

# MIDI Implementation Chart

Function...	Transmitted	Recognized	Remarks
<b>Basic Channel</b>	1-16	1-16	
<b>Mode</b>	Mode 3	Mode 1, 2, 3, 4 (M=1)	
<b>Note Number</b>	0-127	0-127	
<b>Velocity</b> : Note On : Note Off	o x	o x	
<b>After Touch</b>	x	x	
<b>Pitch Bend</b>	o	o	
<b>Control Change</b>	1 o	o	MODULATION
	3 o	o	LFO RATE
	5 o	o	PORTAMENTO TIME
	9 o	o	LFO DELAY TIME
	11 x	o	EXPRESSION PEDAL
	12 o	o	DCO RANGE
	13 o	o	DCO LFO DEPTH
	14 o	o	DCO PWM LEVEL
	15 o	o	DCO PWM SOURCE
	16 o	o	DCO PWM SW
	17 o	o	DCO SAW SW
	18 o	o	DCO SUB LEVEL
	19 o	o	DCO NOISE LEVEL
	20 o	o	HPF CUTOFF
	21 o	o	VCF ENV POLARITY
	22 o	o	VCF ENV DEPTH
	23 o	o	VCF LFO DEPTH
	24 o	o	VCF KEY FOLLOW
	25 o	o	VCA ENV SW
	26 o	o	VCA LEVEL
	27 o	o	ENV SUSTAIN
	64 x	o	HOLD
	65 o	o	PORTAMENTO
71 o	o	VCF RESONANCE	
72 o	o	ENV RELEASE	
73 o	o	ENV ATTACK	
74 o	o	VCF CUTOFF	
75 o	o	ENV DECAY	
82 o	o	DELAY TIME	
83 o	o	DELAY FEEDBACK	
86 o	o	ASSIGN MODE	
87 o	o	BEND RANGE	
91 o	o	DELAY LEVEL	
93 o	o	CHORUS SW	
<b>Program Change</b>	0-63	0-63	
<b>System Exclusive</b>	x	x	
<b>System Common</b> : Song Position : Song Select : Tune Request	x x x	x x x	
<b>System Real Time</b> : Clock : Start : Continue : Stop	o o x o	o o o o	
<b>Aux Messages</b> : All Sound Off : Reset All Controllers : Local On/Off : All Notes Off : Omni Mode Off : Omni Mode On : Mono Mode On : Mono Mode Off : Active Sensing : System Reset	x x x x x x x x x x	o o x o o o o o o x	*1    *1 *1 *1 *1
<b>Notes</b>	*1 Same process as All Note Off.		

Mode 1: OMNI ON, POLY      Mode 2: OMNI ON, MONO  
Mode 3: OMNI OFF, POLY    Mode 4: OMNI OFF, MONO

O : Yes  
X : No

# MIDI Implementation Chart

Function...	Transmitted	Recognized	Remarks
<b>Basic Channel</b>	1	x	
<b>Mode</b> : Default	x	x	
<b>Note Number</b>	48-60	x	
<b>Velocity</b> : Note On	x	x	
: Note Off	x	x	
<b>After Touch</b>	x	x	
<b>Pitch Bend</b>	o	x	
<b>Control Change</b>	1 o	x	MODULATION
	3 o	x	VCF CUTOFF FREQ
	9 o	x	VCF RES
	12 o	x	CHORUS TYPE
	16 o	x	DCO PWM
	17 o	x	DCO SAW
	18 o	x	DCO SUB OSC LEVEL
	19 o	x	DCO NOISE LEVEL
	26 o	x	DCO LFO MOD
	27 o	x	LFO DELAY TIME
	28 o	x	VCF LFO MOD
	29 o	x	LFO RATE
	47 o	x	DCO RANGE
	50 o	x	DCO PWM LEVEL
	59 o	x	VCF ENV POLARITY
	60 o	x	DCO PWM SRC
	70 o	x	CHORUS SW
	79 o	x	HPF FREQ
	81 o	x	VCF ENV MOD
	82 o	x	VCF KEYFOLLOW
83 o	x	ENV ATTACK	
84 o	x	ENV DECAY	
85 o	x	ENV SUSTAIN	
86 o	x	ENV RELEASE	
88 o	x	VCA ENV MODE	
110 o	x	VCA LEVEL	
<b>Program Change</b>	x	x	
<b>System Exclusive</b>	x	x	
<b>System Common</b> : Song Position	x	x	
: Song Select	x	x	
: Tune Request	x	x	
<b>System Real Time</b> : Clock	x	x	
: Start	x	x	
: Continue	x	x	
: Stop	x	x	
<b>Aux Messages</b>	: All Sound Off	x	x
	: Reset All Controllers	x	x
	: Local On/Off	x	x
	: All Notes Off	x	x
	: Omni Mode Off	x	x
	: Omni Mode On	x	x
	: Mono Mode On	x	x
	: Mono Mode Off	x	x
: Active Sensing	x	x	
: System Reset	x	x	
<b>Notes</b>			

Mode 1: OMNI ON, POLY      Mode 2: OMNI ON, MONO  
 Mode 3: OMNI OFF, POLY    Mode 4: OMNI OFF, MONO

O : Yes  
 X : No