



*Sk1*

*Sk2*

*Sk1-73*

*Sk1-88*

**APPENDIX**



## APPENDIX

### ◆ EXTRA VOICE Instrument List

Group	Number	Description
0 A. Piano	0 Stereo Grand Pf.	Concert grand piano. The maximum sound effect is obtained when connected stereo.
0 A. Piano	1 Bright Stereo Grand Pf.	
0 A. Piano	2 Mono Grand Pf.	The mono version of above. Use this if connection is monaural. The clumsy "omission" due to the interfering right and left channels is avoided.
0 A. Piano	3 Bright Mono Grand Pf.	
0 A. Piano	4 Electric Grand Pf.	Electric grand piano which picks up the string vibration by hammer action. The following "EQ" means equalized edition.
0 A. Piano	5 Electric Grand Pf. EQ	
0 A. Piano	6 Stereo Grand Pf. Pad	The mellow "Pad" sound added on Stereo Grand Pf.
0 A. Piano	7 Electric Grand Pf. Pad	The mellow "Pad" sound added on Electric Grand Pf.
2 E. Piano	0 E. Piano Rd1	Tone-bar electric piano (first edition). The following "Pan", "Phase", "OD" are using each effect.
2 E. Piano	1 EP Rd1 Pan	
2 E. Piano	2 EP Rd1 Phase	
2 E. Piano	3 EP Rd1 OD	
2 E. Piano	4 E. Piano Rd2	Tone-bar electric piano (second edition). The following "Pan", "Phase", "OD" are using each effect.
2 E. Piano	5 EP Rd2 Pan	
2 E. Piano	6 EP Rd2 Phase	
2 E. Piano	7 EP Rd2 OD	
2 E. Piano	8 E. Piano FM	FM synth electric piano. The following "Chorus" is using chorus effect.
2 E. Piano	9 EP FM Chorus	
2 E. Piano	10 E. Piano Wur	Reed-driven electric piano. The following "OD" is using overdrive effect.
2 E. Piano	11 EP Wur OD	
3 Keyboard	0 Harpsi 8'	Harpsichord. "8'" is normal, "8' 4'" is in octave unison, "Lute" means treble damped.
3 Keyboard	1 Harpsi 8' 4'	
3 Keyboard	2 Harpsi 8' Lute	
3 Keyboard	3 Clav. AC	Electric clavichord. The following "AC", "AD", "BC", "BD" means each pick-up selector.
3 Keyboard	4 Clav. AD	
3 Keyboard	5 Clav. BC	
3 Keyboard	6 Clav. BD	
3 Keyboard	7 Clav. AC Wah	The sound "Clav. AC" - "Clav. BD" with "Touch-Wah" effect. Playing harder, the filter opens wider.
3 Keyboard	8 Clav. AD Wah	
3 Keyboard	9 Clav. BC Wah	
3 Keyboard	10 Clav. BD Wah	
3 Keyboard	11 Clav. AC Cry	The sound "Clav. AC" - "Clav. BD" with "Pedal Wah" effect. If the expression pedal is connected, you can get the wah effect with pedal operation.
3 Keyboard	12 Clav. AD Cry	
3 Keyboard	13 Clav. BC Cry	
3 Keyboard	14 Clav. BD Cry	
3 Keyboard	15 Lucy	Simulates an electronic organ, that heard intro. of "Lucy In The...". The following "Tremolo" is added its effect. The effective method is playing arpeggio with slowly and staccato.
3 Keyboard	16 Lucy Tremolo	
3 Keyboard	17 Clavn.	Simulates the electronic violin clavier in 1950's.
3 Keyboard	18 Don't Run	The reed sound like "Walk, Don't...".
3 Keyboard	19 Telstar	Simulates the lead sound what used in "Telstar".
3 Keyboard	20 Blue Star	Simulates an electronic organ, like "Blue Star".
3 Keyboard	21 Accordion A120 1/0/0	Variations of Suzuki accordion A-120.
3 Keyboard	22 Accordion A120 1/1/0	
3 Keyboard	23 Accordion A120 1/0/1	
3 Keyboard	24 Accordion A120 1/1/1	
3 Keyboard	25 Accordion A120 1/2/0	
3 Keyboard	26 Accordion A120 1/2/1	
3 Keyboard	27 Accordion A120 0/1/0	
3 Keyboard	28 Accordion A120 0/2/0	
3 Keyboard	29 Accordion A120 0/1/1	
3 Keyboard	30 Accordion A120 0/2/1	
3 Keyboard	31 Accordion A120 0/0/1	
3 Keyboard	32 Accordion A120 OD	Overdriven accordion.
3 Keyboard	33 Acdn Mellow 0/1/0	Mellow accordion. On "MMM", you can adjust the beating by the Chorus - Depth of the Extra Voice effects.
3 Keyboard	34 Acdn Mellow 0/2/0	
3 Keyboard	35 Acdn Mellow MMM	
3 Keyboard	36 Acdn Bright 0/1/0	Bright accordion. On "MMM", you can adjust the beating by the Chorus - Depth of the Extra Voice effects.
3 Keyboard	37 Acdn Bright 0/2/0	
3 Keyboard	38 Acdn Bright MMM	
4 Wind	0 Trumpet Straight	The instruments following "Wind" group sounds simply. They does not work Prochord function.
4 Wind	1 Trumpet Vibrato	
4 Wind	2 Trumpet Muted	Trumpet. The following "Straight", "Vibrato", "Muted" means each playing method.
4 Wind	3 Trombone Straight	Trombone. The following "Straight", "Muted" means each playing method.
4 Wind	4 Trombone Muted	

◆ EXTRA VOICE Instrument List (cont.)

Group	Number	Description
4 Wind	5 Flute Vibrato	Flute with vibrato playing method. The "attack" will heard by hard- <del>stroke</del> .
4 Wind	6 Al. Sax Straight	Alto Saxophone. The following "Straight", "Vibrato" means each method.
4 Wind	7 Al. Sax Vibrato	
4 Wind	8 Tn. Sax Straight	Tenor Saxophone. The following "Straight", "Vibrato" means each method.
4 Wind	9 Tn. Sax Vibrato	
4 Wind	10 Ba. Sax Straight	Baritone Saxophone.
4 Wind	11 Tp + Tb Straight	Trumpet and trombone plays in octave unison. The following "Straight", "Vibrato" means each method.
4 Wind	12 Tp + Tb Vibrato	
4 Wind	13 Tp + Tb Muted	
4 Wind	14 Flute Pcd	The Flute section. A melody with harmony is obtained if a single note is played on the UPPER keyboard holding down the chord on the LOWER keyboard.
4 Wind	15 BigBand Sax Pcd	Only the Saxophone family formation. Alto sax as the top note, tenor sax, baritone sax as the harmony sound if a single note is played on the UPPER keyboard holding down the chord on the LOWER keyboard.
4 Wind	16 BigBand Pcd	The typical big brass band formation. Trumpet as the top note, alto sax, trombone and tenor sax as the harmony sound if a single note is played on the UPPER keyboard holding down the chord on the LOWER keyboard.
4 Wind	17 BigBand FD Pcd	
4 Wind	18 Quartet 1 Pcd	The instrumentation is same as "Big Band Pcd", but the voicing of harmony is different.
4 Wind	19 Quartet 2 Pcd	The instrumentation is same as "Big Band Pcd", but the voicing of harmony is different.
4 Wind	20 Jazz Brass Pcd	Only the brass instruments' formation. Trumpet as the top note, trumpet, trombone as the harmony sound if a single note is played on the UPPER keyboard holding down the chord on the LOWER keyboard. "FD" means fall-down when the played with fortissimo and released.
4 Wind	21 Jazz Brass FD Pcd	
4 Wind	22 Mute Combo 1 Pcd	The brass combo with muted trumpets and straight trombone. Play single note on the UPPER with playing chord on the LOWER.
4 Wind	23 Mute Combo 2 Pcd	The brass combo with muted trumpets and muted trombone. Play single note on the UPPER with playing chord on the LOWER.
5 Other	0 Glockenspiel	Orchestra bells or glockenspiel, effective if mixed with the Drawbar sounds.
5 Other	1 Vibraphone	Hard hit vibraphone. Also effective if mixed with the Drawbar sounds.
5 Other	2 Solly Strings	Strings keyboard usually later 1970's. The following "o" means in octave unison, "Long" means longer release rate.
5 Other	3 Solly Strings o	
5 Other	4 Solly Strings Long	
5 Other	5 Solly Strings o Long	
5 Other	6 Syn. Strings 1	Simulates the strings keyboard via multi-effects. The following "o" means in octave unison.
5 Other	7 Syn. Strings 1 o	
5 Other	8 Syn. Strings 2	Strings sounds by synthesizer. They simulates that Hammond SX/CX series.
5 Other	9 Syn. Strings 2 o	
5 Other	10 Syn. Strings 3	Strings sound by synthesizer. It is used 3 sawtooth waveform.
5 Other	11 Sweep Pad	Synth pad with slowly filter sweep. In addition, "Slice" affects the deep tremolo effect.
5 Other	12 Slice Pad	
5 Other	13 H. Bell Pad	Synth pad with hand bells.
5 Other	14 Glock. Pad	Synth pad with glockenspiel.
5 Other	15 Square Lead	Synth lead made of square waveform.
5 Other	16 Square Mellow	Synth lead, mellow than "Square Lead".
5 Other	17 Saw Lead	Synth lead made of sawtooth waveform. The following "Duo Pcd" adds Prochord function, you can get the "twin-lead" effect by playing single note on the Upper with playing chord on the Lower.
5 Other	18 Saw Duo Pcd	
5 Other	19 P. O. Love	In octave unison of above "Saw Lead". It is usually used not only single note but also on chord like intro. of "The Power Of...".
5 Other	20 Funny Lead	Simulates the "green button" of an Japanese electronic organ in later 1970's. The following "Duo Pcd" adds Prochord function, you can get the "twin-lead" effect by playing single note on the Upper with playing chord on the Lower.
5 Other	21 Funny Duo Pcd	
5 Other	22 Syn. Harp	Synth orchestral harp.
6 Library	0 VxJ Bright	A transistor organ in 1960's, usually used together with "Vx" type in Organ section. This model has tablet switches instead of Drawbars, and they only changes the brightness of its tone. At "Bright" brightest, the tone becomes mellow along "Brass", "Mellow", and "Flute".
6 Library	1 VxJ Brass	
6 Library	2 VxJ Mellow	
6 Library	3 VxJ Flute	
6 Library	4 VxJV Bright	"Vxj" with vibrato.
6 Library	5 VxJV Brass	
6 Library	6 VxJV Mellow	
6 Library	7 VxJV Flute	

Example Select Group 2, Number 3 via NRPN.....Bx 63 06 62 50 06 02 26 00 63 07 62 50 06 03 26 00 (x = Control channel)

◆ Patch Parameter List

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Patch Load
		LSB (62)	MSB (63)	MSB to LSB					
<b>Name</b>	15 Characters	--	--	01	00	00	0F	7 bit ASCII	always
<b>Internal Zone</b>	Manual Bass	07	00	00	07	00	01	00, 01 (Off/On)	INT
	Manual Bass Mode	07	01	00	07	01	01	00 - 02 (Lower, Chord, Poly)	
	Manual Bass Range Hi	07	02	00	07	02	01	24 - 60 (MIDI note number)	
	Great To Pedal	07	03	00	07	03	01	00, 01 (Off/On)	
	G to P Range Hi	07	04	00	07	04	01	24 - 3C (MIDI note number)	
	Split	07	05	00	07	05	01	00, 01 (Off/On)	
	Split Point	07	06	00	07	06	01	24 - 60 (MIDI note number)	
	Key Octave Upper 1	07	07	00	07	07	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Octave Lower 1	07	08	00	07	08	01	3E - 40 - 42 (-2 - 0 - +2)	
	Glide Length	07	09	00	07	09	01	00 - 18 (0 - 24 semitones)	
	Glide Time	07	0A	00	07	0A	01	00 - 31 (0.1 - 5.0 seconds)	
	Glide Amp	07	0B	00	07	0B	01	00, 01 (Off/On)	
	Key Octave Upper 2	07	0C	00	07	0C	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Octave Lower 2	07	0D	00	07	0D	01	3E - 40 - 42 (-2 - 0 - +2)	
<b>External Zone</b>	MIDI Channel	4n	00	00	4n	00	01	00 - 0F (1 - 16)	EXT
	Switch	4n	01	00	4n	01	01	00, 01 (Off/On)	
	Allocate	4n	02	00	4n	02	01	00 - 03 00: Off 01: Upper 02: Lower 03: Pedal	
	Key Range Lo	4n	03	00	4n	03	01	24 - 60 (MIDI note number)	
	Key Range Hi	4n	04	00	4n	04	01	24 - 60 (MIDI note number)	
	Bank Select MSB	4n	05	00	4n	05	01	00 - 7F	
	Bank Select LSB	4n	06	00	4n	06	01	00 - 7F	
	Program Change	4n	07	00	4n	07	01	00 - 7F	
	Octave Shift	4n	08	00	4n	08	01	3E - 40 - 42 (-2 - 0 - +2)	
	Volume	4n	09	00	4n	09	01	00 - 7F	
	Pan	4n	0A	00	4n	0A	01	00 - 40 - 7F (L64 - C - R63)	
	Velocity	4n	0B	00	4n	0B	01	00 - 04 (Off, Normal - Easy)	
	Expression Minimum	4n	0C	00	4n	0C	01	00 - 3F (0 - 63)	
	Expression Maximum	4n	0D	00	4n	0D	01	40 - 7F (64 - 127)	
	Expression CC#	4n	0E	00	4n	0E	01	00, 01 (7, 11)	
	Tx. Damper On	4n	0F	00	4n	0F	01	00, 01 (Off/On)	
<b>Extra Voice</b>	Switch Upper	50	00	00	50	00	01	00, 01 (Off/On)	EXV
	Switch Lower	50	01	00	50	01	01	00, 01 (Off/On)	
	Switch Solo	50	02	00	50	02	01	00, 01 (Off/On)	
	Octerve Shift	50	03	00	50	03	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Range Lo	50	04	00	50	04	01	24 - 60 (MIDI note number)	
	Key Range Hi	50	05	00	50	05	01	24 - 60 (MIDI note number)	
	Inst. Group	50	06	00	50	06	01	00 - 06 (1 - 7)	
	Inst. Number	50	07	00	50	07	01	00 - 7F (1 - 128)	
	Volume	50	08	00	50	08	01	00 - 7F (0 - 127)	
	Velocity	50	09	00	50	09	01	00 - 04 (Off, Normal - Easy)	
	Expression	50	0A	00	50	0A	01	00, 01 (Off/On)	

**Example** "n" means Zone number. 1=0, 2=1, 3=2  
 Turn Extra Voice On via NRPN .....Bx 62 50 63 00 06 01 (x = Upper channel)  
 Turn Extra Voice On via System Exclusive .....F0 55 dd 10 1F 13 00 50 00 01 F7 (dd = Device ID)

◆ Patch Parameter List (cont.)

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Patch Load
		LSB (62)	MSB (63)	MSB to LSB					
Percussion	Second On	08	00	00	08	00	01	00, 01 (Off/On)	DRAWB
	Third On	08	01	00	08	01	01	00, 01 (Off/On)	
	Decay Fast	08	02	00	08	02	01	00, 01 (Off/On)	
	Volume Soft	08	03	00	08	03	01	00, 01 (Off/On)	
	Level On Soft	08	04	00	08	04	01	00 - 0F (1 - 16)	
	Level On Normal	08	05	00	08	05	01	00 - 0F (1 - 16)	
	Decay Fast	08	06	00	08	06	01	00 - 09 (1 - 9, Cont)	
	Decay Slow	08	07	00	08	07	01	00 - 09 (1 - 9, Cont)	
	Touch	08	08	00	08	08	01	00, 01 (Off/On)	
	Velocity	08	09	00	08	09	01	00, 01 (Off/On)	
	Key Track	08	0A	00	08	0A	01	00, 01 (Off/On)	
	Drawbar 1' Cancel	08	0B	00	08	0B	01	00, 01 (Off/On)	
	Drawbar Level	08	0C	00	08	0C	01	00, 01 (0, -3dB)	
Lower & Upper Organ section	Organ Type	20	00	00	20	00	01	00 - 05 00: B-Type 1 01: B-Type 2 02: Mellow 03: Vx 04: Farf 05: Pipe	DRAWB
	Key Click Attack	20	01	00	20	01	01	00 - 0F (0 - 15)	
	Key Click Release	20	02	00	20	02	01	00 - 0F (0 - 15)	
	Fold Back Lo	20	03	00	20	03	01	00 - 0C (C1 - C2)	
	Fold Back Hi	20	04	00	20	04	01	2B - 30 (G4 - C5)	
	Key Click LPF	20	05	00	20	05	01	00 - 7F (0 - 127)	
	Custom TW B-Type 1	20	06	00	20	06	01	00 - 04 (1 - 5)	
	Custom TW B-Type 2	20	07	00	20	07	01	00 - 04 (1 - 5)	
	Custom TW Mellow	20	08	00	20	08	01	00 - 04 (1 - 5)	
	Octerve Shift Upper	20	09	00	20	09	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Range Lo Upper	20	0A	00	20	0A	01	24 - 60 (MIDI note number)	
	Key Range Hi Upper	20	0B	00	20	0B	01	24 - 60 (MIDI note number)	
	Octerve Shift Lower	20	0C	00	20	0C	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Range Lo Lower	20	0D	00	20	0D	01	24 - 60 (MIDI note number)	
Key Range Hi Lower	20	0E	00	20	0E	01	24 - 60 (MIDI note number)		
Upper Registration	16'	--	--	01	01	00	01	00 - 08 (0 - 8)	UPPER
	5 1/3'	--	--	01	01	01	01	00 - 08 (0 - 8)	
	8'	--	--	01	01	02	01	00 - 08 (0 - 8)	
	4'	--	--	01	01	03	01	00 - 08 (0 - 8)	
	2 2/3'	--	--	01	01	04	01	00 - 08 (0 - 8)	
	2'	--	--	01	01	05	01	00 - 08 (0 - 8)	
	1 3/5'	--	--	01	01	06	01	00 - 08 (0 - 8)	
	1 1/3'	--	--	01	01	07	01	00 - 08 (0 - 8)	
	1'	--	--	01	01	08	01	00 - 08 (0 - 8)	
Lower Registration	16	--	--	01	02	00	01	00 - 08 (0 - 8)	L/P
	5 1/3'	--	--	01	02	01	01	00 - 08 (0 - 8)	
	8'	--	--	01	02	02	01	00 - 08 (0 - 8)	
	4'	--	--	01	02	03	01	00 - 08 (0 - 8)	
	2 2/3'	--	--	01	02	04	01	00 - 08 (0 - 8)	
	2'	--	--	01	02	05	01	00 - 08 (0 - 8)	
	1 3/5'	--	--	01	02	06	01	00 - 08 (0 - 8)	
	1 1/3'	--	--	01	02	07	01	00 - 08 (0 - 8)	
	1'	--	--	01	02	08	01	00 - 08 (0 - 8)	

◆ Global Parameter List

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Default	Description
		LSB (62)	MSB (63)	MSB to LSB						
Tune	Transpose	01	00	00	01	00	01	3A - 40 - 46 (-6 - 0 - 6)	40	0
	Master Tune	01	02	00	01	02	02	032E - 0338 - 0342 (430 - 440 - 450)	0338	440
Expression	Source	02	00	00	02	00	01	00 - 01 00: Pedal (normal) 01: Pedal (reverse) 02: MIDI	00	Pedal (normal)
	Min. Level	02	08	00	02	08	01	00 - 09 (Off, -40dB - 0dB)	06	-35dB
	Min. Limit LF	02	09	00	02	09	01	00 - 08	05	-20dB
	Min. Limit HF	02	0A	00	02	0A	01	(Off, -40dB - -5dB)	03	-30dB
Foot Switch	FS Device	03	00	00	03	00	01	00 - 01 (Foot Sw., Leslie Sw.)	00	Foot Sw.
	FS Tip Mode	03	01	00	03	01	01	00 - 0B 00: Off 01: Leslie Fast (alternate) 02: Leslie Fast (momentarily) 03: Leslie Fast (tri-state) 04: Glide 05: Patch Fwd. 06: Patch Back 07: Favorite Fwd. 08: Favorite Back 09: Spring Shock 0A: Delay Time 0B: Music Start 0C: Manual Bass 0D - 25: Bass 1C - 3C	01	Leslie Fast (alternate)
	FS Ring Mode	03	02	00	03	02	01	same as FS Tip mode	01	Leslie Fast (alternate)
	Damper Org. Upper	03	03	00	03	03	01	00, 01 (Off/On)	01	On
	Damper Org. Lower	03	04	00	03	04	01	00, 01 (Off/On)	01	On
	Damper Org. Pedal	03	05	00	03	05	01	00, 01 (Off/On)	01	On
	Damper Extra Voice	03	06	00	03	06	01	00, 01 (Off/On)	01	On
	Octave Down Mode	03	07	00	03	07	01	00 - 05 00: Origin 01: Leslie Stop 02: Leslie Fast 03: Vibrato Upper 04: Vibrato Lower 05: Glide 06: Spring Shock 07: Delay Time	00	Origin
Panel Switch	Octave Up Mode	03	08	00	03	08	01	same as above	00	Origin
	Octave Lower Mode	03	09	00	03	09	01	same as above	00	Origin
Patch Load	Drawbar Regist. Upper	60	00	00	60	00	01	00, 01 (Off/On)	01	On
	Drawbar Regist. L/P	60	01	00	60	01	01	00, 01 (Off/On)	01	On
	Drawbar Parameters (DRAWB)	60	02	00	60	02	01	00, 01 (Off/On)	01	On
	Extra Voice (EXV)	60	03	00	60	03	01	00, 01 (Off/On)	01	On
	Internal Zone (INT)	60	04	00	60	04	01	00, 01 (Off/On)	01	On
	External Zone (EXT)	60	05	00	60	05	01	00, 01 (Off/On)	01	On
	Organ Effect (DRAWB)	60	06	00	60	06	01	00, 01 (Off/On)	01	On
	Extra Voice Effect (EXV)	60	07	00	60	07	01	00, 01 (Off/On)	01	On
Reverb (REV)	60	08	00	60	08	01	00, 01 (Off/On)	01	On	
Favorites	Overwrite Patch	04	00	00	04	00	01	00, 01 (Off/On)	00	Off
Display	Short Cut	--	--	--	--	--	--	0, 1, 2s, No		
	Time Out	--	--	--	--	--	--	4, 8, 16s, No		
	Pop Up	--	--	--	--	--	--	No, 0.5, 1, 2s		
Master EQ	Bass Freq.	02	0F	00	02	0F	01	00 - 0A (20 - 200Hz)	07	100Hz
	Treble Freq.	02	10	00	02	10	01	00 - 03 (4.0k - 8.0kHz)	03	8.0kHz

**Example** Set Transpose at 0 via NRPN.....Bx 62 01 63 00 06 40 (x = Upper channel)  
 Set Transpose at 0 via System Exclusive.....F0 55 dd 10 1D 13 00 01 00 40 F7 (dd = Device ID)

### ◆ Leslie Parameter List

Category	Parameter	NRPN (OR)		NRPN (21)		SysEx Address			SysEx Length	Data
		LSB (62)	MSB (63)	LSB (62)	MSB (63)	MSB to LSB				
Cabinet	Name	--	--	--	--	03	00	00	0A	(10 Characters)
	Slow Speed Horn	06	00	7F	00	00	06	00	01	
	Slow Speed Bass	06	01	7F	01	00	06	01	01	
	Fast Speed Horn	06	02	7F	02	00	06	02	01	
	Fast Speed Bass	06	03	7F	03	00	06	03	01	
	Rise Time Horn	06	04	7F	04	00	06	04	01	
	Rise Time Bass	06	05	7F	05	00	06	05	01	
	Fall Time Horn	06	06	7F	06	00	06	06	01	
	Fall Time Bass	06	07	7F	07	00	06	07	01	
	Brake Time Horn	06	08	7F	08	00	06	08	01	
	Brake Time Bass	06	09	7F	09	00	06	09	01	
	Level Horn	06	0A	--	--	00	06	0A	01	
	Level Bass	06	0B	--	--	00	06	0B	01	
	Mic. Angle	06	0C	7F	0A	00	06	0C	01	
	Mic. Distance	06	0D	7F	0B	00	06	0D	01	
	Horn Character	06	0E	7F	0D	00	06	0E	01	
	Amplifier	06	0F	--	--	00	06	0F	01	
Speaker	06	10	--	--	00	06	10	01		

NRPN OR/21 is switched automatically by Leslie speaker is disconnected/connected.

### ◆ System Parameter List

Category	Parameter	Data Range	Default Value
MIDI	MIDI IN	Lower, Pedal, Low+Ped, Sequence, ExVoice	Sequence
	Local Control	Off/On	On
	TRx. NRPN	Off/On	On
	Tx. Leslie Param.	OR/21	SK
	Rx. Dump	Off/On	On
	TRx. Prog. Change	Off/On	On
	TRx. Drawbar Regi.	Off/On	On
	Tx. Ext. Zone	Off/On	Off
	TRx. Channel Upper	1 - 16, Off	1
	TRx. Channel Lower	1 - 16, Off	2
	TRx. Channel Pedal	1 - 16, Off	3
	Device ID	1 - 32	1
Ext. Leslie	Channel(s)	1, 3	3



### ◆ Drawbar Data List 1

#### Control Number

Upper: 50H(80)

Lower: 51H(81)

Pedal: 52H(82)

Level	Upper / Lower									Pedal	
	16'	5 1/3'	8'	4'	2 2/3'	2'	1 3/5'	1 1/3'	1'	16'	8'
0	00H(0)	09H(9)	12H(18)	1BH(27)	24H(36)	2DH(45)	36H(54)	3FH(63)	48H(72)	00H(0)	09H(9)
1	01H(1)	0AH(10)	13H(19)	1CH(28)	25H(37)	2EH(46)	37H(55)	40H(64)	49H(73)	01H(1)	0AH(10)
2	02H(2)	0BH(11)	14H(20)	1DH(29)	26H(38)	2FH(47)	38H(56)	41H(65)	4AH(74)	02H(2)	0BH(11)
3	03H(3)	0CH(12)	15H(21)	1EH(30)	27H(39)	30H(48)	39H(57)	42H(66)	4BH(75)	03H(3)	0CH(12)
4	04H(4)	0DH(13)	16H(22)	1FH(31)	28H(40)	31H(49)	3AH(58)	43H(67)	4CH(76)	04H(4)	0DH(13)
5	05H(5)	0EH(14)	17H(23)	20H(32)	29H(41)	32H(50)	3BH(59)	44H(68)	4DH(77)	05H(5)	0EH(14)
6	06H(6)	0FH(15)	18H(24)	21H(33)	2AH(42)	33H(51)	3CH(60)	45H(69)	4EH(78)	06H(6)	0FH(15)
7	07H(7)	10H(16)	19H(25)	22H(34)	2BH(43)	34H(52)	3DH(61)	46H(70)	4FH(79)	07H(7)	10H(16)
8	08H(8)	11H(17)	1AH(26)	23H(35)	2CH(44)	35H(53)	3EH(62)	47H(71)	50H(80)	08H(8)	11H(17)

ex: Set Lower 8' to level 7 via MIDI... Bx 51 19 (x=Lower Channel)

### ◆ Drawbar Data List 2

Part	Control Number								
	16'	5 1/3'	8'	4'	2 2/3'	2'	1 3/5'	1 1/3'	1'
Upper	0CH(12)	0DH(13)	0EH(14)	0FH(15)	10H(16)	11H(17)	12H(18)	13H(19)	14H(20)
Lower	15H(21)	16H(22)	17H(23)	18H(24)	19H(25)	1AH(26)	1BH(27)	1CH(28)	1DH(29)
Pedal	21H(33)	-	23H(35)	-	-	-	-	-	-

  

Value	Level								
	0	1	2	3	4	5	6	7	8
	00 - 0FH (0 - 15)	10 - 1FH (16 - 31)	20 - 2FH (32 - 47)	30 - 3FH (48 - 63)	40 - 4FH (64 - 79)	50 - 5FH (80 - 95)	60 - 6FH (96 - 111)	70 - 7EH (112-126)	7FH (127)

ex: Set Lower 8' to level 7 via MIDI... Bx 17 70 (x=Upper Channel)

## ◆ MIDI Implementation Chart

Stage Keyboard  
Model: SK1, SK2

Date: 8-Jul-2010  
Version: 1.0

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	*1 1 - 16	*1 1 - 16	*1: Upper = 1, Lower = 2, Pedal = 3
Mode	Default Messages Altered	3 X *****	3 X X	
Note Number	: True Voice	12 - 120 *****	36 - 96 36 - 96	
Velocity	Note ON Note OFF	O X	O X	
After Touch	Key's Ch's	X X	X X	
Pitch Bend		X	X	
Control Change	0, 32	O	O	Bank Select MSB, LSB Modulation Data Entry MSB, LSB Volume Pan Expression Drawbar Reg. Upper Drawbar Reg. Lower Drawbar Reg. Pedal Spring Shock Glide Damper NRPN MSB, LSB
	1	X	X	
	6, 38	O	O	
	7	O	X	
	10	O	X	
	11	O	O	
	12 - 20, 80	O	O	
	21 - 29, 81	O	O	
	33, 35, 82	O	O	
	48	O	O	
49	O	O		
64	O	O		
98, 99	O	O		
Program Change	: True #	O 0 - 127	O 0 - 81	
System Exclusive		O	O	
System Common	: Song Position : Song Select : Tune	X X X	X X X	
System Real Time	: Clock : Commands	X X	X X	
Aux Messages	: All Sounds Off	X	O	(120)
	: Reset All Controllers	O	O	(121)
	: Local On/Off	X	X	
	: All Notes Off	O	O	
	: Active Sense	O	O	
	: Reset	X	X	

Mode 1: OMNI ON, POLY    Mode 2: OMNI ON, MONO  
Mode 3: OMNI OFF, POLY    Mode 4: OMNI OFF, MONO

O: Yes  
X: No

## ◆ MIDI Implementation

### Channel Voice Message

#### Note Off

Status	2nd Byte	3rd Byte
8nH	kkH	vvH, or
9nH	kkH	00H
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
kk=Note Number:	00H - 7FH (0 - 127)	
vv=Velocity(disregard):	00H - 7FH (0 - 127)	

#### Note On

Status	2nd Byte	3rd Byte
9nH	kkH	vvH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
kk=Note Number:	00H - 7FH (0 - 127)	
vv=Velocity:	00H - 7FH (0 - 127)	

#### Control Change

*The value set by the Control Change is not reset even when Program Change messages etc. are received.*

#### Bank Select (CC#0, 20)

Status	2nd Byte	3rd Byte
BnH	00H	mmH
BnH	20H	llH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
mm,ll=Bank Number:	00 00H=User 01 00H=Preset	

*Until you send the Program Change, the Bank Select process is reserved.*

#### Expression (CC#11)

Status	2nd Byte	3rd Byte
BnH	0BH	vvH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
vv=Expression:	00H - 7FH (0 - 127)	

#### Spring Shock (CC#48)

Status	2nd Byte	3rd Byte
BnH	30H	vvH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
vv=Velocity:	00H - 7FH (0 - 127)	

#### Glide (CC#49)

Status	2nd Byte	3rd Byte
BnH	31H	vvH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
vv=Control Value:	00H - 7FH (0 - 127) 0 - 63=Off, 64 - 127=On	

#### Damper (CC#64)

Status	2nd Byte	3rd Byte
BnH	40H	vvH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
vv=Control Value:	00H - 7FH (0 - 127) 0 - 63=Off, 64 - 127=On	

#### NRPN MSB/LSB (CC#98, 99)

Status	2nd Byte	3rd Byte
BnH	63H	mmH
BnH	62H	llH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
mm=upper byte of the parameter number specified by NRPN		
ll=lower byte of the parameter number specified by NRPN		

#### Data Entry (CC#6, 38)

Status	2nd Byte	3rd Byte
BnH	06H	mmH
BnH	26H	llH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	
mm,ll=the value of the parameter specified by NRPN		

### Program Change

Status	2nd Byte
CnH	ppH
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)
pp=Program Number:	00H - 63H, 7FH (Patch #1 - 100, Manual)

#### Example of Patch operation

ex: select Patch U016  
Bx 00 00 20 00 Cx 0F (x=Upper Channel)  
ex: select Patch P100  
Bx 00 01 20 00 Cx 63 (x=Upper Channel)  
ex: select [Manual]  
Bx 00 00 20 00 Cx 7F (x=Upper Channel)

### Channel Mode Message

#### All Sounds Off (CC#120)

Status	2nd Byte	3rd Byte
BnH	78H	00H
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	

*When this message is received, all currently-sounding notes on the corresponding channel will be turned off immediately.*

#### Reset All Controllers (CC#121)

Status	2nd Byte	3rd Byte
BnH	79H	00H
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	

*When this message is received, the following controllers will be set to their reset values.*

Expression:	127
Glide:	0
Damper:	0

NRPN: unset; previously set data will not change

#### All Sounds Off (CC#123)

Status	2nd Byte	3rd Byte
BnH	7BH	00H
n=MIDI Channel Number:	0H - FH (Ch. 1 - 16)	

*When All Notes Off is received, all notes on the corresponding channel will be turned off. However if Hold 1 or Sostenuuto is ON, the sound will be continued until these are turned off.*

## ◆ MIDI Information

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Preset Load
		LSB (62)	MSB (63)	MSB to LSB					
Pedal	Tonewheel Set	22	00	00	22	00	01	00 - 03 00: Normal 01: Muted 02: Synth 1 03: Synth 2	DRAWB
	Attack	22	01	00	22	01	01	00 - 04 00: Slow Attack 01: No Click 02: Soft Click 03: Normal Click 04: Max Click	
	Sustain On	22	03	00	22	03	01	00, 01 (Off/On)	
	Sustain Length	22	04	00	22	04	01	00 - 04 (1 - 5)	
	Decay Length	22	05	00	22	05	01	00 - 05 (1 - 5, Cont)	
	Velocity	22	06	00	22	06	01	00 - 04 (Off, Normal - Easy)	
	Key Mode	22	07	00	22	07	01	00, 01 (Mono/Poly)	
	Octerve Shift	22	08	00	22	08	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Range Lo	22	09	00	22	09	01	24 - 60 (MIDI note number)	
Key Range Hi	22	0A	00	22	0A	01	24 - 60 (MIDI note number)		
Pedal Registration	16'	--	--	01	03	00	01	00 - 08 (0 - 8)	L/P
	8'	--	--	01	03	01	01	00 - 08 (0 - 8)	
Organ Effect	Leslie Bypass	09	00	00	09	00	01	00, 01 (Enable / Bypass)	EFFECT DRAWB
	Leslie Fast	09	01	00	09	01	01	00, 01 (Slow / Fast)	
	Leslie Stop	09	07	00	09	07	01	00, 01 (Turn / Stop)	
	Leslie Cabinet Number	09	08	00	09	08	01	00 - 07 (1 - 8)	
	Vibrato On Swell	09	04	00	09	02	01	00, 01 (Off/On)	
	Vibrato On Great	09	03	00	09	03	01	00, 01 (Off/On)	
	Vibrato Mode	09	04	00	09	04	01	00 - 05 (V1 - C3)	
	Vibrato Rate	09	05	00	09	05	01	00 - 04 (6.1 - 7.25Hz)	
	Vibrato V1 Depth	09	0D	00	09	0D	01	00 - 0F (1 - 16)	
	Vibrato V2 Depth	09	0E	00	09	0E	01	00 - 0F (1 - 16)	
	Vibrato V3 Depth	09	0F	00	09	0F	01	00 - 0F (1 - 16)	
	Vibrato C1 Depth	09	10	00	09	10	01	00 - 0F (1 - 16)	
	Vibrato C2 Depth	09	11	00	09	11	01	00 - 0F (1 - 16)	
	Vibrato C3 Depth	09	12	00	09	12	01	00 - 0F (1 - 16)	
	Vibrato Tremolo	09	13	00	09	13	01	00 - 0F (0 - 15)	
	Vibrato Cho. Emphasis	09	14	00	09	14	01	00 - 09 (0 - 9)	
	Vibrato On Pedal	09	15	00	09	15	01	00, 01 (Off/On)	

## ◆ MIDI Information (cont.)

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Preset Load
		LSB (62)	MSB (63)	MSB to LSB					
Pedal	Tonewheel Set	22	00	00	22	00	01	00 - 03 00: Normal 01: Muted 02: Synth 1 03: Synth 2	DRAWB
	Attack	22	01	00	22	01	01	00 - 04 00: Slow Attack 01: No Click 02: Soft Click 03: Normal Click 04: Max Click	
	Sustain On	22	03	00	22	03	01	00, 01 (Off/On)	
	Sustain Length	22	04	00	22	04	01	00 - 04 (1 - 5)	
	Decay Length	22	05	00	22	05	01	00 - 05 (1 - 5, Cont)	
	Velocity	22	06	00	22	06	01	00 - 04 (Off, Normal - Easy)	
	Key Mode	22	07	00	22	07	01	00, 01 (Mono/Poly)	
	Octerve Shift	22	08	00	22	08	01	3E - 40 - 42 (-2 - 0 - +2)	
	Key Range Lo	22	09	00	22	09	01	24 - 60 (MIDI note number)	
Key Range Hi	22	0A	00	22	0A	01	24 - 60 (MIDI note number)		
Pedal Registration	16'	--	--	01	03	00	01	00 - 08 (0 - 8)	L/P
	8'	--	--	01	03	01	01	00 - 08 (0 - 8)	
Organ Effect	Leslie Bypass	09	00	00	09	00	01	00, 01 (Enable / Bypass)	EFFECT DRAWB
	Leslie Fast	09	01	00	09	01	01	00, 01 (Slow / Fast)	
	Leslie Stop	09	07	00	09	07	01	00, 01 (Turn / Stop)	
	Leslie Cabinet Number	09	08	00	09	08	01	00 - 07 (1 - 8)	
	Vibrato On Swell	09	04	00	09	02	01	00, 01 (Off/On)	
	Vibrato On Great	09	03	00	09	03	01	00, 01 (Off/On)	
	Vibrato Mode	09	04	00	09	04	01	00 - 05 (V1 - C3)	
	Vibrato Rate	09	05	00	09	05	01	00 - 04 (6.1 - 7.25Hz)	
	Vibrato V1 Depth	09	0D	00	09	0D	01	00 - 0F (1 - 16)	
	Vibrato V2 Depth	09	0E	00	09	0E	01	00 - 0F (1 - 16)	
	Vibrato V3 Depth	09	0F	00	09	0F	01	00 - 0F (1 - 16)	
	Vibrato C1 Depth	09	10	00	09	10	01	00 - 0F (1 - 16)	
	Vibrato C2 Depth	09	11	00	09	11	01	00 - 0F (1 - 16)	
	Vibrato C3 Depth	09	12	00	09	12	01	00 - 0F (1 - 16)	
	Vibrato Tremolo	09	13	00	09	13	01	00 - 0F (0 - 15)	
	Vibrato Cho. Emphasis	09	14	00	09	14	01	00 - 09 (0 - 9)	
	Vibrato On Pedal	09	15	00	09	15	01	00, 01 (Off/On)	

◆ MIDI Information (cont.)

Category	Parameter	NRPN		SysEx Address			SysEx Length	Data	Preset Load	
		LSB (62)	MSB (63)	MSB to LSB						
Effects	Overdrive On	3p	00	00	3p	00	01	00, 01 (Off/On)	EFFECT p=0: DRAWB p=1: EXV	
	Overdrive Type	3p	01	00	3p	01	01	00 - 03 00: Tube 01: Stomp Box 02: Clip 03: E. Pf. Amp		
	Overdrive Drive Level	3p	02	00	3p	02	01	00 - 7F		
	Overdrive Controlled Exp.	3p	03	00	3p	03	01	00-03 00: EX-OD 01: OD-EX 02: OD Only 03: Input		
	Multi Effect On	3p	04	00	3p	04	01	00, 01 (Off/On)		
	Multi Effect Type	3p	05	00	3p	05	01	00-07 00: Tremolo 01: Auto Pan 02: Wah-Wah 03: Ring Mod. 04: Phaser 05: Flanger 06: Chorus 07: Delay		
	Multi Effect Parameter 0	3p	06	00	3p	06	01	00-03		
	Multi Effect Parameter 1	3p	07	00	3p	07	01	00-03		
	Multi Effect Parameter 2	3p	08	00	3p	08	01	00-7F		
	Multi Effect Parameter 3	3p	09	00	3p	09	01	00-7F		
	Multi Effect Parameter 4	3p	0A	00	3p	0A	01	00-7F		
	Multi Effect Parameter 5	3p	0B	00	3p	0B	01	00-7F		
	Multi Effect Parameter 6	3p	0C	00	3p	0C	01	00-7F		
	Multi Effect Parameter 7	3p	0D	00	3p	0D	01	00-7F		
	EQ Bass Gain	3p	0E	00	3p	0E	01	00 - 09 - 12 (-9 - 0 - +9)		
	EQ Bass Frequency	3p	0F	00	3p	0F	01	00 - 0A (20 - 200Hz)		
	EQ Mid Gain	3p	10	00	3p	10	01	00 - 09 - 12 (-9 - 0 - +9)		
	EQ Mid Frequency	3p	11	00	3p	11	01	00 - 0A (250 - 3.1kHz)		
	EQ Treble Gain	3p	12	00	3p	12	01	00 - 09 - 12 (-9 - 0 - +9)		
	EQ Treble Frequency	3p	13	00	3p	13	01	00 - 03 (4.0 - 8.0 kHz)		
	EQ Tone Control	3p	14	00	3p	14	01	00 - 09 - 12 (-9 - 0 - +9)		
	Reverb On	0A	00	00	0A	00	01	00, 01 (Off/On)		REV
	Reverb Type	0A	01	00	0A	01	01	00 - 0A 00: Room 1 01: Room 2 02: Live House 03: Hall 1 04: Hall 2 05: Church 06: Plate 07: Spring 08: Delay 09: Panning Delay 0A: Reverb + Delay		
	Reverb Level	0A	02	00	0A	02	01	00 - 7F (0 - 127)		
	Reverb Time	0A	03	00	0A	03	01	00 - 7F (0 - 127)		
	Reverb Delay Feedback	0A	04	00	0A	04	01	00 - 1F (0 - 96%)		
	Reverb Delay Time	0A	05	00	0A	05	01	00 - 44 (4.7 - 2000ms)		

**Example:** "p" means Section number. Organ=0, Extra Voice=1  
 Set Multi-Effect EXV at Phaser via NRPN .....Bx 63 05 62 31 06 04 26 00 (x = Upper channel)  
 Set Multi-Effect EXV at Phaser via SysEx .....F0 55 dd 10 1F 13 00 31 05 04 F7 (dd = Device ID)

## ◆ System Exclusive Messages

### ◆ Memory Dump

1. Each Packet

F0	System Exclusive
55	SUZUKI ID
dd	Device ID (refer to P.110 #8)
10	Model ID MSB
1F	Model ID LSB
11	Command: Data Packet
[TYPE]	Data Type 02H = All Data Dump 07H = Combi. Temp. Dump 09H = Global Dump 0AH = System Dump
[PNH]	Packet Number MSB
[PNL]	Packet Number LSB
[DATA]	128 Bytes Data 256 Bytes nibblized ASCII ex: 7EH = 37H, 45H
[CHD]	Check Digit Lower 7 bits of XOR [DATA]
F7	End Of Exclusive

2. Acknowledge

F0	System Exclusive
55	SUZUKI ID
dd	Device ID
10	Model ID MSB
1F	Model ID LSB
14	Command: Acknowledge
[TYPE]	Data Type
[AK]	Result 00H = OK 05H = Check Digit Error 06H = Receive Protected
[PNH]	Packet Number MSB
[PNL]	Packet Number LSB
F7	End Of Exclusive

3. # of Packets

All Data Dump:	466
Combi. Temp Dump:	27
Global Dump:	6
System Dump:	1

### ◆ Dump Request (Rx. only)

F0	System Exclusive
55	SUZUKI ID
dd	Device ID
10	Model ID MSB
1F	Model ID LSB
12	Command: Dump Request
[TYPE]	Data Type 02H = All Data Dump 07H = Combi. Temp. Dump 09H = Global Dump 0AH = System Dump
F7	End Of Exclusive

### Mode Setting Exclusive Message

Full Parameters Reset (Rx. only)

F0	System Exclusive
55	SUZUKI ID
dd	Device ID
42	Mode ID for DT1
12	Command: DT1
40	Address MSB
00	Address
7F	Address LSB
7F	Reset
42	Check Sum
F7	End Of Exclusive

### NRPN Switch

F0	Suzuki Exclusive
55	SUZUKI ID
dd	Device ID
10	Model ID MSB
1F	Model ID LSB
02	Command: NRPN Sw.
[DATA]	00H = Off, 7FH = On
F7	End Of Exclusive

*When this device receives this message, switch Tx & Rx NRPN in Control channel.*

### Data Set (Rx. only)

F0	System Exclusive
55	SUZUKI ID
dd	Device ID
10	Model ID MSB
1F	Model ID LSB
13	Command: Data Set
aa	Address MSB
bb	Address
cc	Address LSB
[DATA]	Data (Flexible bytes)
F7	End Of Exclusive

### Identity Request (Rx. only)

F0	System Exclusive
7E	Universal non real-time
dd	Device ID
06	Sub ID #1
01	Sub ID #2
F7	End Of Exclusive

### Identity Reply (Tx. only)

F0	System Exclusive
7E	Universal non real-time
dd	Device ID
06	Sub ID #1
02	Sub ID #2
55	SUZUKI ID
00 10	Device Family code
00 1F	Device Family number
00 00	
00 00	
F7	End Of Exclusive

*When Identity Request is received, Identity Reply will be transmitted.*

## ◆ Software Update List

### Release 8.4

**Date of release:**

Jul 02, 2014

**Updated Files:**

- mainV1621.sys

**Updated Areas:**

- In Tonewheel organ, improved the problem of errors in writing the Attack/Release parameters to sound engine.
- When defaulting the Global parameters, improved the problem of errors in writing to Percussion internal parameters.

### Release 8.3

**Date of release:**

Apr 16, 2014

**Updated Files:**

- mainV1619.sys  
- DSPV1009.sys

**Updated Areas:**

- Improve LINE Output level.

### Release 8.2

**Date of release:**

Feb 14, 2014

**Updated Files:**

- subV1025.sys

**Updated Areas:**

- Improved USB Flash Drive compatibility.

### Release 8.1

**Date of release:**

Jan 28, 2014

**Updated Files:**

- mainV1614.sys

**Updated Areas:**

- Improve Pedal Sustain function.

### Release 8

**Date of release:**

Feb 13, 2014

**Updated Files:**

- mainV1614.sys  
- subV1025.sys  
- sloadV1008.sys  
- DSPV1008.sys  
- presetV1206.sys  
- presetV1207.sys  
- LibAPianoPreLoad1400.sys  
- LibEPianoPreLoad1200.sys

**Updates:**

- New parameter "MIX" added to Vibrato/Chorus menu.
- New parameter "VOLUME" added to the Drawbar Foldback menu.
- New mode "LAST" added to the Drawbar Pedal Mode menu.
- New function "PROCHORD Open / Close" for the Drawbar section added to the Foot Switch "Tip" mode.
- New instrument "Stereo GP Pad3" added to the A.PIANO Extra Voice section.
- New instrument "E.Piano FM Belly" added to the E.PIANO Extra Voice section.
- Information Center Display shows, "Message Completed" when a Voice library or WHOLE file finishes loading.
- Smoother Volume control of the Music Player.
- Added the ability to load and save Custom Tonewheels individually.



<p><b>Release 7</b></p> <p><b>Date of release:</b> Apr 15, 2013</p> <p><b>Updated Files:</b> - mainV1513.sys - skbootV1006 - sksloadV1006 - sksubV1022</p>	<p><b>Updates:</b></p> <ul style="list-style-type: none"> <li>- Added the ability to load and save a Patch individually.</li> <li>- Added Custom Tonewheel editing.</li> <li>- Added Pipe Voice editing.</li> <li>- Initial MIDI IN mode has been set at "PEDAL" (SK2 only).</li> <li>- Added Program Change "ON" or "OFF" of External Zones by MIDI - MAST. PROG parameter.</li> <li>- Added display lock function.</li> <li>- Default - Patch All also resets patch parameters.</li> <li>- Software Update will load only if the version in the instrument is earlier than the update.</li> <li>- Added new option "BOTH" in the Expression - Source Menu which controls expression value of both expression pedal and MIDI in.</li> </ul>
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<p><b>Release 6</b></p> <p><b>Date of release:</b> Nov 19, 2012</p> <p><b>Updated Files:</b> - mainV1400.sys - subV1021.sys - sloadV1005.sys - presetV1106.sys - bootV1005.sys</p>	<p><b>Updates:</b></p> <ul style="list-style-type: none"> <li>- The Voice Group in the [A.PIANO] and [LIBRARY] categories may be toggled by multiple presses of the Group Button.</li> <li>- Leslie Fast switch can now be controlled via MIDI by receiving cc#92</li> <li>- A new control parameter "SOUNDING POINT" which allows the player to set the point along the key travel when the note will sound has been added to the CONTROL Menu.</li> <li>- Two new modes have been added to the "MIDI IN" menu: "UPPER" and "UPP+PED" These modes allow the use of the Sk-1 keyboard as the LOWER part and an external MIDI keyboard as the UPPER or UPPER+PEDAL part.</li> </ul>
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<p><b>Release 5</b></p> <p><b>Date of release:</b> Apr 26, 2012</p> <p><b>Updated Files:</b> - mainV1300.sys - subV1014.sys - LibAPianoPreLoadV1300.sys</p> <p><b>Added Files:</b> - sloadV1003.sys</p>	<p><b>Updates:</b></p> <ul style="list-style-type: none"> <li>- Improved USB Flash Drive compatibility.</li> <li>- On the External zones and Organ section, the key range has been extended, so that it can be set at beyond the SK's physical key range. This improves the usability when an 88-note keyboard controller is used as a LOWER keyboard.</li> <li>- Fixed issue, where the wrong custom Tonewheel number is recalled when recalling the patch with a different organ type.</li> <li>- Fixed issue, with multiple Voice Libraries, when a library has been deleted, the relation between remaining libraries and Patches is not right.</li> <li>- The expression value "chases" the expression pedal when the parameter "EXP" is "ON" in the Extra Voice section.</li> <li>- The LED of the TRANSPOSE and OCT. LOWER buttons indicates if the value is not "zero".</li> <li>- "Stereo GP Pad2" and "Electric GP Pad2" have been added to the A.PIANO Extra Voice section.</li> </ul>
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<p><b>Release 4</b></p> <p><b>Date of release:</b> Nov 29, 2011</p> <p><b>Updated Files:</b> - mainV1200.sys - presetV1009.sys</p> <p><b>Added Files:</b> - libBpianoPreLoadRe140.sys</p>	<p><b>Updates:</b></p> <ul style="list-style-type: none"> <li>- A new parameter, PATCH - P.LOAD - "ANI" has added to hold the state of the [LESLIE] and [VIBRATO] buttons when the Patch is selected.</li> <li>- Two new instruments, "Upright Pf", "Honky Tonk Pf" has added as sub group "A.PIANO2" in the [A.PIANO] button.</li> <li>- Fixed the malfunction of MIDI - MAST REGI.</li> <li>- Fixed the "Electric GP Pad".</li> </ul>
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**Release 3****Date of release:**

Nov 14, 2011

**Updated Files:**

- mainV1112.sys

**Updated Areas:**

- Adapted for reading large size of Voice Library (e.g. Chamber Strings).
- Operation of re-damper improved.

**Release 2****Date of release:**

Sep 2, 2011

**Updated Files:**

- LibAPianoPreLoadRel20.sys  
 - LibEPianoPreLoadRel20.sys  
 - LibKeyboardPreLoadRel20.sys  
 - LibOthersPreLoadRel20.sys  
 - LibTrOrgVxJRel20.sys  
 - LibWindPreLoadRel20.sys  
 - mainV1102.sys  
 - presetV1008.sys

**Updated Areas:**

- New parameter, Velocity Offset, added to the CONTROL Edit Menu.
- Blinking cursor changes to static cursor by pressing the ENTER Touch Button.
- AMOUNT Rotary Knob knob assigned to RATE when the LFO source is chosen Ring Modulator.
- Improved polyphonic response.
- CC#81 Receiving (Lower) Drawbar Registration bug fixed.
- Processing for Loading and Deleting Voice libraries improved.
- The selection of Voice Groups by the VALUE Rotary Knob limited to each category.
- Velocity of sharp keys slightly lowered.
- Extra Voice Version number now included in display.
- Vibrato & Chorus for Pedal turned "OFF" for Factory Preset Patches.
- Custom Tone Wheel models all speak at the same volume level.
- New voices, "3rd Harmonic GP" and "St. GP OldTime Pcd" added to A.PIANO group.
- New voice "EPiano Wur Mellow" added to E.PIANO group.
- New voice "Doob Real Love" has been added to KYBD group.
- New voices "Big Band Gliss Up Pcd", "Two Trumpets", "Unison Brass", "Syn Brs Afri" and "Syn Brs Rosa" added to WIND group.
- New voices "Noise Zap" and "Jet" added to OTHER group.
- New voices "Tr.Organ VxJ" and "VxJS(with sustain effect)" added to LIBRARY group.
- Incoming MIDI pitch bend (2 semitones) and modulation controls are enabled when the MIDI IN mode is set at "EXVOICE".

**Release 1**

Jun 23, 2011

Suzuki Musical Inst. Mfg. Co.,  
Ltd**Updated Areas:**

- Improved system stability. including;  
Correction of the "sticking notes" bug, music player and LCD screen issues.
- An added new velocity layer for the Second octave of E.Piano Wur.
- Improved re-damper of Stereo GP Pad.

**Updated Files:**

- LibAPianoPreLoad1.sys  
 - LibEPianoPreLoad0.sys  
 - mainV1084.sys  
 - subV1012.sys

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## **INSTRUMENT CARE**

### **◆ AC Power**

Be sure to turn the instrument “OFF” after use, and do not turn the unit “ON” and “OFF” in quick succession, as this places an undue load on the electronic components.

### **◆ Cabinet**

Use a soft dry cloth for dusting. To remove fingerprints or dulling film, use a soft cloth slightly moisten with water and a little mild soap. Immediately wipe dry with a soft dry cloth.

### **◆ Keys And Buttons**

To clean keys and buttons, use a clean soft cloth moistened with water. Do not use any solvents, thinners or dryers such as alcohol, gasoline, lighter fluid, carbon tetrachloride, etc. These solutions may affect the letters and/or finish on the buttons and keys.

### **◆ Moving Your Instrument**

It is not necessary to bolt or fasten any parts of the instrument when moving. Careful consultation with your mover will assure you of a satisfactory moving job.

**CAUTION**

Danger of explosion if lithium battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

**ADVARSELL**

Lithiumbatteri. Eksplosjonsfare ved feilagtig håndtering. Utskiftning må kun ske med batteri af samme fabrikat og type. Leber det brukte batteri tilbake til leverandøren.

Norge:

**ADVARSEL**

Lithiumbatteri - Eksplosjonsfare. Ved utskiftning benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

Sverige:

**VARNING**

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller et ekvivalent typ som rekommenderes av apparattillverkaren, Kassera använt batteri enligt fabrikantens instruktion.

Finland:

**VAROITUS**

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin, Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

Manufacturer assumes no responsibility for loss of memory caused by damage to the unit after purchase, such as power surges, battery replacement, repair, etc.
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Hammond maintains a policy of continuously improving and upgrading its instruments and therefore reserves the right to change specifications without notice. Although every attempt has been made to insure the accuracy of the descriptive contents of this Guide, total accuracy cannot be guaranteed. Should the player require further assistance, inquiries should first be made to your Authorized Hammond Dealer. If you still need further assistance, contact Hammond at the following addresses:

In the United States contact:

HAMMOND SUZUKI USA, Inc.  
743 Annoreno Dr.  
Addison, IL 60101  
UNITED STATES

In Europe and the U.K. contact:

HAMMOND SUZUKI EUROPE B.V  
Ir. D.S. Tuynmanweg 4A  
4131 PN Vianen  
THE NETHERLANDS

All other countries contact:

HAMMOND SUZUKI Ltd.  
25-12, Ryoke 2 Chome  
Hamamatsu 430-0852 (Shizuoka)  
JAPAN

Technical materials are available and can be obtained by mailing a request to the appropriate address listed above marked ATTENTION: SERVICE DEPARTMENT.

Manufacturer:

SUZUKI MUSICAL INSTRUMENT MFG. CO., Ltd  
25-12, Ryoke 2 Chome  
Hamamatsu 430-0852 (Shizuoka)  
JAPAN

## ACKNOWLEDGMENTS

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and many others too numerous to list.

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