 O *1 64 X 91 X 93 X | O X X O X X X | Bank Select Volume Panpot Expression Hold 1 Reverb Send Chorus Send |
| Program Change True # | O 0~11 | O 0~11 | Recognized: 1~12: 1~8: Treble Registers 1~3 Bass registers 1~3 Orchestra Bass 1~3 Orchestra Chord 1~12 Orchestra/Organ 1~7 Set |
| System Exclusive | O | O *3 | |
| System Common Song Position Pointer Song Sel Tune | X X X | X X X | |
| System Real Time Clock Commands | X X | X X | |
| Aux Messages All Sounds Off Reset All Controllers Local On/Off All Notes Off Active Sense Reset | X X X X O X | X X X X O X | |
| Notes | *1 O X is selectable *2 Recognized as M=1 even if M≠1 *3 Only bulk dump | | |

Mode 1: OMNI ON, POLY
Mode 3: OMNI OFF, POLY

Mode 2: OMNI ON, MONO
Mode 4: OMNI OFF, MONO

O: Yes
X: No

14. 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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Chaudron - BP79 97 491
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