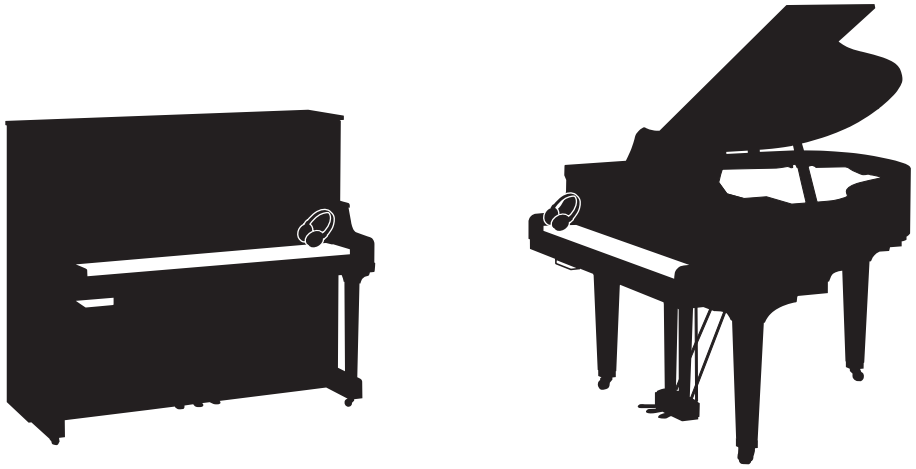
YAMAHA

# SILENT Piano™

## SH2



# MIDIリファレンス

JA

# MIDIデータフォーマット

「MIDIデータフォーマット」は、データ/値を10進数や2進数、16進数で表現しています。16進数の場合は数値のあと(または列の頭)にH(Hexadecimal)が付いています。
また、「n」は任意の整数を表します。データ/値を入力する場合は、以下のテーブルをご参照ください。

| 10進 | 16進 | 2進 | 10進 | 16進 | 2進 | 10進 | 16進 | 2進 | 10進 | 16進 | 2進 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 00 | 0000 0000 | 32 | 20 | 0010 0000 | 64 | 40 | 0100 0000 | 96 | 60 | 0110 0000 |
| 1 | 01 | 0000 0001 | 33 | 21 | 0010 0001 | 65 | 41 | 0100 0001 | 97 | 61 | 0110 0001 |
| 2 | 02 | 0000 0010 | 34 | 22 | 0010 0010 | 66 | 42 | 0100 0010 | 98 | 62 | 0110 0010 |
| 3 | 03 | 0000 0011 | 35 | 23 | 0010 0011 | 67 | 43 | 0100 0011 | 99 | 63 | 0110 0011 |
| 4 | 04 | 0000 0100 | 36 | 24 | 0010 0100 | 68 | 44 | 0100 0100 | 100 | 64 | 0110 0100 |
| 5 | 05 | 0000 0101 | 37 | 25 | 0010 0101 | 69 | 45 | 0100 0101 | 101 | 65 | 0110 0101 |
| 6 | 06 | 0000 0110 | 38 | 26 | 0010 0110 | 70 | 46 | 0100 0110 | 102 | 66 | 0110 0110 |
| 7 | 07 | 0000 0111 | 39 | 27 | 0010 0111 | 71 | 47 | 0100 0111 | 103 | 67 | 0110 0111 |
| 8 | 08 | 0000 1000 | 40 | 28 | 0010 1000 | 72 | 48 | 0100 1000 | 104 | 68 | 0110 1000 |
| 9 | 09 | 0000 1001 | 41 | 29 | 0010 1001 | 73 | 49 | 0100 1001 | 105 | 69 | 0110 1001 |
| 10 | 0A | 0000 1010 | 42 | 2A | 0010 1010 | 74 | 4A | 0100 1010 | 106 | 6A | 0110 1010 |
| 11 | 0B | 0000 1011 | 43 | 2B | 0010 1011 | 75 | 4B | 0100 1011 | 107 | 6B | 0110 1011 |
| 12 | 0C | 0000 1100 | 44 | 2C | 0010 1100 | 76 | 4C | 0100 1100 | 108 | 6C | 0110 1100 |
| 13 | 0D | 0000 1101 | 45 | 2D | 0010 1101 | 77 | 4D | 0100 1101 | 109 | 6D | 0110 1101 |
| 14 | 0E | 0000 1110 | 46 | 2E | 0010 1110 | 78 | 4E | 0100 1110 | 110 | 6E | 0110 1110 |
| 15 | 0F | 0000 1111 | 47 | 2F | 0010 1111 | 79 | 4F | 0100 1111 | 111 | 6F | 0110 1111 |
| 16 | 10 | 0001 0000 | 48 | 30 | 0011 0000 | 80 | 50 | 0101 0000 | 112 | 70 | 0111 0000 |
| 17 | 11 | 0001 0001 | 49 | 31 | 0011 0001 | 81 | 51 | 0101 0001 | 113 | 71 | 0111 0001 |
| 18 | 12 | 0001 0010 | 50 | 32 | 0011 0010 | 82 | 52 | 0101 0010 | 114 | 72 | 0111 0010 |
| 19 | 13 | 0001 0011 | 51 | 33 | 0011 0011 | 83 | 53 | 0101 0011 | 115 | 73 | 0111 0011 |
| 20 | 14 | 0001 0100 | 52 | 34 | 0011 0100 | 84 | 54 | 0101 0100 | 116 | 74 | 0111 0100 |
| 21 | 15 | 0001 0101 | 53 | 35 | 0011 0101 | 85 | 55 | 0101 0101 | 117 | 75 | 0111 0101 |
| 22 | 16 | 0001 0110 | 54 | 36 | 0011 0110 | 86 | 56 | 0101 0110 | 118 | 76 | 0111 0110 |
| 23 | 17 | 0001 0111 | 55 | 37 | 0011 0111 | 87 | 57 | 0101 0111 | 119 | 77 | 0111 0111 |
| 24 | 18 | 0001 1000 | 56 | 38 | 0011 1000 | 88 | 58 | 0101 1000 | 120 | 78 | 0111 1000 |
| 25 | 19 | 0001 1001 | 57 | 39 | 0011 1001 | 89 | 59 | 0101 1001 | 121 | 79 | 0111 1001 |
| 26 | 1A | 0001 1010 | 58 | 3A | 0011 1010 | 90 | 5A | 0101 1010 | 122 | 7A | 0111 1010 |
| 27 | 1B | 0001 1011 | 59 | 3B | 0011 1011 | 91 | 5B | 0101 1011 | 123 | 7B | 0111 1011 |
| 28 | 1C | 0001 1100 | 60 | 3C | 0011 1100 | 92 | 5C | 0101 1100 | 124 | 7C | 0111 1100 |
| 29 | 1D | 0001 1101 | 61 | 3D | 0011 1101 | 93 | 5D | 0101 1101 | 125 | 7D | 0111 1101 |
| 30 | 1E | 0001 1110 | 62 | 3E | 0011 1110 | 94 | 5E | 0101 1110 | 126 | 7E | 0111 1110 |
| 31 | 1F | 0001 1111 | 63 | 3F | 0011 1111 | 95 | 5F | 0101 1111 | 127 | 7F | 0111 1111 |

- 上記のテーブル以外でも、たとえば、144～159 (10進数)/9nH/10010000～10011111(2進数)は、それぞれ(1～16)チャンネルごとのノートオンメッセージを示します。176～191/BnH/10110000～10111111は、それぞれ(1～16)チャンネルごとのコントロールチェンジメッセージを示します。192～207/CnH/11000000～11001111は、それぞれ(1～16)チャンネルごとのプログラムチェンジメッセージを示します。240/F0H/11110000はシステムエクスクルーシブメッセージの始まりを示します。247/F7H/11110111はシステムエクスクルーシブメッセージの終わりを示します。
- aaH (16進数)/0aaaaaaa (2進数)はデータのアドレスを示します。アドレスは、High、MidとLowがあります。
- bbH/0bbbbbbbはバイトカウントを示します。
- ccH/0cccccccはチェックサムを示します。
- ddH/0dddddddはデータ/値を示します。

## パネル音色一覧

プログラムチェンジを0～127で設定する場合は、リストのMIDIプログラムチェンジNo.から1を引いた数で指定します。
たとえば、No.2のプログラムチェンジを指定する場合は、1の値になります。

| 音色名 | MSB (0-127) | LSB (0-127) | Program Change # (1-128) |
|---|---|---|---|
| バイノーラル CFX グランド | 108 | 100 | 1 |
| CFX グランド | 108 | 0 | 1 |
| ベーゼンドルファー インペリアル | 108 | 6 | 1 |
| アップライト ピアノ | 108 | 5 | 3 |
| ポップ グランド | 108 | 1 | 2 |
| バラード グランド | 108 | 2 | 1 |
| ステージ エレピ | 108 | 0 | 5 |
| DX エレピ | 108 | 0 | 6 |
| ビンテージ エレピ | 108 | 1 | 5 |
| ハープシコード 8' | 108 | 0 | 7 |
| ハープシコード 8'+4' | 108 | 1 | 7 |

| 音色名 | MSB (0-127) | LSB (0-127) | Program Change # (1-128) |
|---|---|---|---|
| チェレスタ | 108 | 0 | 9 |
| オルガン プリンシパル | 108 | 1 | 20 |
| オルガン トゥッティ | 108 | 0 | 20 |
| ジャズ オルガン | 108 | 0 | 17 |
| ストリングス | 108 | 0 | 49 |
| クワイア | 108 | 0 | 53 |
| シンセ パッド | 108 | 0 | 90 |
| ピアノ + ストリングス | 108 | 23 | 1 |
| ピアノ + パッド | 108 | 24 | 1 |
| ピアノ + DX エレピ | 108 | 25 | 3 |

# MIDI CHANNEL MESSAGE (1)

| 適用範囲 | MIDI, 本体シーケンサー |
|---|---|

| MIDI Events | Status byte | | 1st Data byte | | | 2nd Data byte | | | MIDI規格 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Status | | Data | (HEX) | Parameter | Data | (HEX) | Parameter | | Song | Panel (主な出力方法) | Song |
| Key Off | 8nH | (n: Channel Number) | kk | | Key no. (0-127) | vv | | Velocity (0-127) | [GM1][GM2] | O | O (鍵盤) | O |
| Key On | 9nH | (n: Channel Number) | kk | | Key no. (0-127) | vv | | Key On: vv=1-127<br>Key Off: vv=0 | [GM1][GM2] | O | O (鍵盤) | O |
| Control Change | BnH | | 0 | (00H) | Bank Select MSB | 0-127 | (00H...7FH) | (00) Normal | [GM2] | O | O (Voice) | O |
| | | | 1 | (01H) | Modulation | 0-127 | (00H...7FH) | Data | [GM1][GM2] | O | X | O |
| | | | 5 | (05H) | Portamento Time | 0-127 | (00H...7FH) | Data | [GM2] | O | X | O |
| | | | 6 | (06H) | Data Entry MSB | 0-127 | (00H...7FH) | Data | [GM2] | O | X | O |
| | | | 7 | (07H) | Main Volume | 0-127 | (00H...7FH) | Data | [GM1][GM2] | O | O (Function) | O |
| | | | 10 | (0AH) | Panpot | 0-127 | (00H...7FH) | L64…C…R63 | [GM1][GM2] | O | X | O |
| | | | 11 | (0BH) | Expression | 0-127 | (00H...7FH) | Data | [GM1][GM2] | O | X | O |
| | | | 32 | (20H) | Bank Select LSB | 0-127 | (00H...7FH) | Data | [GM2] | O | O (Voice) | O |
| | | | 38 | (26H) | Data Entry LSB | 0-127 | (00H...7FH) | Data | [GM2] | O | X | O |
| | | | 64 | (40H) | Sustain (Damper) | 0-127 | (00H...7FH) | Data | [GM1][GM2] | O | O (Pedal) | O |
| | | | 65 | (41H) | Portamento | 0-127 | (00H...7FH) | 0...63, 64...127 (OFF, ON) | [GM2] | O | X | O |
| | | | 66 | (42H) | Sostenuto | 0-127 | (00H...7FH) | 0...63, 64...127 (OFF, ON) | [GM2] | O | O (Pedal) | O |
| | | | 67 | (43H) | Soft Pedal | 0-127 | (00H...7FH) | 0...63, 64...127 (OFF, ON) | [GM2] | O | O (Pedal) | O |
| | | | 71 | (47H) | Harmonic Content | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 72 | (48H) | Release Time | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 73 | (49H) | Attack Time | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 74 | (4AH) | Brightness | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 75 | (4BH) | Decay Time | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 76 | (4CH) | Vibrate Rate | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 77 | (4DH) | Vibrate Depth | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 78 | (4EH) | Vibrate Delay | 0-127 | (00H...7FH) | -64...0...+63 | [GM2] | O | X | O |
| | | | 84 | (54H) | Portamento Control | 0-127 | (00H...7FH) | Key no. (0-127) | | O | X | O |
| | | | 91 | (5BH) | Effect1 Depth (Reverb Send Level) | 0-127 | (00H...7FH) | Data | [GM2] | O | O (Function) | O |
| | | | 93 | (5DH) | Effect3 Depth (Chorus Send Level) | 0-127 | (00H...7FH) | Data | [GM2] | O | O (Voice) | O |
| | | | 94 | (5EH) | Effect4 Depth (Variation Send Level) | 0-127 | (00H...7FH) | Data | | O | X | O |
| | | | 96 | (60H) | RPN Increment | - | - | データバイトは無視する | | O | X | O |
| | | | 97 | (61H) | RPN Decrement | - | - | データバイトは無視する | | O | X | O |
| | | | 98 | (62H) | NRPN LSB | 0-127 | (00H...7FH) | Data | | O | X | O |
| | | | 99 | (63H) | NRPN MSB | 0-127 | (00H...7FH) | Data | | O | X | O |
| | | | 100 | (64H) | RPN LSB | 0-127 | (00H...7FH) | Data | [GM2] | O | X | O |
| | | | 101 | (65H) | RPN MSB | 0-127 | (00H...7FH) | Data | [GM2] | O | X | O |
| Mode Message | BnH | (n: Channel Number) | 120 | (78H) | All Sound Off | 0 | (00H) | Data | [GM2] | O | X | O |
| | | | 121 | (79H) | Reset All Controllers | 0 | (00H) | Data | [GM1][GM2] | O | X | O |
| | | | 122 | (7AH) | Local Control | 0<br>127 | (00H)<br>(7FH) | OFF<br>ON | | O | X | X |
| | | | 123 | (7BH) | All Note Off | 0 | (00H) | Data | [GM1][GM2] | O | X | O |
| | | | 124 | (7CH) | Omni Off | 0 | (00H) | Data | [GM2] | O | X | O |
| | | | 125 | (7DH) | Omni On | 0 | (00H) | Data | [GM2] | O | X | O |
| | | | 126 | (7EH) | Mono | 0-16 | (00H...10H) | Data | [GM2] | O | X | O |
| | | | 127 | (7FH) | Poly | 0 | (00H) | Data | [GM2] | O | X | O |
| Program Change | CnH | (n: Channel Number) | pp | (00H...7FH) | 音色番号(0-127) | - | - | - | [GM1][GM2] | O | O (Voice) | O |
| Channel After Touch | DnH | (n: Channel Number) | vv | (00H...7FH) | Data | - | - | - | [GM1][GM2] | O | X | O |
| Polyphonic After Touch | AnH | (n: Channel Number) | kk | (00H...7FH) | Key no. (0-127) | vv | (00H...7FH) | Data | | O | O (鍵盤) | O |
| Pitch Bend Change | EnH | (n: Channel Number) | cc | (00H...7FH) | LSB | dd | (00H...7FH) | MSB | [GM1][GM2] | O | X | O |
| Realtime Message | F8H | MIDI Clock | - | | - | - | | - | | X | O | |
| | FAH | Start | - | | - | - | | - | | O | O | |
| | FBH | Continue | - | | - | - | | - | | X | X | |
| | FCH | Stop | - | | - | - | | - | | O | O | |
| | FEH | Active Sens | - | | - | - | | - | [GM2] | O | O | |
| | FFH | System Reset | - | | - | - | | - | | X | X | |

# MIDI CHANNEL MESSAGE (2)

| 適用範囲 | MIDI, 本体シーケンサー |
|---|---|

## NRPN (ノンレジスタード・パラメーター・ナンバー)対応パラメーター

| NRPN | | Data Entry | | Parameter | Data Range | MIDI規格 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|---|
| MSB | LSB | MSB | LSB | | | | Song | Panel (主な出力方法) | Song |
| 01H | 08H | mmH | -- | Vibrato Rate | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 09H | mmH | -- | Vibrato Depth | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 0AH | mmH | -- | Vibrato Delay | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 20H | mmH | -- | Low Pass Filter Cutoff Frequency | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 21H | mmH | -- | Low Pass Filter Resonance | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 30H | mmH | -- | EQ BASS | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 31H | mmH | -- | EQ TREBLE | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 34H | mmH | -- | EQ BASS Frequency | mm: 04H-28H (32...2.0k [Hz]) | | O | X | O |
| 01H | 35H | mmH | -- | EQ TREBLE Frequency | mm: 1CH-3AH (500...16.0k [Hz]) | | O | X | O |
| 01H | 63H | mmH | -- | EG Attack Time | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 64H | mmH | -- | EG Decay Time | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 01H | 66H | mmH | -- | EG Release | mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 14H | rrH | mmH | -- | Drum Low Pass Filter Cutoff Frequency | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 15H | rrH | mmH | -- | Drum Low Pass Filter Resonance | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 16H | rrH | mmH | -- | Drum EG Attack Rate | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 17H | rrH | mmH | -- | Drum EG Decay Rate | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 18H | rrH | mmH | -- | Drum Pitch Coarse | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 19H | rrH | mmH | -- | Drum Pitch Fine | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 1AH | rrH | mmH | -- | Drum Level | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | O | X | O |
| 1CH | rrH | mmH | -- | Drum Pan | rr: drum instrument note number<br>mm: 00H, 01H-40H-7FH (RND, L63...C...R63) | | O | X | O |
| 1DH | rrH | mmH | -- | Drum Reverb Send Level | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | O | X | O |
| 1EH | rrH | mmH | -- | Drum Chorus Send Level | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | O | X | O |
| 1FH | rrH | mmH | -- | Drum Variation Send Level | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | O | X | O |
| 24H | rrH | mmH | -- | Drum HPF Cutoff Frequency | rr: drum instrument note number<br>mm: 00H-40H-7FH (-64...0...+63) | | O | X | O |
| 30H | rrH | mmH | -- | Drum EQ Bass Gain | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | X | X | O |
| 31H | rrH | mmH | -- | Drum EQ Treble Gain | rr: drum instrument note number<br>mm: 00H-7FH (0...127) | | X | X | O |
| 34H | rrH | mmH | -- | Drum EQ Bass Frequency | rr: drum instrument note number<br>mm: 04H-28H (32...2.0k [Hz]) | | X | X | O |
| 35H | rrH | mmH | -- | Drum EQ Treble Frequency | rr: drum instrument note number<br>mm: 1CH-3AH (500...16.0k [Hz]) | | X | X | O |
| 40H | rrH | mmH | -- | Drum VELOCITY PITCH SENS. | rr: drum instrument note number<br>mm: 00H-0FH (0...15) | | X | X | O |
| 41H | rrH | mmH | -- | Drum VELOCITY LPF CUTOFF SENS. | rr: drum instrument note number<br>mm: 00H-0FH (0...15) | | X | X | O |

NRPN MSB: 14H-1FH (ドラム用)はそのパートが、ドラムモードのとき受信します。
Data Entry LSB値は無視します。

## RPN (レジスタード・パラメーター・ナンバー)対応パラメーター

| NRPN | | Data Entry | | Parameter | Data Range | MIDI規格 | MIDI受信 (各PARTの受信有無) | MIDI送信 (データ発生元) | |
|---|---|---|---|---|---|---|---|---|---|
| MSB | LSB | MSB | LSB | | | | Song | Panel (主な出力方法) | Song |
| 00H | 00H | mmH | -- | Pitch Bend Sensitivity | mm: 00H-18H (0...+24 [semitones]) | [GM1][GM2] | O | X | O |
| 00H | 01H | mmH | llH | Fine Tune | mm ll: 00H 00H -100 [cent]<br>...<br>mm ll: 40H 00H 0 [cent]<br>...<br>mm ll: 7FH 7FH 100 [cent] | [GM1][GM2] | O | X | O |
| 00H | 02H | mmH | -- | Coarse Tune | mm: 28H-40H-58H (-24...0...+24 [semitones]) | [GM1][GM2] | O | X | O |
| 00H | 05H | mmH | llH | Modulation Sensitivity | mm: 半音単位で設定<br>ll: 100/128セント単位で設定 | [GM2] | O | X | O |
| 7FH | 7FH | -- | -- | Null | - | [GM2] | O | X | O |

# XG PARAMETER CHANGE TABLE

| 適用範囲 | MIDI, 本体シーケンサー |
|---|---|

## MIDI Parameter Change table (XG SYSTEM)

| Address (H) | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Song | Panel (主な出力方法) | Song |
| 00 00 00 | 4 | 00-0F<br>00-0F<br>00-0F<br>00-0F | MASTER TUNE | -102.4...0...+102.3 [cent]<br>1st bit 3-0→bit 15-12<br>2nd bit 3-0→bit 11-8<br>3rd bit 3-0→bit 7-4<br>4th bit 3-0→bit 3-0 | *Panel設定値 | O | X | O |
| 04 | 1 | 00-7F | MASTER VOLUME | 0...127 | 7F | O | X | O |
| 05 | 1 | 00-7F | MASTER ATTENUATOR | 0...127 | 00 | X | X | X |
| 06 | 1 | 28-58 | TRANSPOSE | -24...0...+24 [semitones] | 40 | O | X | O |
| 7D | 1 | N | DRUM SETUP RESET | N: Drum setup number | - | O | X | O |
| 7E | 1 | 00 | XG SYSTEM ON | 00=XG system ON | - | O | X | O |
| 7F | 1 | 00 | ALL PARAMETER RESET | 00=ON | - | O | X | X |

TOTAL SIZE 07

## MIDI Parameter Change table (SYSTEM INFORMATION)

| Address (H) | Size (H) | Data (H) | Parameter | Description | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|
| | | | | | Song | Panel (主な出力方法) | Song |
| 01 00 00<br>...<br>0D | E | 20-7F<br>...<br>20-7F | Model Name 1<br>...<br>Model Name 14 | 32...127 (ASCII CHARACTER)<br>...<br>32...127 (ASCII CHARACTER) | - | X | X |
| 0E | 1 | | NOT USED | | | | |
| 0F | 1 | | NOT USED | | | | |

TOTAL SIZE 10

Dump Requestにより、送信されます。受信は行ないません。

## MIDI Parameter Change table (EFFECT1)

| Address (H) | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Song | Panel (主な出力方法) | Song |
| 02 01 00 | 2 | 00-7F | REVERB TYPE MSB | | 01 (=HALL1) | O | O (Function) | O |
| | | 00-7F | REVERB TYPE LSB | | 00 | | | |
| 02 | 1 | 00-7F | REVERB PARAMETER 1 | | *1 | O*1 | X | O |
| 03 | 1 | 00-7F | REVERB PARAMETER 2 | | *1 | O*1 | X | O |
| 04 | 1 | 00-7F | REVERB PARAMETER 3 | | *1 | O*1 | X | O |
| 05 | 1 | 00-7F | REVERB PARAMETER 4 | | *1 | O*1 | X | O |
| 06 | 1 | 00-7F | REVERB PARAMETER 5 | | *1 | O*1 | X | O |
| 07 | 1 | 00-7F | REVERB PARAMETER 6 | | *1 | O*1 | X | O |
| 08 | 1 | 00-7F | REVERB PARAMETER 7 | | *1 | O*1 | X | O |
| 09 | 1 | 00-7F | REVERB PARAMETER 8 | | *1 | O*1 | X | O |
| 0A | 1 | 00-7F | REVERB PARAMETER 9 | | *1 | O*1 | X | O |
| 0B | 1 | 00-7F | REVERB PARAMETER 10 | | *1 | O*1 | X | O |
| 0C | 1 | 00-7F | REVERB RETURN | -∞dB...0dB...+6dB (0...64...127) | 40 | O | X | O |
| 0D | 1 | 01-7F | REVERB PAN | L63...C...R63 | 40 | O | X | O |

TOTAL SIZE 0E

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 02 01 10 | 1 | 00-7F | REVERB PARAMETER 11 | | *1 | O*1 | X | O |
| 11 | 1 | 00-7F | REVERB PARAMETER 12 | | *1 | O*1 | X | O |
| 12 | 1 | 00-7F | REVERB PARAMETER 13 | | *1 | O*1 | X | O |
| 13 | 1 | 00-7F | REVERB PARAMETER 14 | | *1 | O*1 | X | O |
| 14 | 1 | 00-7F | REVERB PARAMETER 15 | | *1 | O*1 | X | O |
| 15 | 1 | 00-7F | REVERB PARAMETER 16 | | *1 | O*1 | X | O |

TOTAL SIZE 06

*1 Reverb Typeに依存します。

| Address (H) | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Song | Panel (主な出力方法) | Song |
| 02 01 20 | 2 | 00-7F | CHORUS TYPE MSB | | 41 (=CHORUS1) | O | O (Voice) | O |
| | | 00-7F | CHORUS TYPE LSB | | 00 | | | |
| 22 | 1 | 00-7F | CHORUS PARAMETER 1 | | *2 | O*2 | X | O |
| 23 | 1 | 00-7F | CHORUS PARAMETER 2 | | *2 | O*2 | X | O |
| 24 | 1 | 00-7F | CHORUS PARAMETER 3 | | *2 | O*2 | X | O |
| 25 | 1 | 00-7F | CHORUS PARAMETER 4 | | *2 | O*2 | X | O |
| 26 | 1 | 00-7F | CHORUS PARAMETER 5 | | *2 | O*2 | X | O |
| 27 | 1 | 00-7F | CHORUS PARAMETER 6 | | *2 | O*2 | X | O |
| 28 | 1 | 00-7F | CHORUS PARAMETER 7 | | *2 | O*2 | X | O |
| 29 | 1 | 00-7F | CHORUS PARAMETER 8 | | *2 | O*2 | X | O |
| 2A | 1 | 00-7F | CHORUS PARAMETER 9 | | *2 | O*2 | X | O |
| 2B | 1 | 00-7F | CHORUS PARAMETER 10 | | *2 | O*2 | X | O |
| 2C | 1 | 00-7F | CHORUS RETURN | -∞dB...0dB...+6dB (0...64...127) | 40 | O | X | O |
| 2D | 1 | 01-7F | CHORUS PAN | L63...C...R63 | 40 | O | X | O |
| 2E | 1 | 00-7F | SEND CHORUS TO REVERB | -∞dB...0dB...+6dB (0...64...127) | 00 | O | X | O |

TOTAL SIZE 0F

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 02 | 01 | 30 | 1 | 00-7F | CHORUS PARAMETER 11 | | *2 | O*2 | X | O |
| | | 31 | 1 | 00-7F | CHORUS PARAMETER 12 | | *2 | O*2 | X | O |
| | | 32 | 1 | 00-7F | CHORUS PARAMETER 13 | | *2 | O*2 | X | O |
| | | 33 | 1 | 00-7F | CHORUS PARAMETER 14 | | *2 | O*2 | X | O |
| | | 34 | 1 | 00-7F | CHORUS PARAMETER 15 | | *2 | O*2 | X | O |
| | | 35 | 1 | 00-7F | CHORUS PARAMETER 16 | | *2 | O*2 | X | O |

TOTAL SIZE 06

*2 Chorus Typeに依存します。

| Address (H) | | | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Song | Panel (主な出力方法) | Song |
| 02 | 01 | 40 | 2 | 00-7F | VARIATION TYPE MSB | | 05 (=DELAY L, C, R) | O | X | O |
| | | | | 00-7F | VARIATION TYPE LSB | | 00 | | | |
| | | 42 | 2 | 00-7F | VARIATION PARAMETER 1 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 1 LSB | | | | | |
| | | 44 | 2 | 00-7F | VARIATION PARAMETER 2 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 2 LSB | | | | | |
| | | 46 | 2 | 00-7F | VARIATION PARAMETER 3 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 3 LSB | | | | | |
| | | 48 | 2 | 00-7F | VARIATION PARAMETER 4 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 4 LSB | | | | | |
| | | 4A | 2 | 00-7F | VARIATION PARAMETER 5 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 5 LSB | | | | | |
| | | 4C | 2 | 00-7F | VARIATION PARAMETER 6 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 6 LSB | | | | | |
| | | 4E | 2 | 00-7F | VARIATION PARAMETER 7 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 7 LSB | | | | | |
| | | 50 | 2 | 00-7F | VARIATION PARAMETER 8 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 8 LSB | | | | | |
| | | 52 | 2 | 00-7F | VARIATION PARAMETER 9 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 9 LSB | | | | | |
| | | 54 | 2 | 00-7F | VARIATION PARAMETER 10 MSB | | *3 | O*3 | X | O |
| | | | | 00-7F | VARIATION PARAMETER 10 LSB | | | | | |
| | | 56 | 1 | 00-7F | VARIATION RETURN | -∞dB...0dB...+6dB (0...64...127) | 40 | O | X | O |
| | | 57 | 1 | 01-7F | VARIATION PAN | L63...C...R63 | 40 | O | X | O |
| | | 58 | 1 | 00-7F | SEND VARIATION TO REVERB | -∞dB...0dB...+6dB (0...64...127) | 00 | O | X | O |
| | | 59 | 1 | 00-7F | SEND VARIATION TO CHORUS | -∞dB...0dB...+6dB (0...64...127) | 00 | O | X | O |
| | | 5A | 1 | 00-01 | VARIATION CONNECTION | INSERTION, SYSTEM | 00 | O | X | O |
| | | 5B | 1 | 00-7F | VARIATION PART NUMBER | 受信: Part 1...16 (0...15)<br>送信: Part 1...16 (0...15)<br>AD (64)<br>OFF (127) | 7F | O | X | O |
| | | 5C | 1 | 00-7F | MW VARIATION CONTROL DEPTH | -64...0...+63 | 40 | O | X | O |
| | | 5D | 1 | 00-7F | BEND VARIATION CONTROL DEPTH | -64...0...+63 | 40 | O | X | O |
| | | 5E | 1 | 00-7F | CAT VARIATION CONTROL DEPTH | -64...0...+63 | 40 | O | X | O |
| | | 5F | 1 | 00-7F | AC1 VARIATION CONTROL DEPTH | -64...0...+63 | 40 | O | X | O |
| | | 60 | 1 | 00-7F | AC2 VARIATION CONTROL DEPTH | -64...0...+63 | 40 | O | X | O |

TOTAL SIZE 21

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 02 | 01 | 70 | 1 | 00-7F | VARIATION PARAMETER 11 | | *3 | O*3 | X | O |
| | | 71 | 1 | 00-7F | VARIATION PARAMETER 12 | | *3 | O*3 | X | O |
| | | 72 | 1 | 00-7F | VARIATION PARAMETER 13 | | *3 | O*3 | X | O |
| | | 73 | 1 | 00-7F | VARIATION PARAMETER 14 | | *3 | O*3 | X | O |
| | | 74 | 1 | 00-7F | VARIATION PARAMETER 15 | | *3 | O*3 | X | O |
| | | 75 | 1 | 00-7F | VARIATION PARAMETER 16 | | *3 | O*3 | X | O |

TOTAL SIZE 06

*3 Variation Type に依存します。

## MIDI Parameter Change table (MULTI EQ)

| Address (H) | | | Size (H) | Data (H) | Parameter | Description | *MULTI EQはXG System Onでリセットされません。 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Song | Panel (主な出力方法) | Song |
| 02 | 40 | 00 | 1 | 00-04 | EQ TYPE | flat, jazz, pops, rock, classic | | X | X | X |
| | | 01 | 1 | 34-4C | EQ GAIN1 | -12...0...+12 [dB] | | X | X | X |
| | | 02 | 1 | 04-28 | EQ FREQUENCY1 | 32...2.0k [Hz] | | X | X | X |
| | | 03 | 1 | 01-78 | EQ Q1 | 0.1...12.0 | | X | X | X |
| | | 04 | 1 | 00-01 | EQ SHAPE1 | shelving, peaking | | X | X | X |
| | | 05 | 1 | 34-4C | EQ GAIN2 | -12...0...+12 [dB] | | X | X | X |
| | | 06 | 1 | 0E-36 | EQ FREQUENCY2 | 100...10.0k [Hz] | | X | X | X |
| | | 07 | 1 | 01-78 | EQ Q2 | 0.1...12.0 | | X | X | X |
| | | 08 | 1 | | NOT USED | | | - | - | - |
| | | 09 | 1 | 34-4C | EQ GAIN3 | -12...0...+12 [dB] | | X | X | X |
| | | 0A | 1 | 0E-36 | EQ FREQUENCY3 | 100...10.0k [Hz] | | X | X | X |
| | | 0B | 1 | 01-78 | EQ Q3 | 0.1...12.0 | | X | X | X |
| | | 0C | 1 | | NOT USED | | | - | - | - |
| | | 0D | 1 | 34-4C | EQ GAIN4 | -12...0...+12 [dB] | | X | X | X |
| | | 0E | 1 | 0E-36 | EQ FREQUENCY4 | 100...10.0k [Hz] | | X | X | X |
| | | 0F | 1 | 01-78 | EQ Q4 | 0.1...12.0 | | X | X | X |
| | | 10 | 1 | | NOT USED | | | - | - | - |
| | | 11 | 1 | 34-4C | EQ GAIN5 | -12...0...+12 [dB] | | X | X | X |
| | | 12 | 1 | 1C-3A | EQ FREQUENCY5 | 0.5k...16.0k [Hz] | | X | X | X |
| | | 13 | 1 | 01-78 | EQ Q5 | 0.1...12.0 | | X | X | X |
| | | 14 | 1 | 00-01 | EQ SHAPE5 | shelving, peaking | | X | X | X |

TOTAL SIZE 15

## MIDI Parameter Change table (EFFECT2)

| Address (H) | Size (H) | Data (H) | Parameter | Description | *EFFECT2はXG System On でリセットされません。 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Song | Panel (主な出力方法) | Song |
| 03 n 00 | 2 | 00-7F | INSERTION EFFECT TYPE MSB | | | O | X | O |
| | | 00-7F | INSERTION EFFECT TYPE LSB | | | | | |
| 02 | 1 | 00-7F | INSERTION EFFECT PARAMETER 1 | | | O*4 | X | O |
| 03 | 1 | 00-7F | INSERTION EFFECT PARAMETER 2 | | | O*4 | X | O |
| 04 | 1 | 00-7F | INSERTION EFFECT PARAMETER 3 | | | O*4 | X | O |
| 05 | 1 | 00-7F | INSERTION EFFECT PARAMETER 4 | | | O*4 | X | O |
| 06 | 1 | 00-7F | INSERTION EFFECT PARAMETER 5 | | | O*4 | X | O |
| 07 | 1 | 00-7F | INSERTION EFFECT PARAMETER 6 | | | O*4 | X | O |
| 08 | 1 | 00-7F | INSERTION EFFECT PARAMETER 7 | | | O*4 | X | O |
| 09 | 1 | 00-7F | INSERTION EFFECT PARAMETER 8 | | | O*4 | X | O |
| 0A | 1 | 00-7F | INSERTION EFFECT PARAMETER 9 | | | O*4 | X | O |
| 0B | 1 | 00-7F | INSERTION EFFECT PARAMETER 10 | | | O*4 | X | O |
| 0C | 1 | 00-7F | INSERTION EFFECT PART NUMBER | 受信: Part 1...16 (0...15)<br>送信: Part 1...16 (0...15)<br>AD (64)<br>OFF (127) | | O | O<br>(Voice) | O |
| 0D | 1 | 00-7F | MW INSERTION CONTROL DEPTH | -64...0...+63 | | O | X | O |
| 0E | 1 | 00-7F | BEND INSERTION CONTROL DEPTH | -64...0...+63 | | O | X | O |
| 0F | 1 | 00-7F | CAT INSERTION CONTROL DEPTH | -64...0...+63 | | O | X | O |
| 10 | 1 | 00-7F | AC1 INSERTION CONTROL DEPTH | -64...0...+63 | | O | O<br>(Function) | O |
| 11 | 1 | 00-7F | AC2 INSERTION CONTROL DEPTH | -64...0...+63 | | O | X | O |
| TOTAL SIZE | 12 | | | | | | | |
| 20 | 1 | 00-7F | INSERTION EFFECT PARAMETER 11 | | | O*4 | X | O |
| 21 | 1 | 00-7F | INSERTION EFFECT PARAMETER 12 | | | O*4 | X | O |
| 22 | 1 | 00-7F | INSERTION EFFECT PARAMETER 13 | | | O*4 | X | O |
| 23 | 1 | 00-7F | INSERTION EFFECT PARAMETER 14 | | | O*4 | X | O |
| 24 | 1 | 00-7F | INSERTION EFFECT PARAMETER 15 | | | O*4 | X | O |
| 25 | 1 | 00-7F | INSERTION EFFECT PARAMETER 16 | | | O*4 | X | O |
| TOTAL SIZE | 06 | | | | | | | |
| 30 | 2 | 00-7F | INSERTION EFFECT PARAMETER 1 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 1 LSB | | | | | |
| 32 | 2 | 00-7F | INSERTION EFFECT PARAMETER 2 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 2 LSB | | | | | |
| 34 | 2 | 00-7F | INSERTION EFFECT PARAMETER 3 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 3 LSB | | | | | |
| 36 | 2 | 00-7F | INSERTION EFFECT PARAMETER 4 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 4 LSB | | | | | |
| 38 | 2 | 00-7F | INSERTION EFFECT PARAMETER 5 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 5 LSB | | | | | |
| 3A | 2 | 00-7F | INSERTION EFFECT PARAMETER 6 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 6 LSB | | | | | |
| 3C | 2 | 00-7F | INSERTION EFFECT PARAMETER 7 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 7 LSB | | | | | |
| 3E | 2 | 00-7F | INSERTION EFFECT PARAMETER 8 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 8 LSB | | | | | |
| 40 | 2 | 00-7F | INSERTION EFFECT PARAMETER 9 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 9 LSB | | | | | |
| 42 | 2 | 00-7F | INSERTION EFFECT PARAMETER 10 MSB | | | O*4 | X | O |
| | | 00-7F | INSERTION EFFECT PARAMETER 10 LSB | | | | | |
| TOTAL SIZE | 14 | | | | | | | |

*4 Insertion Typeに依存します。

addressの2byte目をインサーションエフェクト番号とします。
n: insertion effect number

本機種のインサーションエフェクト番号の範囲は 0～1。範囲外の値については未知のイベントとして扱い無視されます。
MSBが不要なEFFECT TYPE使用時は、アドレス02～0BのPARAMETERを受信し、アドレス30～42のPARAMETERは受信しません。
MSBが必要なEFFECT TYPE使用時は、アドレス30～42のPARAMETERを受信し、アドレス02～0BのPARAMETERは受信しません。
EFFECT TYPEの情報を含むバルクの送信は、アドレス02～0BのPARAMETERが必ず送信されますが、MSBが必要なEFFECT TYPEの場合は、バルク受信においてもアドレス02～0BのPARAMETERの受信をしません。

## MIDI Parameter Change table (MULTI PART)

| Address (H) | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | Song | Panel (主な出力方法) | Song |
| 08 nn 00 | 1 | 00-20 | NOT USED | | | X | X | X |
| 01 | 1 | 00-7F | BANK SELECT MSB | 0...127 | part 10=7F, other parts=00 | O | X | O |
| 02 | 1 | 00-7F | BANK SELECT LSB | 0...127 | 00 | O | X | O |
| 03 | 1 | 00-7F | PROGRAM NUMBER | 1...128 | 00 | O | X | O |
| 04 | 1 | 00-0F, 7F | Rcv CHANNEL | 1...16, OFF | Part No. | O | X | O |
| 05 | 1 | 00-01 | MONO/POLY MODE | MONO, POLY | 01 | O | X | O |
| 06 | 1 | 00-02 | SAME NOTE NUMBER KEY ON ASSIGN | SINGLE, MULTI, INST (for Drum) | 01 | O | X | O |
| 07 | 1 | 00-03 | PART MODE | NORMAL, DRUM, DRUMS 1...2 | part 10=02, other parts=00 | O | O (Voice) | O |
| 08 | 1 | 28-58 | NOTE SHIFT | -24...0...+24 [semitones] | 40 | O | X | O |
| 09 | 2 | 00-0F<br>00-0F | DETUNE | -12.8...0...+12.7 [Hz]<br>1st bit 3-0→bit 7-4 | 08 00 | O | X | O |
| 0B | 1 | 00-7F | VOLUME | 0...127 | 64 | O | X | O |
| 0C | 1 | 00-7F | VELOCITY SENSE DEPTH | 0...127 | 40 | O | O (Function) | O |
| 0D | 1 | 00-7F | VELOCITY SENSE OFFSET | 0...127 | 40 | O | O (Function) | O |
| 0E | 1 | 00-7F | PAN | RND, L63...C...R63 | 40 | O | X | O |
| 0F | 1 | 00-7F | NOTE LIMIT LOW | C-2...G8 | 00 | O | X | O |
| 10 | 1 | 00-7F | NOTE LIMIT HIGH | C-2...G8 | 7F | O | X | O |
| 11 | 1 | 00-7F | DRY LEVEL | 0...127 | 7F | O | X | O |
| 12 | 1 | 00-7F | CHORUS SEND | 0...127 | 00 | O | X | O |
| 13 | 1 | 00-7F | REVERB SEND | 0...127 | 28 | O | X | O |
| 14 | 1 | 00-7F | VARIATION SEND | 0...127 | 00 | O | X | O |
| 15 | 1 | 00-7F | VIBRATO RATE | -64...0...+63 | 40 | O | X | O |
| 16 | 1 | 00-7F | VIBRATO DEPTH | -64...0...+63 | 40 | O | X | O |
| 17 | 1 | 00-7F | VIBRATO DELAY | -64...0...+63 | 40 | O | X | O |
| 18 | 1 | 00-7F | FILTER CUTOFF FREQUENCY | -64...0...+63 | 40 | O | X | O |
| 19 | 1 | 00-7F | FILTER RESONANCE | -64...0...+63 | 40 | O | X | O |
| 1A | 1 | 00-7F | EG ATTACK TIME | -64...0...+63 | 40 | O | X | O |
| 1B | 1 | 00-7F | EG DECAY TIME | -64...0...+63 | 40 | O | X | O |
| 1C | 1 | 00-7F | EG RELEASE TIME | -64...0...+63 | 40 | O | X | O |
| 1D | 1 | 28-58 | MW PITCH CONTROL | -24...0...+24 [semitones] | 40 | O | X | O |
| 1E | 1 | 00-7F | MW LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 1F | 1 | 00-7F | MW AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 20 | 1 | 00-7F | MW LFO PMOD DEPTH | 0...127 | 0A | O | X | O |
| 21 | 1 | 00-7F | MW LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 22 | 1 | 00-7F | MW LFO AMOD DEPTH | 0...127 | 00 | O | X | O |
| 23 | 1 | 28-58 | BEND PITCH CONTROL | -24...0...+24 [semitones] | 42 | O | X | O |
| 24 | 1 | 00-7F | BEND LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 25 | 1 | 00-7F | BEND AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 26 | 1 | 00-7F | BEND LFO PMOD DEPTH | 0...127 | 00 | O | X | O |
| 27 | 1 | 00-7F | BEND LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 28 | 1 | 00-7F | BEND LFO AMOD DEPTH | 0...127 | 00 | O | X | O |

TOTAL SIZE 29

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 30 | 1 | 00-01 | Rcv PITCH BEND | OFF, ON | 01 | O | X | O |
| 31 | 1 | 00-01 | Rcv CH AFTER TOUCH (CAT) | OFF, ON | 01 | O | X | O |
| 32 | 1 | 00-01 | Rcv PROGRAM CHANGE | OFF, ON | 01 | O | X | O |
| 33 | 1 | 00-01 | Rcv CONTROL CHANGE | OFF, ON | 01 | O | X | O |
| 34 | 1 | 00-01 | Rcv POLY AFTER TOUCH (PAT) | OFF, ON | 01 | O | X | O |
| 35 | 1 | 00-01 | Rcv NOTE MESSAGE | OFF, ON | 01 | O | X | O |
| 36 | 1 | 00-01 | Rcv RPN | OFF, ON | 01 | O | X | O |
| 37 | 1 | 00-01 | Rcv NRPN | OFF, ON | XG mode=01, GM mode=00 | O | X | O |
| 38 | 1 | 00-01 | Rcv MODULATION | OFF, ON | 01 | O | X | O |
| 39 | 1 | 00-01 | Rcv VOLUME | OFF, ON | 01 | O | X | O |
| 3A | 1 | 00-01 | Rcv PAN | OFF, ON | 01 | O | X | O |
| 3B | 1 | 00-01 | Rcv EXPRESSION | OFF, ON | 01 | O | X | O |
| 3C | 1 | 00-01 | Rcv HOLD1 | OFF, ON | 01 | O | X | O |
| 3D | 1 | 00-01 | Rcv PORTAMENTO | OFF, ON | 01 | O | X | O |
| 3E | 1 | 00-01 | Rcv SOSTENUTO | OFF, ON | 01 | O | X | O |
| 3F | 1 | 00-01 | Rcv SOFT PEDAL | OFF, ON | 01 | O | X | O |
| 40 | 1 | 00-01 | Rcv BANK SELECT | OFF, ON | 01 | O | X | O |
| 41 | 1 | 00-7F | SCALE TUNING C | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 42 | 1 | 00-7F | SCALE TUNING C♯ | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 43 | 1 | 00-7F | SCALE TUNING D | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 44 | 1 | 00-7F | SCALE TUNING D♯ | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 45 | 1 | 00-7F | SCALE TUNING E | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 46 | 1 | 00-7F | SCALE TUNING F | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 47 | 1 | 00-7F | SCALE TUNING F♯ | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 48 | 1 | 00-7F | SCALE TUNING G | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 49 | 1 | 00-7F | SCALE TUNING G♯ | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 4A | 1 | 00-7F | SCALE TUNING A | -63...0...+63 [cent] | 40 | O | O (Function) | O |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 4B | 1 | 00-7F | SCALE TUNING A♯ | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 4C | 1 | 00-7F | SCALE TUNING B | -63...0...+63 [cent] | 40 | O | O (Function) | O |
| 4D | 1 | 28-58 | CAT PITCH CONTROL | -24...0...+24 [semitones] | 40 | O | X | O |
| 4E | 1 | 00-7F | CAT LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 4F | 1 | 00-7F | CAT AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 50 | 1 | 00-7F | CAT LFO PMOD DEPTH | 0...127 | 00 | O | X | O |
| 51 | 1 | 00-7F | CAT LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 52 | 1 | 00-7F | CAT LFO AMOD DEPTH | 0...127 | 00 | O | X | O |
| 53 | 1 | 28-58 | PAT PITCH CONTROL | -24...0...+24 [semitones] | 40 | O | X | O |
| 54 | 1 | 00-7F | PAT LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 55 | 1 | 00-7F | PAT AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 56 | 1 | 00-7F | PAT LFO PMOD DEPTH | 0...127 | 00 | O | X | O |
| 57 | 1 | 00-7F | PAT LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 58 | 1 | 00-7F | PAT LFO AMOD DEPTH | 0...127 | 00 | O | X | O |
| 59 | 1 | 00-5F | AC1 CONTROLLER NUMBER | 0...95 | 10 | O | O (Function) | O |
| 5A | 1 | 28-58 | AC1 PITCH CONTROL | -24...0...+24 [semitones] | 40 | O | X | O |
| 5B | 1 | 00-7F | AC1 LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 5C | 1 | 00-7F | AC1 AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 5D | 1 | 00-7F | AC1 LFO PMOD DEPTH | 0...127 | 00 | O | X | O |
| 5E | 1 | 00-7F | AC1 LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 5F | 1 | 00-7F | AC1 LFO AMOD DEPTH | 0...127 | 00 | O | X | O |
| 60 | 1 | 00-5F | AC2 CONTROLLER NUMBER | 0...95 | 11 | O | X | O |
| 61 | 1 | 28-58 | AC2 PITCH CONTROL | -24...0...+24 [semitones] | 40 | O | X | O |
| 62 | 1 | 00-7F | AC2 LOW PASS FILTER CONTROL | -9600...0...+9450 [cent] | 40 | O | X | O |
| 63 | 1 | 00-7F | AC2 AMPLITUDE CONTROL | -100...0...+100 [%] | 40 | O | X | O |
| 64 | 1 | 00-7F | AC2 LFO PMOD DEPTH | 0...127 | 00 | O | X | O |
| 65 | 1 | 00-7F | AC2 LFO FMOD DEPTH | 0...127 | 00 | O | X | O |
| 66 | 1 | 00-7F | AC2 LFO AMOD DEPTH | 0...127 | 00 | O | X | O |
| 67 | 1 | 00-01 | PORTAMENTO SWITCH | OFF, ON | 00 | O | X | O |
| 68 | 1 | 00-7F | PORTAMENTO TIME | 0...127 | 00 | O | X | O |
| 69 | 1 | 00-7F | PITCH EG INITIAL LEVEL | -64...0...+63 | 40 | O | X | O |
| 6A | 1 | 00-7F | PITCH EG ATTACK TIME | -64...0...+63 | 40 | O | X | O |
| 6B | 1 | 00-7F | PITCH EG RELEASE LEVEL | -64...0...+63 | 40 | O | X | O |
| 6C | 1 | 00-7F | PITCH EG RELEASE TIME | -64...0...+63 | 40 | O | X | O |
| 6D | 1 | 01-7F | VELOCITY LIMIT LOW | 1...127 | 01 | O | X | O |
| 6E | 1 | 01-7F | VELOCITY LIMIT HIGH | 1...127 | 7F | O | X | O |
| TOTAL SIZE | 3F | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 70 | 1 | | NOT USED | | - | - | - | - |
| 71 | 1 | | NOT USED | | - | - | - | - |
| 72 | 1 | 00-7F | EQ BASS GAIN | -12dB...+12dB | 40 | O | X | O |
| 73 | 1 | 00-7F | EQ TREBLE GAIN | -12dB...+12dB | 40 | O | X | O |
| TOTAL SIZE | 04 | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 74 | 1 | | NOT USED | | - | - | - | - |
| 75 | 1 | | NOT USED | | - | - | - | - |
| 76 | 1 | 04-28 | EQ BASS FREQUENCY | 32...2.0k [Hz] | 0C | O | X | O |
| 77 | 1 | 1C-3A | EQ TREBLE FREQUENCY | 500...16.0k [Hz] | 36 | O | X | O |
| 78 | 1 | | NOT USED | | - | - | - | - |
| 79 | 1 | | NOT USED | | - | - | - | - |
| 7A | 1 | | NOT USED | | - | - | - | - |
| 7B | 1 | | NOT USED | | - | - | - | - |
| 7C | 1 | | NOT USED | | - | - | - | - |
| 7D | 1 | | NOT USED | | - | - | - | - |
| 7E | 1 | | NOT USED | | - | - | - | - |
| 7F | 1 | | NOT USED | | - | - | - | - |
| TOTAL SIZE | 0C | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 0A nn 40 | 1 | 00-7F | MW OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| 41 | 1 | 00-7F | BEND OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| 42 | 1 | 00-7F | CAT OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| 43 | 1 | 00-7F | PAT OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| 44 | 1 | 00-7F | AC1 OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| 45 | 1 | 00-7F | AC2 OFFSET LEVEL CONTROL | -100 - 100 [%] | 40 | O | X | O |
| TOTAL SIZE | 06 | | | | | | | |

nn = PART NUMBER

DRUM PARTの場合、以下のパラメーターは効果がかかりません。
・BANK SELECT LSB
・PORTAMENTO
・MONO/POLY
・SCALE TUNING
・POLY AFTER TOUCH
・PITCH EG

## MIDI Parameter Change table (DRUM SETUP)

| Address (H) | | | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Song | Panel (主な出力方法) | Song |
| 3n | rr | 00 | 1 | 00-7F | PITCH COARSE | -64...0...+63 | 40 | O | X | O |
| | | 01 | 1 | 00-7F | PITCH FINE | -64...0...+63 [cent] | 40 | O | X | O |
| | | 02 | 1 | 00-7F | LEVEL | 0...127 | *5 | O | X | O |
| | | 03 | 1 | 00-7F | ALTERNATE GROUP | OFF, 1...127 | *5 | O | X | O |
| | | 04 | 1 | 00-7F | PAN | RND, L63...C...R63 | *5 | O | X | O |
| | | 05 | 1 | 00-7F | REVERB SEND | 0...127 | *5 | O | X | O |
| | | 06 | 1 | 00-7F | CHORUS SEND | 0...127 | *5 | O | X | O |
| | | 07 | 1 | 00-7F | VARIATION SEND | 0...127 | 7F | O | X | O |
| | | 08 | 1 | 00-01 | KEY ASSIGN | SINGLE, MULTI | 00 | O | X | O |
| | | 09 | 1 | 00-01 | Rcv NOTE OFF | OFF, ON | *5 | O | X | O |
| | | 0A | 1 | 00-01 | Rcv NOTE ON | OFF, ON | 01 | O | X | O |
| | | 0B | 1 | 00-7F | LOW PASS FILTER CUTOFF FREQUENCY | -64...0...+63 | 40 | O | X | O |
| | | 0C | 1 | 00-7F | LOW PASS FILTER RESONANCE | -64...0...+63 | 40 | O | X | O |
| | | 0D | 1 | 00-7F | EG ATTACK RATE | -64...0...+63 | 40 | O | X | O |
| | | 0E | 1 | 00-7F | EG DECAY1 RATE | -64...0...+63 | 40 | O | X | O |
| | | 0F | 1 | 00-7F | EG DECAY2 RATE | -64...0...+63 | 40 | O | X | O |
| TOTAL SIZE | | | 10 | | | | | | | |

*5 ノートに依存します。

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 20 | 1 | 00-7F | EQ BASS GAIN | -12...+12 [dB] | 40 | X | X | X |
| | | 21 | 1 | 00-7F | EQ TREBLE GAIN | -12...+12 [dB] | 40 | X | X | X |
| | | 22 | 1 | | NOT USED | | - | - | - | - |
| | | 23 | 1 | | NOT USED | | - | - | - | - |
| | | 24 | 1 | 04-28 | EQ BASS FREQUENCY | 32...2.0k [Hz] | 0C | X | X | X |
| | | 25 | 1 | 1C-3A | EQ TREBLE FREQUENCY | 500...16.0k [Hz] | 36 | X | X | X |
| | | 26 | 1 | | NOT USED | | - | - | - | - |
| | | 27 | 1 | | NOT USED | | - | - | - | - |
| | | 28 | 1 | | NOT USED | | - | - | - | - |
| | | 29 | 1 | | NOT USED | | - | - | - | - |
| | | 2A | 1 | | NOT USED | | - | - | - | - |
| | | 2B | 1 | | NOT USED | | - | - | - | - |
| | | 2C | 1 | | NOT USED | | - | - | - | - |
| | | 2D | 1 | | NOT USED | | - | - | - | - |
| TOTAL SIZE | | | 0E | | | | | | | |

n: Drum Setup Number (0-1)
rr: note number (0D-5B)

すべてのDrum Setupを以下の場合に初期化します。
・XG SYSTEM ON受信
・GM SYSTEM ON受信
・GM LEVEL2 SYSTEM ON受信
・GS RESET受信
・DRUM SETUP RESET受信 (XG mode時)

**注記**
Drum Setupをアサインされているパートのプログラムチェンジを受信すると、アサインされているDrum Setupは初期化されます。
複数のパートが同じDrum Setupをアサインされている場合、Drum Setupパラメーターの変更(プログラムチェンジを含む)は、アサインされているすべてのパートに反映します。

# System Exclusive Messages (1)

| 適用範囲 | MIDI, 本体シーケンサー |
|---|---|

* Receive System Exclusive Messageの設定がOFFのときには受信しません。
* Transmit System Exclusive Messageの設定がOFFのときには送信しません。

## システムエクスクルーシブメッセージ (ユニバーサルリアルタイムメッセージ)

| MIDI Event | データフォーマット | MIDI規格 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|
| | | | Song | Panel (主な出力方法) | Song |
| Master Volume | F0 7F XN 04 01 SS TT F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00000100 04 = Sub-ID #1=Device Control Message<br>00000001 01 = Sub-ID #2=Master Volume<br>0sssssss SS = Volume LSB<br>0ttttttt TT = Volume MSB<br>11110111 F7 = End of Exclusive | [GM2] | O | X | △ *1 |
| Master Fine Tuning | F0 7F XN 04 03 SS TT F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00000100 04 = Sub-ID #1=Device Control Message<br>00000011 03 = Sub-ID #2=Master Fine Tuning<br>0sssssss SS = Fine Tuning LSB<br>0ttttttt TT = Fine Tuning MSB<br>11110111 F7 = End of Exclusive | [GM2] | O | X | △ *1 |
| Master Coarse Tuning | F0 7F XN 04 04 00 TT F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00000100 04 = Sub-ID #1=Device Control Message<br>00000100 04 = Sub-ID #2=Master Coarse Tuning<br>00000000 00<br>0ttttttt TT = Coarse Tuning MSB<br>11110111 F7 = End of Exclusive | [GM2] | O | X | △ *1 |
| Reverb Parameter | F0 7F XN 04 05 01 01 01 01 01 PP VV … F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00000100 04 = Sub-ID #1=Device Control Message<br>00000101 05 = Sub-ID #2=Global Parameter Control<br>00000001 01 = Slot path length = 1<br>00000001 01 = Parameter ID width = 1<br>00000001 01 = Value width = 1<br>00000001 01 = Slot path MSB = 1 (Reverb)<br>00000001 01 = Slot path LSB = 1<br>0ppppppp PP = Parameter to be controlled.<br>0vvvvvvv VV = Value for the Parameter.<br>… …<br>11110111 F7 = End of Exclusive<br><br>Parameter (pp) Value (vv) Display<br>pp=0 Reverb Type 0…8 0: RoomS<br>1: RoomM<br>2: RoomL<br>3: HallM<br>4: HallL (default)<br>8: GM Plate<br>pp=1 Reverb Time 0…127 0…11.0s | [GM2] | O | X | △ *1 |
| Chorus Parameter | F0 7F XN 04 05 01 01 01 01 02 PP VV … F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00000100 04 = Sub-ID #1=Device Control Message<br>00000101 05 = Sub-ID #2=Global Parameter Control<br>00000001 01 = Slot path length = 1<br>00000001 01 = Parameter ID width = 1<br>00000001 01 = Value width = 1<br>00000001 01 = Slot path MSB = 1 (Chorus)<br>00000010 02 = Slot path LSB = 2<br>0ppppppp PP = Parameter to be controlled.<br>0vvvvvvv VV = Value for the Parameter.<br>… …<br>11110111 F7 = End of Exclusive<br><br>Parameter (pp) Value (vv) Display<br>pp=0 Chorus Type 0…5 0: GM Chorus1<br>1: GM Chorus2<br>2: GM Chorus3 (default)<br>3: GM Chorus4<br>4: FB Chorus<br>5: GM Flanger<br>pp=1 Mod Rate 0…127 0…15.5Hz<br>pp=2 Mod Depth 0…127<br>pp=3 Feedback 0…127<br>pp=4 Send to Reverb 0…127 | [GM2] | O | X | △ *1 |

| MIDI Event | データフォーマット | MIDI規格 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|
| | | | Song | Panel (主な出力方法) | Song |
| Channel Pressure (Aftertouch) | F0 7F XN 09 01 0M PP RR … F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001001 09 = Sub-ID #1=Controller Destination Setting<br>00000001 01 = Sub-ID #2=Controller Type: 01 (Channel Pressure)<br>0000mmmm 0M = MIDI Channel (00-0F)<br>0ppppppp PP = Controlled Parameter<br>0rrrrrrr RR = Data<br>… …<br>11110111 F7 = End of Exclusive<br><br>Controlled ParameterとRangeをペアで設定。<br>設定しなかったパラメーターは初期化される。<br><br>Control Parameter (pp) / Data (RR) / Description / 初期値<br>pp=00 Pitch Control / 28H-58H / -24…0…+24 semitones / 40H<br>pp=01 Filter Cutoff Control / 00H-7FH / -9600…0…+9450 cents / 40H<br>pp=02 Amplitude Control / 00H-7FH / -100…0…+100% / 40H<br>pp=03 LFO Pitch Depth / 00H-7FH / 0…127 / 00H<br>pp=04 LFO Filter Depth / 00H-7FH / 0…127 / 00H<br>pp=05 LFO Amplitude Depth / 00H-7FH / 0…127 / 00H | [GM2] | O | X | △ *1 |
| Controller (Control Change) | F0 7F XN 09 03 0M CC PP RR … F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001001 09 = Sub-ID #1=Controller Destination Setting<br>00000011 03 = Sub-ID #2=Controller Type: 03 (Control Change)<br>0000mmmm 0M = MIDI Channel (00-0F)<br>0ccccccc CC = Controller Number (01H-1FH, 40H-5FH)<br>0ppppppp PP = Controlled Parameter<br>0rrrrrrr RR = Range<br>… …<br>11110111 F7 = End of Exclusive<br><br>Controlled ParameterとRangeをペアで設定。<br>設定しなかったパラメーターは初期化される。<br><br>Control Parameter (pp) / Data (RR) / Description / 初期値<br>pp=00 Pitch Control / 28H-58H / -24…0…+24 semitones / 40H<br>pp=01 Filter Cutoff Control / 00H-7FH / -9600…0…+9450 cents / 40H<br>pp=02 Amplitude Control / 00H-7FH / -100…0…+100% / 40H<br>pp=03 LFO Pitch Depth / 00H-7FH / 0…127 / 00H<br>pp=04 LFO Filter Depth / 00H-7FH / 0…127 / 00H<br>pp=05 LFO Amplitude Depth / 00H-7FH / 0…127 / 00H | [GM2] | O | X | △ *1 |
| Key-Based Instrument Control | F0 7F XN 0A 01 0M KK CC VV … F7<br>11110000 F0 = Exclusive status<br>01111111 7F = Universal Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001010 0A = Sub-ID #1=Key-Based Instrument Control<br>00000011 01 = Sub-ID #2=Controller<br>0000mmmm 0M = MIDI Channel (00-0F)<br>0kkkkkkk KK = Key Number<br>0ccccccc CC = Controller Number<br>0vvvvvvv VV = Value<br>… …<br>11110111 F7 = End of Exclusive<br><br>Controlled NumberとValueをペアで設定。<br><br>Control Number (CC) / Value (VV) / Description / 初期値<br>CC=07H Volume / 00H-7FH / -100…0…+100% / 40H<br>CC=0AH Pan / 00H-7FH (absolute) / L63…C…R63 / (Preset value)<br>CC=5BH Reverb Send Level / 00H-7FH (absolute) / 0…Max / (Preset value)<br>CC=5DH Chorus Send Level / 00H-7FH (absolute) / 0…Max / (Preset value) | [GM2] | O | X | △ *1 |

*1 XGに変換して出力されます。

## システムエクスクルーシブメッセージ (ユニバーサルノンリアルタイムメッセージ)

| MIDI Event | データフォーマット | MIDI規格 | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|---|
| | | | Song | Panel (主な出力方法) | Song |
| GM1 System On | F0 7E XN 09 01 F7<br>11110000 F0 = Exclusive status<br>01111110 7E = Universal Non-Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001001 09 = Sub-ID #1=General MIDI Message<br>00000001 01 = Sub-ID #2=General MIDI On<br>11110111 F7 = End of Exclusive | [GM1][GM2] | O | X | △ *1 |
| GM2 System On | F0 7E XN 09 03 F7<br>11110000 F0 = Exclusive status<br>01111110 7E = Universal Non-Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001001 09 = Sub-ID #1=General MIDI Message<br>00000011 03 = Sub-ID #2=General MIDI2 On<br>11110111 F7 = End of Exclusive | [GM2] | O | X | △ *1 |
| General MIDI System Off | F0 7E XN 09 02 F7<br>11110000 F0 = Exclusive status<br>01111110 7E = Universal Non-Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001001 09 = Sub-ID #1=General MIDI Message<br>00000010 02 = Sub-ID #2=General MIDI Off<br>11110111 F7 = End of Exclusive | [GM1][GM2] | O | X | △ *1 |
| Scale/Octave Tuning | F0 7E XN 08 08 JJ GG MM SS ... F7<br>11110000 F0 = Exclusive status<br>01111110 7E = Universal Non-Real Time<br>0xxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored<br>00001000 08 = Sub-ID #1=MIDI Tuning Standard<br>00001000 08 = Sub-ID #2=scale/octave tuning 1byte form<br>0jjjjjjj JJ = Channel/option byte1<br>bits 0 to 1 = channel 15 to 16<br>bits 2 to 6 = reserved<br>0ggggggg GG = Channel byte 2 - bits 0 to 6 = channel 8 to 14<br>0mmmmmmm MM = Channel byte 2 - bits 0 to 6 = channel 1 to 7<br>0sssssss SS = 12 byte tuning offset of 12 semitones from C to B<br>00H means -64cent<br>40H means 0cent<br>7FH means +63cent<br>... ...<br>11110111 F7 = End of Exclusive | [GM2] | O | X | △ *1 |

*1 XGに変換して出力されます。

# System Exclusive Messages (2)

| 適用範囲 | MIDI, 本体シーケンサー |
|---|---|

## システムエクスクルーシブメッセージ (XG)

| MIDI Event | データフォーマット | MIDI受信 | MIDI送信 | |
|---|---|---|---|---|
| | | Song | Panel (主な出力方法) | Song |
| XGパラメーターチェンジ | F0 43 1n 4C hh mm ll dd ... F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>0001nnnn 1n = Device Number n=always 0 (when transmit), n=0-F (when receive)<br>01001100 4C = Model ID<br>0hhhhhhh hh = Address High<br>0mmmmmmm mm = Address Mid<br>0lllllll ll = Address Low<br>0ddddddd dd = Data<br>... ...<br>11110111 F7 = End of Exclusive | O<br>*Parameter Change Table を参照のこと | O<br>*Parameter Change Table を参照のこと | |
| XGバルクダンプ | F0 43 0n 4C aa bb hh mm ll dd ... dd cc F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>0000nnnn 0n = Device Number n=always 0 (when transmit), n=0-F (when receive)<br>01001100 4C = Model ID<br>0aaaaaaa aa = Byte Count MSB<br>0bbbbbbb bb = Byte Count LSB<br>0hhhhhhh hh = Address High<br>0mmmmmmm mm = Address Mid<br>0lllllll ll = Address Low<br>0ddddddd dd = Data<br>... ...<br>0ddddddd dd = Data<br>0ccccccc cc = Checksum<br>11110111 F7 = End of Exclusive | O<br>*Parameter Change Table を参照のこと | O<br>*Parameter Change Table を参照のこと | |
| XGパラメーターリクエスト | F0 43 3n 4C hh mm ll F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>0011nnnn 3n = Device Number n=always 0 (when transmit), n=0-F (when receive)<br>01001100 4C = Model ID<br>0hhhhhhh hh = Address High<br>0mmmmmmm mm = Address Mid<br>0lllllll ll = Address Low<br>11110111 F7 = End of Exclusive | O<br>*Parameter Change Table を参照<br><br>ただし、<br>0A nn 4v は X | X | |
| XGダンプリクエスト | F0 43 2n 4C hh mm ll F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>0010nnnn 2n = Device Number n=always 0 (when transmit), n=0-F (when receive)<br>01001100 4C = Model ID<br>0hhhhhhh hh = Address High<br>0mmmmmmm mm = Address Mid<br>0lllllll ll = Address Low<br>11110111 F7 = End of Exclusive | O<br>*Parameter Change Table を参照<br><br>ただし、<br>0A nn 40 は X | X | |

## システムエクスクルーシブメッセージ (その他)

| MIDI Event | データフォーマット | MIDI受信 (各PARTの発音への効果の有無) | MIDI送信 (データ発生元) | |
|---|---|---|---|---|
| | | Song | Panel (主な出力方法) | Song |
| MIDI Master Tuning | F0 43 1n 27 30 00 00 mm ll cc F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>0001nnnn 1n n= always 0 (when transmit), n=0-F (when receive)<br>00100111 27 = Model ID of TG100<br>00110000 30 = Address High<br>00000000 00 = Address Mid<br>00000000 00 = Address Low<br>0000mmmm 0m = Master Tune MSB<br>0000llll 0l = Master Tune LSB<br>0ccccccc cc = don't care<br>11110111 F7 = End of Exclusive | O | X | X |

## システムエクスクルーシブメッセージ (パネル音色関連)

| MIDI Event | データフォーマット | MIDI受信 (各PARTの発音への効果の有無) | MIDI送信 (データ発生元) | |
|---|---|---|---|---|
| | | Song | Panel (主な出力方法) | Song |
| String Resonance Depth | F0 43 73 01 50 11 0n 02 dd F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>01110011 73 = Clavinova ID<br>00000001 01 = Model ID (Clavinova common ID)<br>01010000 50 = Sub ID<br>00010001 11 = Sub ID<br>0000nnnn 0n = Channel (00-0F)<br>00000010 02 = Sub ID (String Resonance Depth)<br>0ddddddd dd = Depth (00-48)<br>11110111 F7 = End of Exclusive | X | O | O |
| Sustain Sample Depth | F0 43 73 01 50 11 0n 03 dd F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>01110011 73 = Clavinova ID<br>00000001 01 = Model ID (Clavinova common ID)<br>01010000 50 = Sub ID<br>00010001 11 = Sub ID<br>0000nnnn 0n = Channel (00-0F)<br>00000011 03 = Sub ID (Sustain Sample Depth)<br>0ddddddd dd = Depth (00-48)<br>11110111 F7 = End of Exclusive | X | O | O |
| Key Off Sampling Depth | F0 43 73 01 50 11 0n 04 dd F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>01110011 73 = Clavinova ID<br>00000001 01 = Model ID (Clavinova common ID)<br>01010000 50 = Sub ID<br>00010001 11 = Sub ID<br>0000nnnn 0n = Channel (00-0F)<br>00000100 04 = Sub ID (Key Off Sampling Depth)<br>0ddddddd dd = Depth (00-50)<br>11110111 F7 = End of Exclusive | O | O<br>(Function) | O |
| Soft Pedal Depth | F0 43 73 01 50 11 0n 05 dd F7<br>11110000 F0 = Exclusive status<br>01000011 43 = YAMAHA ID<br>01110011 73 = Clavinova ID<br>00000001 01 = Model ID (Clavinova common ID)<br>01010000 50 = Sub ID<br>00010001 11 = Sub ID<br>0000nnnn 0n = Channel (00-0F)<br>00000101 05 = Sub ID (Soft Pedal Depth)<br>0ddddddd dd = Depth (00-7F)<br>11110111 F7 = End of Exclusive | O | O<br>(Function) | O |

*各Depth値のリセット値は40H=音色パラメーターとします。

# MIDIインプリメンテーションチャート

YAMAHA [ Silent Piano ] Date:09-Jan-2018
Model SH2 MIDI Implementation Chart Version:1.0

| Function... | | Transmitted | Recognized | Remarks |
|---|---|---|---|---|
| Basic Channel | Default | 1 | 1 - 16 | |
| | Changed | o | x | |
| Mode | Default | 3 | 3 | |
| | Messages | x | x | |
| | Altered | ********** | x | |
| Note Number : True voice | | 0 - 127<br>********** | 0 - 127<br>0 - 127 | |
| Velocity | Note ON | o 9nH,v=1-127 | o 9nH,v=1-127 | |
| | Note OFF | o 8nH,v=64 | o 9nH,v=0 or 8nH | |
| After Touch | Key's | o | o | |
| | Ch's | x | o | |
| Pitch Bend | | x | o 0 - 24 semi | *1 |
| Control Change | 0,32 | o | o | Bank Select |
| | 1,5 | x *2 | o | |
| | 7 | o | o | |
| | 10,11 | x *2 | o | |
| | 6,38 | x *2 | o | Data Entry |
| | 64,66,67 | o | o | Pedal |
| | 65 | x *2 | o | Portamento |
| | 71-74 | x *2 | o | Sound Controller |
| | 84 | x *2 | o | Portamento Control |
| | 91,93 | o | o | Effect Depth |
| | 96-97 | x *2 | o | RPN Inc,Dec |
| | 98-99 | x *2 | o | NRPN LSB,MSB |
| | 100-101 | x *2 | o | RPN LSB,MSB |
| Prog Change : True # | | o 0 - 127<br>********** | o 0 - 127 | |
| System Exclusive | | o | o | |
| Common | : Song Pos. | x | x | |
| | : Song Sel. | x | x | |
| | : Tune | x | x | |
| System Real Time | : Clock | o | x | |
| | : Commands | o | o | |
| Aux Mes- sages | :All Sound OFF | x | o(120,126,127) | |
| | :Reset All Cntrls | x | o(121) | |
| | :Local ON/OFF | x | o(122) | |
| | :All Notes OFF | x | o(123-125) | |
| | :Active Sense | o | o | |
| | :Reset | x | x | |

Notes: *1 ピアノやハープシコードの一部の音色では、ピッチベンド幅の設定どおりに音の高さが変化しない場合があります。
*2 これらのコントロールチェンジはパネル操作によって送信されませんが、Song演奏中に送信されることがあります。

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON , MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No

Manual Development Group

2018年6月 発行
MW-A0