Roland™

Supplemental Note

Selecting Internal and SRX-Series Sounds Via MIDI

Roland's acclaimed SRX-Series sound expansion boards add additional high-quality sounds to a Roland synthesizer's excellent built-in sound libray. You can install SRX boards in the entire Fantom-X family of products—the Fantom X6, X7, X8, Fantom XR and Fantom Xa synths—as well as the Fantom-S, the Fantom, the XV-88, and Roland's XV-5050, XV-2020, XV-5080, XV-3080, MC-909 and Juno-G.

You can select SRX sounds from a synth's front panel or via MIDI messages, which has a few advantages. First, you can be sure that your synth will always play the sounds you want because your sequencer (or an external MIDI controller's performance) will remember which ones they are. With a synth module, MIDI also allows you to select sounds even when the synth is mounted out of reach in a rack.

Throughout this document, you'll come across information that's labeled with one of the following symbols.

A note is something that adds information about the topic at hand.

A tip offers suggestions for using the feature being discussed.

SRX Sounds and MIDI Messages

Roland has permanently assigned MIDI Bank Select and Program Change messages to each SRX expansion board patch and rhythm set. This new system simplifies MIDI sound-selection, especially when you use someone else's synth. (Of course, they'll still need to have the required SRX expansion boards installed.) When you send Bank Select and Program Change messages to any of your Roland synth's parts, the corresponding sound or rhythm set is selected. Expansion-board sounds are properly found and selected no matter where your expansion boards are installed.

Each part responds to MIDI data on a specific MIDI channel. See the synth's documentation to learn more about parts.

In Performance mode, a synth has 16 parts. In Patch mode, it has one or two—again, see your synth's documentation for details.

This document provides an overview of how Bank Select and Program Change messages work, and lists the MIDI messages that select each SRX patch and rhythm set.

The Roland XV-88, XV-5080, XV-3080 and the original Fantom can also use SR-JV80-Series sound expansion boards. To learn about the selection of SR-JV80 sounds via MIDI, see the Supplemental Note (SN) 131, "Selecting Internal and SR-JV80 Sounds Via MIDI."

Bank Select and Program Change Messages

The sounds in an Roland synth are organized into "banks." Each bank can contain up to 128 sounds. Before you can select an individual sound via MIDI, you have to select its bank.

Banks are selected using two MIDI Control Change messages:

- The MSB (for "Most Significant Byte") Bank Select message signifies the type of bank you want to select. An MSB value of 93 selects an SRX patch bank. An MSB value of 92 selects an SRX rhythm set bank. Some external sequencers and controllers show MSB Bank Select values by name, while others show them as CC00 values. "CC00" stands for "Control Change Number 00."

- Once the synth knows the type of bank you want, you can select the bank using the LSB ("Least Significant Byte") Bank Select message. Each bank has been assigned its own LSB value. Some sequencers and controllers show LSB Bank Select values as CC32 values.

The charts in this document list the bank to which each SRX patch and rhythm set belongs.

Each patch and rhythm kit has its own Program Change number, from 1-128. Once you've selected the desired bank, you select a patch or rhythm kit by sending the part its Program Change value. Some sequencers and controllers abbreviate "Program Change" as "PC."

Bank Select and Program Change messages must always be sent to a part in a specific order:

1. The Bank Select MSB value tells the part the type of bank you want.
2. The Bank Select LSB value selects the individual bank to which the desired sound belongs.
3. The Program Change value selects the patch or rhythm kit itself.

If a part is already using a sound from the bank that contains the sound you want to select, you can save time by using the new sound's Program Change value without any Bank Select messages.

Leave some blank space—one measure is usually enough—at the beginning of your song so the synth will have time to call up the desired patches and rhythm kits before the music actually begins.

Learning a Patch's Program Change Value

User patches, General MIDI 2 (GM2) and SRX patches are presented in numerical lists that can run into the hundreds of patches.

Patches 1-128 in such a list use Program Change values 1-128, respectively. Here's how to calculate the Program Change value for the remaining patches in the list. For:

- *Patches 129-256*—subtract 128 from the patch's number.
- *Patches 257-384*—subtract 256 from the patch's number.
- *Patches 385-512*—subtract 384 from the patch's number.

For example, to select SRX-03 Patch 017 ChorusLA, you'd use:

Message	Value
Bank Select MSB/CC00	93
Bank Select LSB/CC32	2
Program Change/PC	17

To select Patch 271 Full Brass on SRX-06, you'd use:

Message	Value
Bank Select MSB/CC00	93
Bank Select LSB/CC32	9
Program Change/PC	15

How Sequencers Select Sounds

Some sequencers—including those built into the Fantom-X and Fantom-S synths—offer patch lists that let you to select sounds without having to be concerned with Bank Select and Program Changes messages at all—the patch lists themselves make sure that the proper MIDI messages get sent to the parts. If you use an external sequencer that supports patch lists, configure it for use with your synth, so you'll be able to select patches and rhythm kits by name right from the sequencer.

If an external sequencer doesn't use patch lists, you can select sounds by manually placing the necessary Bank Select and Program Change messages at the desired time location(s) on the sequencer's tracks. When the sequencer plays back the messages, the messages will be sent and the desired patch or rhythm kit will be selected. The charts in the remaining sections of this document list the required messages for each SRX patch and rhythm set.

Certain external sequencers select banks by combining the MSB and LSB into one single MIDI Bank Select message. They do so using the equation (MSB x 128) + LSB. The last column in the charts in this document lists these values for you. Check your external sequencer's documentation to learn if it uses a combined MIDI Bank Select message.

> A sequencer will either use standard Bank Select messages or a MIDI Bank Select value—it will not use both.

Selecting Internal Sounds Via MIDI

At the end of this document, you'll find charts of the MIDI messages that select internal patches and rhythm sets in the:

- Fantom X6, X7, X8, XR
- Fantom-S
- XV-2020
- Juno-G
- Fantom-Xa
- XV-5050
- MC-909

> Click a product name in the above list to jump to its chart in the Appendices.

> See the Appendices of Supplemental Note (SN) 131 for the MIDI messages that select sounds in the XV-5080, XV-3080, XV-88 and Fantom.

Selecting SRX-Series Patches Via MIDI

To select patches on installed SRX-Series expansion boards, send the following MIDI messages:

Exp. Board	Patch	MSB	LSB	PC	MIDI Bank Select
SRX-01	1-41	93	0	1-41	11904
SRX-02	1-50	93	1	1-50	11905
SRX-03	1-128	93	2	1-128	11906
SRX-04	1-128	93	3	1-128	11907
SRX-05	1-128	93	4	1-128	11908
SRX-05	129-256	93	5	1-128	11909
SRX-05	257-312	93	6	1-56	11910
SRX-06	1-128	93	7	1-128	11911
SRX-06	129-256	93	8	1-128	11912
SRX-06	257-384	93	9	1-128	11913
SRX-06	385-449	93	10	1-65	11914
SRX-07	1-128	93	11	1-128	11915
SRX-07	129-256	93	12	1-128	11916
SRX-07	257-384	93	13	1-128	11917
SRX-07	385-475	93	14	1-91	11918
SRX-08	1-128	93	15	1-128	11919
SRX-08	129-256	93	16	1-128	11920
SRX-08	257-384	93	17	1-128	11921
SRX-08	385-448	93	18	1-64	11922
SRX-09	1-128	93	19	1-128	11923
SRX-09	129-256	93	20	1-128	11924
SRX-09	257-384	93	21	1-128	11925
SRX-09	385-414	93	22	1-30	11926
SRX-10	1-100	93	23	1-100	11927
SRX-11	1-42	93	24	1-42	11928
SRX-12	1-105	93	26	1-105	11930
SRX-97	1-12	93	97	1-12	12001
SRX-98	1-78	93	98	1-78	12002

Selecting SRX-Series Rhythm Sets Via MIDI

To select rhythm sets on installed SRX-Series expansion boards that contain rhythm sets, send the following MIDI messages:

Exp. Board	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
SRX-01	1-79	92	0	1-79	11776
SRX-03	1-12	92	2	1-12	11778
SRX-05	1-34	92	4	1-34	11780
SRX-06	1-5	92	7	1-5	11783
SRX-07	1-11	92	11	1-11	11787
SRX-08	1-21	92	15	1-21	11791
SRX-09	1-12	92	19	1-12	11795

Not all SRX expansion boards contain rhythm sets. Those that do are listed in the table above.

Selecting Fantom-X Internal Sounds Via MIDI

The following chart applies to the Fantom X: the X6, X7, X8, and XR synths.

The following chart applies to the Fantom-X: the X6, X7, X8, and XR synths.

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1-128	87	00	1-128	11136
User	129-256	87	01	1-128	11137
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201
Preset C	1-128	87	66	1-128	11202
Preset D	1-128	87	67	1-128	11203
Preset E	1-128	87	68	1-128	11204
Preset F	1-128	87	69	1-128	11205
Preset G	1-128	87	70	1-128	11206
Preset H	1-128	87	71	1-128	11207
Preset I*	1-128	87	72	1-128	11208
Card	1-128	87	32	1-128	11168
Card	129-256	87	33	1-128	11169

*Fantom-X Version 2

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-32	86	00	1-32	11008
Preset	1-40	86	64	1-40	11072
Card	1-32	86	32	1-32	11040

Selecting Fantom-Xa Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1-128	87	00	1-128	11136
User	129-256	87	01	1-128	11137
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201
Preset C	1-128	87	66	1-128	11202
Preset D	1-128	87	67	1-128	11203
Preset E	1-128	87	68	1-128	11204
Preset F	1-128	87	69	1-128	11205
Card	1-128	87	32	1-128	11168
Card	129-256	87	33	1-128	11169

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-32	86	00	1-32	11008
Preset	1-36	86	64	1-36	11072
Card	1-32	86	32	1-32	11040

Selecting Fantom-S Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1-128	87	00	1-128	11136
User	129-256	87	01	1-128	11137
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201
Preset C	1-128	87	66	1-128	11202
Preset D	1-128	87	67	1-128	11203
Preset E	1-128	87	68	1-128	11204
Card	1-128	87	32	1-128	11168
Card	129-256	87	33	1-128	11169

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-32	86	00	1-32	11008
Preset	1-32	86	64	1-32	11072
Card	1-32	86	32	1-32	11040

Selecting XV-5050 Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1-128	87	00	1-128	11136
User	129-256	87	01	1-128	11137
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201
Preset C	1-128	87	66	1-128	11202
Preset D	1-128	87	67	1-128	11203
Preset E	1-128	87	68	1-128	11204
Preset F	1-128	87	69	1-128	11205
Preset G	1-128	87	70	1-128	11206
Preset H	1-128	87	71	1-128	11207
Card	1-128	87	32	1-128	11168
Card	129-256	87	33	1-128	11169

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-4	86	00	1-4	11008
Preset A	1, 2	86	64	1, 2	11072
Preset B	1, 2	86	65	1, 2	11073
Preset C	1, 2	86	66	1, 2	11074
Preset D	1, 2	86	67	1, 2	11075
Preset E	1, 2	86	68	1, 2	11076
Preset F	1, 2	86	69	1, 2	11077
Preset G	1, 2	86	70	1, 2	11078
Preset H	1, 2	86	71	1, 2	11079

Selecting XV-2020 Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1-128	87	00	1-128	11136
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201
Preset C	1-128	87	66	1-128	11202
Preset D	1-128	87	67	1-128	11203

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-4	86	00	1-4	11008
Preset A	1-4	86	64	1-4	11072
Preset B	1-4	86	65	1-4	11073

Appendix-F

Selecting MC-909 Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User A	1-128	81	00	1-128	10368
User B	129-256	81	01	1-128	10369
Preset A	1-128	81	64	1-128	10432
Preset B	1-128	81	65	1-128	10433
Preset C	1-128	81	66	1-128	10434
Preset D	1-128	81	67	1-128	10435
Preset E	1-128	81	68	1-128	10436
Preset F	1-128	81	69	1-128	10437
Preset G	1-32	81	70	1-32	10438

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-128	82	00	1-128	10496
Preset A	1-72	82	64	1-72	10560

Appendix-G

Selecting Juno-G Internal Sounds Via MIDI

Patches

Patch Type	Patch	MSB	LSB	PC	MIDI Bank Select
User A	1-128	87	00	1-128	11136
User B	129-256	87	01	1-128	11137
Preset A	1-128	87	64	1-128	11200
Preset B	1-128	87	65	1-128	11201

Rhythm Sets

Kit Type	Rhythm Set	MSB	LSB	PC	MIDI Bank Select
User	1-32	86	00	1-32	11008
Preset	1-36	86	64	1-36	11072

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