YAMAHA

DIGITAL KEYBOARD

PSR-E433

MIDI Reference

EN

MIDI Implementation Chart

Yamaha — Date:28-DEC-2011

Model PSR-E433 MIDI Implementation Chart — Version : 1.0

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1 - 16	1 - 16	
	Changed	x	x	
Mode	Default	3	3	
	Messages	x	x	
	Altered	**********	x	
Note Number	: True voice	0 - 127 **********	0 - 127 0 - 127	
Velocity	Note ON	o 9nH,v=1-127	o 9nH,v=1-127	
	Note OFF	x	x	
After Touch	Key's	x	x	
	Ch's	x	x	
Pitch Bend		o	o	
Control Change	0,32	o	o	Bank Select
	1	o	o	Modulation
	6,38	o	o	Data Entry
	7,10	o	o	Main Volume,Pan
	11	o	o	Expression
	64	o	o	Sustain
	71-74	o	o	Sound Controller
	84	o	o	Portamento Control
	91,93	o	o	Effect Depth
	96-97	o	o	RPN Inc,Dec
	100-101	o	o	RPN LSB,MSB
Prog Change	: True #	o 0 - 127 **********	o 0 - 127	
System Exclusive		o	o	
Common	: Song Pos.	x	x	
	: Song Sel.	x	x	
	: Tune	x	x	
System Real Time	: Clock	o	o	
	: Commands	o	o	
Aux Mes- sages	:All Sound OFF	o	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	

*1 Refer to #2 on page 3.

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO o : Yes

Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO x : No

NOTE:

1 By default (factory settings) the instrument ordinarily functions as a 16-channel multi-timbral tone generator, and incoming data does not affect the panel voices or panel settings. However, the MIDI messages listed below do affect the panel voices, auto accompaniment, and songs.
- MIDI Master Tuning
- System exclusive messages for changing the Reverb Type and Chorus Type.

2 Messages for these control change numbers cannot be transmitted from the instrument itself. However, they may be transmitted when playing the accompaniment, song or using the Harmony effect.

3 Exclusive

<GM System ON>
F0H, 7EH, 7FH, 09H, 01H, F7H
- This message automatically restores all default settings for the instrument, with the exception of MIDI Master Tuning.

<MIDI Master Volume>
F0H, 7FH, 7FH, 04H, 01H, ll, mm, F7H
- This message allows the volume of all channels to be changed simultaneously (Universal System Exclusive).
- The values of "mm" is used for MIDI Master Volume. (Values for "ll" are ignored.)

<MIDI Master Tuning>
F0H, 43H, 1nH, 27H, 30H, 00H, 00H, mm, ll, cc, F7H
- This message simultaneously changes the tuning value of all channels.
- The values of "mm" and "ll" are used for MIDI Master Tuning.
- The default value of "mm" and "ll" are 08H and 00H, respectively. Any values can be used for "n" and "cc".

<Reverb Type>
F0H, 43H, 1nH, 4CH, 02H, 01H, 00H, mmH, llH, F7H
- mm : Reverb Type MSB
- ll : Reverb Type LSB

Refer to the Effect Map (page 3) for details.

<Chorus Type>
F0H, 43H, 1nH, 4CH, 02H, 01H, 20H, mmH, llH, F7H
- mm : Chorus Type MSB
- ll : Chorus Type LSB

Refer to the Effect Map (page 3) for details.

4 When the accompaniment is started, an FAH message is transmitted. When accompaniment is stopped, an FCH message is transmitted. When the clock is set to External, both FAH (accompaniment start) and FCH (accompaniment stop) are recognized.

5 Local ON/OFF
<Local ON> Bn, 7A, 7F
<Local OFF> Bn, 7A, 00
Value for "n" is ignored.

Effect map

* When a Type LSB value is received that corresponds to no effect type, a value corresponding to the effect type (coming the closest to the specified value) is automatically set.
* The numbers in parentheses in front of the Effect Type names correspond to the number indicated in the display.

REVERB

TYPE MSB	TYPE LSB								
	00	01	02	08	16	17	18	19	20
000	No Effect								
001	(01)Hall1				(02)Hall2	(03)Hall3			
002	Room					(04)Room1		(05)Room2	
003	Stage				(06)Stage1	(07)Stage2			
004	Plate				(08)Plate1	(09)Plate2			
005...127	No Effect								

CHORUS

TYPE MSB	TYPE LSB								
	00	01	02	08	16	17	18	19	20
000...063	No Effect								
064	No Effect								
065	Chorus		(02)Chorus2						
066	Celeste					(01)Chorus1			
067	Flanger			(03)Flanger1		(04)Flanger2			
068...127	No Effect								

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