

editor ctr#	hex1	operator	hex3	bytes1	range	parameter	description	notes
0	30	0	0	1	20 – 7E	Voice Name1	32 – 126 (ASCII)	
1			1	1	20 – 7E	Voice Name2	32 – 126 (ASCII)	
2			2	1	20 – 7E	Voice Name3	32 – 126 (ASCII)	
3			3	1	20 – 7E	Voice Name4	32 – 126 (ASCII)	
4			4	1	20 – 7E	Voice Name5	32 – 126 (ASCII)	
5			5	1	20 – 7E	Voice Name6	32 – 126 (ASCII)	
6			6	1	20 – 7E	Voice Name7	32 – 126 (ASCII)	
7			7	1	20 – 7E	Voice Name8	32 – 126 (ASCII)	
8			8	1	20 – 7E	Voice Name9	32 – 126 (ASCII)	
9			9	1	20 – 7E	Voice Name10	32 – 126 (ASCII)	
10			0A	1		reserved		
11			0B	1		reserved		
12			0C	1	28 – 58	Transpose (TP)	-24 – +24 (semitones)	
13			0D	1	00 – 02	Part Mode	poly (POLY), Mono- Full (MONO-FULL), MONO-FULL: applied to all notes MONO-LGATO: applied only to notes played legato	
14			0E	1	00 – 7F	Portamento Time (PORTA)		
15			0F	1	28 – 58	Pitch Bend Range (PB)	-24 – +24 (semitones)	
16			10	1	00 – 0B	Algorithm (ALGO)	ALGO 1 – 12	
17			11	1	00 – 06	LFO Wave (WAVE)	sine (SIN), triangle (TRI), sawtooth up (SAW U), sawtooth down (SAW D), square (SQ), sample & hold 8 (S&H8), sample & hold (S&H)	
18			12	1	00 – 7F	LFO Speed (SPEED)	0 – 127	
19			13	1	00 – 7F	LFO Delay (DELAY)	0 – 127	
20			14	1	00 – 7F	LFO Pitch Modulation Depth (PMD)	0 (no LFO) – 127 (max)	
21			15	1	00 – 7F	Pitch EG Rate 1 (PITCH EG Rate)	0 (slow) – 127 (fast)	
22			16	1	00 – 7F	Pitch EG Rate 2 (PITCH EG Rate)	0 (slow) – 127 (fast)	
23			17	1	00 – 7F	Pitch EG Rate 3 (PITCH EG Rate)	0 (slow) – 127 (fast)	
24			18	1	00 – 7F	Pitch EG Rate 4 (PITCH EG Rate)	0 (slow) – 127 (fast)	
25			19	1	10 – 70	Pitch EG Level 1 (PITCH EG Level)	-48 (-4 octave) – +48 (+4 octave)	
26			1A	1	10 – 70	Pitch EG Level 2 (PITCH EG Level)	-48 (-4 octave) – +48 (+4 octave)	
27			1B	1	10 – 70	Pitch EG Level 3 (PITCH EG Level)	-48 (-4 octave) – +48 (+4 octave)	
28			1C	1	10 – 70	Pitch EG Level 4 (PITCH EG Level)	-48 (-4 octave) – +48 (+4 octave)	
29			1D	1	00 – 07	Effect 1 Type	thru (THRU), distortion (DIST), touch wah (T.WAH), chorus (CHO), flanger (FLA), phaser (PHA), delay (DLY), reverb (REV)	
30			1E	1	00 – 7F	Effect 1 Parameter 1 (*Note)	0 – 127	DRIVE: distortion SENS: touch wah DEPTH: chorus, flanger, phaser, delay, reverb
31			1F	1	00 – 7F	Effect 1 Parameter 2 (*Note)	0 – 127	tone: distortion REZ: touch wah RATE: chorus, flanger, phaser TIME: delay, reverb
32			20	1	00 – 07	Effect 2 Type	thru (THRU), distortion (DIST), touch wah (T.WAH), chorus (CHO), flanger (FLA), phaser (PHA), delay (DLY), reverb (REV)	
33			21	1	00 – 7F	Effect 2 Parameter 1 (*Note)	0 – 127	DRIVE: distortion SENS: touch wah DEPTH: chorus, flanger, phaser, delay, reverb
34			22	1	00 – 7F	Effect 2 Parameter 2 (*Note)	0 – 127	tone: distortion REZ: touch wah RATE: chorus, flanger, phaser TIME: delay, reverb
35			23	3		reserved		
36	31	1	0	1	00 – 01	OP ON-OFF (OP)	off, ON	
37		1	1	1	00 – 7F	OP EG Rate 1	0 (slow) – 127 (fast)	
38		1	2	1	00 – 7F	OP EG Rate 2	0 (slow) – 127 (fast)	
39		1	3	1	00 – 7F	OP EG Rate 3	0 (slow) – 127 (fast)	
40		1	4	1	00 – 7F	OP EG Rate 4	0 (slow) – 127 (fast)	
41		1	5	1	00 – 7F	OP EG Level 1	0 (no output) – 127 (max)	
42		1	6	1	00 – 7F	OP EG Level 2	0 (no output) – 127 (max)	
43		1	7	1	00 – 7F	OP EG Level 3	0 (no output) – 127 (max)	
44		1	8	1	00 – 7F	OP EG Level 4	0 (no output) – 127 (max)	
45		1	9	1	00 – 7F	OP EG Keyboard Rate Scaling (KSC-R)	0 – 127	
46		1	0A	1	00 – 7F	OP Keyboard Level Scaling Left Depth (KSC-Level)	0 (flat: no variation) – 127 (max)	
47		1	0B	1	00 – 7F	OP Keyboard Level Scaling Right Depth (KSC-Level)	0 (flat: no variation) – 127 (max)	
48		1	0C	1	00 – 03	OP Keyboard Level Scaling Left Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)	
49		1	0D	1	00 – 03	OP Keyboard Level Scaling Right Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)	
50		1	0E	1	00 – 7F	OP LFO AMD Depth (LFO AMD)	0 (no amplitude) – 127 (max)	
51		1	0F	1	00 – 01	OP LFO PMD ON/ OFF (LFO PMD On/ Off)	off, ON	
52		1	10	1	00 – 01	OP PEG ON/OFF (PITCH EG On/Off)	off, ON	
53		1	11	1	00 – 7F	OP Level Velocity Sensitivity (VEL.S)	0 (no touch response) – 127 (max)	
54		1	12	1	00 – 7F	OP Level Output Level (LEVEL)	0 – 127	
55		1	13	1	00 – 7F	OP Level Feedback Level (FB)	0 – 127	
56		1	14	1	00 – 01	OP Level Feedback Type (FB)	sawtooth, square	
57		1	15	1	00 – 01	OP Freq. Mode (MODE)	frequency/ratio (Ratio), fixed freq/Hz (Fixed)	
58		1	16	1	00 – 1F	OP Freq. Coarse (RATIO/FREQ)		
59		1	17	1	00 – 63	OP Freq. Fine (RATIO/FREQ)		
60		1	18	1	00 – 7F	OP Freq. Detune (DTUNE)	-64 – +63	
61		1	19	3		reserved		
62	31	2	0	1	00 – 01	OP ON-OFF (OP)	off, ON	
63		2	1	1	00 – 7F	OP EG Rate 1	0 (slow) – 127 (fast)	
64		2	2	1	00 – 7F	OP EG Rate 2	0 (slow) – 127 (fast)	
65		2	3	1	00 – 7F	OP EG Rate 3	0 (slow) – 127 (fast)	
66		2	4	1	00 – 7F	OP EG Rate 4	0 (slow) – 127 (fast)	
67		2	5	1	00 – 7F	OP EG Level 1	0 (no output) – 127 (max)	
68		2	6	1	00 – 7F	OP EG Level 2	0 (no output) – 127 (max)	
69		2	7	1	00 – 7F	OP EG Level 3	0 (no output) – 127 (max)	
70		2	8	1	00 – 7F	OP EG Level 4	0 (no output) – 127 (max)	
71		2	9	1	00 – 7F	OP EG Keyboard Rate Scaling (KSC-R)	0 – 127	
72		2	0A	1	00 – 7F	OP Keyboard Level Scaling Left Depth (KSC-Level)	0 (flat: no variation) – 127 (max)	
73		2	0B	1	00 – 7F	OP Keyboard Level Scaling Right Depth (KSC-Level)	0 (flat: no variation) – 127 (max)	
74		2	0C	1	00 – 03	OP Keyboard Level Scaling Left Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)	
75		2	0D	1	00 – 03	OP Keyboard Level Scaling Right Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)	
76		2	0E	1	00 – 7F	OP LFO AMD Depth (LFO AMD)	0 (no amplitude) – 127 (max)	
77		2	0F	1	00 – 01	OP LFO PMD ON/ OFF (LFO PMD On/ Off)	off, ON	
78		2	10	1	00 – 01	OP PEG ON/OFF (PITCH EG On/Off)	off, ON	
79		2	11	1	00 – 7F	OP Level Velocity Sensitivity (VEL.S)	0 (no touch response) – 127 (max)	
80		2	12	1	00 – 7F	OP Level Output Level (LEVEL)	0 – 127	
81		2	13	1	00 – 7F	OP Level Feedback Level (FB)	0 – 127	
82		2	14	1	00 – 01	OP Level Feedback Type (FB)	sawtooth, square	
83		2	15	1	00 – 01	OP Freq. Mode (MODE)	frequency/ratio (Ratio), fixed freq/Hz (Fixed)	
84		2	16	1	00 – 1F	OP Freq. Coarse (RATIO/FREQ)		
85		2	17	1	00 – 63	OP Freq. Fine (RATIO/FREQ)		
86		2	18	1	00 – 7F	OP Freq. Detune (DTUNE)	-64 – +63	
87		2	19	3		reserved		
88	31	3	0	1	00 – 01	OP ON-OFF (OP)	off, ON	

89		3	1	1 00 – 7F	OP EG Rate 1	0 (slow) – 127 (fast)		
90		3	2	1 00 – 7F	OP EG Rate 2	0 (slow) – 127 (fast)		
91		3	3	1 00 – 7F	OP EG Rate 3	0 (slow) – 127 (fast)		
92		3	4	1 00 – 7F	OP EG Rate 4	0 (slow) – 127 (fast)		
93		3	5	1 00 – 7F	OP EG Level 1	0 (no output) – 127 (max)		
94		3	6	1 00 – 7F	OP EG Level 2	0 (no output) – 127 (max)		
95		3	7	1 00 – 7F	OP EG Level 3	0 (no output) – 127 (max)		
96		3	8	1 00 – 7F	OP EG Level 4	0 (no output) – 127 (max)		
97		3	9	1 00 – 7F	OP EG Keyboard Rate Scaling (KSC-R)	0 – 127		
98		3	0A	1 00 – 7F	OP Keyboard Level Scaling Left Depth (KSC-Level)	0 (flat: no variation) – 127 (max)		
99		3	0B	1 00 – 7F	OP Keyboard Level Scaling Right Depth (KSC-Level)	0 (flat: no variation) – 127 (max)		
100		3	0C	1 00 – 03	OP Keyboard Level Scaling Left Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)		
101		3	0D	1 00 – 03	OP Keyboard Level Scaling Right Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)		
102		3	0E	1 00 – 7F	OP LFO AMD Depth (LFO AMD)	0 (no amplitude) – 127 (max)		
103		3	0F	1 00 – 01	OP LFO PMD ON/ OFF (LFO PMD On/ Off)	off, ON		
104		3	10	1 00 – 01	OP PEG ON/OFF (PITCH EG On/Off)	off, ON		
105		3	11	1 00 – 7F	OP Level Velocity Sensitivity (VEL.S)	0 (no touch response) – 127 (max)		
106		3	12	1 00 – 7F	OP Level Output Level (LEVEL)	0 – 127		
107		3	13	1 00 – 7F	OP Level Feedback Level (FB)	0 – 127		
108		3	14	1 00 – 01	OP Level Feedback Type (FB)	sawtooth, square		
109		3	15	1 00 – 01	OP Freq. Mode (MODE)	frequency/ratio (Ratio), fixed freq/Hz (Fixed)		
110		3	16	1 00 – 1F	OP Freq. Coarse (RATIO/FREQ)			
111		3	17	1 00 – 63	OP Freq. Fine (RATIO/FREQ)			
112		3	18	1 00 – 7F	OP Freq. Detune (DTUNE)	-64 – +63		
113		3	19	3	reserved			
114	31	4	0	1 00 – 01	OP ON-OFF (OP)	off, ON		
115		4	1	1 00 – 7F	OP EG Rate 1	0 (slow) – 127 (fast)		
116		4	2	1 00 – 7F	OP EG Rate 2	0 (slow) – 127 (fast)		
117		4	3	1 00 – 7F	OP EG Rate 3	0 (slow) – 127 (fast)		
118		4	4	1 00 – 7F	OP EG Rate 4	0 (slow) – 127 (fast)		
119		4	5	1 00 – 7F	OP EG Level 1	0 (no output) – 127 (max)		
120		4	6	1 00 – 7F	OP EG Level 2	0 (no output) – 127 (max)		
121		4	7	1 00 – 7F	OP EG Level 3	0 (no output) – 127 (max)		
122		4	8	1 00 – 7F	OP EG Level 4	0 (no output) – 127 (max)		
123		4	9	1 00 – 7F	OP EG Keyboard Rate Scaling (KSC-R)	0 – 127		
124		4	0A	1 00 – 7F	OP Keyboard Level Scaling Left Depth (KSC-Level)	0 (flat: no variation) – 127 (max)		
125		4	0B	1 00 – 7F	OP Keyboard Level Scaling Right Depth (KSC-Level)	0 (flat: no variation) – 127 (max)		
126		4	0C	1 00 – 03	OP Keyboard Level Scaling Left Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)		
127		4	0D	1 00 – 03	OP Keyboard Level Scaling Right Curve (KSC-Level)	-linear (-LIN), -exponential (-EXP), +exponential (+EXP), +linear (+LIN)		
128		4	0E	1 00 – 7F	OP LFO AMD Depth (LFO AMD)	0 (no amplitude) – 127 (max)		
129		4	0F	1 00 – 01	OP LFO PMD ON/ OFF (LFO PMD On/ Off)	off, ON		
130		4	10	1 00 – 01	OP PEG ON/OFF (PITCH EG On/Off)	off, ON		
131		4	11	1 00 – 7F	OP Level Velocity Sensitivity (VEL.S)	0 (no touch response) – 127 (max)		
132		4	12	1 00 – 7F	OP Level Output Level (LEVEL)	0 – 127		
133		4	13	1 00 – 7F	OP Level Feedback Level (FB)	0 – 127		
134		4	14	1 00 – 01	OP Level Feedback Type (FB)	sawtooth, square		
135		4	15	1 00 – 01	OP Freq. Mode (MODE)	frequency/ratio (Ratio), fixed freq/Hz (Fixed)		
136		4	16	1 00 – 1F	OP Freq. Coarse (RATIO/FREQ)			
137		4	17	1 00 – 63	OP Freq. Fine (RATIO/FREQ)			
138		4	18	1 00 – 7F	OP Freq. Detune (DTUNE)	-64 – +63		
139		4	19	3	reserved			