## DDJ-SZ

List of MIDI messages version 1.01


MIDI channel assignment
MIDI channel is defined as shown below.
0x9*: Note


As a reference for MIDI assign, MIDI message sent from buttons and knobs of this controller are listed in decimal numbers and English scale.
Please utilize this reference depending on the notation of your MIDI compatible software. Please utilize this reference depending on the notation of your MIDI compatible software.
NOTE is a term used for MIDI to express that a key of a keyboard or a piano is pressed or your finger is released from it.
CC is an abbreviation of "Control Change". Control Change is a kind of MIDI message used to communicate many kinds
of control information such as sound quality and volume level.
English scale uses alphabetical letters of C, D, E, F, G, A and B as well as \# to indicate haltone.



| Group | Fig. | User Interface |  |  |  | MID assign reference |  |  |  |  |  |  | MIDI-OUT <br> (from computer) |  |  | Details (Data 2) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | UI name | +SHIFT | Trigger | Condition (mode) | $\begin{gathered} \text { MIDI } \\ \text { Channel } \end{gathered}$ (Dec) | $\begin{array}{\|l\|} \text { NOTE } \\ \text { / CC } \end{array}$ | $\frac{\text { MIDIDat }}{(\mathrm{Dec})}$ | $\begin{aligned} & \text { a (Data 1) } \\ & \hline \begin{array}{c} \text { (English } \\ \text { scale) } \end{array} \end{aligned}$ | $\begin{aligned} & \text { Status } \\ & \text { (Hex) } \end{aligned}$ | $\begin{array}{\|l\|l} \text { Data } 1 \\ (H e x) \end{array}$ | $\begin{array}{\|l} \hline \text { Data } 2 \\ (H e x) \end{array}$ | $\begin{array}{\|l\|} \hline \text { Status } \\ \text { (Hex) } \end{array}$ | $\begin{aligned} & \text { Data } 1 \\ & \text { (Hex) } \end{aligned}$ | $\begin{aligned} & \text { Data 2 } \\ & \text { (Hex) } \end{aligned}$ |  |
| 4. EFFECT | 1 (L) | FX1-1 | $+{ }_{+} \text {SHIFT }$ | rotate |  | 5 | CC | $\begin{gathered} 2 \\ 34 \end{gathered}$ |  | B4 | 02 22 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | 5 | CC | 18 50 |  | B4 | 12 32 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 1 (R) | FX2-1 | +SHIFT | rotate |  | 6 | CC | $\stackrel{2}{34}$ |  | B5 | 02 22 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | 6 | CC | $\begin{aligned} & 18 \\ & 50 \end{aligned}$ |  | B5 | $\begin{aligned} & 12 \\ & 32 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 2 (L) | FX1-2 | +SHIFT | rotate |  | 5 | CC | $\begin{gathered} 4 \\ 36 \end{gathered}$ |  | B4 | 04 24 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | 5 | cc | $\begin{aligned} & 20 \\ & 52 \end{aligned}$ |  | B4 | 14 34 | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 2 (R) | FX2-2 | +SHIFT | rotate |  | 6 | CC | $\begin{gathered} 4 \\ 36 \end{gathered}$ |  | B5 | 04 24 | $\begin{gathered} \text { MSB } \\ \text { CSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | 6 | cc | $\begin{aligned} & 20 \\ & 52 \end{aligned}$ |  | B5 | $\begin{aligned} & 14 \\ & 34 \end{aligned}$ | $\begin{gathered} \text { MSB } \\ \text { CSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 3 (L) | FX1-3 | +SHIFT | rotate |  | 5 | CC | ${ }_{38}^{6}$ |  | B4 | $\begin{aligned} & 06 \\ & 26 \end{aligned}$ | $\underset{\substack{\text { MSB } \\ \text { BSB }}}{2}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | 5 | cc | $\begin{aligned} & 22 \\ & 54 \end{aligned}$ |  | B4 | $\begin{aligned} & 16 \\ & 36 \end{aligned}$ | $\begin{gathered} \text { MSB } \\ \text { CSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 3 (R) | FX2-3 | +SHIFT | rotate |  | 6 | cc | ${ }_{38}^{6}$ |  | B5 | $\begin{aligned} & 06 \\ & 26 \end{aligned}$ | $\begin{gathered} \text { MSB } \\ \text { CSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  |  |  |  |  |  | ${ }^{6}$ | cc | $\begin{aligned} & 22 \\ & 54 \end{aligned}$ |  | B5 | $\begin{aligned} & 16 \\ & 36 \end{aligned}$ | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 4 (L) | FX1 beats |  | rotate |  | 5 | CC | ${ }^{0}$ |  | B4 <br> 84 | 00 10 | hh |  |  |  | Difference count value from when previous operated |
|  |  |  |  |  |  | 5 | NOTE | ${ }^{67}$ | G4 | ${ }_{94} 9$ | ${ }^{10}$ | hh |  |  |  | When turned Clockwise: $1 \sim 30(0 \times 01 \sim 0 \times 1$ (E) |
|  |  |  | $\stackrel{+ \text { SHIFT }}{ }$ | press |  | 5 | NOTE | 64 | E4 | 94 | 40 | hh |  |  |  | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 4 (R) | FX2 BEATS |  | rotate |  | 6 | CC | 0 |  | B5 | 00 | hh |  |  |  | Difference count value from when previous operated |
|  |  |  | +SHIFI | press |  | 6 | NOTE | $\frac{16}{67}$ | G4 | ${ }_{95}{ }^{\text {B }}$ | $\stackrel{10}{43}$ | hn |  |  |  | When turned clockwise: $1 \sim 30(0 \times 01 \sim 0 \times 1 \mathrm{E}$ |
|  |  |  | $\stackrel{+ \text { SHIFT }}{ }$ |  |  | 6 | NOTE | 64 | E4 | 95 | 40 | hh |  |  |  | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 5 (L) | FX1-1 ON | SHIET | press |  | 5 | NOTE | $\stackrel{71}{99}$ | B4 | 94 | 47 | hh | <- Same as MID-IN |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  | SHIFT |  |  | 6 | NOTE | $\stackrel{99}{71}$ | $\frac{\text { D\#\# }}{\text { B4 }}$ | 94 | 63 47 | hh | <-San | meas M |  | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 5 (R) | FX2-1 ON | $\stackrel{+ \text { SHIFT }}{ }$ | press |  | 6 | NOTE | 99 | D\#7 | 95 | 63 | hh | $<$-San | me as M | IDI-IN | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 6 (L) | FX1-2 2 N | + SHIFT | press |  | 5 | NOTE | 72 | C5 | 94 | $\stackrel{48}{64}$ | hh | <-Sam | meas M | ID-IN | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  |  | press |  | 6 | NOTE | 72 | ${ }^{\text {E }}$ | 95 | 64 <br> 48 | hh | <-San | meas M | (idi-N | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7)$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 6 (R) | FX2-2 ON | $\stackrel{+ \text { SHIFT }}{ }$ |  |  | 6 | NOTE | 100 | E7 | 95 | 64 | hh | $<$-San | me as M | IDP-IN | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 7 (L) | FX1-3 ON | + SHIFT | press |  | 5 | NOTE | $\stackrel{73}{101}$ | C\#5 | 94 | 49 | hh | <-San | meas M | ID-IN | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  | +SHIFT | press |  | 6 | NOTE | 101 73 | C\#5 | 94 | 65 | hh | <-San | me as M | IDD-IN | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 7 (R) | FX2-3 ON | $\stackrel{+ \text { SHIFT }}{ }$ |  |  | 6 | NOTE | 101 | F7 | 95 | 65 | hh | $<$-San | me as M | IDP-IN | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 8 (L) | FX1 TAP | $\uparrow+$ SHIFT | press |  | 5 | NOTE | 74 <br> 102 | ¢5 | 94 | ${ }_{4}^{4} 6$ | $\frac{\mathrm{hh}}{\mathrm{hh}}$ | <-San | me as M | MD-1N | OFF $=0$ (0x00) $\mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 00) . \mathrm{ON}=127(0 \times 7)$ |
|  |  |  | +SHIFT | Stss |  | 6 | NOTE | 102 | - ${ }_{\text {FFI }}$ | 95 | 4 A | hh | <-San | meas M |  | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7)$ $\mathrm{FFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 8 (R) | FX2 TAP | $\downarrow$ +SHIFT | press |  | 6 | NOTE | 102 | F\#7 | 95 | 66 | hh | $<$ Same as MID-IN |  |  | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 9 | $\begin{gathered} \text { FX1 } \\ \text { ASSIGN } \end{gathered}$ | + SHIFT |  |  | 7 | NOTE | 76 112 | E5 | 96 | 4 C | hh |  |  |  |  |
|  |  |  | +SHIFT | press |  | 7 | NOTE | 77 | F5 | 96 | 40 | hh | <- Same as MDD-IN |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 10 |  | $\downarrow$ +SHIFT |  |  | 7 | NOTE | 113 | F8 | 96 | 71 | hh | <- Same as MIDID-IN |  |  | OFF = 0 ( (xx00), ON = 127 (0x7F) |
|  | 11 |  | + SHIFT | press |  | 7 | NOTE | $\stackrel{78}{114}$ | F\#5 | 96 | 4 4 | hh | <-Same as MIDIIN |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  | +SHIFT | press |  | 7 | NOTE | 114 79 | $\frac{\mathrm{F} \# 8}{\text { G5 }}$ | 96 | $\frac{72}{47}$ | hh | <- Same as MIDI-IN |  |  | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 12 |  | $\downarrow$ +SHIFT |  |  | 7 | NOTE | 115 | G8 | 96 | 73 | hh | <-Same as MID-IN |  |  | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 13 | $\begin{gathered} \text { FX2 } \\ \text { ASSIGN } \end{gathered}$ | + SHIFT | press |  | 7 | NOTE | 80 | G\#5 | 96 | 50 | hh |  |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  | +SHIFT | press |  | 7 | NOTE | $\stackrel{84}{81}$ | C6 | 96 | 54 <br> 51 | $\frac{\mathrm{hh}}{\mathrm{hh}}$ | <- Same as MIDI-IN |  |  | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 14 |  | $\longdiv { + \text { SHIFT } }$ |  |  | 7 | NOTE | 85 | C\#\# | 96 | 55 | hh | <-Same as MIDI-IN |  |  | OFF = 0 ( (0x00), ON = 127 (0x7F) |
|  | 15 |  |  | press |  | 7 | NOTE | 82 | A\#5 | 96 | 52 | hh | <-S Same as as MID--IN |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 16 |  | +SHIFT | press |  | 7 | NOTE | $\stackrel{86}{83}$ | D6 | 96 | $5{ }_{5}^{56}$ | hh | $\xrightarrow[\text { <-Same as MID--IN }]{\text { <-Same as MID--IN }}$ |  |  | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  |  | $\stackrel{+ \text { SHIFT }}{ }$ |  |  | 7 | NOTE | 87 | D\#6 | 96 | 57 | hh | <-Same as MID-IN |  |  | $\mathrm{OFF}=0$ ( (0x00), $\mathrm{ON}=127$ ( $12 \times 7 \mathrm{~F}$ ) |
|  | 17 | $\begin{gathered} \hline \text { COLOR FX } \\ \text { PARAMETER } \\ \mathrm{CH} 1 \\ \hline \end{gathered}$ |  | rotate |  | 7 | cc | $\begin{array}{r} 23 \\ 55 \\ \hline \end{array}$ |  | B6 | $\begin{aligned} & 17 \\ & 37 \end{aligned}$ | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 18 | $\begin{gathered} \text { COLOR FX } \\ \text { PARAMETER } \\ \text { CH2 } \end{gathered}$ |  | rotate |  | 7 | cc | $\begin{aligned} & 24 \\ & 56 \end{aligned}$ |  | B6 | 18 38 | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 19 | $\begin{gathered} \text { COLOR FX } \\ \text { PARAMETER } \\ \text { CH3 } \\ \hline \end{gathered}$ |  | rotate |  | 7 | cc | 25 57 |  | B6 | 19 39 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 20 | $\begin{aligned} & \text { COLOR FX } \\ & \text { PARAMETER } \\ & \text { CH4 } \end{aligned}$ |  | rotate |  | 7 | cc | 26 58 |  | B6 | 14 $3 A$ | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 21 | COLOR FX PARAMETER SAMPLER |  | rotate |  | 7 | cc | 27 59 |  | B6 | 18 <br> 38 <br> 1 | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 22 | COLOR FX PARAMETER OSCILLATOR |  | rotate |  | 7 | CC | $\begin{aligned} & 28 \\ & 60 \end{aligned}$ |  | B6 | $\begin{aligned} & 1 \mathrm{C} \\ & 3 \mathrm{C} \end{aligned}$ | $\begin{gathered} \text { MSB } \\ \text { LSB } \end{gathered}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 23 | COLOR FX |  | press |  | 7 | NOTE | 0 |  | 96 | 00 | hh |  |  |  | OFF = 0 ( $0 \times 000$ ), ON $=127$ (0x7 F) |
|  | 23 | ECHO | $\xlongequal{+ \text { SHIFT }}$ |  |  | 7 | NOTE | 8 |  | 96 | 08 | hh |  |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 24 | COLOR FX PITCH | $\stackrel{+ \text { SHIFT }}{ }$ | press |  | 7 | NOTE | 1 |  | 96 | 01 09 | hh |  | C | $\bigcirc$ |  |
|  | 25 | COLORFX |  | press |  | 7 | NOTE | 2 |  | 96 | 02 | hh | C | , | $\bigcirc$ | OFF = 0 ( (0x00), $\mathrm{ON}=127$ ( $12 \times 7 \mathrm{~F}$ ) |
|  | 25 | JET | +SHIFT |  |  | 7 | NOTE | 10 |  | 96 | 0 A | hh | $\square$ | $\square$ | $\square$ | OFF $=0$ ( $0 \times 000$ ), ON = 127 (0x7F) |
|  | 26 | COLORFX |  | press |  | 7 | NOTE | 3 |  | 96 | 03 | hh | $\square$ | $\square$ | $\square$ | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 77)$ |
|  |  | $\stackrel{\text { FILTER }}{\text { OSCILATOR }}$ | +SHIFT | press |  | 7 | NOTE | $\frac{11}{4}$ |  | 96 | OB | $\frac{\mathrm{hn}}{\mathrm{hh}}$ |  | , | , | OFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 27 | NOISE | $\uparrow+$ SHIFT |  |  | 7 | NOTE | 12 |  | 96 | 0 O | hh |  | $\square$ |  | $\mathrm{OFF}=0$ ( (xx00), $\mathrm{ON}=127$ (0x7F) |
|  | 28 | OSCILLATOR |  | press |  | 7 | NOTE | ${ }_{5}^{5}$ |  | 96 | 05 | hh | $\square$ | $\square$ | $\square$ | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  |  | CYMBAL | +SHIFT |  |  | 7 | NOTE | $\frac{13}{6}$ |  | 96 | OD | hh | , | , | $\checkmark$ | (eFF $=0(0 \times 00), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 29 | ${ }_{\text {SIREN }}$ | $\longdiv { + \text { SHIFT } }$ | press |  | 7 | NOTE | 14 |  | 96 | 0 O | hh | $\square$ | $\square$ | , | OFF =0 ( (0x00), ON = 127 ( (0x7F) |
|  | 30 | OSCILLATOR |  | press |  | 7 | NOTE | 7 <br>  |  | 96 | 07 | hh | T | $\square$ | $\square$ | OFF = 0 ( (0x00), ON $=127(0 \times 77)$ |
|  |  | HORN | +SHIFT | press |  | 7 | NOTE | 15 |  | 96 | 0 F | hh | , | $\square$ | $\square$ | OFF $=0(0 \times 000), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |
|  | 31 | OSCILLATOR VOLUME |  | rotate |  | 7 | CC | $\begin{aligned} & 30 \\ & 62 \end{aligned}$ |  | B6 | 1 E 3 E | $\begin{aligned} & \hline \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 32 | OSCILLATOR PARAMETER |  | rotate |  | 7 | cc | $\begin{aligned} & 29 \\ & 61 \end{aligned}$ |  | B6 | $\begin{aligned} & 1 \mathrm{D} \\ & 3 \mathrm{D} \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { MSB } \\ & \text { LSB } \end{aligned}$ |  |  |  | Min 0 (MSB: 0x00, LSB: 0x00) ~ Max 16383 (MSB: 0x7F, LSB: 0x7F) When turned fully counterclockwise: 0 When turned fully clockwise: 16383 |
|  | 33 | $\underset{\substack{\text { OSCILATAN } \\ \text { ASSIGR }}}{\text { OSt }}$ |  | slide | Switch to 3 | 7 | NOTE | 90 9192 | F\#6 | 96 | 5A | 7F | , | $\square$ | $\bigcirc$ |  |
|  |  |  |  |  |  | 7 | NOTE | 91 | G6 | 96 | 5 BB | 7 F | $\square$ | $\square$ | $\square$ | OFF =0 ( (0x00), ON = $127(0 \times 7 \mathrm{~F}$ ) |
|  |  |  |  |  | Switch 104 | 7 | NOTE | 90192 | F\#6/G\#6 | 96 | 5A5C | 00 | $\square$ | $\square$ | $\square$ | OFF $=0$ ( $0 \times 000$, $\mathrm{ON}=127$ (0x7 F ) |
|  |  |  |  |  | witch to MASTER | 7 | NOTE | 90/91 | F\#\#6/G6 | ${ }_{96} 9$ | 5A5B | 00 |  |  |  | $\mathrm{OFF}=0(0 \times 00), \mathrm{ON}=127(0 \times 7)$ $\mathrm{OFF}=0(0 \times 0), \mathrm{ON}=127(0 \times 7 \mathrm{~F})$ |





