YAMAHA

disklavier™

Silent™

MPX70

Appendix
MIDI Data Format

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MIDI Data Format

If you are familiar with MIDI, or are using a computer to control your music software with computer-generated MIDI messages, the data provided in this section can help you to control your Disklavier.

Messages include those that can be received by the piano part and/or those that can be received by an ESBL part. Messages that can be transmitted as well as received are shown as "transmitted".

1. CHANNEL MESSAGES

1.1 Key On / Key Off
(Piano Part, ESBL Part) (transmitted)

Piano Part reception note range = A-1 ~ C7 : C3=60
ESBL part reception note range = C-2 ~ G8
Velocity range = 1 ~ 127 (Only the Key On velocity is received)

1.2 Control Change

1.2.1 Bank Select
(ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
0	Bank Select MSB	0: Normal, 63: User voice, 64: SFX, 126: SFX kit, 127: Drum
32	Bank Select LSB	0...127

You can select the Voice banks with MSB and LSB numbers.
MSB and LSB functions differently depending on the play mode.
In XG mode, MSB numbers select Voice type (Normal Voice or Drum Voice), and LSB number select Voice banks.
In TG300B mode, LSB is fixed, and MSB numbers select Voice banks.
(See Normal Voice List Drum Voice List.)
A new bank selection will not become effective until the next Program Change message is received.

1.2.2 Modulation
(ESBL Part)

Cntrl#	Parameter	Data Range
1	Modulation	0...127

1.2.3 Portamento Time
(ESBL Part)

Cntrl#	Parameter	Data Range
5	Portamento Time	0...127

When the parameter 1.2.9 Portamento = ON, values will adjust the speed of pitch change.
A setting of 0 - minimum portamento time, and 127 - maximum portamento time.

1.2.4 Data Entry
(ESBL Part)

Messages which set the value for the parameter specified by RPN/NRPN.

Cntrl#	Parameter	Data Range
6	Data Entry MSB	0...127
38	Data Entry LSB	0...127

Parameter value is determined by combining MSB and LSB.

1.2.5 Main Volume
(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
7	Main Volume	0...127

1.2.6 Pan
(ESBL Part)

Cntrl#	Parameter	Data Range
10	Pan	0...127

1.2.7 Expression
(Piano Part, ESBL Part)

Cntrl#	Parameter	Data Range
11	Expression	0...127

1.2.8 Hold1
(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
64	Hold1	0...127 (0-63:off, 64-127:on)

1.2.9 Portamento
(ESBL Part)

Cntrl#	Parameter	Data Range
65	Portamento	0...127 (0-63:off, 64-127:on)

1.2.10 Sostenuto
(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
66	Sostenuto	0...127 (0-63:off, 64-127:on)

1.2.11 Soft Pedal
(Piano Part, ESBL Part) (transmitted)

Cntrl#	Parameter	Data Range
67	Soft Pedal	0...127 (0-63:off, 64-127:on)

1.2.12 Harmonic Content
(ESBL Part)

Messages which adjust the resonance set for each Voice.

Cntrl#	Parameter	Data Range
71	Harmonic Content	0...127 (0:-64, 64:+0, 127:+63)

Higher values will result in a more characteristic, resonant sound.

Depending on the Voice, the effective range may be narrower than the range available for adjustment.

1.2.13 Release Time
(ESBL Part)

Messages which adjust the envelope release time set for each Voice.

Cntrl#	Parameter	Data Range
72	Release Time	0...127 (0:-64, 64:+0, 127:+63)

1.2.14 Attack Time
(ESBL Part)

Messages which adjust the envelope attack time set for each Voice.

Cntrl#	Parameter	Data Range
73	Attack Time	0...127 (0:-64, 64:+0, 127:+63)

1.2.15 Brightness
(ESBL Part)

Messages which adjust the filter cutoff frequency set for each Voice.

Cntrl#	Parameter	Data Range
74	Brightness	0...127 (0:-64, 64:+0, 127:+63)

1.2.16 Portamento Control
(ESBL Part)

Messages which apply a portamento between the currently-sounding note and the subsequent note.

Cntrl#	Parameter	Data Range
84	Portamento Control	0...127

1.2.17 Effect1 Depth (Reverb Send Level)
(ESBL Part)

Cntrl#	Parameter	Data Range
91	Effect1 Depth	0...127

1.2.18 Effect3 Depth (Chorus Send Level)
(ESBL Part)

Cntrl#	parameter	Data Range
93	Effect3 Depth	0...127

1.2.19 Effect4 Depth (Variation Effect Send Level)
(ESBL Part)

Cntrl#	Parameter	Data Range
94	Effect4 Depth	0...127

1.2.20 Data Increment / Decrement (for RPN)
(ESBL Part)

Cntrl#	Parameter	Data Range
96	RPN Increment	0...127
97	RPN Decrement	0...127

1.2.21 NRPN (Non-Registered Parameter Number)
(ESBL Part)

Cntrl#	Parameter	Data Range
98	NRPN LSB	0...127
99	NRPN MSB	0...127

First send the NRPN MSB and NRPN LSB to specify the parameter which is to be controlled. Then use Data Entry to set the value of the specified parameter.
* Note that once the NRPN has been set for a channel subsequent data entry will be recognized as the same NRPN's value change. Therefore, after you use the NRPN, you should set a Null (7FH, 7FH) value to avoid an unexpected result.

The following NRPN number can be received.

NRPN MSB	NRPN LSB	Data entry MSB	PARAMETER NAME and VALUE RANGE
$01	$08	$mm	Vibrato Rate mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$09	$mm	Vibrato Depth mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$0A	$mm	Vibrato Delay mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$20	$mm	Filter Cutoff Frequency mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$21	$mm	Filter Resonance mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$63	$mm	EG Attack Time mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$64	$mm	EG Decay Time mm : $00 - $40 - $7F (-64 - 0 - +63)
$01	$66	$mm	EG Release Time mm : $00 - $40 - $7F (-64 - 0 - +63)
$14	$rr	$mm	Drum Filter Cutoff Frequency mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number
$15	$rr	$mm	Drum Filter Resonance mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number
$16	$rr	$mm	Drum EG Attack mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number
$17	$rr	$mm	Drum EG Decay Rate mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number Applies to both Decay1 and 2.
$18	$rr	$mm	Drum Instrument Pitch Coarse mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number
$19	$rr	$mm	Drum Instrument Pitch Fine mm : $00 - $40 - $7F (-64 - 0 - +63) rr : drum instrument note number
$1A	$rr	$mm	Drum Instrument Level mm : $00 - $7F (0 - max) rr : drum instrument note number
$1C	$rr	$mm	Drum Instrument Pan mm : $00 - $40 - $7F (random, left - center - right) rr : drum instrument note number
$1D	$rr	$mm	Drum Instrument Reverb Send Level mm : $00 - $7F (0 -max) rr : drum instrument note number
$1E	$rr	$mm	Drum Instrument Chorus Send Level mm : $00 - $7F (0 - max) rr : drum instrument note number
$1F	$rr	$mm	Drum Instrument Variation Send Level mm : $00 - $7F (0 - max) rr : drum instrument note number

MSB 14H- 1FH (for Drum) is valid only if the Multi Part parameter PART MODE = DRUMS 1 or DRUMS2 for that channel. (If PART MODE = DRUM, no values will be changed.)

1.2.22 RPN (Registered Parameter Number)
(ESBL Part)

Cntrl#	Parameter	Data Range
100	RPN LSB	0...127
101	RPN MSB	0...127

The following RPN numbers can be received.

RPN MSB	RPN LSB	Data entry MSB	Data entry LSB	PARAMETER NAME and VALUE RANGE
00H	00H	mmH	--	Pitch Bend Sensitivity mm:00-18H (0-24 chromatic steps) Assignable in chromatic steps up to 2 octaves Default : 02H LSB value is ignored.
00H	01H	mmH	11H	Fine Tuning mm: 00H-40H-7FH (-64-0-+63)
00H	02H	mmH	--	Coarse Tuning mm: 28H - 40H - 58H (-24 - +24 chromatic steps) LSB value is ignored.
7FH	7FH	--	--	RPN null Cancels RPN and NRPN numbers

1.2.23 Channel Mode Messages

The following Channel Mode Messages can be received.

2nd byte	3rd byte	
120	0	All Sound Off
121	0	Reset All Controllers
123	0	All Note Off
124	0	Omni Off
125	0	Omni On
126	0 ~ 16	Mono
127	0	Poly

1.2.23.1 All Sound Off
(Piano Part, ESBL Part) (transmitted)

ESBL part;
Terminates all sounds currently sounding on the specified channel. However, the status of channel messages such as Note On and Hold On is maintained.
Piano Part;
The status of channel messages is not maintained.

1.2.23.2 Reset All Controllers
(ESBL Part)

The values of the following controllers will be reset to the defaults.

CONTROLLER	VALUE
Pitch Bend Change	±O (center)
Channel Aftertouch	0 (off)
Polyphonic Aftertouch	0 (off)
Modulation	0 (off)
Expression	127 (max)
Hold 1	0 (off)
Portamento	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)
Portamento Control	cancels the Portamento Source Key Number that was received
RPN	number not specified; internal data will not change
NRPN	number not specified; internal data will not change

1.2.23.3 All Note Off
(Piano Part, ESBL Part) (transmitted)

Terminates all notes currently on for the specified channel. However, if Hold 1 or Sostenuto is on, notes will continue sounding until these are turned off.

1.2.23.4 Omni Off
(Piano Part, ESBL Part)

Performs the same function as when an All Notes Off message is received.

1.2.23.5 Omni On
(Piano Part, ESBL Part)

Performs the same function as when an All Notes Off message is received.

1.2.23.6 Mono
(Piano Part, ESBL Part)

Performs the same function as when an All Sounds on message is received, and if the 3rd byte (mono number) is in the range of 0 - 16, sets the corresponding channel to Mono Mode (Mode 4 : m = 1).

1.2.23.7 Poly
(Piano Part, ESBL Part)

Performs the same function as when an All Sounds Off message is received. and sets the corresponding channel to Poly Mode (Mode 3).

1.2.24 Local Control
(Piano Part, ESBL Part)

0;Off Disklavier keyboard does not play the internal voices.
127;On

1.3 Program Change
(ESBL Part) (transmitted)

Messages for Voice selection.
With a combination of Bank Select, you can select not only basic Voice numbers, but also variation Voice bank numbers.

1.4 Pitch Bend
(ESBL Part)

When Multi Part Parameter Rcv PITCH BEND CHANGE=OFF, pitch bend for that part is not received.

1.5 Channel Aftertouch
(ESBL Part)

1.6 Polyphonic Aftertouch
(ESBL Part)

2. SYSTEM EXCLUSIVE MESSAGES

2.1 Parameter Change

The Disklavier receives the following parameter change messages.

[UNIVERSAL REALTIME MESSAGE]
1) Master Volume

[UNIVERSAL NON REALTIME MESSAGE]
1) General MIDI Mode On

[XG NATIVE]
1) XG System on
2) XG System Data parameter change
3) Multi Effect1 Data parameter change
4) Multi Part Data parameter change
5) Drums Setup Data parameter change

[OTHER]
1) Master tuning
2) TG300 System Data Parameter change
3) TG300 Multi Effect Data parameter change
4) TG300 Multi Part Data parameter change

2.1.2 Universal Realtime Messages

2.1.2.1 Master Volume
(Piano Part, ESBL Part)

11110000	F0	= Exclusive status
01111111	7F	= Universal Real Time
01111111	7F	= ID of target device
00000100	04	= Sub-ID #1=Device Control Message
00000001	01	= Sub-ID #2=Master Volume
0sssssss	*SS	= Volume LSB
0ttttttt	TT	= Volume MSB
11110111	F7	= End of Exclusive
or		
11110000	F0	= Exclusive status
01111111	7F	= Universal Real Time
0xxxnnnn	XN	= Device Number, xxx = don't care
00000100	04	= Sub-ID #1=Device Control Message
00000001	01	= Sub-ID #2=Master Volume
0sssssss	SS	= Volume LSB
0ttttttt	TT	= Volume MSB
11110111	F7	= End of Exclusive

When received, the Volume MSB will be effective for the System Parameter MASTER VOLUME.
* "SS" is the hexadecimal expression of Ossssss; same as for "tt", "aa", etc.

2.1.3 Universal Non-Realtime Messages

2.1.3.1 General MIDI Mode On
(ESBL Part)

11110000	F0	= Exclusive status
01111110	7E	= Universal Non-Real Time
01111111	7F	= ID of target device
00001001	09	= Sub-ID #1=General MIDI Message
00000001	01	= Sub-ID #2=General MIDI On
11110111	F7	= End of Exclusive
or		
11110000	F0	= Exclusive status
01111110	7E	= Universal Non-Real Time
0xxxnnnn	XN	= Device Number, xxx = don't care
00001001	09	= Sub-ID #1=General MIDI Message
00000001	01	= Sub-ID #2=General MIDI On
11110111	F7	= End of Exclusive

When General MIDI Mode On is received. the play mode will be changed to XG mode.
When this happens, the ESBL part will receive the MIDI messages which compatible with GM System Level 1, and consequently will not receive NRPN and Bank Select messages.
Since approximately 50ms is required to execute this messag, be sure to leave an appropriate interval before the subsequent message.

2.1.4 XG Native Parameter Change
(ESBL Part)

With the Parameter Change messages as listed below, you can change the characteristic of a Voice, such as by Effect Type or effect parameter, transpose, tuning, and others.

11110000	F0	Exclusive status
01000011	43	YAMAHA ID

0001nnnn	1n	Device Number
01001100	4C	XG Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	ddddddd	Data
!	!	
11110111	F7	End of Exclusive

* Any number is OK since the device number for the Disklavier is fixed to "All".
For parameters with data size of 2 or 4, transmit the appropriate number of data bytes.
When sending the parameter change messages consecutively, be sure to leave an appropriate interval (if the time base is 480. ca 5 unit) between the messages.

2.1.4.1 XG System On
(ESBL Part)

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	XG Model ID
0aaaaaaa	00	Address High
0aaaaaaa	00	Address Mid
0aaaaaaa	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

When this data is received. the Disklavier will switch to XG mode and all the parameters will be initialized accordingly, and XG-compatible messages such as NRPN and Bank Select messages can be received.
Since approximately 50ms is required to execute this message, be sure to leave an appropriate interval before the subsequent message

2.1.4.2 XG System Data parameter change
(ESBL Part)

See tables <1-1> and <1-2>.

2.1.4.3 Multi Effect1 Data parameter change
(ESBL Part)

See tables <1-1> and <1-3>.

2.1.4.4 Multi Part Data parameter change
(ESBL Part)

See tables <1-1> and <1-4>.

2.1.4.5 Drums Setup Data parameter change
(ESBL Part)

See tables <1-1> and <1-5>.
If a Drum Setup Reset parameter change message is received, the Drum Setup parameter values will be initialized.
Selecting a Drum Set will cause the Drum Setup parameter values to be initialized.

2.1.5 Other parameter changes

2.1.5.1 Master Tuning
(ESBL Part)

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1n	Device Number
00100111	27	Model ID
00110000	30	Sub ID2
00000000	00	
00000000	00	
0mmmmmmm	mm	Master Tune MSB
0lllllll	ll	Master Tune LSB
0ceeeeee	ee	
11110111	F7	End of Exclusive

This message simultaneously changes the pitch of all channels.

2.2 Bulk Dump
(ESBL Part)

The Disklavier receives the following bulk dump data.

[XG NATIVE]
1) XG System Data
2) Multi Effect1 Data
3) Multi Part Data
4) Drums Setup Data

[QS300 NATIVE]
1) QS300 User Normal Voice Data

2.2.1 XG Native Bulk Dump

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01001100	4C	XG Model ID
0bbbbbbb	bbbbbbb	ByteCount
0bbbbbbb	bbbbbbb	ByteCount
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	dd	Data
!	!	
!	!	
0ccccccc	ccccccc	Checksum
11110111	F7	End of Exclusive

For the Address and Byte Count, refer to the supplementary tables. The Checksum is the value that results in a value of 0 for the lower 7 bits when the Start Address, Byte Count, plus the Checksum itself are added.

2.2.1.1 XG System Data bulk dump
(ESBL Part)

See tables <1-1> and <1-2>.

2.2.1.2 Multi Effect1 Data bulk dump
(ESBL Part)

See tables <1-1> and <1-3>.

2.2.1.3 Multi Part Data bulk dump
(ESBL Part)

See tables <1-1> and <1-4>.

2.2.1.4 Drums Setup Data bulk dump
(ESBL Part)

See tables <1-1> and <1-5>.

2.2.2 QS300 Native Bulk Dump

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01001101	4B	QS300 Model ID
0bbbbbbb	bbbbbbb	ByteCount
0bbbbbbb	bbbbbbb	ByteCount
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	dd	Data
!	!	
!	!	
0ccccccc	ccccccc	Checksum
11110111	F7	End of Exclusive

2.2.2.1 QS300 User Normal Voice Data bulk damp
(ESBL Part)

See tables <2-1> and <2-2>.

3. SYSTEM COMMON MESSAGES

3.1 Song Position Pointer

a) Transmission
This message is transmitted only when the REMOTE OUT parameter is set to On.

b) Reception
This message is received only when REMOTE IN Parameter is set to On.

3.2 Song Select

a) Transmission
This message is transmitted only when the REMOTE OUT parameter is set to On.

b) Reception
This message is received only when REMOTE IN Parameter is set to On.

4. SYSTEM REALTIME MESSAGES

4.1 Active Sensing

a) Transmission
Transmitted.

b) Reception
Once FE has been received. if no MIDI data is subsequently received for longer than an interval of approximately 300msec. the Disklavier will perform the same function as when ALL SOUNDS OFF. ALL NOTES OFF, and RESET ALL CONTROLLERS messages are received, and will then return to a status in which FE is not monitored.

4.2 Timing Clock

a) Transmission
This message is transmitted only when the REMOTE OUT parameter is set to On.

b) Reception
Not recognized.

4.3 Start

a) Transmission
This message is transmitted only when the REMOTE OUT parameter is set to On.

b) Reception
This message is received only when REMOTE IN Parameter is Set to On.

4.4 Stop

a) Transmission
This message is transmitted only when the REMOTE OUT parameter is set to On.

b) Reception
This message is received only when REMOTE IN Parameter is Set to On.

<Table 1-1>

Parameter Bass Address
Model ID = 4C [XG]

Parameter Change				
	Address			
	(H)	(M)	(L)	Description
XG SYSTEM	00	00	00	System
	00	00	7D	Drum setup Reset
	00	00	7E	XG System On
	00	00	7F	All Parameter Reset
EFFECT 1	02	01	00	Effect1 (Reverb, Chorus, Variation)
MULTI PART	08	00	00	Multi Part 1
		:		:
	08	0F	00	Multi Part 16
DRUM	30	18	00	Drum Setup 1
	31	18	00	Drum Setup 2

------->

Address			Parameter
3n	0B	00	note number 13
3n	0C	00	note number 14
	:		:
3n	5B	00	note number 91

n: Drum setup number (0, 1)

<Table 1-2>

MIDI Parameter Change table (SYSTEM) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
00	00	00	4	0000-07FF	MASTER TUNE	-102.4 - +102.3 [cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	00 04 00 00 -400
		04	1	00 - 7F	MASTER VOLUME	0 - 127	7F
		05	1	00 - 7F	not used		
		06	1	28 - 58	TRANSPOSE	-24 - +24 [semitones]	40
		7D		n	DRUM SETUP RESET	n=Drum setup number	
		7E		00	XG SYSTEM ON	00=XG system ON (receive only)	
		7F		00	ALL PARAMETER RESET	00=ON (receive only)	
TOTAL SIZE			07				

<Table 1-3>

MIDI Parameter Change table (EFFECT 1) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
02	01	00	2	00-7F	REVERB TYPE MSB	see Effect Type List	01(=HALL1)
				00-7F	REVERB TYPE LSB	00 : basic type	00
		02	1	00-7F	REVERB PARAMETER 1	see Effect Parameter List	Depends on reverb type
		03	1	00-7F	REVERB PARAMETER 2	"	"
		04	1	00-7F	REVERB PARAMETER 3	"	"
		05	1	00-7F	REVERB PARAMETER 4	"	"
		06	1	00-7F	REVERB PARAMETER 5	"	"
		07	1	00-7F	REVERB PARAMETER 6	"	"
		08	1	00-7F	REVERB PARAMETER 7	"	"

		09	1	00-7F	REVERB PARAMETER 8	''	''
		0A	1	00-7F	REVERB PARAMETER 9	''	''
		0B	1	00-7F	REVERB PARAMETER 10	''	''
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB(0...64...127)	40
		0D	1	01-7F	REVERB PAN	L63...C...R63(1...64...127)	40
TOTAL SIZE			0E				
02	01	10	1	00-7F	REVERB PARAMETER 11	see Effect Parameter List	Depends on reverb type
		11	1	00-7F	REVERB PARAMETER 12	''	''
		12	1	00-7F	REVERB PARAMETER 13	''	''
		13	1	00-7F	REVERB PARAMETER 14	''	''
		14	1	00-7F	REVERB PARAMETER 15	''	''
		15	1	00-7F	REVERB PARAMETER 16	''	''
TOTAL SIZE			6				
02	01	20	2	00-7F	CHORUS TYPE MSB	see Effect Type List	41 (=CHORUS1)
				00-7F	CHORUS TYPE LSB	00 : basic type	00
		22	1	00-7F	CHORUS PARAMETER 1	see Effect Parameter List	Depends on chorus Type
		23	1	00-7F	CHORUS PARAMETER 2	''	''
		24	1	00-7F	CHORUS PARAMETER 3	''	''
		25	1	00-7F	CHORUS PARAMETER 4	''	''
		26	1	00-7F	CHORUS PARAMETER 5	''	''
		27	1	00-7F	CHORUS PARAMETER 6	''	''
		28	1	00-7F	CHORUS PARAMETER 7	''	''
		29	1	00-7F	CHORUS PARAMETER 8	''	''
		2A	1	00-7F	CHORUS PARAMETER 9	''	''
		2B	1	00-7F	CHORUS PARAMETER 10	''	''
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...64...127)	40
		2D	1	01-7F	CHORUS PAN	L63...C...R63(1...64...127)	40
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB... +6dB(0...64...127)	00
TOTAL SIZE			0F				
02	01	30	1	00-7F	CHORUS PARAMETER 11	see Effect Parameter List	Depends on chorus Type
		31	1	00-7F	CHORUS PARAMETER 12	''	''
		32	1	00-7F	CHORUS PARAMETER 13	''	''
		33	1	00-7F	CHORUS PARAMETER 14	''	''
		34	1	00-7F	CHORUS PARAMETER 15	''	''
		35	1	00-7F	CHORUS PARAMETER 16	''	''
TOTAL SIZE			6				
02	01	40	2	00-7F	VARIATION TYPE MSB	see Effect Type List	05 (=DELAY L, C, R)
				00-7F	VARIATION TYPE LSB	00 : basic type	00
		42	2	00-7F	VARIATION PARAMETER 1 MSB	see Effect Parameter List	Depends on variation type
				00-7F	VARIATION PARAMETER 1 LSB	''	''
		44	2	00-7F	VARIATION PARAMETER 2 MSB	''	''
				00-7F	VARIATION PARAMETER 2 LSB	''	''
		46	2	00-7F	VARIATION PARAMETER 3 MSB	''	''
				00-7F	VARIATION PARAMETER 3 LSB	''	''
		48	2	00-7F	VARIATION PARAMETER 4 MSB	''	''
				00-7F	VARIATION PARAMETER 4 LSB	''	''
		4A	2	00-7F	VARIATION PARAMETER 5 MSB	''	''
				00-7F	VARIATION PARAMETER 5 LSB	''	''
		4C	2	00-7F	VARIATION PARAMETER 6 MSB	''	''
				00-7F	VARIATION PARAMETER 6 LSB	''	''
		4E	2	00-7F	VARIATION PARAMETER 7 MSB	''	''
				00-7F	VARIATION PARAMETE'R 7 LSB	''	''
		50	2	00-7F	VARIATION PARAMETER 8 MSB	''	''
				00-7F	VARIATION PARAMETER 8 LSB	''	''
		52	2	00-7F	VARIATION PARAMETER 9 MSB	''	''
				00-7F	VARIATION PARAMETER 9 LSB	''	''
		54	2	00-7F	VARIATION PARAMETER 10 MSB	''	''
				00-7F	VARIATION PARAMETER 10 LSB	''	''
		56	1	00-7F	VARIATION RETURN	-∞ dB...0dB...+6dB(0...64...127)	40
		57	1	01-7F	VARIATION PAN	L63...C...R63(1...64...127)	40
		58	1	00-7F	SEND VARIATION TO REVERB	-∞ dB...0dB...+6dB(0...64...127)	00
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞ dB...0dB...+6dB(0...64...127)	00
		5A	1	00-01	VARIATION CONNECTION	0:INSERTION, 1:SYSTEM	00
		5B	1	00-0F,7F	VARIATION PART	Part1...16(0...15) 0FF (127)	7F
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64 - +63	40
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64 - +63	40
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64 - +63	40
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64 - +63	40
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64 - +63	40
TOTAL SIZE			21				
02	01	70	1	00-7F	VARIATION PARAMETER 11	see Effect Parameter List	Depends on variation type
		71	1	00-7F	VARIATION PARAMETER 12	''	''
		72	1	00-7F	VARIATION PARAMETER 13	''	''
		73	1	00-7F	VARIATION PARAMETER 14	''	''
		74	1	00-7F	VARIATION PARAMETER 15	''	''
		75	1	00-7F	VARIATION PARAMETER 16	''	''
TOTAL SIZE			6				

<Table 1-4>

MIDI Parameter Change table (MULTI PART) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
08	nn	00	1	00 - 20	ELEMENT RESERVE	0 - 32	part10=0, other =2
	nn	01	1	00 - 7F	BANK SELECT MSB	0 - 127	part10=7F, other=0
	nn	02	1	00 - 7F	BANK SELECT LSB	0 - 127	00
	nn	03	1	00 - 7F	PROGRAM NUMBER	1 - 128	00

	nn	04	1	00 - 0F, 7F	Rcv CHANNEL	1 - 16,OFF	part no.
	nn	05	1	00 - 01	MONO/POLY MODE	0:MONO 1:POLY	01
	nn	06	1	00 - 02	SAME NOTE NUMBER KEY ON ASSIGN	0:SINGLE 1:MULTI 2:INST (for DRUM)	1 (all part) part10=2, other=0
	nn	07	1	00 - 03	PART MODE	0:NORMAL 1:DRUM 2-3:DRUMS1 - 2	00 (other than Part10) 02 (Part10)
	nn	08	1	28 - 58	NOTE SHIFT	-24 - +24 [semitones]	40
	nn	09	2	00 - FF	DETUNE	-12.8 - +12.7 [Hz]	08 00
	nn	0A				1st bit3-0→bit7-4 2nd bit3-0→bit3-0	(80)
	nn	0B	1	00 - 7F	VOLUME	0 - 127	64
	nn	0C	1	00 - 7F	VELOCITY SENSE DEPTH	0 - 127	40
	nn	0D	1	00 - 7F	VELOCITY SENSE OFFSET	0 - 127	40
	nn	0E	1	00 - 7F	PAN	0/random, 1/L63-64/C-127/R63	40
	nn	0F	1	00 - 7F	NOTE LIMIT LOW	C-2 - G8	00
	nn	10	1	00 - 7F	NOTE LIMIT HIGH	C-2 - G8	7F
	nn	11	1	00 - 7F	DRY LEVEL	0 - 127	7F
	nn	12	1	00 - 7F	CHORUS SEND	0 - 127	00
	nn	13	1	00 - 7F	REVERB SEND	0 - 127	40
	nn	14	1	00 - 7F	VARIATION SEND	0 - 127	00
	nn	15	1	00 - 7F	VIBRATO RATE	-64 - +63	40
	nn	16	1	00 - 7F	VIBRATO DEPTH	-64 - +63	40 (drum part ignores)
	nn	17	1	00 - 7F	VIBRATO DELAY	-64 - +63	40 (drum part ignores)
	nn	18	1	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - +63	40
	nn	19	1	00 - 7F	FILTER RESONANCE	-64 - +63	40
	nn	1A	1	00 - 7F	EG ATTACK TIME	-64 - +63	40
	nn	1B	1	00 - 7F	EG DECAY TIME	-64 - +63	40
	nn	1C	1	00 - 7F	EG RELEASE TIME	-61 - +63	40
	nn	1D	1	28 - 58	MW PITCH CONTROL	-24 -+24 [semitones]	40
	nn	1E	1	00 - 7F	MW FILTER CONTROL	-9600 - +9450 [cent]	40
	nn	1F	1	00 - 7F	MW AMPLITUDE CONTROL	-64 - +63	40
	nn	20	1	00 -7F	MW LFO PMOD DEPTH	0 - 127	0A
	nn	21	1	00 - 7F	MW LFO FMOD DEPTH	0 - 127	00
	nn	22	1	00 7F	MW LFO AMOD DEOTH	0 - 127	00
	nn	23	1	28 - 58	BEND PITCH CONTROL	-24 - +24 [semitones]	42
	nn	24	1	00 - 7F	BEND FILTER CONTROL	-9600 - +9450 [cent]	40
	nn	25	1	00 - 7F	BEND AMPLITUDE CONTROL	-64 - +63	40
	nn	26	1	00 - 7F	BEND LFO PMOD DEPTH	+100 - +100 [%]	40
	nn	27	1	00 - 7F	BEND LFO FMOD DEPTH	+100 - +100 [%]	40
	nn	28	1	00 - 7F	BEND LFO AMOD DEPTH	+100 - +100 [%]	40
TOTAL SIZE			29				
	nn	30	1	00 - 01	Rcv PITCH BEND	0/OFF, 1/ON	01
	nn	31	1	00 - 01	Rcv CH AFTER TOUCH (CAT)	0/OFF, 1/ON	01
	nn	32	1	00 - 01	Rcv PROGRAM CHANGE	0/OFF, 1/ON	01
	nn	33	1	00 - 01	Rcv CONTROL CHANGE	0/OFF, 1/ON	01
	nn	34	1	00 - 01	Rcv POLY AFTER TOUCH (PAT)	0/OFF, 1/ON	01
	nn	35	1	00 - 01	Rcv NOTE MESSAGE	0/OFF, 1/ON	01
	nn	36	1	00 - 01	Rcv RPN	0/OFF, 1/ON	01
	nn	37	1	00 - 01	Rcv NRPN	0/OFF, 1/ON	XG=01, GM=00
	nn	38	1	00 - 01	Rcv MODULATION	0/OFF, 1/ON	01
	nn	39	1	00 - 01	Rcv VOLUME	0/OFF, 1/ON	01
	nn	3A	1	00 - 01	Rcv PAN	0/OFF, 1/ON	01
	nn	3B	1	00 - 01	Rcv EXPRESSION	0/OFF, 1/ON	01
	nn	3C	1	00 - 01	Rcv HOLD1	0/OFF, 1/ON	01
	nn	3D	1	00 - 01	Rcv PORTAMENTO	0/OFF, 1/ON	01
	nn	3E	1	00 - 01	Rcv SOSTENUTO	0/OFF, 1/ON	01
	nn	3F	1	00 - 01	Rcv SOFT PEDAL	0/OFF, 1/ON	01
	nn	40	1	00 - 01	Rcv BANK SELECT	0/OFF,1/ON	XG=01, GM=00
	nn	41	1	00 - 7F	SCALE TUNING C	-64 - +63 [cent]	40
	nn	42	1	00 - 7F	SCALE TUNING C#	-64 - +63 [cent]	40
	nn	43	1	00 - 7F	SCALE TUNING D	-64 - +63 [cent]	40
	nn	44	1	00 - 7F	SCALE TUNING D#	-64 - +63 [cent]	40
	nn	45	1	00 - 7F	SCALE TUNING E	-64 - +63 [cent]	40
	nn	46	1	00 - 7F	SCALE TUNING F	-64 - +63 [cent]	40
	nn	47	1	00 - 7F	SCALE TUNING F#	-64 - +63 [cent]	40
	nn	48	1	00 - 7F	SCALE TUNING G	-64 - +63 [cent]	40
	nn	49	1	00 - 7F	SCALE TUNING G#	-64 - +63 [cent]	40
	nn	4A	1	00 - 7F	SCALE TUNING A	-64 - +63 [cent]	40
	nn	4B	1	00 - 7F	SCALE TUNING A#	-64 - +63 [cent]	40
	nn	4C	1	00 - 7F	SCALE TUNING B	-64 - +63 [cent]	40
	nn	4D	1	28 - 58	CAT PITCH CONTROL	-24 - +24 [semitones]	40
	nn	4E	1	00 - 7F	CAT FILTER CONTROL	-9600 - +9450 [cent]	40
	nn	4F	1	00 - 7F	CAT AMPLITUDE CONTROL	-64 - +63	40
	nn	50	1	00 - 7F	CAT LFO PMOD DEPTH	0 - 127	00
	nn	51	1	00 - 7F	CAT LFO FMOD DEPTH	0 - 127	00
	nn	52	1	00 - 7F	CAT LFO AMOD DEPTH	0 - 127	00
	nn	53	1	28 - 58	PAT PITCH CONTROL	-24 - +24 [semitones]	40
	nn	54	1	00 - 7F	PAT FILTER CONTROL	-9600 - +9450 [cent]	40
	nn	55	1	00 - 7F	PAT AMPLITUDE CONTROL	-64 - +63	40
	nn	56	1	00 - 7F	PAT LFO PMOD DEPTH	0 - 127	00
	nn	57	1	00 - 7F	PAT LFO FMOD DEPTH	0 - 127	00
	nn	58	1	00 - 7F	PAT LFO AMOD DEPTH	0 - 127	00
	nn	59	1	00 - 5F	AC1 CONTROLLER NUMBER	0 - 95	10
	nn	5A	1	28 - 58	AC1 PITCH CONTRO	-24 - +24 [semitones]	40
	nn	5B	1	00 - 7F	AC1 FILTER CONTROL	-9600 - +9450 [cent]	40

nn	5C	1	00 - 7F	AC1 AMPLITUDE CONTROL	-64 - +63	40
nn	5D	1	00 - 7F	AC1 LFO PMOD DEPTH	0 - 127	00
nn	5E	1	00 - 7F	AC1 LFO FMOD DEPTH	0 - 127	00
nn	5F	1	00 - 7F	AC1 LFO AMOD DEPTH	0 - 127	00
nn	60	1	00 - 5F	AC2 CONTROLLER NUMBER	0 - 95	11
nn	61	1	28 - 58	AC2 PITCH CONTROL	-24 - +24 [semitones]	40
nn	62	1	00 - 7F	AC2 FILTER CONTROL	-9600 - +9450 [cent]	40
nn	63	1	00 - 7F	AC2 AMPLITUDE CONTROL	-64 - +63	40
nn	64	1	00 - 7F	AC2 LFO PMOD DEPTH	0 - 127	00
nn	65	1	00 - 7F	AC2 LFO FMOD DEPTH	0 - 127	00
nn	66	1	00 - 7F	AC2 LFO AMOD DEPTH	0 - 127	00
nn	67	1	00 - 01	PORTAMENTO SWITCH	0/OFF, 1/ON	00
nn	68	1	00 - 7F	PORTAMENTO TIME	0 - 127	00
nn	69	1	00 - 7F	PITCH EG INITIAL LEVEL	-64 -+63	40
nn	6A	1	00 - 7F	PITCH EG ATTACK TIME	-64 - +63	40
nn	6B	1	00 - 7F	PITCH EG RELEASE LEVEL	-64 - +63	40
nn	6C	1	00 - 7F	PITCH EG RELEASE TIME	-64 - +63	40
nn	6D	1	01 - 7F	VELOCITY LIMIT LOW	1 - 127	01
nn	6E	1	01 - 7F	VELOCITY LIMIT HIGH	1 - 127	7F
TOTAL SIZE		3F				

nn = Part Number (0:1Part, 1:2Part, 2:3Part, ..., 15:16Part)
For the DRUM PART, the following parameters have no effect.

- SOFT PEDAL
- BANK SELECT LSB
- MONO/POLY
- SCALE TUNING
- PORTAMENTO
- PITCH EG INITIAL LEVEL
- PITCH EG ATTACK TIME
- PITCH EG RELEASE LEVEL
- PITCH EF RELEASE TIME
- POLY AFTER TOUCH

<Table 1-5>

MIDI Parameter Change table (DRUM SETUP) [XG]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default
3n	rr	00	1	00 - 7F	PITCH COARSE	-64 - +63	40
3n	rr	01	1	00 - 7F	PITCH FINE	-64 - +63 [cent]	40
3n	rr	02	1	00 - 7F	LEVEL	0 - 127	Depends on the note
3n	rr	03	1	00 - 7F	ALTERNATE GROUP	0/OFF, 1 - 127	〃
3n	rr	04	1	00 - 7F	PAN	0/random, 1/L63 - 64/C - 127/R63	〃
3n	rr	05	1	00 - 7F	REVERB SEND	0 - 127	〃
3n	rr	06	1	00 - 7F	CHORUS SEND	0 - 127	〃
3n	rr	07	1	00 - 7F	VARIATION SEND	0 - 127	7F
3n	rr	08	1	00 - 01	KEY ASSIGN	0/SINGLE, 1/MULTI	00
3n	rr	09	1	00 - 01	Rcv NOTE OFF	0/OFF, 1/ON	Depends on the note
3n	rr	0A	1	00 - 01	Rcv NOTE ON	0/OFF, 1/ON	01
3n	rr	0B	1	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - +63	40
3n	rr	0C	1	00 - 7F	FILTER RESONANCE	-64 - +63	40
3n	rr	0D	1	00 - 7F	EG ATTACK RATE	-64 - +63	40
3n	rr	0E	1	00 - 7F	EG DECAY1 RATE	-64 - +63	40
3n	rr	0F	1	00 - 7F	EG DECAY2 RATE	-64 - +63	40
TOTAL SIZE			10				

[Note]
n: Drum number (0 - 1)
rr: note number (0D - 5B)
When XG system on or GM mode on messages are received, all Drum Setup parameters are initialized.
The Drum Setup Reset message can be used to initialized each Drum Setup parameter.
Selecting a Drum Set will cause the Drum Setup parameter values to be initialized.

<Table 2-1>

Parameter Bass Address
Model ID = 4B [QS300]

Bulk Dump				
	Address			Description
	(H)	(M)	(L)	
USER NORMAL VOICE	11	00	00	User Normal Voice 1
				:
	11	1F	00	User Normal Voice 32

<Table 2-2>

MIDI Bulk Dump table (USER NORMAL VOICE) [QS300]

Address (H)			Size (H)	Data (H)	Parameter	Description	Default value (H)
11	nn	00	17D	20-7E	Voice Name	[Common]	
		:					
		07					
		08			not used		
		:			〃		
		0A			〃		
		0B		01-03	Element Switch		1:Element 1 on, 2:Element 2 on, 3:Element 1 and 2 on
		0C		00-7F	Voice Level		
		0D			not used		
		:			〃		
		3C			〃		
						[Element 1]	
		3D		00-7F	Wave Number High		bit13-bit7
		3E		00-7F	Wave Number Low		bit6-bit0
		3F		00-7F	Note Limit Low		
		40		00-7F	Note Limit High		
		41		00-7F	Velocity Limit Low		
		42		00-7F	Velocity Limit High		
		43		00-01	Filter EG Velocity Curve		
		44		00-02	LFO Wave Select		0:saw, 1:tri, 2:S&H
		45		00-01	LFO Phase Initialize		0:OFF, 1:ON
		46		00-3F	LFO Speed		
		47		00-7F	LFO Delay		
		48		00-7F	LFO Fade Time		
		49		00-3F	LFO PMD Depth		
		4A		00-0F	LFO CMD Depth		
		4B		00-1F	LFO AMD Depth		
		4C		20-60	Note Shift		
		4D		0E -72	Detune		
		4E		00-05	Pitch Scaling		0:100%, 1:50%, 2:20%, 3:10%, 4:5%, 5:0%
		4F		00-7F	Pitch Scaling Center Note		
		50		00-03	Pitch EG Depth		0:1/2oct, 1:1oct, 2:2oct, 3:4oct
		51		39-47	Velocity PEG Level Sensitivity		
		52		39-47	Velocity PEG Rate Sensitivity		
		53		39-47	PEG Rate Scaling		
		54		00-7F	PEG Rate Scaling Center Note		
		55		00-3F	PEG Rate 1		
		56		00-3F	PEG Rate 2		
		57		00-3F	PEG Rate 3		
		58		00-3F	PEG Rate 4		
		59		00-7F	PEG Level 0		
		5A		00-7F	PEG Level 1		
		5B		00-7F	PEG Level 2		
		5C		00-7F	PEG Level 3		
		5D		00-7F	PEG Level 4		
		5E		00-3F	Filter Resonance		
		5F		00-07	Velocity Sensitivity		
		60		00-7F	Cutoff Frequency		
		61		00-7F	Cutoff Scaling Break Point 1		
		62		00-7F	Cutoff Scaling Break Point 2		
		63		00-7F	Cutoff Scaling Break Point 3		
		64		00-7F	Cutoff Scaling Break Point 4		
		65		00-7F	Cutoff Scaling Offset 1		
		66		00-7F	Cutoff Scaling Offset 2		
		67		00-7F	Cutoff Scaling Offset 3		
		68		00-7F	Cutoff Scaling Offset 4		
		69		39-47	Velocity FEG Level Sensitivity		
		6A		39-47	Velocity FEG Rate Sensitivity		
		6B		39-47	FEG Rate Scaling		
		6C		00-7F	FEG Rate Scaling Center Note		
		6D		00-3F	FEG Rate 1		
		6E		00-3F	FEG Rate 2		
		6F		00-3F	FEG Rate 3		
		70		00-3F	FEG Rate 4		
		71		00-7F	FEG Level 0		
		72		00-7F	FEG Level 1		
		73		00-7F	FEG Level 2		
		74		00-7F	FEG Level 3		
		75		00-7F	FEG Level 4		
		76		00-7F	Element Level		
		77		00-7F	Level Scaling Break Point 1		
		78		00-7F	Level Scaling Break Point 2		
		79		00-7F	Level Scaling Break Point 3		
		7A		00-7F	Level Scaling Break Point 4		
		7B		00-7F	Level Scaling Offset 1		
		7C		00-7F	Level Scaling Offset 2		
		7D		00-7F	Level Scaling Offset 3		
		7E		00-7F	Level Scaling Offset 4		
		7F		00-06	Velocity Curve		
		80		00-0F	Pan		0 (Left)-14 (Right), 15:Scaling
		81		39-47	AEG Rate Scaling		
		82		00-7F	AEG Scaling Center Note		
		83		00-0F	AEG Key on Delay		
		84		00-7F	AEG Attack Rate		
		85		00-7F	AEG Decay 1 Rate		
		86		00-7F	AEG Decay 2 Rate		
		87		00-7F	AEG Release Rate		
		88		00-7F	AEG Decay 1 Level		
		89		00-7F	AEG Decay 2 Level		
		8A		00-7F	Address Offset High		bit13-bit7
		8B		00-7F	Address Offset Low		bit6-bit0
		8C		39-47	Resonance Sensitivity		
						[Element 2]	
		8D				same as [Element 1]	
		:				〃	
		DC				〃	
						[Element 3]	
		DD				not used	
		:				〃	
		12C				〃	
		12D				[Element 4]	
		:				not used	
		17C				〃	
TOTAL SIZE		17D					

nn=Voice Number (00-1F)

XG Normal Voice List

Bank Select MSB = 000, LSB = Bank Number

Voice names in bold typeface are voices that can be selected in the Disklavier.
The Disklavier can produce all the voices listed below, but can only display bank 0 voices.

Instrument Group	Program #	Bank #	Voice Name	Element
Piano	1	0	**GrandPno**	1
		1	GrndPnoK	1
		18	MelloGrP	1
		40	PianoStr	2
		41	Dream	2
	2	0	**BritePno**	1
		1	BritPnoK	1
	3	0	**E.Grand**	2
		1	ElGrPnoK	2
		32	Det.CP80	2
		40	ElGrPno1	2
		41	ElGrPno2	2
	4	0	**HnkyTonk**	2
		1	HnkyTnkK	2
	5	0	**E.Piano1**	2
		1	El.Pno1K	1
		18	MelloEP1	2
		32	Chor.EP1	2
		40	HardEl.P	2
		45	VX El.P1	2
		64	60sEl.P	1
	6	0	**E.Piano2**	2
		1	El.Pno2K	1
		32	Chor.EP2	2
		33	DX Hard	2
		34	DXLegend	2
		40	DX Phase	2
		41	DX+Analg	2
		42	DXKotoEP	2
		45	VX El.P2	2
	7	0	**Harpsi.**	1
		1	Harpsi.K	1
		25	Harpsi.2	2
		35	Harpsi.3	2
	8	0	**Clavi.**	2
		1	Clavi. K	1
		27	ClaviWah	2
		64	PulseClv	1
		65	PierceCl	2
Chromatic Percussion	9	0	**Celesta**	1
	10	0	**Glocken**	1
	11	0	**MusicBox**	2
		64	Orgel	2
	12	0	**Vibes**	1
		1	VibesK	1
		45	HardVibe	2
	13	0	**Marimba**	1
		1	MarimbaK	1
		64	SineMrmb	2
		97	Balafon2	2
		98	Log Drum	2
	14	0	**Xylophon**	1
	15	0	**TubulBel**	1
		96	ChrchBel	2
		97	Carillon	2
	16	0	**Dulcimer**	1
		35	Dulcimr2	2
		96	Cimbalom	2
		97	Santur	2

Instrument Group	Program #	Bank #	Voice Name	Element
Organ	17	0	**DrawOrgn**	1
		32	DetDrwOr	2
		33	60sDrOr1	2
		34	60sDrOr2	2
		35	70sDrOr1	2
		36	DrawOrg2	2
		37	60sDrOr3	2
		38	EvenBar	2
		40	16+2"2/3	2
		64	Organ Ba	1
		65	70sDrOr2	2
		66	CheezOrg	2
		67	DrawOrg3	2
	18	0	**PercOrgn**	1
		24	70sPcOr1	2
		32	DetPrcOr	2
		33	LiteOrg	2
		37	PercOrg2	2
	19	0	**RockOrgn**	2
		64	RotaryOr	2
		65	SloRotar	2
		66	FstRotar	2
	20	0	**ChrchOrg**	2
		32	ChurOrg3	2
		35	ChurOrg2	2
		40	NotreDam	2
		64	OrgFlute	2
		65	TrmOrgFl	2
	21	0	**ReedOrgn**	1
		40	Puff Org	2
	22	0	**Acordion**	2
		32	AccordIt	2
	23	0	**Harmnica**	1
		32	Harmo 2	2
	24	0	**TangoAcd**	2
		64	TngoAcd2	2
Guitar	25	0	**NylonGtr**	1
		16	NylonGt2	1
		25	NylonGt3	2
		43	VelGtHrm	2
		96	Ukulele	1
	26	0	**SteelGtr**	1
		16	SteelGt2	1
		35	12StrGtr	2
		40	Nyln&Stl	2
		41	Stl&Body	2
		96	Mandolin	2
	27	0	**Jazz Gtr**	1
		18	MelloGtr	1
		32	JazzAmp	2
	28	0	**CleanGtr**	1
		32	ChorusGt	2
	29	0	**Mute.Gtr**	1
		40	FunkGtr1	2
		41	MuteStlG	2
		43	FunkGtr2	2
		45	Jazz Man	1
	30	0	**Ovrdrive**	1
		43	Gt.Pinch	2
	31	0	**Dist.Gtr**	1
		40	FeedbkGt	2
		41	FeedbGt2	2
	32	0	**GtrHarmo**	1
		65	GtFeedbk	1
		66	GtrHrmo2	1

Instrument Group	Program #	Bank #	Voice Name	Element
Bass	33	0	**Aco.Bass**	1
		40	JazzRthm	2
		45	VXUprght	2
	34	0	**FngrBass**	1
		18	FingrDrk	2
		27	FlangeBa	2
		40	Ba&DstEG	2
		43	FngrSlap	2
		45	FngBass2	2
		65	ModAlem	2
	35	0	**PickBass**	1
		28	MutePkBa	1
	36	0	**Fretless**	1
		32	Fretles2	2
		33	Fretles3	2
		34	Fretles4	2
		96	SynFretl	2
		97	Smooth	2
	37	0	**SlapBas1**	1
		27	ResoSlap	1
		32	PunchThm	2
	38	0	**SlapBas2**	1
		43	VeloSlap	2
	39	0	**SynBass1**	1
		18	SynBa1Dk	1
		20	FastResB	1
		24	AcidBass	1
		35	Clv Bass	2
		40	TeknoBa	2
		64	Oscar	2
		65	SqrBass	1
		66	RubberBa	2
		96	Hammer	2
	40	0	**SynBass2**	2
		6	MelloSB1	1
		12	Seq Bass	2
		18	ClkSynBa	2
		19	SynBa2Dk	1
		32	SmthBa 2	2
		40	ModulrBa	2
		41	DX Bass	2
		64	X WireBa	2
Strings	41	0	**Violin**	1
		8	SlowVln	1
	42	0	**Viola**	1
	43	0	**Cello**	1
	44	0	**Contrabs**	1
	45	0	**Trem.Str**	1
		8	SlowTrStr	1
		40	Susp Str	2
	46	0	**Pizz.Str**	1
	47	0	**Harp**	1
		40	YangChin	2
	48	0	**Timpani**	1

Instrument Group	Program #	Bank #	Voice Name	Element
Ensemble	49	0	**Strings1**	1
		3	S.Strngs	2
		8	SlowStr	1
		24	ArcoStr	2
		35	60sStrng	2
		40	Orchestr	2
		41	Orchstr2	2
		42	TremOrch	2
		45	VeloStr	2
	50	0	**Strings2**	1
		3	S.SlwStr	2
		8	LegatoSt	2
		40	Warm Str	2
		41	Kingdom	2
		64	70s Str	1
		65	Str Ens3	1
	51	0	**Syn.Str1**	2
		27	ResoStr	2
		64	Syn Str4	2
		65	SS Str	2
	52	0	**Syn.Str2**	2
	53	0	ChoirAah	1
		3	S.Choir	2
		16	Ch.Aahs2	2
		32	MelChoir	2
		40	ChoirStr	2
	54	0	**VoiceOoh**	1
	55	0	**SynVoice**	1
		40	SynVox2	2
		41	Choral	2
		64	AnaVoice	1
	56	0	**Orch.Hit**	2
		35	OrchHit2	2
		64	Impact	2
Brass	57	0	**Trumpet**	1
		16	Trumpet2	1
		17	BriteTrp	2
		32	WarmTrp	2
	58	0	**Trombone**	1
		18	Trmbone2	2
	59	0	**Tuba**	1
		16	Tuba 2	1
	60	0	**Mute.Trp**	1
	61	0	**Fr.Horn**	2
		6	FrHrSolo	2
		32	FrHorn2	1
		37	HornOrch	2
	62	0	**BrasSect**	1
		35	Tp&TbSec	2
		40	BrssSec2	2
		41	HiBrass	2
		42	MelloBrs	2
	63	0	**SynBras1**	2
		12	QuackBr	2
		20	RezSynBr	2
		24	PolyBrss	2
		27	SynBras3	2
		32	JumpBrss	2
		45	AnaVelBr	2
		64	AnaBrss1	2
	64	0	**SynBras2**	1
		18	Soft Brs	2
		40	SynBras4	2
		41	ChorBrss	2
		45	VelBras2	2
		64	AnaBras2	2

Bank 0 : (GM)
Bank 1 : Key Scale Planning
Bank 3 : Stereo
Bank 6 : Single
Bank 8 : Slow
Bank 12 : Fast Decay
Bank 14 : Double Attack
Bank 16 : Bright
Bank 17 : Bright
Bank 18 : Dark
Bank 19 : Dark
Bank 20 : Resonant
Bank 24 : Attack
Bank 24 : Release
Bank 27 : Reso Sweep
Bank 28 : Muted
Bank 32 : Detune 1
Bank 33 : Detune 2
Bank 34 : Detune 3
Bank 35 : Octave 1
Bank 36 : Octave 2
Bank 37 : 5th 1
Bank 38 : 5th 2
Bank 39 : Bend
Bank 40 : Tutti
Bank 41 : Tutti
Bank 42 : Tutti
Band 43 : Velo-Switch
Bank 45 : Velo-Xfade
Bank 64 : Other wave
Bank 65 : Other wave
Bank 66 : Other wave
Bank 67 : Other wave
Bank 68 : Other wave
Bank 69 : Other wave
Bank 70 : Other wave
Bank 71 : Other wave
Bank 72 : Other wave
Bank 96 : Other wave
Bank 97 : Other wave
Bank 98 : Other wave
Bank 99 : Other wave
Bank 100 : Other wave
Bank 101 : Other wave

Bank Select
MSB = 064, LSB = 000
SFX Voice

Instrument Group	Program #	Bank #	Voice Name	Element
Reed	65	0	**SprnoSax**	1
	66	0	**Alto Sax**	1
		40	Sax Sect	2
		43	HyprAlto	2
	67	0	**TenorSax**	1
		40	BrthTnSx	2
		41	SoftTenr	2
		64	TnrSax 2	1
	68	0	**Bari.Sax**	1
	69	0	**Oboe**	2
	70	0	**Eng.Horn**	1
	71	0	**Bassoon**	1
	72	0	**Clarinet**	1
Pipe	73	0	**Piccolo**	1
	74	0	**Flute**	1
	75	0	**Recorder**	1
	76	0	**PanFlute**	1
	77	0	**Bottle**	2
	78	0	**Shakuhchi**	2
	79	0	**Whistle**	1
	80	0	**Ocarina**	1
Synth Lead	81	0	**SquareLd**	2
		6	Square 2	1
		8	LMSquare	2
		18	Hollow	1
		19	Shmoog	2
		64	Mellow	2
		65	SoloSine	2
		66	SineLead	1
	82	0	**Saw.Lead**	2
		6	Saw 2	1
		8	ThickSaw	2
		18	DynaSaw	1
		19	DigiSaw	2
		20	Big Lead	2
		24	HeavySyn	2
		25	WaspySyn	2
		40	PulseSaw	2
		41	Dr. Lead	2
		45	VeloLead	2
		96	Seq Ana	2
	83	0	**CaliopLd**	2
		65	Pure Pad	2
	84	0	**Chiff Ld**	2
		64	Rubby	2
	85	0	**CharanLd**	2
		64	DistLead	2
		65	WireLead	2
	86	0	**Voice Ld**	2
		24	SynthAah	2
		64	VoxLead	2
	87	0	**Fifth Ld**	2
		35	Big Five	2
	88	0	**Bass &Ld**	2
		16	Big&Low	2
		64	Fat&Prky	2
		65	SoftWurl	2
Synth Pad	89	0	**NewAgePd**	2
		64	Fantasy2	2
	90	0	**Warm Pad**	2
		16	ThickPad	2
		17	Soft Pad	2
		18	SinePad	2
		64	Horn Pad	2
		65	RotarStr	2
	91	0	**PolySyPd**	2
		64	PolyPd80	2
		65	ClickPad	2
		66	Ana Pad	2
		67	SquarPad	2

Instrument Group	Program #	Bank #	Voice Name	Element
Synth Pad	92	0	**ChoirPad**	2
		64	Heaven2	2
		66	Itopia	2
		67	CC Pad	2
	93	0	**BowedPad**	2
		64	Glacier	2
		65	GlassPad	2
	94	0	**MetalPad**	2
		64	Tine Pad	2
		65	Pan Pad	2
	95	0	**Halo Pad**	2
	96	0	**SweepPad**	2
		20	Shwimmer	2
		27	Converge	2
		64	PolarPad	2
		66	Celstial	2
Synth Effects	97	0	**Rain**	2
		45	ClaviPad	2
		64	HrmoRain	2
		65	AfrcnWnd	2
		66	Caribean	2
	98	0	**SoundTrk**	2
		27	Prologue	2
		64	Ancestrl	2
	99	0	**Crystal**	2
		12	SynDrCmp	2
		14	Popcorn	2
		18	TinyBell	2
		35	RndGlock	2
		40	GlockChi	2
		41	ClearBel	2
		42	ChorBell	2
		64	SynMalet	1
		65	SftCryst	2
		66	LoudGlok	2
		67	XmasBell	2
		68	VibeBell	2
		69	DigiBell	2
		70	AirBells	2
		71	BellHarp	2
		72	GameImba	2
	100	0	**Atmosphr**	2
		18	WarmAtms	2
		19	HollwRls	2
		40	NylonEP	2
		64	NylnHarp	2
		65	Harp Vox	2
		66	AtmosPad	2
		67	Planet	2
	101	0	**Bright**	2
		64	FantaBel	2
		96	Smokey	2
	102	0	**Goblins**	2
		64	GobSyn	2
		65	50sSciFi	2
		66	Ring Pad	2
		67	Ritual	2
		68	ToHeaven	2
		70	Night	2
		71	Glisten	2
		96	BelChoir	2
	103	0	**Echoes**	2
		8	EchoPad2	2
		14	Echo Pan	2
		64	EchoBell	2
		65	Big Pan	2
		66	SynPiano	2
		67	Creation	2
		68	Stardust	2
		69	Reso Pan	2
	104	0	**Sci-Fi**	2
		64	Starz	2

Instrument Group	Program #	Bank #	Voice Name	Element
Ethnic	105	0	**Sitar**	1
		32	DetSitar	2
		35	Sitar 2	2
		96	Tambra	2
		97	Tamboura	2
	106	0	**Banjo**	1
		28	MuteBnjo	1
		96	Rabab	2
		97	Gopichnt	2
		98	Oud	2
	107	0	**Shamisen**	1
	108	0	**Koto**	1
		96	T. Koto	2
		97	Kanoon	2
	109	0	**Kalimba**	1
	110	0	**Bagpipe**	2
	111	0	**Fiddle**	1
	112	0	**Shanai**	1
		64	Shanai2	1
		96	Pungi	1
		97	Hichriki	2
Percussive	113	0	**TnklBell**	2
		96	Bonang	2
		97	Gender	2
		98	Gamelan	2
		99	S.Gamlan	2
		100	Rama Cym	2
		101	AsianBel	2
	114	0	**Agogo**	2
	115	0	**SteelDrm**	2
		97	GlasPerc	2
		98	ThaiBell	2
	116	0	**WoodBlok**	1
		96	Castanet	1
	117	0	**TaikoDrm**	1
		96	Gr.Cassa	1
	118	0	**MelodTom**	2
		64	Mel Tom2	1
		65	Real Tom	2
		66	Rock Tom	2
	119	0	**Syn.Drum**	1
		64	Ana Tom	1
		65	ElecPerc	2
	120	0	**RevCymbl**	1
Sound Effects	121	0	**FretNoiz**	2
	122	0	**BrthNoiz**	2
	123	0	**Seashore**	2
	124	0	**Tweet**	2
	125	0	**Telphone**	1
	126	0	**Helicptr**	1
	127	0	**Applause**	1
	128	0	**Gunshot**	1

Program #	MSB=064 LSB=000	Element
1	CuttngNz	1
2	CttngNz2	2
3		
4	Str Slap	1
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17	Fl.KClik	1
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33	Rain	1
34	Thunder	1
35	Wind	1
36	Stream	2
37	Bubble	2
38	Feed	2
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49	Dog	1
50	Horse	1
51	Bird 2	1
52		
53		
54		
55	Ghost	2
56	Maou	2
57		
58		
59		
60		
61		
62		
63		
64		

Program #	MSB=064 LSB=000	Element
65	Tel.Dial	1
66	DoorSqek	1
67	Door Slam	1
68	Scratch	1
69	Scratch 2	2
70	WindChm	1
71	Telphon2	1
72		
73		
74		
75		
76		
77		
78		
79		
80		
81	CarEngin	1
82	Car Stop	1
83	Car Pass	1
84	CarCrash	1
85	Siren	2
86	Train	1
87	Jetplane	2
88	Starship	2
89	Burst	2
90	Coaster	2
91	SbMarine	2
92		
93		
94		
95		
96		
97	Laughing	1
98	Scream	1
99	Punch	1
100	Heart	1
101	FootStep	1
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113	MchinGun	1
114	LaserGun	2
115	Xplosion	2
116	FireWork	2
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		

: No Sound

Appendix

TG300B Normal Voice List

Bank Select MSB=Bank Number, LSB=000

Instrument Group	Program #	Bank #	Voice Name	Element
Piano	1	0	GrandPno	1
		8	GrndPnoK	1
		16	MelloGrP	1
		126	A-Piano1	2
		127	a.piano1	1
	2	0	BritePno	1
		8	BritPnoK	1
		126	A-Piano2	2
		127	a.piano2	1
	3	0	E.Grand	2
		1	ElGrPno1	2
		2	ElGrPno2	2
		8	ElGrPnoK	2
		126	A-Piano3	2
		127	a.piano3	1
	4	0	HnkyTonk	2
		8	HnkyTnkK	2
		126	A-Piano4	2
		127	e.piano1	1
	5	0	E.Piano1	2
		8	Chor.EP1	2
		16	VX El.P1	2
		24	60sEl.P	1
		25	HardEl.P	2
		26	MelloEP1	2
		32	El.Pno1K	1
		126	A-Piano5	1
		127	e.piano2	1
	6	0	E.Piano2	2
		8	Chor.EP2	2
		16	VX El.P2	2
		24	DX Hard	2
		32	El.Pno2K	1
		126	A-Piano6	1
		127	e.piano3	1
	7	0	Harpsi.	1
		8	Harpsi.3	2
		16	Harpsi.K	1
		24	Harpsi.2	2
		126	A-Piano7	1
		127	e.piano4	1
	8	0	Clavi.	2
		8	Clavi. K	1
		126	E-Piano1	2
		127	hnkytnk	2
Chromatic Percussion	9	0	Celesta	1
		126	E-Piano2	2
		127	e.organ1	2
	10	0	Glocken	1
		126	E-Piano3	2
		127	e.organ2	2
	11	0	MusicBox	2
		126	A-Guitr1	1
		127	e.organ3	1
	12	0	Vibes	1
		1	HardVibe	2
		8	VibesK	1
		126	A-Guitr2	2
		127	e.organ4	1
	13	0	Marimba	1
		8	MarimbaK	1
		17	Balafon2	2
		24	Log Drum	2
		126	A-Guitr3	2
		127	pipeorg1	2
	14	0	Xylophon	1
		126	E-Guitr1	2
		127	pipeorg2	2
	15	0	TubulBel	1
		8	ChrchBel	2
		9	Carillon	2
		126	E-Guitr2	1
		127	pipeorg3	2
	16	0	Dulcimer	1
		1	Dulcimr2	2
		8	Cimbalom	2
		126	Slap-1	2
		127	acordion	2

Instrument Group	Program #	Bank #	Voice Name	Element
Organ	17	0	DrawOrgn	1
		1	70sDrOr1	2
		8	DetDrwOr	2
		9	70sDrOr2	2
		16	60sDrOr1	2
		17	60sDrOr2	2
		18	60sDrOr3	2
		24	CheezOrg	2
		32	DrawOrg2	2
		33	EvenBar	2
		40	Organ Ba	1
		126	Slap-2	2
		127	harpsi1	1
	18	0	PercOrgn	1
		1	70sPcOr1	2
		8	DetPrcOr	2
		32	PercOrg2	2
		126	Slap-3	2
		127	harpsi2	2
	19	0	RockOrgn	2
		8	RotaryOr	2
		16	SloRotar	2
		24	FstRotar	2
		126	Slap-4	2
		127	harpsi3	1
	20	0	ChrchOrg	2
		8	ChurOrg2	2
		16	ChurOrg3	2
		24	OrgFlute	2
		32	TrmOrgFl	2
		126	Slap-5	2
		127	clavi1	1
	21	0	ReedOrgn	1
		126	Slap-6	2
		127	clavi2	1
	22	0	Acordion	2
		8	AccordIt	2
		126	Slap-7	2
		127	clavi3	1
	23	0	Harmnica	1
		1	Harmo 2	2
		126	Slap-8	2
		127	celesta1	1
	24	0	TangoAcd	2
		126	Finger-1	1
		127	celesta2	1
Guitar	25	0	NylonGtr	1
		8	Ukulele	1
		16	NylonGt3	2
		24	VelGtHrm	2
		32	NylonGt2	1
		40	LequintG	1
		126	Finger-2	2
		127	synbras1	2
	26	0	SteelGtr	1
		8	12StrGtr	2
		9	Nyln&Stl	2
		16	Mandolin	2
		32	SteelGt2	1
		126	Picked-1	1
		127	synbras2	2
	27	0	Jazz Gtr	1
		1	MelloGtr	1
		8	PdlSteel	1
		126	Picked-2	2
		127	synbras3	2
	28	0	CleanGtr	1
		8	ChorusGt	2
		126	FretlsBs	1
		127	synbras4	2

Instrument Group	Program #	Bank #	Voice Name	Element
Guitar	29	0	Mute.Gtr	1
		8	FunkGtr1	2
		16	FunkGtr2	2
		126	A-Bass	2
		127	synbass1	1
	30	0	Ovrdrive	1
		126	Choir-1	1
		127	synbass2	1
	31	0	Dist.Gtr	1
		8	FeedbkGt	2
		9	FeedbGt2	2
		126	Choir-2	1
		127	synbass3	2
	32	0	GtrHarmo	1
		8	GtFeedbk	1
		126	Choir-3	2
		127	synbass4	1
Bass	33	0	Aco.Bass	1
		126	Choir-4	2
		127	newagepd	2
	34	0	FngrBass	1
		1	FngBass2	2
		126	Strngs-1	2
		127	synharmo	2
	35	0	PickBass	1
		8	MutePkBa	1
		126	Strngs-2	2
		127	choir pd	2
	36	0	Fretless	1
		1	Fretles2	2
		2	Fretles3	2
		3	Fretles4	2
		4	SynFretl	2
		5	Smooth	2
		126	Strngs-3	2
		127	bowed pd	2
	37	0	SlapBas1	1
		8	ResoSlap	1
		126	Strngs-4	2
		127	soundtrk	2
	38	0	SlapBas2	1
		126	E-Organ1	2
		127	atmosphr	2
	39	0	SynBass1	1
		1	SynBa1Dk	1
		8	AcidBass	1
		9	FastResB	1
		10	TeknoBa	2
		16	ResoBass	1
		126	E-Organ2	2
		127	syn warm	2
	40	0	SynBass2	2
		1	ClkSynBa	2
		2	ModulrBa	2
		3	Seq Bass	2
		8	DX Bass	2
		9	X WireBa	2
		16	RubberBa	2
		17	SynBa2Dk	1
		18	MelloSB1	1
		19	SmthBa 2	2
		126	E-Organ3	2
		127	synfunny	1

Instrument Group	Program #	Bank #	Voice Name	Element
Strings	41	0	Violin	1
		8	SlowVln	1
		126	E-Organ4	2
		127	synecho1	2
	42	0	Viola	1
		126	E-Organ5	2
		127	rain	2
	43	0	Cello	1
		126	E-Organ6	2
		127	synoboe	2
	44	0	Contrabs	1
		126	E-Organ7	2
		127	synecho2	2
	45	0	Trem.Str	1
		8	SlowTrStr	1
		9	Susp Str	2
		126	E-Organ8	2
		127	synsolo	2
	46	0	Pizz.Str	1
		126	E-Organ9	2
		127	synrdorg	2
	47	0	Harp	1
		126	SoftTP-1	1
		127	synbell	1
	48	0	Timpani	1
		126	SoftTP-2	1
		127	squareld	2
Ensemble	49	0	Strings1	1
		1	Slow Str	1
		8	Orchestr	2
		9	Orchstr2	2
		10	TremOrch	2
		11	ChoirStr	2
		16	S.Strngs	2
		24	VeloStr	2
		126	TP/TRB-1	1
		127	strsect1	2
	50	0	Strings2	1
		1	70s Str	1
		8	LegatoSt	2
		9	Warm Str	2
		10	S.SlwStr	2
		126	TP/TRB-2	1
		127	strsect2	2
	51	0	Syn.Str1	2
		1	Syn Str4	2
		126	TP/TRB-3	1
		127	strsect3	2
	52	0	Syn.Str2	2
		126	TP/TRB-4	1
		127	pizz.str	1
	53	0	ChoirAah	1
		8	S.Choir	2
		9	MelChoir	2
		32	Ch.Aahs2	2
		126	TP/TRB-5	2
		127	violin 1	2
	54	0	VoiceOoh	1
		126	TP/TRB-6	2
		127	violin 2	1
	55	0	SynVoice	1
		8	SynVox2	2
		126	Sax-1	1
		127	cello 1	1
	56	0	Orch.Hit	2
		1	OrchHit2	2
		8	Impact	2
		16	LoFiRave	2
		126	Sax-2	1
		127	cello 2	1

Instrument Group	Program #	Bank #	Voice Name	Element
Brass	57	0	Trumpet	1
		1	Trumpet2	1
		24	BriteTrp	2
		25	WarmTrp	2
		126	Sax-3	1
		127	contrabs	1
	58	0	Trombone	1
		1	Trmbone2	2
		126	Sax-4	2
		127	harp 1	1
	59	0	Tuba	1
		1	Tuba 2	1
		126	Brass-1	1
		127	harp 2	1
	60	0	Mute.Trp	1
		126	Brass-2	1
		127	guitar 1	1
	61	0	Fr.Horn	2
		1	FrHorn2	2
		8	FrHrSolo	1
		16	HornOrch	2
		126	Brass-3	2
		127	guitar 2	1
	62	0	BrasSect	1
		8	BrssSec2	2
		126	Brass-4	2
		127	elecgtr1	2
	63	0	SynBras1	2
		1	PolyBrss	2
		8	SynBras3	2
		9	QuackBr	2
		16	AnaBrss1	2
		126	Brass-5	2
		127	elecgtr2	2
	64	0	SynBras2	1
		1	Soft Brs	2
		8	SynBras4	2
		16	AnaBrss2	2
		17	VelBras2	2
		126	Orch-Hit	1
		127	sitar	1
Reed	65	0	SprnoSax	1
		127	a.bass 1	1
	66	0	Alto Sax	1
		8	HyprAlto	2
		127	a.bass 2	1
	67	0	TnrSax 2	1
		8	BrthTnSx	2
		127	e.bass 1	1
	68	0	Bari.Sax	1
		127	e.bass 2	1
	69	0	Oboe	2
		127	slapbas1	1
	70	0	Eng.Horn	1
		127	slapbas2	1
	71	0	Bassoon	1
		127	fretles1	1
	72	0	Clarinet	1
		127	fretles2	1
Pipe	73	0	Piccolo	1
		127	flute1	1
	74	0	Flute	1
		127	flute2	1
	75	0	Recorder	1
		127	piccolo1	1
	76	0	PanFlute	1
		127	piccolo2	2
	77	0	Bottle	2
		127	recorder	1
	78	0	Shakhchi	2
		127	panpipes	2
	79	0	Whistle	1
		127	sax1	2
	80	0	Ocarina	1
		127	sax2	1

Instrument Group	Program #	Bank #	Voice Name	Element
Synth Lead	81	0	SquareLd	2
		1	Square 2	1
		2	Hollow	1
		3	Mellow	2
		4	SoloSine	2
		5	Shmoog	2
		6	LMSquare	2
		8	SineLead	1
		127	sax3	1
	82	0	Saw.Lead	2
		1	Saw 2	1
		2	PulseSaw	2
		3	ThickSaw	2
		4	Big Lead	2
		5	VeloLead	2
		6	HeavySyn	2
		7	DynaSaw	1
		8	Dr. Lead	2
		16	WaspySyn	2
		127	sax4	1
	83	0	CaliopLd	2
		2	Pure Pad	2
		127	clarint1	1
	84	0	Chiff Ld	2
		127	clarint2	1
	85	0	CharanLd	2
		8	DistLead	2
		127	oboe	1
	86	0	Voice Ld	2
		127	eng.horn	1
	87	0	Fifth Ld	2
		1	Big Five	2
		127	bassoon	1
	88	0	Bass &Ld	2
		1	Big&Low	2
		2	Fat&Prky	2
		127	harmnica	1
Synth Pad	89	0	NewAgePd	2
		1	Fantasy2	2
		127	trumpet1	1
	90	0	Warm Pad	2
		1	ThickPad	2
		2	Horn Pad	2
		3	RotarStr	2
		4	Soft Pad	2
		127	trumpet2	1
	91	0	PolySyPd	2
		1	PolyPd80	2
		127	trmbone1	2
	92	0	ChoirPad	2
		1	Heaven2	2
		127	trmbone2	2
	93	0	BowedPad	2
		127	fr.horn1	1
	94	0	MetalPad	2
		1	Tine Pad	2
		2	Pan Pad	2
		127	fr.horn2	2
	95	0	Halo Pad	2
		127	tuba	2
	96	0	SweepPad	2
		1	PolarPad	2
		8	Converge	2
		9	Shwimmer	2
		10	Celstial	2
		127	brssect1	1

Instrument Group	Program #	Bank #	Voice Name	Element
Synth Effects	97	0	Rain	2
		1	HrmoRain	2
		2	AfrcnWnd	2
		8	ClaviPad	2
		127	brssect2	2
	98	0	SoundTrk	2
		1	Ancestrl	2
		2	Prologue	2
		127	vibe1	1
	99	0	Crystal	2
		1	SynMalet	1
		2	SftCryst	2
		3	RndGlock	2
		4	LoudGlok	2
		5	GlockChi	2
		6	ClearBel	2
		7	XmasBell	2
		8	VibeBell	2
		9	DigiBell	2
		16	ChorBell	2
		17	AirBells	2
		18	BellHarp	2
		19	GameImba	2
		127	vibe2	1
	100	0	Atmosphr	2
		1	WarmAtms	2
		2	NylnHarp	2
		3	Harp Vox	2
		4	HollwRls	2
		5	NylonEP	2
		6	AtmosPad	2
		127	symallet	1
	101	0	Bright	2
		127	maletwin	2
	102	0	Goblins	2
		1	GobSyn	2
		2	50sSciFi	2
		127	glocken	2
	103	0	Echoes	2
		1	EchoBell	2
		2	Echo Pan	2
		3	EchoPad2	2
		4	Big Pan	2
		6	SynPiano	2
		127	tubulbel	1
	104	0	Sci-Fi	2
		1	Starz	2
		127	xylophon	1
Ethnic	105	0	Sitar	1
		1	Sitar 2	2
		2	DetSitar	2
		8	Tambra	2
		16	Tamboura	2
		127	marimba	2
	106	0	Banjo	1
		1	MuteBnjo	1
		8	Rabab	2
		16	Gopichnt	2
		24	Oud	2
		127	koto	1
	107	0	Shamisen	1
		127	sho	2
	108	0	Koto	1
		8	T. Koto	2
		16	Kanoon	2
		127	shakhchi	2
	109	0	Kalimba	1
		127	whistle1	2
	110	0	Bagpipe	2
		127	whistle2	1
	111	0	Fiddle	1
		127	bottle	2
	112	0	Shanai	1
		1	Shanai2	1
		8	Pungi	1
		16	Hichriki	2
		127	breath	2

Instrument Group	Program #	Bank #	Voice Name	Element
Percussive	113	0	TnklBell	2
		8	Bonang	2
		9	Gender	2
		10	Gamelan	2
		11	S.Gamlan	2
		16	Rama Cym	2
		127	timpani	1
	114	0	Agogo	2
		127	melotom	1
	115	0	SteelDrm	2
		127	deepsnar	1
	116	0	WoodBlok	1
		8	Castanet	1
		127	e.perc1	1
	117	0	TaikoDrm	1
		8	Gr.Cassa	1
		127	e.perc2	1
	118	0	MelodTom	2
		1	Real Tom	2
		8	Mel Tom2	1
		9	Rock Tom	2
		127	taiko	1
	119	0	Syn.Drum	1
		8	Ana Tom	1
		9	ElecPerc	2
		127	taikorim	1
	120	0	RevCymbl	1
		127	cymbal	2
Sound Effects	121	0	FretNoiz	2
		1	CuttngNz	1
		2	Str Slap	1
		3	CttngNz2	2
		127	castanet	1
	122	0	BrthNoiz	2
		1	Fl.KClik	1
		127	triangle	1
	123	0	Seashore	2
		1	Rain	1
		2	Thunder	1
		3	Wind	1
		4	Stream	2
		5	Bubble	2
		127	orchehit	1
	124	0	Tweet	2
		1	Dog	1
		2	Horse	1
		3	Bird 2	1
		127	telphone	1
	125	0	Telphone	1
		1	Tel.Dial	1
		2	DoorSqek	1
		3	DoorSlam	1
		4	Scratch	1
		5	WindChm	1
		6	Scratch2	2
		127	bird	1
	126	0	Helicptr	1
		1	CarEngin	1
		2	Car Stop	1
		3	Car Pass	1
		4	CarCrash	1
		5	Siren	2
		6	Train	1
		7	Jetplane	2
		8	Starship	2
		9	Burst	2
		16	Coaster	2
		127	jam	1
	127	0	Applause	1
		1	Laughing	1
		2	Scream	1
		3	Punch	1
		4	Heart	1
		5	FootStep	1
		127	efctwatr	2
	128	0	Gunshot	1
		1	MchinGun	1
		2	LaserGun	2
		3	Xplosion	2
		127	efctjngl	2

XG Drum Voice List

Bank Select MSB=Bank Number, LSB=000

Drum kit names in bold typeface are those that can be selected in the Disklavier.

Bank				127	127	127	127	127	127	127	127	127	126	126
Program #				1	2	9	17	25	26	33	41	49	1	2
Note#	Note	Key off	Alternate assign	**Standard Kit**	**Standard2 Kit**	**Room Kit**	**Rock Kit**	**Electro Kit**	**Analog Kit**	**Jazz Kit**	**Brush Kit**	**Classic Kit**	SFX 1	SFX 2
13	C# -1		3	Surdo Mute										
14	D -1		3	Surdo Open										
15	D# -1			Hi Q										
16	E -1			Whip Slap										
17	F -1		4	Scratch Push										
18	F# -1		4	Scratch Pull										
19	G -1			Finger Snap										
20	G# -1			Click Noise										
21	A -1			Metronome Click										
22	A# -1			Metronome Bell										
23	B -1			Seq Click L										
24	C 0			Seq Click H										
25	C# 0			Brush Tap										
26	D 0	O		Brush Swirl L										
27	D# 0			Brush Slap										
28	E 0	O		Brush Swirl H				Reverse Cymbal	Reverse Cymbal					
29	F 0	O		Snare Roll	Snare Roll 2									
30	F# 0			Castanet				Hi Q	Hi Q					
31	G 0			Snare L	Snare L 2		SD Rock M	Snare M	SD Rock H		Brush Slap L			
32	G# 0			Sticks										
33	A 0			Bass Drum L			Bass Drum M	Bass Drum H 4	Bass Drum M			Bass Drum L2		
34	A# 0			Open Rim Shot	Open Rim Shot 2									
35	B 0			Bass Drum M	Bass Drum M 2		Bass Drum H 3	BD Rock	BD Analog L			Gran Cassa		
36	C 1			Bass Drum H	Bass Drum H 2		BD Rock	BD Gate	BD Analog H	BD Jazz	BD Soft	Gran Cassa Mute	Guitar Cutting Noise	Dial Tone
37	C# 1			Side Stick					Analog Side Stick				Guitar Cutting Noise 2	Door Creaking
38	D 1			Snare M	Snare M 2	SD Room L	SD Rock	SD Rock L	Analog Snare L		Brush Slap M	Marching Sn M		Door Slam
39	D# 1			Hand Clap									String Slap	Scratch
40	E 1			Snare H	Snare H 2	SD Room H	SD Rock Rim	SD Rock H	Analog Snare H		Brush Tap H	Marching Sn H		Scratch 2
41	F 1			Floor Tom L		Room Tom 1	Rock Tom 1	E Tom 1	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1		Windchime
42	F# 1		1	Hi-Hat Closed					Analog HH Closed 1					Telephone Ring2
43	G 1			Floor Tom H		Room Tom 2	Rock Tom 2	E Tom 2	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2		
44	G# 1		1	Hi-Hat Pedal					Analog HH Closed 2					
45	A 1			Low Tom		Room Tom 3	Rock Tom 3	E Tom 3	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3		
46	A# 1		1	Hi-Hat Open					Analog HH Open					
47	B 1			Mid Tom L		Room Tom 4	Rock Tom 4	E Tom 4	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4		
48	C 2			Mid Tom H		Room Tom 5	Rock Tom 5	E Tom 5	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5		
49	C# 2			Crash Cymbal 1					Analog Cymbal			Hand Cym.Open L		
50	D 2			High Tom		Room Tom 6	Rock Tom 6	E Tom 6	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6		
51	D# 2			Ride Cymbal 1								Hand Cym.Closed L		
52	E 2			Chinese Cymbal									FL.Key Click	Engine Start
53	F 2			Ride Cymbal Cup										Tire Screech
54	F# 2			Tambourine										Car Passing
55	G 2			Splash Cymbal										Crash
56	G# 2			Cowbell					Analog Cowbell					Siren
57	A 2			Crash Cymbal 2								Hand Cym.Open H		Train
58	A# 2			Vibraslap										Jetplane
59	B 2			Ride Cymbal 2								Hand Cym.Closed H		Starship
60	C 3			Bongo H										Burst Noise
61	C# 3			Bongo L										Coaster
62	D 3			Conga H Mute					Analog Conga H					SbMarine
63	D# 3			Conga H Open					Analog Conga M					
64	E 3			Conga L					Analog Conga L					
65	F 3			Timbale H										
66	F# 3			Timbale L										
67	G 3			Agogo H										
68	G# 3			Agogo L									Rain	Laughing
69	A 3			Cabasa									Thunder	Screaming
70	A# 3			Maracas					Analog Maracas				Wind	Punch
71	B 3	O		Samba Whistle H									Stream	Heartbeat
72	C 4	O		Samba Whistle L									Bubble	Footsteps
73	C# 4			Guiro Short									Feed	
74	D 4	O		Guiro Long										
75	D# 4			Claves					Analog Claves					
76	E 4			Wood Block H										
77	F 4			Wood Block L										
78	F# 4			Cuica Mute				Scratch Push	Scratch Push					
79	G 4			Cuica Open				Scratch Pull	Scratch Pull					
80	G# 4		2	Triangle Mute										
81	A 4		2	Triangle Open										
82	A# 4			Shaker										
83	B 4			Jingle Bell										
84	C 5			Bell Tree									Dog	Machine Gun
85	C# 5												Horse Gallop	Laser Gun
86	D 5												Bird 2	Explosion
87	D# 5													FireWork
88	E 5													
89	F 5													
90	F# 5												Ghost	
91	G 5												Maou	

: Same as Standard Kit

: No Sound

TG300B Drum Voice List

Program #			1	9	17	25	26	33	41	49	57	128
Note#	Note	Alternate assign	Standard Kit	Room Kit	Power Kit	Electro Kit	Analog Kit	Jazz Kit	Brush Kit	Orchestra Kit	SFX Set	C/M Kit
25	C# 0		Snare Roll									
26	D 0		Finger Snap									
27	D# 0		Hi Q							Hi-Hat Closed		
28	E 0		Whip Slap							Hi-Hat Pedal		
29	F 0	7	Scratch Push							Hi-Hat Open		
30	F# 0	7	Scratch Pull							Ride Cymbal 1		
31	G 0		Sticks									
32	G# 0		Click Noise									
33	A 0		Metronome Click									
34	A# 0		Metronome Bell									
35	B 0		Bass Drum M							BD Jazz		
36	C 1		Bass Drum H		BD Power	BD Electronic	BD Analog H	BD Jazz	BD Soft	Gran Cassa		
37	C# 1		Side Stick				Analog Side Stick					
38	D 1		Snare M		SD Power	SD Electronic	Analog Snare L		Brush Tap	Concert SD		
39	D# 1		Hand Clap						Brush Slap	Castanet	High-Q	
40	E 1		Snare H			SD Power			Brush Swirl	Concert SD	Slap	SD Electro
41	F 1		Floor Tom L	Room Tom 1	Room Tom 1	E Tom 1	Analog Tom 1	Jazz Tom 1	Jazz Tom 1	Timpani F	Scratch Push	
42	F# 1	1	Hi-Hat Closed				Analog HH Closed 1			Timpani F#	Scratch Pull	
43	G 1		Floor Tom H	Room Tom 2	Room Tom 2	E Tom 2	Analog Tom 2	Jazz Tom 2	Jazz Tom 2	Timpani G	Sticks	
44	G# 1	1	Hi-Hat Pedal				Analog HH Closed 2			Timpani G#	Square Click	Hi-Hat Open 1
45	A 1		Low Tom	Room Tom 3	Room Tom 3	E Tom 3	Analog Tom 3	Jazz Tom 3	Jazz Tom 3	Timpani A	Metronome Click	
46	A# 1	1	Hi-Hat Open				Analog HH Open			Timpani A#	Metronome Bell	Hi-Hat Open 2
47	B 1		Mid Tom L	Room Tom 4	Room Tom 4	E Tom 4	Analog Tom 4	Jazz Tom 4	Jazz Tom 4	Timpani B	Guitar Fret Noise	
48	C 2		Mid Tom H	Room Tom 5	Room Tom 5	E Tom 5	Analog Tom 5	Jazz Tom 5	Jazz Tom 5	Timpani C	Guitar Cutting Down	
49	C# 2		Crash Cymbal 1				Analog Cymbal			Timpani C#	Guitar Cutting Up	
50	D 2		High Tom	Room Tom 6	Room Tom 6	E Tom 6	Analog Tom 6	Jazz Tom 6	Jazz Tom 6	Timpani D	Ac Bass Slap	
51	D# 2		Ride Cymbal 1							Timpani D#	FL.Key Click	
52	E 2		Chinese Cymbal			Reverse Cymbal				Timpani E	Laughing	
53	F 2		Ride Cymbal Cup							Timpani F	Screaming	
54	F# 2		Tambourine								Punch	
55	G 2		Splash Cymbal								Heartbeat	
56	G# 2		Cowbell				Analog Cowbell				Footsteps 1	
57	A 2		Crash Cymbal 2							Hand Cym.1	Footsteps 2	
58	A# 2		Vibraslap								Applause	
59	B 2		Ride Cymbal 2							Hand Cym.2	Door Creaking	
60	C 3		Bongo H								Door Slam	
61	C# 3		Bongo L								Scratch	
62	D 3		Conga H Mute				Analog Conga H				Windchime	
63	D# 3		Conga H Open				Analog Conga M				Engine Start	
64	E 3		Conga L				Analog Conga L				Tire Screech	
65	F 3		Timbale H								Car Passing	
66	F# 3		Timbale L								Crash	
67	G 3		Agogo H								Siren	
68	G# 3		Agogo L								Train	
69	A 3		Cabasa								Jetplane	
70	A# 3		Maracas				Analog Maracas				Helicopter	
71	B 3	2	Samba Whistle H								Starship	
72	C 4	2	Samba Whistle L								Gunshot	
73	C# 4	3	Guiro Short								Machine Gun	Vibraslap
74	D 4	3	Guiro Long								Laser Gun	
75	D# 4		Claves				Analog Claves				Explosion	
76	E 4		Wood Block H								Dog	Laughing
77	F 4		Wood Block L								Horse Gallop	Screaming
78	F# 4	4	Cuica Mute								Bird Tweet	Punch
79	G 4	4	Cuica Open								Rain	Heartbeat
80	G# 4	5	Triangle Mute								Thunder	Footsteps 1
81	A 4	5	Triangle Open								Wind	Footsteps 2
82	A# 4		Shaker								Seashore	Applause
83	B 4		Jingle Bell								Stream	Door Creaking
84	C 5		Bell Tree								Bubble	Door Slam
85	C# 5		Castanet									Scratch
86	D 5	6	Surdo Mute									Windchime
87	D# 5	6	Surdo Open									Engine Start
88	E 5									Applause		Tire Screech
89	F 5											Car Passing
90	F# 5											Crash
91	G 5											Siren
92	G# 5											Train
93	A 5											Jetplain
94	A# 5											Helicopter
95	B 5											Starship
96	C 6											Gunshot
97	C# 6											Machine Gun
98	D 6											Laser Gun
99	D# 6											Explosion
100	E 6											Dog
101	F 6											Horse Gallop
102	F# 6											Bird Tweet
103	G 6											Rain
104	G# 6											Thunder
105	A 6											Wind
106	A# 6											Seashore
107	B 6											Stream
108	C 7											Bubble

: Same as Standard Kit

: No Sound

Effect Type List

Exclusive MSB	Exclusive LSB	Effect Type	Description
REVERB			
00	00	NO EFFECT	Effect turned off.
01	00	HALL1	Reverb simulating the resonance of a hall.
01	01	HALL2	Reverb simulating the resonance of a hall.
02	00	ROOM1	Reverb simulating the resonance of a room.
02	01	ROOM2	Reverb simulating the resonance of a room.
02	02	ROOM3	Reverb simulating the resonance of a room.
03	00	STAGE1	Reverb appropriate for a solo instrument.
03	01	STAGE2	Reverb appropriate for a solo instrument.
04	00	PLATE	Reverb simulating a metal plate reverb unit.
10	00	WHITE ROOM	A unique short reverb with a bit of initial delay.
11	00	TUNNEL	Simulation of a tunnel space expanding to left and right.
13	00	BASEMENT	A bit of initial delay followed by reverb with a unique resonance.
CHORUS			
00	00	NO EFFECT	Effect turned off.
41	00	CHORUS1	Conventional chorus program that adds natural spaciousness.
41	01	CHORUS2	Conventional chorus program that adds natural spaciousness.
41	02	CHORUS3	Conventional chorus program that adds natural spaciousness.
41	08	CHORUS4	Chorus with stereo input. The pan setting specified for the Part will also apply to the effect sound.
42	00	CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.
42	01	CELESTE2	A 3-phase LFO adds modulation and spaciousness to the sound.
42	02	CELESTE3	A 3-phase LFO adds modulation and spaciousness to the sound.
42	08	CELESTE4	Celeste with stereo input. The pan setting specified for the Part will also apply to the effect sound.
43	00	FLANGER1	Adds a jet-airplane effect to the sound.
43	01	FLANGER2	Adds a jet-airplane effect to the sound.
43	08	FLANGER3	Adds a jet-airplane effect to the sound.
VARIATION			
00	00	NO EFFECT	Effect turned off.
01	00	HALL1	Reverb simulating the resonance of a hall.
01	01	HALL2	Reverb simulating the resonance of a hall.
02	00	ROOM1	Reverb simulating the resonance of a room.
02	01	ROOM2	Reverb simulating the resonance of a room.
02	02	ROOM3	Reverb simulating the resonance of a room.
03	00	STAGE1	Reverb appropriate for a solo instrument.
03	01	STAGE2	Reverb appropriate for a solo instrument.
04	00	PLATE	Reverb simulating a metal plate reverb unit.
05	00	DELAY L, C, R	A program that creates three delay sounds; L, R, and C (center).
06	00	DELAY L, R	A program that creates two delay sounds; L and R. Two feedback delays are provided.
07	00	ECHO	Two delays (L and R) and independent feedback delays for L and R.
08	00	CROSS DELAY	A program that crosses the feedback of two delays.
09	00	EARLY REF1	An effect that produces only the early reflection component of reverb.
09	01	EARLY REF2	An effect that produces only the early reflection component of reverb.
0A	00	GATE REVERB	A simulation of gated reverb.
0B	00	REVERSE GATE	A program that simulates gated reverb played backwards.
14	00	KARAOKE 1	A delay with feedback of the same types as used for karaoke reverb.
14	01	KARAOKE 2	A delay with feedback of the same types as used for karaoke reverb.
14	02	KARAOKE 3	A delay with feedback of the same types as used for karaoke reverb.
41	00	CHORUS1	Conventional chorus program that add natural spaciousness.
41	01	CHORUS2	Conventional chorus program that adds natural spaciousness.
41	02	CHORUS3	Conventional chorus program that adds natural spaciousness.
41	08	CHORUS4	Chorus with stereo input.
42	00	CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.
42	01	CELESTE2	A 3-phase LFO adds modulation and spaciousness to the sound.
42	02	CELESTE3	A 3-phase LFO adds modulation and spaciousness to the sound.
42	08	CELESTE4	Celeste with stereo input.
43	00	FLANGER1	Adds a jet-airplane effect to the sound.
43	01	FLANGER2	Adds a jet-airplane effect to the sound.
43	08	FLANGER3	Adds a jet-airplane effect to the sound.
44	00	SYMPHONIC	A multi-phase version of CELESTE.
45	00	ROTARY SPEAKER	A simulation of a rotary speaker. You can use AC1 (assignable controller) etc. to control the speed of rotation.
46	00	TREMOLO	An effect that cyclically modulates the volume.
47	00	AUTO PAN	A program that cyclically moves that sound image to left and right, front and back.
48	00	PHASER1	Cyclically changes the phase to add modulation to the sound.
48	08	PHASER2	Phaser with stereo input.
49	00	DISTORTION	Adds a sharp-edged distortion to the sound.
4A	00	OVER DRIVE	Adds mild distortion to the sound.
4B	00	AMP SIMULATOR	A simulation of a guitar amp.
4C	00	3BAND EQ (MONO)	A mono EQ with adjustable LOW, MID, and HIGH equalizing.
4D	00	2BAND EQ (STEREO)	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.
4E	00	AUTO WAH (LFO)	Cyclically modulates the center frequency of a wah filter. With an AC1 etc. this can function as a pedal wah.
40	00	THRU	Bypass without applying any effect.

* MSB, LSB is represented in hexadecimal.
* LCB=0 is the basic effect type.

Effect Parameter List

No	Parameter	Range	Value	See Table	Control
HALL1, HALL2, ROOM 1, 2, 3, STAGE 1, 2, PLATE					
1	Reverb Time	0.3～30.0s	0-69	table#4	
2	Diffusion	0～10	0-10		
3	Initial Delay	0～63	0-63	table#5	
4	HPF Cutoff	Thru～8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k～Thru	34-60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11	Rev Delay	0～63	0-63	table#5	
12	Density	0～3	0-3		
13	Er/Rev Balance	E63>R ～ E=R ～ E>R63	1-127		
14					
15	Feedback Level	-63～+63	1-127		
16					
WHITE ROOM, TUNNEL, BASEMENT					
1	Reverb Time	0.3～30.0s	0-69	table#4	
2	Diffusion	0～10	0-10		
3	Initial Delay	0～63	0-63	table#5	
4	HPF Cutoff	Thru～8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k～Thru	34-60	table#3	
6	Width	0.5～10.2m	0-37	table#11	
7	Height	0.5～20.2m	0-73	table#11	
8	Depth	0.5～30.2m	0-104	table#11	
9	Wall Vary	0～30	0-30		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11	Rev Delay	0～63	0-63	table#5	
12	Density	0～3	0-3		
13	Er/Rev Balance	E63>R～E=R～E>R63	1-127		
14					
15	Feedback Level	-63～+63	1-127		
16					
DELAY L, C, R					
1	Lch Delay	0.1～715.0ms	1-7150		
2	Rch Delay	0.1～715.0ms	1-7150		
3	Cch Delay	0.1～715.0ms	1-7150		
4	Feedback Delay	0.1～715.0ms	1-7150		
5	Feedback Level	-63～+63	1-127		
6	Cch Level	0～127	0-127		
7	High Damp	0.1～1.0	1-10		
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
14	EQ Low Gain	-12～+12dB	52-76		
15	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
16	EQ High Gain	-12～+12dB	52-76		
DELAY L, R					
1	Lch Delay	0.1～715.0ms	1-7150		
2	Rch Delay	0.1～715.0ms	1-7150		
3	Feedback Delay1	0.1～715.0ms	1-7150		
4	Feedback Delay2	0.1～715.0ms	1-7150		
5	Feedback Level	-63～+63	1-127		
6	High Damp	0.1～1.0	1-10		
7					
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
14	EQ Low Gain	-12～+12dB	52-76		
15	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
16	EQ High Gain	-12～+12dB	52-76		

No	Parameter	Range	Value	See Table	Control
ECHO					
1	Lch Delay1	0.1～355.0ms	1-3350		
2	Lch Feedback Level	-63～+63	1-127		
3	Rch Delay1	0.1～355.0ms	1-3550		
4	Rch Feedback Level	-63～+63	1-127		
5	High Damp	0.1～1.0	1-10		
6	Lch Delay2	0.1～355.0ms	1-3550		
7	Rch Delay2	0.1～355.0ms	1-3550		
8	Delay2 Level	0～127	0-127		
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
14	EQ Low Gain	-12～+12dB	52-76		
15	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
16	EQ High Gain	-12～+12dB	52-76		
CROSS DELAY					
1	L->R Delay	0.1～355.0ms	1-3550		
2	R->L Delay	0.1～355.0ms	1-3550		
3	Feedback Level	-63～+63	1-127		
4	Input Select	L, R, L&R	0-2		
5	High Damp	0.1～1.0	1-10		
6					
7					
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
14	EQ Low Gain	-12～+12dB	52-76		
15	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
16	EQ High Gain	-12～+12dB	52-76		
EARLY REF1, EARLY REF2					
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5		
2	Room Size	0.1～7.0	0-44	table#6	
3	Diffusion	0～10	0-10		
4	Initial Delay	0～63	0-63	table#5	
5	Feedback Level	-63～+63	1-127		
6	HPF Cutoff	Thru～8.0kHz	0-52		
7	LPF Cutoff	1.0k～Thru	34-60		
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11	Liveness	0～10	0-10		
12	Density	0～3	0-3		
13	High Damp	0.1～1.0	1-10		
14					
15					
16					
GATE REVERB, REVERSE GATE					
1	Type	TypeA, TypeB	0-1		
2	Room Size	0.1～7.0	0-44	table#6	
3	Diffusion	0～10	0-10		
4	Initial Delay	0～63	0-63	table#5	
5	Feedback Level	-63～+63	1-127		
6	HPF Cutoff	Thru～8.0kHz	0-52		
7	LPF Cutoff	1.0k～Thru	34-60		
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11	Liveness	0～10	0-10		
12	Density	0～3	0-3		
13	High Damp	0.1～1.0	1-10		
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
See Table** : Refer to "Effect Data Assign Table"

No	Parameter	Range	Value	See Table	Control
KARAOKE 1, 2, 3					
1	Delay Time	0～127	0-127	table#7	
2	Feedback Level	-63～+63	1-127		
3	HPF Cutoff	Thru～8.0kHz	0-52		
4	LPF Cutoff	1.0k～Thru	34-60		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13					
14					
15					
16					
CHORUS 1, 2, 3, 4, CELESTE 1, 2, 3, 4					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	
2	LFO PM Depth	0～127	0-127		
3	Feedback Level	-63～+63	1-127		
4	Delay Offset	0～127	0-127	table#2	
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					
FLANGER 1, 2, 3					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	
2	LFO Depth	0～127	0-127		
3	Feedback Level	-63～+63	1-127		
4	Delay Offset	0～63	0-63	table#2	
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13					
14	LFO Phase Difference	-180～+180deg	4-124		
15					
16					
SYMPHONIC					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	
2	LFO Depth	0～127	0-127		
3	Delay Offset	0～127	0-127	table#2	
4					
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11					
12					
13					
14					
15					
16					

No	Parameter	Range	Value	See Table	Control
ROTARY SPEAKER					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	•
2	LFO Depth	0～127	0-127		
3					
4					
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		
11					
12					
13					
14					
15					
16					
TREMOLO					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	•
2	AM Depth	0～127	0-127		
3	PM Depth	0～127	0-127		
4					
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10					
11					
12					
13					
14		-180～+180deg	4-124		
15	Input Mode	mono/stereo	0-1		
16					
AUTO PAN					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	•
2	L/R Depth	0～127	0-127		
3	F/R Depth	0～127	0-127		
4	PAN Direction	L<->R, L->R, L<-R, Lturn, Rturn, L/R	0-5		
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10					
11					
12					
13					
14					
15					
16					
PHASER1, PHASER2					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	
2	LFO Depth	0～127	0-127		
3	Phase Shift	0～127	0-127		
4	Feedback Level	-63～+63	1-127		
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		•
11	Stage	3～10	3-10		
12	Diffusion	Mono/Stereo	0-1		
13	LFO Phase Di	-180～+180deg	4-124		
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
See Table** : Refer to "Effect Data Assign Table"

No	Parameter	Range	Value	See Table	Control
DISTORTION, OVERDRIVE					
1	Drive	0～127	0-127		•
2	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
3	EQ Low Gain	-12～+12dB	52-76		
4	LPF Cutoff	1.0k～Thru	34-60	table#3	
5	Output Level	0～127	0-127		
6					
7	EQ Mid Frequency	500Hz～10.0kHz	28-54	table#3	
8	EQ Mid Gain	-12～+12dB	52-76		
9	EQ Mid Width	1.0～12.0	10-120		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		
11	Edge (Clip Curve)	0～127	0-127	mild ～sharp	
12					
13					
14					
15					
16					
GUITAR AMP SIMULATOR					
1	Drive	0～127	0-127		•
2	AMP Type	Off, Stack, Combo, Tube	0-3		
3	LPF Cutoff	1.0k～Thru	34-60	table#3	
4	Output Level	0～127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W～D=W～D<W63	1-127		
11	Edge (Clip Curve)	0～127	0-127	mild ～sharp	
12					
13					
14					
15					
16					
3-BAND EQ					
1	EQ Low Gain	-12～+12dB	52-76		
2	EQ Mid Frequency	500Hz～10.0kHz	28-54	table#3	
3	EQ Mid Gain	-12～+12dB	52-76		
4	EQ Mid Width	1.0～12.0	10-120		
5	EQ High Gain	-12～+12dB	52-76		
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
8					
9					
10					
11					
12					
13					
14					
15					
16					

No	Parameter	Range	Value	See Table	Control
2-BAND EQ					
1	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
2	EQ Low Gain	-12～+12dB	52-76		
3	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
4	EQ High Gain	-12～+12dB	52-76		
5					
6					
7					
8					
9					
10					
11	EQ Mid Frequency	100Hz～10.0kHz	14-54	table#3	
12	EQ Mid Gain	-12～+12dB	52-76		
13	EQ Mid Width	1.0～12.0	10-120		
14					
15					
16					
AUTO WAH					
1	LFO Frequency	0.00～39.7Hz	0-127	table#1	
2	LFO Depth	0～127	0-127		
3	Cutoff Frequency	0～127	0-127		•
4	Resonance	1.0～12.0	10-120		
5					
6	EQ Low Frequency	50Hz～2.0kHz	8-40	table#3	
7	EQ Low Gain	-12～+12dB	52-76		
8	EQ High Frequency	500Hz～16.0kHz	28-58	table#3	
9	EQ High Gain	-12～+12dB	52-76		
10	Dry/Wet	D63>W～D=W～D<W63	1-127		
11					
12					
13					
14					
15					
16					

• : Can be controlled by AC1 (Assignable Controller 1)
No.* : These numbers correspond to the Parameter Suffix numbers in <Table 1-3>
See Table** : Refer to "Effect Data Assign Table"

Effect Data Assign Table

Table#1
LFO Frequency (Hz)

Data	Value	Data	Value	Data	Value
0	0.00	43	1.81	86	5.38
1	0.04	44	1.85	87	5.55
2	0.08	45	1.89	88	5.72
3	0.13	46	1.94	89	6.06
4	0.17	47	1.98	90	6.39
5	0.21	48	2.02	91	6.73
6	0.25	49	2.06	92	7.07
7	0.29	50	2.10	93	7.40
8	0.34	51	2.15	94	7.74
9	0.38	52	2.19	95	8.08
10	0.42	53	2.23	96	8.41
11	0.46	54	2.27	97	8.75
12	0.51	55	2.31	98	9.08
13	0.55	56	2.36	99	9.42
14	0.59	57	2.40	100	9.76
15	0.63	58	2.44	101	10.10
16	0.67	59	2.48	102	10.80
17	0.72	60	2.52	103	11.40
18	0.76	61	2.57	104	12.10
19	0.80	62	2.61	105	12.80
20	0.84	63	2.65	106	13.50
21	0.88	64	2.69	107	14.10
22	0.93	65	2.78	108	14.80
23	0.97	66	2.86	109	15.50
24	1.01	67	2.94	110	16.20
25	1.05	68	3.03	111	16.80
26	1.09	69	3.11	112	17.50
27	1.14	70	3.20	113	18.20
28	1.18	71	3.28	114	19.50
29	1.22	72	3.37	115	20.90
30	1.26	73	3.45	116	22.20
31	1.30	74	3.53	117	23.60
32	1.35	75	3.62	118	24.90
33	1.39	76	3.70	119	26.20
34	1.43	77	3.87	120	27.60
35	1.47	78	4.04	121	28.90
36	1.51	79	4.21	122	30.30
37	1.56	80	4.37	123	31.60
38	1.60	81	4.54	124	33.00
39	1.64	82	4.71	125	34.30
40	1.68	83	4.88	126	37.00
41	1.72	84	5.05	127	39.70
42	1.77	85	5.22		

Table#2
Modulation Delay Offset (ms)

Data	Value	Data	Value	Data	Value
0	0.0	43	4.3	86	8.6
1	0.1	44	4.4	87	8.7
2	0.2	45	4.5	88	8.8
3	0.3	46	4.6	89	8.9
4	0.4	47	4.7	90	9.0
5	0.5	48	4.8	91	9.1
6	0.6	49	4.9	92	9.2
7	0.7	50	5.0	93	9.3
8	0.8	51	5.1	94	9.4
9	0.9	52	5.2	95	9.5
10	1.0	53	5.3	96	9.6
11	1.1	54	5.4	97	9.7
12	1.2	55	5.5	98	9.8
13	1.3	56	5.6	99	9.9
14	1.4	57	5.7	100	10.0
15	1.5	58	5.8	101	11.1
16	1.6	59	5.9	102	12.2
17	1.7	60	6.0	103	13.3
18	1.8	61	6.1	104	14.4
19	1.9	62	6.2	105	15.5
20	2.0	63	6.3	106	17.1
21	2.1	64	6.4	107	18.6
22	2.2	65	6.5	108	20.2
23	2.3	66	6.6	109	21.8
24	2.4	67	6.7	110	23.3
25	2.5	68	6.8	111	24.9
26	2.6	69	6.9	112	26.5
27	2.7	70	7.0	113	28.0
28	2.8	71	7.1	114	29.6
29	2.9	72	7.2	115	31.2
30	3.0	73	7.3	116	32.8
31	3.1	74	7.4	117	34.3
32	3.2	75	7.5	118	35.9
33	3.3	76	7.6	119	37.5
34	3.4	77	7.7	120	39.0
35	3.5	78	7.8	121	40.6
36	3.6	79	7.9	122	42.2
37	3.7	80	8.0	123	43.7
38	3.8	81	8.1	124	45.3
39	3.9	82	8.2	125	46.9
40	4.0	83	8.3	126	48.4
41	4.1	84	8.4	127	50.0
42	4.2	85	8.5		

Table#3
EQ Frequency (Hz)

Data	Value	Data	Value
0	THRU(20)	43	2.8k
1	22	44	3.2k
2	25	45	3.6k
3	28	46	4.0k
4	32	47	4.5k
5	36	48	5.0k
6	40	49	5.6k
7	45	50	6.3k
8	50	51	7.0k
9	56	52	8.0k
10	63	53	9.0k
11	70	54	10.0k
12	80	55	11.0k
13	90	56	12.0k
14	100	57	14.0k
15	110	58	16.0k
16	125	59	18.0k
17	140	60	THRU(20.0k)
18	160		
19	180		
20	200		
21	225		
22	250		
23	280		
24	315		
25	355		
26	400		
27	450		
28	500		
29	560		
30	630		
31	700		
32	800		
33	900		
34	1.0k		
35	1.1k		
36	1.2k		
37	1.4k		
38	1.6k		
39	1.8k		
40	2.0k		
41	2.2k		
42	2.5k		

Table#4
Reverb Time (ms)

Data	Value	Data	Value
0	0.3	43	4.6
1	0.4	44	4.7
2	0.5	45	4.8
3	0.6	46	4.9
4	0.7	47	5.0
5	0.8	48	5.5
6	0.9	49	6.0
7	1.0	50	6.5
8	1.1	51	7.0
9	1.2	52	7.5
10	1.3	53	8.0
11	1.4	54	8.5
12	1.5	55	9.0
13	1.6	56	9.5
14	1.7	57	10.0
15	1.8	58	11.0
16	1.9	59	12.0
17	2.0	60	13.0
18	2.1	61	14.0
19	2.2	62	15.0
20	2.3	63	16.0
21	2.4	64	17.0
22	2.5	65	18.0
23	2.6	66	19.0
24	2.7	67	20.0
25	2.8	68	25.0
26	2.9	69	30.0
27	3.0		
28	3.1		
29	3.2		
30	3.3		
31	3.4		
32	3.5		
33	3.6		
34	3.7		
35	3.8		
36	3.9		
37	4.0		
38	4.1		
39	4.2		
40	4.3		
41	4.4		
42	4.5		

Table#5
Delay Time (ms)

Data	Value	Data	Value	Data	Value
0	0.1	43	67.8	86	135.5
1	1.7	44	69.4	87	137.0
2	3.2	45	70.9	88	138.6
3	4.8	46	72.5	89	140.2
4	6.4	47	74.1	90	141.8
5	8.0	48	75.7	91	143.3
6	9.5	49	77.2	92	144.9
7	11.1	50	78.8	93	146.5
8	12.7	51	80.4	94	148.1
9	14.3	52	81.9	95	149.6
10	15.8	53	83.5	96	151.2
11	17.4	54	85.1	97	152.8
12	19.0	55	86.7	98	154.4
13	20.6	56	88.2	99	155.9
14	22.1	57	89.8	100	157.5
15	23.7	58	91.4	101	159.1
16	25.3	59	93.0	102	160.6
17	26.9	60	94.5	103	162.2
18	28.4	61	96.1	104	163.8
19	30.0	62	97.7	105	165.4
20	31.6	63	99.3	106	166.9
21	33.2	64	100.8	107	168.5
22	34.7	65	102.4	108	170.1
23	36.3	66	104.0	109	171.7
24	37.9	67	105.6	110	173.2
25	39.5	68	107.1	111	174.8
26	41.0	69	108.7	112	176.4
27	42.6	70	110.3	113	178.0
28	44.2	71	111.9	114	179.5
29	45.7	72	113.4	115	181.1
30	47.3	73	115.0	116	182.7
31	48.9	74	116.6	117	184.3
32	50.5	75	118.2	118	185.8
33	52.0	76	119.7	119	187.4
34	53.6	77	121.3	120	189.0
35	55.2	78	122.9	121	190.6
36	56.8	79	124.4	122	192.1
37	58.3	80	126.0	123	193.7
38	59.9	81	127.6	124	195.3
39	61.5	82	129.2	125	196.9
40	63.1	83	130.7	126	198.4
41	64.6	84	132.3	127	200.0
42	66.2	85	133.9		

Table#6
Room Size (m)

Data	Value	Data	Value
0	0.1	43	6.8
1	0.3	44	7.0
2	0.4		
3	0.6		
4	0.7		
5	0.9		
6	1.0		
7	1.2		
8	1.4		
9	1.5		
10	1.7		
11	1.8		
12	2.0		
13	2.1		
14	2.3		
15	2.5		
16	2.6		
17	2.8		
18	2.9		
19	3.1		
20	3.2		
21	3.4		
22	3.5		
23	3.7		
24	3.9		
25	4.0		
26	4.2		
27	4.3		
28	4.5		
29	4.6		
30	4.8		
31	5.0		
32	5.1		
33	5.3		
34	5.4		
35	5.6		
36	5.7		
37	5.9		
38	6.1		
39	6.2		
40	6.4		
41	6.5		
42	6.7		

Table#7
Delay Time (ms)

Data	Value	Data	Value	Data	Value
0	0.1	43	135.5	86	270.9
1	3.2	44	138.6	87	274.0
2	6.4	45	141.8	88	277.2
3	9.5	46	144.9	89	280.3
4	12.7	47	148.1	90	283.5
5	15.8	48	151.2	91	286.6
6	19.0	49	154.4	92	289.8
7	22.1	50	157.5	93	292.9
8	25.3	51	160.7	94	296.1
9	28.4	52	163.8	95	299.2
10	31.6	53	167.0	96	302.4
11	34.7	54	170.1	97	305.5
12	37.9	55	173.3	98	308.7
13	41.0	56	176.4	99	311.8
14	44.2	57	179.6	100	315.0
15	47.3	58	182.7	101	318.1
16	50.5	59	185.9	102	321.3
17	53.6	60	189.0	103	324.4
18	56.8	61	192.2	104	327.6
19	59.9	62	195.3	105	330.7
20	63.1	63	198.5	106	333.9
21	66.2	64	201.6	107	337.0
22	69.4	65	204.8	108	340.2
23	72.5	66	207.9	109	343.3
24	75.7	67	211.1	110	346.5
25	78.8	68	214.2	111	349.6
26	82.0	69	217.4	112	352.8
27	85.1	70	220.5	113	355.9
28	88.3	71	223.7	114	359.1
29	91.4	72	226.8	115	362.2
30	94.6	73	230.0	116	365.4
31	97.7	74	233.1	117	368.5
32	100.9	75	236.3	118	371.7
33	104.0	76	239.4	119	374.8
34	107.2	77	242.6	120	378.0
35	110.3	78	245.7	121	381.1
36	113.5	79	248.9	122	384.3
37	116.6	80	252.0	123	387.4
38	119.8	81	255.2	124	390.6
39	122.9	82	258.3	125	393.7
40	126.1	83	261.5	126	396.9
41	129.2	84	264.6	127	400.0
42	132.4	85	267.7		

Table#8
Reverb Width; Depth; Height (m)

Data	Value	Data	Value	Data	Value
0	0.5	43	11.8	86	24.2
1	0.8	44	12.1	87	24.5
2	1.0	45	12.3	88	24.9
3	1.3	46	12.6	89	25.2
4	1.5	47	12.9	90	25.5
5	1.8	48	13.1	91	25.8
6	2.0	49	13.4	92	26.1
7	2.3	50	13.7	93	26.5
8	2.6	51	14.0	94	26.8
9	2.8	52	14.2	95	27.1
10	3.1	53	14.5	96	27.5
11	3.3	54	14.8	97	27.8
12	3.6	55	15.1	98	28.1
13	3.9	56	15.4	99	28.5
14	4.1	57	15.6	100	28.8
15	4.4	58	15.9	101	29.2
16	4.6	59	16.2	102	29.5
17	4.9	60	16.5	103	29.9
18	5.2	61	16.8	104	30.2
19	5.4	62	17.1		
20	5.7	63	17.3		
21	5.9	64	17.6		
22	6.2	65	17.9		
23	6.5	66	18.2		
24	6.7	67	18.5		
25	7.0	68	18.8		
26	7.2	69	19.1		
27	7.5	70	19.4		
28	7.8	71	19.7		
29	8.0	72	20.0		
30	8.3	73	20.2		
31	8.6	74	20.5		
32	8.8	75	20.8		
33	9.1	76	21.1		
34	9.4	77	21.4		
35	9.6	78	21.7		
36	9.9	79	22.0		
37	10.2	80	22.4		
38	10.4	81	22.7		
39	10.7	82	23.0		
40	11.0	83	23.3		
41	11.2	84	23.6		
42	11.5	85	23.9		

YAMAHA [Disklavier]
Model: MPX70

MIDI IMPLEMENTATION CHART

Date : 01-Apr-1999
Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic	Default	1-16	1-16	Memorized
Channel	Changed	1-16	1-16	
Mode	Default	3	3	
	Messages	×	3, 4 (m=1) *2, *3	
	Altered	**********	×	
Note Number :		0-127	0-127	
	True voice	**********	0-127	
Velocity	Note ON	O 9nH, v=1-127	O v=1-127	
	Note OFF	× 9nH, v=0	O	
After Touch	Key's	O *4	O *1, *4	
	Ch's	×	O *1, *2	
Pitch Bend		×	O 0-24 semi *1, *2	
Control Change	0, 32	O	O *1, *2	Bank Select
	7, 11	O	O *1	
	1, 5, 10	×	O *1, *2	
	6, 38	×	O *2	Data Entry
	64	O	O	Hold1 (Sustain)
	65	×	O *2	Portament
	66	×	O *2	Sostenuto
	67	O	O	Soft (Shift) Pedal
	71-74, 84	×	O *2	
	91, 93, 94	×	O *2	Effect Depth
	96-101	×	O *1, *2	
	120	O	O	All Sound Off
	121	×	O *2	Reset All Cntrls
Prog Change : True #		O 0-127	O 0-127 *2	
		**********		
System Exclusive		O	O	
Common	: Song Pos	O *1	O *1	
	: Song Sel	O *1	O *1	
	: Tune	×	×	
System Real Time	: Clock	O	×	
	: Commands	O *1	O *1	
Aux Mes-sages	: Local ON/OFF	×	O	
	: All Notes OFF	O (123)	O (123-127)	
	: Active Sense	O	O	
	: Reset	×	×	

Notes
*1 = Received (transmitted) if switch is on.
*2 = Only "ESBL Part" can recognize.
*3 = m is always treated as "1" regardless of its value.
*4 = This function enables the Disklavier *Silent* to transmit and receive the position of the keys as independent additional information, instead of continuously transmitting "key aftertouch" data based on key pressure applied after the keys are played.

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

O : Yes
× : No

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XW119A0 2049910 Ⓝ Printed in Japan