Supplemental Notes

Selecting XV Series Sounds Via MIDI

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Introduction

Roland's XV-88, XV-5080 and XV-3080 are the first XV Series synthesizers. This amazing new generation of instruments introduces lots of great new features, including 128-voice polyphony, new effects, new expansion options, new modulators, and world of new sounds!

You can select sounds on an XV-Series synth from its front panel or via MIDI messages sent from a sequencer or MIDI controller. MIDI sound-selection has a couple of advantages. First, you can be sure that your XV will always play the sounds you want because your sequence or MIDI controller performance will remember which ones they are. Second, MIDI allows you to select sounds regardless of how close you actually are to your XV synth—this is especially handy if you own an XV-5080 or XV-3080 that's mounted in a rack somewhere out of reach.

Roland has permanently assigned MIDI Bank Select and Program Change messages to each XV-compatible patch and rhythm set. This new system simplifies MIDI sound-selection, especially when you use someone else's XV synth—though they'll still need to have the required SR-JV80 or SRX Series expansion boards installed. When you send Bank Select and Program Change messages to any of the XV synth's 16 parts, the XV always selects the corresponding sound or rhythm set. Expansion-board sounds are properly found and selected no matter where your expansion boards are installed.

Each part responds to MIDI data received on a specific MIDI channel. See your XV's documentation to learn more about parts.

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

Before We Get Started...

Throughout this document, special information is signified by symbols located to their left. Each symbol signifies a particular type of important information that you won't want to miss.

Notes provide information relating to the topic under discussion.

Tips offer suggestions for using the feature being discussed.

Warnings contain important information that can help you avoid possible damage to your equipment or yourself.

I.	**Bank Select and Program Change Messages**

The many sounds in an XV-Series 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. For example, an MSB value of 87 tells the XV that you want to choose an internal patch bank. A value of 88 selects a rhythm set bank on an SR-JV80 Series of expansion board, 93 a patch bank on an SRX Series expansion board, and so on. Some 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 XV 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.

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 XV its Program Change value. Some sequencers and controllers abbreviate "Program Change" as "PC."

Bank Select and Program Change messages must always be sent in the proper order:

1. The Bank Select MSB value tells the XV the type of bank you want.
2. The Bank Select LSB value selects the bank.
3. The Program Change value selects the patch or rhythm kit itself.

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

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

Here are some examples that show how to select sounds via MIDI.

To select the patch PR-A: 040 Claviduck, you'd send:

Message	*Value*
Bank Select MSB/CC00	87
Bank Select LSB/CC32	64
Program Change/PC	40

To select PR-C: 021 Arasian Morn, you'd send:

Message	*Value*
Bank Select MSB/CC00	87
Bank Select LSB/CC32	66
Program Change/PC	21

Bank Select and Program Change Messages (Cont)

How Sequencers Select Sounds

Some sequencers may offer patch lists that let you to select XV 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. If you use one of these sequencers, configure it for use with your XV Series synth. Once you do, you'll be able to select XV patches and rhythm kits by name right from the sequencer.

If your sequencer doesn't use patch lists, you can select sounds on your XV 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 XV patch or rhythm kit will be selected. The charts in the remaining sections of this document list the required messages for each XV patch and rhythm set.

Certain 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 sequencer's documentation to learn if its 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.

II.   Selecting XV Patches Via MIDI

The following chart lists the MIDI messages to use when you want to select internal 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
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
Card A	1-128	87	32	1-128	11168
Card B	1-128	87	33	1-128	11169
Card C	1-128	87	34	1-128	11170
Card D	1-128	87	35	1-128	11171
Card E	1-128	87	36	1-128	11172
Card F	1-128	87	37	1-128	11173
Card G	1-128	87	38	1-128	11174
Card H	1-128	87	39	1-128	11175

XV-5080 only

Selecting XV Patches Via MIDI (Cont)

To select patches on installed SR-JV80 Series expansion boards, send the following MIDI messages:

Exp. Board	Patch	MSB	LSB	PC	MIDI Bank Select
SR-JV80-01	1-128	89	0	1-128	11392
SR-JV80-01	129-145	89	1	1-17	11393
SR-JV80-02	1-128	89	2	1-128	11394
SR-JV80-02	129-255	89	3	1-127	11395
SR-JV80-03	1-111	89	4	1-111	11396
SR-JV80-03	n/a	89	5	n/a	11397
SR-JV80-04	1-128	89	6	1-128	11398
SR-JV80-04	129-255	89	7	1-127	11399
SR-JV80-05	1-128	89	8	1-128	11400
SR-JV80-05	129-255	89	9	1-127	11401
SR-JV80-06	1-128	89	10	1-128	11402
SR-JV80-06	129-255	89	11	1-127	11403
SR-JV80-07	1-128	89	12	1-128	11404
SR-JV80-07	129-255	89	13	1-127	11405
SR-JV80-08	1-128	89	14	1-128	11406
SR-JV80-08	129-255	89	15	1-127	11407
SR-JV80-09	1-128	89	16	1-128	11408
SR-JV80-09	129-255	89	17	1-127	11409
SR-JV80-10	1-128	89	18	1-128	11410
SR-JV80-10	129-204	89	19	1-76	11411
SR-JV80-11	1-128	89	20	1-128	11412
SR-JV80-11	129-256	89	21	1-128	11413
SR-JV80-12	1-128	89	22	1-128	11414
SR-JV80-12	129-256	89	23	1-128	11415
SR-JV80-13	1-128	89	24	1-128	11416
SR-JV80-13	129-131	89	25	1-3	11417
SR-JV80-14	1-128	89	26	1-128	11418
SR-JV80-14	129-256	89	27	1-128	11419
SR-JV80-15	1-128	89	28	1-128	11420
SR-JV80-15	129-256	89	29	1-128	11421
SR-JV80-16	1-128	89	30	1-128	11422
SR-JV80-16	129-256	89	31	1-128	11423
SR-JV80-17	1-128	89	32	1-128	11424
SR-JV80-17	129-256	89	33	1-128	11425
SR-JV80-18	1-128	89	34	1-128	11426
SR-JV80-18	129-256	89	35	1-128	11427
SR-JV80-19	1-128	89	36	1-128	11428
SR-JV80-19	129-256	89	37	1-128	11429

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

III.   Selecting XV Rhythm Kits Via MIDI

On the XV-Series synths, any part can use either a patch or a rhythm set.

The following chart lists the MIDI messages to use when you want to select internal rhythm kits.

Kit Type	Patch	MSB	LSB	PC	MIDI Bank Select
User	1, 2, 3, 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*	1-128	86	70	1, 2	11078
Card A	1-128	86	32	1-128	11040
Card B	1-128	86	33	1-128	11041
Card C	1-128	86	34	1-128	11042
Card D	1-128	86	35	1-128	11043
Card E	1-128	86	36	1-128	11044
Card F	1-128	86	37	1-128	11045
Card G	1-128	86	38	1-128	11046
Card H	1-128	86	39	1-128	11047

*XV-5080 only

To select rhythm kits on installed SR-JV80 Series expansion boards, send the following MIDI messages:

Exp. Board	Patch	MSB	LSB	PC	MIDI Bank Select
SR-JV80-01	n/a	88	0	n/a	11264
SR-JV80-01	n/a	88	1	n/a	11265
SR-JV80-02	n/a	88	2	n/a	11266
SR-JV80-02	n/a	88	3	n/a	11267
SR-JV80-03	n/a	88	4	n/a	11268
SR-JV80-03	n/a	88	5	n/a	11269
SR-JV80-04	n/a	88	6	n/a	11270
SR-JV80-04	n/a	88	7	n/a	11271
SR-JV80-05	1	88	8	1	11272
SR-JV80-05	n/a	88	9	n/a	11273
SR-JV80-06	1-8	88	10	1-8	11274
SR-JV80-06	n/a	88	11	n/a	11275
SR-JV80-07	1-8	88	12	1-8	11276
SR-JV80-07	n/a	88	13	n/a	11277
SR-JV80-08	n/a	88	14	n/a	11278
SR-JV80-08	n/a	88	15	n/a	11279
SR-JV80-09	1-8	88	16	1-8	11280
SR-JV80-09	n/a	88	17	n/a	11281
SR-JV80-10	1-8	88	18	1-8	11282
SR-JV80-10	n/a	88	19	n/a	11283
SR-JV80-11	1-8	88	20	1-8	11284
SR-JV80-11	n/a	88	21	n/a	11285

Selecting XV Rhythm Kits Via MIDI (Cont)

(SRV-J80 Rhythm Kits, cont)

Exp. Board	Patch	MSB	LSB	PC	MIDI Bank Select
SR-JV80-12	1-8	88	22	1-8	11286
SR-JV80-12	n/a	88	23	n/a	11287
SR-JV80-13	n/a	88	24	n/a	11288
SR-JV80-13	n/a	88	25	n/a	11289
SR-JV80-14	1-8	88	26	1-8	11290
SR-JV80-14	n/a	88	27	n/a	11291
SR-JV80-15	1-8	88	28	1-8	11292
SR-JV80-15	n/a	88	29	n/a	11293
SR-JV80-16	1-2	88	30	1-2	11294
SR-JV80-16	n/a	88	31	n/a	11295
SR-JV80-17	1-8	88	32	1-8	11296
SR-JV80-17	n/a	88	33	n/a	11297
SR-JV80-18	1-8	88	34	1-8	11298
SR-JV80-18	n/a	88	35	n/a	11299

To select rhythm kits on installed SRX Series expansion boards, send the following MIDI messages:

Exp. Board	Patch	MSB	LSB	PC	MIDI Bank Select
SRX-01	1-79	92	0	1-79	11776
SRX-02	n/a	92	1	n/a	11777
SRX-03	1-12	92	2	1-12	11778
SRX-04	n/a	92	3	n/a	11779
SRX-05	1-34	92	4	1-34	11800

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