

MIDI CC Number	MIDI CC Usual Purpose	MIDI CC Usual Purpose Description	Laplace	Shoom (per synth)	Xynthesizr
0	Bank Select (MSB)	Changes to a new bank of instruments if possible.			
1	Modulation Wheel (MSB)	Sends a command to add modulation (vibrato) to the current sound.	Vibrato		
2	Breath Controller (MSB)	Sends a control from a breath device.			
3	Undefined (MSB)	-			
4	Foot Controller (MSB)	Sends a control from a foot pedal device.			
5	Portamento Time (MSB)	Controls portamento rate to slide between 2 notes played subsequently.	Glide	Snap Glide	
6	Data Entry (MSB)	Controls Value for NRPN or RPN parameters.			
7	Channel Volume (MSB)	Controls the main volume of a channel.	Volume	Amp Level	
8	Balance (MSB)	Controls the stereo balance. 0 = hard left, 64 = center, 127 = hard right		Pan Width	Pan Width
9	Undefined (MSB)	-	Velocity		
10	Pan (MSB)	0 = hard left, 64 = center, 127 = hard right		Pan Position	
11	Expression (MSB)	Expression is a percentage of volume (CC7).	Level		
12	Effect Control 1 (MSB)	Controls some aspect of the MIDI unit's effects.			
13	Effect Control 2 (MSB)	Controls an alternate aspect of the unit's effects.			
14	Undefined (MSB)	-	Click Pitch	Filter Attack	Filter Attack
15	Undefined (MSB)	-	Click Stiffness	Filter Decay	Filter Decay
16	General Purpose 1 (MSB)	Programmable on most units.	Click Velocity	Filter Sustain	Filter Sustain
17	General Purpose 2 (MSB)	Programmable on most units.	Click KEY	Filter Release	Filter Release
18	General Purpose 3 (MSB)	Programmable on most units.	Click Color	Filt Env Amount	Filt Env Amount
19	General Purpose 4 (MSB)	Programmable on most units.	Click Decay	Filt Env Slope	
20	Undefined (MSB)	-	Click Damper Noise	OSC1 Level	OSC1 Level
21	Undefined (MSB)	-	Exciter Mix	OSC1 Wave	OSC1 Wave
22	Undefined (MSB)	-	Noise LPF Freq	OSC1 Pulse Width	
23	Undefined (MSB)	-	Noise ENV	OSC1 Octave	OSC1 Octave
24	Undefined (MSB)	-	Noise Velocity	OSC1 Semitones	
25	Undefined (MSB)	-	Noise KEY	OSC1 Cents	
26	Undefined (MSB)	-	Noise Resonance	OSC2 Level	OSC2 Level
27	Undefined (MSB)	-	Noise HPF Freq	OSC2 Wave	OSC2 Wave
28	Undefined (MSB)	-	Noise Attack	OSC2 Pulse Width	
29	Undefined (MSB)	-	Noise Decay	OSC2 Octave	OSC2 Octave
30	Undefined (MSB)	-	Noise Sustain	OSC2 Semitones	OSC2 Interval
31	Undefined (MSB)	-	Noise Release	OSC2 Cents	OSC2 Detune
32	LSB for CC 0 (Bank Select)	Changes to a new bank of instruments if possible.	Noise ENV/Gate	2>1 FM Depth	
33	LSB for CC 1 (Mod Wheel)	Sends a command to add modulation (vibrato) to the current sound.		Noise Level	
34	LSB for CC 2 (Breath Controller)	Sends a control from a breath device.	Res Strength	Noise Color	
35	LSB for CC 3 (Undefined)	-	Res Color	LFO1 Waveform	LFO1 Waveform
36	LSB for CC 4 (Foot Controller)	Sends a control from a foot pedal device.	Res LPF Freq	LFO1 Frequency	LFO1 Rate
37	LSB for CC 5 (Portamento Time)	Controls portamento rate to slide between 2 notes played subsequently.	Res LPF Velocity	LFO1 Mode	
38	LSB for CC 6 (Data Entry)	Controls Value for NRPN or RPN parameters.	Res ENV Decay	LFO1 Fade In	
39	LSB for CC 7 (Channel Volume)	Controls the main volume of a channel.	Res ENV Damper	LFO1 Start Phase	
40	LSB for CC 8 (Balance)	Controls the stereo balance. 0 = hard left, 64 = center, 127 = hard right	P ENV Depth	LFO1 Tempo Sync	LFO1 Tempo Sync
41	LSB for CC 9 (Undefined)	-	P ENV Velocity	LFO1 Dest 1	LFO1 Target
42	LSB for CC 10 (Pan)	0 = hard left, 64 = center, 127 = hard right	P ENV Attack	LFO1 Dest 2	
43	LSB for CC 11 (Expression)	Expression is a percentage of volume (CC7).	P ENV Decay	LFO1 Dest 3	
44	LSB for CC 12 (Effect CC 1)	Controls some aspect of the MIDI unit's effects.	Sine Coarse Pitch	LFO1 Dest 1 Depth	LFO1 Amount
45	LSB for CC 13 (Effect CC 2)	Controls an alternate aspect of the unit's effects.	Sine Fine Pitch	LFO1 Dest 2 Depth	
46	LSB for CC 14 (Undefined)	-	Sine FM Depth	LFO1 Dest 3 Depth	
47	LSB for CC 15 (Undefined)	-	Sine FM Ratio	LFO2 Waveform	LFO2 Waveform
48	LSB for CC 16 (GP 1)	Programmable on most units.	Sine Release	LFO2 Frequency	LFO2 Rate
49	LSB for CC 17 (GP 2)	Programmable on most units.	Resonator/Sine Mix	LFO2 Mode	
50	LSB for CC 18 (GP 3)	Programmable on most units.	HPF Frequency	LFO2 Fade In	
51	LSB for CC 19 (GP 4)	Programmable on most units.	Res Dry/Wet Mix	LFO2 Start Phase	
52	LSB for CC 20 (Undefined)	-	LFO Rate	LFO2 Tempo Sync	LFO2 Tempo Sync
53	LSB for CC 21 (Undefined)	-	LFO Noise LPF	LFO2 Dest 1	LFO2 Target

MIDI CC Number	MIDI CC Usual Purpose	MIDI CC Usual Purpose Description	Laplace	Shoom (per synth)	Xynthesizr
54	LSB for CC 22 (Undefined)	-	LFO Exciter Mix	LFO2 Dest 2	
55	LSB for CC 23 (Undefined)	-	LFO Res Flavor	LFO2 Dest 3	
56	LSB for CC 24 (Undefined)	-	LFO Res LPF	LFO2 Dest 1 Depth	LFO2 Amount
57	LSB for CC 25 (Undefined)	-	LFO Res/Sine Mix	LFO2 Dest 2 Depth	
58	LSB for CC 26 (Undefined)	-	Res Type A/B (0-1)	LFO2 Dest 3 Depth	
59	LSB for CC 27 (Undefined)	-			
60	LSB for CC 28 (Undefined)	-			
61	LSB for CC 29 (Undefined)	-			
62	LSB for CC 30 (Undefined)	-			
63	LSB for CC 31 (Undefined)	-			
64	Sustain Pedal	Sustains any notes that are playing. ≤ 63 off, ≥ 64 on	sustain		
65	Portamento On/Off	Changes the state of the portamento to on or off. ≤ 63 off, ≥ 64 on			
66	Sostenuto	Sostenuto: sustains notes that are already ON. ≤ 63 off, ≥ 64 on			
67	Soft Pedal	Lowers the volume the current instrument ≤ 63 off, ≥ 64 on			
68	Legato Pedal	Applies or removes legato ≤ 63 off, ≥ 64 on		Snap Legato	
69	Sustain Pedal 2	Lengthens the time that it takes for a note to fade-out. ≤ 63 off, ≥ 64 on	Hold		
70	Sound Control 1 'Sound Var'	Programmable, the default is 'Sound Variation'.		Filter Drive	
71	Sound Control 2 'Resonance'	Programmable, the default is 'Timbre / VCF Resonance'.		Filter Resonance	Filter Resonance
72	Sound Control 3 'Release'	Programmable, the default is 'Release Time'.		Amp Release	Amp Release
73	Sound Control 4 'Attack'	Programmable, the default is 'Attack Time'.		Amp Attack	Amp Attack
74	Sound Control 5 'Cutoff'	Programmable, the default is 'Brightness / VCF cutoff frequency'.		Filter Cutoff	Filter Cutoff
75	Sound Control 6	Programmable, no default.		Filter Pitch Track	
76	Sound Control 7	Programmable, no default.	Octave (62-66)	Amp Decay	Amp Decay
77	Sound Control 8	Programmable, no default.	ARP Off/On	Amp Sustain	Amp Sustain
78	Sound Control 9	Programmable, no default.	ARP Key Sync	Amp Env Slope	
79	Sound Control 10	Programmable, no default.	ARP Step Length (0-14)		
80	General Purpose Controller 5	Programmable on most units. ≤ 63 off, ≥ 64 on	ARP Style (0-5)	Snap On	
81	General Purpose Controller 6	Programmable on most units. ≤ 63 off, ≥ 64 on	ARP Loop Length (0-14)	Snap Initial	
82	General Purpose Controller 7	Programmable on most units. ≤ 63 off, ≥ 64 on	ARP Octave (0-2)	Pitch Lock	
83	General Purpose Controller 8	Programmable on most units. ≤ 63 off, ≥ 64 on	ARP Rate (0-2)		SEQ Step Length
84	Portamento Control	Controls the amount of Portamento.	ARP Accent		SEQ Tie Notes
85	Undefined	-	ARP Gate		Sustain When Paused
86	Undefined	-	ARP Staccato		SEQ Morph Type
87	Undefined	-	Chorus Off/On		SEQ Random Chance
88	Undefined	-	Chorus Dry/Wet		SEQ Max Delta X
89	Undefined	-	Chorus Time		SEQ Max Delta Y
90	Undefined	-	Chorus Feedback	Reverb On	SEQ Morph Area
91	Effect 1 Depth 'Reverb Send'	Usually controls reverb send amount	Chorus Depth	Reverb Mix	Reverb Mix
92	Effect 2 Depth 'Tremelo'	Usually controls tremolo amount	Chorus Speed	Reverb Predelay	
93	Effect 3 Depth 'Chorus'	Usually controls chorus amount	Chorus Spread	Reverb Size	
94	Effect 4 Depth 'Detune'	Usually controls detune amount	Delay Off/On	Reverb Decay	Reverb Decay
95	Effect 5 Depth 'Phaser'	Usually controls phaser amount	Delay Dry/Wet	Reverb Damping	
96	(+1) Data Increment	Usually used to increment data for RPN and NRPN messages.			
97	(-1) Data Decrement	Usually used to decrement data for RPN and NRPN messages.			
98	NRPN LSB	For controllers 6, 38, 96, and 97, it selects the NRPN parameter.			
99	NRPN MSB	For controllers 6, 38, 96, and 97, it selects the NRPN parameter.			
100	RPN LSB	For controllers 6, 38, 96, and 97, it selects the RPN parameter.			
101	RPN MSB	For controllers 6, 38, 96, and 97, it selects the RPN parameter.			
102	Undefined	-	Delay Range (0-3)	Reverb HF Cut	Reverb HF Damp
103	Undefined	-	Delay L Ratio (0-5)	Reverb LF Cut	Reverb LF Damp
104	Undefined	-	Delay Time	Reverb Modulation	
105	Undefined	-	Delay R (0-5)	Delay On	
106	Undefined	-	Delay Mod Depth	Delay Mix	Delay Level
107	Undefined	-	Delay Mod Speed	Delay Time Left	Delay Time Left
108	Undefined	-	Delay Feedback	Delay Time Right	Delay Time Right
109	Undefined	-	Delay Cross	Delay Feedback L	Delay Feedback L
110	Undefined	-	Delay Hi-Damp	Delay Feedback R	Delay Feedback R

MIDI CC Number	MIDI CC Usual Purpose	MIDI CC Usual Purpose Description	Laplace	Shoom (per synth)	Xynthesizr
111	Undefined	-	Delay Frequency	Delay Filt Freq	Delay Filt Freq
112	Undefined	-	Delay Resonance	Delay Link	
113	Undefined	-	Delay Fiter MOD	Delay Tempo Sync	Delay Tempo Sync
114	Undefined	-	Delay Filter Speed	Y Axis Dest 1	
115	Undefined	-	Delay Drive	Y Axis Dest 2	
116	Undefined	-	Reverb Off/On	Y Axis Dest 3	
117	Undefined	-	Reverb Dry/Wet	Y Axis Dest 1 Depth	
118	Undefined	-	Reverb Time	Y Axis Dest 2 Depth	
119	Undefined	-	Reverb Hi-Damp	Y Axis Dest 3 Depth	
120	All Sound Off	Mutes all sound. Regardless of release time or sustain. (See CC123)			
121	All Controllers Off	Turns off controllers or sets them to default, usually 0.			
122	Local keyboard on/off	If set to off, a keyboard won't generate sound internally.			
123	All Notes Off	Turns all notes off. Release time maintained, notes held by sustain remain.			
124	Omni Mode Off	Turns Omni Mode off.			
125	Omni Mode On	Turns Omni Mode on.			
126	Mono Mode	Turns Monophonic operation on.			
127	Poly Mode	Turns Polyphonic operation on.			

Key	
Undefined	Free to use
Defined	Defined but uncommon; use freely
Defined	Defined with common controller; attempt to map to common usage
Defined, system	Defined with system control message; use with caution
Reserved	Reserved - do not use (NOTE: ModStep sends ModWheel with MSB & LSB; use CC1 not "Mod Wheel")
Issue	Issue to be noted (e.g. Laplace parameters that map to discrete values)