Using FR-4x Editor

Introduction

FR-4x Editor is an editor for creating sets (SET) and user programs (UPG). This document explains how to edit the parameters and how to save the set or user program.

(This document explains the operations for Windows, but operations are the same on Mac as well.)

Installation

To use FR-4x Editor, you must install the USB driver and Java (JRE).

1. **Log in to your computer as an administrator.**
2. **Download the USB driver from the Roland website, and install it.**

   http://www.roland.com/support
3. **Download and install the most recent version of Java (JRE).**

   http://www.java.com

Connecting the FR-4x to the Editor

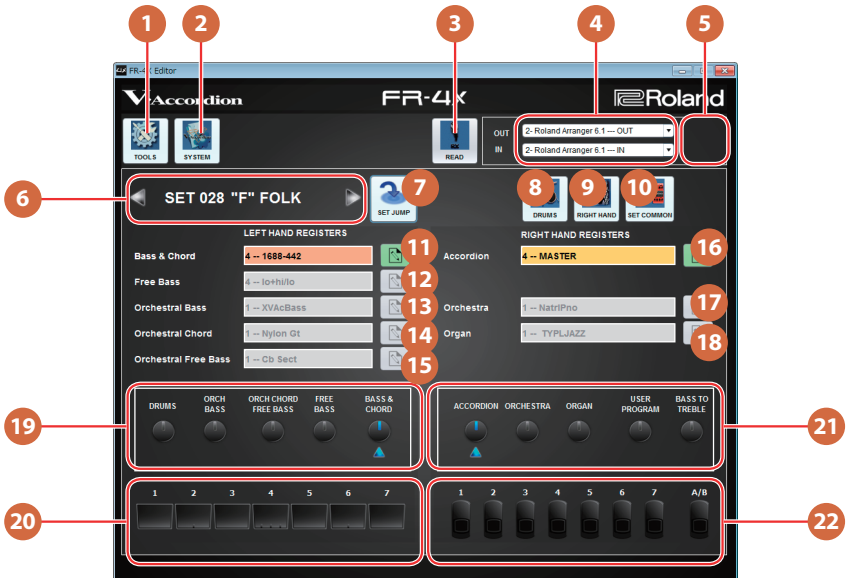
1. **Power-on the FR-4x.**

   * We recommend that you set the FR-4x's USB Drv setting to ORG.
2. **Use a USB cable to connect the FR-4x to your computer.**
3. **On your computer, start FR_Editor.**
4. **Set OUT and IN as shown below.**

	Windows	Mac
OUT	Roland Arranger 6.1—OUT	CoreMIDI4J – Roland Arranger
IN	Roland Arranger 6.1—IN	CoreMIDI4J – Roland Arranger

The unit's data is loaded, and a connection is established.

TOP Screen



1 [TOOLS] button

Lets you save sets or user programs.

2 [SYSTEM] button

Edits the system parameters.

3 [READ] button

Applies the state of the FR-4x to the editor.

4 [OUT/IN] setting buttons

Change the MIDI input/output devices.

5 Reload [OUT/IN] button

Reloads the OUT/IN settings.

This button is shown if the FR-4x is disconnected or is not correctly connected.

6 SET select buttons

Select the previous or next set.

7 [SET JUMP] button

Specifies a set number to select it.

8 [DRUMS] button

Edits the Drums parameters.

9 [RIGHT HAND] button

Edits the Right Hand parameters.

10 [SET COMMON] button

Edits the Common parameters.

11 [Bass & Chord Edit] button

Edits the Bass & Chord parameters.

12 [Free Bass Edit] button

Edits the Free Bass parameters.

13 [Orchestral Bass Edit] button

Edits Orchestral Bass parameters.

14 [Orchestral Chord Edit] button

Edits the Orchestral Chord parameters.

15 [Orchestral Free Bass Edit] button

Edits the Orchestral Free Bass parameters.

16 [Accordion Edit] button

Edits the Accordion parameters.

17 [Orchestra Edit] button

Edits the Orchestra parameters.

18 [Organ Edit] button

Edits the Organ parameters.

19 LEFT HAND part

Turns the part played by the left hand on/off.

20 Left-hand register buttons

Select the current register for the left hand.

21 RIGHT HAND part

Turns the part played by the right hand on/off.

22 Right-hand register buttons

Selects the right-hand register as on the unit itself.

Edit Screen

You can use the editor to edit the sound settings of each part.

Here we explain how to edit the parameters of the accordion part.

1. Select the accordion part.

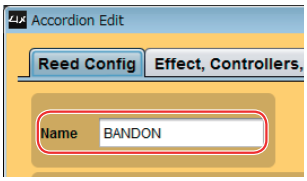
2. Select a register.

3. Click the edit button for the accordion part.

The edit screen of the accordion part appears.

4. Use the drop-down lists and sliders to edit the parameters.

In **"Name"** you can enter a name of your choice.



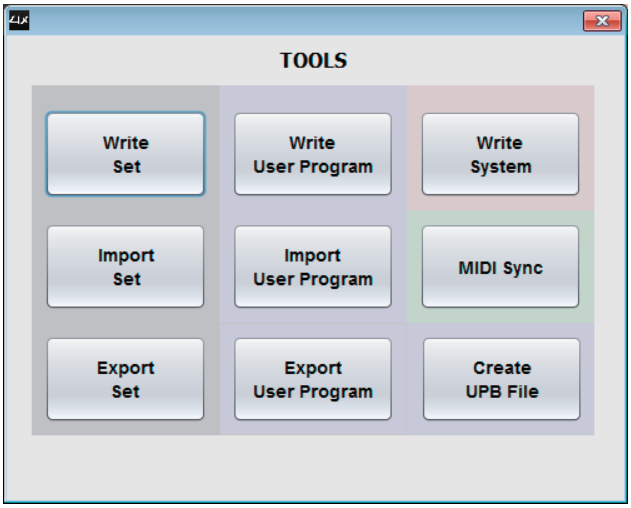
You can also click the **[Effect, Controllers, MIDI]** tab and edit other parameters.

TOOLS

The TOOLS screen lets you save, export, and import sets or user programs.

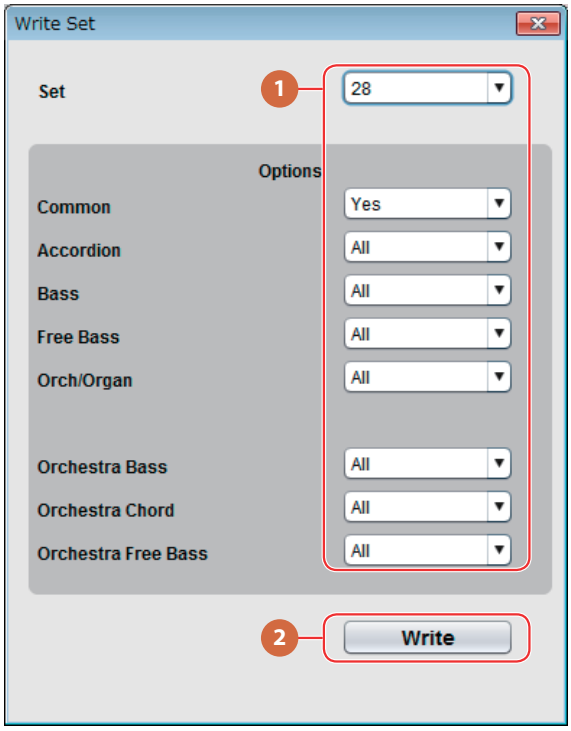
1. Click the TOOLS icon.

2. Click the item that you want to use.



SET

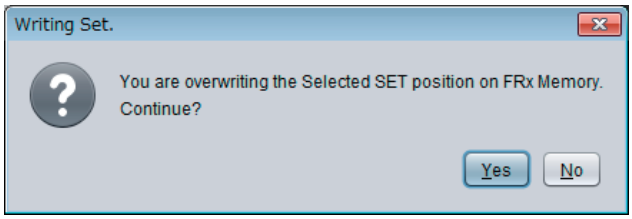
Saving a set (Write Set)



1. Use the drop-down list to select the save-destination for the set and the parts that you want to save.

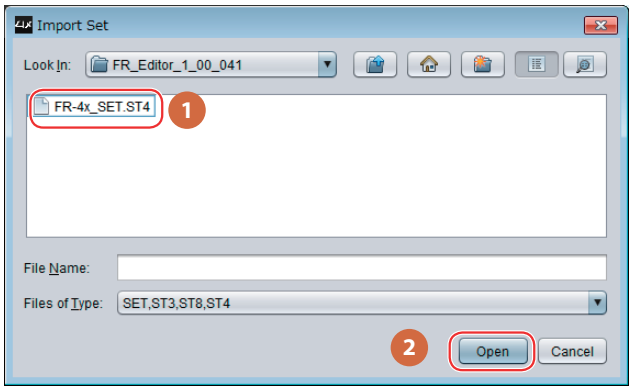
2. Click [Write].

A confirmation message appears.



3. Click "Yes."

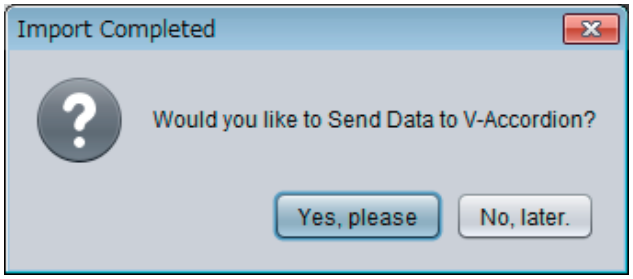
Importing a set (Import File Set)



1. Select the file that you want to import.

2. Click [Open].

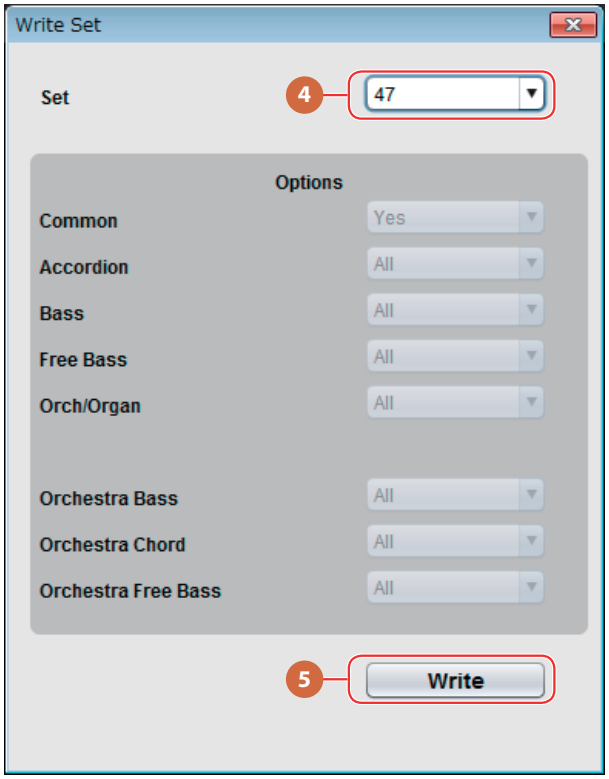
A confirmation message appears.



3. Click [Yes, please].

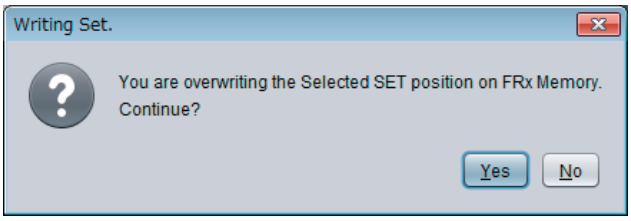
A progress indicator appears; wait several seconds.

4. Select the import-destination set number.



5. Click [Write].

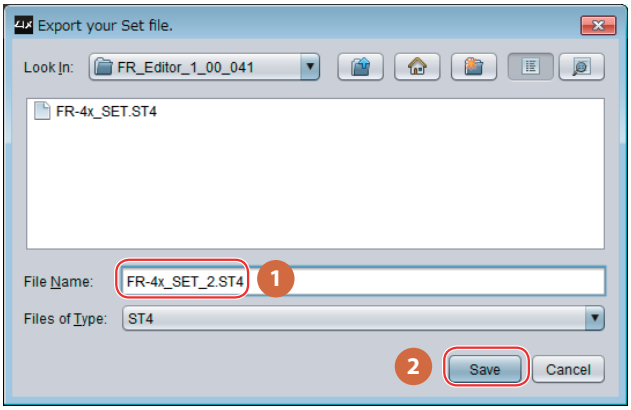
A confirmation message appears.



6. Click [Yes].

When the operation is completed, the screen indicates **"Operation Complete."**

Exporting a set (Export File Set)



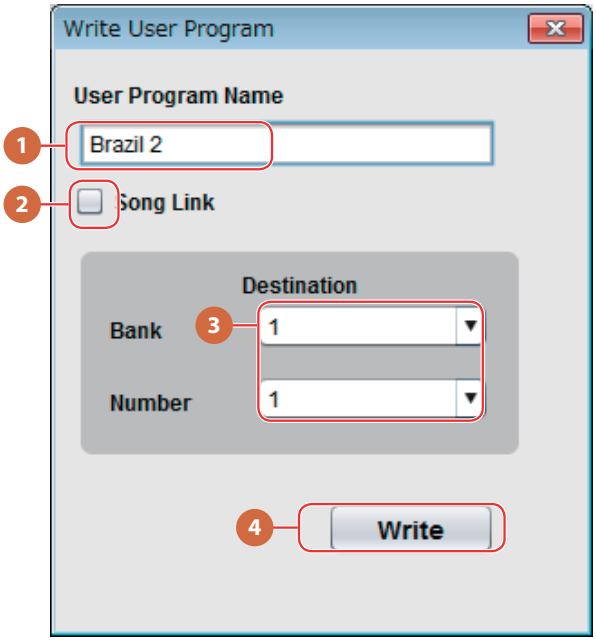
1. Enter a file name.

2. Click [Save].

When saving is completed, the screen indicates **"Operation Completed."**

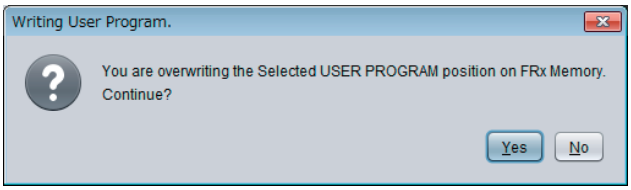
User Program

Saving a user program (Write User Program)



1. **Enter the User Program Name.**
2. **If you want to link a song, select the Song Link check box.**
3. **Use the drop-down lists to select the save-destination Bank and Number.**
4. **Click Write.**

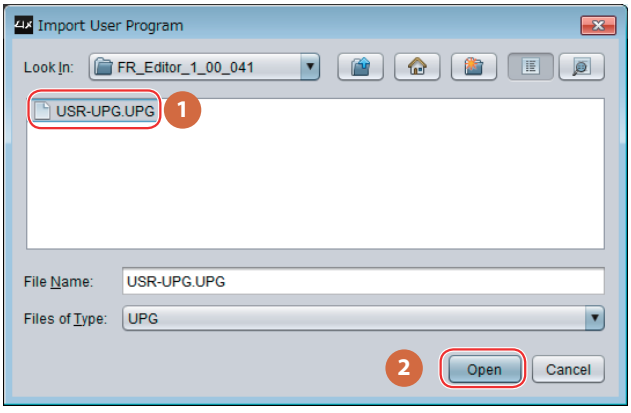
   A confirmation message appears.



5. **Click "Yes."**

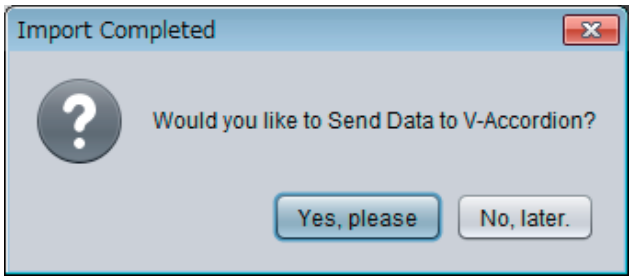
   When saving is completed, the screen indicates **"Operation Completed."**

Importing a user program (Import File User Program)



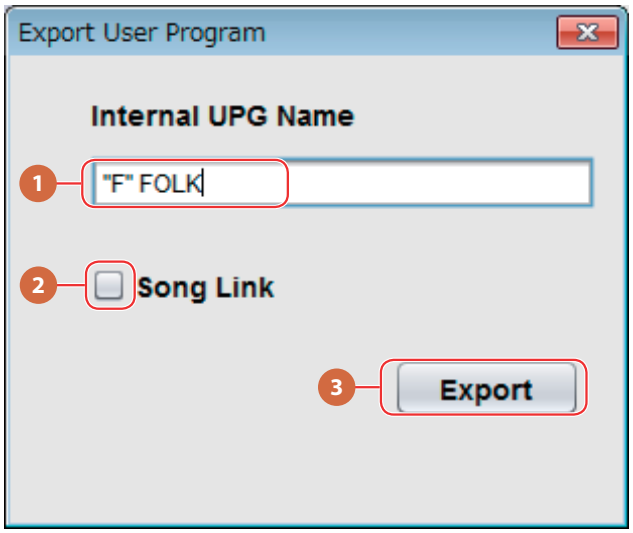
6. **Click [Open].**

   A confirmation message appears.

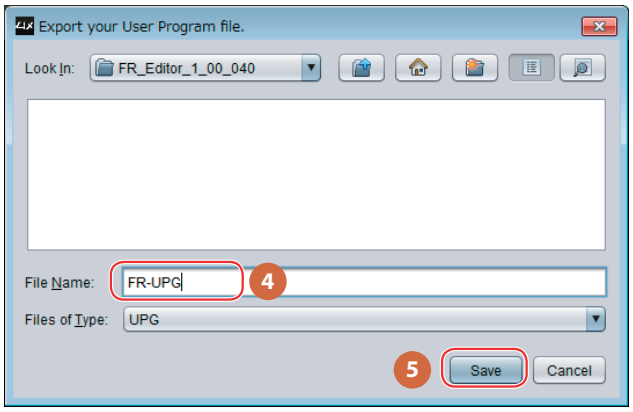


7. **Click [Yes, please].**

Exporting a user program (Export File User Program)



1. Enter the UPG Name.
2. If you want to link a song, select the Song Link check box.
3. Click [Export].

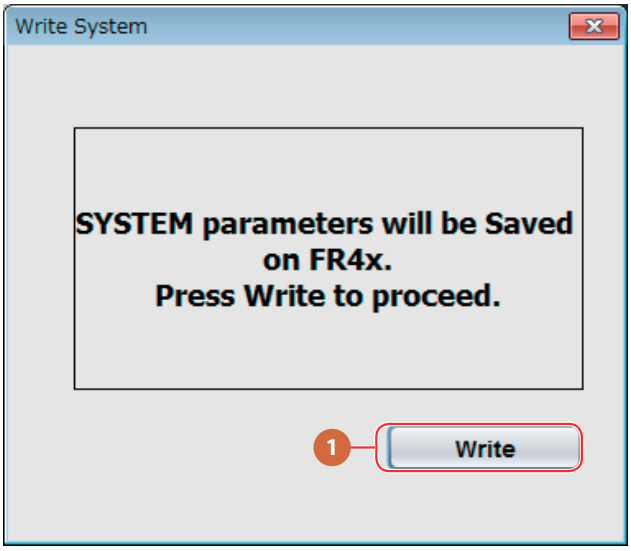


4. Enter a file name.
5. Select [Save].

When saving is completed, the screen indicates **"Operation Completed."**

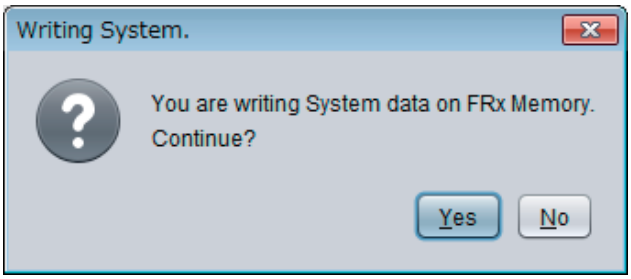
Others

Saving system parameters (Write System)



1. Click [Write].

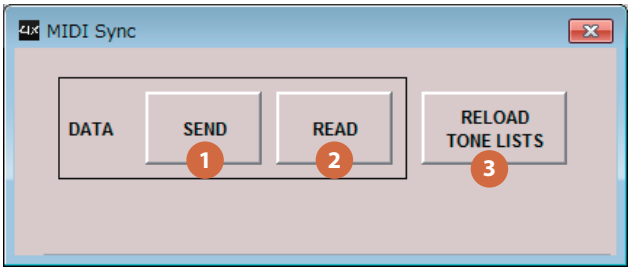
A confirmation message appears.



2. Click "Yes."

When saving is completed, the screen indicates **"Operation Completed."**

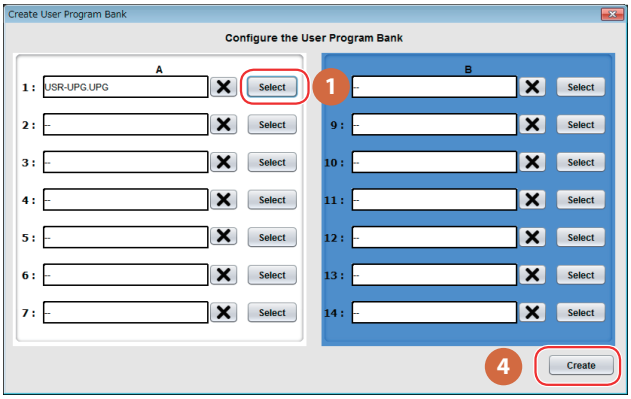
Synchronizing data via MIDI (MIDI Sync)

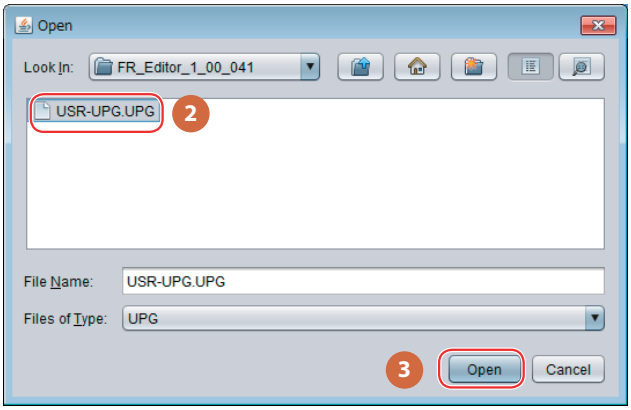


1. Applies the state of the editor to the FR-4x.
2. Applies the state of the FR-4x to the editor.
3. Reloads the Tone Lists.

Creating a UPB file (Create UPB File)

Here's how to create a User Program Bank file.





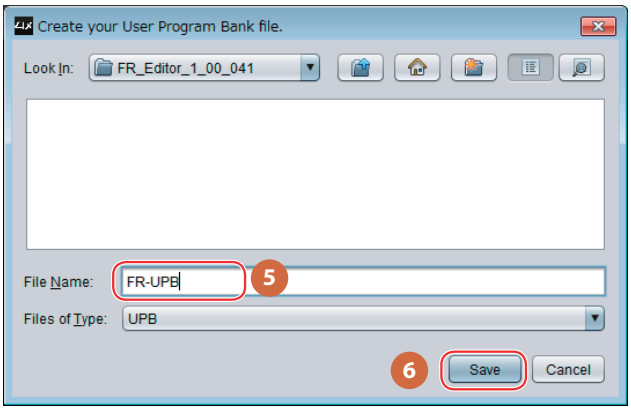
1. Click [Select].

2. Select a file.

3. Click [Open].

Select other UPG files in the same way.

4. Click [Create].



5. Enter a file name.

6. Click [Save].

When saving is completed, the screen indicates **"Operation Completed."**

FR-4x Parameter List

By using the editor you can make detailed settings that cannot be made on the unit itself.

The following parameters can be edited only via the editor.

* For details on the parameters that can be edited on the unit itself, refer to the reference manual.

Accordion Edit

Reed Config

Parameter		Value	Explanation
Reed: **16′** **8′** **8′–** **8′+** **4′** **5-1/3′** **2-2/3′**	Status	Off, On, On-Cassotto	• **"Off"**: No sound • **"On"**: Sound • **"On-Cassotto"**: On-Cassotto (muffled sound)
	Type	Bandoneon, I-Folk, I-Folk2, Classic, Cajun, Jazz, F-Folk, D-Folk, Organetto, F-Folk2, Classic2, Studio, Tradition, Steierische, OldItaly, TexMex, Trikitixa, F-Jazz, Classic3, Bajan	Select a type of instrument.
	Octave	-1~0~+1	This parameter allows you to transpose the selected register one octave up or down. This can be used for two purposes: • to quickly correct the pitch that results from the active reeds (see above) –or– • to avoid overlaps of the selected register when using an ORCHESTRA sound. (The ORCHESTRA section also provides an **"Octave"** parameter.)
	Volume	Off, –40~STD~+40	This parameter can be set for each reed/footage individually. It allows you to create the desired **"mix"** (volume balance) for the active reeds. This is a relative parameter: its value is added to or subtracted from the standard value (**"STD"**). As a rule, first decide which reed is most important and set its **"Volume"** parameter to **"STD"**. Then reduce or increase the volume of the **"ancillary"** reeds to create the desired balance.

Bass Edit

Reed Config

Parameter		Value	Explanation
Reed: **16′** **8′** **8′-4′** **4′** **2′**	Status	Off, On	• **"Off"**: No sound • **"On"**: Sound
	Type	Bandoneon, I-Folk, I-Folk2, Classic, Cajun, Jazz, F-Folk, D-Folk, Organetto, F-Folk2, Classic2, Studio, Tradition, Steierische, Trikitixa, F-Jazz, Classic3, Bajan	Select a type of instrument.
	Volume	Off, –40~STD~+40	This parameter can be set for each reed/footage individually. It allows you to create the desired **"mix"** (volume balance) for the active reeds. This is a relative parameter: its value is added to or subtracted from the standard value (**"STD"**). As a rule, first decide which reed is most important and set its **"Volume"** parameter to **"STD"**. Then reduce or increase the volume of the **"ancillary"** reeds to create the desired balance.

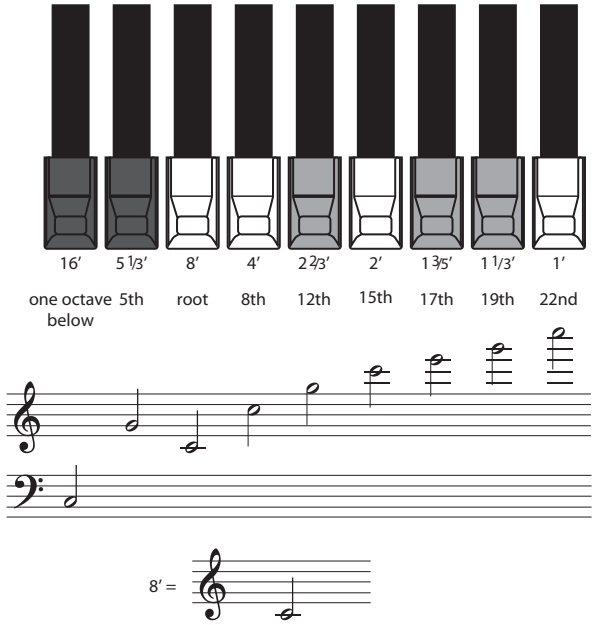
Free Bass Edit

Reed Config

Parameter		Value	Explanation
Reed: 16' 8'	Status	Off, Low, High, Whole	Specifies which left-hand button keys are used to play the reeds. By changing the Status for each reed, you can play different sounds in different key regions. • **"Off"**: Sounds are not played. • **"Low"**: Only the lower half plays sounds. • **"High"**: Only the upper half plays sounds. • **"Whole"**: All the left-hand button keys play sounds. **NOTE** Assigning the same partial **"STATUS"** (**"High"** or **"Low"**) to both reeds means that only half the number of available bass buttons can be used.
	Type	Bandoneon, I-Folk, I-Folk2, Classic, Cajun, Jazz, F-Folk, D-Folk, Organetto, F-Folk2, Classic2, Studio, Tradition, Steierische, Trikitixa, F-Jazz, Classic3, Bajan	Select a type of instrument.
	Volume	Off, –40~STD~40	This is the last parameter that can be set for each reed individually. It allows you to create the desired **"mix"** (volume balance) for the active reeds. This is a relative parameter: its value is added to or subtracted from the standard value (**"STD"**). As a rule, first decide which reed is most important and set its **"Volume"** parameter to **"STD"**. Then reduce or increase the volume of the **"ancillary"** reeds to create the desired balance.

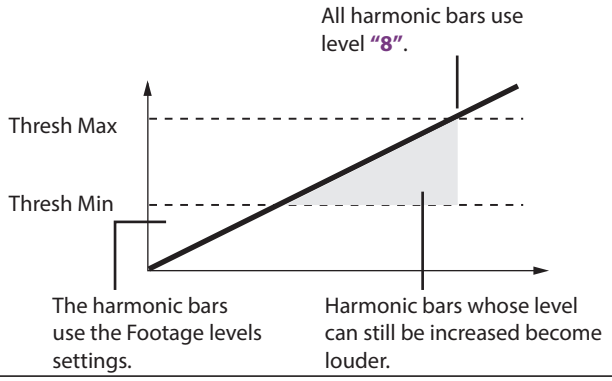
Organ Edit

<table>
<tr><th colspan="2">Parameter</th><th>Value</th><th>Explanation</th></tr>
<tr><td rowspan="9">HarmonicBar</td><td>16'</td><td rowspan="9">0-8</td><td rowspan="9">The harmonic bars are assigned to sounds of different footage (pitch). You can create a wide variety of organ sounds by layering these sounds.
The volume will be loudest when the harmonic bars are fully lowered; there will be no sound when the harmonic bars are fully raised.

Harmonic bars and the pitch of the sound
When the middle C (C4) note is pressed, each harmonic bar will sound the following notes.
 

There are three colors of harmonic bars. Those that are in octave multiples of 8′ are white, those that are not octave multiples are black, and the lower-pitched bars are brown.

A tonewheel organ's overtone structure
In certain regions of a tonewheel organ's keyboard, the overtones will not correspond to the configuration of the harmonic bars. In order to prevent unpleasantly high or low pitches, the high footage is "folded back down" in one octave units for the high range, while the low footage is "folded back up" in one-octave units for the low range. The FR-4x faithfully reproduces this characteristic of tonewheel organs.</td></tr>
<tr><td>51/3'</td></tr>
<tr><td>8'</td></tr>
<tr><td>4'</td></tr>
<tr><td>22/3'</td></tr>
<tr><td>2'</td></tr>
<tr><td>13/5'</td></tr>
<tr><td>11/3'</td></tr>
<tr><td>1'</td></tr>
<tr><td>Leakage</td><td>Level</td><td>0~127</td><td>Specifies the level of the effect with respect to the unprocessed organ signal.</td></tr>
<tr><td rowspan="4">Percussion</td><td>Switch</td><td>Off, On</td><td>You can enable the Percussion sound.</td></tr>
<tr><td>Harmonic</td><td>2nd, 3rd</td><td>• "2nd": The Percussion use the 2-2/3′ harmonic bar.
• "3rd": The Percussion use the 4′ harmonic bar.</td></tr>
<tr><td>Volume</td><td>Normal, Soft</td><td>Sets the percussion sound's level.
• "Normal": normal level
• "Soft": softer level.</td></tr>
<tr><td>Decay</td><td>Fast, Slow</td><td>Specifies the desired attack (aggressiveness) of the percussion sound.
• "Fast": fast and more abrupt
• "Slow": slow and longer.</td></tr>
<tr><td rowspan="4">VibratoChorus</td><td>Switch</td><td>Off, On</td><td>You can apply vibrato or chorus to the organ sound.</td></tr>
<tr><td>Type</td><td>V-1, V-2, V-3
C-1, C-2, C-3</td><td>The effect will intensify as the vibrato type (V-1, V-2, V-3) or chorus type (C-1, C-2, C-3) moves to a higher number</td></tr>
<tr><td>Vintage</td><td>'50, '60, '70</td><td>Tonewheel used in tonewheel organs of 1950, 1960, 1970.</td></tr>
<tr><td>Level</td><td>0~127</td><td>Use this parameter to set the Vibrato or chorus level.</td></tr>
</table>

Parameter		Value	Explanation
Overdrive	Switch	Off, On	Allows you to switch the overdrive effect on or off.
	Drive	0~127	Specifies how strongly the sound is distorted. A value toward 127 raise the gain, adding distortion to the sound.
	Level	0~127	Specifies the level of the effect with respect to the unprocessed organ signal.
Rotary	Level	0~127	You can adjust the level of rotary effect.
	Reverb Send	0~127	Allows yo to specify the level of the rotary signal that is transmitted to the reverb effect. Choose **"0"** if the sound should not be processed by the organ reverb processor.
	Chorus Send	0~127	Allows yo to specify the level of the rotary signal that is transmitted to the organ chorus effect. Choose **"0"** if the sound should not be processed by the organ chorus processor.
Bellows	Crescendo	Off, 1~100	Sets the organ sound's sensitivity to changes in the force with which the bellows is moved. The higher the value, the more the bellows will influence the organ sound. This function temporarily increases the level of the harmonic bars as you move the bellows while playing on the keyboards. It has no effect if all harmonic bars are already set to **"8"** 
	Threshold Min	0~110 (this value cannot be higher than the **"Thresh Max"** value)	This parameter allows you to specify the pressure you need to apply to the bellows to start triggering the **"Crescendo"** effect. Set a relatively high value if you want to change the footage levels only for accented notes.
	Threshold Max	20~120 (this value cannot be lower than the **"Thresh Min"** value)	This parameter allows you to specify the maximum pressure that will set the levels of all virtual harmonic bars to maximum level. Choosing a value below **"120"** means that the Crescendo effect is no longer applied when you press the bellows very forcefully.

Orchestra Bass Edit

Parameter		Value	Explanation
HarmonicBar	16'	0-8	See Organ Edit.
	8'		
Leakage	Level	0~127	
VibratoChorus	Switch	Off, On	
	Type	V-1, V-2, V-3 C-1, C-2, C-3	
	Vintage	'50, '60, '70	
	Level	0~127	
Overdrive	Switch	Off, On	
	Drive	0~127	
	Level		
Rotary	Level		
	Reverb Send		
	Chorus Send		

Orchestra Chord Edit

Parameter		Value	Explanation
HarmonicBar	16'	0-8	See Organ Edit.
	51/3'		
	8'		
	4'		
	22/3'		
	2'		
	13/5'		
	11/3'		
	1'		
Leakage	Level	0~127	
VibratoChorus	Switch	Off, On	
	Type	V-1, V-2, V-3 C-1, C-2, C-3	
	Vintage	'50, '60, '70	
	Level	0~127	
Overdrive	Switch	Off, On	
	Drive	0~127	
	Level		
Rotary	Level		
	Reverb Send		
	Chorus Send		

Orchestra Free Bass Edit

Parameter		Value	Explanation
HarmonicBar	16'	0-8	See Organ Edit.
	51/3'		
	8'		
	4'		
	22/3'		
	2'		
	13/5'		
	11/3'		
	1'		
Leakage	Level	0~127	
VibratoChorus	Switch	Off, On	
	Type	V-1, V-2, V-3 C-1, C-2, C-3	
	Vintage	'50, '60, '70	
	Level	0~127	
Overdrive	Switch	Off, On	
	Drive	0~127	
	Level		
Rotary	Level		
	Reverb Send		
	Chorus Send		