

This document contains a listing of the assignments for the MIDI continuous controllers. These assignments are in the MIDI specification and are universal for all manufacturers.

I. Control Change Messages

Decimal	Hex	Function
0	00	Bank Select MSB
1	01	Modulation
2	02	Breath Controller
3	03	Undefined
4	04	Foot controller
5	05	Portamento time
6	06	Data entry MSB
7	07	Volume
8	08	Balance
9	09	Undefined
10	0A	Panning
11	0B	Expression
12-15	0C-0F	Undefined
16-19	10-13	General Purpose Controllers (#'s 1-4)
20-31	14-1F	Undefined
32	20	Bank Select LSB
33-63	21-3F	LSB for values 1-31
64	40	Hold 1 Damper pedal (sustain)
65	41	Portamento
66	42	Sostenuto
67	43	Soft pedal
68	44	Undefined
69	45	Hold 2
70	46	Sound Variation
71	47	Harmonic Intensity
72	48	Release Time
73	49	Attack Time
74	4A	Brightness
75-79	4B-4F	Undefined
80-83	50-53	General Purpose Controllers (#'s 5-8)
84	54	Portamento Control
85-90	55-5A	Undefined
91	5B	Reverb Depth
92	5C	Tremolo Depth
93	5D	Chorus Depth
94	5E	Celeste (Detune) Depth
95	5F	Phaser Depth
96	60	Data increment
97	61	Data decrement
98	62	Non-Registered Parameter Number LSB
99	63	Non-Registered Parameter Number MSB
100	64	Registered Parameter Number LSB
101	65	Registered Parameter Number MSB
102-120	66-78	Undefined

II. Channel Mode Messages

Decimal	Hex	Function
121	79	Reset all Controllers
122	7A	Local Control
123	7B	All Notes Off
124	7C	Omni Mode Off
125	7D	Omni Mode On
126	7E	Mono Mode On (Poly Off)
127	7F	Poly Mode On (Mono Off)

III. Decimal to Hexidecimal Conversion Chart

D	H	D	H	D	H	D	H
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH