

(numbers are decimal, except as noted)

Note: CC's might not work in Panel mode. (not tested yet!)

Function	CC #	CC Range	Parm Value
Osc1 Waveform	14	0-127	0-15
Osc2 Waveform	15	0-127	0-15
Pulse Width	16	0-127	1-254
Osc2 Detune Amt	17	0-127	1-254
Osc2 Octave Shift	18	0-127	0-5
Osc2 Semitone Offset	19	0-127	0-14
Tuning Semitone	20	0-127	0-14
Octave setting	21	0-127	2-6
Glide Type	22	0-127	0-5
Glide Rate	23	0-127	1-254
Direct Pitch Mod Amt	24	0-127	1-254
Mod Wheel Pitch Amt	25	0-127	1-254
Bend Amt	26	0-127	1-254
Oscillator Balance	27	0-127	1-254
Noise Balance	28	0-127	1-254
Filter Drive	29	0-127	1-254
Filter Frequency	30	0-127	1-254
Filter Separation	31	0-127	1-254
Filter Resonance/Q	32	0-127	1-254
Filter Type	33	0-127	0-5
Filter Attack	34	0-127	1-254
Filter Decay	35	0-127	1-254
Filter Sustain	36	0-127	1-254
Filter Release	37	0-127	1-254
Direct Filter Mod Amt	38	0-127	1-254
Env Filter Mod Amt	39	0-127	1-254
Mod Wheel Filter Amt	40	0-127	1-254
Volume Attack	41	0-127	1-254
Volume Decay	42	0-127	1-254
Volume Sustain	43	0-127	1-254
Volume Release	44	0-127	1-254
Gate Time	45	0-127	1-254
LFO Waveform	46	0-127	0-5
LFO Rate	47	0-127	1-254
Intro Delay Time	48	0-127	1-254
Trigger Type	49	0-127	0-5
Function	50	0-127	0-5
Arpeggiator Mode	51	0-127	0-15 (some values not valid)
LFO to Osc1 disable	52	0-127	0 or 1
LFO hard sync enable	53	0-127	0 or 1
Tempo	54	0-127	1-254
PWM mod rate	55	0-127	0-3 (0 is slowest)

These are repeated here for compatibility:

Filter Resonance/Q	71	0-127	1-254
Volume Release	72	0-127	1-254
Volume Attack	73	0-127	1-254
Filter Frequency	74	0-127	1-254

CC values needed to control the OSCar:

Note: "Value" is the actual value in the OSCar's RAM, so this is what would be in a patch dump. Number range is what needs to be sent to the synth using MIDI.

Parameters that have two settings:

0-63 Value is 0
64-127 Value is 1

Parameters that have four settings:

0-31 Value is 0
32-63 Value is 1
64-95 Value is 2
96-127 Value is 3

Parameters that have 5 settings:

0-24 First value
25-49 Second value
50-74 Third value
75-99 Fourth value
100-127 Fifth value

Parameters that have 6 settings:

0-20 First value
21-41 Second value
42-62 Third value
63-83 Fourth value
84-104 Fifth value
105-127 Sixth value

Parameters that have 15 or 16 settings:

0-7 First value
8-15 Second value
16-23 Third value
24-31 Fourth value
32-39 Fifth value
40-47 Sixth value
48-55 Seventh value
56-63 Eighth value
64-71 Ninth value
72-79 Tenth value
80-87 Eleventh value
88-95 Twelfth value
96-103 Thirteenth value
104-111 Fourteenth value

CC values sent in patch dump:

Note: Only the lower CC numbers will be sent for the four parameters that have two CC's assigned to them for reception.

Parm = 0, 0 sent
Parm = 1, 64 sent

Parm = 0, 16 sent
Parm = 1, 48 sent
Parm = 2, 80 sent
Parm = 3, 112 sent

First parm value, 12 sent
Second parm value, 37 sent
Third parm value, 62 sent
Fourth parm value, 87 sent
Fifth parm value, 102 sent

First value, 10 sent
Second value, 31 sent
Third value, 52 sent
Fourth value, 73 sent
Fifth value, 94 sent
Sixth value, 115 sent

First value, 4 sent
Second value, 12 sent
Third value, 20 sent
Fourth value, 28 sent
Fifth value, 36 sent
Sixth value, 44 sent
Seventh value, 52 sent
Eighth value, 60 sent
Ninth value, 68 sent
Tenth value, 76 sent
Eleventh value, 84 sent
Twelfth value, 92 sent
Thirteenth value, 100 sent
Fourteenth value, 108 sent

112-119 Fifteenth value
120-127 16th value if there is one, otherwise, the 15th

Fifteenth value, 116 sent
Sixteenth value, 124 sent

Semitone parameters settings:

Parm = 0, 116 sent (+7)
Parm = 1, 108 sent
Parm = 2, 100 sent
Parm = 3, 92 sent
Parm = 4, 84 sent
Parm = 5, 76 sent
Parm = 6, 68 sent
Parm = 7, 60 sent (0 offset)
Parm = 8, 52 sent
Parm = 9, 44 sent
Parm = 10, 36 sent
Parm = 11, 28 sent
Parm = 12, 20 sent
Parm = 13, 12 sent
Parm = 14, 4 sent (-7)