

# VIVO H5 MIDI IMPLEMENTATION

## 1. Received data

### ■ Channel Voice Messages

#### ● Note off

Status	2nd byte	3rd byte
8nH	kkH	ccH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*kk= note number: 00H~7FH (0~127)*  
*cc= note off velocity: 00H~7FH (0~127)*

#### ● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*kk= note number: 00H~7FH (0~127)*  
*vv= note off velocity: 00H~7FH (0~127)*

- Not received when Rx. STATUS= OFF. (Initial value is ON)

### ■ Control Change

#### ● Bank Sound Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*mm= Bank number MSB: 00H~7FH (Initial value= 00H)*  
*ll= Bank number LSB: 00H~7FH (Initial value= 00H)*

- Not received when "PG" Rx is Off.

#### ● Modulation (Controller number 1)

Status	2nd byte	3rd byte
BnH	01H	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Modulation depth: 00H~7FH (0~127)*

- Not received when Rx.MODULATION is OFF (Initial value is ON).

#### ● Volume (Controller number 7)

Status	2nd byte	3rd byte
BnH	07H	vvH

*n= MIDI channel number 0H~FH (Ch.1~16)*  
*vv= Volume: 00H~7FH (0~127),*

- Not received when Rx.VOLUME is OFF (Initial value is ON).

#### ● Panpot (Controller number 10)

Status	2nd byte	3rd byte
BnH	0AH	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= pan: 00H~40H~7FH (Left~Center~Right). Initial value= 40H (Center)*

- Not received when "PanPot" RX is Off

#### ● Expression (Controller number 11)

Status	2nd byte	3rd byte
BnH	0BH	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Expression: 00H~7FH (0~127), Initial value= 7FH (127)*

- Not received when "Expression" RX is Off.

#### ● Hold (Controller number 64)

Status	2nd byte	3rd byte
BnH	40H	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Control value: 00H~7FH (0~127)*

- Not received when "Hold" RX is Off.

#### ● Sostenuto (Controller number 66)

Status	2nd byte	3rd byte
BnH	42H	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON*

- Not received when "Sostenuto" RX is Off.

#### ● Soft (Controller number 67)

Status	2nd byte	3rd byte
BnH	43H	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON*

- Not received when "Soft" RX is Off.

#### ● Reverb Send Level (Controller number 91)

Status	2nd byte	3rd byte
BnH	5BH	vvH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*vv= Reverb Send Level: 00H~7FH (0~127)*

- This message adjusts the Reverb Send Level of each Part.
- Not received when "Reverb" RX is Off.

#### ● Program Change

Status	2nd byte
CnH	ppH

*n= MIDI channel number: 0H~FH (Ch.1~16)*  
*pp= Program number: 00H~7FH (prog.1~prog.128)*

- Not received when "PG" RX is Off.

### ● Pitch Bend Change

Status            2nd byte            3rd byte

EnH                lIH                    mmH

*n = MIDI channel number: 0H~FH (Ch.1~16)*

*mm, ll = Pitch Bend value: 00 00H~40 00H~7F 7FH (-8192~0~+8191)*

- Not received when "PB" RX is Off.

### ■ Channel Mode Messages

#### ● All Sounds Off (Controller number 120)

Status            2nd byte            3rd byte

BnH                78H                    00H

*n = MIDI channel number: 0H~FH (Ch.1~16)*

*When the message is received, all notes currently sounding on the corresponding channel will be turned Off.*

#### ● Reset All Controllers (Controller number 121)

Status            2nd byte            3rd byte

BnH                79H                    00H

*n = MIDI channel number: 0H~FH (Ch.1~16)*

- When this message is received, the following controllers will be set to their reset values.

*Controller Reset value*

*Pitch Bend Change +/-0 (center)*

*Modulation 0 (off)*

*Expression 127 (max)*

*Hold 1 0 (off)*

*Sostenuto 0 (off)*

*Soft 0 (off)*

#### ● All Notes Off (Controller number 123)

Status            2nd byte            3rd byte

BnH                7BH                    00H

*n = MIDI channel number: 0H~FH (Ch.1~16)*

*When All Notes Off is received, all notes on the corresponding channel will be turned off. However, if Hold 1 or Sostenuto is ON, the sound will be continued until these are turned off.*

### ■ Memory RX

Midi Message	Value	Memory
PG	0~19	MEMORY: 1~20

*Default MIDI channel is 15*

*Example:*

- to receive Memory 1 send PG=0
- to receive Memory 20 send PG=19
- Not received when "Memory RX Status" is Off.

## 2. Transmitted data

### ■ Channel Voice Messages

#### ● Note off

Status	2nd byte	3rd byte
8nH	kkH	ccH

*n* = MIDI channel number: 0H~FH (Ch.1~16)  
*kk* = note number: 00H~7FH (0~127)

*cc* = note off velocity: 00H~7FH (0~127)

#### ● Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)  
*kk* = note number: 00H~7FH (0~127)

*vv* = note off velocity: 00H~7FH (0~127)

### ■ Control Change

#### ● Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*mm* = Bank number MSB: 00H~7FH

*ll* = Bank number LSB: 00H~7FH

*l* = Bank number LSB: 00H~7FH

*l* = Bank number LSB: 00H~7FH

• Not transmitted when "PG" Tx is Off.

#### ● Modulation (Controller number 1)

Status	2nd byte	3rd byte
BnH	01H	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = Modulation depth: 00H~7FH (0~127)

*vv* = Modulation depth: 00H~7FH (0~127)

• Not transmitted when "Modulation" TX is Off.

#### ● Volume (Controller number 7)

Status	2nd byte	3rd byte
BnH	07H	vvH

*n* = MIDI channel number 0H~FH (Ch.1~16)

*vv* = Volume: 00H~7FH (0~127), Initial value= 64H (100)

*vv* = Volume: 00H~7FH (0~127), Initial value= 64H (100)

• Not transmitted when "Volume" TX is off.

#### ● Panpot (Controller number 10)

Status	2nd byte	3rd byte
BnH	0AH	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = pan: 00H~40H~7FH (Left~Center~Right),

*vv* = pan: 00H~40H~7FH (Left~Center~Right),

• The stereo position can be adusted in 127 steps.

• Not transmitted when "PanPot" RX is Off

#### ● Hold (Controller number 64)

Status	2nd byte	3rd byte
BnH	40H	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = Control value: 00H~7FH (0~127)

*vv* = Control value: 00H~7FH (0~127)

• Not transmitted when "Hold" TX is Off.

#### ● Sostenuto (Controller number 66)

Status	2nd byte	3rd byte
BnH	42H	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON

*vv* = Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON

• Not transmitted when "Sostenuto" TX is Off.

#### ● Soft (Controller number 67)

Status	2nd byte	3rd byte
BnH	43H	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON

*vv* = Control value: 00H~7FH (0~127) 0~63= OFF, 64~127= ON

• Not transmitted when "Soft" TX is Off.

#### ● Reverb Send Level (Controller number 91)

Status	2nd byte	3rd byte
BnH	5BH	vvH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*vv* = Reverb Send Level: 00H~7FH (0~127)

*vv* = Reverb Send Level: 00H~7FH (0~127)

• This message adjusts the Reverb Send Level of each Part.

• Not transmitted when "Reverb" TX is Off.

#### ● Program Change

Status	2nd byte
CnH	ppH

*n* = MIDI channel number: 0H~FH (Ch.1~16)

*pp* = Program number: 00H~7FH (prog.1~prog.128)

*pp* = Program number: 00H~7FH (prog.1~prog.128)

• Not transmitted when "Program Change" TX is Off.

### ■ Memory TX

Midi Message	Value	Memory
PG	0~19	MEMORY: 1~20

PG 0~19 MEMORY: 1~20

Default MIDI channel is 15

• Not transmitted when "Memory TX Status" is Off.