Roland

SYSTEM-8 Software Synthesizer

Owner's Manual

Introduction

When using the SYSTEM-8 Software Synthesizer for the first time, you must specify the MIDI Input/Output setting in the Setting window (p. 10).

For details on the settings for the DAW software that you're using, refer to the DAW's help or manuals.

Screen Structure

Main window

This area shows various knobs and sliders that you can use to edit the sound.

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Patch Memory name

This area shows the name of the selected patch memory.

Level meter

Displays output levels of the SYSTEM-8 Software Synthesizer.

[CONDITION] knob

Specifies the state (condition) of the analog sound engine circuit that is being modeled.

[TUNE] knob

Adjusts the overall pitch of the SYSTEM-8 Software Synthesizer.

[PATCH] button

Selects a patch memory.

The Patch Select window opens.

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[SEND] button

Sends the memory to the SYSTEM-8 Software Synthesizer.

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[GET] button

Loads the memory currently being edited in the SYSTEM-8(temporary) into the SYSTEM-8 SoftwareSynthesizer.

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* These operate only when the SYSTEM-8's MODEL setting is SYSTEM-8.

[OPTION] button

Here you can make settings such as MIDI control mapping.

These settings can be made separately for each instance of the SYSTEM-8 Software Synthesizer.

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[SETTING] button

Here you can edit the MIDI settings and the direction of mouse wheel scrolling (Only on Mac).

These settings are shared by all instances of the SYSTEM-8 Software Synthesizer that you are using.

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[HELP] button

Displays help.

[ABOUT] button

Here you can view information about the SYSTEM-8 Software Synthesizer.

Keyboard area

Click here to produce sound.

When a MIDI message is received, the corresponding key responds.

[KEYBOARD] button

Toggles the keyboard area between visible and hidden.

Main Window

LFO

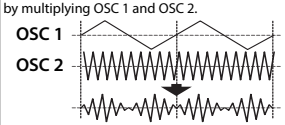
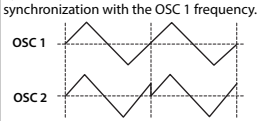
Here you can create cyclic change (modulation) in the sound.

		Variation 1	Variation 2	Variation 3
VARIATION				
WAVE	∿	Sine wave	Sine wave x 2	TYPE 1
	∿	Triangle wave	Triangle wave x 2	TYPE 2
	⩘	Sawtooth wave	Sawtooth wave x 2	TYPE 3
	⊓	Square wave	Square wave x 2	TYPE 4
		Sample and Hold	Sample and Hold x 2	TYPE 5
	RND	Random wave	Random wave x 2	TYPE 6

PITCH	Allows the LFO to modulate the pitch of the sound, producing a vibrato effect.
FADE TIME	Specifies the time from when the tone sounds until the LFO reaches its maximum amplitude.
FILTER	Allows the LFO to modulate the FILTER CUTOFF (cutoff frequency).
KEY TRIG	Specifies whether the LFO waveform is synchronized to start the moment you press a key (on) or is not synchronized (off).
TRIG ENV	Causes the envelope to start repeatedly at the LFO cycle (on).
RATE	Determines the speed of the LFO modulation.
AMP	Allows the LFO to modulate the AMP LEVEL (volume), producing a tremolo effect.

OSC 1 / OSC 2

Here you can select the waveform that determines the character of the sound, and specify its pitch.

VARIATION	➡ "OSC 1/OSC2 Variation (VARIATION) and Waveform (WAVE)" (p. 5)
WAVE	
OCTAVE (64–2FEET)	Specifies the octave of the oscillator.
COLOR	Adjusts the tone.
MOD	Selects the source that is modulated by the [COLOR] knob.
COARSE TUNE	Adjusts the pitch in semitone steps.
FINE TUNE	Allows fine pitch adjustments.
CROSS MOD (OSC 1 only)	Modifies the OSC 1 frequency according to the OSC 2 waveform.
RING (OSC 2 only)	This is a ring modulator. It generates a complex waveform by multiplying OSC 1 and OSC 2. 
SYNC (OSC 2 only)	This is oscillator sync. It generates a complex waveform by forcibly resetting OSC 2 to the beginning of its cycle in synchronization with the OSC 1 frequency. 

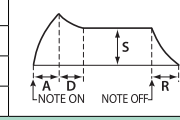
OSC 3 / SUB OSC

TYPE	Selects the waveform that is the basis of the sound.	
	∿ -2Oct	Sine wave two octaves lower
	∿ -1Oct	Sine wave one octave lower
	∿	Sine wave
	∿	Triangle wave
	∿ -1Oct	Triangle wave one octave lower
	∿ -2Oct	Triangle wave two octaves lower
COLOR	The result depends on the waveform.	
TUNE	Adjusts the pitch of the oscillator.	

FILTER

These settings determine the brightness and thickness of the sound.

VARIATION	➡ "FILTER Variation (VARIATION) and Type (TYPE)" (p. 5)
TYPE	
CUTOFF	
RESO	Resonance boosts the sound in the region of the filter's cutoff frequency.
ENV	This knob specifies the depth and direction of the cutoff frequency change produced by the [A], [D], [S], and [R] sliders.
KEY	Allows the filter cutoff frequency to vary according to the key that you play.
VELOCITY SENS	Adjusts the sensitivity by which the key velocity (playing dynamics) varies the depth of the filter envelope.
HPF	Specifies the cutoff frequency of the high-pass filter. Frequency components below the cutoff frequency are cut.
A	Attack time
D	Decay time
S	Sustain level
R	Release time



MIXER

Adjust the OSC 1, OSC 2, OSC 3/SUB OSC, Noise's volume.

OSC 1	Adjust the OSC 1's volume.
OSC 2	Adjust the OSC 2's volume.
OSC 3/SUB OSC	Adjust the OSC 3/SUB OSC's volume.
NOISE	Adjust the noise's volume.
NOISE TYPE	Selects the type of the noise.

PITCH

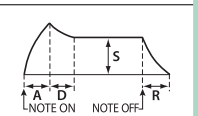
Here you can create time-varying change (envelope) for pitch.

ENV	If this knob is turned toward the right, the pitch initially becomes higher and then returns to the pitch of the key you pressed. If this knob is turned toward the left, the pitch initially becomes lower and then returns to the pitch of the key you pressed.
A	These sliders operate similarly to the [A] [D] sliders of the AMP section (they affect the pitch rather than the volume).
D	

AMP

Here you can create time-varying change (envelope) for the volume.

VELOCITY SENS	Adjusts the sensitivity by which the key velocity (playing dynamics) varies the volume.
TONE	Adjusts the brightness of the sound.
LEVEL	Adjusts the volume.
A	Attack time
D	Decay time
S	Sustain level
R	Release time



EFFECTS, DELAY/CHORUS, REVERB

Here you can adjust the effect, delay/chorus, and reverb depth.

EFFECT TYPE	Selects the effect type.
TONE	Specifies the character of the effect.
DEPTH	Specifies the depth of the effect.
DELAY/CHO TYPE	Switches the delay/chorus type.
TIME	Adjusts the time by which the sound is delayed.
LEVEL	Adjusts the volume of delay/chorus.
REVERB TYPE	Switches the reverb type.
TIME	Specifies the reverb time.
LEVEL	Specifies the reverb volume.

OSC 1/OSC2 Variation (VARIATION) and Waveform (WAVE)

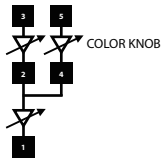
Variation 1	Variation 2	Variation 3 (*1)	Variation 4 (*2)
Sawtooth wave (SAW)	Noise Saw (NOISE SAW)	FM 2 operator (FM 1:1)	FM 5 operator (FM Type A)
Square wave (SQR)	Logic (LOGIC OPERATION)	FM 2 operator (FM 1:1.5)	FM 5 operator (FM Type B)
Triangle wave (TRI)	FM (FM)	FM 2 operator (FM 1:2)	FM 5 operator (FM Type C)
Sawtooth wave2 (SAW2)	FM+SYNC (FM SYNC)	FM 2 operator (FM 1:3.5)	FM 5 operator (FM Type D)
Square wave2 (SQR2)	Vowel (VOWEL)	FM 2 operator (FM 1:15)	FM 5 operator (FM Type E)
Triangle wave2 (TRI2)	CB (COWBELL)	FM 2 operator (FM 6:1)	FM 5 operator (FM Type F)

* The FM waveform of Variation 2 applies frequency modulation using a logarithmic scale. Operating the COLOR knob will change the pitch.
* The FM waveform for Variations 3 and 4 applies frequency modulation using a linear scale. Operating the COLOR knob will not change the pitch.

*1 FM 2 operator (Variation 3)

Variation 3	1	2	Explanation
	SIN	SIN	
FM 2 operator (FM 1: 1)	1	1	Uses harmonic overtones to produce a waveform similar to a sawtooth wave.
FM 2 operator (FM 1: 1.5)	1	1.5	Allows you to obtain a harmonic at -1 octave.
FM 2 operator (FM 1: 2)	1	2	Uses odd-numbered harmonics to produce a waveform similar to a square wave.
FM 2 operator (FM 1: 3.5)	1	3.5	Produces bell-like sounds.
FM 2 operator (FM 1: 15)	1	15	Using ENV to adjust the COLOR parameter produces the attack sound of an electric piano.
FM 2 operator (FM 6: 1)	6	1	Using ENV to adjust the COLOR parameter produces a sound similar to electric guitar feedback.

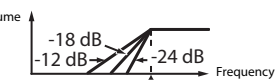
*2 FM 5 operator(Variation 4)



Variation 4	1	2	3	4	5	Explanation
	SIN	TRI	SIN	TRI	SIN	
FM 5 operator (FM Type A)	1	4	11	4	15	Produce a tone generated by harmonic overtones that differ for each type.
FM 5 operator (FM Type B)	1	1	9	4	9	
FM 5 operator (FM Type C)	1	2	9	4	9	
FM 5 operator (FM Type D)	1	1	11	3.5	11	Produce a tone generated by inharmonic overtones that differ for each type.
FM 5 operator (FM Type E)	1	3	11	3.5	11	
FM 5 operator (FM Type F)	1	1	1	40	1	Produces a tone with formant characteristics.

FILTER Variation (VARIATION) and Type (TYPE)

Variation	Explanation	Behavior of the [CUTOFF] knob
LPF/HPF (Variation 1)	Low pass filter (LPF), High pass filter (HPF)	Cutoff
SBF (Variation 2)	Side band filter (SBF)	Band Interval
SYSTEM-1 (Variation 3)	This is a SYSTEM-1 type low pass filter (LPF).	Cutoff
JUPITER-8 (Variation 4)	The JUPITER-8's HPF and VCF (LPF)	Cutoff
JUNO-106 (Variation 5)	The JUNO-106's HPF and VCF (LPF)	Cutoff
FORMANT 2 (Variation 6)	Formant filter (morphing between two formants)	Formant
FORMANT 3 (Variation 7)	Formant filter (morphing between three formants)	Formant
HARMONICS (Variation 8)	Filter that uses a feedback delay to vary the overtones * The HPF CUTOFF knob operates as the LPF/HPF knob.	Harmonics

Parameter	Value	Explanation
TYPE	(Variation 1) LPF-24dB, LPF-18dB, LPF-12dB, HPF-12dB, HPF-18dB, HPF-24dB	Low pass filter (LPF), High pass filter (HPF) Selects the slope of the filter. LPF: -24dB, -18dB, -12dB  HPF: -12dB, -18dB, -24dB 
	(Variation 2) SBF1–SBF6	Side band filter (SBF) You can use the [CUTOFF] knob to adjust the band interval. You can also use the filter type knob to select the range of the band interval. **SBF1**–**3**: Low range, Mid range, High range with original sound **SBF4**–**6**: High range, Mid range, Low range without original sound You can use the resonance knob to adjust the band width.
	(Variation 3) LPF-24dB, LPF-18dB, LPF-12dB	This is a SYSTEM-1 type low pass filter (LPF) Selects the slope of the filter. Although the knob moves through six steps, this setting has three values. Even if you move the knob to the fourth or subsequent step, the value is LPF-12 dB.
	(Variation 4) LPF-24dB, LPF-18dB, LPF-12dB	The JUPITER-8's HPF and VCF (LPF) Selects the slope of the filter. Although the knob moves through six steps, this setting has three values. Even if you move the knob to the fourth or subsequent step, the value is LPF-12 dB.
	(Variation 5) LPF-24dB, LPF-18dB, LPF-12dB	The JUNO-106's HPF and VCF (LPF) Selects the slope of the filter. Although the knob moves through six steps, this setting has three values. Even if you move the knob to the fourth or subsequent step, the value is LPF-12 dB.
	(Variation 6) u-a, u-e, u-i, o-a, o-e, o-i	Formant filter (morphing between two formants) Selects the combination of formants.
	(Variation 7) u-i-a, u-e-a, u-i-e, o-i-a, o-e-a, o-i-e	Formant filter (morphing between three formants) Selects the combination of formants.
	(Variation 8) 64FEET, 32FEET, 16FEET, 8FEET, 4FEET, 2FEET	Filter that uses a feedback delay to vary the overtones Selects the length of the delay. This is typically set to the same octave (feet) as OSC1 or OSC2. You can additionally modify the FEET setting of HARM to select the desired effect.

PORTAMENTO / PITCH BEND / MODULATION

PORTAMENTO	Adjusts the time over which pitch change occurs when portamento is applied.
LEGATO	Applies portamento only when you play legato (i.e., when you press the next key before releasing the previous key).
BEND RANGE	Specifies the amount of pitch bend range.
BEND GAIN	Specifies a multiplier for the BEND RANGE, extending the range of change.
BEND SENS PITCH	Specifies the amount of the pitch change produced by pitch bend operations.
BEND SENS FILTER	Specifies the amount of the filter change produced by pitch bend operations.
MOD SENS PITCH	Specifies the amount of the pitch change produced by modulation operations.
MOD SENS FILTER	Specifies the amount of the filter change produced by modulation operations.

TEMPO / ASSIGN MODE

TEMPO SYNC		The modulation speed (RATE) of the LFO section and the delay time (TIME) of the EFFECTS section are synchronized to the tempo.
KEY ASSIGN	UNISON	Multiple notes are sounded together as a single note (Unison).
	MONO	The instrument plays monophonically (Mono).
	POLY	The instrument plays polyphonically (Poly).

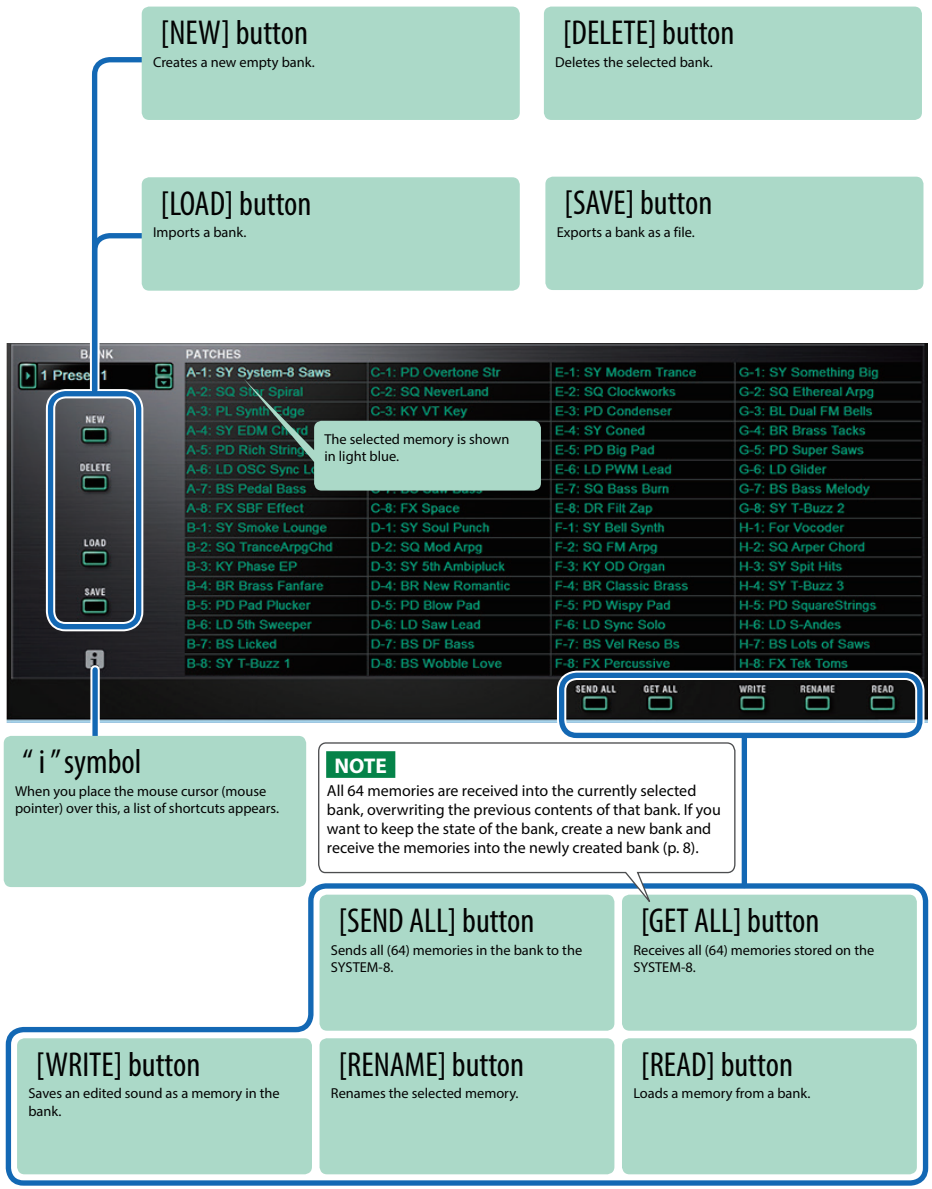
ARPEGGIO

ARPEGGIO	Turns the arpeggio function on/off.
ARP TYPE	Selects the arpeggio type.
ARP STEP	Selects the note value for each step of the arpeggio.
KEY HOLD	Turns the key hold function on/off.
OCTAVE	Shifts the pitch range of the keyboard in one-octave units.

Memory and Bank

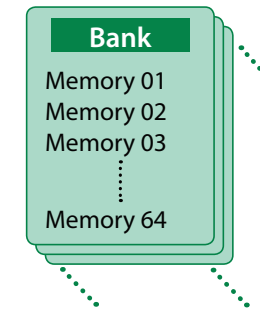
1. Click the [PATCH] button.

The Patch Select window opens.



Bank

A set of 64 memories is called a "bank." By switching banks you can access a large number of memories.
A bank of memories can be saved as a file.



Changing to Other Bank

1. Click the Bank field.

The bank list window opens.

2. Click the bank that you want to recall.

By pressing the [▲] [▼] buttons located at the right of the bank field, you can switch to the next or previous bank.

Exporting the Bank

Here's how to export a bank as a file.

1. Click the [SAVE] button.

The file name input window opens.

2. Enter a file name and save.

The file is exported.

Importing a Bank

1. Click the [LOAD] button.

The file selection window opens.

2. Select a file and load it.

The bank is loaded.

Creating/Deleting a Bank

Creating a bank

Click the [NEW] button to create a new empty bank.

Deleting a bank

Here's how to delete the selected bank.

1. **Select a bank as described in "Changing to Other Bank" (p. 7).**
2. **Click the [DELETE] button.**
   A confirmation screen appears.
3. **Click [OK] to delete the bank.**

Renaming a Bank

1. **Select a bank as described in "Changing to Other Bank" (p. 7).**
2. **At the left of the bank field, click ►.**
3. **Edit the name and press the [Return (Enter)] key.**

Memory

The SYSTEM-8 Software Synthesizer manages 64 memories as one bank.

Loading a Memory

Here's how to load a memory from a bank. When you load a memory, its settings appear in the edit area and can be edited.

1. **Click the number of the memory that you want to load.**
2. **Click the [READ] button. Or press the [Return (Enter)] key.**
   The memory is loaded.
   * You can also load a memory by double-clicking a memory number.

Saving the Memory

Here's how to save an edited sound as a memory in the bank.

1. **Click the number of the memory in which you want to save the sound.**
2. **Click the [WRITE] button.**
   The memory is saved in the bank.

Renaming the Memory

1. **Click the number of the memory that you want to rename.**
2. **Click the [RENAME] button.**
3. **Change the memory name. (Up to 16 letters)**

Changing the Order of the Memories

Drag the memory number to change the order of memories.

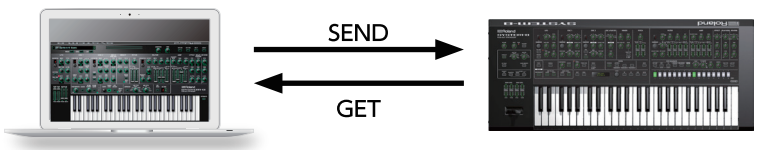
Playing with the SYSTEM-8

Memories that you edit using the SYSTEM-8 Software Synthesizer can be sent (SEND) to the SYSTEM-8 and played.

You can also receive (GET) memories from the unit into the SYSTEM-8 Software Synthesizer and edit them.

The "SYSTEM-8 CTRL" shown as a MIDI port is the port used by the SYSTEM-8 Software Synthesizer.

Do not use this port from your DAW.



Send Memories

Sending One Memory

Here's how to send the memory in the SYSTEM-8 Software Synthesizer to the SYSTEM-8.

1. On the SYSTEM-8, turn the MODEL [SYSTEM-8] button on.

The SYSTEM-8 is in SYSTEM-8 mode.

2. Click the [SEND] button.

The memory is sent.

Sending All Memories

Here's how to send all (64) memories in the bank to the SYSTEM-8.

NOTE

The 64 memories are transmitted in a single operation. If the SYSTEM-8 contains any memories that you want to keep, use the "Get Memories" (p. 9) procedure to receive these memories into the computer and save them before you continue.

1. As described in "Changing to Other Bank" (p. 7), select the bank that contains the memories that you want to send.

2. Click the [SEND ALL] button.

The 64 memories are sent.

Get Memories

Here's how to receive memories from the SYSTEM-8 into the SYSTEM-8 Software Synthesizer.

Receiving One Memory

Here's how the memory that's recalled (being edited) on the SYSTEM-8 can be received into the SYSTEM-8 Software Synthesizer.

1. On the SYSTEM-8, press the MODEL [SYSTEM-8] button.

The SYSTEM-8 is in SYSTEM-8 mode.

2. Click the [GET] button.

The memory is received.

Receiving All Memories

Here's how all (64) memories stored on the SYSTEM-8 can be received.

NOTE

All 64 memories are received into the currently selected bank, overwriting the previous contents of that bank. If you want to keep the state of the bank, create a new bank and receive the memories into the newly created bank (p. 8).

1. Specify the bank that will receive the memories.

* If you want to create a new bank to receive the memories, press the [NEW] button. If you want to receive the memories into a specific existing bank, specify the bank as described in "Changing to Other Bank" (p. 7).

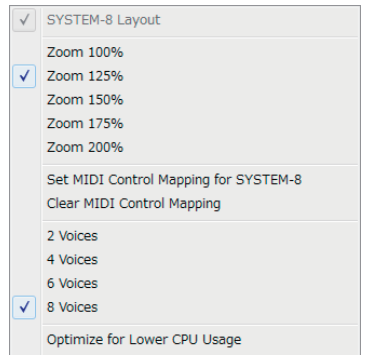
2. Click the [GET ALL] button.

The 64 memories are received.

Settings

Option

1. Click the [OPTION] button.



2. Select items.

A ✓ is shown for the selected item.

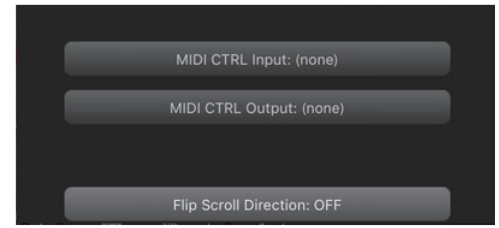
Item	Explanation
SYSTEM-8 Layout	Changes the layout of the controllers in the main window. **SYSTEM-8 Layout:** The controllers are laid out as they are on the SYSTEM-8.
Zoom	Changes the size of the main window.
Set MIDI Control Mapping for SYSTEM-8	Set MIDI control change mapping to use the SYSTEM-8 as a control surface.
Clear MIDI Control Mapping	Clears all MIDI control change mapping.
2–8Voices	Specifies the maximum simultaneous polyphony. You can reduce the load on the CPU by lowering the polyphony.
Optimize for Lower CPU Usage	Turn this ON if CPU usage is high, and clicks or pops occur.
Roland Cloud...	Displays the Roland Cloud site.
Authentication...	Performs user authentication for the SYSTEM-8 Software Synthesizer.

Setting

1. Click the [SETTING] button.

The Setting window opens.

* Flip Scroll Direction is only on Mac.



2. Edit the parameters.

Parameter	Explanation
MIDI CTRL Input	Choose "SYSTEM-8 CTRL".
MIDI CTRL Output	
Flip Scroll Direction (Only on Mac)	Inverts the direction of rotation when using the mouse wheel to edit a value.

* If multiple instances of the SYSTEM-8 Software Synthesizer are running, these settings apply to all instances.

Others

If you want to use the SYSTEM-8 to play the SYSTEM-8 Software Synthesizer (plug-in) in your DAW, set the SYSTEM-8's menu item "SYSTEM" → "SOUND" → "Local Sw" to "SURFACE."

The internal sound engine of the SYSTEM-8 no longer produces sound; only the SYSTEM-8 Software Synthesizer can produce sound.

For detailes, refer to SYSTEM-8 Reference Manual.