

51: V-FLANGER		
1 Dry/Wet	D63>W — D=W — D<W63	
2 LFO Frequency	0.0Hz — 39.70Hz	
3 LFO Wave LFO	TriAngle,Sine,Random	
4 LFO Depth	0 — 127	
5 Feedback Level	-63 — +63	
6 Feedback High Damp	0.1 — 1.0	
7 Delay Offset	0.09 — 36.21ms	
8 Modulation Phase	-180 — +180	
9 Analog Feel	0 — 10	
10 EQ Low Frequency	32Hz — 2.0kHz	
11 EQ Low Gain	-12dB — +12dB	
12 EQ Mid Frequency	100Hz — 10.0kHz	
13 EQ Mid Gain	-12dB — +12dB	
14 EQ Mid Width	1 — 12.0	
15 EQ High Frequency	500Hz — 16.0kHz	
16 EQ High Gain	-12dB — +12dB	
52: FLANGER		
1 Dry/Wet	D63>W — D=W — D<W63	
2 LFO Frequency	0.0Hz — 39.70Hz	
3 LFO Depth	0 — 127	
4 Feedback Level	-63 — +63	
5 Delay Offset	0.0ms — 50.0ms	
6 LFOPhaseDifference	-180deg — +180deg L/R	
7 EQ Low Frequency	32Hz — 2.0kHz	
8 EQ Low Gain	-12dB — +12dB	
9 EQ Mid Frequency	100Hz — 10.0kHz	
10 EQ Mid Gain	-12dB — +12dB	
11 EQ Mid Width	1 — 12.0	
12 EQ High Frequency	500Hz — 16.0kHz	
13 EQ High Gain	-12dB — +12dB	
53: PHASER1		
1 Dry/Wet	D63>W — D=W — D<W63	
2 LFO Frequency	0.0Hz — 39.70Hz	
3 LFO Depth	0 — 127	
4 Phase Shift Offset	0 — 127	
5 Feedback Level	-63 — +63	
6 Stage	4, 5, 6, 7, 8, 9, 10, 11, 12	
7 Diffusion	mono/stereo	
8 EQ Low Frequency	32Hz — 2.0kHz	
9 EQ Low Gain	-12dB — +12dB	
10 EQ High Frequency	500Hz — 16.0kHz	
11 EQ High Gain	-12dB — +12dB	
54: PHASER2		
1 Dry/Wet	D63>W — D=W — D<W63	
2 LFO Frequency	0.0Hz — 39.70Hz	
3 LFO Depth	0 — 127	
4 Phase Shift Offset	0 — 127	
5 Feedback Level	-63 — +63	
6 Stage	3, 4, 5, 6	
7 LFOPhaseDifference L/R	-180deg — +180deg	
8 EQ Low Frequency	32Hz — 2.0kHz	
9 EQ Low Gain	-12dB — +12dB	
10 EQ High Frequency	500Hz — 16.0kHz	
11 EQ High Gain	-12dB — +12dB	
55: TREMOLO		
1 LFO Frequency	0.0Hz — 39.70Hz	
2 AM Depth	0 — 127	
3 PW Depth Delay	0 — 127	
4 LFOPhaseDifference L/R	-180deg — +180deg	
5 EQ Low Frequency	32Hz — 2.0kHz	
6 EQ Low Gain	-12dB — +12dB	
7 EQ Mid Frequency	100Hz — 10.0kHz	
8 EQ Mid Gain	-12dB — +12dB	
9 EQ Mid Width	1 — 12.0	
10 EQ High Frequency	500Hz — 16.0kHz	
11 EQ High Gain	-12dB — +12dB	
12 Input Mode	mono/stereo	
56: FLANGING PAN		
1 Dry/Wet	D63>W — D=W — D<W63	
2 Flanger&Pan Speed	0.0Hz — 39.70Hz	
3 Flanger Depth	0 — 127	
4 Flanger Delay	0.1 — 180.0ms	
5 Flanger	-63 — +63	
6 FlgPan Delay	0.1 — 180.0ms	
7 FlgPan Feedback	-63 — +63	
8 HPF Frequency	22Hz — 8.0kHz	
9 LPF Frequency	1.0kHz — 18.0kHz, thru	
10 Delay Time	0.1 — 270.0ms	
11 Delay Feedback	-63 — +63	
12 Delay Level	0 — 127	
13 AM Speed Frequency	0.0Hz — 39.70Hz	
14 AM Wave	tri,sine,saw up,saw down	
15 AM Depth	0 — 127	
16 AM Inverse R	normal,inverse	
57: FLOW PAN		
1 Dry/Wet	D63>W — D=W — D<W63	
2 Delay Time	0.1 — 650.0ms	
3 Delay Time Ofst R	0 — 884	
4 Feedback Level	-63 — +63	
5 FB Level Ofst R	-63 — +63	
6 Feedback High Damp	0.1 — 1.0	
7 FB Hi Damp Ofst R	-0.9 — +0.9	
8 Delay Mod Speed	0.0Hz — 39.70Hz	
9 Delay Mod Depth	0 — 127	
10 Delay Dry/Wet	0 — 127	
11 PreDelayPan Speed	0.0Hz — 39.70Hz	
12 PreDelayPan Wave	tri,sine	
13 PreDelayPan Depth	0 — 127	
14 Auto Pan Speed	0.0Hz — 39.70Hz	
15 Auto Pan Wave	tri,sine	
16 Auto Pan Depth	0 — 127	
58: ROTARY SPEAKER		
1 LFO Frequency	0.0Hz — 39.70Hz	
2 LFO Depth	0 — 127	
3 EQ Low Frequency	32Hz — 2.0kHz	
4 EQ Low Gain	-12dB — +12dB	
5 EQ Mid Frequency	100Hz — 10.0kHz	
6 EQ Mid Gain	-12dB — +12dB	
7 EQ Mid Width	1 — 12.0	
8 EQ High Frequency	500Hz — 16.0kHz	
9 EQ High Gain	-12dB — +12dB	
10 Dry/Wet Balance	D63>W — D=W — D<W63	
59:2WAY ROTARY SPEAKER		
1 Rotor Speed	0.0Hz — 39.70Hz	
2 Drive Low	0 — 127	
3 Drive High	0 — 127	
4 Low/High Balance	L63>H — L=H — L<H63	
5 Crossover Frequency	100Hz — 10.0kHz	
6 Mic L-R Angle	0deg — 180deg	
7 EQ Low Frequency	32Hz — 2.0kHz	
8 EQ Low Gain	-12dB — +12dB	
9 EQ High Frequency	500Hz — 16.0kHz	
10 EQ High Gain Gain with	-12dB — +12dB	
60: DUAL ROTORS SPEAKER		
1 Speed Control	Slow/Fast	
2 Rotor Speed Slow	0.0Hz — 2.65Hz	
3 Horn Speed Slow	0.0Hz — 2.65Hz	
4 Rotor Speed Fast	2.69Hz — 39.70Hz	
5 Horn Speed Fast	2.69Hz — 39.70Hz	
6 Slow-Fast Time of R	0 — 127	
7 Slow-Fast Time of H	0 — 127	
8 Drive Low Depth	0 — 127	
9 Drive High Depth	0 — 127	
10 Low/High Balance	L63>H — L=H — L<H63	
11 Mic L-R Angle L/R	0deg — 180deg	
12 EQ Low Frequency	32Hz — 2.0kHz	
13 EQ Low Gain	-12dB — +12dB	
14 EQ High Frequency	-12dB — +12dB	
15 EQ High Gain	-12dB — +12dB	
61:DIST+ROTARYSPEAKER, 62:OVRDRIVE+RTARY SPEAK		
1 Drive	0 — 127	
2 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru	
3 Output Level	0 — 127	
4 LFO Frequency	0.0Hz — 39.70Hz	
5 LFO Depth speaker rotation	0 — 127	
6 EQ Low Frequency	32Hz — 2.0kHz	
7 EQ Low Gain	-12dB — +12dB	
8 EQ High Frequency	500Hz — 16.0kHz	
9 EQ High Gain	-12dB — +12dB	
10 Dry/Wet Balance	D63>W — D=W — D<W63	
63:AMPSIM+RTARY SPEAKER		
1 Drive	0 — 127	
2 AMP	Off, Stack, Combo,Tube	
3 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru	
4 Output Level	0 — 127	
5 LFO Frequency	0.0Hz — 39.70Hz	
6 LFO Depth	0 — 127	
7 EQ Low Frequency	32Hz — 2.0kHz	
8 EQ Low Gain	-12dB — +12dB	
9 EQ High Frequency	500Hz — 16.0kHz	
10 EQ High Gain	-12dB — +12dB	
11 Dry/Wet Balance	D63>W — D=W — D<W63	

64:DIST+2WAYRTARY SPEAK 65:OVERDRIVE+2WY ROTARYSPEAKER	
1 Drive	0 — 127
2 LPF Cutoff Freq 1	0kHz — 18.0kHz, thru
3 Output Level	0 — 127
4 Rotor Speed	0.0Hz — 39.70Hz
5 Drive Low Depth	0 — 127
6 Drive High Depth	0 — 127
7 Low/High	L63>H — L=H — L<H63
8 Crossover Frequency	100Hz — 10.0kHz
9 Mic L-R Angle L/R	0deg — 180deg
10 EQ Low Frequency	32Hz — 2.0kHz
11 EQ Low Gain	-12dB — +12dB
12 EQ High Frequency	500Hz — 16.0kHz
13 EQ High Gain	-12dB — +12dB
14 Dry/Wet Balance	D63>W — D=W — D<W63
66: AMP SIM + 2FO WOTARY SPEAKER	
1 Drive	0 — 127
2 AMP Type	Off, Stack, Combo,Tube
3 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru
4 Output Level	0 — 127
5 Rotor Speed Rotation	0.0Hz — 39.70Hz
6 Drive Low Depth	0 — 127
7 Drive High Depth	0 — 127
8 Low/High Balance	L63>H — L=H — L<H63
9 Crossover Frequency	100Hz — 10.0kHz
10 Mic L-R Angle	0deg — 180deg
11 EQ Low Frequency	32Hz — 2.0kHz
12 EQ Low Gain	-12dB — +12dB
13 EQ High Frequency	500Hz — 16.0kHz
14 EQ High Gain	-12dB — +12dB
15 Dry/Wet Balance	D63>W — D=W — D<W63
67: AUTO PAN	
1 LFO Frequency	0.0Hz — 39.70Hz
2 L/R Depth	0 — 127
3 F/R Depth	0 — 127
4 PAN Direction,	L<R, L>R, L<R, Lturn, Rturn
5 EQ Low Frequency	32Hz — 2.0kHz
6 EQ Low Gain	-12dB — +12dB
7 EQ Mid Frequency	100Hz — 10.0kHz
8 EQ Mid Gain	-12dB — +12dB
9 EQ Mid Width	1 — 12.0
10 EQ High Frequency	500Hz — 16.0kHz
11 EQ High Gain	-12dB — +12dB
68: DELAY + AUTO PAN	
1 Dry/Wet	D63>W — D=W — D<W63 B
2 Delay Time	0.1 — 740.0ms
3 Feedback Level	-63 — +63
4 Feedback High Damp	0.1 — 1.0 High
5 Auto Pan Speed	0.0Hz — 39.70Hz
6 Auto Pan Depth	0 — 127
7 EQ Frequency	90Hz — 10.0kHz
8 EQ Gain Gain	-12dB — +12dB
9 EQ Width	1.0 — 12.0
69: DELAY L,C,R	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time L	0.1ms — 1480.0ms
3 Delay Time R	0.1ms — 1480.0ms
4 Delay Time C	0.1ms — 1480.0ms
5 Feedback Time	0.1ms — 1480.0ms
6 Feedback Level	-63 — +63
7 Delay Level C	0 — 127
8 Feedback High Damp	0.1 — 1.0 High
9 EQ Low Frequency	32Hz — 2.0kHz
10 EQ Low Gain	-12dB — +12dB
11 EQ High Frequency	500Hz — 16.0kHz
12 EQ High Gain	-12dB — +12dB
70: DELAY L,R	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time L	0.1ms — 1480.0ms
3 Delay Time R	0.1ms — 1480.0ms
4 Feedback Time 1	0.1ms — 1480.0ms
5 Feedback Time 2	0.1ms — 1480.0ms
6 Feedback Level	-63 — +63
7 Feedback High Damp	0.1 — 1.0
8 EQ Low Frequency	32Hz — 2.0kHz
9 EQ Low Gain	-12dB — +12dB
10 EQ High Frequency	500Hz — 16.0kHz
11 EQ High Gain Gain with	-12dB — +12dB
71: ECHO	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time L	0.1ms — 740.0ms
3 Feedback Level L	-63 — +63
4 Delay Time R	0.1ms — 740.0ms
5 Feedback Level R	-63 — +63
6 Feedback High Damp	0.1 — 1.0
7 Delay Time L2	0.1ms — 740.0ms
8 Delay Time R2	0.1ms — 740.0ms
9 Delay Level 2	0 — 127
10 EQ Low Frequency	32Hz — 2.0kHz
11 EQ Low Gain	-12dB — +12dB
12 EQ High Frequency	500Hz — 16.0kHz
13 EQ High Gain with	-12dB — +12dB
72: CROSS DELAY	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time L>R	0.1ms — 740.0ms
3 Delay Time R<L	0.1ms — 740.0ms
4 Feedback Level	-63 — +63
5 Input Select	L, R, L&R
6 Feedback High Damp	0.1 — 1.0
7 EQ Low Frequency	32Hz — 2.0kHz
8 EQ Low Gain	-12dB — +12dB
9 EQ High Frequency	500Hz — 16.0kHz
10 Dry/Wet	-12dB — +12dB
73: CONTROL DELAY(MONO)	
1 Delay Time	0.1ms — 1480.0ms
2 Feedback Level	-63 — +63
3 Feedback High Damp	0.1 — 1.0
4 Delay transition rate	1 — 48
5 Control Type	Normal, Scratch
6 EQ Low Frequency	32Hz — 2.0kHz
7 EQ Low Gain	-12dB — +12dB
8 EQ High Frequency	500Hz — 16.0kHz
9 EQ High Gain	-12dB — +12dB
10 Dry/Wet	D63>W — D=W — D<W63
74: CONTROL DELAY(STEREO)	
1 Delay Time	0.1ms — 740.0ms
2 Feedback Level	-63 — +63
3 Feedback High Damp	0.1 — 1.0
4 Delay transition rate	1 — 48
5 Control Type	Normal, Scratch
6 EQ Low Frequency	32Hz — 2.0kHz
7 EQ Low Gain	-12dB — +12dB
8 EQ High Frequency	500Hz — 16.0kHz
9 EQ High Gain	-12dB — +12dB
10 Dry/Wet	D63>W — D=W — D<W63
75: AMBIENCE	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time	0.0ms — 50.0ms
3 Wet Output Phase	normal/inverse
4 EQ Low Frequency	32Hz — 2.0kHz
5 EQ Low Gain	-12dB — +12dB
6 EQ High Frequency	500Hz — 16.0kHz
7 EQ High Gain	-12dB — +12dB
76: KARAOKE	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time	0.1ms — 400.0ms
3 Feedback Level	-63 — +63
4 HPF Cutoff Freq	thru, 20Hz — 8.0kHz
5 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru
77: EARLY REFLECTION	
1 Dry/Wet	D63>W — D=W — D<W63
2 Type	S-hall, L-hall, random, reverse, plate, spring
3 Room Size	0.1 — 20.0
4 Diffusion	0 — 10
5 Initial Delay	0.1ms — 200.0ms
6 HPF Cutoff Freq	thru, 22Hz — 8.0kHz
7 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru
8 Liveness Sets	0 — 10
9 Density	0 — 3
10 Feedback High Damp	0.1 — 1.0
11 Feedback Level	-63 — +63

78: GATE REVERB, 79: REVERSE GATE	
1 Dry/Wet	D63>W — D=W — D<W63
2 Type Selects	Type-A, Type-B
3 Room Size	0.1 — 20.0
4 Diffusion	0 — 10
5 Initial Delay	0.1ms — 200.0ms
6 HPF Cutoff Freq	thru, 20Hz — 8.0kHz
7 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru
8 Liveness	0 — 10
9 Density Sets	0 — 3
10 Feedback High Damp	0.1 — 1.0
11 Feedback Level	-63 — +63
80: HALL — 83: PLATE	
1 Dry/Wet	D63>W — D=W — D<W63
2 Reverb Time	0.3s — 30.0s
3 Diffusion Spread	0 — 10
4 Initial Delay	0.1ms — 99.3ms
5 HPF Cutoff Freq	thru, 20Hz — 8.0kHz
6 LPF Cutoff Freq	1.0kHz — 18.0kHz, thru
7 Reverb Delay	0.1ms — 99.3ms
8 Density	0 — 4
9 ER/rev Balance	E63>R — E=R — E<R63
10 Feedback High Damp	0.1 — 1.0 High
11 Feedback Level	-63 — +63
84: WHITE ROOM 87: CANYON	
1 Dry/Wet	D63>W — D=W — D<W63
2 Reverb Time	0.3s — 30.0s
3 Diffusion Spread	0 — 10
4 Initial Delay	0.1ms — 99.3ms
5 HPF Cutoff Freq	thru, 20Hz — 8.0kHz
6 LPF Cutoff Freq 1	.0kHz — 18.0kHz, thru
7 Width	0.5m — 10.2m
8 Height	0.5m — 20.2m
9 Depth	0.5m — 30.2m
10 Wall	0 — 30
11 Reverb Delay	0.1ms — 99.3ms
12 Density	0 — 4
13 ER/Rev Balance	E63>R — E=R — E<R63
14 Feedback High Damp	0.1 — 1.0
15 Feedback Level	-63 — +63
88: TEMPO DELAY(MONO)	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time	32nd note — whole note
3 Feedback Level	-63 — +63
4 Feedback High Damp	0.1 — 1.0
5 L/R Diffusion	-63ms — +63ms
6 Lag	-63ms — +63ms
7 EQ Low Frequency	32Hz — 2.0kHz
8 EQ Low Gain	-12dB — +12dB
9 EQ High Frequency	500Hz — 16.0kHz
10 EQ High Gain	-12dB — +12dB
89: TEMPO DELAY (STEREO)	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time	32nd note — half note
3 Feedback	-63 — +63
4 Feedback High Damp	0.1 — 1.0
5 L/R Diffusion	-63ms — +63ms
6 Lag	-63ms — +63ms
7 EQ Low Frequency	32Hz — 2.0kHz
8 EQ Low Gain	-12dB — +12dB
9 EQ High Frequency	500Hz — 16.0kHz
10 EQ High Gain	-12dB — +12dB
90: TEMPO CROSS DELAY	
1 Dry/Wet	D63>W — D=W — D<W63
2 Delay Time L>R	32nd note — half note
3 Delay Time R<L	32nd note — half note
4 Feedback Level	-63 — +63
5 Feedback High Damp	0.1 — 1.0
6 Input Select	L, R, L&R
7 Lag	-63ms — +63ms
8 EQ Low Frequency	32Hz — 2.0kHz
9 EQ Low Gain	-12dB — +12dB
10 EQ High Frequency	500Hz — 16.0kHz
11 EQ High Gain	-12dB — +12dB
91: TEMPO FLANGER	
1 Dry/Wet	D63>W — D=W — D<W63
2 LFO frequency Delay	32nd note — 1/4 note x 16
3 LFO depth Delay	0 — 127
4 Feedback Level	-63 — +63
5 Delay Offset	0.0ms — 50.0ms
6 LFO Phase Difference	-180deg — +180deg
7 LFO Init Phase	0deg, 90deg, 180deg, 270deg
8 EQ Low Frequency	32Hz — 2.0kHz
9 EQ Low	-12dB — +12dB
10 EQ Mid Frequency	100Hz — 10.0kHz
11 EQ Mid Gain	-12dB — +12dB
12 EQ Mid Width	1 — 12.0
13 EQ High Frequency	500Hz — 16.0kHz
14 EQ High Gain	-12dB — +12dB
15 LFO Reset (Ctrl)	
92: TEMPO PHASER	
1 Dry/Wet	D63>W — D=W — D<W63
2 LFO frequency	32nd note — 1/4 note x 16
3 LFO depth	0 — 127
4 phase shift	-63 — +63
5 feedback level	-63 — +63
6 stage	3, 4, 5, 6
7 LFO phase difference	-180deg — +180deg
8 LFO init	0deg, 90deg, 180deg, 270deg
9 EQ Low Frequency	32Hz — 2.0kHz
10 EQ Low Gain	-12dB — +12dB
11 EQ High Frequency	500Hz — 16.0kHz
12 EQ High Gain	-12dB — +12dB
13 LFO Reset (Ctrl)	
93: TEMPO AUTO WAH	
1 LFO Depth	0 — 127
2 LFO Frequency	32nd note — 1/4 note x 16
4 Resonance	0 — 127
5 LFO Init Phase	1 — 12.0
6 EQ Low Frequency	0deg, 90deg, 180deg, 270deg
7 EQ Low Gain	32Hz — 2.0kHz
8 EQ High Frequency	-12dB — +12dB
9 EQ High Gain	500Hz — 16.0kHz
10 Dry/Wet	-12dB — +12dB
11 LFO Reset (Ctrl)	D63>W — D=W — D<W63
94: TEMPO DIGITAL SCRATCH	
1 Input Level	0 — 1 — 460.0ms
2 Initial Delay	32nd note — 1/4 note x 16
3 Scratch Speed	0 — 127
4 Scratch Depth	0deg, 90deg, 180deg, 270deg
5 Scrch LFO Init Phase	32nd note — 1/4 note x 16
6 Auto Pan Speed	0 — 127
7 Auto Pan Depth	0deg, 90deg, 180deg, 270deg
8 Pan LFO Init Phase	100Hz — 10.0kHz
9 EQ Frequency	12 — +12dB
10 EQ Gain	1.0 — 12.0
11 EQ Width	0 — 12.0
12 HPF Frequency	thru, 20Hz — 8.0kHz
13 Dry/Wet	D63>W — D=W — D<W63
14 Scrch LFO Reset (Ctrl)	
15 Pan LFO Reset (Ctrl)	
95: TEMPO AUTO SYNTH	
1 Mod Speed	0 — 127
2 Mod Wave Type	TypeA,TypeB,TypeC,TypeD
3 Mod Depth	0 — 127
4 Mod Depth Ofst R	-63 — +63
5 LPF Frequency	1.0kHz — 18.0kHz,thru
6 HPF Frequency	thru,22Hz — 8.0kHz
7 Delay Time	0.1 — 370.0ms
8 Delay Time Ofst R	0 — 99.4
9 Feedback Level	-63 — +63
10 Delay Level	0 — 127
11 AM Speed	32nd note — 1/4 note x 16
12 AM Wave	tri,sine,saw up,saw down
13 AM Depth	0 — 127
14 AM Inverse R	normal,inverse Inverts
15 AM Init Phase	0deg, 90deg, 180deg, 270deg
16 AM Reset (Ctrl)	
96: TEMPO FLANGING PAN	
1 Dry/Wet	D63>W — D=W — D<W63
2 Flanger&Pan Speed	32nd note — 1/4 note x 16
3 Flanger Depth Delay	0 — 127
4 Flanger Delay	0.1 — 180.0ms
5 Flanger Feedback	-63 — +63
6 FlgPan Delay	0.1 — 180.0ms
7 FlgPan Feedback	-63 — +63
8 LFO Init Phase	0deg, 90deg, 180deg, 270deg
9 LPF Frequency	1.0kHz — 18.0kHz,thru
10 Delay Time	32th note — 1/4 note
11 Delay Feedback	-63 — +63
12 Delay Level	0 — 127
13 AM Speed	32nd note — 1/4 note x 16
14 AM Depth	0 — 127
15 AM Init Phase	0deg, 90deg, 180deg, 270deg
16 LFO Reset (Ctrl)	