Technics

SM- AC1200 REFERENCE GUIDE

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EASY SETTING (Press and hold)

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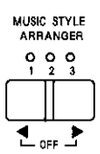


→ MUSIC STYLE ARRANGER MODE

→ PANEL MEMORY MODE

→ DISK LOAD

SOUND VARIATION

No.		SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
		PIANO			
00		Piano	0 (0)	0 (0)	1
	*	Honky Tonk	0 (1)	1 (16)	4
01		Bright Piano	1 (0)	1 (0)	2
	*	Midi Grand	1 (1)	0 (32)	—
02		Elect.Grand	2 (0)	3 (0)	3
	*	Rock Piano	2 (1)	3 (32)	—
03		E.Piano 1	3 (0)	5 (0)	5
	*	E.Piano 2	3 (1)	5 (32)	—
04		Modern E.P.1	4 (0)	6 (0)	6
	*	Modern E.P.2	4 (1)	4 (0)	—
05		Synth Piano	5 (0)	114 (0)	—
	*	Modern E.P.3	5 (1)	6 (48)	—
06		Harpsichord	6 (0)	16 (0)	7
	*	Cembalo	6 (1)	18 (0)	—
07		Clavi	7 (0)	17 (0)	8
	*	Synth Clavi	7 (1)	115 (0)	—
		ORCHESTRAL			
08		Harp	8 (0)	32 (0)	47
	*	Celesta	8 (1)	12 (0)	9
09		Timpani	9 (0)	126 (0)	48
	*	Orchestra Hit	9 (1)	127 (16)	56
		MALLET			
10		Glockenspiel	10 (0)	9 (0)	10
	*	Synth Glocken	10 (1)	9 (32)	99
11		Vibraphone	11 (0)	8 (0)	12
	*	Tubular Bells	11 (1)	14 (0)	15
12		Marimba	12 (0)	10 (0)	13
	*	Bottle Marimba	12 (1)	13 (0)	—
13		Xylophone	13 (0)	11 (0)	14
	*	Caribb Mallet	13 (1)	11 (16)	—
		SPECIAL PERC			
14		Banjo	14 (0)	33 (0)	106
	*	Mandolin	14 (1)	35 (0)	—
15		Music Box	15 (0)	7 (0)	11
	*	Tinkle Bell	15 (1)	14 (32)	113
16		Steel Drum	16 (0)	15 (0)	115
	*	Kalimba	16 (1)	39 (0)	109
17		Sitar	17 (0)	38 (0)	105
	*	Dulcimer	17 (1)	38 (16)	16
18		Koto	18 (0)	37 (0)	108
	*	Shamisen	18 (1)	36 (0)	107
19		Agogo	19 (0)	122 (0)	114
	*	Wood Block	19 (1)	122 (16)	116
20		Taiko Drum	20 (0)	123 (48)	117
	*	Synth Drum	20 (1)	124 (0)	119
21		Melodic Tom	21 (0)	122 (32)	118
	*	ReverseCymbal	21 (1)	122 (48)	120

No.		SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
		GUITAR			
22		Classical Gtr	22 (0)	20 (0)	—
	*	Bright Ac.Gtr	22 (1)	21 (0)	25
23		Folk Guitar	23 (0)	22 (0)	26
	*	12 String Gtr	23 (1)	23 (0)	—
24		Jazz Guitar 1	24 (0)	25 (0)	27
	*	Jazz Guitar 2	24 (1)	24 (0)	—
25		Bright Solid	25 (0)	26 (0)	28
	*	Mellow Solid	25 (1)	28 (0)	—
26		Mute Guitar	26 (0)	29 (0)	29
	*	Funk Solid	26 (1)	26 (16)	—
27		Distortion Gt1	27 (0)	30 (0)	31
	*	Distortion Gt2	27 (1)	30 (48)	—
28		Overdrive Gtr	28 (0)	27 (32)	30
	*	Gtr Harmonics	28 (1)	27 (16)	32
29		Country Gtr	29 (0)	31 (16)	—
	*	Hawaiian Gtr	29 (1)	31 (0)	—
		VOCAL			
30		Vocal Ah	30 (0)	104 (48)	53
	*	Vocal Doo	30 (1)	109 (0)	54
31		Vocal Ooh	31 (0)	104 (32)	—
	*	Humming	31 (1)	105 (0)	—
32		Synth Vocal	32 (0)	107 (0)	55
	*	Mellow Ens.	32 (1)	107 (16)	90
		STRINGS			
33		Violin	33 (0)	96 (0)	41
	*	Jazz Violin	33 (1)	96 (16)	—
34		CountryFiddle	34 (0)	96 (32)	111
	*	Viola	34 (1)	97 (32)	42
35		Cello	35 (0)	97 (0)	43
	*	Bowed Bass	35 (1)	98 (0)	44
36		Strings	36 (0)	100 (0)	49
	*	Octave Strings	36 (1)	102 (0)	—
37		Soft Strings	37 (0)	101 (32)	—
	*	Slow Strings	37 (1)	101 (0)	50
38		Pizzicato	38 (0)	99 (0)	46
	*	TremoloString	38 (1)	100 (32)	45
39		SynthStrings 1	39 (0)	103 (0)	51
	*	SynthStrings 2	39 (1)	103 (16)	52
		ORGAN			
40		Pipe Organ 1	40 (0)	84 (0)	20
	*	Pipe Organ 2	40 (1)	85 (0)	—
41		Theatre Organ	41 (0)	87 (32)	—
	*	Harmonium	41 (1)	86 (32)	21
42		Jazz Organ	42 (0)	88 (0)	18
	*	Jazz Drawbars	42 (1)	93 (0)	—
43		Full Drawbars	43 (0)	89 (0)	17
	*	16' & 1'	43 (1)	91 (0)	—
44		Rock Organ	44 (0)	92 (32)	19
	*	Pop Organ	44 (1)	90 (0)	—

SOUND VARIATION

No.		SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
BRASS					
45		Brass	45 (0)	56 (0)	62
	*	Octave Brass	45 (1)	56 (16)	—
46		Trumpet	46 (0)	48 (0)	57
	*	Orch.Trumpet	46 (1)	48 (32)	—
47		Mute Trumpet	47 (0)	50 (0)	60
	*	Flugel Horn	47 (1)	51 (0)	—
48		Trombone	48 (0)	52 (0)	58
	*	Orch.Trombone	48 (1)	52 (16)	—
49		Close Fr.Horn	49 (0)	54 (0)	—
	*	Open Fr.Horn	49 (1)	54 (16)	61
50		Synth Brass	50 (0)	60 (0)	64
	*	Mellow Brass	50 (1)	62 (16)	—
51		Syn.Brass Ens	51 (0)	61 (16)	63
	*	Brass & Synth	51 (1)	56 (48)	—
FLUTE					
52		Piccolo	52 (0)	64 (0)	73
	*	Alto Flute	52 (1)	64 (16)	—
53		Jazz Flute	53 (0)	65 (0)	74
	*	Classic Flute	53 (1)	65 (16)	—
54		Recorder	54 (0)	74 (0)	75
	*	Ocarina	54 (1)	74 (16)	80
55		Pan Flute	55 (0)	72 (0)	76
	*	Blown Bottle	55 (1)	72 (32)	77
56		Shakuhachi	56 (0)	75 (0)	78
	*	Whistle	56 (1)	111 (0)	79
REED					
57		Soprano Sax	57 (0)	76 (0)	65
	*	Distortion Sax	57 (1)	78 (32)	—
58		Alto Sax	58 (0)	77 (0)	66
	*	Mellow Alto	58 (1)	77 (16)	—
59		Tenor Sax	59 (0)	78 (48)	—
	*	Breathy Tenor	59 (1)	78 (16)	67
60		Baritone Sax	60 (0)	79 (16)	68
	*	Rock Tenor	60 (1)	79 (0)	—
61		Jazz Clarinet	61 (0)	68 (0)	72
	*	Clas.Clarinet	61 (1)	69 (0)	—
62		Oboe	62 (0)	66 (0)	69
	*	English Horn	62 (1)	67 (0)	70
63		Bassoon	63 (0)	70 (0)	71
	*	Bass Clarinet	63 (1)	69 (16)	—
64		Bagpipe	64 (0)	73 (0)	110
	*	Shanai	64 (1)	73 (16)	112
65		Harmonica	65 (0)	83 (0)	23
	*	Jazz Harmonica	65 (1)	83 (32)	—
ACCORDION					
66		Bri.Accordion	66 (0)	80 (0)	22
	*	Mel.Accordion	66 (1)	81 (0)	—
67		Musette	67 (0)	82 (0)	—
	*	Bandoneon	67 (1)	80 (16)	24

No.		SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
SYNTH LEAD					
68		Square Lead	68 (0)	117 (0)	81
	*	Charang	68 (1)	27 (48)	85
69		Saw Lead	69 (0)	118 (16)	82
	*	5th Wave	69 (1)	119 (0)	87
70		Synth Calliope	70 (0)	72 (48)	83
	*	Air Vox	70 (1)	106 (16)	86
71		Chiffer Lead	71 (0)	117 (32)	84
	*	Synthynet	71 (1)	115 (16)	—
72		Lead Voice	72 (0)	121 (32)	—
	*	Chopper Flute	72 (1)	112 (32)	—
SYNTH PAD					
73		Fantasia	73 (0)	116 (32)	89
	*	Glitter	73 (1)	104 (16)	—
74		Polysynth	74 (0)	102 (32)	91
	*	Halo Pad	74 (1)	107 (48)	95
75		Spacy Pad	75 (0)	107 (32)	92
	*	Sweep Pad	75 (1)	62 (32)	96
76		Crystal Ens.	76 (0)	120 (0)	93
	*	Dream	76 (1)	108 (32)	—
77		Metal Pad	77 (0)	106 (32)	94
	*	Syn.Orchestra	77 (1)	63 (16)	—
78		Mist	78 (0)	108 (48)	101
	*	Star Theme	78 (1)	120 (16)	104
SYNTH EFFECT					
79		Ice Rain	79 (0)	121 (48)	97
	*	Atmosphere	79 (1)	21 (48)	100
80		Soundtrack	80 (0)	119 (16)	98
	*	Echo Drops	80 (1)	106 (48)	103
81		Goblins	81 (0)	106 (0)	102
	*	Click Echo	81 (1)	108 (0)	—
BASS					
82		Acoustic Bass	82 (0)	43 (0)	33
	*	Mellow A.Bass	82 (1)	43 (16)	—
83		Electric Bass	83 (0)	40 (0)	—
	*	Bright E.Bass	83 (1)	40 (16)	34
84		Fretless Bass	84 (0)	40 (32)	36
	*	Funky E.Bass	84 (1)	40 (48)	—
85		Picked E.Bass	85 (0)	42 (0)	35
	*	Rock Bass	85 (1)	47 (16)	—
86		Mute Bass	86 (0)	47 (0)	—
	*	Analog Bass	86 (1)	46 (16)	—
87		Slap Bass 1	87 (0)	41 (0)	37
	*	Slap Bass 2	87 (1)	41 (16)	38
88		Wow Bass	88 (0)	46 (0)	39
	*	Bass & Lead	88 (1)	46 (32)	88
89		Synth Chopper	89 (0)	45 (0)	40
	*	Wire Bass	89 (1)	45 (32)	—
90		Tuba	90 (0)	55 (0)	59
	*	Organ Bass	90 (1)	94 (16)	—

SOUND VARIATION

No.		SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
SOUND EFFECT					
91		Telephone	91 (0)	123 (0)	125
	*	Bird Tweet	91 (1)	125 (32)	124
92		Helicopter	92 (0)	123 (16)	126
	*	Seashore	92 (1)	124 (48)	123
93		Applause	93 (0)	125 (48)	127
	*	Gun Shot	93 (1)	123 (32)	128
94		Fret Noise	94 (0)	124 (16)	121
	*	Breath Noise	94 (1)	124 (32)	122
KEYBOARD PERC					
95		Jazz Kit	95 (0)	113 (128)	—
	*	Brush Kit	95 (1)	117 (128)	—
96		Rock Kit 1	96 (0)	112 (128)	—
	*	L.Rock Kit	96 (1)	126 (128)	—
97		Rock Kit 2	97 (0)	115 (128)	—
	*	Hard Rock Kit	97 (1)	119 (128)	—
98		Dance Kit	98 (0)	122 (128)	—
	*	Funk Kit	98 (1)	120 (128)	—
99		Soul Kit	99 (0)	121 (128)	—
	*	House Kit	99 (1)	123 (128)	—

No.	SOUND	MIDI PROGRAM CHANGE DATA NORM	TECH	GM
MEMORY				
M01	Memory1	100 (0)	0 (128)	—
M02	Memory2	100 (1)	1 (128)	—
M03	Memory3	101 (0)	2 (128)	—
M04	Memory4	101 (1)	3 (128)	—
M05	Memory5	102 (0)	4 (128)	—
M06	Memory6	102 (1)	5 (128)	—
M07	Memory7	103 (0)	6 (128)	—
M08	Memory8	103 (1)	7 (128)	—
M09	Memory9	104 (0)	8 (128)	—
M10	Memory10	104 (1)	9 (128)	—
M11	Memory11	105 (0)	10 (128)	—
M12	Memory12	105 (1)	11 (128)	—
M13	Memory13	106 (0)	12 (128)	—
M14	Memory14	106 (1)	13 (128)	—
M15	Memory15	107 (0)	14 (128)	—
M16	Memory16	107 (1)	15 (128)	—
M17	Memory17	108 (0)	16 (128)	—
M18	Memory18	108 (1)	17 (128)	—
M19	Memory19	109 (0)	18 (128)	—
M20	Memory20	109 (1)	19 (128)	—
M21	Memory21	110 (0)	20 (128)	—
M22	Memory22	110 (1)	21 (128)	—
M23	Memory23	111 (0)	22 (128)	—
M24	Memory24	111 (1)	23 (128)	—
M25	Memory25	112 (0)	24 (128)	—
M26	Memory26	112 (1)	25 (128)	—
M27	Memory27	113 (0)	26 (128)	—
M28	Memory28	113 (1)	27 (128)	—
M29	Memory29	114 (0)	28 (128)	—
M30	Memory30	114 (1)	29 (128)	—
M31	Memory31	115 (0)	30 (128)	—
M32	Memory32	115 (1)	31 (128)	—
M33	Memory33	116 (0)	32 (128)	—
M34	Memory34	116 (1)	33 (128)	—
M35	Memory35	117 (0)	34 (128)	—
M36	Memory36	117 (1)	35 (128)	—

- The numbers in parentheses ( ) are bank data.
  Program change number = Program change data+1 / Bank number = Bank data+1
- GM mode; Program change number = Program change data

RHYTHM

No.	RHYTHM	MIDI PROGRAM CHANGE DATA NORM	TECH
	8BEAT		
00	8Bt Standard1	0	90 (96)
01	8Bt Standard2	1	90 (80)
02	8Bt Soft Rock	2	88 (64)
03	8Bt Rock	3	90 (64)
04	8Bt Ballad	4	91 (32)
05	8Bt Soul 1	5	87 (32)
06	8Bt Soul 2	6	87 (0)
07	8Bt Pop	7	84 (48)
08	8Bt Pop Rock	8	84 (32)
09	Hard Rock	9	92 (32)
10	Folk Rock	10	85 (0)
11	Country Rock	11	85 (32)
12	Rock'n'Roll	12	80 (64)
13	British Rock	13	86 (16)
	16BEAT		
14	16Bt Stand. 1	14	96 (64)
15	16Bt Stand. 2	15	96 (32)
16	16Bt Stand. 3	16	96 (48)
17	16Bt Rock 1	17	97 (32)
18	16Bt Rock 2	18	100 (0)
19	16Bt Ballad 1	19	99 (112)
20	16Bt Ballad 2	20	99 (96)
21	16Bt Pop 1	21	107 (48)
22	16Bt Pop 2	22	101 (32)
23	16Bt Pop 3	23	107 (64)
24	Jazz Rock	24	113 (80)
25	Jazz Funk 1	25	112 (48)
26	Jazz Funk 2	26	113 (64)
27	Soul Rock	27	102 (48)
28	Soul Ballad	28	103 (32)
29	SlwSoulBallad	29	75 (32)
30	Carib.Rock	30	118 (48)
31	Latin Rock	31	119 (64)
32	Samba Rock	32	117 (16)

No.	RHYTHM	MIDI PROGRAM CHANGE DATA NORM	TECH
	FUNK & DANCE		
33	Funk 1	33	110 (48)
34	Funk 2	34	111 (32)
35	Funk 3	35	111 (16)
36	Electro Pop 1	36	109 (32)
37	Electro Pop 2	37	108 (16)
38	Disco 1	38	121 (0)
39	Disco 2	39	123 (64)
40	Euro Beat	40	120 (48)
41	Dance	41	124 (64)
42	Dance Funk	42	127 (64)
43	Rap	43	127 (32)
44	House 1	44	125 (0)
45	House 2	45	125 (16)
	ROCK (OTHERS)		
46	Shuffle R&R	46	76 (80)
47	Shuffle Boogie	47	76 (96)
48	Shuffle Rock	48	76 (64)
49	Shuffle H.Rock	49	79 (16)
50	Shuffle Soul	50	77 (48)
51	Rock Ballad 1	51	74 (80)
52	Rock Ballad 2	52	75 (96)
53	Swing Rock 1	53	73 (16)
54	Swing Rock 2	54	64 (0)
	LATIN		
55	Rhumba	55	58 (32)
56	Beguine	56	59 (32)
57	Mambo	57	56 (32)
58	Modern Mambo	58	66 (64)
59	Cha Cha	59	57 (48)
60	Salsa	60	68 (48)
61	Reggae	61	71 (32)
62	Modern Reggae	62	71 (48)
63	Samba	63	51 (48)
64	Bossanova	64	48 (96)
65	Jazz Bossa	65	49 (16)
66	Tango Contin.	66	53 (64)

RHYTHM

No.	RHYTHM	MIDI PROGRAM CHANGE DATA NORM	TECH
	SWING		
67	Stand.Swing 1	67	25 (0)
68	Stand.Swing 2	68	32 (48)
69	Big Band 1	69	36 (48)
70	Big Band 2	70	38 (80)
71	B.Band Ballad	71	39 (16)
72	Orch.Swing	72	37 (0)
	TRAD JAZZ		
73	Jazz Combo	73	34 (32)
74	Jazz Quartet	74	32 (64)
75	Jazz Ballad	75	44 (16)
76	Modern Jazz 1	76	40 (48)
77	Modern Jazz 2	77	40 (80)
78	Dixie	78	24 (32)
79	Blues	79	38 (96)
80	Jazz Waltz	80	46 (48)
	TRADITIONAL		
81	StandardWaltz	81	11 (16)
82	Vienna Waltz	82	9 (32)
83	Slow Waltz	83	13 (16)
84	Foxtrot	84	30 (0)
85	Broadway Show	85	15 (32)
86	Hollywood	86	30 (16)
87	Soft Shoe	87	24 (80)
88	U.S.March 2/4	88	0 (32)
89	German Mrch2/4	89	1 (48)
90	U.S.March 6/8	90	2 (16)
91	Polka 2/4	91	4 (48)
92	Polka 6/8	92	5 (32)
93	Country	93	17 (112)
94	Modern Country	94	17 (80)
95	Bluegrass	95	20 (48)
96	R&B 8 Beat	96	81 (16)
97	R&B Ballad	97	75 (64)
98	Gospel Shuffle	98	77 (64)
99	Hawaiian	99	22 (16)

No.	RHYTHM	MIDI PROGRAM CHANGE DATA NORM	TECH
	MEMORY A		
M01	Memory 1	100 (0)	0 (128)
M02	Memory 2	101 (0)	1 (128)
M03	Memory 3	102 (0)	2 (128)
M04	Memory 4	103 (0)	3 (128)
M05	Memory 5	104 (0)	4 (128)
M06	Memory 6	105 (0)	5 (128)
	MEMORY B		
M07	Memory 7	106 (0)	6 (128)
M08	Memory 8	107 (0)	7 (128)
M09	Memory 9	108 (0)	8 (128)
M10	Memory 10	109 (0)	9 (128)
M11	Memory 11	110 (0)	10 (128)
M12	Memory 12	111 (0)	11 (128)

・The numbers in parentheses ( ) are bank data.
Program change number = Program change data+1 / Bank number = Bank data+1

KEYBOARD PERCUSSION

		Drum kit	MIDI NOTE NUMBER		General MIDI	MIDI NOTE NUMBER
			NORM	TECH		
		—	—	—	Bass Drum 2*	35
		Bass Drum	36	36	Bass Drum 1	36
		Rim Shot	37	47	Rim Shot	37
		Snare Drum 1	38	38	Snare Drum 1	38
		Special Snare Drum	39	31	Hand Clap	39
		Snare Drum 2	40	32	Electric Snare	40
		Floor Tom	41	95	Floor Tom Low	41
		Splash Cymbal	42	24	Hi Hat Close	42
		Tom Low	43	41	Floor Tom High	43
		Crash Cymbal Low	44	51	Hi Hat Pedal	44
		Tom Mid	45	43	Tom Low	45
		Crash Cymbal High	46	25	Hi Hat Open	46
		Tom High	47	45	Tom Mid	47
		Hi Hat Close 1	48	48	Tom High 1	48
		Hi Hat Close 2	49	49	Crash Cymbal 1	49
		Hi Hat Open	50	50	Tom High 2	50
		Ride Bell	51	28	Ride Cymbal 1	51
		Ride Cymbal	52	52	Chinese Cymbal	52
		Conga Low	53	53	Ride Bell	53
		Small Conga Low	54	54	Tambourine	54
		Conga High	55	55	Splash Cymbal	55
		Small Conga High	56	56	Cowbell	56
		Conga Crash	57	57	Crash Cymbal 2	57
		Metal Cabasa	58	58	Vibraslap	58
		Timbales Low	59	99	Ride Cymbal 2	59
		Timbales High	60	100	Bongo High	60
		Cowbell Low	61	66	Bongo Low	61
		Cowbell High	62	62	Conga Mute Crash	62
		Agogo Low	63	102	Conga High	63
		Agogo High	64	101	Conga Low	64
		Samba Whistle Low	65	65	Timbales High	65
		Samba Whistle High	66	66	Timbales Low	66
		Claves	67	67	Agogo High	67
		Slap	68	68	Agogo Low	68
		Hand Clap	69	69	Cabasa	69
		Tambourine	70	74	Maracas	70
		Shaker	71	96	Samba Whistle Short	71
		Triangle Mute	72	108	Samba Whistle Long	72
		Maracas	73	105	Guiro Short	73
		Triangle Open	74	107	Guiro Long	74
		Guiro Short	75	77	Claves	75
		Guiro Long	76	76	Wood Block Mid	76
		Orchestral Bass Drum	77	85	Wood Block Low	77
		Orchestral Snare Drum	78	86	Cuica High	78
		Orchestral Cymbal	79	87	Cuica Low	79
		Wind Chime	80	29	Triangle Mute	80
		—	—	—	Triangle Open*	81

* Sounds in SEQUENCER and GM function.

TONE

A PIANO

Piano
Bright Piano
E.Grand
E.Piano 1
E.Piano 2
Modern E.P.1
Modern E.P.2
Synth Piano

B HARPSI & MALLET

Harpsichord 1
Harpsichord 2
Clavi
Synth Clavi
Glocken 1
Glocken 2
Soft Glocken
Vibraphone
Tubular Bells
Steel Drum
Marimba
Xylophone
Bottle Marimba
African Mallet

C GUITAR

Nylon Guitar 1
Nylon Guitar 2
Folk Guitar
Jazz Guitar
Bright Solid
Mellow Solid
Funk Solid
Mute Guitar 1
Mute Guitar 2
Distortion Gt1
Distortion Gt2
Overdrive Gtr.
Gtr.Harmonics
Hawaiian Gtr.
Country Gtr.

D SPECIAL PERCUS

Banjo
Harp
Music Box
Kalimba
Sitar
Dulcimer
Koto
Shamisen
Orchestra Hit
Timpani

E STRINGS & VOCAL

Strings 1
Strings 2
Pizzicato
Violin
Jazz Violin
Viola
Cello
Bowed Bass
Vocal Ah
Echo Vocal
Vocal Ooh 1
Vocal Ooh 2
Vocal Doo

F ORGAN & ACCORDION

Jazz Organ
Full Drawbars
16' & 1'
Jazz Drawbars
Pop Organ
Pipe Organ 1
Pipe Organ 2
Brt.Accordion
Musette

G BRASS

Brass
Trumpet
Orch.Trumpet
Mute Trumpet
Flugel Horn
Soft Flugel
Trombone
Orch.Trombone
Closed Fr.Horn
Open Fr.Horn
Tuba
Synth Brass
Syn.Brass Ens.

H REED

Soprano Sax
Alto Sax
Mel.Alto Sax
Tenor Sax 1
Tenor Sax 2
Rock Tenor Sax
Baritone Sax
Jazz Clarinet
Clas.Clarinet
Bass Clarinet
Mel.Clarinet
Synth Clarinet
Oboe
English Horn
Bassoon
Bagpipe
Harmonica

I FLUTE & ETHNIC

Piccolo
Jazz Flute
Classic Flute
Alto Flute
Recorder
Ocarina
Pan Flute
Whistle
Quena
Shakuhachi

J BASS

Acoustic Bass
Mellow A.Bass
Electric Bass
Bright E.Bass
Funky E.Bass
Fretless Bass
Picked E.Bass
Rock Bass
Mute Bass
Slap Bass
Thumb Bass
Analog Bass
Wow Bass
Plastic Bass
Synth Chopper
Wire Bass

K SYNTH

Sine Lead
Sine Wave
Tri. Wave
Sawtooth Wave
Square Wave
Pulse 20%
Pulse 10%
Pulse 5%
Digi Wire
Synth String
Pulse Mod.
Soft Pad
Fog Vox
Mellow Ens.

L VARIOUS NOISE & WAVE

White Noise 1
White Noise 2
HiPass Noise1
HiPass Noise2
Sax Breath
Shaku Breath
Pick Noise 1
Pick Noise 2
Pick Noise 3
Fret Noise
Gamelan
Scratch 1
Scratch 2
Click 1
Click 2
Click 3
Click 4

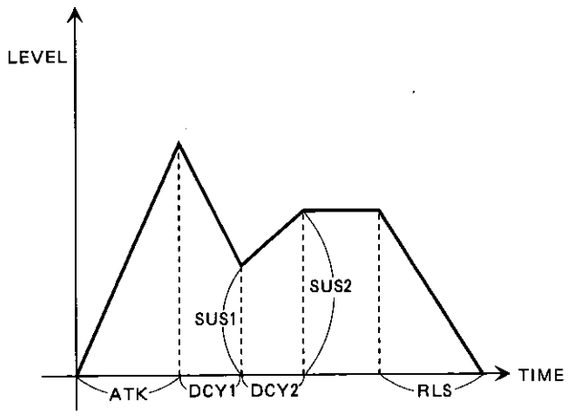
M DRUMS & PERCUS

Rock Kick
Jazz Kick
Hard Kick
Analog Kick 1
Analog Kick 2
Orch.Bass Dr.
Rock Snare
Jazz Snare
Soul Snare
Orch.Snare
Reverse Snare
Melodic Tom
Electric Tom
Analog Tom 1
Analog Tom 2
Rim 1
Rim 2
Rim 3
Brush Short
Brush Long
H.H.Closed 1
H.H.Closed 2
H.H.Open 1
H.H.Open 2
Crash Cymbal
Orch.Cymbal
Ride Cymbal 1
Ride Cymbal 2
Ride Cymbal 3
Reverse Cymb.
Conga 1
Conga 2
Bongo
Timbales 1
Timbales 2
Samba Drum
Claves
Wood Block
Slap
Hand Claps
Maracas
Cabasa
Shaker
Guiro Short
Guiro Long
Cuica 1
Cuica 2
Triangle Mute
Triangle Open
Agogo
Cowbell
Tambourine
Crickets
Vibraslap
Samba Whistle
Wind Chime

N SOUND EFFECTS

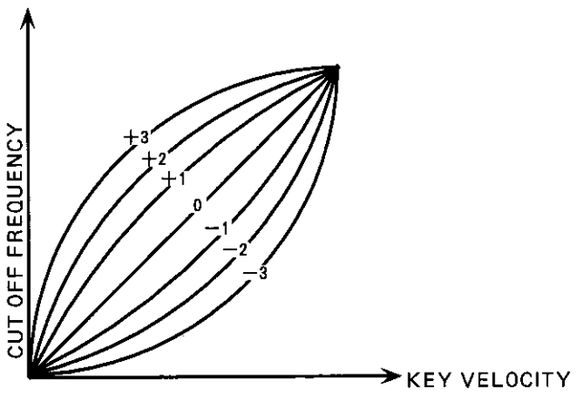
Gun Shot
Bird Tweet
Helicopter
Telephone
Applause
Seashore

ENVELOPE



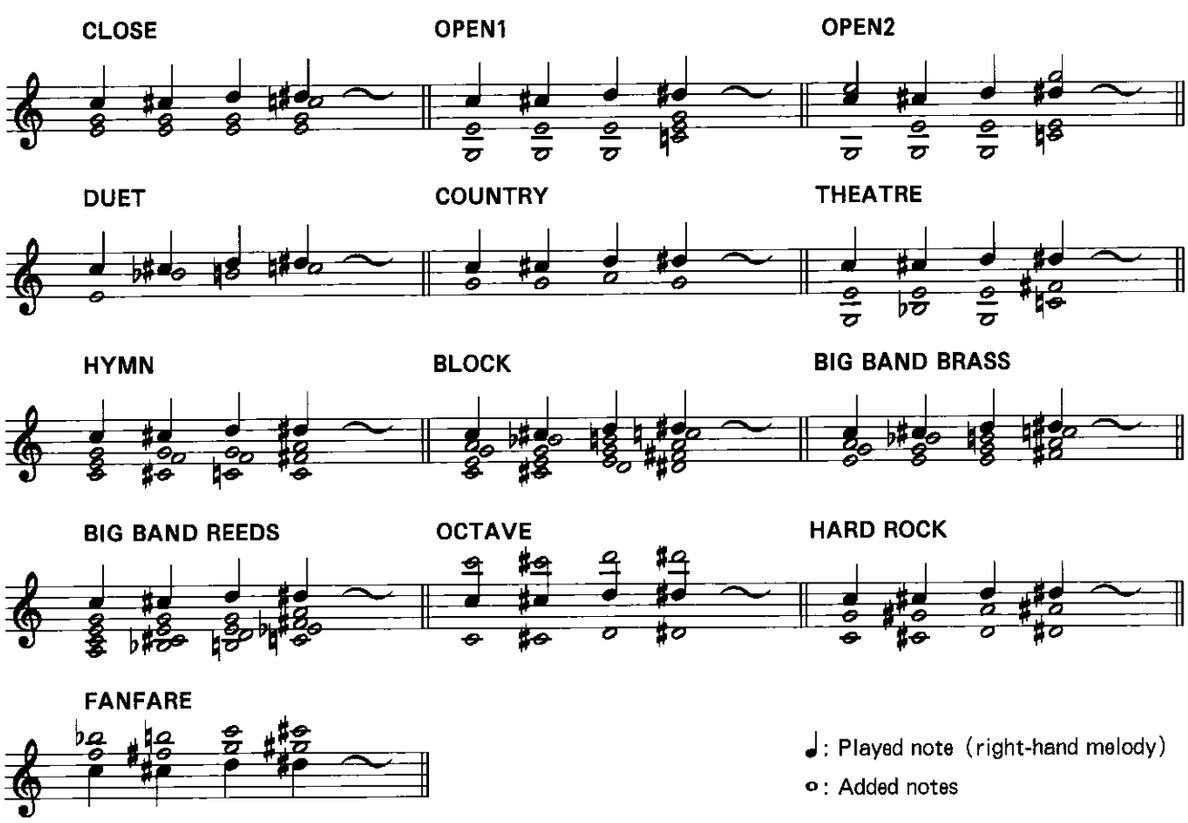
ATK: Attack Time
DCY1: Decay Time 1
SUS1: Sustain Level 1
DCY2 Decay Time 2
SUS2: Sustain Level 2
RLS: Release Time

CURVE (FILTER)



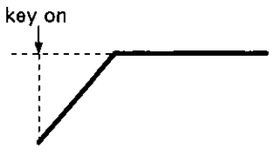
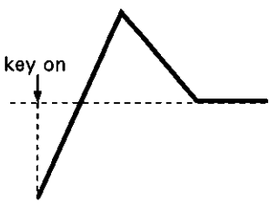
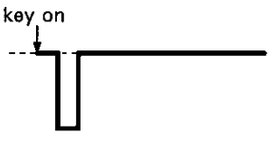
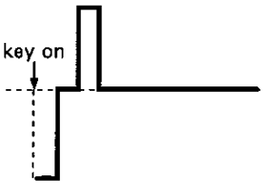
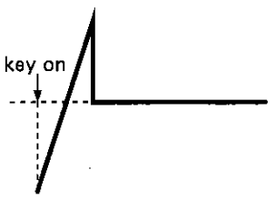
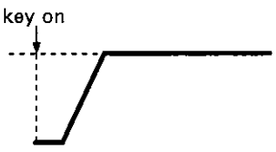
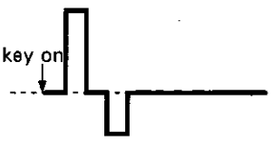
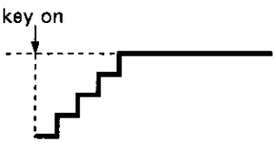
TECHNI-CHORD TYPE

<Example: C major chord>



♩: Played note (right-hand melody)
o: Added notes

AUTOBEND & TRILL

BEND		TRILL	
UP	UP-DOWN	DOWN-UP	UP-DOWN
			
UP-DROP	DELAY-UP	MELODY	5-UP
			

DIGITAL EFFECT

EFFECT	PARAMETER	RANGE	EFFECT	PARAMETER	RANGE
CELESTE1•2	DEPTH	0 — 50	ROTARY	DEPTH1	0 — 50
	SPEED	0 — 50		SPEED1	0 — 50
	DELAY	0 — 50		DEPTH2	0 — 50
	DETUNE	−50 — +50		SPEED2	0 — 50
CHORUS1•2	DEPTH	0 — 50	DELAY	DELAY	0 — 50
	SPEED	0 — 50		DETUNE	−50 — +50
	DELAY	0 — 50		KEY SHIFT	−24 — +24
	DETUNE	−50 — +50		BALANCE	0 — 100
ENSEMBLE1•2	DEPTH1	0 — 50	REPEAT	SPEED	0 — 30
	SPEED1	0 — 50		DECAY	0 — 30
	DEPTH2	0 — 50		SUSTAIN	0 — 30
	SPEED2	0 — 50		RELEASE	0 — 30
TREMOLO	DEPTH	0 — 50	SOLO EFFECT	DISTORTION	ON / OFF
	SPEED	0 — 50		TOUCH DEPTH	0 — 50
	WAVE	SIN/TRI/SQR/SAW		DEPTH	0 — 100
	BALANCE	0 — 100			

MIDI Implementation Chart

Keyboard [SM−AC1200] **(Transmitted)**

Function		RIGHT1,2,LEFT, PART4~15	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
Channel	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
	Default	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
Mode	Messages	×	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	—	
Note		0-119	0-119	0-119	0-119	0-119	0-119	0-119	—	Changes depending on the position of the transpose control,octave shift,and drums type.
Number	True voice	—	—	—	—	—	—	—	—	
Velocity	Note ON	○	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	×	—	
After	Key's	×	×	×	×	×	×	×	—	
Touch	Ch's	×	×	×	×	×	×	×	—	
Pitch Bend		○×*	×	○×*	○×*	○×*	×	○×*	×	
Control Change	0,32	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	bank select MSB, LSB
	1	○×*	×	○×*	○×*	○×*	×	○×*	×	modulation
	6,38	○×*	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	volume
	10	○×*	×	×	×	×	×	×	×	panpot
	11	○×*	○×*	×	×	×	×	×	○×*	expression
	64	○×*	○×*	○×*	○×*	○×*	○×*	×	×	sustain
	80	×	×	○×*	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	○×*	×	×	intro, fill in, ending
	91	○×*	○×*	○×*	○×*	○×*	○×*	○×*	○×*	reverb
	93	○×*	×	○×*	○×*	○×*	×	○×*	×	digital effect
	100,101	○×*	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○	○	×	×	×	×	×	×	all sound off
	121	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	reset all cotrollers
Prog		○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	Changes depending on program change mode and prog.cng to p.mem.
Change	True #	—	—	—	—	—	—	—	—	
System exclusive		○								
System common	Song Pos	○×*								
	Song Sel	○×* (0-19)								
	Tune	×								
System Real Time	Clock	○								
	Commands	○×*								start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	—	
	All notes OFF	×	×	×	×	×	×	×	—	
	Active Sense	○								
	Reset	×								
Notes		○×*……Whether or not the data for each of these items is transmitted can be set.								

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

MIDI Implementation Chart

Keyboard [SM−AC1200] **(Recognized)**

Function		RIGHT1,2,LEFT, PART4～15	PART16	ACMP1	ACMP2,3	BASS	DRUMS	CHORD	CONTROL	Remarks
Basic Channel	Default	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	memorized
	Changed	1-16	1-16	1-16	1-16	1-16	1-16	1-16	1-16	
Mode	Default	3	3	3	3	3	3	3	3	OMNI OFF,POLY MODE
	Messages	×	×	×	×	×	×	×	×	
	Altered	—	—	—	—	—	—	—	—	
Note Number		0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	Changes depending on the position of the transpose control,octave shift, and drums type.
	True voice	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	
Velocity	Note ON	○	○	○	○	○	○	○	—	
	Note OFF	×	×	×	×	×	×	×	—	
After Touch	Key's	×	×	×	×	×	×	×	—	
	Ch's	×	×	×	×	×	×	×	—	
Pitch Bend		○×*	×	○×*	○×*	○×*	×	○×*	×	
Control Change	0,32	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	bank select MSB, LSB
	1	○×*	×	○×*	○×*	○×*	×	○×*	×	modulation
	6,38	○×*	×	×	×	×	×	×	×	data entry MSB, LSB
	7	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	volume
	10	○×*	×	×	×	×	×	×	×	panpot
	11	○×*	○×*	×	×	×	×	×	○×*	expression
	64	○×*	○×*	○×*	○×*	○×*	○×*	×	×	sustain
	80	×	×	○×*	×	×	×	×	×	auto play chord
	82	×	×	×	×	×	○×*	×	×	intro, fill in, ending
	91	○×*	○×*	○×*	○×*	○×*	○×*	○×*	○×*	reverb
	93	○×*	×	○×*	○×*	○×*	×	○×*	×	digital effect
	100,101	○×*	×	×	×	×	×	×	×	RPN LSB, MSB
	120	○	○	○	○	○	○	○	×	all sound off
	121	○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	reset all cotrollers
Prog Change		○×*	○×*	○×*	○×*	○×*	○×*	○×*	×	Changes depending on program change mode and prog.cng to p.mem.
	True #	0-127	0-127	0-127	0-127	0-127	0-127	0-127	—	
System exclusive		○								
System common	Song Pos	○×*								
	Song Sel	○×* (0-19)								
	Tune	×								
System Real Time	Clock	○								
	Commands	○×*								start/stop,continue
Aux Messages	Local ON/ OFF	×	×	×	×	×	×	×	—	
	All notes OFF	○	○	○	○	○	○	○	—	
	Active Sense	○								
	Reset	×								
Notes		○×*……Whether or not the data for each of these items is received can be set.								

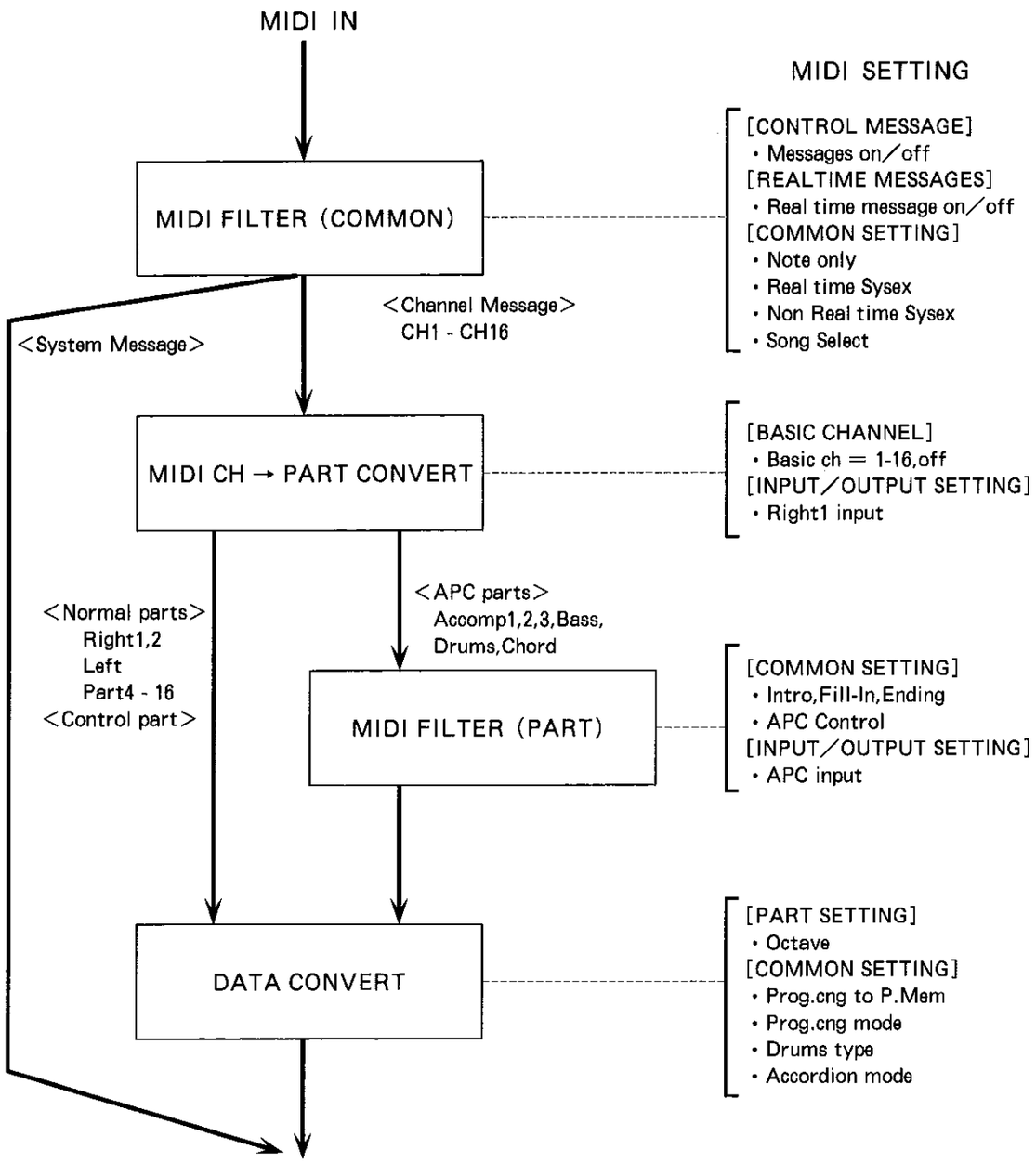
Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO ○:Yes

Mode 3: OMNI OFF, POLY Mode 4: OMNI OFF, MONO ×:No

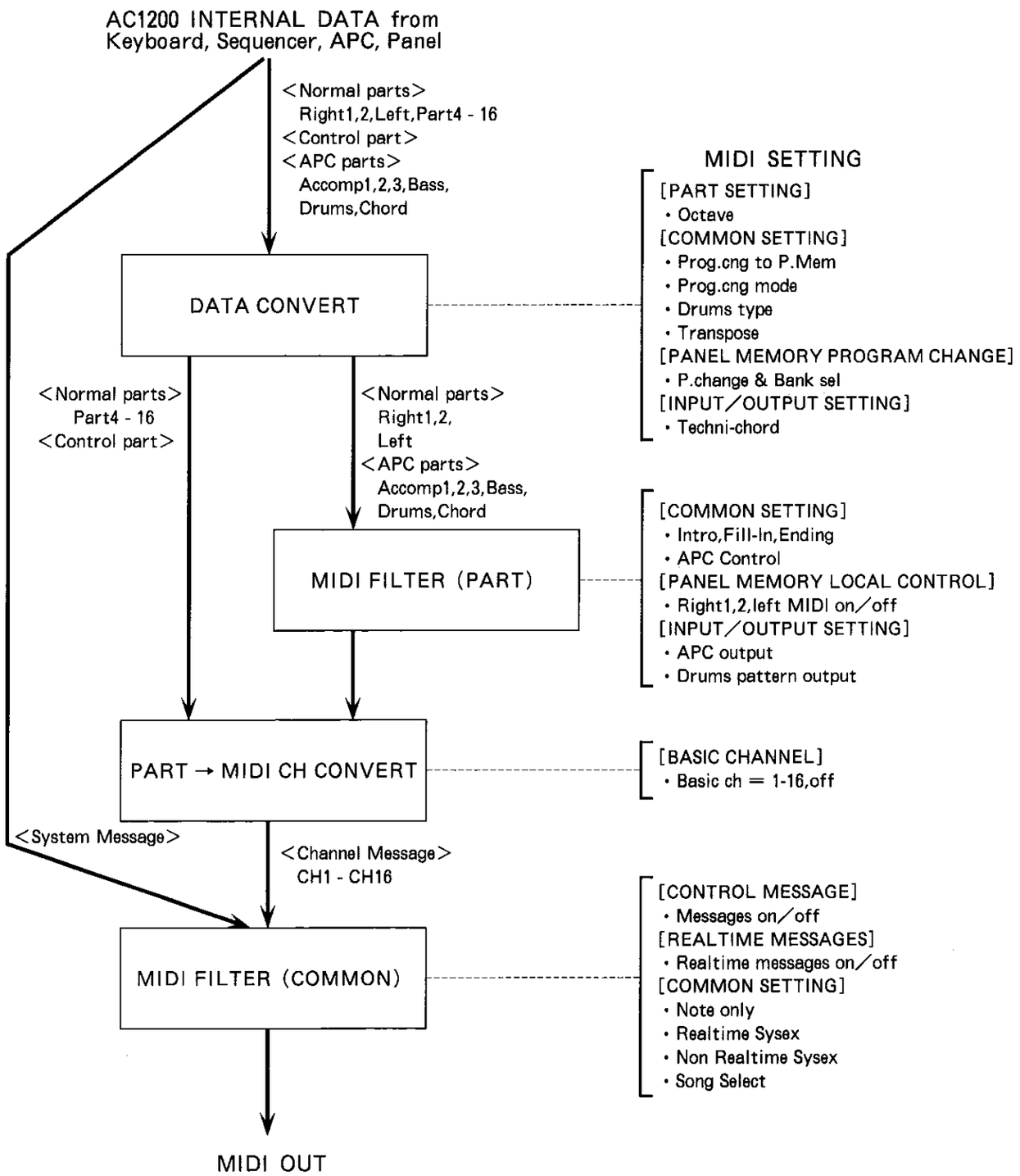
MIDI DATA FORMAT

MIDI DATA FLOWCHART

<MIDI INPUT>



<MIDI OUTPUT>


AC1200 INTERNAL DATA from
Keyboard, Sequencer, APC, Panel
<Normal parts>
Right1,2,Left,Part4 - 16
<Control part>
<APC parts>
Accomp1,2,3,Bass,
Drums,Chord
DATA CONVERT
MIDI SETTING
[PART SETTING]
• Octave
[COMMON SETTING]
• Prog.cng to P.Mem
• Prog.cng mode
• Drums type
• Transpose
[PANEL MEMORY PROGRAM CHANGE]
• P.change & Bank sel
[INPUT/OUTPUT SETTING]
• Techni-chord
<Normal parts>
Part4 - 16
<Control part>
<Normal parts>
Right1,2,
Left
<APC parts>
Accomp1,2,3,Bass,
Drums,Chord
MIDI FILTER (PART)
[COMMON SETTING]
• Intro,Fill-In,Ending
• APC Control
[PANEL MEMORY LOCAL CONTROL]
• Right1,2,left MIDI on/off
[INPUT/OUTPUT SETTING]
• APC output
• Drums pattern output
PART → MIDI CH CONVERT
[BASIC CHANNEL]
• Basic ch = 1-16,off
<System Message>
<Channel Message>
CH1 - CH16
MIDI FILTER (COMMON)
[CONTROL MESSAGE]
• Messages on/off
[REALTIME MESSAGES]
• Realtime messages on/off
[COMMON SETTING]
• Note only
• Realtime Sysex
• Non Realtime Sysex
• Song Select
MIDI OUT

Message format

■ Channel voice message

Note off

8nH	Note off status
kk	Note number
vv	Velocity

n: 0−F Basic channel
kk: 00H−7FH Note number
vv: 00H−7FH Velocity
・This status is not used during transmission; rather, velocity=0 is transmitted with the note on status.

Note on

9nH	Note on status
kk	Note number
vv	Velocity

n: 0−F Basic channel
kk: 00H−7FH Note number
vv: 01H−7FH Velocity
00H Note off

Control change

Bank select

BnH	Control change status
00H	Bank select (MSB)
mm	Bank select value (MSB)
(BnH)	Control change status
20H	Bank select (LSB)
11	Bank select value (LSB)

n: 0−F Basic channel
mm,11: 00H−7FH
・Indicates program change bank. Used when program Change mode is set to Normal mode or Technics mode.
・Transmission/reception of ACCOMP 1,2,3,BASS and DRUMS bank select is possible only during COMPOSER record.

Modulation

BnH	Control change status
01H	Modulation
vv	Modulation depth value

n: 0−F Basic channel
vv: 00H−7FH
・Reception of ACCOMP 1,2,3 and BASS modulation is possible only during COMPOSER record.

Data entry

BnH	Control change status
06H	Data entry (MSB)
mm	Data entry value (MSB)
(BnH)	Control change status
26H	Data entry (LSB)
11	Data entry value (LSB)

n: 0−F Basic channel
mm,11: Values conform to the parameters specified for the RPN.

Volume

BnH	Control change status
07H	Part volume
vv	Part volume value

n: 0−F Basic channel
vv: 00H−7FH

Panpot

BnH	Control change status
0AH	Panpot
vv	Panpot value

n: 0−F Basic channel
vv: 00H−7FH

Expression

BnH	Control change status
0BH	Expression
vv	Expression value

n: 0−F Basic channel
vv: 00H−7FH
・The expression for the CONTROL part is the total expression as regulated by the pedal operation.

Sustain

BnH	Control change status
40H	Sustain
vv	Sustain on/off

n: 0−F Basic channel
vv: 00H−3FH (00H) Off
40H−7FH (7FH) On
・Transmitted data is indicated by parentheses( ).
・Reception of ACCOMP 1,2,3 and BASS sustain is possible only during COMPOSER record.

Auto Play Chord

BnH	Control change status
50H	APC message
vv	APC message value

n: 0－F Basic channel
vv: 00H ＝Off
01H ＝FINGERED
02H ＝ONE FINGER
03H ＝PIANIST

・Transmitted／received on the basic channel for the ACCOMP 1 part.

Rhythm control

BnH	Control change status
52H	Rhythm control message
vv	Rhythm control data

n: 0－F Basic channel
vv: 00H ＝off
01H ＝FILL IN 1
02H ＝ENDING
03H ＝INTRO
05H ＝FILL IN 2
07H ＝COUNT INTRO

・Transmitted／received on the basic channel for the DRUMS part.

Reverb

BnH	Control change status
5BH	Reverb
vv	Reverb on／off

n: 0－F Basic channel
vv: 00H－3FH (00H) Off
40H－7FH (7FH) On

・Transmitted data is indicated by parentheses( ).
・The Reverb for the CONTROL part is the total reverb.

Digital effect

BnH	Control change status
5DH	Digital effect
vv	Digital effect on／off

n: 0－F Basic channel
vv: 00H－3FH (00H) Off
40H－7FH (7FH) On

・Transmitted data is indicated by parentheses( ).
・Transmission/reception of the DIGITAL EFFECT for ACCOMP 1,2,3 and BASS is possible only during COMPOSER record.

RPN

BnH	Control change status
65H	RPN (MSB)
mm	RPN data number (MSB)
(BnH)	Control change status
64H	RPN (LSB)
11	RPN data number (LSB)

n: 0－F Basic channel
mm,11:The most significant byte (MSB) and least significant byte (LSB) of the parameter number specified for the RPN.

The RPN which can be transmitted／received are Pitch Bend Sensitivity, Fine Tuning, Coarse Tuning (corresponding respectively to the Pitch bend Range, Tuning and Key Shift of the AC1200), and RPN reset.

RPN		Data Entry		
MSB	LSB	MSB	LSB	
00H	00H	mm	---	Pitch Bend Sensitivity mm:00H - 0CH (0 - 12semi-tones) 11:igored ・Up to 1 octave can be specified in semi-tone increments.
00H	01H	mm	11	Fine Tuning mm,11:00H,00H - 40H,00H -7FH,7FH (－128＊100／128-0-127＊100／128cents) ・11:00H or40H (lower 6 bits ignored) ・Can be specified in 100／128 cent increments.
00H	02H	mm	---	Coarse Tuning mm,34H - 40H - 4CH(－12 - 0 - ＋12semi-tones) 11:ignored ・Up to 1 octave can be specified insemi-tone increments.
7FH	7FH	---	---	RPN Reset mm,11:ignored ・For when the RPN number is not specified. ・The internal set value doesnot change.

Program change

CnH	Program change status
pp	Program change value

n: 0−F Basic channel
pp: 00H−7FH Program change value
Normal mode: Numbers are correspond to the sound number as shown on the panel list (the variation is indicated by the Bank Select).
Technics mode: Numbers are standardized among Technics modes(Bank Select also used).
GM:GM program change numbers.
・The Program Change for the Drums part is recognized as a change in the rhythm pattern select. The Program Change for the CONTROL part is recognized as a change in the BGS.
・Transmission/reception of ACCOMP 1,2,3,BASS, and DRUMS program change is possible only during COMPOSERrecord.
・When PROG.CNG TO P.MEM is ON, the PANEL MEMORY numbers are transmitted/received on the basic channel for the RIGHT 1 part.

Pitch bend change

EnH	Pitch bend status
11	Pitch bend value (LSB)
mm	Pitch bend value (MSB)

n: 0−F Basic channel
11,mm: 00H−7FH Pitch bend data
・The Pitch Bend Range is determined by the Pitch Bend Range(Pitch Bend Sensitivity)of each part.
・Reception of accomp 1,2,3 and BASS pitch bend change is possible only during COMPOSER record.

■ Channel mode message

All sound off

BnH	Channel mode status
78H	All sound off
00H	Dummy data

n: 0−F Basic channel

Reset all controllers

BnH	Channel mode status
79H	Reset all controllers
00H	Dummy data

n: 0−F Basic channel

All note off

BnH	Channel mode status
7BH	All note off
00H	Dummy data

n: 0−F Basic channel
Receive only

OMNI off

BnH	Channel mode status
7CH	OMNI off
00H	Dummy data

n: 0−F Basic channel
・Processed in same manner as when ALL Note off is received.

OMNI on

BnH	Channel mode status
7DH	OMNI on
00H	Dummy data

n: 0−F Basic channel
・Processed in same manner as when ALL Note off is received. Does not change to OMNI on.

MONO

BnH	Channel mode status
7EH	MONO
00H	Dummy data

n: 0−F Basic channel
・Processed in same manner as when ALL Note off is received. Does not change to MONO.

POLY

BnH	Channel mode status
7FH	POLY
00H	Dummy data

n: 0−F Basic channel
・Processed in same manner as when ALL Note off is received.

■ System common message

Song position pointer

F2H	Song position pointer
11	Least significant
mm	Most significant

11,mm: 00H - 7FH

Song select

F3H	Song select
ss	Song number

ss: 0−19

■ System real time message

Timing Clock

F8H	Timing clock

Start

FAH	Start

Continue

FBH	Continue

Stop

FCH	Stop

Active Sense

FEH	Active sense

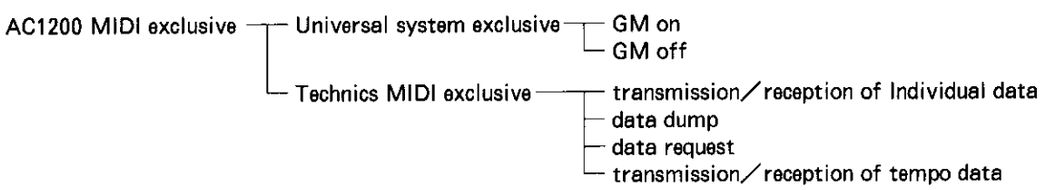
System exclusive

F0H	System exclusive status
ii	ID number
dd	data
:	:
dd	data
F7H	End of exclusive status

ii: 7EH(universal non-real time ID),
50H(Technics ID)
dd: 00H－7FH

About the AC1200 MIDI exclusive

Outline of AC1200 MIDI exclusive



Universal system exclusive Message format

Turn General MIDI System On:

F0H	Exclusive status
7EH	Universal Non-Real Time SysEx
7FH	ID of target device (7F:Broadcast)
09H	sub-ID # 1 = General MIDI message
01H	sub-ID # 2 = General MIDI on
F7H	EOX

Turn General MIDI System Off:

F0H	Exclusive status
7EH	Universal Non-Real Time SysEx
7FH	ID of target device (7F:Broadcast)
09H	sub-ID # 1 = General MIDI message
02H	sub-ID # 2 = General MIDI off
F7H	EOX

Technics MIDI exclusive Message format

■ Type of messages and their forms

SOX	Exclusive status
IDC	Technics ID number
CMD	Command ID
PC	Keyboard category ID
MD	Model differentiating ID
VER	Exclusive version ID
[data]	Body of data
EOX	End of exclusive

Messages are transmitted in order, beginning with SOX, IDC, etc. and continuing to the end.
The form of the transmission message differs depending on the type of command.

■ Explanation of messages

SOX: Indicates the start of exclusive

F0H	Exclusive status

IDC: Product manufacturer differentiating ID

50H	Technics ID number

CMD: Indicates type of transmission data and commands.

21H	HRQ: Hand shake request
22H	HRT: Hand shake routine
23H	ACK: Acknowledge
24H	NAK: Negative Acknowledge
25H	TMP: Tempo data
27H	EOK: End of Block
28H	END: End
29H	ERR: Error
2AH	FUL: Memory full
2BH	DRQ: Data request
2CH	ITR: Individual data
2DH	BTR: Data block
7EH	CDD: Continuing data

PC: Technics product category ID

01H	AC／KN
7EH	DMY: Dummy data for ACK,NAK,EOK,END, ERR,FUL

MD: Model differentiating ID

1CH	AC1200

VER: Exclusive version control ID

10H	Ver 2.0

[data]: Body of data

·[data] for Individual data, Data dump, and Data request.

ADR	ADR(MSB)	ADDRESS MSB (7bit)
	ADR	: (7bit)
	ADR(LSB)	ADDRESS LSB (7bit)
SIZ	SIZ(MSB)	MSB of the address length of relevant data from the above address. (7bit)
	SIZ	: (7bit)
	SIZ(LSB)	LSB of the address length of relevant data from the above address. (7bit)
DT		data
:		:
CN		Continue ID
SM		Checksum

ADR :
Indicates address length of beginning data. The type of data is recognized by this value. The 21-bit address is divided into 3bytes of 7 bits each, and is sent in order beginning with the upper end. (Refer to the address map.)

SIZ :
Indicates length of address from ADR. (Refer to the address map.) The 21-bit address length is divided into 3 bytes of 7 bytes each,and is sent in order beginning with the upper end.
If a size not consistent with the data is indicated, data request is ineffective. If the data request concerns the data dump, then dummy data is sent, although it has no significance.

DT :
Body of transmitted data. The 8-bit data is divided into 2 bytes of 4 bits each, and is sent in order beginning with the upper end.
Note that SIZ = number of bytes in DT divided by 2.

CN : Indicates data continue／discontinue
00h STP : End of data
01H CNT : More data follows
(CMD of next packet is CDD)
The number of bytes in one exclusive packet is 256. In a transmission where the number of bytes exceeds one packet, CN = CNT, and the continuing data is transmitted in the continuing data (CMD = CDD) format.

SM : Checksum
Checksum for checking data errors.
Based on EXCLUSIVE-OR operation from IDC to CN.

·[data] for Tempo.

DT1	Data LSB
DT2	Data MSB

DT2, DT1 : 02H, 08H - 12H,0Ch
(♩ =40-300)
Tempo data is 9bit Binary (= 101000 ~ 100101100)
The lower 4 bits is expressed as DT1, and the remaining upper 5 bits as DT2. DT1 is sent first followed by DT2.

■ The form of the transmission message

Function	SOX	IDC	CMD	PC	MD	VER	[data]					EOX
	=F0H	=50H		=01H	=1CH	=10H	ADR	SIZ	DT	CN	SM	=F7H
Hand shake request	SOX	IDC	HRQ	PC	MD	VER	—	—	—	—	—	EOX
Hand shake routine	SOX	IDC	HRT	PC	MD	VER	—	—	—	—	—	EOX
Ackowledge	SOX	IDC	ACK	DMY	—	—	—	—	—	—	—	EOX
Negative Ackowledge	SOX	IDC	NAK	DMY	—	—	—	—	—	—	—	EOX
End of Block	SOX	IDC	EOK	DMY	—	—	—	—	—	—	—	EOX
End	SOX	IDC	END	DMY	—	—	—	—	—	—	—	EOX
Error	SOX	IDC	ERR	DMY	—	—	—	—	—	—	—	EOX
Memory full	SOX	IDC	FUL	DMY	—	—	—	—	—	—	—	EOX
Tempo data	SOX	IDC	TMP	—	—	—	—	—	DT	—	—	EOX
Data request	SOX	IDC	DRQ	PC	MD	VER	ADR	SIZ	—	CN	SM	EOX
Individual data												
System data	SOX	IDC	ITR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Part data	SOX	IDC	ITR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Sound Memory parameter	SOX	IDC	ITR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Data dump												
Sound Memory												
header	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
parameter	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Panel												
panel total data	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
panel memory	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Composer												
location	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
header	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
performance	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Sequencer												
location	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
header	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
performance	SOX	IDC	BTR	PC	MD	VER	ADR	SIZ	DT	CN	SM	EOX
Continuing data	SOX	IDC	CDD	—	—	—	—	—	DT	CN	SN	EOX

■ MIDI exclusive address map

ADDRESS (Hex)		Area	Subarea	Sub-subarea
ADR MSB~LSB	ADDRESS (21bit)			
20 00 00~	080000H~	SYSTEM		REAL TIME
20 04 00~	080200H~			NON-REAL TIME
20 08 00~	080400H~	PART	COMMON	REAL TIME
20 0A 00~	080600H~			NON-REAL TIME
20 10 00~	080800H~	PART	INDIVIDUAL	PART 1 REAL TIME
20 10 40~	080840H~			PART 1 NON-REAL TIME
20 11 00~	080880H~			PART 2 REAL TIME
20 11 40~	0808C0H~			PART 2 NON-REAL TIME
:	:			
20 1n 40~	:			PART n REAL TIME
20 1n 40~	:			PART n NON-REAL TIME
:	:			:
20 1F 00~	080F80~			PART 16 REAL TIME
20 1F 40~	080FC0~			PART 16 NON-REAL TIME
20 20 00~	081000~			ACCOMP 1 REAL TIME
20 20 40~	081040~			ACCOMP 1 NON-REAL TIME
20 21 00~	081080H~			ACCOMP 2 REAL TIME
20 21 40~	0810C0H~			ACCOMP 2 NON-REAL TIME
20 22 00~	081100H~			ACCOMP 3 REAL TIME
20 22 40~	081140H~			ACCOMP 3 NON-REAL TIME
20 23 00~	081180H~			BASS REAL TIME
20 23 40~	0811C0H~			BASS NON-REAL TIME
20 24 00~	081200H~			DRUMS REAL TIME
20 24 40~	081240H~			DRUMS NON-REAL TIME
20 25 00~	081280H~			CHORD REAL TIME
20 25 40~	0812C0H~			CHORD NON-REAL TIME
20 26 00~	081300H~			R.BASS REAL TIME
20 26 40~	081340H~			R.BASS NON-REAL TIME
20 60 00~	081800H~	PART	SPECIAL	REAL TIME
20 68 00~	081A00H~			NON-REAL TIME
30 00 00~	0C0000H~	SOUND MEMORY	HEADER	NON-REAL TIME
30 00 50~	0C0050H~		PARAMETER	SOUND MEMORY 1
30 01 60~	0C00E0H~			SOUND MEMORY 2
:	:			:
30 13 60~	0C09E0H~			SOUND MEMORY 18
30 14 70~	0C0A70H~			SOUND MEMORY 19
:	:			:
	0C0050H +90H*P~			SOUND MEMORY P
:	:			:
30 28 00~	0C1400H~			SOUND MEMORY 36
				*P = 0~19H
				*NON-REAL TIME
40 00 00~	100000H~	PANEL	PANEL DATA	NON-REAL TIME
41 00 00~	108000H~		PANEL MEMORY	NON-REAL TIME
50 00 00~	140000H~	COMPOSER	LOCATION	NON-REAL TIME
50 00 60~	140060H~		HEADER	NON-REAL TIME
50 0F 60~	1407E0h~		PERFORMANCE	NON-REAL TIME
60 00 00~	180000H~	SEQUENCER	LOCATION	NON-REAL TIME
60 02 00~	180100H~		HEADER	NON-REAL TIME
60 08 00~	180400H~		PERFORMANCE	NON-REAL TIME

Classification of individual data and data dump areas

Individual data area:

System	
Part	(Common／individual／special)
Sound Memory	(Parameter only)

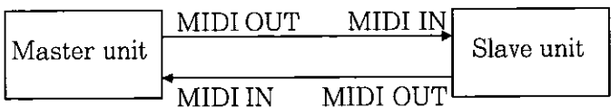
Data dump area:

Sound Memory	(Header＋Parameter)
Panel	(Panel data＋Panel Memory)
Composer	(Location＋Header＋Performance)
Sequencer	(Location＋Header＋Performance)

One-way transmission and handshake transmission

In one-way transmission,communication takes place in one direction only,that is from the master unit to the slave unit.

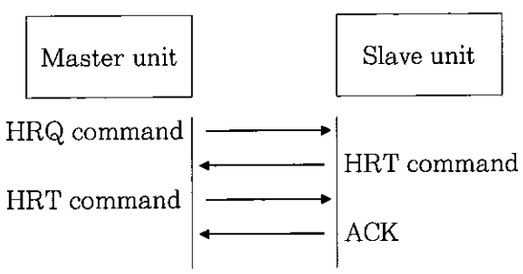
In handshake transmission,the transmission status between the master unit and slave unit is being confirmed during data transmission. For this reason, a MIDI cable connection from the slave unit to the master unit is also necessary. In comparison to one-way transmission, handshake transmission is faster.



In the AC1200, the transmission mode is switched automatically between handshake transmission and one-way transmission. Communication begins with handshake transmission, and if there is no response from the slave unit within a given time, communication switches automatically to one-way transmission.

Communication sequence between master unit and slave unit

■ Comunication sequence of handshake confirmation



HRQ command: handshake request

SOX	F0H
IDC	50H
HRQ	21H
PC	01H
MD	1CH
VER	10H
EOX	F7H

HRT command: handshake routine

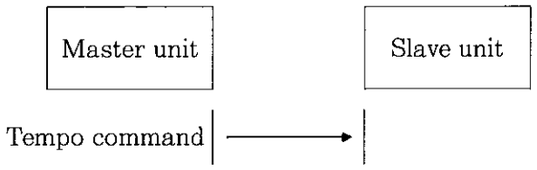
SOX	F0H
IDC	50H
HRT	22H
PC	01H
MD	1CH
VER	10H
EOX	F7H

ACK: Acknowledge

SOX	F0H
IDC	50H
ACK	23H
DMY	7EH
EOX	F7H

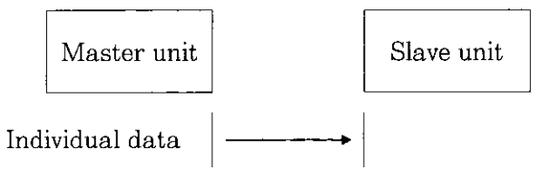
- There is no END command.
- If there is no response from the slave unit to the master unit even after the above handshake confirmation routine is performed three times,it is interpreted as inability to transmit handshake transmission data, and the transmission mode switches to one-way transmission (in the case of a MIDI sequencer, etc.) .
- Handshake communication is possible only during data dump.

■ Sequence of tempo data communication



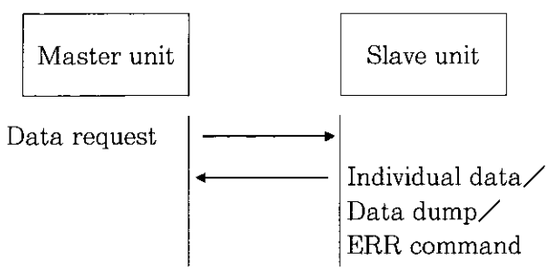
・Transmission／reception of TEMPO exclusive data can be enabled or disabled by the NOTE ONLY setting of the MIDI settings.

■ Sequence of individual data communication

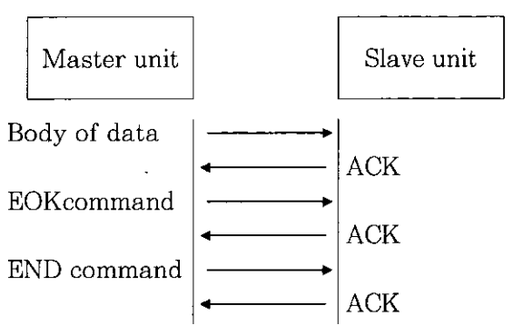


・Transmission／reception of REAL TIME and NON REAL TIME exclusive data can be enabled or disabled by the COMMON SETTING setting of the MIDI settings.

■ Sequence of data request communication



■ Sequence of data dump communication



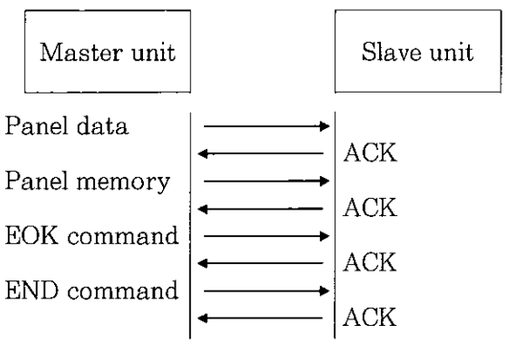
・Data dump is possible only while the SYSEX BULK DUMP display is selected during MIDI function setting.

In the AC1200, data is divided into five types: ALL, PANEL, SOUND MEMORY, COMPOSER, and SEQUENCER.

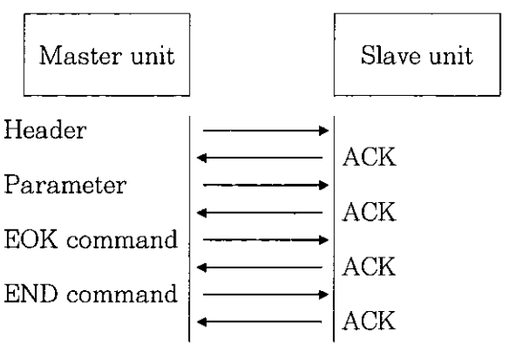
After the above handshake routine is concluded and communication link is established, the various kinds of data are respectively transmitted as described below.
For one-way transmission, the transmission interval between packets is more than 50 msec.

The number of bytes in one exclusive packet is 256. In a transmission where the number of bytes exceeds one packet, the continuing data is transmitted in the continuing data(CMD=CDD) format.

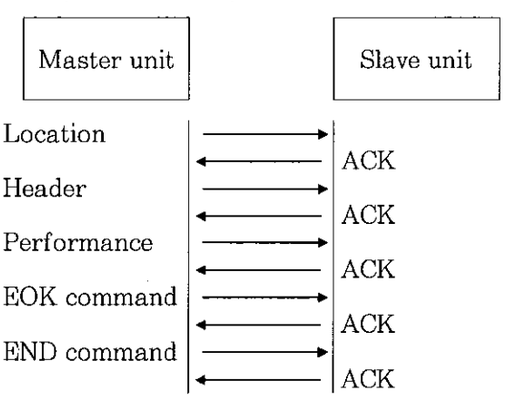
● Panel



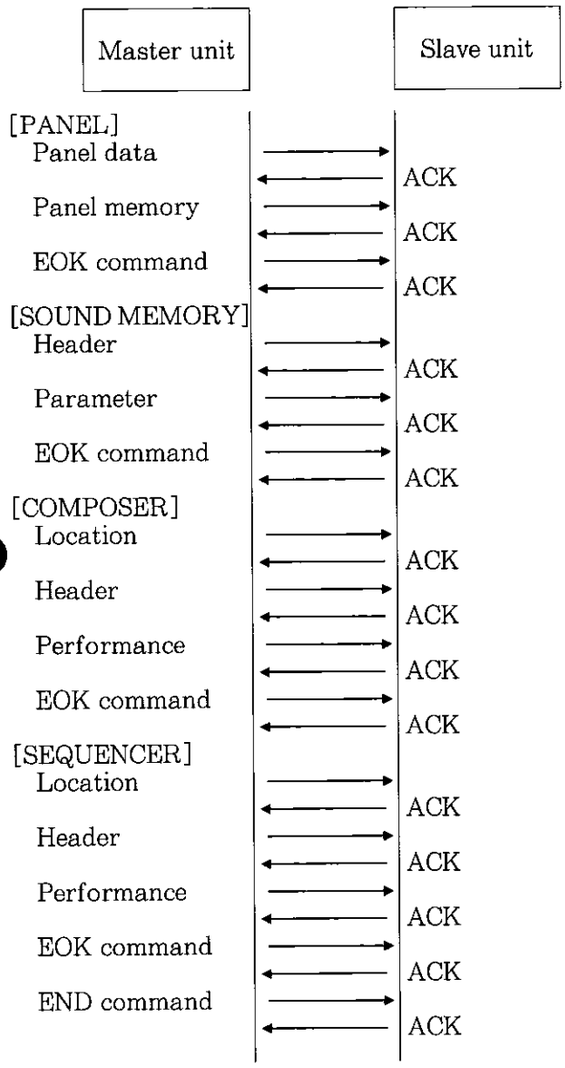
● Sound memory



● Composer data,Sequencer data



● All data



● SIZ of data dump area

SIZ			Area	Subarea
MSB		LSB		
00	00	50	SOUND MEMORY	HEADER
00	28	40		PARAMETER
00	08	40	PANEL	PANEL DATA
00	2A	00		PANEL MEMORY
00	00	60	COMPOSER	LOCATION
00	0F	00		HEADER
Variable				PERFORMANCE
00	02	00	SEQUENCER	LOCATION
00	06	00		HEADER
Variable				PERFORMANCE

● ADR of data request concerns the data dump

ADR			Area
MSB		LSB	
30	00	00	SOUND MEMORY
40	00	00	PANEL
50	00	00	COMPOSER
60	00	00	SEQUENCER

SYSTEM AND PART PARAMETER

ADR(HEX) MSB	ADR(HEX) LSB	SIZ(HEX) MSB	SIZ(HEX) LSB	PARAMETER	DATA(HEX) RANGE	DISCRIPTION	NOTE *1
SYSTEM REAL TIME							
20 00 00		00 00 01		MASTER TUNING	C0-00-3F	427.3-440.0-453.0	QR
20 00 01		00 00 01		SCALE TYPE	00-01	00H:Equal.Temperament, 01H:Piano Tuning	QR
20 00 02		00 00 01		TRANSPOSE	00-05-0B	G-C-F#	QRT
20 00 03		00 00 01		OVERALL TOUCH SENSITIVITY	00-09	0-9	QR
20 00 10		00 00 01		PANEL MEMORY NUMBER	00-18	Off, A-1, A-2, ・・・,C-8	QRT
20 00 11		00 00 01		PANEL MEMORY EXPAND MODE	00-01	00H:Normal, 01H:Expand	QR
20 00 12		00 00 01		MUSIC STYLE ARRANGER STYLE	00-03	00H:Off, 01H-03H:1-3	QRT
20 00 13		00 00 01		MUSIC STYLE ARRANGER MODE	00-03	00H:Sound, 01H:Rhythm 02H:Sound&Rhythm 03H:Panel Memory	QR
SYSTEM NON-REAL TIME							
20 04 00		00 00 01		NON-REAL TIME SYSEX ENABLE	00-01	00H:Off, 01H:On	QR *2
20 04 01		00 00 01		REAL TIME SYSEX ENABLE	00-01	00H:Off, 01H:On	QR *2
20 04 02		00 00 01		REAL TIME COMMAND ENABLE	00-01	00H:Off, 01H:On	QR
20 04 03		00 00 01		CLOCK SELECT	00-01	00H:Internal, 01H:MIDI	QR
20 04 04		00 00 01		SONG SELECT ENABLE	00-01	00H:Off, 01H:On	QR
PART COMMON REAL TIME							
20 08 00		00 00 01		TOTAL EXPRESSION	00-7F	0-127	QRT
20 08 08		00 00 01		TECHNI-CHORD ON/OFF	00-01	00H:Off, 01H:On	QRT
20 08 09		00 00 01		TECHNI-CHORD TYPE	00-0C	00H:Close, 07H:Block 01H:Open1, 08H:Big Band Brass 02H:Open2, 09H:Big Band Reeds 03H:Duet, 0AH:Octave 04H:Country, 0BH:Hard Rock 05H:Theatre, 0CH:Fanfare 06H:Hymn	QR
20 08 10		00 00 01		REVERB TOTAL ON/OFF	00-7F	00H:Off, 7FH:On	QRT
20 08 11		00 00 01		REVERB TYPE	00-09	00H:Room1, 01H:Room2, 02H:Hall1, 03H:Hall2, 04H:Hall3, 06H:Echo	QR
20 08 12		00 00 01		REVERB DEPTH	00-07	1-8	QR
PART COMMON NON-REAL TIME							
20 0A 00		00 00 01		PROG.CHANGE ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 01		00 00 01		BANK SELECT ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 02		00 00 01		PITCH BEND ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 03		00 00 01		VOLUME ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 04		00 00 01		EXPRESSION ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 05		00 00 01		PAN ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 06		00 00 01		SUSTAIN ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 07		00 00 01		EFFECT&REVERB ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 08		00 00 01		MODULATION ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 09		00 00 01		TUNING ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 0A		00 00 01		BEND RANGE ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 0B		00 00 01		RESET ALL CONTROLLERS ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 0C		00 00 01		APC MODE ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 0D		00 00 01		FILL IN, INTRO, ENDING ENABLE	00-01	00H:Off, 01H:On	QR
20 0A 0E		00 00 01		NOTE ONLY	00-01	00H:Off, 01H:On	QR
20 0A 20		00 00 01		P.MEM TO PROG.CNG	00-01	00H:Off, 01H:On	QR
20 0A 21		00 00 01		TRANSPOSE OUT	00-01	00H:Off, 01H:On	QR
20 0A 22		00 00 01		PROG. CHANGE MODE	00-03	00H:Norm, 01H:Technics, 03:GM	QR
20 0A 23		00 00 01		DRUMS TYPE	00-03	00H:Norm, 01H:Technics, 03:GM	QR
20 0A 24		00 00 01		RIGHT1 INPUT	00-01	00H:Conductor, 01H:Direct	QR
20 0A 25		00 00 01		AUTO PLAY CHORD INPUT	00-01	00H:Off, 01H:On	QR
20 0A 26		00 00 01		TECHNI-CHORD OUTPUT	00-01	00H:Off, 01H:On	QR
20 0A 27		00 00 01		AUTO PLAY CHORD OUTPUT	00-01	00H:Off, 01H:On	QR
20 0A 28		00 00 01		DRUMS PATTERN OUTPUT	00-01	00H:Off, 01H:On	QR

ADR(HEX)		SIZ(HEX)		PARAMETER	DATA(HEX)	DISCRIPTION	NOTE *1
MSB	LSB	MSB	LSB		RANGE		
PART INDIVIDUAL REAL TIME							
n= 0 - F : NORMAL PART NUMBER (PART1 - PART16) *PART1=RIGHT1, PART2=RIGHT2, PART3=LEFT, PART16=DRUMS							
20	1n 00	00	00 02	SOUND PROG. CNG	00-7F	0-127	QR *3
				& Bank select	00-FF	0-255	
20	1n 02	00	00 01	VOLUME	00-7F	0-127	QR
20	1n 03	00	00 01	SUSTAIN DEPTH	00-07	1-8	QR
20	1n 04	00	00 01	SUSTAIN	00-7F	00H:Off, 7FH:On	QR
20	1n 06	00	00 01	DIGITAL EFFECT	00-7F	00H:Off, 7FH:On	QR
20	1n 07	00	00 01	REVERB	00-7F	00H:Off, 7FH:On	QR
20	1n 08	00	00 01	PAN	00-7F	0-127	QR
20	1n 09	00	00 01	BEND RANGE	00-0C	0-12	QR
20	1n 0A	00	00 01	TUNING	00-80-FF	−128-0-+127	QR
20	1n 0B	00	00 01	KEY SHIFT	34-00-4C	−12-0-+12	QR
m= 0 - 6 : APC PART NUMBER (ACCOMP1, ACCOMP2, ACCOMP3, BASS, DRUMS, CHORD, R.BASS)							
20	2m 02	00	00 01	VOLUME	00-7F	0-127	QR
20	2m 07	00	00 01	REVERB	00-7F	00H:Off, 7FH:On	QR
PART INDIVIDUAL NON-REAL TIME							
20	1n 40	00	00 01	BASIC CHANNEL	00-0F	1-16	QR
20	1n 41	00	00 01	MIDI OCTAVE SHIFT	00-03-06	−3-0-+3	QR
20	1n 42	00	00 01	LOCAL OFF SETTING	00-01	00H:Local On, 01H:Local Off	QR
20	1n 43	00	00 01	MIDI OUT DISABLE	00-01	00H:MIDI Channel On, 01H:MIDI Channel Off	QR
20	2m 40	00	00 01	BASIC CHANNEL	00-0F	1-16	QR *4
20	2m 41	00	00 01	MIDI OCTAVE SHIFT	00-03-06	−3-0-+3	QR *4
20	2m 42	00	00 01	LOCAL OFF SETTING	00-01	00H:Off, 01H:On	QR *4
20	2m 43	00	00 01	MIDI OUT DISABLE	00-01	00H:Off, 01H:On	QR *4
PART SPECIAL REAL TIME							
20	60 00	00	00 02	RHYTHM PROG. CNG	00-7F	0-127	QRT *5
				& Bank Select	00-FF	0-255	
20	60 02	00	00 01	APC TYPE	00-03	00H:Off 01H:One Finger 02H:Fingered 03H:Pianist	QRT *6
20	60 03	00	00 01	APC MEMORY ON/OFF	00-01	00h:Off, 01H:On	QRT *6
20	60 08	00	00 01	SYNCHRO/BREAK	00-01	00h:Off, 01H:On	QRT *7
20	60 09	00	00 01	VARIATION	00-01	00h:Off, 01H:On	QRT *7
20	60 0A	00	00 01	INTRO 1	00-01	00h:Off, 01H:On	RT *7
20	60 0B	00	00 01	COUNT INTRO	00-01	00h:Off, 01H:On	RT *7
20	60 0C	00	00 01	FILL IN 1	00-01	00h:Off, 01H:On	RT *7
20	60 0D	00	00 01	FILL IN 2	00-01	00h:Off, 01H:On	RT *7
20	60 0E	00	00 01	ENDING 1	00-01	00h:Off, 01H:On	RT *7
20	60 21	00	00 01	MANUAL PERCUSSION VOLUME	00-7F	0-127	QRT

*1 Q: When Data Request is received, the relevant data is sent.
R: Data reception possible.
T: Data transmission possible.

*2 Invariably transmitted/received,regardless of REAL TIME SYSEX ENABLE and NON-REAL TIME SYSEX ENABLE settings.

*3 Corresponds to Technics numbers on the sound map.

*4 ROOT BASS PART cannot be set.

*5 Corresponds to Technics numbers on the rhythm map.

*6 Not transmitted/received when APC MODE ENABLE = 0 (disable) .

*7 Not transmitted/received when FILL IN, INTRO ENABLE = 0(disable) .

SOUND GENERAL PARAMETER

PARAMETER No. [HEX]	PARAMETER No. [DEC]	PARAMETER INTENTS	PARAMETER LIMIT [HEX]	PARAMETER LIMIT [DEC]	NOTE
SOUND NAME					
00	0	CHARACTER 0 (TOP)	20~7F	32~127	' ' (SPACE) ~']'
:	:	: :			
0C	12	CHARACTER 12 (END)	20~7F	32~127	
0D	13	CHARACTER 13 (DUMMY)	20~7F	32~127	0D(13) ~ 0F(15) : DUMMY DATA
:	:	: :			
0F	15	CHARACTER 15 (DUMMY)	20~7F	32~127	
GENERAL FLAG					
10	16	GLIDE ON/OFF	BP7	—	0(0) : OFF, 1(1) : ON
		SUSTAIN PEDAL MODE	BP2	—	0(0) : LONG RELEASE, 1(1) : KEY ON HOLD
CONTROLLERS					
11	17	WHEEL ON/OFF	BP7	—	0(0) : OFF, 1(1) : ON
		WHEEL SELECT	BP0~BP6	—	BP0: MODULATION DEPTH, BP1: VIBRATO DEPTH
OCTAVE SHIFT					
12	18	OCTAVE SHIFT	BP4~BP7	—	06(6) : −2oct, 07(7) : −1oct, 08(8) :0oct, 09(9) :+1oct, 0A(10) :+2oct
13	19	RIGHT OF SPLIT	BP4~BP7	—	06(6) : −2oct, 07(7) : −1oct, 08(8) :0oct, 09(9) :+1oct, 0A(10) :+2oct
		LEFT OF SPLIT	BP0~BP3	—	06(6) : −2oct, 07(7) : −1oct, 08(8) :0oct, 09(9) :+1oct, 0A(10) :+2oct
VIBRATO					
14	20	VOLUME MODULATION DEPTH	00~1E	0~30	—
15	21	PITCH MODULATION DEPTH	00~1E	0~30	—
16	22	SPEED	00~1E	0~30	—
17	23	DELAY	00~1E	0~30	—
AUTO BEND & TRILL					
18	24	ON/OFF	BP7~BP6	—	00(0) : OFF, 01(1) : ON, 10(2) : TOUCH ON
		MODE	BP5~BP4	—	00(0) : 1ST, 01(1) : 2ND, 10(2) : ALL, 11(3) : INVERSE
		TYPE	BP2	—	0(0) : BEND, 1(1) : TRILL
		PATTERN	BP1~BP0	—	TYPE=0(BEND) 00(0):UP, 01(1):UP-DOWN, 10(2):UP-DROP, 11(3):DELAY-UP TYPE=1(TRILL) 00(0):DOWN-UP, 01(1):UP-DOWN, 10(2):MELODY, 11(3):5-UP
19	25	DEPTH	E2~1E	−30~+30	—
1A	26	SPEED	00~1E	0~30	—
MODULATION					
1B	27	ON/OFF	BP6	—	0(0) : OFF, 1(1) : ON
		MODE	BP4~BP5	—	00(0) : 1ST, 01(1) : 2ND, 10(2) : ALL, 11(3) : INVERSE
		WAVE	BP0~BP1	—	00(0) : SINE
1C	28	DEPTH	91~7F	−127~+127	—
1D	29	SPEED	00~7F	0~127	—
DISTORTION					
1E	30	TYPE	BP7	—	0(0) : DISTORTION, 1(1) : GROWL
		ON/OFF	BP6	—	0(0) : OFF, 1(1) : ON
		DEPTH	00~32	0~50	—
1F	31	TOUCH DEPTH	00~32	0~50	—
REVERB DEPTH					
20	32	REVERB DEPTH	00~10	0~16	—
DIGITAL EFFECT					
21	33	ON/OFF	BP7	—	0(0) : OFF, 1(1) : ON
		PAN	BP6	—	0(0) : MONO, 1(1) : STEREO
		TYPE	00~0A	0~10	0(0) : CELESTE1, 01(1) : CELESTE2, 02(2) : CHORUS1, 03(3) : CHORUS2, 04(4) : ENSEMBLE1, 05(5) : ENSEMBLE2, 06(6) : TREMOLO, 07(7) : ROTARY, 08(8) : DELAY, 09(9) : REPEAT, 0A(10) : SOLO EFFECT
22	34	DIGITAL EFFECT VALUE 1	—	—	EACH DIGITAL EFFECT TYPE HAS DIFFIRENT VALUE. PLEASE LOOK AT DIGITAL EFFECT EXPLANATION.
23	35	DIGITAL EFFECT VALUE 2	—	—	
24	36	DIGITAL EFFECT VALUE 3	—	—	
25	37	DIGITAL EFFECT VALUE 4	—	—	
26	38	DIGITAL EFFECT VALUE 5	—	—	
27	39	DIGITAL EFFECT VALUE 6	—	—	
28	40	DIGITAL EFFECT VALUE 7	—	—	
29	41	DIGITAL EFFECT VALUE 8	—	—	

SOUND TONE PARAMETER

PARAMETER No. [HEX]	PARAMETER No. [DEC]	PARAMETER INTENTS	PARAMETER LIMIT [HEX]	PARAMETER LIMIT [DEC]	NOTE
1ST PARAMETER					
TONE FLAG					
2A	42	TONE ON/OFF	BP7	—	0(0) : OFF, 1(1) : ON
		VIBRATO ON/OFF	BP6	—	0(0) : OFF, 1(1) : ON
		PRIORITY	BP0	—	0(0) :LOW PRIORITY, 1(1) :HIGH PRIORITY
TONE					
2B	43	TTN SELECT	00~7F	0~127	—
2C	44	SUFFIX/ATTACK TONE FLAG	BP7	—	0(0) : SUFFIX TONE, 1(1) : ATTACK TONE
		SUFFIX/ATTACK SELECT			
		SUFFIX:	00~03	0~3	—
		ATTACK:	00~01	0~1	—
NOTE					
2D	45	KEY SHIFT	E8~18	−24~+24	—
2E	46	DETUNE	CE~32	−50~+50	—
LEVEL					
2F	47	VOLUME	00~7F	0~127	1 step 0.375 [dB]
30	48	VOLUME TOUCH DEPTH	CE~32	−50~+50	—
31	49	VOLUME TOUCH CURVE	FD~03	−3~+3	—
LEVEL KEY FOLLOW					
32	50	SLOPE	CE~32	−50~+50	—
33	51	LOW KEY LIMIT	00~7F	0~127	—
34	52	HIGH KEY LIMIT	00~7F	0~127	—
ENVELOPE					
35	53	ATTACK	00~32	0~50	—
36	54	DECAY 1	00~32	0~50	—
37	55	SUSTAIN 1	00~32	0~50	—
38	56	DECAY 2	00~32	0~50	—
39	57	SUSTAIN 2	00~32	0~50	—
3A	58	RELEASE	00~32	0~50	—
TOUCH ENVELOPE					
3B	59	TOUCH ATTACK	CE~32	−50~+50	—
ENVELOPE KEY FOLLOW					
3C	60	ATTACK SLOPE	CE~32	−50~+50	—
3D	61	ATTACK LOW KEY LIMIT	00~7F	0~127	—
3E	62	ATTACK HIGH KEY LIMIT	00~7F	0~127	—
3F	63	DECAY 1&2 SLOPE	CE~32	−50~+50	—
40	64	DECAY 1&2 LOW KEY LIMIT	00~7F	0~127	—
41	65	DECAY 1&2 HIGH KEY LIMIT	00~7F	0~127	—
42	66	RELEASE SLOPE	CE~32	−50~+50	—
43	67	RELEASE LOW KEY LIMIT	00~7F	0~127	—
44	68	RELEASE HIGH KEY LIMIT	00~7F	0~127	—
FILTER					
45	69	CUTOFF FREQENCY	00~7F	0~127	—
46	70	TOUCH DEPTH	00~32	0~50	—
47	71	TOUCH CURVE	FD~03	−3~+3	—
48	72	TYPE	FF~00	−1~0	FF (−1) :FILTER THROUGH
49	73	FILTER SLOPE	CE~32	−50~+50	—
4A	74	FILTER LOW KEY LIMIT	00~7F	0~127	—
4B	75	FILTER HIGH KEY LIMIT	00~7F	0~127	—
2ND PARAMETER					
4C~6D	76~109	SAME AS 1ST	—	—	—
3RD PARAMETER					
6E~8F	110~143	SAME AS 1ST	—	—	—

• Parameter No. is offset from each SOUND MEMORY top address.

MSB LSB

• SIZ = 00 00 01 (individual data) .

GENERAL MIDI SETTINGS

■ SOUND

P.CNG#	SOUND NAME		P.CNG#	SOUND NAME		P.CNG#	SOUND NAME		P.CNG#	SOUND NAME	
1	Piano	(1)	33	Acoustic Bass	(1)	65	Soprano Sax	(1*)	97	Ice Rain	(2)
2	Bright Piano	(1)	34	Bright E.Bass	(1)	66	Alto Sax	(1*)	98	Soundtrack	(2)
3	Elect. Grand	(1*)	35	Picked E.Bass	(1)	67	Breathy Tenor	(1*)	99	Synth Glocken	(2*)
4	Honky Tonk	(2*)	36	Fretless Bass	(2)	68	Baritone Sax	(1*)	100	Atmosphere	(2*)
5	E.Piano 1	(2)	37	Slap Bass 1	(1)	69	Oboe	(1)	101	Mist	(2*)
6	Modern E.P.1	(2*)	38	Slap Bass 2	(2)	70	English Horn	(1)	102	Goblins	(2*)
7	Harpsichord	(1*)	39	Wow Bass	(1)	71	Bassoon	(1)	103	Echo Drops	(2*)
8	Clavi	(1)	40	Synth Chopper	(1)	72	Jazz Clarinet	(1*)	104	Star Theme	(2*)
9	Celesta	(2*)	41	Violin	(1)	73	Piccolo	(1)	105	Sitar	(2)
10	Glockenspiel	(1*)	42	Viola	(1*)	74	Jazz Flute	(1*)	106	Banjo	(1*)
11	Music Box	(1)	43	Cello	(1)	75	Recorder	(1)	107	Shamisen	(1)
12	Vibraphone	(2)	44	Bowed Bass	(1)	76	Pan Flute	(1*)	108	Koto	(1)
13	Marimba	(2)	45	TremoloStrings	(2)	77	Blown Bottle	(2*)	109	Kalimba	(1*)
14	Xylophone	(1*)	46	Pizzicato	(2)	78	Shakuhachi	(1*)	110	Bagpipe	(1)
15	Tubular Bells	(2)	47	Harp	(1*)	79	Whistle	(1)	111	CountryFiddle	(2)
16	Dulcimer	(2*)	48	Timpani	(1)	80	Ocarina	(1)	112	Shanai	(2*)
17	Full Drawbars	(2)	49	Strings	(1)	81	Square Lead	(2)	113	Tinkle Bell	(2)
18	Jazz Organ	(2)	50	Slow Strings	(1)	82	Saw Lead	(2)	114	Agogo	(1)
19	Rock Organ	(2*)	51	SynthStrings1	(2*)	83	SynthCalliope	(2*)	115	Steel Drum	(1*)
20	Pipe Organ 1	(2)	52	SynthStrings2	(2*)	84	Chiffer Lead	(2*)	116	Wood Block	(1)
21	Harmonium	(2)	53	Vocal Ah	(1)	85	Charang	(2*)	117	Taiko Drum	(1)
22	Bri. Accordion	(2)	54	Vocal Doo	(2)	86	Air Vox	(2*)	118	Melodic Tom	(1)
23	Harmonica	(1)	55	Synth Vocal	(1*)	87	5th Wave	(2)	119	Synth Drum	(1)
24	Bandoneon	(2)	56	Orchestra Hit	(1)	88	Bass & Lead	(2)	120	ReverseCymbal	(1)
25	Bright Ac. Gtr	(1)	57	Trumpet	(1)	89	Fantasia	(2*)	121	Fret Noise	(1)
26	Folk Guitar	(1*)	58	Trombone	(1)	90	Mellow Ens.	(2*)	122	Breath Noise	(1)
27	Jazz Guitar 1	(1*)	59	Tuba	(1)	91	Polysynth	(2*)	123	Seashore	(1)
28	Bright Solid	(2*)	60	Mute Trumpet	(1)	92	Spacy Pad	(2)	124	Bird Tweet	(2)
29	Mute Guitar	(2*)	61	Open Fr.Horn	(1)	93	Crystal Ens.	(2*)	125	Telephone	(1)
30	Overdrive Gtr	(1*)	62	Brass	(1)	94	Metal Pad	(2)	126	Helicopter	(2)
31	DistortionGt1	(2*)	63	Syn.Brass Ens	(2)	95	Halo Pad	(2*)	127	Applause	(1)
32	Gtr Harmonics	(2*)	64	Synth Brass	(2*)	96	Sweep Pad	(2*)	128	Gun Shot	(1)

( )=Number of Tones

* =SUB Tone is used. Depending on the sound output status of the instrument, it may be generated.

■ Parts

MIDI CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PART	R1	R2	L	P4	P5	P6	P7	P8	P9	P16	P11	P12	P13	P14	P15	P10
SEQUENCER TRACK	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

■ Non-working Function

ONE TOUCH PLAY/MUSIC STYLE SELECT, MUSIC STYLE ARRANGER, PANEL MEMORY, TECHNI-CHORD, AUTO PLAY CHORD, MANUAL PERCUSSION, COMPOSER, SOUND ARRANGER, SOUND EDIT, EASY REC etc

MIDI PRESET DATA

		With APC											
Preset No.		1	2	3	4	5	6	7	8	9	10	11	12
Master ↓ Slave		PX Piano	Accordion type1	Accordion type2	Organ type1	Organ type2	Keyboard type1	Keyboard type2	PR Piano type1	PR Piano type2	Ext SEQ	AC1200 ↓ Sound Module	AC1200 ↓ Ext SEQ
		AC1200											
Basic channel	Right1	1	1	1	1	1	1	1	1	1	1	1	1
	Right2	2	4	4	3	3	2	2	3	2	2	2	2
	Left	3	2	off	2	2	4	3	2	3	3	3	3
	Part4	4	3	3	4	4	3	4	4	4	4	4	4
	Part5	5	5	5	off	off	off	off	off	off	5	5	5
	Part6	6	6	6	6	6	6	6	6	6	6	6	6
	Part7	7	7	7	7	7	7	7	7	7	7	7	7
	Part8	8	8	8	8	8	8	8	8	8	8	8	8
	Part9	9	9	9	9	9	9	9	9	9	9	9	9
	Part10	10	10	10	10	10	10	10	10	10	10	off	10
	Part11	11	11	11	11	11	11	11	11	11	11	11	11
	Part12	12	12	12	12	12	12	12	12	12	12	12	12
	Part13	13	13	13	13	13	13	13	13	13	13	off	13
	Part14	14	14	14	14	14	14	14	14	14	14	off	14
	Part15	15	15	15	off	off	off	15	off	15	off	off	off
	Part16	16	16	16	off	off	off	off	off	off	off	off	off
	Control	off	off	off	16	15	16	off	16	off	off	off	off
	Accomp1	off	off	off	off	off	off	off	off	off	off	13	off
	Accomp2	off	off	off	off	off	off	off	off	off	off	14	off
	Accomp3	off	off	off	off	off	off	off	off	off	off	15	off
	Bass	off	off	off	off	off	off	off	off	off	off	16	off
	Drums	off	off	off	15	16	15	16	15	16	16	10	16
	Chord	off	2	2	5	5	5	5	5	5	15	off	15
Octave	Part4	0	−1	−1	0	0	0	0	0	0	0	0	0
	Chord	0	+1	+1	0	0	0	0	0	0	0	0	0
	Others	0	0	0	0	0	0	0	0	0	0	0	0
Local all ch.		on	on	on	on	on	on	on	on	on	on	on	on
Program change		on	on	on	on	on	on	on	on	on	on	on	on
Bank select		on	on	on	on	on	on	on	on	on	on	on	on
Pitch Bend		on	on	on	on	on	on	on	on	on	on	on	on
Volume		on	on	on	on	on	on	on	on	on	on	on	on
Expression		on	on	on	on	on	on	on	on	on	on	on	on
Panpot		on	on	on	on	on	on	on	on	on	on	on	on
Sustain		on	on	on	on	on	on	on	on	on	on	on	on
Effect/Reverb		on	on	on	on	on	on	on	on	on	on	on	on
Modulation		on	on	on	on	on	on	on	on	on	on	on	on
Tuning		on	on	on	on	on	on	on	on	on	on	on	on
Bend range		on	on	on	on	on	on	on	on	on	on	on	on
Reset all cnt.		on	on	on	on	on	on	on	on	on	on	on	on
Realtime message		on	on	on	on	on	on	on	on	on	off	on	on
Clock		int	int	int	Ext	Ext	Ext	Ext	Ext	Ext	Ext	int	int
Right input mode (direct or conductor)		Cndct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct
APC input		on	on	on	on	on	on	on	on	on	on	off	on
Techni-chord out		off	off	off	off	off	off	off	off	off	off	off	off
Drums out		off	off	off	off	off	off	off	off	off	off	on	off
APC out		on	on	on	on	on	on	on	on	on	on	on	on
Panel mem control		off	off	off	off	off	off	off	off	off	off	off	off
P.cng to P.mem		off	off	off	off	off	off	off	off	off	off	off	off
Note only		off	off	off	off	off	off	off	off	off	off	off	off
Realtime sysex		off	on	on	off	off	off	on	off	off	on	on	on
Non real sysex		off	off	off	off	off	off	off	off	off	off	off	off
Intro/Fill		on	on	on	on	on	on	on	on	on	on	on	on
APC control		off	on	on	on	on	on	on	on	on	on	on	on
Transpose		off	off	off	off	off	off	off	off	off	off	off	off
Program cng mode		Norm	Norm	Norm	TECH	TECH	TECH	TECH	TECH	TECH	TECH	GM	TECH
Drums type		Norm	Norm	Norm	TECH	TECH	TECH	TECH	TECH	TECH	TECH	GM	TECH
Song select		on	on	on	on	on	on	on	on	on	on	on	on
Accordion mode		off	on	on	off	off	off	off	off	off	off	off	off

type1 : Setting used when the connected equipment does not have the MIDI PRESETS capability.

type2 : Setting used when the connected equipment has the MIDI PRESETS capability, and the MIDI PRESETS are specified both on this instrument and on the connected equipment.

MIDI PRESET DATA

		Without APC										
Preset No.		13	14	15	16	17	18	19	20	21	22	23
Master ↓ Slave		PX Piano → AC1200	Accordion → AC1200	Organ type1 → AC1200	Organ type2 → AC1200	Keyboard type1 → AC1200	Keyboard type2 → AC1200	PR Piano type1 → AC1200	PR Piano type2 → AC1200	Ext SEQ → AC1200	AC1200 → Sound Module	AC1200 → Ext SEQ
Basic channel	Right1	1	1	1	1	1	1	1	1	1	1	1
	Right2	2	4	3	3	2	2	3	2	2	2	2
	Left	3	2	2	2	4	3	2	3	3	3	3
	Part4	4	3	4	4	3	4	4	4	4	4	4
	Part5	5	5	5	5	5	5	5	5	5	5	5
	Part6	6	6	6	6	6	6	6	6	6	6	6
	Part7	7	7	7	7	7	7	7	7	7	7	7
	Part8	8	8	8	8	8	8	8	8	8	8	8
	Part9	9	9	9	9	9	9	9	9	9	9	9
	Part10	10	10	10	10	10	10	10	10	10	10	10
	Part11	11	11	11	11	11	11	11	11	11	11	11
	Part12	12	12	12	12	12	12	12	12	12	12	12
	Part13	13	13	13	13	13	13	13	13	13	13	13
	Part14	14	14	14	14	14	14	14	14	14	14	14
	Part15	15	15	off	off	off	15	off	15	15	15	15
	Part16	16	16	15	16	15	16	15	16	16	16	16
	Control	off	off	16	15	16	off	16	off	off	off	off
	Accomp1	off	off	off	off	off	off	off	off	off	off	off
	Accomp2	off	off	off	off	off	off	off	off	off	off	off
	Accomp3	off	off	off	off	off	off	off	off	off	off	off
	Bass	off	off	off	off	off	off	off	off	off	off	off
	Drums	off	off	off	off	off	off	off	off	off	off	off
	Chord	off	off	off	off	off	off	off	off	off	off	off
Octave	Part4	0	−1	0	0	0	0	0	0	0	0	0
	Chord	0	0	0	0	0	0	0	0	0	0	0
	Others	0	0	0	0	0	0	0	0	0	0	0
Local all ch.		on	on	on	on	on	on	on	on	on	on	on
Program change		on	on	on	on	on	on	on	on	on	on	on
Bank select		on	on	on	on	on	on	on	on	on	on	on
Pitch Bend		on	on	on	on	on	on	on	on	on	on	on
Volume		on	on	on	on	on	on	on	on	on	on	on
Expression		on	on	on	on	on	on	on	on	on	on	on
Panpot		on	on	on	on	on	on	on	on	on	on	on
Sustain		on	on	on	on	on	on	on	on	on	on	on
Effect/Reverb		on	on	on	on	on	on	on	on	on	on	on
Modulation		on	on	on	on	on	on	on	on	on	on	on
Tuning		on	on	on	on	on	on	on	on	on	on	on
Bend range		on	on	on	on	on	on	on	on	on	on	on
Reset all cnt.		on	on	on	on	on	on	on	on	on	on	on
Realtime message		on	on	on	on	on	on	on	on	off	on	on
Clock		int	int	ixt	ixt	ixt	ixt	ixt	ixt	Ext	int	int
Right input mode (direct or conductor)		Cndct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct	Dirct
APC input		off	off	off	off	off	off	off	off	off	off	off
Techni-chord out		off	off	off	off	off	off	off	off	off	off	off
Drums out		off	off	off	off	off	off	off	off	off	off	off
APC out		off	off	off	off	off	off	off	off	off	off	off
Panel mem control		off	off	off	off	off	off	off	off	off	off	off
P.cng to P.mem		off	off	off	off	off	off	off	off	off	off	off
Note only		off	off	off	off	off	off	off	off	off	off	off
Realtime sysex		off	on	off	off	off	on	off	off	on	on	on
Non real sysex		off	off	off	off	off	off	off	off	off	off	off
Intro/Fill		on	on	on	on	on	on	on	on	on	on	on
APC control		off	off	off	off	off	off	off	off	off	off	on
Transpose		off	off	off	off	off	off	off	off	off	off	off
Program cng mode		Norm	Norm	TECH	TECH	TECH	TECH	TECH	TECH	TECH	GM	TECH
Drums type		Norm	Norm	TECH	TECH	TECH	TECH	TECH	TECH	TECH	GM	TECH
Song select		on	on	on	on	on	on	on	on	on	on	on
Accordion mode		off	on	off	off	off	off	off	off	off	off	off

type1 : Setting used when the connected equipment does not have the MIDI PRESETS capability.

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