

Presets (Factory Settings)

#	Name	Effect	Variation	Couple	Engine	Edit A	Edit B	EQ LO	EQ HI	MIX
1	VIRTUAL CATHEDRAL	1	11	Yes	L	63	50	-1	-5	20
					R		42	-1	-5	20
2	THE CONCERT	6	26	Yes	L	20	51	0	-4	30
					R		63	0	-4	30
3	INSIDE THE ROOM	4	32	Yes	L	0	29	-2	-5	50
					R			-2	-5	50
4	VIRTUAL PLATE	2	14	Yes	L	9	63	0	-6	20
					R		50	0	-6	20
5	ULTRA CHORUS	24	1		L	20	63	2	-3	60
					R	36	26	2	-3	60
6	MAGIC PITCH	17	1		L	4	6	2	-3	50
					R	-4	-4	2	-3	50
7	GATED REVERB	12	5	Yes	L	50	21	-2	-2	20
					R			-2	-2	20
8	FLANGE IT	23	4		L	63	63	-3	0	60
					R	30	50	-3	0	60
9	ECHOMIZER	11	5		L	63	41	2	-3	50
					R	62	42	2	-3	50
10	MAGIC SPEAKER	14	12	Yes	L	23	12	-6	-6	80
					R			-6	-6	80
11	BIG	1	12	Yes	L	23	21	0	0	50
					R	7	0	0	0	50
12	MEDIUM	1	32	Yes	L	14	0	2	-9	32
					R	40	2	-9	32	
13	HOT PLATE	2	4	Yes	L	40	34	0	0	36
					R	31	0	0	0	36
14	OPEN PLATE	2	23	Yes	L	40	10	0	0	36
					R	41	0	0	0	36
15	SCHOOL ROOM	3	4	Yes	L	0	10	0	0	24
					R	14	0	0	0	24
16	GYMNASIUM	3	24	Yes	L	40	58	-8	0	8
					R	61	-8	0	8	
17	SMALL ROOM	4	4	Yes	L	25	31	0	0	50
					R		0	0	0	50
18	MEDIUM ROOM	4	8	Yes	L	13	38	0	0	50
					R		0	0	0	50
19	STUDIO A	5	13	Yes	L	50	52	0	0	20
					R	30	0	0	0	20
20	STUDIO B	5	21	Yes	L	48	51	8	-4	10
					R	20	8	-4	10	
21	STUDIO C	5	6	Yes	L	56	60	0	0	20
					R	60	0	0	0	20
22	SHADOW HALL	6	12	Yes	L	10	34	0	0	24
					R	40	0	0	0	24
23	COLISEUM	6	13	Yes	L	20	56	0	0	20
					R	50	0	0	0	20
24	CONCERT HALL	6	18	Yes	L	60	24	-12	0	50
					R	60	-12	0	50	
25	BRIGHT HALL	6	18	Yes	L	60	8	-12	2	52
					R	60	-12	2	52	
26	DANCE HALL	7	10	Yes	L	44	4	0	0	40
					R	4	0	0	0	40
27	EMPTY ROOM	7	19	Yes	L	31	8	0	0	34
					R	23	0	0	0	34
28	ICY WORLD	7	27	Yes	L	23	60	8	0	66
					R	34	8	0	0	66
29	ANTARCTICA	7	30	Yes	L	10	60	0	0	66
					R	62	0	0	0	66
30	VOICE CHAMBER	8	4	Yes	L	6	50	0	0	20
					R	10	0	0	0	20
31	VOICE ROOM	8	12	Yes	L	6	40	0	0	24
					R	10	0	0	0	24
32	VOICE HALL	8	26	Yes	L	28	55	6	-6	34
					R	13	6	-6	34	
33	BIG VOICE	8	26	Yes	L	40	55	3	-3	40
					R	13	3	-3	40	
34	DRUM AMBIENCE	9	10	Yes	L	40	10	0	-8	12
					R		0	-8	12	
35	DRUM VERB	9	17	Yes	L	40	4	0	-8	20
					R	0	0	0	-8	20
36	OPEN SNARE	9	22	Yes	L	40	11	-6	2	26
					R		-6	2	26	
37	BRIGHT PLATE	9	30	Yes	L	20	5	0	2	46
					R		0	2	46	
38	STEREO DELAY	10	2		L	0	30	0	0	50
					R	63	15	0	0	50
39	CENTER DELAY	10	4		L	0	10	0	0	50
					R	0	10	0	0	50
40	WEIRD DELAY	10	26		L	63	10	0	0	50
					R	0	5	0	0	50
41	REPEAT IT ! (120 BPM / BAR)	11	25		L	8	0	0	0	50
					R	16	0	0	0	50
42	SPREAD ECHO	11	3		L	63	20	0	0	50
					R	0	40	0	0	50
43	TUMBLING ECHO	11	16	Yes	L	63	30	0	0	50
					R	63	30	0	0	50
44	SHORT GATED REVERB	12	8	Yes	L	30	6	0	0	32
					R		0	0	32	
45	MEDIUM GATED REVERB	12	15	Yes	L	63	6	0	0	32
					R		0	0	32	
46	LONG GATED REVERB	12	30	Yes	L	50	25	0	0	32
					R		0	0	32	
47	SMALL REVERSE	13	8	Yes	L	30	6	0	0	32
					R		0	0	32	
48	MEDIUM REVERSE	13	15	Yes	L	63	6	0	0	32
					R		0	0	32	
49	LARGE REVERSE	13	30	Yes	L	50	25	0	0	32
					R		0	0	32	
50	DIRTY HARRY	14	4	Yes	L	20	16	0	0	50
					R		0	0	50	

#	Name	Effect	Variation	Couple	Engine	Edit A	Edit B	EQ LO	EQ HI	MIX
51	UGLY POP	14	24	Yes	L	20	16	0	0	60
					R			0	0	60
52	TALKING DEAD	14	30	Yes	L	25	5	0	0	66
					R			0	0	66
53	SHORT ROTATION	15	4	Yes	L	12	12	0	0	100
					R			0	0	100
54	BRIGHT ROTATION	15	1	Yes	L	24	63	8	0	100
					R			8	0	100
55	DARK ROTATION	15	26	Yes	L	24	24	0	0	100
					R			0	0	100
56	STRANGE VOX	16	1	Yes	L	0	0	0	0	100
					R			0	0	100
57	VOICE VOCODER	16	16	Yes	L	10	0	0	-2	80
					R			-2	0	100
58	PITCHED UP	17	-	Yes	L	0	1	0	0	100
					R	0	1	0	0	100
59	PITCHED DOWN	17	-	Yes	L	0	-1	0	0	100
					R	0	-1	0	0	100
60	CLOUDY SKIES	18	4	Yes	L	30	4	0	0	30
					R	30	4	0	0	30
61	FAT PAD	18	12	Yes	L	35	4	0	0	34
					R	35	4	0	0	34
62	FLANGED	18	22	Yes	L	40	4	0	0	40
					R	40	4	0	0	40
63	WIDE CHOIR	19	4	Yes	L	54	63	0	0	74
					R	4	54	0	0	74
64	SYNTH CHORUS	19	12	Yes	L	40	20	0	0	100
					R	40	20	0	0	100
65	OVERALL	19	30	Yes	L	50	30	0	0	100
					R	50	30	0	0	100
66	OLD TREMOLO	20	12		L	27	0	-5	16	100
					R	0	4	-5	16	100
67	CRAZY PING PONG 1	20	32		L	31	63	0	0	100
					R	0	0	0	0	100
68	CRAZY PING PONG 2	20	32		L	31	63	0	0	100
					R	5	10	0	0	100
69	DELAYED REVERB	21	32		L	63	0	0	0	50
					R	28	28	0	0	50
70	PITCHED REVERB 1	22	-		L	0	1	0	0	50
					R	10	10	0	0	50
71	PITCHED REVERB 2	22	-		L	0	-1	0	0	50
					R	6	17	0	0	50
72	SMALL FLANGE	23	4		L	30	4	0	0	50
					R	10	10	0	0	50
73	MEDIUM FLANGE	23	17		L	35	4	0	0	50
					R	29	10	0	0	50
74	LARGE FLANGE	23	22		L	40	4	0	0	50
					R	10	10	0	0	50
75	BALLAD SYNTH	24	4		L	25	13	0	0	50
					R	10	10	0	0	50
76	HORNY BRASS	24	12		L	40	20	0	0	100
					R	10	10	0	0	100
77	STRING CHORUS	24	30		L	50	30	0	0	100
					R	10	10	0	0	100
78	PITCH/REVERB DOWN	25	-		L	0	1	0	0	100
					R	10	31	0	0	24
79	PITCH/REVERB DOWN UNDER	25	-		L	0	-2	0	0	100
					R	5	30	4	-1	24
80	FLANGE/REV 1	26	4		L	30	4	0	0	30
					R	10	31	0	0	30
81	FLANGE/REV 2	26	18		L	35	4	0	0	30
					R	20	37	0	0	30
82	FLANGE/REV 3	26	22		L	40	4	0	0	40
					R	10	31	0	0	30
83	CHORUS/REV 1	27	12		L	40	20	0	0	100
					R	10	31	0	0	30
84	CHORUS/REV 2	27	18		L	35	4	0	0	100
					R	18	37	0	0	30
85	CHORUS/REV 3	27	30		L	50	30	0	0	100
					R	10	31	0	0	30
86	TREM/REV 1	28	18		L	31	32	0	0	100
					R	10	10	0	0	30
87	TREM/REV 2	28	17		L	31	32	0	0	80
					R	18	21	0	0	30
88	TREM/REV 3	28	32		L	31	32	0	0	100
					R	22	20	0	0	30
89	DELAY/REV SLOW	29	-		L	63	0	0	0	100
					R	19	63	0	0	52
90	DELAY/REV MID	29	-		L	32	39	0	0	48
					R	19	32	9	0	52
91	DELAY/REV FAST	29	-		L	32	40	0	0	38
					R	34	30	0	0	100
92	PITCH/ECHO 1	30	-		L	25	1	0	0	100
					R	32	4	0	0	50
93	PITCH/ECHO 2	30	-		L	25	2	0	0	100
					R	25	39	0	0	20
94	FLANGE/ECHO 1	31	4		L	30	4	0	0	30
					R	32	4	0	0	50
95	FLANGE/ECHO 2	31	17		L	35	2	0	0	48
					R	12	16	0	0	40
96	FLANGE/ECHO 3	31	22		L	40	4	0	0	40
					R	32	4	0	0	50
97	CHORUS/ECHO 1	32	4		L	54	63	0	0	74
					R	5	40	0	-4	74
98	CHORUS/ECHO 2	32	12		L	40	20	0	0	100
					R	20	20	0	0	100
99	CHORUS/ECHO 3	32	16		L	40	20	0	0	100
					R	32	0	0	0	50
100	CHORUS/ECHO 4	32	30		L	50	30	0	0	100
					R	25	30	0	-16	100

Effect Algorithms

No.	EFFECT	VARIATION	EDIT A		EDIT B	
			ENGINE L	ENGINE R	ENGINE L	ENGINE R
1	CATHEDRAL	Reverb Time		Diffusion	Early Reflections	High Multiply
2	PLATE	Reverb Time		Pre Delay	Stereo Width	High Multiply
3	SMALL HALL	Reverb Time		Diffusion	Early Reflections	Stereo Width
4	ROOM	Reverb Time		Pre Delay		Wall Damp
5	STUDIO	Reverb Time		Pre Delay	Early Reflections	Wall Damp
6	CONCERT	Reverb Time		Pre Delay	Early Reflections	Diffusion
7	STAGE	Reverb Time		Diffusion	Liveliness	Stereo Width
8	VOCAL	Reverb Time		Pre Delay	Early Reflections	High Multiply
9	PERCUSSION	Reverb Time		Diffusion		High Frequency Decay
10	DELAY	Del. Coarse	Delay Time	Delay Time	Feedback	Feedback
11	ECHO	Del. Coarse	Delay Time	Delay Time	Feedback	Feedback
12	GATED REVERB	Gate Time		Density		Gate Threshold
13	REVERSE REVERB	Gate Time		Pre Delay		Gate Threshold
14	VOCAL DISTORTION	Distortion Type		Delay Time (x 10 ms)		Delay Mix
15	ROTARY SPEAKER	Rotary Type		Horn Speed		Rotor Speed
16	VOCODER	Vocoder Type		Vocoder Distortion		Vocoder Sens
17	PITCH		Cent	Cent	Semi Tone	Semi Tone
18	FLANGER	Mod. Frequency	Mod. Depth	Mod. Depth	Mod. Feedback	Mod. Feedback
19	CHORUS	Mod. Frequency	Mod. Delay	Mod. Delay	Mod. Depth	Mod. Depth
20	TREMOLO & DELAY	Mod. Frequency	Mod. Depth	el. Time (x 10 ms)	Panning	Delay Feedback
21	DELAY & REVERB	Del. Mix	Del. Time (x 10 ms)	Reverb Time	Delay Feedback	Reverb Mix
22	PITCH & REVERB	Del. Mix	Cent	Reverb Time	Semi Tone	Reverb Mix
23	FLANGER & REVERB	Mod. Frequency	Mod. Depth	Reverb Time	Mod. Feedback	Reverb Mix
24	CHORUS & REVERB	Mod. Frequency	Mod. Delay	Reverb Time	Mod. Depth	Reverb Mix
25	PITCH / REVERB		Cent	Reverb Time	Semi Tone	High Multiply
26	FLANGER / REVERB	Mod. Frequency	Mod. Depth	Reverb Time	Mod. Feedback	High Multiply
27	CHORUS / REVERB	Mod. Frequency	Mod. Delay	Reverb Time	Mod. Depth	High Multiply
28	TREMOLO / REVERB	Mod. Frequency	Del. Time (x 10 ms)	Reverb Time	Delay Feedback	High Multiply
29	DELAY / REVERB		Del. Time (x 10 ms)	Reverb Time	Delay Feedback	High Multiply
30	PITCH / ECHO		Cent	el. Time (x 10 ms)	Semi Tone	Delay Feedback
31	FLANGER / ECHO	Mod. Frequency	Mod. Depth	el. Time (x 10 ms)	Mod. Feedback	Delay Feedback
32	CHORUS / ECHO	Mod. Frequency	Mod. Delay	el. Time (x 10 ms)	Mod. Depth	Delay Feedback

Variation Type	Edit A				Step Size (L & R)
	Delay (L)		Delay (R)		
	From (ms)	Until (ms)	From (ms)	Until (ms)	
1	0	315	0	315	5
2	320	635	320	635	5
3	640	955	640	955	5
4	960	1275	960	1275	5
5	0	315	320	635	5
6	0	315	640	955	5
7	0	315	960	1275	5
8	320	635	640	955	5
9	320	635	960	1275	5
10	640	955	960	1275	5
11	0	630	1280	1910	10
12	0	630	1920	2550	10
13	0	630	2560	3190	10
14	0	630	3200	3830	10
15	640	1270	1280	1910	10
16	640	1270	1920	2550	10
17	640	1270	2560	3190	10
18	640	1270	3200	3830	10
19	1280	1910	1920	2550	10
20	1280	1910	2560	3190	10
21	1280	1910	3200	3830	10
22	1280	1910	3840	4470	10
23	1920	2550	2560	3190	10
24	1920	2550	3200	3830	10
25	1920	2550	3840	4470	10
26	1920	2550	4480	5110	10
27	2560	3190	3200	3830	10
28	2560	3190	3840	4470	10
29	2560	3190	4480	5110	10
30	3200	3830	3840	4470	10
31	3200	3830	4480	5110	10
32	3840	4470	4480	5110	10

MIDI

MIDI Implementation Chart				
Function		Transmitted	Recognized	Remarks
Basic Channel	Default	OFF, 1 - 16	OFF, 1 - 16	memorized
	Changed	OFF, 1 - 16	OFF, 1 - 16	
Mode	Default	1,2,3,4	1,2,3,4	
	Messages	X	X	
	Altered	X	X	
Note Number		X	X	
	True Voice	X	X	
Velocity	Note ON	X	X	
	Note OFF	X	X	
After Touch	Key's	X	X	
	Ch's	X	X	
Pitch Bender		X	X	
Control		O 20 - 30	O 20 - 30	s. add. Table
Progr. Change	True #	O (0-99) 1-100	O (0-99) 1-100	
System Exclusive		X	X	
System Common	Song Pos	X	X	
	Song Sel	X	X	
	Tune	X	X	
System	Clock	X	X	
Real Time	Commands	X	X	
Aux Messages	Local ON/OFF	X	X	
	All notes OFF	X	X	
	Active Sense	X	X	
	Reset	X	X	
Notes				
O = YES, X = NO				
Mode 1:		OMNI ON, POLY		
Mode 2:		OMNI ON, MONO		
Mode 3:		OMNI OFF, POLY		
Mode 4:		OMNI OFF, MONO		

Parameter Name	Display Range	Midi-Controller	Controller Range	LEDs	
				Couple	Left Right IN on IN off
Effect	1..32	20	0..31		
Variation	1..32	21	0..31		
Engine		22	0,1,2	0	1 2
Edit A	0..63 / -50..50	23	0..63 / 0..100 (1)		
Edit B	0..63 / -12..12	24	0..63 / 0..24 (2)		
EQ LO	-16..16	25	0..32		
EQ HI	-16..16	26	0..32		
Mix	0..100	27	0..100		
Store	1..100	28	0..99		
IN/OUT		29	0,1		1 0
Mix Intern/Extern	0..100 / --	30	0,1		

- (1) when the effect has a cent-function (for instance pitch)
 (2) when the effect has a semitone-function (for instance pitch)

Display	MIDI Modes
Channel:	
- c	No MIDI functions
1c - 16c	MIDI Channel 1 - 16
Omni:	
0o	Omni off
1o	Omni on
Controller:	
0C	No controller data are transmitted
1C	Controller data are received but not transmitted
2C	Controller data are transmitted but not received
3C	Controller data are transmitted and received
Program Change:	
0P	No program change data are transmitted
1P	Program change data are received but not transmitted
2P	Program change data are transmitted but not received
3P	Program change data are transmitted and received
Store Enable:	
0S	Controller #28 is ignored
1S	Controller #28 is enabled (see manual chapter 2.5)
MIDI Sys Ex Dump:	
0d	No Sys Ex function
1d	Sys Ex Bulk Dump Receive
2d	Sys Ex Bulk Dump Send

These modes need to be confirmed by pressing the STORE key. While sending or receiving SysEx, audio is muted.