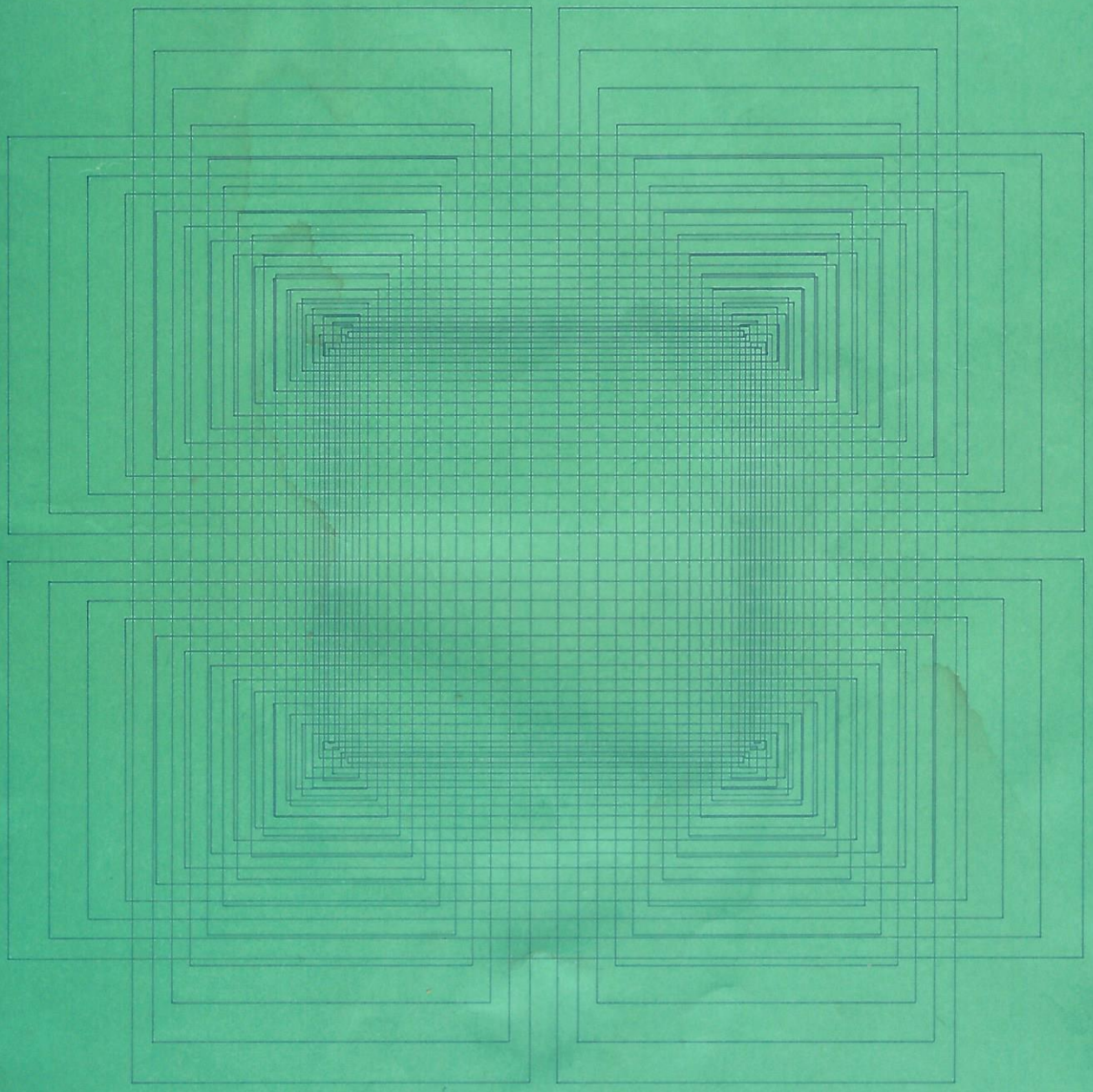
SOUND DATA BOOK

DIGITAL SYNTHESIZER CZ SERIES



CASIO®

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SOUND DATA (1)

Tonalité → forme d'onde
volume du son → amplitude
plus elle est grande
plus le volume est fort

(Variation du volume en fonction du temps enveloppe)

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. BRASS 1		

PARAMETER

(Select les voies)

(Diff Hauteur de son entre DCO 1 et DCO 2)

LINE SELECT	MODULATION RING	MODULATION NOISE	DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE	VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH	OCTAVE +/−	OCTAVE RANGE
1+1′	OFF	OFF	+	0	00	06	1	00	00	00		0
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

(enveloppe) (hauteur du son)

WAVE FORM FIRST	WAVE FORM SECOND
3	5
(1~8)	(0~8)

1 Dents de scie
2 creneaux
3 impulsion
4 sinusoïde double
5 Impulsion dents de scie

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	68							(0~99)
LEVEL	33	00							(0~99)
SUS/END		END							

DCW 1

(coloration) (Tonalité)
(enveloppe d'onde)

KEY FOLLOW	
0	(0~9)

6 Resonance I
7 Resonance II
8 Resonance III

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	80	47	37	26	50				(0~99)
LEVEL	99	96	52	00	00				(0~99)
SUS/END			SUS		END				

DCA 1

(volume) amplitude

KEY FOLLOW	
0	(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	77	67	79	33				(0~99)
LEVEL	50	99	91	59	00				(0~99)
SUS/END			SUS		END				

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

4/
5/
6/
7/
8/

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

1/ Violons cuivre coloration brillant
2/ Coloration simple (bois clarinette)
3/ Tonalité dure (funk)
4/ Tonalité brillante (stridente)
5/ ~~funk~~ son cuivre metallique
6

6/ funk
7/ funk
8/ funk

SOUND DATA (2)

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. BRASS 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	60	50	08
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	0
(1~8)	(0~8)

(Hauteur de l'onde)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0
(0~9)

(Tonalité) Harmonique

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	63	27	18	49	77	43			(0~99)
LEVEL	81	65	50	64	50	00			(0~99)
SUS/END					SUS	END			

temps →

DCA 1

KEY FOLLOW
0
(0~9)

(Volume)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	83	36							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
5	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	68							(0~99)
LEVEL	60	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW
2
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	76	55	33	39					(0~99)
LEVEL	99	96	57	00					(0~99)
SUS/END			SUS	END					

DCA 2

KEY FOLLOW
2
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	71	32	50	32					(0~99)
LEVEL	99	91	59	00					(0~99)
SUS/END		SUS		END					

COMMENT

SOUND DATA (3)

TONE NAME	CARTRIDGE NO.	TONE NO.
BRASS ENSEMBLE 3		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	68							(0~99)
LEVEL	33	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	76	47	37	26					(0~99)
LEVEL	99	96	52	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	77	67	79	33				(0~99)
LEVEL	50	99	91	59	00				(0~99)
SUS/END			SUS		END				

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

SOUND DATA (4)

TONE NAME	CARTRIDGE NO.	TONE NO.
STRING ENSEMBLE 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
4	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
7
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	93	60	42						(0~99)
LEVEL	99	87	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	75	55	55						(0~99)
LEVEL	68	99	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

SOUND DATA (5)

TONE NAME	CARTRIDGE NO.	TONE NO.
STRING ENSEMBLE 3		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	26	51	12
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	70	35	30	50					(0~99)
LEVEL	90	65	00	00					(0~99)
SUS/END		SUS		END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	66	42	40						(0~99)
LEVEL	91	89	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	70	20	30	50					(0~99)
LEVEL	95	80	00	00					(0~99)
SUS/END		SUS		END					

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	66	12	40						(0~99)
LEVEL	85	69	00						(0~99)
SUS/END		SUS	END						

COMMENT

SOUND DATA (6)

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. STRINGS 2		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	10
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	7	53	18
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	4
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	83	37	41					(0~99)
LEVEL	99	96	83	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	93	39							(0~99)
LEVEL	87	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SOFT ORGAN		

PARAMETER

LINE SELECT	MODULATION		DETUNE			VIBRATO				OCTAVE	
	RING	NOISE	+/−	OCTAVE	NOTE	FINE	WAVE	DELAY	RATE	DEPTH	+/−	RANGE
1+2′	OFF	OFF	+	3	00	00	1	0	00	00	−	1
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	00							(0~99)
LEVEL	67	00							(0~99)
SUS/END	SUS	END							

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	83	59							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	45								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
4	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	00							(0~99)
LEVEL	67	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	84	59							(0~99)
LEVEL	56	00							(0~99)
SUS/END	SUS	END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
JAZZ ORGAN		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE	DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE	VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH	OCTAVE +/−	OCTAVE RANGE
1+2′	OFF	OFF	+	0	00	12	1	00	00	00		0
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

(Hauteur du son) (Ton brillante) (Ton dure) (Haut et des bas)

WAVE FORM FIRST	WAVE FORM SECOND
4	3
(1~8)	(0~8)

sin double impulsion

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	66	00							(0~99)
SUS/END		END							

→ Tempo

DCW 1

end (tonalité) (doux aigus)

KEY FOLLOW
9

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	12	70	00	50					(0~99)
LEVEL	19	00	23	00					(0~99)
SUS/END			SUS	END					

DCA 1

(volume amplitude) (fort ou faible)

KEY FOLLOW
9

? (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	65							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
4	3
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	57	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW
9

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	73	00	50					(0~99)
LEVEL	53	00	23	00					(0~99)
SUS/END			SUS	END					

DCA 2

KEY FOLLOW
9

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	65							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

COMMENT

SOUND DATA (9)

TONE NAME	CARTRIDGE NO.	TONE NO.
FANTASTIC PIANO		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	62	39	06
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
8
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	55	37						(0~99)
LEVEL	81	23	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	63	33						(0~99)
LEVEL	99	90	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
ACCORDION 2		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	12
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	38	60	04
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	3
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	65	72	50						(0~99)
LEVEL	33	08	00						(0~99)
SUS/END			END						

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	74	56	37	26					(0~99)
LEVEL	88	75	52	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	77	55	13	62					(0~99)
LEVEL	81	87	72	00					(0~99)
SUS/END			SUS	END					

2

DCO 2

WAVE FORM	
FIRST	SECOND
2	3
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	66	68	50						(0~99)
LEVEL	52	00	00						(0~99)
SUS/END			END						

DCW 2

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	83	02	26					(0~99)
LEVEL	88	96	52	00					(0~99)
SUS/END			SUS	END					

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	73	20	62						(0~99)
LEVEL	96	78	00						(0~99)
SUS/END		SUS	END						

COMMENT

SOUND DATA (11)

TONE NAME	CARTRIDGE NO.	TONE NO.
HARPSICHORD		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
−	1	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
4	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
2
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	96	17							(0~99)
LEVEL	96	00							(0~99)
SUS/END	SUS	END							

DCA 1

KEY FOLLOW
1
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	84	35	46						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
METALLIC HAMMER PIANO		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	3	09	38
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	65	60	10
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	99	81						(0~99)
LEVEL	99	49	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW
2
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	44	34						(0~99)
LEVEL	96	76	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
1	4
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW
4
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	90	50						(0~99)
LEVEL	99	23	00						(0~99)
SUS/END		SUS	END						

DCA 2

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	35	50						(0~99)
LEVEL	99	55	00						(0~99)
SUS/END		SUS	END						

COMMENT

SOUND DATA (13)

TONE NAME	CARTRIDGE NO.	TONE NO.
FUNKY CLAVI.		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	1	00	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
2	43	60	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	7
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99	99						(0~99)
LEVEL	66	00	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	00							(0~99)
LEVEL	50	00							(0~99)
SUS/END	SUS	END							

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	33	57	99					(0~99)
LEVEL	90	16	00	00					(0~99)
SUS/END			SUS	END					

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
3	7
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	00	00							(0~99)
SUS/END	SUS	END							

DCW 2

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	00							(0~99)
LEVEL	50	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	76	94	58	44	90				(0~99)
LEVEL	01	99	90	00	00				(0~99)
SUS/END				SUS	END				

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. GLOCKENSPIEL		

PARAMETER

LINE SELECT
1+1′
(1,2,1+2′,1+1′)

MODULATION	
RING	NOISE
ON	OFF
(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	3	10	60
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	27	61	20
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
9
(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	12							(0~99)
LEVEL	49	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	95	30							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
XYLOPHONE		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	3	04	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	52	50	14
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW	
4	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	55	52						(0~99)
LEVEL	99	89	00						(0~99)
SUS/END			END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	62							(0~99)
LEVEL	16	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW	
4	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	49							(0~99)
LEVEL	79	00							(0~99)
SUS/END		END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
BELL-LYRA		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	1	08	27
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	80	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	48							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
5	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	75	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW
0
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	54							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
TRUMPET 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	53	52	09
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
4

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	73	53	50						(0~99)
LEVEL	99	88	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW
1

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	83	55							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
3	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW
0

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	75	53	50						(0~99)
LEVEL	99	88	00						(0~99)
SUS/END		SUS	END						

DCA 2

KEY FOLLOW
0

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	83	55							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

COMMENT

SOUND DATA (18)

TONE NAME	CARTRIDGE NO.	TONE NO.
FLUTE 2		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	ON
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
−	1	08	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	42	60	11
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	60	00							(0~99)
LEVEL	57	00							(0~99)
SUS/END	SUS	END							

DCA 1

KEY FOLLOW	
1	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	70	59	12	66				(0~99)
LEVEL	36	91	99	93	00				(0~99)
SUS/END				SUS	END				

2

DCO 2

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	60	00							(0~99)
LEVEL	57	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW	
5	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	66	36	78						(0~99)
LEVEL	44	00	00						(0~99)
SUS/END		SUS	END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
BLUES HARMONICA		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE	DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE	VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH	OCTAVE +/−	OCTAVE RANGE
1+1′	OFF	OFF	+	0	00	01	4	16	61	12	+	1
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
5	4
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	47	00						(0~99)
LEVEL	65	66	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW
0

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	87	87	87	87	87	87	87	00	(0~99)
LEVEL	99	75	99	75	99	75	99	00	(0~99)
SUS/END							SUS	END	

DCA 1

KEY FOLLOW
0

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	80	75							(0~99)
LEVEL	87	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

SOUND DATA (20)

TONE NAME	CARTRIDGE NO.	TONE NO.
DOUBLE REED		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	50	60	05
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
3	4
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	87	50						(0~99)
LEVEL	29	00	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW	
9	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	74	93	50						(0~99)
LEVEL	93	86	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW	
1	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	83	64							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
3	4
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	73							(0~99)
LEVEL	66	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	74	50							(0~99)
LEVEL	89	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	83	65							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

COMMENT

SOUND DATA (21)

TONE NAME	CARTRIDGE NO.	TONE NO.
CELLO		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1	OFF	OFF
(1,2,1+2',1+1')	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	50	53	12
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	4
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	83	59	31	85	50				(0~99)
LEVEL	99	66	48	00	00				(0~99)
SUS/END		SUS			END				

DCA 1

KEY FOLLOW
2
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	62	34	25	50					(0~99)
LEVEL	68	99	70	00					(0~99)
SUS/END			SUS	END					

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

SOUND DATA (22)

TONE NAME	CARTRIDGE NO.	TONE NO.
WOOD BASS		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
−	1	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	31	50	29
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	92	44	47						(0~99)
LEVEL	80	62	00						(0~99)
SUS/END			END						

DCA 1

KEY FOLLOW	
3	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	33	42						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END			END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00	00							(0~99)
LEVEL	02	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	92	44	44						(0~99)
LEVEL	80	62	00						(0~99)
SUS/END			END						

DCA 2

KEY FOLLOW	
3	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	33	86						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END			END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
ELEC. GUITAR 1		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	65	52	15
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
3	4
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	93	93	93	93	93	93	93	93	(0~99)
LEVEL	66	00	66	00	66	00	66	00	(0~99)
SUS/END								END	

DCW 1

KEY FOLLOW
6
(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	82	99	82	99	23	50		(0~99)
LEVEL	70	99	70	99	85	00	00		(0~99)
SUS/END							END		

DCA 1

KEY FOLLOW
4
(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	95	99	80	20	58	65		(0~99)
LEVEL	62	99	82	99	75	51	00		(0~99)
SUS/END					SUS		END		

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
ELEC. GUITAR 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	1	07	04
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	33	23	06
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	4
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
7

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	97	43	50	50					(0~99)
LEVEL	99	79	87	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW
9

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	21	61						(0~99)
LEVEL	99	88	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
ELEC. BASS		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	07	04
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	33	55	23
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	3
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
7	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	97	43	50	52					(0~99)
LEVEL	99	79	74	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	21	61						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
FAT BASS		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE	DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE	VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH	OCTAVE +/−	OCTAVE RANGE
1+2′	ON	OFF	+	0	00	12	1	54	49	12	−	1
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	5
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	66	72	43	65					(0~99)
LEVEL	58	00	05	00					(0~99)
SUS/END				END					

DCW 1

KEY FOLLOW	
9	(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	82	42	00						(0~99)
LEVEL	88	63	00						(0~99)
SUS/END			END						

DCA 1

KEY FOLLOW	
9	(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	28	56						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END			END						

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
2	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
7	(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	92	42	00						(0~99)
LEVEL	80	62	00						(0~99)
SUS/END			END						

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	90	33	86						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END			END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
HUMAN VOICE 1		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	08
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	34	54	27
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	40	00						(0~99)
LEVEL	65	66	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	69	23	31	52					(0~99)
LEVEL	88	99	77	00					(0~99)
SUS/END			SUS	END					

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
HUMAN VOICE 2		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	1	00	10
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	24	54	20
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	40	00						(0~99)
LEVEL	65	66	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	59	21	31	60					(0~99)
LEVEL	99	74	75	00					(0~99)
SUS/END		SUS		END					

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
4	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	46	35	54						(0~99)
LEVEL	65	20	00						(0~99)
SUS/END		SUS	END						

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	67	21	12	35					(0~99)
LEVEL	90	77	90	00					(0~99)
SUS/END			SUS	END					

COMMENT

SOUND DATA (29)

TONE NAME	CARTRIDGE NO.	TONE NO.
CARILLON		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	2	1	45
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	23	02
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
1	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	12							(0~99)
LEVEL	12	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW	
2	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	95	30							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
1	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	98	38							(0~99)
LEVEL	65	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW	
2	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	95	23							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. BLOCKS		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	08	30
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
2	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	76	89							(0~99)
LEVEL	42	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	57							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
2	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	76	89							(0~99)
LEVEL	42	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	57							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
CALIMBA		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	1	10	25
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
5	1
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	94	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	44							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
5	2
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	55							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
AFRO-PERCUSSION		

PARAMETER

LINE SELECT
1
(1,2,1+2',1+1')

MODULATION	
RING	NOISE
OFF	OFF
(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	90	90						
LEVEL	76	00						
SUS/END		END						

(0~99) (0~99)

DCW 1

KEY FOLLOW
0

(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	99	50						
LEVEL	15	00						
SUS/END	SUS	END						

(0~99) (0~99)

DCA 1

KEY FOLLOW
0

(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	49						
LEVEL	99	00						
SUS/END		END						

(0~99) (0~99)

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE								
LEVEL								
SUS/END								

(0~99) (0~99)

DCW 2

KEY FOLLOW

(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE								
LEVEL								
SUS/END								

(0~99) (0~99)

DCA 2

KEY FOLLOW

(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE								
LEVEL								
SUS/END								

(0~99) (0~99)

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
STEEL DRUM 1		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	2	03	08
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	0	38	15
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	76							(0~99)
LEVEL	62	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	51							(0~99)
LEVEL	83	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW	
2	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	52							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
STEEL DRUM 2		

PARAMETER

LINE SELECT
1+2′
(1,2,1+2′,1+1′)

MODULATION	
RING	NOISE
ON	OFF
(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	03	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	24	09
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	0
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	50							
LEVEL	00							
SUS/END	END							

(0~99) (0~99)

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	76	58						
LEVEL	42	00						
SUS/END		END						

(0~99) (0~99)

DCA 1

KEY FOLLOW
0
(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	49	34	50				
LEVEL	99	80	00	00				
SUS/END				END				

(0~99) (0~99)

2

DCO 2

WAVE FORM	
FIRST	SECOND
3	0
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	50							
LEVEL	00							
SUS/END	END							

(0~99) (0~99)

DCW 2

KEY FOLLOW
0
(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	76	85						
LEVEL	61	00						
SUS/END		END						

(0~99) (0~99)

DCA 2

KEY FOLLOW
0
(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	48	60					
LEVEL	80	00	00					
SUS/END			END					

(0~99) (0~99)

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. DRUMS 1		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	ON
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	10	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
3	00	55	99
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	5
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	94	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	45	30						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	99	13						(0~99)
LEVEL	99	53	00						(0~99)
SUS/END		SUS	END						

DCW 2

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	50							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW	
1	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	53	35						(0~99)
LEVEL	99	35	00						(0~99)
SUS/END		SUS	END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. DRUMS 2		

PARAMETER

LINE SELECT
1+2′
(1,2,1+2′,1+1′)

MODULATION	
RING	NOISE
OFF	ON
(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	10	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	5
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	99	42						(0~99)
LEVEL	70	00						(0~99)
SUS/END		END						

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	99	99						(0~99)
LEVEL	99	00						(0~99)
SUS/END		END						

DCA 1

KEY FOLLOW
9
(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	53						(0~99)
LEVEL	99	00						(0~99)
SUS/END		END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
5	0
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	99	99	13					(0~99)
LEVEL	99	53	00					(0~99)
SUS/END		SUS	END					

DCW 2

KEY FOLLOW
8
(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	99	50						(0~99)
LEVEL	99	00						(0~99)
SUS/END	SUS	END						

DCA 2

KEY FOLLOW
0
(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	50	52					(0~99)
LEVEL	92	00	00					(0~99)
SUS/END		SUS	END					

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. DRUMS 3		

PARAMETER

LINE SELECT	MODULATION		DETUNE				VIBRATO				OCTAVE	
	RING	NOISE	+/−	OCTAVE	NOTE	FINE	WAVE	DELAY	RATE	DEPTH	+/−	RANGE
1+2′	OFF	OFF	+	0	08	01	1	00	00	00	−	1
(1,2,1+2′,1+1′)	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	5
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	42							(0~99)
LEVEL	70	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW	
9	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	43	50						(0~99)
LEVEL	99	00	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	5
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	42							(0~99)
LEVEL	66	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW	
8	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	47	52						(0~99)
LEVEL	92	00	00						(0~99)
SUS/END		SUS	END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SCRATCH SOUND		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	OFF	ON
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
2	00	67	99
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
2	5
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	63	76	67						(0~99)
LEVEL	81	69	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW	
4	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	55	41							(0~99)
LEVEL	59	00							(0~99)
SUS/END	SUS	END							

DCA 1

KEY FOLLOW	
5	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	68	47	66	88					(0~99)
LEVEL	99	87	00	00					(0~99)
SUS/END			SUS	END					

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
SOUTHERN WING		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
4	3
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	00	47	68	60					(0~99)
LEVEL	00	44	00	00					(0~99)
SUS/END			SUS	END					

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	68	37						(0~99)
LEVEL	81	99	00						(0~99)
SUS/END		SUS	END						

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	62	33						(0~99)
LEVEL	87	75	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

SOUND DATA (40)

TONE NAME	CARTRIDGE NO.	TONE NO.
SYNTH. HARP		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	05
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	51	52	05
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
5	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	50	0	50					(0~99)
LEVEL	99	30	99	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	90	30							(0~99)
LEVEL	99	00							(0~99)
SUS/END	SUS	END							

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
4	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	82	46	50	00				(0~99)
LEVEL	99	85	60	00	00				(0~99)
SUS/END				SUS	END				

DCA 2

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	89	50	50					(0~99)
LEVEL	99	70	80	00					(0~99)
SUS/END			SUS	END					

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
FANTASTIC SOUND 1		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1	OFF	OFF
(1,2,1+2',1+1')	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
1	30	47	3
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	00								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW
1
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	75	75	49	49	49	49	39		(0~99)
LEVEL	99	84	43	67	24	61	00		(0~99)
SUS/END		SUS					END		

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
FANTASTIC SOUND 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE	DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE	VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH	OCTAVE +/−	OCTAVE RANGE
1	OFF	OFF	+	0	00	00	1	71	40	39		0
(1,2,1+2',1+1')	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	64	64	64	64	00				(0~99)
LEVEL	64	65	66	66	00				(0~99)
SUS/END				SUS	END				

DCW 1

KEY FOLLOW
9

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	20	28	00						(0~99)
LEVEL	46	00	00						(0~99)
SUS/END			END						

DCA 1

KEY FOLLOW
0

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	84	38	70	44	73	47	73	29	(0~99)
LEVEL	99	34	76	38	83	38	87	00	(0~99)
SUS/END	SUS							END	

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
FANTASTIC SOUND 3		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	00	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	00	00	00
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	90							(0~99)
LEVEL	46	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	50	50	50	50	50	50	35	(0~99)
LEVEL	99	35	85	35	70	35	55	00	(0~99)
SUS/END	SUS							END	

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	90							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCW 2

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 2

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	50	50	50	50	50	50	35	(0~99)
LEVEL	55	35	80	35	70	35	55	00	(0~99)
SUS/END	SUS							END	

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
CAVERNOUS SOUND		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
−	3	3	26
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
2	00	89	38
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
3	2
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE	50							(0~99)
LEVEL	00							(0~99)
SUS/END	END							

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE	99							(0~99)
LEVEL	00							(0~99)
SUS/END	END							

DCA 1

KEY FOLLOW	
4	(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE	99	50	40	30				(0~99)
LEVEL	99	94	75	00				(0~99)
SUS/END				END				

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)								
STEP	1	2	3	4	5	6	7	8
RATE								(0~99)
LEVEL								(0~99)
SUS/END								

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)								
STEP	1	2	3	4	5	6	7	8
RATE								(0~99)
LEVEL								(0~99)
SUS/END								

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)								
STEP	1	2	3	4	5	6	7	8
RATE								(0~99)
LEVEL								(0~99)
SUS/END								

COMMENT

SOUND DATA (45)

TONE NAME	CARTRIDGE NO.	TONE NO.
DANGEROUS SOUND		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+2′	OFF	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	3	07	03
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
2	60	52	73
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
1	3
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW	
0	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	00	55	40	28					(0~99)
LEVEL	01	99	70	00					(0~99)
SUS/END			SUS	END					

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	94	55	35						(0~99)
LEVEL	99	90	00						(0~99)
SUS/END		SUS	END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
1	0
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 2

KEY FOLLOW	
9	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	99							(0~99)
LEVEL	40	00							(0~99)
SUS/END	SUS	END							

DCA 2

KEY FOLLOW	
3	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	99	56	38						(0~99)
LEVEL	44	28	00						(0~99)
SUS/END		SUS	END						

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
LASER GUN 1		

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
+	0	01	06
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
1	36	66	46
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
3	2
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE	55	54	00						(0~99)
LEVEL	82	39	00						(0~99)
SUS/END	SUS		END						

DCW 1

KEY FOLLOW	
4	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE	82	26	00						(0~99)
LEVEL	92	45	00						(0~99)
SUS/END	SUS		END						

DCA 1

KEY FOLLOW	
0	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE	62	37	45						(0~99)
LEVEL	99	68	00						(0~99)
SUS/END	SUS		END						

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
LASER GUN 2		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1′	ON	OFF
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	00	07
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
4	00	81	99
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
+	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	91							(0~99)
LEVEL	72	00							(0~99)
SUS/END		END							

DCW 1

KEY FOLLOW
0

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	76							(0~99)
LEVEL	99	00							(0~99)
SUS/END		END							

DCA 1

KEY FOLLOW
0

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	55	50	25	60				(0~99)
LEVEL	99	90	60	00	00				(0~99)
SUS/END		SUS			END				

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW

(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW

(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.
TYPHOON SOUND		

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+2′	OFF	ON
(1,2,1+2′,1+1′)	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
−	1	00	00
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
3	00	04	30
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
−	1
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
1	0
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCW 1

KEY FOLLOW
0 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

DCA 1

KEY FOLLOW
0 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99								(0~99)
LEVEL	00								(0~99)
SUS/END	END								

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
1	2
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	99	68	18	34	40	45	35	50	(0~99)
LEVEL	33	00	66	00	65	00	64	00	(0~99)
SUS/END								END	

DCW 2

KEY FOLLOW
9 (0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	35	47	37	26	20	50	23	50	(0~99)
LEVEL	44	18	29	45	11	52	37	00	(0~99)
SUS/END							SUS	END	

DCA 2

KEY FOLLOW
8 (0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	72	37	30	33	27	34	35	22	(0~99)
LEVEL	64	99	59	93	77	99	89	00	(0~99)
SUS/END							SUS	END	

COMMENT

SOUND DATA

TONE NAME	CARTRIDGE NO.	TONE NO.
Piano concert	Int	4

PARAMETER

LINE SELECT	MODULATION RING	MODULATION NOISE
1+1'	OFF	OFF
(1,2,1+2',1+1')	(ON/OFF)	

DETUNE +/−	DETUNE OCTAVE	DETUNE NOTE	DETUNE FINE
+	0	0	0
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO WAVE	VIBRATO DELAY	VIBRATO RATE	VIBRATO DEPTH
2	00	26	01
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE +/−	OCTAVE RANGE
	0
(+/−)	(0~1)

1

DCO 1

WAVE FORM FIRST	WAVE FORM SECOND
3	2
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE	50	50	50						(0~99)
LEVEL	00	00	00						(0~99)
SUS/END		SUS	END						

DCW 1

KEY FOLLOW
0
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE	99	12	50						(0~99)
LEVEL	75	00	00						(0~99)
SUS/END	SUS		END						

DCA 1

KEY FOLLOW
4
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE	99	50	40	29					(0~99)
LEVEL	99	94	75	00					(0~99)
SUS/END				END					

2

DCO 2

WAVE FORM FIRST	WAVE FORM SECOND
(1~8)	(0~8)

E N V (PITCH) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW
(0~9)

E N V (WAVE) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW
(0~9)

E N V (AMP) STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.

PARAMETER

LINE SELECT	MODULATION		DETUNE				VIBRATO				OCTAVE	
	RING	NOISE	+/−	OCTAVE	NOTE	FINE	WAVE	DELAY	RATE	DEPTH	+/−	RANGE
(1,2,1+2',1+1')	(ON/OFF)		(+/−)	(0~3)	(0~11)	(0~60)	(1~4)	(0~99)	(0~99)	(0~99)	(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 1

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 1

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

TONE NAME	CARTRIDGE NO.	TONE NO.

PARAMETER

LINE SELECT	MODULATION	
	RING	NOISE
(1,2,1+2',1+1')	(ON/OFF)	

DETUNE			
+/−	OCTAVE	NOTE	FINE
(+/−)	(0~3)	(0~11)	(0~60)

VIBRATO			
WAVE	DELAY	RATE	DEPTH
(1~4)	(0~99)	(0~99)	(0~99)

OCTAVE	
+/−	RANGE
(+/−)	(0~1)

1

DCO 1

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 1

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 1

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

2

DCO 2

WAVE FORM	
FIRST	SECOND
(1~8)	(0~8)

E N V (PITCH)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCW 2

KEY FOLLOW	
	(0~9)

E N V (WAVE)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

DCA 2

KEY FOLLOW	
	(0~9)

E N V (AMP)									
STEP	1	2	3	4	5	6	7	8	
RATE									(0~99)
LEVEL									(0~99)
SUS/END									

COMMENT

CASIO®

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