MIDI Control Change Messages – Continuous Controllers

MIDI CC #	MIDI CC PURPOSE	VALUE	MIDI CC DESCRIPTION
MIDI CC 0	**Bank Select** (MSB)	0-127	Allows user to switch bank for patch selection. Program change used with Bank Select. MIDI can access 16,384 patches per MIDI channel.
MIDI CC 1	**Modulation Wheel** (MSB)	0-127	Generally this CC controls a vibrato effect (pitch, loudness, brighness). What is modulated is based on the patch.
MIDI CC 2	Breath Controller (MSB)	0-127	Often times associated with aftertouch messages. It was originally intended for use with a breath MIDI controller in which blowing harder produced higher MIDI control values. It can be used for modulation as well.
MIDI CC 3	Undefined (MSB)	0-127	
MIDI CC 4	**Foot Pedal** (MSB)	0-127	Often used with aftertouch messages. It can send a continuous stream of values based on how the pedal is used.
MIDI CC 5	Portamento Time (MSB)	0-127	Controls portamento rate to slide between 2 notes played subsequently.
MIDI CC 6	**Data Entry** (MSB)	0-127	Controls Value for NRPN or RPN parameters.
MIDI CC 7	**Volume** (MSB)	0-127	Controls the volume of the channel.
MIDI CC 8	Balance (MSB)	0-127	Controls the left and right balance, generally for stereo patches. A value of 64 equals the center.
MIDI CC 9	Undefined (MSB)	0-127	
MIDI CC 10	**Pan** (MSB)	0-127	Controls the left and right balance, generally for mono patches. A value of 64 equals the center.
MIDI CC 11	**Expression** (MSB)	0-127	Expression is a percentage of volume (CC7).
MIDI CC 12	Effect Controller 1 (MSB)	0-127	Usually used to control a parameter of an effect within the synth or workstation.
MIDI CC 13	Effect Controller 2 (MSB)	0-127	Usually used to control a parameter of an effect within the synth or workstation.
MIDI CC 14	Undefined (MSB)	0-127	
MIDI CC 15	Undefined (MSB)	0-127	
MIDI CC 16 – 19	General Purpose (MSB)	0-127	
MIDI CC 20 – 31	Undefined (MSB)	0-127	
MIDI CC 32 – 63	LSB Controller for 0-31	0-127	
MIDI CC 64	**Damper Pedal** on/off	≤63 off, ≥64 on	On/off switch that controls sustain pedal. Nearly every synth will react to CC 64. (See also Sostenuto CC 66)
MIDI CC 65	**Portamento** on/off	≤63 off, ≥64 on	On/off switch
MIDI CC 66	Sostenuto Pedal on/off	≤63 off, ≥64 on	On/off switch – Like the Sustain controller (CC 64), However, it only holds notes that were "On" when the pedal was pressed. People use it to "hold" chords" and play melodies over the held chord.
MIDI CC 67	Soft Pedal on/off	≤63 off, ≥64 on	On/off switch – Lowers the volume of notes played.
MIDI CC 68	Legato FootSwitch	≤63 off, ≥64 on	On/off switch – Turns Legato effect between 2 subsequent notes on or off.
MIDI CC 69	Hold 2	≤63 off, ≥64 on	Another way to "hold notes" (see MIDI CC 64 and MIDI CC 66). However notes fade out according to their release parameter rather than when the pedal is released.
MIDI CC 70	Sound Controller 1	0-127	Usually controls the way a sound is produced. Default = Sound Variation.
MIDI CC 71	**Sound Controller 2**	0-127	Allows shaping the Voltage Controlled Filter (VCF). Default = **Resonance** also (Timbre or Harmonics)
MIDI CC 72	Sound Controller 3	0-127	Controls release time of the Voltage controlled Amplifier (VCA). Default = Release Time.
MIDI CC 73	Sound Controller 4	0-127	Controls the "Attack' of a sound. The attack is the amount of time it takes forthe sound to reach maximum amplitude.
MIDI CC 74	**Sound Controller 5**	0-127	Controls VCFs **cutoff frequency** of the filter.

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MIDI CC 75	Sound Controller 6	0-127	Generic – Some manufacturers may use to further shave their sounds.
MIDI CC 76	Sound Controller 7	0-127	Generic – Some manufacturers may use to further shave their sounds.
MIDI CC 77	Sound Controller 8	0-127	Generic – Some manufacturers may use to further shave their sounds.
MIDI CC 78	Sound Controller 9	0-127	Generic – Some manufacturers may use to further shave their sounds.
MIDI CC 79	Sound Controller 10	0-127	Generic – Some manufacturers may use to further shave their sounds.
MIDI CC 80	General Purpose MIDI CC Controller	0-127	Decay Generic or on/off switch ≤63 off, ≥64 on
MIDI CC 81	General Purpose MIDI CC Controller	0-127	Hi-Pass Filter Frequency or Generic on/off switch ≤63 off, ≥64 on
MIDI CC 82	General Purpose MIDI CC Controller	0-127	Generic on/off switch ≤63 off, ≥64 on
MIDI CC 83	General Purpose MIDI CC Controller	0-127	Generic on/off switch ≤63 off, ≥64 on
MIDI CC 84	Portamento CC Control	0-127	Controls the **amount of Portamento.**
MIDI CC 85 – 87	Undefined	—	
MIDI CC 88	High Resolution Velocity Prefix	0-127	Extends the range of possible velocity values
MIDI CC 89 & 90	Undefined	—	
MIDI CC 91	**Effect 1 Depth**	0-127	Usually controls **reverb** send amount
MIDI CC 92	Effect 2 Depth	0-127	Usually controls tremolo amount
MIDI CC 93	**Effect 3 Depth**	0-127	Usually controls **chorus** amount
MIDI CC 94	Effect 4 Depth	0-127	Usually controls detune amount
MIDI CC 95	Effect 5 Depth	0-127	Usually controls phaser amount
MIDI CC 96	(+1) Data Increment	N/A	Usually used to increment data for RPN and NRPN messages.
MIDI CC 97	(-1) Data Decrement	N/A	Usually used to decrement data for RPN and NRPN messages.
MIDI CC 98	Non-Registered Parameter Number LSB (NRPN)	0-127	For controllers 6, 38, 96, and 97, it selects the NRPN parameter.
MIDI CC 99	Non-Registered Parameter Number MSB (NRPN)	0-127	For controllers 6, 38, 96, and 97, it selects the NRPN parameter.
MIDI CC 100	Registered Parameter Number LSB (RPN)	0-127	For controllers 6, 38, 96, and 97, it selects the RPN parameter.
MIDI CC 101	Registered Parameter Number MSB (RPN)	0-127	For controllers 6, 38, 96, and 97, it selects the RPN parameter.
MIDI CC 102 – 119	Undefined	—	
MIDI CC 120 to 127 are "Channel Mode Messages."			
MIDI CC 120	All Sound Off	0	**Mutes all sound.** It does so regardless of release time or sustain. (See MIDI CC 123)
MIDI CC 121	Reset All Controllers	0	It will reset all controllers to their default.
MIDI CC 122	Local on/off Switch	0 off, 127 on	Turns internal connection of a MIDI keyboard or workstation, etc. on or off. If you use a computer, you will most likely want local control off to avoid notes being played twice. Once locally and twice when the note is sent back from the computer to your keyboard.
MIDI CC 123	All Notes Off	0	**Mutes all sounding notes.** Release time will still be maintained, and notes held by sustain will not turn off until sustain pedal is depressed.
MIDI CC 124	Omni Mode Off	0	Sets to "Omni Off" mode.
MIDI CC 125	Omni Mode On	0	Sets to "Omni On" mode.
MIDI CC 126	Mono Mode	→	Sets device mode to Monophonic. The value equals the number of channels, or 0 if the number of channels equals the number of voices in the receiver.
MIDI CC 127	Poly Mode	0	Sets device mode to Polyphonic.