

# Clavinova®

**MIDI** Reference

**CLP-725** 

# **Table of Contents**

| MIDI Functions                          |    |
|---|----|
| MIDI Transmit/Receive Channel Selection |    |
| Local Control ON/OFF                    |    |
| Program Change ON/OFF                   |    |
| Control Change ON/OFF                   |    |
| Changing Song Playback Channels         |    |
| MIDI Data Format                        | 2  |
| MIDI Implementation Chart               | 10 |

# **MIDI Functions**

When this instrument and a computer are connected with a USB cable, MIDI communication can be performed. The explanations here cover the settings necessary for performing MIDI communication between both devices. NOTE |

For instructions on how to connect this instrument to the computer, refer to the "Computer-related Operations" downloadable from the Yamaha Downloads website.

# **MIDI Transmit/Receive Channel Selection**

In order to perform MIDI communication between this instrument and a computer, it is necessary to match the corresponding MIDI transmit and receive channels. By setting the MIDI transmit channels on this instrument, the setting of the keyboard or pedal performance or the program change can be transmitted over the channel number corresponding to a specified channel on the computer. By properly setting the MIDI receive channels on this instrument, only data of the specified channel will be played back in the MIDI data received from the computer.

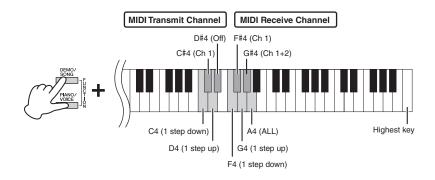
## **Setting the MIDI Transmit Channel**

While holding down [DEMO/SONG] and [PIANO/VOICE], press the C4 – D#4keys. Default setting: Ch 1 Setting range: Ch 1 - 16, off

## **Setting the MIDI Receive Channel**

While holding down [DEMO/SONG] and [PIANO/VOICE], press the F4 – A4 keys. Default setting: ALL

Setting range: Ch 1 - 16, 1+2, ALL



#### **MIDI** transmission channels in Dual

Voice 1 data is transmitted on the channel set up here. Voice 2 data is transmitted on the next greater channel number relative to the specified channel.

### MIDI receive channel = ALL:

This allows simultaneous reception of different parts on all 16 MIDI channels. When SMF Song data is played back on a computer with the Voice of this instrument, this setting is selected. However, when a Voice not available on the instrument is specified, the playback sound may not be suitable.

#### MIDI receive channel = 1+2:

This allows simultaneous reception on channels 1 and 2 only. When SMF Song data is played back on a computer, this setting is selected for playing back only data of channels 1 - 2 on this

#### NOTE I

Panel settings (Voices, etc.) of this instrument will not be affected by MIDI messages received from a computer.

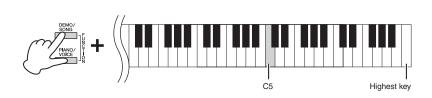
Data for the Demo Songs and Preset Songs cannot be transmitted via MIDI.

# **Local Control ON/OFF**

"Local Control" refers to the fact that, normally, the keyboard of the instrument controls its internal tone generator, allowing the internal voices to be played directly from the keyboard. This situation is "Local Control On," since the internal tone generator is controlled locally by its own keyboard. Local Control can be turned off as desired, so that the keyboard of the instrument does not play the internal voices.

While holding down [DEMO/SONG] and [PIANO/VOICE], press the C5 key. Pressing the C5 key repeatedly toggles between Local Control On and Off.

Default setting: ON



# **Program Change ON/OFF**

The information related to Voice changes is called "program change" in MIDI. Sending and receiving program change messages can be enabled or disabled as desired on this instrument. For example, if the relevant transmit and receive parameters are set to ON, Voice change information in this instrument can be transmitted to or received from a computer. (However, the Voice as played from the keyboard is maintained and does not change.)

While holding down [DEMO/SONG] and [PIANO/VOICE], press the C#5 key. Pressing the C#5 key repeatedly toggles between Local Control On and Off.

### NOTE I

For information on program change numbers for each of the Voices of the instrument, refer to page 4.

Default setting: ON

# Control Change ON/OFF

Information related to non-note expressive changes, such as the use of a sustain pedal, is called "control change" in MIDI. Sending and receiving control change messages can be enabled or disabled as desired on this instrument. For example, if the relevant transmit and receive parameters are set to ON, pedal performance information on this instrument can be transmitted to or received from a computer. (However, the performance of pedals and other controls as played from the instrument is maintained and does not change.)

While holding down [DEMO/SONG] and [PIANO/VOICE], press the D5 key. Pressing the D5 key repeatedly toggles between Local Control On and Off.



For information on control changes that can be used with the instrument, refer to page 5.

Default setting: ON

# **Changing Song Playback Channels**

Try this operation when playback of Songs loaded from the computer produces an unexpected or unnatural sound.

## To set Song Playback Channels to "1+2":

While holding down [DEMO/SONG] and [PIANO/VOICE] simultaneously, press the C7

With this operation, the Song data of only channels 1 and 2 will be played back. When Voices incompatible with this instrument are assigned to channels 3 – 16 and the Piano parts are assigned to the channels 1 and 2, this operation results in the proper or expected sound.

# To set Song Playback Channels to "ALL":

While holding down [DEMO/SONG] and the [PIANO/VOICE] simultaneously, press the

With this operation, the Song data of all channels will be played back.



# **MIDI Data Format**

# **Preset Voice List**

| Voice Name         | MSB<br>(0-127) | LSB<br>(0-127) | Program Change #<br>(1-128) |
|--------------------|----------------|----------------|-----------------------------|
| CFX Grand          | 108            | 0              | 1                           |
| Binaural CFX Grand | 108            | 100            | 1                           |
| Bösendorfer        | 108            | 6              | 1                           |
| Pop Grand          | 108            | 1              | 2                           |
| Stage E.Piano      | 108            | 0              | 5                           |
| DX E.Piano         | 108            | 0              | 6                           |
| Harpsichord        | 108            | 0              | 7                           |
| Vibraphone         | 108            | 0              | 12                          |
| Pipe Organ         | 108            | 1              | 20                          |
| Jazz Organ         | 108            | 0              | 17                          |
| Strings            | 108            | 0              | 49                          |

# **Effect Type List**

# Reverb Type

| Effect Name  | MSB | LSB |  |  |
|--------------|-----|-----|--|--|
| Off          | 0   | 0   |  |  |
| Recital Hall | 1   | 24  |  |  |
| Concert Hall | 1   | 4   |  |  |
| Chamber      | 2   | 24  |  |  |
| Club         | 3   | 24  |  |  |

# **Chorus Type**

| Effect Name | MSB | LSB |
|-------------|-----|-----|
| Off         | 0   | 0   |
| Chorus      | 65  | 8   |
| Phaser      | 72  | 17  |
| Tremolo     | 119 | 0   |
| Rotary      | 66  | 18  |

# **DSP Type**

| Effect Name | MSB | LSB |  |  |
|-------------|-----|-----|--|--|
| Off         | 64  | 0   |  |  |
| DelayLCR    | 5   | 16  |  |  |
| DelayLR     | 6   | 0   |  |  |
| Echo        | 7   | 0   |  |  |
| CrossDelay  | 8   | 0   |  |  |
| Symphonic   | 68  | 16  |  |  |
| Rotary      | 69  | 32  |  |  |
| Tremolo     | 70  | 18  |  |  |
| VibeRotor   | 119 | 0   |  |  |
| AutoPan     | 71  | 21  |  |  |
| Phaser      | 72  | 16  |  |  |
| AutoWah     | 78  | 16  |  |  |
| Distortion  | 97  | 33  |  |  |

# **MIDI CHANNEL MESSAGE**

Application Range MIDI, Internal Sequencer

|                           |            | Status byte         |           | 1st D          | ata byte                                |                | 2nd Dat              | a byte                            | MIDI                    |      | IDI<br>eption         | MID<br>Transmi |      |
|---------------------------|------------|---------------------|-----------|----------------|---|----------------|----------------------|-----------------------------------|-------------------------|------|-----------------------|----------------|------|
| MIDI Events               |            | Status              | Data      | (Hex)          | Parameter                               | Data           | (Hex)                | Parameter                         | Formats                 | Song | Main<br>Layer<br>Left | Panel          | Song |
| Key Off                   | 8nH        | (n: Channel Number) | kk        |                | Key no. (0-127)                         | vv             |                      | Velocity (0-127)                  | [GM1]<br>[GM2]          | 0    | ×                     | 0              | 0    |
| Key On                    | 9nH        | (n: Channel Number) | kk        |                | Key no. (0-127)                         | vv             |                      | Key On: vv=1-127<br>Key Off: vv=0 | [GM1]<br>[GM2]          | 0    | ×                     | 0              | 0    |
| Control Change            | BnH        |                     | 0         | (00H)          | Bank Select MSB                         | 0-127          | (00H7FH)             | (00) Normal                       | [GM2]                   | 0    | ×                     | 0              | 0    |
| g-                        |            |                     | 1         | (01H)          | Modulation                              | 0-127          | (00H7FH)             | Data                              | [GM1]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | -         | (OFLI)         | Destaurate Time                         | 0.107          | (00LL 7ELI)          | Dete                              | [GM2]                   | _    | V                     |                | 0    |
|                           |            |                     | 5         | (05H)<br>(06H) | Portamento Time Data Entry MSB          | 0-127<br>0-127 | (00H7FH)<br>(00H7FH) | Data<br>Data                      | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 7         | (07H)          | Main Volume                             | 0-127          | (00H7FH)             | Data                              | [GM1]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 10        | (OAH)          | Panpot                                  | 0-127          | (00H7FH)             | L64CR63                           | [GM2]<br>[GM1]<br>[GM2] | 0    | ×                     | 0              | 0    |
|                           |            |                     | 11        | (OBH)          | Expression                              | 0-127          | (00H7FH)             | Data                              | [GM1]<br>[GM2]          | 0    | ×                     | ×              | 0    |
|                           |            |                     | 19        | (13H)          | Key Acceleration                        | 0-127          | (00H7FH)             | Key Acceleration<br>(0-127)       | [GIVIZ]                 | 0    | ×                     | 0              | 0    |
|                           |            |                     | 32        | (20H)          | Bank Select LSB                         | 0-127          | (00H7FH)             | Data                              | [GM2]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 38        | (26H)          | Data Entry LSB                          | 0-127          | (00H7FH)             | Data                              | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 64        | (40H)          | Sustain (Damper)                        | 0-127          | (00H7FH)             | Data                              | [GM1]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 65        | (41H)          | Portamento                              | 0-127          | (00H7FH)             | 063, 64127<br>(OFF, ON)           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 66        | (42H)          | Sostenuto                               | 0-127          | (00H7FH)             | 063, 64127<br>(OFF, ON)           | [GM2]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 67        | (43H)          | Soft Pedal                              | 0-127          | (00H7FH)             | 063, 64127<br>(OFF, ON)           | [GM2]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 71        | (47H)          | Harmonic Content                        | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 72        | (48H)          | Release Time                            | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 73        | (49H)          | Attack Time                             | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 74<br>75  | (4AH)<br>(4BH) | Brightness<br>Decay Time                | 0-127<br>0-127 | (00H7FH)<br>(00H7FH) | -640+63<br>-640+63                | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 76        | (4CH)          | Vibrate Rate                            | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 77        | (4DH)          | Vibrate Depth                           | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 78        | (4EH)          | Vibrate Delay                           | 0-127          | (00H7FH)             | -640+63                           | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 84        | (54H)          | Portamento Control                      | 0-127          | (00H7FH)             | Key no. (0-127)                   |                         | 0    | ×                     | ×              | 0    |
|                           |            |                     | 88        | (58H)          | High-Res Velocity<br>Prefix             | 0-127          | (00H8FH)             | Velocity (0-127)                  | 101101                  | 0    | ×                     | 0              | 0    |
|                           |            |                     | 91        | (5BH)          | Effect1 Depth<br>(Reverb Send Level)    | 0-127          | (00H7FH)             | Data                              | [GM2]                   | 0    | ×                     | 0              | 0    |
|                           |            |                     | 93        | (5DH)          | Effect3 Depth<br>(Chorus Send Level)    | 0-127          | (00H7FH)             | Data                              | [GM2]                   | 0    | ×                     | O<br>×         | 0    |
|                           |            |                     |           | (5EH)          | Effect4 Depth<br>(Variation Send Level) | 0-127          | (00H7FH)             | Data                              |                         |      | ×                     |                |      |
|                           |            |                     | 96        | (60H)          | RPN Increment                           | -              | =                    | The data byte is ignored.         |                         | 0    | ×                     | ×              | 0    |
|                           |            |                     | 97        | (61H)          | RPN Decrement                           | -              | =                    | The data byte is ignored.         |                         | 0    | ×                     | ×              | 0    |
|                           |            |                     | 98        | (62H)          | NRPN LSB                                | 0-127          | (00H7FH)             | Data                              |                         | 0    | ×                     | ×              | 0    |
|                           |            |                     | 99<br>100 | (63H)<br>(64H) | NRPN MSB<br>RPN LSB                     | 0-127<br>0-127 | (00H7FH)<br>(00H7FH) | Data<br>Data                      | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 101       | (65H)          | RPN MSB                                 | 0-127          | (00H7FH)             | Data                              | [GM2]                   | 0    | ×                     | ×              | 0    |
| Mode Message              | BnH        | (n: Channel Number) | 120       | (78H)          | All Sound Off                           | 0              | (00H)                | Data                              | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 121       | (79H)          | Reset All Controllers                   | 0              | (00H)                | Data                              | [GM1]<br>[GM2]          | 0    | ×                     | ×              | 0    |
|                           |            |                     | 122       | (7AH)          | Local Control                           | 0<br>127       | (00H)<br>(7FH)       | OFF<br>ON                         |                         |      | 0                     | ×              | ×    |
|                           |            |                     | 123       | (7BH)          | All Note Off                            | 0              | (00H)                | Data                              | [GM1]<br>[GM2]          | 0    | ×                     | ×              | 0    |
|                           |            |                     | 124       | (7CH)          | Omni Off<br>Omni On                     | 0              | (00H)                | Data<br>Data                      | [GM2]                   | 0    | ×                     | ×              | 0    |
|                           |            |                     | 126       | (7DH)<br>(7EH) | Mono                                    | 0-16           | (00H)<br>(00H10H)    | Data                              | [GM2]<br>[GM2]          | 0    | ×                     | ×              | 0    |
|                           |            |                     | 127       | (7EH)          | Poly                                    | 0              | (00H)                | Data                              | [GM2]                   | 0    | ×                     | ×              | 0    |
| Program Change            | CnH        | (n: Channel Number) | pp        | (00H7FH)       | Voice number (0-127)                    | -              | -                    | -                                 | [GM1]<br>[GM2]          | 0    | ×                     | 0              | 0    |
| Channel After Touch       | DnH        | (n: Channel Number) | vv        | (00H7FH)       | Data                                    | -              | =                    | =                                 | [GM1]<br>[GM2]          | 0    | ×                     | ×              | 0    |
| Polyphonic After<br>Touch | AnH        | (n: Channel Number) | kk        | (00H7FH)       | Key no. (0-127)                         | vv             | (00H7FH)             | Data                              |                         | 0    | ×                     | 0              | 0    |
| Pitch Bend Change         | EnH        | (n: Channel Number) | cc        | (00H7FH)       | LSB                                     | dd             | (00H7FH)             | MSB                               | [GM1]<br>[GM2]          | 0    | ×                     | ×              | 0    |
| Realtime Message          | F8H<br>FAH | MIDI Clock          | -         |                | -                                       | -              |                      | -                                 |                         |      | X<br>O                | 0              |      |
|                           | FBH        | Start<br>Continue   | _         |                | -                                       | -              |                      | -                                 |                         |      | ×                     | ×              |      |
|                           | FCH        | Stop                | -         |                | -                                       | -              |                      | _                                 |                         |      | )                     | 0              |      |
|                           | FEH        | Active Sens         | -         |                | -                                       | -              |                      | -                                 | [GM2]                   |      | )                     | 0              |      |
|                           | FFH        | System Reset        | -         |                | -                                       | -              |                      | -                                 |                         |      | ×                     | ×              |      |

# Parameters controlled by RPN (Registered Parameter Numbers)

| NR  | PN  | Data Entry |     |                        |  |                 | MIDI Re<br>(respond | ception<br>/ignored)  | MIDI Trans<br>(generate |      |
|-----|-----|------------|-----|------------------------|--|-----------------|---------------------|-----------------------|-------------------------|------|
| MSB | LSB | MSB        | LSB | Parameter              | Data Range   | MIDI<br>Formats | Song                | Main<br>Layer<br>Left | Panel                   | Song |
| 00H | 00H | mmH        | -   | Pitch Bend Sensitivity | mm: 00H-18H (0+24 [semitones])   | [GM1]<br>[GM2]  | 0                   | ×                     | ×                       | 0    |
| 00H | 01H | mmH        | IIH | Fine Tune              | mm II: 00H 00H -100 [cent] mm II: 40H 00H 0 [cent] mm II: 7FH 7FH 100 [cent] | [GM1]<br>[GM2]  | 0                   | ×                     | ×                       | 0    |
| 00H | 02H | mmH        | =   | Coarse Tune            | mm: 28H-40H-58H (-240+24 [semitones])  | [GM1]<br>[GM2]  | 0                   | ×                     | ×                       | 0    |
| 00H | 05H | mmH        | IIH | Modulation Sensitivity | mm: Specified in semitone steps<br>II: Specified in 100/128 cent steps       | [GM2]           | 0                   | ×                     | ×                       | 0    |
| 7FH | 7FH | -          | -   | Null                   | -  | [GM2]           | 0                   | ×                     | ×                       | 0    |

# **MIDI PARAMETER CHANGE TABLE**

Application Range MIDI, Internal Sequencer

\*Not received when Receive Parameter SysEx is set to off.
\*Not transmitted when Transmit Parameter SysEx is set to off.

# **MIDI Parameter Change Table (XG SYSTEM)**

|    |                |    |             |                                  |                     |   |                      | MIDI Re | ception               | MIDI Trans | mission |
|----|----------------|----|-------------|----------------------------------|---------------------|---|----------------------|---------|-----------------------|------------|---------|
|    | Address<br>(H) | S  | Size<br>(H) | Data (H)                         | Parameter           | Description   | XG Default<br>(H)    | Song    | Main<br>Layer<br>Left | Panel      | Song    |
| 00 | 00             | 00 | 4           | 00-0F<br>00-0F<br>00-0F<br>00-0F | MASTER TUNE         | -102.40+102.3 [cent]<br>1st bit3-0→bit15-12<br>2nd bit3-0→bit11-8<br>3rd bit3-0→bit7-4<br>4th bit3-0→bit3-0 | *Panel setting value | 0       |                       | ×          | 0       |
|    |                | 04 | 1           | 00-7F                            | MASTER VOLUME       | 0127  | 7F                   | 0       | ×                     | ×          | 0       |
|    |                | 05 | 1           | 00-7F                            | MASTER ATTENUATOR   | 0127  | 00                   | ×       | ×                     | ×          | ×       |
|    |                | 06 | 1           | 28-58                            | TRANSPOSE           | -240+24 [semitones]   | 40                   | 0       | ×                     | ×          | 0       |
|    |                | 7E | 1           | 00                               | XG SYSTEM ON        | 00=XG system ON   | -                    | 0       | ×                     | ×          | 0       |
|    |                | 7F | 1           | 00                               | ALL PARAMETER RESET | 00=ON   | -                    | 0       | ×                     | ×          | ×       |

# **MIDI Parameter Change Table (EFFECT1)**

|    |                |    |             |                |  |   |                           | MIDI Re | ception               | MIDI Trans | smission |
|----|----------------|----|-------------|----------------|--|---|---------------------------|---------|-----------------------|------------|----------|
|    | Addres:<br>(H) | S  | Size<br>(H) | Data (H)       | Parameter                                | Description   | XG Default<br>(H)         | Song    | Main<br>Layer<br>Left | Panel      | Song     |
| 02 | 01             | 00 | 2           | 00-7F<br>00-7F | REVERB TYPE MSB<br>REVERB TYPE LSB       | Refer to Effect Type List   | 01 (=HALL1)<br>00         | C       | )                     | 0          | 0        |
|    |                | 0C | 1           | 00-7F          | REVERB RETURN                            | -∞dB0dB+6dB (064127)  | 40                        | C       | )                     | ×          | 0        |
|    |                | 0D | 1           | 01-7F          | REVERB PAN                               | L63CR63   | 40                        |         | )                     | ×          | 0        |
|    |                | 20 | 2           | 00-7F<br>00-7F | CHORUS TYPE MSB<br>CHORUS TYPE LSB       | Refer to Effect Type List   | 41 (=CHORUS1)<br>00       | C       | )                     | 0          | 0        |
|    |                | 2C | 1           | 00-7F          | CHORUS RETURN                            | -∞dB0dB+6dB (064127)  | 40                        | C       | )                     | ×          | 0        |
|    |                | 2D | 1           | 01-7F          | CHORUS PAN                               | L63CR63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 2E | 1           | 00-7F          | SEND CHORUS TO REVERB                    | -∞dB0dB+6dB (064127)  | 00                        | C       | )                     | ×          | 0        |
|    |                | 40 | 2           | 00-7F<br>00-7F | VARIATION TYPE MSB<br>VARIATION TYPE LSB | Refer to Effect Type List   | 05 (=DELAY L, C, R)<br>00 | C       | )                     | ×          | 0        |
|    |                | 56 | 1           | 00-7F          | VARIATION RETURN                         | -∞dB0dB+6dB (064127)  | 40                        | C       | )                     | ×          | 0        |
|    |                | 57 | 1           | 01-7F          | VARIATION PAN                            | L63CR63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 58 | 1           | 00-7F          | SEND VARIATION TO REVERB                 | -∞dB0dB+6dB (064127)  | 00                        | C       | )                     | ×          | 0        |
|    |                | 59 | 1           | 00-7F          | SEND VARIATION TO CHORUS                 | -∞dB0dB+6dB (064127)  | 00                        | C       | )                     | ×          | 0        |
|    |                | 5A | 1           | 00-01          | VARIATION CONNECTION                     | INSERTION, SYSTEM   | 00                        | C       | )                     | ×          | 0        |
|    |                | 5B | 1           | 00-7F          | VARIATION PART NUMBER                    | Reception: Part116 (015)<br>Transmission: Part116 (015)<br>AD (64)<br>OFF (127) | 7F                        | C       | )                     | ×          | 0        |
|    |                | 5C | 1           | 00-7F          | MW VARIATION CONTROL DEPTH               | -640+63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 5D | 1           | 00-7F          | BEND VARIATION CONTROL DEPTH             | -640+63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 5E | 1           | 00-7F          | CAT VARIATION CONTROL DEPTH              | -640+63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 5F | 1           | 00-7F          | AC1 VARIATION CONTROL DEPTH              | -640+63   | 40                        | C       | )                     | ×          | 0        |
|    |                | 60 | 1           | 00-7F          | AC2 VARIATION CONTROL DEPTH              | -640+63   | 40                        | C       | )                     | ×          | 0        |

# **MIDI Parameter Change Table (EFFECT2)**

 $^{*}\mbox{The EFFECT2}$  Parameter cannot be reset to its factory setting with XG SYSTEM ON.

|    |                                  |    |   |                |  |   | MIDI Re               | ception | MIDI Trans | mission |
|----|----------------------------------|----|---|----------------|--|---|-----------------------|---------|------------|---------|
|    | Address Size Data<br>(H) (H) (H) |    |   | Parameter      | Description  | Song  | Main<br>Layer<br>Left | Panel   | Song       |         |
| 03 | n                                | 00 | 2 | 00-7F<br>00-7F | INSERTION EFFECT TYPE MSB<br>INSERTION EFFECT TYPE LSB | Refer to Effect Type List   |                       | )       | 0          | 0       |
|    |                                  | 0C | 1 | 00-7F          | INSERTION EFFECT PART NUMBER                           | Reception: Part116 (015)<br>Transmission: Part116 (015)<br>AD (64)<br>OFF (127) |                       | )       | 0          | 0       |
|    |                                  | 0D | 1 | 00-7F          | MW INSERTION CONTROL DEPTH                             | -640+63   | (                     | )       | ×          | 0       |
|    |                                  | 0E | 1 | 00-7F          | BEND INSERTION CONTROL DEPTH                           | -640+63   | (                     | )       | ×          | 0       |
|    |                                  | OF | 1 | 00-7F          | CAT INSERTION CONTROL DEPTH                            | -640+63   | (                     | )       | ×          | 0       |
|    |                                  | 10 | 1 | 00-7F          | AC1 INSERTION CONTROL DEPTH                            | -640+63   | (                     | )       | 0          | 0       |
|    |                                  | 11 | 1 | 00-7F          | AC2 INSERTION CONTROL DEPTH                            | -640+63   | (                     | )       | ×          | 0       |

The second byte of the address is considered as an Insertion effect number. n: insertion effect number

The Insertion Effect No. range is from 0 to 1. Values outside the range are handled as unknown and ignored.

# **MIDI Parameter Change Table (MULTI PART)**

|    |                |    |             |             |                       |                       |                               | MIDI Re | eception              | MIDI Trans | mission |
|----|----------------|----|-------------|-------------|-----------------------|-----------------------|-------------------------------|---------|-----------------------|------------|---------|
|    | Address<br>(H) | 6  | Size<br>(H) | Data<br>(H) | Parameter             | Description           | XG Default<br>(H)             | Song    | Main<br>Layer<br>Left | Panel      | Song    |
| 08 | nn             | 07 | 1           | 00-03       | PART MODE             | NORMAL, DRUM, DRUMS12 | part 10=02,<br>other parts=00 | 0       | ×                     | 0          | 0       |
|    |                | 0C | 1           | 00-7F       | VELOCITY SENSE DEPTH  | 0127                  | 40                            | 0       | ×                     | 0          | 0       |
|    |                | 0D | 1           | 00-7F       | VELOCITY SENSE OFFSET | 0127                  | 40                            | 0       | ×                     | 0          | 0       |
|    |                | 41 | 1           | 00-7F       | SCALE TUNING C        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 42 | 1           | 00-7F       | SCALE TUNING C#       | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 43 | 1           | 00-7F       | SCALE TUNING D        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 44 | 1           | 00-7F       | SCALE TUNING D#       | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 45 | 1           | 00-7F       | SCALE TUNING E        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 46 | 1           | 00-7F       | SCALE TUNING F        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 47 | 1           | 00-7F       | SCALE TUNING F#       | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 48 | 1           | 00-7F       | SCALE TUNING G        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 49 | 1           | 00-7F       | SCALE TUNING G#       | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 4A | 1           | 00-7F       | SCALE TUNING A        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 4B | 1           | 00-7F       | SCALE TUNING A#       | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 4C | 1           | 00-7F       | SCALE TUNING B        | -630+63 [cent]        | 40                            | 0       | ×                     | ×          | 0       |
|    |                | 59 | 1           | 00-5F       | AC1 CONTROLLER NUMBER | 095                   | 10                            | 0       | ×                     | 0          | 0       |

# **System Exclusive Messages**

Application Range MIDI, Internal Sequencer

\*Not received when Receive Parameter SysEx is set to off.
\*Not transmitted when Transmit Parameter SysEx is set to off.

# ■ System Exclusive Messages (XG)

|                         |   | MIDI Rec  | eption                | MIDI Transmission                         |
|-------------------------|---|---|-----------------------|---|
| MIDI Event              | Data Format   | Song  | Main<br>Layer<br>Left | Panel Song                                |
| XG Parameter Change     | F0 43 1n 4C hh mm II dd F7  11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n = Device Number n=always 0 (when transmit), n=0-F (when receive) 01001100 4C = Model ID 010h1hhhhh hh = Address High 0mmnmmmm mm = Address Mid 0111111 II = Address Low 0dddddd dd = Data 11110111 F7 = End of Exclusive                             | O *Refer to Parameter Change Table.   | ×                     | O<br>"Refer to Parameter Change<br>Table. |
| XG Bulk Dump            | F0 43 0n 4C aa bb hh mm II dd dd cc F7  11110000 F0 = Exclusive status 01000011 43 = VAMAHA ID 010001010 4C = Model ID 0aaaaaa aa = Byte Count MSB 0bbbbbb bb = Byte Count LSB 0hhhhhhh hh = Address High 0mmmmmmm mm= Address Mid 0111111 II = Address Low 0dddddd dd = Data 0ddddddd dd = Data 0cccccc c = Checksum 1111011 F7 = End of Exclusive | O<br>"Refer to<br>Parameter Change<br>Table.  | x                     | *Refer to Parameter Change<br>Table.      |
| XG Parameter<br>Request | F0 43 3n 4C hh mm    F7  11110000   | O  *Refer to Parameter Change Table. (However, the request for address "OA nn 4v" will be ignored.) | ×                     | ×   |
| XG Dump Request         | F0 43 2n 4C hh mm   II F7   | O *Refer to Parameter Change Table. (However, the request for address "OA nn 40" will be ignored.)  | ×                     | ×   |

# ■ System Exclusive Messages (Others)

|                    |  | MIDI Reception (effective or not for each part) |                       | MIDI Transmission<br>(generated data) |      |
|--------------------|--|---|-----------------------|---------------------------------------|------|
| MIDI Event         | Data Format  | Song  | Main<br>Layer<br>Left | Panel                                 | Song |
| MIDI Master Tuning | F0 43 1n 27 30 00 00 0m 0l cc F7  11110000 F0 = Exclusive status 01000011 43 = Y4MAHA ID 0001nnnn 1n n= always 0 (when transmit), n=0-F (when receive) 01100111 27 = Modell ID of TG100 00110000 30 = Address High 00000000 00 = Address Mid 00000000 00 = Address Low 0000mmmm 0rm = Master Tune MSB 00001111 0l = Master Tune LSB 0cccccc cc = don't care 11110111 F7 = End of Exclusive | 0   |                       | ×                                     | ×    |

# ■ System Exclusive Messages (Preset Voice)

|                           |  | MIDI Reception (effective or not for each part) |                       | MIDI Transmission (generated data) |      |
|---------------------------|--|---|-----------------------|------------------------------------|------|
| MIDI Event                | Data Format  | Song  | Main<br>Layer<br>Left | Panel                              | Song |
| Key Off Sampling<br>Depth | F0 43 73 01 50 11 0n 04 dd F7  11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 0000nnn 0n = Channel (00-0F) 0000100 04 = Sub-ID (Key Off Sampling Depth) 0ddddddd dd = Depth (00-50) 11110111 F7 = End of Exclusive | 0   | ×                     | ×                                  | 0    |
| Soft Pedal Depth          | F0 43 73 01 50 11 0n 05 dd F7  11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 00001001 01 = Channel (00-0F) 0000101 05 = Sub-ID (Soft Pedal Depth) 0dddddd dd = Depth (00-7F) 11110111 F7 = End of Exclusive       | 0   | ×                     | ×                                  | 0    |

<sup>\*</sup>For each Depth value, the reset value is 40H = Voice parameter

Version: 1.0

| Function  |   | Transmitted                   | Recognized  | Remarks  |
|---|---|-------------------------------|---|--|
|   | Default<br>Changed  | 1 0                           | 1 - 16<br>O   |  |
| ]   | Default<br>Messages<br>Altered  | 3<br>×<br>*******             | 3<br>×<br>×   |  |
| Note<br>Number : True voice   |   | 0 - 127<br>******             | 0 - 127<br>0 - 127  |  |
| _   | Note ON<br>Note OFF   | O 9nH, v=1-127<br>O 8nH, v=64 | O 9nH, v=1-127<br>O 9nH, v=0 or 8nH                         |  |
|   | Key's<br>Ch's   | O<br>×                        | 0   |  |
| Pitch Bend  |   | 0                             | O 0 - 24 semi   | *1   |
| Control<br>Change   | 0,32<br>1,5,11<br>7,10<br>19<br>6,38<br>64,66,67<br>65<br>71-74<br>84<br>88<br>91,93<br>96-97<br>98-99<br>100-101 | O                             | 00000000000000  | Key Acceleration Data Entry Pedal Portamento Sound Controller  High-Res Velocity Prefix Effect Depth RPN Inc, Dec NRPN LSB, MSB RPN LSB, MSB |
| Prog<br>Change : '  | True #  | O 0 - 127<br>******           | O 0 - 127<br>0,1,4,5,6,11,16,19,48                          |  |
| System Exclusive  |   | 0                             | 0   |  |
| : Song Pos. Common : Song Sel. : Tune                                   |   | ×<br>×<br>×                   | ×<br>×<br>×   |  |
| System : Clock<br>Real Time: Commands                                   |   | 0                             | ×   |  |
| : All Son Aux : Reset Aux : Local ( Mes- : All No sages: Active : Reset | All Cntrls<br>ON/OFF<br>tes OFF   | ×<br>×<br>×<br>O<br>×         | O (120,126,127)<br>O (121)<br>O (122)<br>O (123-125)<br>O × |  |

Notes: \*1 For some Voices, the pitch may not be changed according to the pitch bend setting range.

Mode 1 : OMNI ON , POLY Mode 3 : OMNI OFF, POLY Mode 2 : OMNI ON ,MONO Mode 4 : OMNI OFF,MONO O : Yes × : No

<sup>\*2</sup> These Control Change messages cannot be transmitted by panel operations, but can be transmitted by Song playback data.