YAMAHA

Clavinova®

CLP-280/270

DATA LIST

DATEN-LISTE

LISTE DES DONNÉES

LISTA DE DATOS

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Normal (Default) Setting List
Liste der Grundeinstellungen (Default)
Liste des réglages normaux (par défaut)
Lista de ajustes normales (predeterminados)

Parameter name	Value
Voice selection	Grand Piano 1
Split mode	Off
Split point	F#2
Reverb On/Off	ON
Chorus On/Off	per voice
Brilliance mode	Normal
Tempo	120
Song balance	Song balance slider value at power-on

■ FILE/SONG SETTING

Parameter name	Settings	Value
SongAutoOpen	Automatically selecting a song in storage media	On
CharacterCode	Changing the type of characters on screen	International
SongRepeat	Playing back a song/all songs repeatedly	RepeatOff
PhraseMark	Playing back the phrase specified by the phrase number	RepeatOff
Quantize Strength	Correcting note timing Determining how strongly the notes will be quantized	1/16 50%
QuickPlay	Specifying whether playback starts immediately along with the first voicing	On
ChannelListen	Auditioning the channels	Ch1
ChannelClear	Deleting data from each channel	Ch1
RecStart	Selecting a record starting method	Normal
RecEnd	Selecting a record ending method	Replace
RecExtraPartsCh	Recording parts 3-16 (Extra Parts)	Ch5

■ METRONOME SETTING

Parameter name	Settings	Value
TimeSignature	Setting the metronome time signature	4/4
MetronomeVolume	Setting the metronome volume level	100
MetronomeSound	Setting the metronome voice	BellOff

■ VOICE SETTING

The default value of each parameter is different for each voice.

■ iAFC SETTING

Parameter name	Settings	Value
iAFC	Turning iAFC on/off	On
DynDmpFX Depth	Adjusting the Dynamic Damper Effect depth	98
SpatialFX Depth	Adjusting the Spatial Effect depth	14

■ FUNCTION

Parameter name	Settings	Value
Transpose	Changing the key Transposition amount	Master 0
TouchResponse	Selecting a touch response Fixed volume	Medium 64
Tune	Fine tuning the pitch	A3=440.0Hz
PianoTuningCurve	Selecting a tuning curve for a piano voice	Stretch
Scale	Selecting a scale Root note	Equal C
SplitPoint	Specifying the Split Point	F#2
RPedalFunc	Setting the right pedal function	per voice
CPedalFunc	Setting the center pedal function	per voice
LPedalFunc	Setting the left pedal function	per voice
AuxPedalFunc	Setting the auxiliary pedal function	per voice
RPedalOnOff	Turning the right pedal function on/off	per voice
CPedalOnOff	Turning the center pedal function on/off	per voice
LPedalOnOff	Turning the left pedal function on/off	per voice
AuxPedalOnOff	Turning the auxiliary pedal function on/off	per voice
PedalPlay/Pause	Assigning the SONG [PLAY/PAUSE] function to the pedal	All pedals: Off
AuxPedalType	Selecting a type of auxiliary pedal	Make
HalfPedalPoint	Setting the point at which the damper pedal starts to affect the sound	0
SoftPedalDepth	Adjusting the depth of the Soft pedal	5
StringResonanceDepth	Setting the depth of string resonance	5
SustainSamplingDepth	Setting the depth of sustain sampling for the damper pedal	5
KeyOffSamplingDepth	Specifying the volume of the key-off sound	5
PitchBendRange	Setting the range of pitch bend	2
Speaker	Switching the speaker on/off	Normal (HeadphoneSW)
AuxOutLevel	Selecting the AUX OUT level (Fixed/Variable)	Fixed
MidiOutChannel	Setting the MIDI transmit channel	Main: Midi/Usb1 Ch1 Left: Midi/Usb1 Ch2 Layer: Midi/Usb1 Ch3 LeftLayer: Midi/Usb1 Ch4
MidiInChannel	Setting the MIDI receive channel	Midi/Usb1 Ch1 – 16: Song Usb2 Ch1: Keyboard Usb2 Ch2: Main Usb2 Ch3: Left Usb2 Ch4: Layer Usb2 Ch5: LeftLayer Others: Off
LocalControl	Turning local control on/off	On
MidiOutSelect	Selecting performance from the keyboard or song data for MIDI transmission	Keyboard
ReceiveParameter	Selecting a type of data received via MIDI	All data: On
TransmitParameter	Selecting a type of data transmitted via MIDI	All data: On
MemoryBackup	Selecting items saved at shutdown	Transpose,Main/LeftVoice, MetronomeSetting, Function (except for Transpose, SplitPoint and Midi settings): Off, Others: On
FactorySet	Restoring the normal (default) settings	MemorySongExcluded

XG Voice List / XG Voice-Liste / Liste des voix XG / Lista de sonidos XG

■ Bank Select MSB=00

Instrument Group	Pgm#	Bank 0 (Bank Select LSB=00)	E	Bank 1 (KSP)	E	Bank 3 (Stereo)	E	Bank 6 (Single)	E	Bank 8 (Slow)	E	Bank 12 (Fast Decay)	E	Bank 14 (Double Attack)	E	Bank 16 (Bright)	E	Bank 17 (Bright)	E	Bank 18 (Dark)	E	Bank 19 (Dark)	E	Bank 20 (Resonant)	E	Bank 24 (Attack)	E
Piano	1	Acoustic Grand Piano — GrandPno	2	GrndPnoK	1															MelloGrP	2						
	2	Bright Acoustic Piano — BritePno	2	BritPnoK	1																						
	3	Electric Grand Piano — El.Grand	2	ElGrPnoK	2																						
	4	Honky-tonk Piano — HnkyTonk	2	HnkyTnkK	2																						
	5	Electric Piano 1 — E.Piano1	1	El.Pno1K	1																			MelloEP1	2		
	6	Electric Piano 2 — E.Piano2	1	El.Pno2K	1																						
	7	Harpsichord — Harpsi.	1	Harpsi.K	1																						
	8	Clavi — Clavi.	2	Clavi K	1																						
Chromatic Percussion	9	Celesta — Celesta	1																								
	10	Glockenspiel — Glocken	1																								
	11	Music Box — MusicBox	2																								
	12	Vibraphone — Vibes	1	Vibes K	1																						
	13	Marimba — Marimba	1	MarimbaK	1																						
	14	Xylophone — Xylophon	1																								
	15	Tubular Bells — TubulBel	1																								
	16	Dulcimer — Dulcimer	1																								
Organ	17	Drawbar Organ 1 — DrawOrgn	1																								
	18	Percussive Organ — PercOrgn	1																							70sPcOr1	2
	19	Rock Organ — RockOrgn	2																								
	20	Church Organ 1 — ChrchOrg	2																								
	21	Reed Organ — ReedOrgn	1																								
	22	Accordion — Acordion	1																								
	23	Hamonica — Harmnica	1																								
	24	Tango Accordion — TangoAcd	1																								
Guitar	25	Acoustic Guitar (nylon) 1 — NylonGtr	1													NylonGt2	1										
	26	Acoustic Guitar (steel) — SteelGtr	1													SteelGt2	1										
	27	Electric Guitar (jazz) — Jazz Gtr	1																	MelloGtr	1						
	28	Electric Guitar (clean) — CleanGtr	1																								
	29	Electric Guitar (muted) — Mute.Gtr	1																								
	30	Overdriven Guitar — Ovrdrive	1																								
	31	Distortion Guitar — Dist.Gtr	1																								
	32	Guitar Harmonics — GtrHarmo	1																								
Bass	33	Acoustic Bass — Aco.Bass	1																								
	34	Electric Bass (finger) — FngrBass	1																	FingrDrk	2						
	35	Electric Bass (pick) — PickBass	1																								
	36	Fretless Bass — Fretless	1																								
	37	Slap Bass 1 — SlapBas1	1																								
	38	Slap Bass 2 — SlapBas2	1																								
	39	Synth Bass 1 — SynBass1	1																	SynBa1Dk	1			FastResB	1	AcidBass	1
	40	Synth Bass 2 — SynBass2	2					MelloSBa	1	Seq Bass	2									ClkSynBa	2	SynBa2Dk	1				
Strings	41	Violin — Violin	1							Slow Vln	1																
	42	Viola — Viola	1																								
	43	Cello — Cello	1																								
	44	Contrabass — Contrabs	1																								
	45	Tremolo Strings — Trem.Str	1							SlwTrStr	1																
	46	Pizzicato Strings — Pizz.Str	1																								
	47	Orchestral Harp — Harp	1																								
	48	Timpani — Timpani	1																								
Ensemble	49	String Ensemble 1 — Strings1	1			S.Strngs	2			Slow Str	1															Arco Str	2
	50	String Ensemble 2 — Strings2	1			S.SlwStr	2			LegatoSt	2																
	51	Synth Strings 1 — Syn.Str1	2																								
	52	Synth Strings 2 — Syn.Str2	2																								
	53	Choir Aahs — ChoirAah	1			S.Choir	2									Ch.Aahs2	2										
	54	Voice Oohs — VoiceOoh	1																								
	55	Synth Voice — SynVoice	1																								
	56	Orchestra Hit — Orch.Hit	1																								
Brass	57	Trumpet — Trumpet	1													Trumpet2	1	BriteTrp	2								
	58	Trombone — Trombone	1																	Trmbone2	1						
	59	Tuba — Tuba	1													Tuba 2	1										
	60	Muted Trumpet — Mute.Trp	1																								
	61	French Horn — Fr. Horn	2					FrHrSolo	1																		
	62	Brass Section 1 — BrasSect	1																								
	63	Synth Brass 1 — SynBrss1	2							Quack Br	2													RezSynBr	2	PolyBrss	2
	64	Synth Brass 2 — SynBrss2	2																	Soft Brs	2						
Reed	65	Soprano Sax — SprnoSax	1																								
	66	Alto Sax — Alto Sax	1																								
	67	Tenor Sax — TenorSax	1																								
	68	Baritone Sax — Bari.Sax	1																								
	69	Oboe — Oboe	2																								
	70	English Horn — Eng.Horn	1																								
	71	Bassoon — Bassoon	1																								
	72	Clarinet — Clarinet	1																								
Pipe	73	Piccolo — Piccolo	1																								
	74	Flute — Flute	1																								
	75	Recorder — Recorder	1																								
	76	Pan Flute — PanFlute	1																								
	77	Blown Bottle — Bottle	2																								
	78	Shakuhachi — Shakhchi	2																								
	79	Whistle — Whistle	1																								
	80	Ocarina — Ocarina	1																								
Synth Lead	81	Lead 1 (square) — SquareLd	2					SquarLd2	1	LMSquare	2									Hollow	1	Shroud	2				
	82	Lead 2 (sawtooth) — Saw Ld	2					Saw Ld 2	1	ThickSaw	2									Dyna Saw	1	Digi Saw	2	Big Lead	2	HeavySyn	2
	83	Lead 3 (calliope) — CaliopLd	2																								
	84	Lead 4 (chiff) — Chiff Ld	2																								
	85	Lead 5 (charang) — CharanLd	2																								
	86	Lead 6 (voice) — Voice Ld	2																							SynthAah	2
	87	Lead 7 (fifths) — Fifth Ld	2																								
	88	Lead 8 (bass+lead) — Bass&Ld	2													Big&Low	2										
Synth Pad	89	Pad 1 (new age) — NewAgePd	2																								
	90	Pad 2 (warm) — Warm Pad	2													ThickPad	2	Soft Pad	2	Sine Pad	2						
	91	Pad 3 (polysynth) — PolySyPd	2																								
	92	Pad 4 (choir) — ChoirPad	2																								
	93	Pad 5 (bowed) — BowedPad	2																								
	94	Pad 6 (metallic) — MetalPad	2																								
	95	Pad 7 (halo) — Halo Pad	2																								
	96	Pad 8 (sweep) — SweepPad	2																					Shwimmer	2		
Synth Effects	97	FX 1 (rain) — Rain	2																								
	98	FX 2 (soundtrack) — SoundTrk	2																								
	99	FX 3 (crystal) — Crystal	2							SynDrCmp	2			Popcorn	2					TinyBell	2						
	100	FX 4 (atmosphere) — Atmosphr	2																	WarmAtms	2	HollwRls	2				
	101	FX 5 (brightness) — Bright	2																								
	102	FX 6 (goblins) — Goblins	2																								
	103	FX 7 (echoes) — Echoes	2							Echoes 2	2			Echo Pan	2												
	104	FX 8 (sci-fi) — Sci-Fi	2																								
Ethnic	105	Sitar — Sitar	1																								
	106	Banjo — Banjo	1																								
	107	Shamisen — Shamisen	1																								
	108	Koto — Koto	1																								
	109	Kalimba — Kalimba	1																								
	110	Bagpipe — Bagpipe	2																								
	111	Fiddle — Fiddle	1																								
	112	Shanai — Shanai	1																								
Percussive	113	Tinkle Bell — TnklBell	2																								
	114	Agogo — Agogo	2																								
	115	Steel Drums — SteelDrm	2																								
	116	Woodblock — Woodblok	1																								
	117	Taiko Drum — TaikoDrm	1																								
	118	Melodic Tom 1 — MelodTom	2																								
	119	Synth Drum — Syn Drum	1																								
	120	Reverse Cymbal — RevCymbl	1																								
Sound Effects	121	Guitar Fret Noise — FretNoiz	1																								
	122	Breath Noise — BrthNoiz	2																								
	123	Seashore — Seashore	2																								
	124	Bird Tweet — Tweet	2																								
	125	Telephone Ring — Telphone	1																								
	126	Helicopter — Helicptr	1																								
	127	Applause — Applause	1																								
	128	Gunshot — Gunshot	1																								

□ : Same as Bank 0   ■ : No sound   E : Element number

Instrument Group	Pgm#	Bank 0 (Bank Select LSB=00)	E	Release Bank 25	E	Rezo Sweep Bank 27	E	Muted Bank 28	E	Detune 1 Bank 32	E	Detune 2 Bank 33	E	Detune 3 Bank 34	E	Octave 1 Bank 35	E	Octave 2 Bank 36	E	5th 1 Bank 37	E	5th 2 Bank 38	E	Bend Bank 39	E	Tutti Bank 40	E
Piano	1	GrandPno	2																							PianoStr	2
	2	BritePno	2																							LayerCP1	2
	3	El.Grand	2							Det.CP80	2																
	4	HnkyTonk	2																								
	5	E.Piano1	2							Chor.EP1																HardEl.P	2
	6	E.Piano2	2							Chor.EP2		DX Hard	2	DXLegend	2											DX Phase	2
	7	Harpsi.	1	Harpsi.2	2											Harpsi.3											
	8	Clavi.	2			ClaviWah	2																				
Chromatic Percussion	9	Celesta	1																								
	10	Glocken	1																								
	11	MusicBox	2																								
	12	Vibes	1																								
	13	Marimba	1																								
	14	Xylophon	1																								
	15	TubulBel	1																								
	16	Dulcimer	1													Dulcimr2												
Organ	17	DrawOrgn	1							DetDrwOr	2	60sDrOr1	2	60sDrOr2	2	70sDrOr1	2	DrawOrg2	2	60sDrOr3	2	Even Bar	2			16+2"2/3	2
	18	PercOrgn	1							DetPrcOr	2	Lite Org	2							PercOrg2	2						
	19	RockOrgn	2																								
	20	ChrchOrg	2							ChurOrg3						ChurOrg2	2									NotreDam	2
	21	ReedOrgn	1																							Puff Org	2
	22	Acordion	2							AccordIt	2																
	23	Harmnica	1							Harmo. 2	2																
	24	TangoAcd	1																								
Guitar	25	NylonGtr	1	NylonGt3	2																						
	26	SteelGtr	1													12StrGtr	2									Nyln&Stl	2
	27	Jazz Gtr	1							Jazz Amp	2																
	28	CleanGtr	1							ChorusGt	2																
	29	Mute.Gtr	1																							FunkGtr1	2
	30	Ovrdrive	1																								
	31	Dist.Gtr	1																							FeedbkGt	2
	32	GtrHarmo	1																								
Bass	33	Aco.Bass	1																							JazzRthm	2
	34	FngrBass	1			FlangeBa	2																			Ba&DstEG	2
	35	PickBass	1					MutePkBa	1																		
	36	Fretless	1							Fretles2	2	Fretles3	2	Fretles4	2												
	37	SlapBas1	1			ResoSlap	1			PunchThm	2																
	38	SlapBas2	1																								
	39	SynBass1	1													Clv Bass	2									TechnoBa	2
	40	SynBass2	2							SmthSynB	2															ModulrBa	2
Strings	41	Violin	1																								
	42	Viola	1																								
	43	Cello	1																								
	44	Contrabs	1																								
	45	Trem.Str	1																							Susp.Str	2
	46	Pizz.Str	1																								
	47	Harp	1																							YangChin	2
	48	Timpani	1																								
Ensemble	49	Strings1	1													60sStrng	2									Orchestr	2
	50	Strings2	1																							Warm Str	2
	51	Syn.Str1	2			Reso Str	2																				
	52	Syn.Str2	2																								
	53	ChoirAah	1							MelChoir	2															ChoirStr	2
	54	VoiceOoh	1																								
	55	SynVoice	1																							SyVoice2	2
	56	Orch.Hit	2													OrchHit2	2										
Brass	57	Trumpet	1							Warm Trp	2																
	58	Trombone	1																								
	59	Tuba	1																								
	60	Mute.Trp	1																								
	61	Fr. Horn	2							FrHorn 2	1									HornOrch	2						
	62	BrassSect	1													Tp&TbSec	2									BrssSec2	2
	63	SynBrss1	2			SynBrss3	2			JumpBrss	2																
	64	SynBrss2	1																							SynBrss4	2
Reed	65	SprnoSax	1																								
	66	Alto Sax	1																							Sax Sect	2
	67	TenorSax	1																							BrthTnSx	2
	68	Bari.Sax	1																								
	69	Oboe	2																								
	70	Eng.Horn	1																								
	71	Bassoon	1																								
	72	Clarinet	1																								
Pipe	73	Piccolo	1																								
	74	Flute	1																								
	75	Recorder	1																								
	76	PanFlute	1																								
	77	Bottle	2																								
	78	Shakhchi	2																								
	79	Whistle	1																								
	80	Ocarina	1																								
Synth Lead	81	SquareLd	2																								
	82	Saw Ld	2	WaspySyn	2																					PulseSaw	2
	83	CaliopLd	2																								
	84	Chiff Ld	2																								
	85	CharanLd	2																								
	86	Voice Ld	2																								
	87	Fifth Ld	2													Big Five	2										
	88	Bass&Ld	2																								
Synth Pad	89	NewAgePd	2																								
	90	Warm Pad	2																								
	91	PolySyPd	2																								
	92	ChoirPad	2																								
	93	BowedPad	2																								
	94	MetalPad	2																								
	95	Halo Pad	2																								
	96	SweepPad	2			Converge	2																				
Synth Effects	97	Rain	2																								
	98	SoundTrk	2			Prologue	2																				
	99	Crystal	2													RndGlock	2									GlockChi	2
	100	Atmosphr	2																							Nylon EP	2
	101	Bright	2																								
	102	Goblins	2																								
	103	Echoes	2																								
	104	Sci-Fi	2																								
Ethnic	105	Sitar	1							DetSitar	2						Sitar 2	2										
	106	Banjo	1					MuteBnjo	1																		
	107	Shamisen	1																								
	108	Koto	1																								
	109	Kalimba	1																								
	110	Bagpipe	1																								
	111	Fiddle	1																								
	112	Shanai	1																								
Percussive	113	TnklBell	2																								
	114	Agogo	1																								
	115	SteelDrm	2																								
	116	Woodblok	1																								
	117	TaikoDrm	1																								
	118	MelodTom	2																								
	119	Syn Drum	1																								
	120	RevCymbl	1																								
Sound Effects	121	FretNoiz	2																								
	122	BrthNoiz	2																								
	123	Seashore	2																								
	124	Tweet	2																								
	125	Telphone	2																								
	126	Helicptr	2																								
	127	Applause	2																								
	128	Gunshot	1																								

■ : Same as Bank 0   ■ : No sound   E : Element number

Instrument Group	Pgm#	Bank 0 (Bank Select LSB=00)		E	Bank 41	E	Bank 42	E	Bank 43 (Velo-Switch)	E	Bank 45 (Velo-Xfade)	E	Bank 64 (other wave)	E	Bank 65	E	Bank 66	E	Bank 67	E	Bank 68	E	Bank 69	E	Bank 70	E	Bank 71	E
Piano	1	Acoustic Grand Piano	GrandPno	2	Dream	2																					
	2	Bright Acoustic Piano	BritePno	2																							
	3	Electric Grand Piano	El.Grand	2	LayerCP2	2																					
	4	Honky-tonk Piano	HnkyTonk	2																							
	5	Electric Piano 1	E.Piano1	2							VX El.P1	2	60sEl.P1	1													
	6	Electric Piano 2	E.Piano2	2	DX+Analg	2	DXKotoEP	2			VX El.P2	2															
	7	Harpsichord	Harpsi.																								
	8	Clavi.	Clavi.											PulseClv	1	PierceCl	2										
Chromatic Percussion	9	Celesta	Celesta	1																							
	10	Glockenspiel	Glocken	1																							
	11	Music Box	MusicBox	2									Orgel	2													
	12	Vibraphone	Vibes	1							HardVibe	2															
	13	Marimba	Marimba	1									SineMrmb	2													
	14	Xylophone	Xylophon	1																							
	15	Tubular Bells	TubulBel	1																							
	16	Dulcimer	Dulcimer	1																							
Organ	17	Drawbar Organ 1	DrawOrgn	1									Organ Ba		70sDrOr2	2	CheezOrg	2	DrawOrg3	2								
	18	Percussive Organ	PercOrgn	1																							
	19	Rock Organ	RockOrgn	2									RotaryOr	2	SloRotar	2	FstRotar	2										
	20	Church Organ 1	ChrchOrg	2									OrgFlute	2	TrmOrgFl	2												
	21	Reed Organ	ReedOrgn	1																							
	22	Accordion	Acordion	2																							
	23	Hamonica	Harmnica	1																							
	24	Tango Accordion	TangoAcd	1									TngoAcd2	2													
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1					VelGtHrm	2																	
	26	Acoustic Guitar (steel)	SteelGtr	1	Stl&Body	2																					
	27	Electric Guitar (jazz)	Jazz Gtr	2																							
	28	Electric Guitar (clean)	CleanGtr	1																							
	29	Electric Guitar (muted)	Mute.Gtr	1	MuteStlG	2			FunkGtr2	2	Jazz Man	1															
	30	Overdriven Guitar	Ovrdrive	1					Gt.Pinch	2																	
	31	Distortion Guitar	Dist.Gtr	2	FeedbkG2	2																					
	32	Guitar Harmonics	GtrHarmo	1											GtFeedbk	1	GtrHrmo2	1										
Bass	33	Acoustic Bass	Aco.Bass	1							VXUprght	2															
	34	Electric Bass (finger)	FngrBass	1					FngrSlap	2	FngBass2	2					Mod.Bass	2										
	35	Electric Bass (pick)	PickBass	1																							
	36	Fretless Bass	Fretless	1																							
	37	Slap Bass 1	SlapBas1	1																							
	38	Slap Bass 2	SlapBas2	1					VeloSlap	2																	
	39	Synth Bass 1	SynBass1	1									Orbiter	2	Sqr.Bass	1	RubberBa	2										
	40	Synth Bass 2	SynBass2	2	DX Bass	2							X WireBa	2													
Strings	41	Violin	Violin	1																							
	42	Viola	Viola	1																							
	43	Cello	Cello	1																							
	44	Contrabass	Contrabs	1																							
	45	Tremolo Strings	Trem.Str	1																							
	46	Pizzicato Strings	Pizz.Str	1																							
	47	Orchestral Harp	Harp	1																							
	48	Timpani	Timpani	1																							
Ensemble	49	String Ensemble 1	Strings1	1	Orchstr2	2	TremOrch	2			Velo.Str	2															
	50	String Ensemble 2	Strings2	1	Kingdom	2							70s Str	1	Strings3	1												
	51	Synth Strings 1	Syn.Str1	2									Syn Str4	2	Syn Str5	2												
	52	Synth Strings 2	Syn.Str2	2																							
	53	Choir Aahs	ChoirAah	1																							
	54	Voice Oohs	VoiceOoh	1																							
	55	Synth Voice	SynVoice	1	Choral	2							AnaVoice	1													
	56	Orchestra Hit	Orch.Hit	2									Impact	2													
Brass	57	Trumpet	Trumpet	1																							
	58	Trombone	Trombone	1																							
	59	Tuba	Tuba	1																							
	60	Muted Trumpet	Mute.Trp	1																							
	61	French Horn	Fr. Horn	2																							
	62	Brass Section 1	BrasSect	1	Hi Brass	2	MelloBrs	2																			
	63	Synth Brass 1	SynBrss1	2							AnVelBr1	2	AnaBrss1	2													
	64	Synth Brass 2	SynBrss2	1	ChoirBrs	2					AnVelBr2	2	AnaBrss2	2													
Reed	65	Soprano Sax	SprnoSax	1																							
	66	Alto Sax	Alto Sax	1					HyprAlto	2																	
	67	Tenor Sax	TenorSax	1	SoftTenr	2							TnrSax 2	1													
	68	Baritone Sax	Bari.Sax	1																							
	69	Oboe	Oboe	2																							
	70	English Horn	Eng.Horn	1																							
	71	Bassoon	Bassoon	1																							
	72	Clarinet	Clarinet	1																							
Pipe	73	Piccolo	Piccolo	1																							
	74	Flute	Flute	1																							
	75	Recorder	Recorder	1																							
	76	Pan Flute	PanFlute	1																							
	77	Blown Bottle	Bottle	2																							
	78	Shakuhachi	Shakhchi	2																							
	79	Whistle	Whistle	1																							
	80	Ocarina	Ocarina	1																							
Synth Lead	81	Lead 1 (square)	SquareLd	1									Mellow	2	SoloSine	2	SineLead	1										
	82	Lead 2 (sawtooth)	Saw Ld	2	Dr. Lead	2					VeloLead	2															
	83	Lead 3 (calliope)	CaliopLd	2											PureLead	2												
	84	Lead 4 (chiff)	Chiff Ld	2									Rubby	2														
	85	Lead 5 (charang)	CharanLd	2									DistLead	2	WireLead	2												
	86	Lead 6 (voice)	Voice Ld	2									Vox Lead	2														
	87	Lead 7 (fifths)	Fifth Ld	2																							
	88	Lead 8 (bass+lead)	Bass&Ld	2									Fat&Prky	2	Soft Wrl	2												
Synth Pad	89	Pad 1 (new age)	NewAgePd	2									Fantasy	2													
	90	Pad 2 (warm)	Warm Pad	2									Horn Pad	2	RotarStr	2												
	91	Pad 3 (polysynth)	PolySyPd	2									PolyPd80	2	ClickPad	2	Ana. Pad	2	SquarPad	2								
	92	Pad 4 (choir)	ChoirPad	2									Heaven	2	Itopia	2	CC Pad	2										
	93	Pad 5 (bowed)	BowedPad	2									Glacier	2	GlassPad	2												
	94	Pad 6 (metallic)	MetalPad	2									Tine Pad	2	Pan Pad	2												
	95	Pad 7 (halo)	Halo Pad	2																							
	96	Pad 8 (sweep)	SweepPad	2									PolarPad	2	Celstial	2												
Synth Effects	97	FX 1 (rain)	Rain	2							ClaviPad	2	HrmoRain	2	AfrcnWnd	2	Carib	2										
	98	FX 2 (soundtrack)	SoundTrk	2									Ancestrl	2													
	99	FX 3 (crystal)	Crystal	2	ClearBel	2	ChorBell	2					SynMalet	2	SftCryst		LoudGlok	2	ChrstBel	2	VibeBell	2	DigiBell	2	AirBells	2	BellHarp	2
	100	FX 4 (atmosphere)	Atmosphr	2									NylnHarp	2	Harp Vox		AtmosPad	2	Planet	2								
	101	FX 5 (brightness)	Bright	2									FantaBel	2														
	102	FX 6 (goblins)	Goblins	2									GobSynth	2	Creeper	2	Ring Pad	2	Ritual	2	ToHeaven	2			Night	2	Glisten	2
	103	FX 7 (echoes)	Echoes	2									EchoBell	2	Big Pan	2	SynPiano	2	Creation	2	StarDust	2	Reso&Pan	2				
	104	FX 8 (sci-fi)	Sci-Fi	2									Starz	2														
Ethnic	105	Sitar	Sitar	1																							
	106	Banjo	Banjo	1																							
	107	Shamisen	Shamisen	1																							
	108	Koto	Koto	1																							
	109	Kalimba	Kalimba	1																							
	110	Bagpipe	Bagpipe	2																							
	111	Fiddle	Fiddle	1																							
	112	Shanai	Shanai	1									Shanai 2	1														
Percussive	113	Tinkle Bell	TnklBell	2																							
	114	Agogo	Agogo	2																							
	115	Steel Drums	SteelDrm	2																							
	116	Woodblock	Woodblok	1																							
	117	Taiko Drum	TaikoDrm	1																							
	118	Melodic Tom 1	MelodTom	2									Mel Tom2	1	Real Tom	2	Rock Tom	2										
	119	Synth Drum	Syn Drum	1									Ana Tom	1	ElecPerc	2												
	120	Reverse Cymbal	RevCymbl	1																							
Sound Effects	121	Guitar Fret Noise	FretNoiz	1																							
	122	Breath Noise	BrthNoiz	2																							
	123	Seashore	Seashore	2																							
	124	Bird Tweet	Tweet	2																							
	125	Telephone Ring	Telphone	1																							
	126	Helicopter	Helicptr	1																							
	127	Applause	Applause	1																							
	128	Gunshot	Gunshot	1																							

▢ : Same as Bank 0   ▢ : No sound   E : Element number

■ Bank Select MSB=64

Instrument Group	Pgm#	Bank 0 Bank Select LSB=00	Bank 0	E	Bank 72	E	Bank 96	E	Bank 97	E	Bank 98	E	Bank 99	E	Bank 100	E	Bank 101	E
Piano	1	Acoustic Grand Piano	GrandPno	2														
	2	Bright Acoustic Piano	BritePno	2														
	3	Electric Grand Piano	El.Grand	2														
	4	Honky-tonk Piano	HnkyTonk	2														
	5	Electric Piano 1	E.Piano1	2														
	6	Electric Piano 2	E.Piano2	2														
	7	Harpsichord	Harpsi.	1														
	8	Clavi	Clavi.	2														
Chromatic Percussion	9	Celesta	Celesta	1														
	10	Glockenspiel	Glocken	1														
	11	Music Box	MusicBox	2														
	12	Vibraphone	Vibes	1														
	13	Marimba	Marimba	1					Balimba	2	Log Drum	2						
	14	Xylophone	Xylophon	1														
	15	Tubular Bells	TubulBel	1			ChrchBel	2	Carillon	2								
	16	Dulcimer	Dulcimer	1			Cimbalom	2	Santur	2								
Organ	17	Drawbar Organ 1	DrawOrgn	2														
	18	Percussive Organ	PercOrgn	1														
	19	Rock Organ	RockOrgn	2														
	20	Church Organ 1	ChrchOrg	2														
	21	Reed Organ	ReedOrgn	1														
	22	Accordion	Acordion	2														
	23	Harmonica	Harmnica	1														
	24	Tango Accordion	TangoAcd	2														
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1			Ukulele	1										
	26	Acoustic Guitar (steel)	SteelGtr	1			Mandolin	2										
	27	Electric Guitar (jazz)	Jazz Gtr	1														
	28	Electric Guitar (clean)	CleanGtr	1														
	29	Electric Guitar (muted)	Mute.Gtr	1														
	30	Overdriven Guitar	Ovrdrive	1														
	31	Distortion Guitar	Dist.Gtr	1														
	32	Guitar Harmonics	GtrHarmo	1														
Bass	33	Acoustic Bass	Aco.Bass	1														
	34	Electric Bass (finger)	FngrBass	1														
	35	Electric Bass (pick)	PickBass	1														
	36	Fretless Bass	Fretless	1			SynFretl	2	SmthFrtl	2								
	37	Slap Bass 1	SlapBas1	1														
	38	Slap Bass 2	SlapBas2	1														
	39	Synth Bass 1	SynBass1	1			Hammer	2										
	40	Synth Bass 2	SynBass2	2														
Strings	41	Violin	Violin	1														
	42	Viola	Viola	1														
	43	Cello	Cello	1														
	44	Contrabass	Contrabs	1														
	45	Tremolo Strings	Trem.Str	1														
	46	Pizzicato Strings	Pizz.Str	1														
	47	Orchestral Harp	Harp	1														
	48	Timpani	Timpani	1														
Ensemble	49	String Ensemble 1	Strings1	1														
	50	String Ensemble 2	Strings2	1														
	51	Synth Strings 1	Syn.Str1	2														
	52	Synth Strings 2	Syn.Str2	2														
	53	Choir Aahs	ChoirAah	1														
	54	Voice Oohs	VoiceOoh	1														
	55	Synth Voice	SynVoice	1														
	56	Orchestra Hit	Orch.Hit	2														
Brass	57	Trumpet	Trumpet	1														
	58	Trombone	Trombone	1														
	59	Tuba	Tuba	1														
	60	Muted Trumpet	Mute.Trp	1														
	61	French Horn	Fr. Horn	2														
	62	Brass Section 1	BrasSect	1														
	63	Synth Brass 1	SynBrss1	2														
	64	Synth Brass 2	SynBrss2	1														
Reed	65	Soprano Sax	SprnoSax	1														
	66	Alto Sax	Alto Sax	1														
	67	Tenor Sax	TenorSax	1														
	68	Baritone Sax	Bari.Sax	1														
	69	Oboe	Oboe	2														
	70	English Horn	Eng.Horn	1														
	71	Bassoon	Bassoon	1														
	72	Clarinet	Clarinet	1														
Pipe	73	Piccolo	Piccolo	1														
	74	Flute	Flute	1														
	75	Recorder	Recorder	1														
	76	Pan Flute	PanFlute	1														
	77	Blown Bottle	Bottle	2														
	78	Shakuhachi	Shakhchi	2														
	79	Whistle	Whistle	1														
	80	Ocarina	Ocarina	1														
Synth Lead	81	Lead 1 (square)	SquareLd	2														
	82	Lead 2 (sawtooth)	Saw Ld	2			Seq Ana.	2										
	83	Lead 3 (calliope)	CaliopLd	2														
	84	Lead 4 (chiff)	Chiff Ld	2														
	85	Lead 5 (charang)	CharanLd	2														
	86	Lead 6 (voice)	Voice Ld	2														
	87	Lead 7 (fifths)	Fifth Ld	2														
	88	Lead 8 (bass+lead)	Bass&Ld	2														
Synth Pad	89	Pad 1 (new age)	NewAgePd	2														
	90	Pad 2 (warm)	Warm Pad	2														
	91	Pad 3 (polysynth)	PolySyPd	2														
	92	Pad 4 (choir)	ChoirPad	2														
	93	Pad 5 (bowed)	BowedPad	2														
	94	Pad 6 (metallic)	MetalPad	2														
	95	Pad 7 (halo)	Halo Pad	2														
	96	Pad 8 (sweep)	SweepPad	2														
Synth Effects	97	FX 1 (rain)	Rain	2														
	98	FX 2 (soundtrack)	SoundTrk	2														
	99	FX 3 (crystal)	Crystal	2	GamelImba	2												
	100	FX 4 (atmosphere)	Atmosphr	2														
	101	FX 5 (brightness)	Bright	2			Smokey	2										
	102	FX 6 (goblins)	Goblins	2			BelChoir	2										
	103	FX 7 (echoes)	Echoes	2														
	104	FX 8 (sci-fi)	Sci-Fi	2														
Ethnic	105	Sitar	Sitar	1			Tambra	2	Tamboura	2								
	106	Banjo	Banjo	1			Rabab	2	Gopichnt	2	Oud	2						
	107	Shamisen	Shamisen	1														
	108	Koto	Koto	1			Taisho-k	2	Kanoon	2								
	109	Kalimba	Kalimba	1														
	110	Bagpipe	Bagpipe	2														
	111	Fiddle	Fiddle	1														
	112	Shanai	Shanai	1			Pungi	1	Hichriki	2								
Percussive	113	Tinkle Bell	TnklBell	2			Bonang	2	Altair	2	Gamelan	2	S.Gamlan	2	Rama Cym	2	AsianBel	2
	114	Agogo	Agogo	1														
	115	Steel Drums	SteelDrm	2					GlasPerc	2	ThaiBell	2						
	116	Woodblock	Woodblok	1			Castanet	1										
	117	Taiko Drum	TaikoDrm	1			Gr.Cassa	1										
	118	Melodic Tom 1	MelodTom	1														
	119	Synth Drum	Syn Drum	1														
	120	Reverse Cymbal	RevCymbl	1														
Sound Effects	121	Guitar Fret Noise	FretNoiz	2														
	122	Breath Noise	BrthNoiz	2														
	123	Seashore	Seashore	1														
	124	Bird Tweet	Tweet	2														
	125	Telephone Ring	Telphone	1														
	126	Helicopter	Helicptr	1														
	127	Applause	Applause	2														
	128	Gunshot	Gunshot	1														

SFX

Pch#	Bank 0	E
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	Shower	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	Tweet 2	1
52		
53		
54		
55	Ghost	2
56	Maou	2
57		
58		
59		
60		
61		
62		
63		
64		
65	PhonCall	1
66	DoorSqek	1
67	Door Slam	1
68	ScratchC	1
69	ScratchS	2
70	WindChim	1
71	Telphon2	1
72		
73		
74		
75		
76		
77		
78		
79		
80		
81	CarElgnt	1
82	CarTSqel	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	Submarin	2
92		
93		
94		
95		
96		
97	Laugh	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		

: Same as Bank 0   : No sound   E : Element number

XG Drum Kit List
Liste der Drum Kits (Schlagzeug-Sets)
Liste des kits de percussion XG
Lista del kit de batería XG

- Key Off: Keys marked "O" stop sounding the instant they are released.
- Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number

■ Same as Standard Kit 1
■ No Sound

Bank Select MSB (0-127)				127	127	127	127	127	127	127
Bank Select LSB (0-127)				0	0	0	0	0	0	0
Program Change (0-127)				0	1	8	16	24	25	27
MIDI Note#	Note	Key Off	Alternate Group	Standard Kit1	Standard Kit2	Room Kit	Rock Kit	Electro Kit	Analog Kit	Dance Kit
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 H						
18	F#-1		4	Scratch L						
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	C0			Seq Click H						
25	C#0			Brush Tap						
26	D0	O		Brush Swirl						
27	D#0			Brush Slap						
28	E0	O		Brush Tap Swirl				Reverse Cymbal	Reverse Cymbal	Reverse Cymbal
29	F0	O		Snare Roll						
30	F#0			Castanet				Hi Q 2	Hi Q 2	Hi Q 2
31	G0			Snare Soft	Snare Soft 2		Snare Noisy	Snare Snappy Electro	Snare Noisy 4	Snare Techno
32	G#0			Sticks						
33	A0			Kick Soft				Kick 3	Kick 3	Kick Techno Q
34	A#0			Open Rim Shot	Open Rim Shot H Short					Rim Gate
35	B0			Kick Tight			Kick 2	Kick Gate	Kick Analog Short	Kick Techno L
36	C1			Kick	Kick Short		Kick Gate	Kick Gate Heavy	Kick Analog	Kick Techno
37	C#1			Side Stick	Side Stick Light				Side Stick Analog	Side Stick Analog
38	D1			Snare	Snare Short	Snare Snappy	Snare Rock	Snare Noisy 2	Snare Analog	Snare Clap
39	D#1			Hand Clap						
40	E1			Snare Tight	Snare Tight H	Snare Tight Snappy	Snare Rock Tight	Snare Noisy 3	Snare Analog 2	Snare Dry
41	F1			Floor Tom L		Tom Room 1	Tom Rock 1	Tom Electro 1	Tom Analog 1	Tom Analog 1
42	F#1		1	Hi-Hat Closed					Hi-Hat Closed Analog	Hi-Hat Closed 3
43	G1			Floor Tom H		Tom Room 2	Tom Rock 2	Tom Electro 2	Tom Analog 2	Tom Analog 2
44	G#1		1	Hi-Hat Pedal					Hi-Hat Closed Analog 2	Hi-Hat Closed Analog 3
45	A1			Low Tom		Tom Room 3	Tom Rock 3	Tom Electro 3	Tom Analog 3	Tom Analog 3
46	A#1		1	Hi-Hat Open					Hi-Hat Open Analog	Hi-Hat Open 3
47	B1			Mid Tom L		Tom Room 4	Tom Rock 4	Tom Electro 4	Tom Analog 4	Tom Analog 4
48	C2			Mid Tom H		Tom Room 5	Tom Rock 5	Tom Electro 5	Tom Analog 5	Tom Analog 5
49	C#2			Crash Cymbal 1					Crash Analog	Crash Analog
50	D2			High Tom		Tom Room 6	Tom Rock 6	Tom Electro 6	Tom Analog 6	Tom Analog 6
51	D#2			Ride Cymbal 1						
52	E2			Chinese Cymbal						
53	F2			Ride Cymbal Cup						
54	F#2			Tambourine						
55	G2			Splash Cymbal						
56	G#2			Cowbell					Cowbell Analog	Cowbell Analog
57	A2			Crash Cymbal 2						
58	A#2			Vibraslap						
59	B2			Ride Cymbal 2						
60	C3			Bongo H						
61	C#3			Bongo L						
62	D3			Conga H Mute					Conga Analog H	Conga Analog H
63	D#3			Conga H Open					Conga Analog M	Conga Analog M
64	E3			Conga L					Conga Analog L	Conga Analog L
65	F3			Timbale H						
66	F#3			Timbale L						
67	G3			Agogo H						
68	G#3			Agogo L						
69	A3			Cabasa						
70	A#3			Maracas					Maracas 2	Maracas 2
71	B3	O		Samba Whistle H						
72	C4	O		Samba Whistle L						
73	C#4			Guiro Short						
74	D4	O		Guiro Long						
75	D#4			Claves					Claves 2	Claves 2
76	E4			Wood Block H						
77	F4			Wood Block L						
78	F#4			Cuica Mute				Scratch H 2	Scratch H 2	Scratch H 2
79	G4			Cuica Open				Scratch L 2	Scratch L 2	Scratch L 2
80	G#4		2	Triangle Mute						
81	A4		2	Triangle Open						
82	A#4			Shaker						
83	B4			Jingle Bells						
84	C5			Bell Tree						
85	C#5									
86	D5									
87	D#5									
88	E5									
89	F5									
90	F#5									
91	G5									

Bank Select MSB (0-127)				127	127	127	126	126
Bank Select LSB (0-127)				0	0	0	0	0
Program Change (0-127)				32	40	48	0	1
MIDI Note#	Note	Key Off	Alternate Group	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit1	SFX Kit2
13	C#-1		3					
14	D-1		3					
15	D#-1							
16	E-1							
17	F-1		4					
18	F#-1		4					
19	G-1							
20	G#-1							
21	A-1							
22	A#-1							
23	B-1							
24	C0							
25	C#0							
26	D0	O						
27	D#0							
28	E0	O						
29	F0	O						
30	F#0							
31	G0			Snare Jazz H	Brush Slap 2			
32	G#0							
33	A0					Kick Soft 2		
34	A#0				Open Rim Shot Light			
35	B0					Gran Cassa		
36	C1			Kick Jazz	Kick Jazz	Gran Cassa Mute	Cutting Noise	Phone Call
37	C#1			Side Stick Light	Side Stick Light		Cutting Noise 2	Door Squeak
38	D1			Snare Jazz L	Brush Slap 3	Band Snare		Door Slam
39	D#1						String Slap	Scratch Cut
40	E1			Snare Jazz M	Brush Tap 2	Band Snare 2		Scratch H 3
41	F1				Tom Brush 1			Wind Chime
42	F#1		1					Telephone Ring 2
43	G1				Tom Brush 2			
44	G#1		1					
45	A1				Tom Brush 3			
46	A#1		1					
47	B1				Tom Brush 4			
48	C2				Tom Brush 5			
49	C#2					Hand Cymbal		
50	D2				Tom Brush 6			
51	D#2					Hand Cymbal Short		
52	E2						Flute Key Click	Car Engine Ignition
53	F2							Car Tires Squeal
54	F#2							Car Passing
55	G2							Car Crash
56	G#2							Siren
57	A2					Hand Cymbal 2		Train
58	A#2							Jet Plane
59	B2					Hand Cymbal 2 Short		Starship
60	C3							Burst
61	C#3							Roller Coaster
62	D3							Submarine
63	D#3							
64	E3							
65	F3							
66	F#3							
67	G3							
68	G#3						Shower	Laugh
69	A3						Thunder	Scream
70	A#3						Wind	Punch
71	B3	O					Stream	Heart Beat
72	C4	O					Bubble	Foot Steps
73	C#4						Feed	
74	D4	O						
75	D#4							
76	E4							
77	F4							
78	F#4							
79	G4							
80	G#4		2					
81	A4		2					
82	A#4							
83	B4							
84	C5						Dog	Machine Gun
85	C#5						Horse	Laser Gun
86	D5						Bird Tweet 2	Explosion
87	D#5							Firework
88	E5							
89	F5							
90	F#5						Ghost	
91	G5						Maou	

XG Effect Type List
Liste der XG-Effekttypen
Liste des types d'effets XG
Lista de tipos de efectos XG

■ Reverb Block

Reverb types that can be selected by [VOICE SETTING]

Effect Name	MSB	LSB
Hall1	1	0
Hall2	1	17
Room	2	17
Stage	3	17
Plate	4	16

All reverb types

XG Effect Name	MSB	LSB
HALL1	1	0
HALL2	1	1
LARGE HALL	1	2
MEDIUM HALL	1	3
HALL M	1	6
HALL L	1	7
(HALL)	1	16
(HALL)	1	17
(HALL)	1	18
ROOM1	2	0
ROOM2	2	1
ROOM3	2	2
WARM ROOM	2	3
WOODY ROOM	2	4
ROOM S	2	5
ROOM M	2	6
ROOM L	2	7
(ROOM)	2	16
(ROOM)	2	17
(ROOM)	2	18
(ROOM)	2	19
STAGE1	3	0
STAGE2	3	1
(STAGE)	3	16
(STAGE)	3	17
PLATE	4	0
RICH PLATE	4	1
GM PLATE	4	7
(PLATE)	4	16
(PLATE)	4	17
WHITE ROOM	16	0
TUNNEL	17	0
CANYON	18	0
BASEMENT	19	0
NO EFFECT	0	0

■ Chorus Block

Chorus types that can be selected by [VOICE SETTING]

Effect Name	MSB	LSB
Chorus	65	8
Celeste	66	8
Flanger	67	1

All chorus types

XG Effect Name	MSB	LSB
CHORUS1	65	0
CHORUS2	65	1
CHORUS3	65	2
GM CHORUS1	65	3
GM CHORUS2	65	4
GM CHORUS3	65	5
GM CHORUS4	65	6
FB CHORUS	65	7
CHORUS4	65	8
CELESTE1	66	0
CELESTE2	66	1
CELESTE3	66	2
CELESTE4	66	8
(CELESTE)	66	16
(CELESTE)	66	17
(CELESTE)	66	18
FLANGER1	67	0
FLANGER2	67	1
GM FLANGER	67	7
FLANGER3	67	8
(FLANGER)	67	16
(FLANGER)	67	17
SYMPHONIC	68	0
(SYMPHONIC)	68	16
PHASER1	72	0
(PHASER)	72	16
(PHASER)	72	17
(PHASER)	72	18
ENS DETUNE	87	0
NO EFFECT	0	0

■ Variation/Insertion Block

Variation/insertion effects that can be selected by [VOICE SETTING]

Effect Name	MSB	LSB
DelayLCR	5	16
DelayLR	6	0
Echo	7	0
CrossDelay	8	0
Symphonic	68	16
Rotary	66	18
Tremolo	70	18
VibeRotor	119	0
AutoPan	71	21
Phaser	72	17
AutoWah	78	16
SoundBoard	3	0

All variation/insertion effects

XG Effect Name	Variation block	Insertion block	MSB	LSB
HALL1	●	●	1	0
HALL2	●	●	1	1
HALL M	●	●	1	6
HALL L	●	●	1	7
(HALL)	●	●	1	16
(HALL)	●	●	1	17
(HALL)	●	●	1	18
ROOM1	●	●	2	0
ROOM2	●	●	2	1
ROOM3	●	●	2	2
ROOM S	●	●	2	5
ROOM M	●	●	2	6
ROOM L	●	●	2	7
(ROOM)	●	●	2	16
(ROOM)	●	●	2	17
(ROOM)	●	●	2	18
(ROOM)	●	●	2	19
STAGE1	●	●	3	0
STAGE2	●	●	3	1
(STAGE)	●	●	3	16
(STAGE)	●	●	3	17
PLATE	●	●	4	0
GM PLATE	●	●	4	7
(PLATE)	●	●	4	16
(PLATE)	●	●	4	17
DELAY LCR	●	●	5	0
(DELAY LCR)	●	●	5	16
DELAY LR	●	●	6	0
ECHO	●	●	7	0
CROSS DELAY	●	●	8	0
ER1	●		9	0
ER2	●		9	1
GATE REVERB	●		10	0
REVERS GATE	●		11	0
WHITE ROOM	●		16	0
TUNNEL	●		17	0
CANYON	●		18	0
BASEMENT	●		19	0
KARAOKE1	●	●	20	0
KARAOKE2	●	●	20	1
KARAOKE3	●	●	20	2
TEMPO DELAY	●	●	21	0
TEMPO ECHO	●	●	21	8

XG Effect Name	Variation block	Insertion block	MSB	LSB
TEMPO CROSS	●	●	22	0
CHORUS1	●	●	65	0
CHORUS2	●	●	65	1
CHORUS3	●	●	65	2
GM CHORUS1	●	●	65	3
GM CHORUS2	●	●	65	4
GM CHORUS3	●	●	65	5
GM CHORUS4	●	●	65	6
FB CHORUS	●	●	65	7
CHORUS4	●	●	65	8
CELESTE1	●	●	66	0
CELESTE2	●	●	66	1
CELESTE3	●	●	66	2
CELESTE4	●	●	66	8
(CELESTE)	●	●	66	16
(CELESTE)	●	●	66	17
(CELESTE)	●	●	66	18
FLANGER1	●	●	67	0
FLANGER2	●	●	67	1
GM FLANGER	●	●	67	7
FLANGER3	●	●	67	8
(FLANGER)	●	●	67	16
(FLANGER)	●	●	67	17
SYMPHONIC	●	●	68	0
(SYMPHONIC)	●	●	68	16
ROTARY SP	●	●	69	0
DST+ROT SP	●		69	1
OD+ROT SP	●		69	2
AMP+ROT SP	●		69	3
(ROTARY SP)	●	●	69	16
TREMOLO	●	●	70	0
(TREMOLO)	●	●	70	16
(TREMOLO)	●	●	70	17
(TREMOLO)	●	●	70	18
(TREMOLO)	●	●	70	19
AUTO PAN1	●	●	71	0
AUTO PAN2	●		71	1
(AUTO PAN)	●	●	71	16
(AUTO PAN)	●	●	71	17
(AUTO PAN)	●	●	71	18
(AUTO PAN)	●	●	71	19
(AUTO PAN)	●	●	71	20
(AUTO PAN)	●	●	71	21
(AUTO PAN)	●	●	71	22
PHASER1	●	●	72	0
PHASER2	●		72	8
(PHASER)	●	●	72	16
(PHASER)	●	●	72	17
(PHASER)	●	●	72	18
DISTORTION	●	●	73	0
COMP+DIST	●		73	1
STEREO DIST	●		73	8
(COMP+DIST)	●		73	16
OVERDRIVE	●	●	74	0
STEREO OD	●		74	8
AMP SIM1	●	●	75	0
AMP SIM2	●		75	1
STEREO AMP	●		75	8
(AMP SIM)	●	●	75	16
(AMP SIM)	●	●	75	17
(AMP SIM)	●		75	18
(AMP SIM)	●		75	19
(AMP SIM)	●		75	20
(AMP SIM)	●	●	75	21
(AMP SIM)	●	●	75	22
(AMP SIM)	●	●	75	23
3BAND EQ	●	●	76	0
(3BAND EQ)	●	●	76	16
(3BAND EQ)	●	●	76	17
(3BAND EQ)	●	●	76	18
2BAND EQ	●	●	77	0
AUTO WAH	●	●	78	0
AT WAH+DST	●		78	1
AT WAH+OD	●		78	2
(AUTO WAH)	●	●	78	16
(AT WAH+DST)	●		78	17
(AT WAH+OD)	●		78	18
PITCH CHG	●		80	0
PITCH CHG2	●		80	1
(PITCH CHG)	●		80	16
HM ENHANCE	●	●	81	0
(HM ENHANCE)	●	●	81	16
TOUCH WAH	●	●	82	0
TC WAH+DST	●		82	1
TC WAH+OD	●		82	2
TOUCH WAH2	●	●	82	8
(TC WAH+DST)	●		82	16
(TC WAH+OD)	●		82	17
(TOUCH WAH2)	●	●	82	18
(TOUCH WAH)	●	●	82	19
COMPRESSOR	●	●	83	0
NOISE GATE	●	●	84	0
VCE CANCEL	●		85	0
2WAY ROT SP	●		86	0
DST+2ROT SP	●		86	1
OD+2ROT SP	●		86	2
AMP+2ROT SP	●		86	3
ENS DETUNE	●	●	87	0
AMBIENCE	●		88	0
TALKING MOD	●		93	0
LO-FI	●		94	0
DST+DELAY	●		95	0
OD+DELAY	●		95	1
(DST+DELAY)	●		95	16
(OD+DELAY)	●		95	17
CMP+DST+DLY	●		96	0
CMP+OD+DLY	●		96	1
(CMP+DST+DLY)	●		96	16
(CMP+OD+DLY)	●		96	17
WH+DST+DLY	●		97	0
WH+OD+DLY	●		97	1
(WH+DST+DLY)	●		97	16
(WH+OD+DLY)	●		97	17
V_DIST HARD	●		98	0
V_DST H+DLY	●		98	1
V_DIST SOFT	●		98	2
V_DST S+DLY	●		98	3
DUAL ROT SP1	●		99	0
DUAL ROT SP2	●		99	1
DST+TDLY	●		100	0
OD+TDLY	●		100	1
CMP+DST+TDL	●		101	0
CMP+OD+TDLY	●		101	1
WH+DST+TDLY	●		102	0
WH+OD+TDLY	●		102	1
V_DST H+TDLY	●		103	0
V_DST S+TDLY	●		103	1
V_FLANGER	●		104	0
MBAND COMP	●		105	0
T_FLANGER	●		107	0
T_PHASER	●		108	0
DYN FILTER	●		109	0
DYN FLANGER	●		110	0
DYN PHASER	●		111	0
DYN RINGMOD	●		112	0
RING MOD	●		113	0
ISOLATOR	●		115	0
VIBE VIBRATE	●	●	119	0
NO EFFECT	●		0	0
THRU	●	●	64	0

Effect Parameter List
Liste der Effektparameter
Liste des paramètres d'effets
Lista de parámetros de efectos

Parameters marked with a ● in the "Control" column can be controlled from an AC1 (assignable cotroller 1) etc. However, these only affect insertion type effects.
Only the effect names which appear in the display are described above each chart. For details on effects which are not displayed but can be selected by using MSB/LSB numbers, refer to the XG Effect Type List on page 11.

Panel Effect Name

Reberb block
    Hall1, Hall2   MSB = 01
    Room   LSB = 0, 1, 6, 7, 16, 17, 18
    Stage   MSB = 02
    Plate   LSB = 0,1, 2, 5, 6, 7,16,17,18,19
Insertion block   MSB = 03
    Sound Board   MSB = 04
                        LSB = 0, 7, 16, 17

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3 – 30.0s	0 – 69	table#4	
2	Diffusion	0 – 10	0 – 10		
3	Initial Delay	0.1mS – 200.0mS (*1)	0 – 127	table#5	
		0.1mS – 99.3mS (*2, 3)	0 – 63		
4	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
5	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Rev Delay	0.1mS – 200.0mS (*1)	0 – 127	table#5	
		0.1mS – 99.3mS (*2, 3)	0 – 63		
12	Density	0 – 4 (*1, 2)	0 – 4		
		0 – 2 (*3)	0 – 2		
13	Er/Rev Balance	E63>R – E=R – E<R63	1 – 127		
14	High Damp	0.1 – 1.0	1 – 10		
15	Feedback Level	-63 – +63	1 – 127	(table#16)	
16					

MSB = 01, LSB = 2, 3
MSB = 02, LSB = 3, 4
MSB = 04, LSB = 1

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3 – 30.0s	0 – 69	table#4	
2	Diffusion	0 – 10	0 – 10		
3	Initial Delay	0.1mS – 200.0mS	0 – 127	table#5	
4	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
5	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13					
14	High Damp	0.1 – 1.0	1 – 10		
15					
16					

Insertion block
Delay LCR   MSB = 05

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
2	Rch Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
3	Cch Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
4	Feedback Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
5	Feedback Level	-63 – +63	1 – 127	(table#16)	
6	Cch Level	0 – 127	0 – 127	(table#18)	
7	High Damp	0.1 – 1.0	1 – 10		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 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		

Insertion block
Delay LR   MSB = 06

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
2	Rch Delay	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
3	Feedback Delay 1	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
4	Feedback Delay 2	0.1 – 1638.3ms (*2)	1 – 16383		
		0.1 – 1486.0ms (*3)	1 – 14860		
5	Feedback Level	-63 – +63	1 – 127	(table#16)	
6	High Damp	0.1 – 1.0	1 – 10		
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 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		

Insertion block
Echo   MSB = 07

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay1	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
2	Lch Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Rch Delay1	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
4	Rch Feedback Level	-63 – +63	1 – 127	(table#16)	
5	High Damp	0.1 – 1.0	1 – 10		
6	Lch Delay2	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
7	Rch Delay2	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
8	Delay2 Level	0 – 127	0 – 127	(table#18)	
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 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		

Insertion block
Cross Delay   MSB = 08

No.	Parameter	Display	Value	See Table	Control
1	L->R Delay	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
2	R->L Delay	0.1 – 1486.0ms (*2)	1 – 14860		
		0.1 – 743.0ms (*3)	1 – 7430		
3	Feedback Level	-63 – +63	1 – 127	(table#16)	
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	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 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		

MSB = 09

No.	Parameter	Display	Value	See Table	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0 – 5		
2	Room Size	0.1 – 20.0	0 – 127	table#6	
3	Diffusion	0 – 10	0 – 10		
4	Initial Delay	0.1mS – 200.0mS	0 – 127	table#5	
5	Feedback Level	-63 – +63	1 – 127	(table#16)	
6	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
7	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Liveness	0 – 10	0 – 10		
12	Density	0 – 3	0 – 3		
13	High Damp	0.1 – 1.0	1 – 10		
14					
15					
16					

MSB = 10
MSB = 11

No.	Parameter	Display	Value	See Table	Control
1	Type	TypeA, TypeB	0 – 1		
2	Room Size	0.1 – 20.0	0 – 127	table#6	
3	Diffusion	0 – 10	0 – 10		
4	Initial Delay	0.1mS – 200.0mS	0 – 127	table#5	
5	Feedback Level	-63 – +63	1 – 127	(table#16)	
6	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
7	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Liveness	0 – 10	0 – 10		
12	Density	0 – 3	0 – 3		
13	High Damp	0.1 – 1.0	1 – 10		
14					
15					
16					

MSB = 16
MSB = 17
MSB = 18
MSB = 19

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3 – 30.0s	0 – 69	table#4	
2	Diffusion	0 – 10	0 – 10		
3	Initial Delay	0.1mS – 200.0mS (*1)	0 – 127	table#5	
		0.1mS – 99.3mS (*2)	0 – 63		
4	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
5	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
6	Width	0.5 – 30.2m (*1)	0 – 104	table#11	
		0.5 – 10.2m (*2)	0 – 37		
7	Height	0.5 – 30.2m (*1)	0 – 104	table#11	
		0.5 – 20.2m (*2)	0 – 73		
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	(table#15)	●
11	Rev Delay	0.1mS – 200.0mS (*1)	0 – 127	table#5	
		0.1mS – 99.3mS (*2)	0 – 63		
12	Density	0 – 4	0 – 4		
13	Er/Rev Balance	E63>R – E=R – E<R63	1 – 127		
14	High Damp	0.1 – 1.0	1 – 10		
15	Feedback Level	-63 – +63	1 – 127	(table#16)	
16					

MSB = 20

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1mS – 400.0mS	0 – 127	table#7	
2	Feedback Level	-63 – +63	1 – 127	(table#16)	
3	HPF Cutoff	Thru – 8.0kHz	0 – 52	table#3	
4	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Density	0 – 3	0 – 3		
12					
13					
14					
15					
16					

MSB = 21

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
2	Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Feedback High Dump	0.1 – 1.0	1 – 10		
4	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
5	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W=63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40		
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16.0kHz	28 – 58		
16	EQ High Gain	-12 – +12dB	52 – 76		

MSB = 22

No.	Parameter	Display	Value	See Table	Control
1	Delay Time L>R	64th/3 – 4thx6	0 – 19	table#14	
2	Delay Time R>L	64th/3 – 4thx6	0 – 19	table#14	
3	Feedback Level	-63 – +63	1 – 127	(table#16)	
4	Input Select	L, R, L&R	0 – 2		
5	Feedback High Dump	0.1 – 1.0	1 – 10		
6	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W=63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40		
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16.0kHz	28 – 58		
16	EQ High Gain	-12 – +12dB	52 – 76		

Insertion block
**   Rotary**
Chorus Block
**   Chorus**   MSB = 65
**   Celeste**   LSB = 66

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14					
15	Input Mode	mono/stereo	0 – 1		
16					

Chorus block
**   Flanger**   MSB = 67

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15					
16					

Insertion block
Symphonic   MSB = 68

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14					
15					
16					

MSB = 69, LSB = 0, 16

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14					
15					
16					

MSB = 69, LSB = 1
MSB = 69, LSB = 2

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.0 – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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<W=63	1 – 127	(table#15)	
11					
12					
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60	table#3	
16	Output Level	0 – 127	0 – 127	(table#18)	

MSB = 69, LSB = 3

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.0 – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	AMP Type	Off, Stack, Combo, Tube	0 – 3		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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<W=63	1 – 127	(table#15)	
11					
12					
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60	table#3	
16	Output Level	0 – 127	0 – 127	(table#18)	

Insertion block
Tremolo   MSB = 70

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 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	32Hz – 2.0kHz	4 – 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	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15	Input Mode	mono/stereo	0 – 1		
16					

Insertion block
AutoPan   MSB = 71
     LSB = 0,16,17,18,19, 20, 21, 22

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 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	32Hz – 2.0kHz	4 – 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	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14					
15					
16					

MSB = 71, LSB = 1

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 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	LFO Wave	0 – 28	0 – 28		
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	EQ Mid Frequency (*4)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*4)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*4)	0.1 – 12.0	1 – 120		
14					
15	Input Mode	Mono, Stereo	0 – 1		
16					

Insertion block
Phaser   MSB = 72, LSB = 0, 16, 17, 18

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – +63	1 – 127	(table#16)	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11	Stage	4 – 22 (*2)	4 – 22		
		4 – 12 (*3)	4 – 12		
12	Diffusion	mono/stereo	0 – 1		
13					
14					
15					
16					

Effect Parameter List / Liste der Effektparameter / Liste des paramètres d'effets / Lista de parámetros de efectos

MSB = 72, LSB = 8

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – +63	1 – 127	(table#16)	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11	Stage	3 – 11	3 – 11		
12					
13	LFO Phase Difference	-180deg – +180deg (resolution=3deg.)	4 – 124		
14					
15					
16					

MSB = 73, LSB = 0
MSB = 74, LSB = 0

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
3	EQ Low Gain	-12 – +12dB	52 – 76		
4	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
5	Output Level	0 – 127	0 – 127	(table#18)	
6					
7	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
8	EQ Mid Gain	-12 – +12dB	52 – 76		
9	EQ Mid Width	0.1 – 12.0	1 – 120		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Edge (Clip Curve)	0 – 127 (mild – sharp)	0 – 127		
12					
13					
14					
15					
16					

MSB = 73, LSB = 1, 16

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
3	EQ Low Gain	-12 – +12dB	52 – 76		
4	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
5	Output Level	0 – 127	0 – 127	(table#18)	
6					
7	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
8	EQ Mid Gain	-12 – +12dB	52 – 76		
9	EQ Mid Width	0.1 – 12.0	1 – 120		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Edge (Clip Curve)	0 – 127 (mild – sharp)	0 – 127		
12	Attack	1ms – 40ms	0 – 19	table#8	
13	Release	10ms – 680ms	0 – 15	table#9	
14	Threshold	-48dB – -6dB	79 – 121		
15	Ratio	1.0 – 20.0	0 – 7	table#10	
16					

MSB = 73, LSB = 8
MSB = 74, LSB = 8

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	EQ Low Frequency	32 – 2.0kHz	4 – 40	table#3	
3	EQ Low Gain	-12 – +12dB	52 – 76		
4	LPF Cutoff	1kHz – Thru	34 – 60		
5	Output Level	0 – 127	0 – 127	(table#18)	
6					
7	EQ Mid Frequency	100 – 10.0kHz	14 – 54	table#3	
8	EQ Mid Gain	-12 – +12dB	52 – 76		
9	EQ Mid Width	0.1 – 12.0	1 – 120		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Edge (Clip Curve)	0 – 127	0 – 127		
12					
13					
14					
15					
16					

MSB = 75, LSB = 0,16,17, 22, 23
MSB = 75, LSB = 21 (*3)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	AMP Type	Off, Stack, Combo, Tube	0 – 3		
3	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
4	Output Level	0 – 127	0 – 127	(table#18)	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Edge (Clip Curve)	0 – 127 (mild – sharp)	0 – 127		
12					
13					
14					
15					
16					

MSB = 75, LSB = 1

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	AMP Type	Off, Stack, Combo, Tube, Crunch, Hi gain, British	0 – 6		
3	LPF Cutoff	1.0kHz – Thru	34 – 60	table#3	
4	Output Level	0 – 127	0 – 127	(table#18)	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11					
12					
13					
14					
15					
16					

MSB = 75, LSB = 8, 18, 19, 20
MSB = 75, LSB = 21 (*2)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0 – 127	0 – 127		●
2	AMP Type	Off, Stack, Combo, Tube	0 – 3		
3	LPF Cutoff	1kHz – Thru	34 – 60	table#3	
4	Output Level	0 – 127	0 – 127	(table#18)	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Edge (Clip Curve)	0 – 127 (mild – sharp)	0 – 127		
12					
13					
14					
15					
16					

MSB = 76

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Gain	-12 – +12dB	52 – 76		
2	EQ Mid Frequency	100Hz – 16.0kHz	14 – 58	table#3	
3	EQ Mid Gain	-12 – +12dB	52 – 76		
4	EQ Mid Width	0.1 – 12.0	1 – 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	Input Mode	mono/stereo	0 – 1		
16					

MSB = 77

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Frequency	32Hz – 2.0kHz	4 – 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					
12					
13					
14					
15					
16					

Variation/Insertion block
AutoWah **MSB = 78, LSB = 0, 16**

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive (*4)	0 – 127	0 – 127		
12					
13					
14					
15					
16					

MSB = 78, LSB = 1, 2, 17, 18

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive	0 – 127	0 – 127		
12	EQ Low Gain (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff	1.0kHz – thru	34 – 60	table#3	
15	Output Level	0 – 127	0 – 127	(table#18)	
16					

MSB = 80, LSB = 0, 16

No.	Parameter	Display	Value	See Table	Control
1	Pitch	-24 – +24	40 – 88		
2	Initial Delay	0.1mS – 400.0mS	0 – 127	table#7	
3	Fine 1	-50 – +50	14 – 114		
4	Fine 2	-50 – +50	14 – 114		
5	Feedback Level	-63 – +63	1 – 127		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Pan 1	L63 – R63	1 – 127		
12	Output Level 1	0 – 127	0 – 127	(table#18)	
13	Pan 2	L63 – R63	1 – 127		
14	Output Level 2	0 – 127	0 – 127	(table#18)	
15					
16					

MSB = 80, LSB = 1

No.	Parameter	Display	Value	See Table	Control
1	Pitch	-24 – +24	40 – 88		
2	Initial Delay	0.1mS – 400.0mS	0 – 127	table#7	
3	Fine 1	-50 – +50cent	14 – 114		
4	Fine 2	-50 – +50cent	14 – 114		
5	Feedback Level	-63 – +63	1 – 127		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Pan 1	L63 – R63	1 – 127		
12	Output Level 1	0 – 127	0 – 127	(table#18)	
13	Pan 2	L63 – R63	1 – 127		
14	Output Level 2	0 – 127	0 – 127	(table#18)	
15					
16					

MSB = 81

No.	Parameter	Display	Value	See Table	Control
1	HPF Cutoff	500Hz – 16.0kHz	28 – 58		
2	Drive	0 – 127	0 – 127		
3	Mix Level	0 – 127	0 – 127		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 82, LSB = 0

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive (*4)	0 – 127	0 – 127		
12					
13					
14					
15					
16					

MSB = 82, LSB = 1, 16

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive	0 – 127	0 – 127		
12					
13					
14					
15					
16					

MSB = 82, LSB = 8, 18, 19

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive (*4)	0 – 127	0 – 127		
12	EQ Low Gain (*4) (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (*4) (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff (*4)	1.0kHz – thru	34 – 60	table#3	
15	Output Level (*4)	0 – 127	0 – 127	(table#18)	
16	Release	10 – 680mS	52 – 67	table#12	

MSB = 82, LSB = 2, 17

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	
11	Drive	0 – 127	0 – 127		
12	EQ Low Gain (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff	1.0kHz – thru	34 – 60	table#3	
15	Output Level	0 – 127	0 – 127	(table#18)	
16	Release	10 – 680mS	52 – 67	table#12	

MSB = 83

No.	Parameter	Display	Value	See Table	Control
1	Attack	1 – 40ms	0 – 19	table#8	
2	Release	10 – 680ms	0 – 15	table#9	
3	Threshold	-48 – -6dB	79-121		
4	Ratio	1.0 – 20.0	0 – 7	table#10	
5	Output Level	0 – 127	0 – 127	(table#18)	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 84

No.	Parameter	Display	Value	See Table	Control
1	Attack	1 – 40ms	0 – 19	table#8	
2	Release	10 – 680ms	0 – 15	table#9	
3	Threshold	-72 – -30dB	55 – 97		
4	Output Level	0 – 127	0 – 127	(table#18)	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 85

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	Low Adjust	0 – 26	0 – 26		
12	High Adjust	0 – 26	0 – 26		
13					
14					
15					
16					

MSB = 86, LSB = 0

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0Hz – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High	L63>H – L=H – L<H63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0deg – 180deg (resolution=3deg.)	0 – 60		
13					
14					
15					
16					

MSB = 86, LSB = 1
MSB = 86, LSB = 2

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0 – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High Balance	L63>H – L=H – L<H=63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0 – 180deg	0 – 60		
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60		
16	Output Level	0 – 127	0 – 127	(table#18)	

MSB = 86, LSB = 3

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0 – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High Balance	L63>H – L=H – L<H=63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0 – 180deg	0 – 60		
13	AMP Type	Off, Stack, Combo, Tube	0 – 3		
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60		
16	Output Level	0 – 127	0 – 127	(table#18)	

MSB = 87

No.	Parameter	Display	Value	See Table	Control
1	Detune	-50 – +50cent	14 – 114		
2	Lch Init Delay	0.0mS – 50mS	0 – 127	table#2	
3	Rch Init Delay	0.0mS – 50mS	0 – 127	table#2	
4					
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
12	EQ Low Gain	-12 – +12dB	52 – 76		
13	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
14	EQ High Gain	-12 – +12dB	52 – 76		
15					
16					

MSB = 88

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.0mS – 50mS	0 – 127	table#2	
2	Output Phase	normal/inverse	0 – 1		
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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	(table#15)	●
11					
12					
13					
14					
15					
16					

MSB = 93

No.	Parameter	Display	Value	See Table	Control
1	Vowel	a, i, u, e, o	0 – 4		●
2	Move speed	1 – 62	1 – 62		
3	Drive	0 – 127	0 – 127		
4	Output Level	0 – 127	0 – 127	(table#18)	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 94

No.	Parameter	Display	Value	See Table	Control
1	Sampling Freq Control	44.1kHz – 345Hz	0 – 127	table#13	
2	Word Length	1 – 127	1 – 127		
3	Output Gain	-6 – +36dB	0 – 42		
4	LPF Cutoff	63Hz – Thru	10 – 60	table#3	
5	Filter Type	Thru, PowerBass, Radio, Tel, Clean, Low	0 – 5		
6	LPF Resonance	1.0 – 12.0	10 – 120		
7	Bit Assign	0 – 6	0 – 6		
8	Emphasis	Off/On	0 – 1		
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13					
14					
15	Input Mode	mono/stereo			
16					

MSB = 95

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay Time	0.1 – 1638.3ms	1 – 16383		
2	Rch Delay Time	0.1 – 1638.3ms	1 – 16383		
3	Delay Feedback Time	0.1 – 1638.3ms	1 – 16383		
4	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
5	Delay Mix	0 – 127	0 – 127		
6	Dist Drive	0 – 127	0 – 127		
7	Dist Output Level	0 – 127	0 – 127	(table#18)	
8	Dist EQ Low Gain	-12 – +12dB	52 – 76		
9	Dist EQ Mid Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13					
14					
15					
16					

MSB = 96

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1 – 1638.3ms	1 – 16383		
2	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Delay Mix	0 – 127	0 – 127		
4	Dist Drive	0 – 127	0 – 127		
5	Dist Output Level	0 – 127	0 – 127	(table#18)	
6	Dist EQ Low Gain	-12 – +12dB	52 – 76		
7	Dist EQ Mid Gain	-12 – +12dB	52 – 76		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Comp. Attack	1ms – 40ms	0 – 19	table#8	
12	Comp. Release	10ms – 680ms	0 – 15	table#9	
13	Comp. Threshold	-48dB – -6dB	79 – 121		
14	Comp. Ratio	1.0 – 20.0	0 – 7	table#10	
15					
16					

MSB = 97

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1 – 1638.3ms	1 – 16383		
2	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Delay Mix	0 – 127	0 – 127		
4	Dist Drive	0 – 127	0 – 127		
5	Dist Output Level	0 – 127	0 – 127	(table#18)	
6	Dist EQ Low Gain	-12 – +12dB	52 – 76		
7	Dist EQ Mid Gain	-12 – +12dB	52 – 76		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Wah Sensitivity	0 – 127	0 – 127		
12	Wah Cutoff Freq Offset	0 – 127	0 – 127		
13	Wah Resonance	1.0 – 12.0	10 – 120		
14	Wah Release	10 – 680ms	52 – 67	table#12	
15					
16					

MSB = 98, LSB = 0
MSB = 98, LSB = 2

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0 – 100%	0 – 100		
2	Device	Transistor/Vintage Tube/Dist1/Dist2/Fuzz	0 – 4		
3	Speaker	Flat/Stack/Combo/Twin/Radio/Megaphone	0 – 5		
4	Presence	0 – 20	0 – 20		
5	Output Level	0 – 100%	0 – 100		
6					
7					
8					
9					
10	Dry/Wet Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13					
14					
15					
16					

MSB = 98, LSB = 1
MSB = 98, LSB = 3

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0 – 100%	0 – 100		
2	Device	Transistor/Vintage Tube/Dist1/Dist2/Fuzz	0 – 4		
3	Speaker	Flat/Stack/Combo/Twin/Radio/Megaphone	0 – 5		
4	Presence	0 – 20	0 – 20		
5	Output Level	0 – 100%	0 – 100		
6	Delay Time L	0.1 – 1638.3ms	1 – 16383		
7	Delay Time R	0.1 – 1638.3ms	1 – 16383		
8	Delay Feedback Time	0.1 – 1638.3ms	1 – 16383		
9	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
10	Dry/Wet Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Delay Mix	0 – 127	0 – 127		
12	Feedback High Dump	0.1 – 1.0	1 – 10		
13					
14					
15					
16					

MSB = 99

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed Slow	0.0Hz – 2.65Hz	0 – 63	table#1	
2	Horn Speed Slow	0.0Hz – 2.65Hz	0 – 63	table#1	
3	Rotor Speed Fast	2.69Hz – 39.7Hz	64 – 127	table#1	
4	Horn Speed Fast	2.69Hz – 39.7Hz	64 – 127	table#1	
5	Slow-Fast Time of R	0 – 127	0 – 127		
6	Slow-Fast Time of H	0 – 127	0 – 127		
7	Drive Low	0 – 127	0 – 127		
8	Drive High	0 – 127	0 – 127		
9	Low/High Balance	L63>H – L=H – L<H=63	1 – 127		
10					
11	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
12	EQ Low Gain	-12 – +12dB	52 – 76		
13	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
14	EQ High Gain	-12 – +12dB	52 – 76		
15	Mic L-R Angle	0 – 180deg	0 – 60		
16	Speed Control	Slow/Fast	0/1		●

MSB = 100

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
2	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Delay Mix	0 – 127	0 – 127		
4	Dist Drive	0 – 127	0 – 127		
5	Dist Output Level	0 – 127	0 – 127	(table#18)	
6	Dist EQ Low Gain	-12 – +12dB	52 – 76		
7	Dist EQ High Gain	-12 – +12dB	52 – 76		
8	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
9	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13					
14					
15					
16					

MSB = 101

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
2	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Delay Mix	0 – 127	0 – 127		
4	Dist Drive	0 – 127	0 – 127		
5	Dist Output Level	0 – 127	0 – 127	(table#18)	
6	Dist EQ Low Gain	-12 – +12dB	52 – 76		
7	Dist EQ High Gain	-12 – +12dB	52 – 76		
8	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
9	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Comp. Attack	1ms – 40ms	0 – 19	table#8	
12	Comp. Release	10ms – 680ms	0 – 15	table#9	
13	Comp. Threshold	-48dB – -6dB	79 – 121		
14	Comp. Ratio	1.0 – 20.0	0 – 7	table#10	
15					
16					

MSB = 102

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
2	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Delay Mix	0 – 127	0 – 127		
4	Dist Drive	0 – 127	0 – 127		
5	Dist Output Level	0 – 127	0 – 127	(table#18)	
6	Dist EQ Low Gain	-12 – +12dB	52 – 76		
7	Dist EQ High Gain	-12 – +12dB	52 – 76		
8	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
9	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
10	Dry/Wet	D63>W – D=W – D<W=63	1 – 127	(table#15)	●
11	Wah Sensitivity	0 – 127	0 – 127		
12	Wah Cutoff Freq Offset	0 – 127	0 – 127		
13	Wah Resonance	1.0 – 12.0	10 – 120		
14	Wah Release	10 – 680mS	52 – 67	table#12	
15					
16					

MSB = 103

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0 – 100%	0 – 100		
2	Device	Transistor/Vintage Tube/Dist1/Dist2/Fuzz	0 – 4		
3	Speaker	Flat/Stack/Combo/Twin/Radio/Megaphone	0 – 5		
4	Presence	0 – 20	0 – 20		
5	Output Level	0 – 100%	0 – 100		
6	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
7	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
8	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
9	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
10	Dry/Wet Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Delay Mix	0 – 127	0 – 127		
12	Feedback High Dump	0.1 – 1.0	1 – 10		
13					
14					
15					
16					

MSB = 104

No.	Parameter	Display	Value	See Table	Control
1	LFO Freq	0.0 – 39.70[Hz]	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	LFO Wave	Triangle, Sine, Random	0 – 2		
4	Delay Offset	0.09 – 36.21[ms]	0 – 139	table#23	
5	Feedback Level	-100 – +100[%]	0 – 200		
6	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
7	EQ Low Gain	-12 – +12[dB]	52 – 76		
8	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
9	EQ High Gain	-12 – +12[dB]	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ mid frequency	100[Hz] – 10.0[kHz]	14 – 54	table#3	
12	EQ mid gain	-12 – +12[dB]	52 – 76		
13	EQ mid width	0.1 – 12.0	1 – 120		
14	Modulation Phase	-180 – +180[deg]	0 – 16	table#24	
15	Feedback High Damp	0.1 – 1.0	1 – 10		
16	Analog Feel	0 – 10	0 – 10		

MSB = 105

No.	Parameter	Display	Value	See Table	Control
1	Type	Normal, Low, Mid, High, Low/High, Low/Mid, Mid/High, Full Bit, Wild, Attacky, Low End, Hard, Basic	0 – 12		
2	Threshold Offset	-32 – +32	32 – 96		●
3	Low Gain Offset	-63 – +63	1 – 127		
4	Mid Gain Offset	-63 – +63	1 – 127		
5	High Gain Offset	-63 – +63	1 – 127		
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 107

No.	Parameter	Display	Value	See Table	Control
1	LFO Freq	16th – 4thx8	5 – 21	table#14	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Delay Offset	0.0 – 50.0[ms]	0 – 127	table#2	
5					
6	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
7	EQ Low Gain	-12 – +12[dB]	52 – 76		
8	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
9	EQ High Gain	-12 – +12[dB]	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ mid frequency	100[Hz] – 10.0[kHz]	14 – 54	table#3	
12	EQ mid gain	-12 – +12[dB]	52 – 76		
13	EQ mid width	0.1 – 12.0	1 – 120		
14	LFO phase difference	-180 – +180[deg]	4 – 124		
15					
16					

MSB = 111

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		●
2	Dyna Level Offset	0 – 127	0 – 127		
3	Feedback Level	-63 – +63	1 – 127	(table#16)	
4	Attack Time	0.3 – 227[ms]	0 – 127	table#20	
5	Release Time	2.6 – 2171[ms]	0 – 127	table#21	
6	Release Curve	0 – 127	0 – 127		
7	Direction	Up, Down	0 – 1		
8	Dyna Threshold Level	0 – 127	0 – 127		
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Stage	4, 5, 6	4 – 6		
12					
13	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
16	EQ High Gain	-12 – +12[dB]	52 – 76		

MSB = 108

No.	Parameter	Display	Value	See Table	Control
1	LFO Freq	16th – 4thx8	5 – 21	table#14	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – +63	1 – 127	(table#16)	
5					
6	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
7	EQ Low Gain	-12 – +12[dB]	52 – 76		
8	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
9	EQ High Gain	-12 – +12[dB]	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Stage	3 – 11	3 – 11		
12					
13	LFO phase difference	-180 – +180[deg]	4 – 124		
14					
15					
16					

MSB = 112

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		●
2	HPF Cutoff Frequency	Thru (20[Hz]) – 8.0[kHz]	0 – 52	table#3	
3	LPF Cutoff Frequency	1.0[kHz] – Thru (20.0[kHz])	34 – 60	table#3	
4	Attack Time	0.3 – 227[ms]	0 – 127	table#20	
5	Release Time	2.6 – 2171[ms]	0 – 127	table#21	
6	Release Curve	0 – 127	0 – 127		
7	Direction	Up, Down	0 – 1		
8	Dyna Threshold Level	0 – 127	0 – 127		
9	Dyna Level Offset	0 – 127	0 – 127		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11					
12					
13	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
16	EQ High Gain	-12 – +12[dB]	52 – 76		

MSB = 109

No.	Parameter	Display	Value	See Table	Control
1	Filter Type	LPF (12dB), LPF (18dB), LPF (24dB), HPF, BPF, BEF	0 – 5		
2	Sensitivity	0 – 127	0 – 127		●
3	Dyna Level Offset	0 – 127	0 – 127		
4	Resonance	-16 – +111	0 – 127		
5	Attack Time	0.3 – 227[ms]	0 – 127	table#20	
6	Release Time	2.6 – 2171[ms]	0 – 127	table#21	
7	Release Curve	0 – 127	0 – 127		
8	Direction	Up, Down	0 – 1		
9	Dyna Threshold Level	0 – 127	0 – 127		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11					
12					
13	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
14	EQ Low Gain	-12 – +12[dB]	52 – 76		
15	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
16	EQ High Gain	-12 – +12[dB]	52 – 76		

MSB = 113

No.	Parameter	Display	Value	See Table	Control
1	Carrier Freq Coarse	0.7[Hz] – 5[kHz]	0 – 127	table#22	●
2	Carrier Freq Fine	0 – 127	0 – 127		
3	LFO Wave	Triangle, Sine	0 – 1		
4	LFO Depth	0 – 127	0 – 127	(table#19)	
5	LFO Freq	0.0 – 39.70[Hz]	0 – 127	table#1	
6	HPF Cutoff Frequency	Thru (20[Hz]) – 8.0[kHz]	0 – 52	table#3	
7	LPF Cutoff Frequency	1.0[kHz] – Thru (20.0[kHz])	34 – 60	table#3	
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11					
12					
13	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
16	EQ High Gain	-12 – +12[dB]	52 – 76		

MSB = 110

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		●
2	Delay Time Offset	0 – 127	0 – 127		
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Attack Time	0.3 – 227[ms]	0 – 127	table#20	
5	Release Time	2.6 – 2171[ms]	0 – 127	table#21	
6	Release Curve	0 – 127	0 – 127		
7	Direction	Up, Down	0 – 1		
8	Dyna Threshold Level	0 – 127	0 – 127		
9	Dyna Level Offset	0 – 127	0 – 127		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11					
12					
13	EQ Low Frequency	32[Hz] – 2.0[kHz]	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500[Hz] – 16.0[kHz]	28 – 58	table#3	
16	EQ High Gain	-12 – +12[dB]	52 – 76		

MSB = 115

No.	Parameter	Display	Value	See Table	Control
1	On/off SW	Off, On	0 – 1		●
2	Low Level	0 – 127	0 – 127		
3	Mid Level	0 – 127	0 – 127		
4	High Level	0 – 127	0 – 127		
5	Low Mute	Off, On	0 – 1		
6	Mid Mute	Off, On	0 – 1		
7	High Mute	Off, On	0 – 1		
8					
9					
10					
11					
12					
13					
14					
15					
16					

Insertion block
VibeRotor   **MSB = 119**

No.	Parameter	Display	Value	See Table	Control
1	Vibrate Speed	0.00Hz – 39.7Hz	0 – 127	table#1	
2	Vibrate Depth (AM)	0 – 127	0 – 127		
3	Vibrate Depth (PM)	0 – 127	0 – 127		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 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 Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	EQ Mid Frequency (*)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*)	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15	Input Mode	mono/stereo	0 – 1		
16	Vibrate SW	Off, On	0 – 1		●

MSB = 0

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

MSB = 64

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

(Parameter 10 Dry/Wet only affects insertion type effects.)

(*1)   Reverb Block
(*2)   Variation Block
(*3)   Chorus and Insertion Block(s)
(*4)   Variation Block only

Effect Data Assign Table
Effektdaten-Zuordnungstabelle
Tableau d'assignation des données d'effets
Tabla de asignación de datos para efectos

table#1
LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	0.00	32	1.35	64	2.69	96	8.41
1	0.04	33	1.39	65	2.78	97	8.75
2	0.08	34	1.43	66	2.86	98	9.08
3	0.13	35	1.47	67	2.94	99	9.42
4	0.17	36	1.51	68	3.03	100	9.76
5	0.21	37	1.56	69	3.11	101	10.1
6	0.25	38	1.60	70	3.20	102	10.8
7	0.29	39	1.64	71	3.28	103	11.4
8	0.34	40	1.68	72	3.37	104	12.1
9	0.38	41	1.72	73	3.45	105	12.8
10	0.42	42	1.77	74	3.53	106	13.5
11	0.46	43	1.81	75	3.62	107	14.1
12	0.51	44	1.85	76	3.70	108	14.8
13	0.55	45	1.89	77	3.87	109	15.5
14	0.59	46	1.94	78	4.04	110	16.2
15	0.63	47	1.98	79	4.21	111	16.8
16	0.67	48	2.02	80	4.37	112	17.5
17	0.72	49	2.06	81	4.54	113	18.2
18	0.76	50	2.10	82	4.71	114	19.5
19	0.80	51	2.15	83	4.88	115	20.9
20	0.84	52	2.19	84	5.05	116	22.2
21	0.88	53	2.23	85	5.22	117	23.6
22	0.93	54	2.27	86	5.38	118	24.9
23	0.97	55	2.31	87	5.55	119	26.2
24	1.01	56	2.36	88	5.72	120	27.6
25	1.05	57	2.40	89	6.06	121	28.9
26	1.09	58	2.44	90	6.39	122	30.3
27	1.14	59	2.48	91	6.73	123	31.6
28	1.18	60	2.52	92	7.07	124	33.0
29	1.22	61	2.57	93	7.40	125	34.3
30	1.26	62	2.61	94	7.74	126	37.0
31	1.30	63	2.65	95	8.08	127	39.7

table#2
Modulation Delay Offset

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

ttable#3
EQ Frequency

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

table#4
Reverb time

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

table#5
Delay Time (0.1 – 200.0 [ms])

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

table#6
Room Size

Data	Value	Data	Value	Data	Value	Data	Value
0	0.1	32	5.1	64	10.1	96	15.1
1	0.3	33	5.3	65	10.3	97	15.3
2	0.4	34	5.4	66	10.4	98	15.5
3	0.6	35	5.6	67	10.6	99	15.6
4	0.7	36	5.7	68	10.8	100	15.8
5	0.9	37	5.9	69	10.9	101	15.9
6	1.0	38	6.1	70	11.1	102	16.1
7	1.2	39	6.2	71	11.2	103	16.2
8	1.4	40	6.4	72	11.4	104	16.4
9	1.5	41	6.5	73	11.5	105	16.6
10	1.7	42	6.7	74	11.7	106	16.7
11	1.8	43	6.8	75	11.9	107	16.9
12	2.0	44	7.0	76	12.0	108	17.0
13	2.1	45	7.2	77	12.2	109	17.2
14	2.3	46	7.3	78	12.3	110	17.3
15	2.5	47	7.5	79	12.5	111	17.5
16	2.6	48	7.6	80	12.6	112	17.6
17	2.8	49	7.8	81	12.8	113	17.8
18	2.9	50	7.9	82	12.9	114	18.0
19	3.1	51	8.1	83	13.1	115	18.1
20	3.2	52	8.2	84	13.3	116	18.3
21	3.4	53	8.4	85	13.4	117	18.4
22	3.5	54	8.6	86	13.6	118	18.6
23	3.7	55	8.7	87	13.7	119	18.7
24	3.9	56	8.9	88	13.9	120	18.9
25	4.0	57	9.0	89	14.0	121	19.1
26	4.2	58	9.2	90	14.2	122	19.2
27	4.3	59	9.3	91	14.4	123	19.4
28	4.5	60	9.5	92	14.5	124	19.5
29	4.6	61	9.7	93	14.7	125	19.7
30	4.8	62	9.8	94	14.8	126	19.8
31	5.0	63	10.0	95	15.0	127	20.0

table#7
Delay Time (0.1 – 400.0 [ms])

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

table#8
Compressor Attack Time

Data	Value
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	12
11	14
12	16
13	18
14	20
15	23
16	26
17	30
18	35
19	40

table#9
Compressor Release Time

Data	Value
0	10
1	15
2	25
3	35
4	45
5	55
6	65
7	75
8	85
9	100
10	115
11	140
12	170
13	230
14	340
15	680

table#10
Compressor Ratio

Data	Value
0	1.0
1	1.5
2	2.0
3	3.0
4	5.0
5	7.0
6	10.0
7	20.0

table#11
Reverb Width; Depth; Height

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

table#12
Wah Release Time

Data	Value
52	10
53	15
54	25
55	35
56	45
57	55
58	65
59	75
60	85
61	100
62	115
63	140
64	170
65	230
66	340
67	680

table#13
LO-FI Sampling Frequency Control

Data	Value	Data	Value	Data	Value	Data	Value
0	44.1k	32	1.34k	64	678.0	96	455.0
1	22.1k	33	1.30k	65	668.0	97	450.0
2	14.7k	34	1.26k	66	658.0	98	445.0
3	11.0k	35	1.23k	67	649.0	99	441.0
4	8.8k	36	1.19k	68	639.0	100	437.0
5	7.4k	37	1.16k	69	630.0	101	432.0
6	6.3k	38	1.13k	70	621.0	102	428.0
7	5.5k	39	1.10k	71	613.0	103	424.0
8	4.9k	40	1.08k	72	604.0	104	420.0
9	4.4k	41	1.05k	73	596.0	105	416.0
10	4.0k	42	1.03k	74	588.0	106	412.0
11	3.7k	43	1.00k	75	580.0	107	408.0
12	3.4k	44	980.0	76	572.0	108	405.0
13	3.2k	45	959.0	77	565.0	109	401.0
14	2.9k	46	938.0	78	558.0	110	397.0
15	2.8k	47	919.0	79	551.0	111	394.0
16	2.6k	48	900.0	80	544.0	112	390.0
17	2.5k	49	882.0	81	538.0	113	387.0
18	2.3k	50	865.0	82	531.0	114	383.0
19	2.2k	51	848.0	83	525.0	115	380.0
20	2.1k	52	832.0	84	519.0	116	377.0
21	2.0k	53	817.0	85	513.0	117	374.0
22	1.92k	54	802.0	86	507.0	118	371.0
23	1.84k	55	788.0	87	501.0	119	368.0
24	1.76k	56	774.0	88	496.0	120	364.0
25	1.70k	57	760.0	89	490.0	121	361.0
26	1.63k	58	747.0	90	485.0	122	359.0
27	1.58k	59	735.0	91	479.0	123	356.0
28	1.52k	60	723.0	92	474.0	124	353.0
29	1.47k	61	711.0	93	469.0	125	350.0
30	1.42k	62	700.0	94	464.0	126	347.0
31	1.38k	63	689.0	95	459.0	127	345.0

table#14
Tempo

Data	Value	Data	Value	Data	Value
0	64th/3	32	4thX19	64	4thX51
1	64th.	33	4thX20	65	4thX52
2	32th	34	4thX21	66	4thX53
3	32th/3	35	4thX22	67	4thX54
4	32th.	36	4thX23	68	4thX55
5	16th	37	4thX24	69	4thX56
6	16th/3	38	4thX25	70	4thX57
7	16th.	39	4thX26	71	4thX58
8	8th	40	4thX27	72	4thX59
9	8th/3	41	4thX28	73	4thX60
10	8th.	42	4thX29	74	4thX61
11	4th	43	4thX30	75	4thX62
12	4th/3	44	4thX31	76	4thX63
13	4th.	45	4thX32	77	4thX64
14	2nd	46	4thX33		
15	2nd/3	47	4thX34		
16	2nd.	48	4thX35		
17	4thX4	49	4thX36		
18	4thX5	50	4thX37		
19	4thX6	51	4thX38		
20	4thX7	52	4thX39		
21	4thX8	53	4thX40		
22	4thX9	54	4thX41		
23	4thX10	55	4thX42		
24	4thX11	56	4thX43		
25	4thX12	57	4thX44		
26	4thX13	58	4thX45		
27	4thX14	59	4thX46		
28	4thX15	60	4thX47		
29	4thX16	61	4thX48		
30	4thX17	62	4thX49		
31	4thX18	63	4thX50		

table#15
Dry/Wet

Data	Dry (dB)	Wet (dB)	Data	Dry (dB)	Wet (dB)	Data	Dry (dB)	Wet (dB)
1	0.00	−∞	44	0.00	-6.63	87	-7.89	0.00
2	0.00	-71.97	45	0.00	-6.24	88	-8.33	0.00
3	0.00	-59.93	46	0.00	-5.85	89	-8.78	0.00
4	0.00	-52.89	47	0.00	-5.46	90	-9.25	0.00
5	0.00	-47.89	48	0.00	-5.09	91	-9.72	0.00
6	0.00	-44.01	49	0.00	-4.72	92	-10.21	0.00
7	0.00	-40.85	50	0.00	-4.37	93	-10.71	0.00
8	0.00	-38.17	51	0.00	-4.01	94	-11.23	0.00
9	0.00	-35.85	52	0.00	-3.67	95	-11.77	0.00
10	0.00	-33.80	53	0.00	-3.33	96	-12.32	0.00
11	0.00	-31.97	54	0.00	-3.00	97	-12.89	0.00
12	0.00	-30.32	55	0.00	-2.68	98	-13.48	0.00
13	0.00	-28.81	56	0.00	-2.37	99	-14.09	0.00
14	0.00	-27.42	57	0.00	-2.05	100	-14.72	0.00
15	0.00	-26.13	58	0.00	-1.74	101	-15.37	0.00
16	0.00	-24.93	59	0.00	-1.44	102	-16.06	0.00
17	0.00	-23.81	60	0.00	-1.14	103	-16.77	0.00
18	0.00	-22.76	61	0.00	-0.85	104	-17.50	0.00
19	0.00	-21.76	62	0.00	-0.56	105	-18.28	0.00
20	0.00	-20.82	63	0.00	-0.28	106	-19.08	0.00
21	0.00	-19.93	64	0.00	0.00	107	-19.93	0.00
22	0.00	-19.08	65	-0.28	0.00	108	-20.82	0.00
23	0.00	-18.28	66	-0.56	0.00	109	-21.76	0.00
24	0.00	-17.50	67	-0.85	0.00	110	-22.76	0.00
25	0.00	-16.77	68	-1.14	0.00	111	-23.81	0.00
26	0.00	-16.06	69	-1.44	0.00	112	-24.93	0.00
27	0.00	-15.37	70	-1.74	0.00	113	-26.13	0.00
28	0.00	-14.72	71	-2.05	0.00	114	-27.42	0.00
29	0.00	-14.09	72	-2.36	0.00	115	-28.81	0.00
30	0.00	-13.48	73	-2.68	0.00	116	-30.32	0.00
31	0.00	-12.89	74	-3.00	0.00	117	-31.97	0.00
32	0.00	-12.32	75	-3.33	0.00	118	-33.80	0.00
33	0.00	-11.77	76	-3.67	0.00	119	-35.85	0.00
34	0.00	-11.23	77	-4.01	0.00	120	-38.17	0.00
35	0.00	-10.71	78	-4.37	0.00	121	-40.85	0.00
36	0.00	-10.21	79	-4.72	0.00	122	-44.01	0.00
37	0.00	-9.72	80	-5.09	0.00	123	-47.89	0.00
38	0.00	-9.25	81	-5.46	0.00	124	-52.89	0.00
39	0.00	-8.78	82	-5.85	0.00	125	-59.93	0.00
40	0.00	-8.33	83	-6.24	0.00	126	-71.97	0.00
41	0.00	-7.89	84	-6.63	0.00	127	−∞	0.00
42	0.00	-7.46	85	-7.04	0.00			
43	0.00	-7.04	86	-7.46	0.00			

table#16
Feedback Level (Reverb, Delay type, Flanger type)

Data	Value (%)	Data	Value (%)	Data	Value (%)
1	-99.20654297	44	-31.49414063	87	36.21826172
2	-97.63183594	45	-29.91943359	88	37.79296875
3	-96.05712891	46	-28.34472656	89	39.36767578
4	-94.48242188	47	-26.77001953	90	40.94238281
5	-92.90771484	48	-25.1953125	91	42.51708984
6	-91.33300781	49	-23.62060547	92	44.09179688
7	-89.75830078	50	-22.04589844	93	45.66650391
8	-88.18359375	51	-20.47119141	94	47.24121094
9	-86.60888672	52	-18.89648438	95	48.81591797
10	-85.03417969	53	-17.32177734	96	50.390625
11	-83.45947266	54	-15.74707031	97	51.96533203
12	-81.88476563	55	-14.17236328	98	53.54003906
13	-80.31005859	56	-12.59765625	99	55.11474609
14	-78.73535156	57	-11.02294922	100	56.68945313
15	-77.16064453	58	-9.448242188	101	58.26416016
16	-75.5859375	59	-7.873535156	102	59.83886719
17	-74.01123047	60	-6.298828125	103	61.41357422
18	-72.43652344	61	-4.724121094	104	62.98828125
19	-70.86181641	62	-3.149414063	105	64.56298828
20	-69.28710938	63	-1.574707031	106	66.13769531
21	-67.71240234	64	0	107	67.71240234
22	-66.13769531	65	1.574707031	108	69.28710938
23	-64.56298828	66	3.149414063	109	70.86181641
24	-62.98828125	67	4.724121094	110	72.43652344
25	-61.41357422	68	6.298828125	111	74.01123047
26	-59.83886719	69	7.873535156	112	75.5859375
27	-58.26416016	70	9.448242188	113	77.16064453
28	-56.68945313	71	11.02294922	114	78.73535156
29	-55.11474609	72	12.59765625	115	80.31005859
30	-53.54003906	73	14.17236328	116	81.88476563
31	-51.96533203	74	15.74707031	117	83.45947266
32	-50.390625	75	17.32177734	118	85.03417969
33	-48.81591797	76	18.89648438	119	86.60888672
34	-47.24121094	77	20.47119141	120	88.18359375
35	-45.66650391	78	22.04589844	121	89.75830078
36	-44.09179688	79	23.62060547	122	91.33300781
37	-42.51708984	80	25.1953125	123	92.90771484
38	-40.94238281	81	26.77001953	124	94.48242188
39	-39.36767578	82	28.34472656	125	96.05712891
40	-37.79296875	83	29.91943359	126	97.63183594
41	-36.21826172	84	31.49414063	127	99.20654297
42	-34.64355469	85	33.06884766		
43	-33.06884766	86	34.64355469		

table#17
Feedback Level (Chorus type)

Data	Value (%)	Data	Value (%)	Data	Value (%)	Data	Value (%)
1	-72.29	33	-35.57	65	1.15	97	37.87
2	-71.14	34	-34.42	66	2.29	98	39.01
3	-70.00	35	-33.28	67	3.44	99	40.16
4	-68.85	36	-32.13	68	4.59	100	41.31
5	-67.70	37	-30.98	69	5.74	101	42.46
6	-66.55	38	-29.83	70	6.88	102	43.60
7	-65.41	39	-28.69	71	8.03	103	44.75
8	-64.26	40	-27.54	72	9.18	104	45.90
9	-63.11	41	-26.39	73	10.33	105	47.05
10	-61.96	42	-25.24	74	11.47	106	48.19
11	-60.82	43	-24.10	75	12.62	107	49.34
12	-59.67	44	-22.95	76	13.77	108	50.49
13	-58.52	45	-21.80	77	14.92	109	51.64
14	-57.37	46	-20.65	78	16.06	110	52.78
15	-56.23	47	-19.51	79	17.21	111	53.93
16	-55.08	48	-18.36	80	18.36	112	55.08
17	-53.93	49	-17.21	81	19.51	113	56.23
18	-52.78	50	-16.06	82	20.65	114	57.37
19	-51.64	51	-14.92	83	21.80	115	58.52
20	-50.49	52	-13.77	84	22.95	116	59.67
21	-49.34	53	-12.62	85	24.10	117	60.82
22	-48.19	54	-11.47	86	25.24	118	61.96
23	-47.05	55	-10.33	87	26.39	119	63.11
24	-45.90	56	-9.18	88	27.54	120	64.26
25	-44.75	57	-8.03	89	28.69	121	65.41
26	-43.60	58	-6.88	90	29.83	122	66.55
27	-42.46	59	-5.74	91	30.98	123	67.70
28	-41.31	60	-4.59	92	32.13	124	68.85
29	-40.16	61	-3.44	93	33.28	125	70.00
30	-39.01	62	-2.29	94	34.42	126	71.14
31	-37.87	63	-1.15	95	35.57	127	72.29
32	-36.72	64	0.00	96	36.72		

table#18
Level

Data	dB	Data	dB	Data	dB	Data	dB
0	-∞	32	-23.95	64	-11.90	96	-4.86
1	-84.15	33	-23.41	65	-11.64	97	-4.68
2	-72.11	34	-22.89	66	-11.37	98	-4.50
3	-65.07	35	-22.39	67	-11.11	99	-4.33
4	-60.07	36	-21.90	68	-10.85	100	-4.15
5	-56.19	37	-21.42	69	-10.60	101	-3.98
6	-53.03	38	-20.96	70	-10.35	102	-3.81
7	-50.35	39	-20.51	71	-10.10	103	-3.64
8	-48.03	40	-20.07	72	-9.86	104	-3.47
9	-45.98	41	-19.64	73	-9.62	105	-3.30
10	-44.15	42	-19.22	74	-9.38	106	-3.14
11	-42.50	43	-18.81	75	-9.15	107	-2.98
12	-40.98	44	-18.41	76	-8.92	108	-2.82
13	-39.59	45	-18.02	77	-8.69	109	-2.66
14	-38.31	46	-17.64	78	-8.47	110	-2.50
15	-37.11	47	-17.27	79	-8.25	111	-2.34
16	-35.99	48	-16.90	80	-8.03	112	-2.18
17	-34.93	49	-16.54	81	-7.81	113	-2.03
18	-33.94	50	-16.19	82	-7.60	114	-1.88
19	-33.00	51	-15.85	83	-7.39	115	-1.72
20	-32.11	52	-15.51	84	-7.18	116	-1.57
21	-31.26	53	-15.18	85	-6.98	117	-1.42
22	-30.46	54	-14.86	86	-6.77	118	-1.28
23	-29.68	55	-14.54	87	-6.57	119	-1.13
24	-28.94	56	-14.22	88	-6.37	120	-0.98
25	-28.23	57	-13.92	89	-6.18	121	-0.84
26	-27.55	58	-13.62	90	-5.98	122	-0.70
27	-26.90	59	-13.32	91	-5.79	123	-0.56
28	-26.27	60	-13.03	92	-5.60	124	-0.42
29	-25.66	61	-12.74	93	-5.41	125	-0.28
30	-25.07	62	-12.46	94	-5.23	126	-0.14
31	-24.50	63	-12.18	95	-5.04	127	0.00

table#19
LFO Depth

Data	Value (%)	Data	Value (%)	Data	Value (%)	Data	Value (%)
0	0.00	32	25.20	64	50.39	96	75.59
1	0.78	33	25.98	65	51.17	97	76.37
2	1.56	34	26.76	66	51.95	98	77.15
3	2.34	35	27.54	67	52.73	99	77.93
4	3.13	36	28.32	68	53.52	100	78.71
5	3.91	37	29.10	69	54.30	101	79.49
6	4.69	38	29.88	70	55.08	102	80.27
7	5.47	39	30.66	71	55.86	103	81.05
8	6.25	40	31.45	72	56.64	104	81.84
9	7.03	41	32.23	73	57.42	105	82.62
10	7.81	42	33.01	74	58.20	106	83.40
11	8.59	43	33.79	75	58.98	107	84.18
12	9.38	44	34.57	76	59.77	108	84.96
13	10.16	45	35.35	77	60.55	109	85.74
14	10.94	46	36.13	78	61.33	110	86.52
15	11.72	47	36.91	79	62.11	111	87.30
16	12.50	48	37.70	80	62.89	112	88.09
17	13.28	49	38.48	81	63.67	113	88.87
18	14.06	50	39.26	82	64.45	114	89.65
19	14.84	51	40.04	83	65.23	115	90.43
20	15.63	52	40.82	84	66.02	116	91.21
21	16.41	53	41.60	85	66.80	117	91.99
22	17.19	54	42.38	86	67.58	118	92.77
23	17.97	55	43.16	87	68.36	119	93.55
24	18.75	56	43.95	88	69.14	120	94.34
25	19.53	57	44.73	89	69.92	121	95.12
26	20.31	58	45.51	90	70.70	122	95.90
27	21.09	59	46.29	91	71.48	123	96.68
28	21.88	60	47.07	92	72.27	124	97.46
29	22.66	61	47.85	93	73.05	125	98.24
30	23.44	62	48.63	94	73.83	126	99.02
31	24.22	63	49.41	95	74.61	127	100.00

table#20
Dyna Attack Time (ms)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.3	32	54.0	64	112	96	170
1	0.9	33	56.0	65	114	97	172
2	1.8	34	58.0	66	116	98	174
3	2.7	35	60.0	67	118	99	176
4	3.6	36	61.0	68	120	100	178
5	5.4	37	63.0	69	121	101	180
6	7.2	38	65.0	70	123	102	181
7	9.0	39	67.0	71	125	103	183
8	10.0	40	69.0	72	127	104	185
9	12.0	41	70.0	73	129	105	187
10	14.0	42	72.0	74	130	106	189
11	16.0	43	74.0	75	132	107	190
12	18.0	44	76.0	76	134	108	192
13	20.0	45	78.0	77	136	109	194
14	21.0	46	80.0	78	138	110	196
15	23.0	47	81.0	79	140	111	198
16	25.0	48	83.0	80	141	112	200
17	27.0	49	85.0	81	143	113	201
18	29.0	50	87.0	82	145	114	203
19	30.0	51	89.0	83	147	115	205
20	32.0	52	90.0	84	149	116	207
21	34.0	53	92.0	85	150	117	209
22	36.0	54	94.0	86	152	118	210
23	38.0	55	96.0	87	154	119	212
24	40.0	56	98.0	88	156	120	214
25	41.0	57	100.0	89	158	121	216
26	43.0	58	101.0	90	160	122	218
27	45.0	59	103.0	91	161	123	220
28	47.0	60	105.0	92	163	124	221
29	49.0	61	107.0	93	165	125	223
30	50.0	62	109.0	94	167	126	225
31	52.0	63	110.0	95	169	127	227

table#21
Dyna Release Time (ms)

Data	Value	Data	Value	Data	Value	Data	Value
0	2.6	32	86.8	64	369.1	96	1064.0
1	3.0	33	91.2	65	390.8	97	1085.7
2	3.4	34	95.5	66	412.5	98	1107.4
3	3.9	35	99.8	67	434.2	99	1129.1
4	4.3	36	104.2	68	456.0	100	1150.8
5	4.7	37	108.5	69	477.7	101	1172.5
6	5.2	38	112.9	70	499.4	102	1194.3
7	5.6	39	117.2	71	521.1	103	1216.0
8	6.0	40	121.6	72	542.8	104	1237.7
9	6.5	41	125.9	73	564.5	105	1259.4
10	6.9	42	130.2	74	586.2	106	1281.1
11	7.3	43	134.6	75	608.0	107	1302.8
12	7.8	44	138.9	76	629.7	108	1346.3
13	8.2	45	143.3	77	651.4	109	1389.7
14	8.6	46	147.6	78	673.1	110	1433.1
15	13.0	47	152.0	79	694.8	111	1476.6
16	17.3	48	156.3	80	716.5	112	1520.0
17	21.7	49	160.6	81	738.3	113	1563.4
18	26.0	50	165.0	82	760.0	114	1606.8
19	30.4	51	169.3	83	781.7	115	1650.3
20	34.7	52	173.7	84	803.4	116	1693.7
21	39.0	53	178.0	85	825.1	117	1737.1
22	43.4	54	182.4	86	846.8	118	1780.6
23	47.7	55	186.7	87	868.5	119	1824.0
24	52.1	56	195.4	88	890.3	120	1867.4
25	56.4	57	217.1	89	912.0	121	1910.8
26	60.8	58	238.8	90	933.7	122	1954.3
27	65.1	59	260.5	91	955.4	123	1997.7
28	69.4	60	282.2	92	977.1	124	2041.1
29	73.8	61	304.0	93	998.8	125	2084.6
30	78.1	62	325.7	94	1020.5	126	2128.0
31	82.5	63	347.4	95	1042.3	127	2171.4

table#22
Ring Mod Carrier Freq Course (Hz)

Data	Value	Data	Value	Data	Value	Data	Value
0	0.7	32	25.6	64	151.4	96	895.0
1	1.3	33	26.9	65	160.2	97	946.1
2	2.0	34	28.9	66	169.6	98	1000.7
3	2.7	35	30.3	67	179.0	99	1057.2
4	3.4	36	32.3	68	189.1	100	1117.7
5	4.0	37	33.6	69	199.9	101	1181.7
6	4.7	38	35.7	70	211.3	102	1249.0
7	5.4	39	37.7	71	223.4	103	1320.3
8	6.1	40	39.7	72	236.2	104	1395.7
9	6.7	41	42.4	73	249.7	105	1475.1
10	7.4	42	44.4	74	263.8	106	1559.2
11	8.1	43	47.1	75	279.3	107	1648.7
12	8.7	44	49.8	76	294.7	108	1742.9
13	9.4	45	52.5	77	311.6	109	1841.8
14	10.1	46	55.9	78	329.7	110	1947.5
15	10.8	47	59.2	79	348.6	111	2058.5
16	11.4	48	62.6	80	368.1	112	2175.6
17	12.1	49	65.9	81	389.6	113	2300.1
18	12.8	50	70.0	82	411.8	114	2431.3
19	13.5	51	73.3	83	435.4	115	2569.9
20	14.1	52	78.1	84	459.6	116	2716.6
21	14.8	53	82.1	85	485.9	117	2871.4
22	15.5	54	86.8	86	514.1	118	3035.6
23	16.2	55	92.2	87	543.1	119	3208.5
24	16.8	56	96.9	88	574.0	120	3391.6
25	17.5	57	103.0	89	607.0	121	3585.4
26	18.2	58	108.3	90	642.0	122	3790.0
27	19.5	59	115.1	91	678.3	123	4006.6
28	20.9	60	121.1	92	717.3	124	4234.8
29	21.5	61	128.5	93	757.7	125	4477.0
30	22.9	62	135.9	94	801.5	126	4732.1
31	24.2	63	143.3	95	847.2	127	5002.6

table#23
V-Flanger Delay Offset

Data	Value	Data	Value
0	0.1	70	6.4
1	0.1	71	6.7
2	0.1	72	7.0
3	0.2	73	7.4
4	0.2	74	7.7
5	0.2	75	8.1
6	0.2	76	8.5
7	0.2	77	9.0
8	0.3	78	9.4
9	0.3	79	9.9
10	0.3	80	10.3
11	0.3	81	10.7
12	0.4	82	11.2
13	0.4	83	11.6
14	0.4	84	12.1
15	0.4	85	12.5
16	0.4	86	12.9
17	0.5	87	13.4
18	0.5	88	13.8
19	0.5	89	14.2
20	0.5	90	14.7
21	0.6	91	15.1
22	0.6	92	15.6
23	0.6	93	16.0
24	0.7	94	16.4
25	0.7	95	16.9
26	0.7	96	17.3
27	0.8	97	17.8
28	0.8	98	18.2
29	0.8	99	18.6
30	0.9	100	19.1
31	0.9	101	19.5
32	1.0	102	20.0
33	1.0	103	20.4
34	1.1	104	20.8
35	1.1	105	21.3
36	1.2	106	21.7
37	1.2	107	22.2
38	1.3	108	22.6
39	1.4	109	23.0
40	1.4	110	23.5
41	1.5	111	23.9
42	1.6	112	24.4
43	1.7	113	24.8
44	1.8	114	25.2
45	1.8	115	25.7
46	1.9	116	26.1
47	2.0	117	26.5
48	2.1	118	27.0
49	2.3	119	27.4
50	2.4	120	27.9
51	2.5	121	28.3
52	2.6	122	28.7
53	2.7	123	29.2
54	2.9	124	29.6
55	3.0	125	30.1
56	3.2	126	30.5
57	3.3	127	30.9
58	3.5	128	31.4
59	3.7	129	31.8
60	3.9	130	32.3
61	4.1	131	32.7
62	4.3	132	33.1
63	4.5	133	33.6
64	4.7	134	34.0
65	5.0	135	34.5
66	5.2	136	34.9
67	5.5	137	35.3
68	5.8	138	35.8
69	6.0	139	36.2

table#24
Modulation Phase

Data	Value
0	-180
1	-158
2	-135
3	-113
4	-90
5	-68
6	-45
7	-23
8	0
9	23
10	45
11	68
12	90
13	113
14	135
15	158
16	180

MIDI Data Format
MIDI-Datenformat
Format des données MIDI
Formato de datos MIDI

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers. Hexadecimal numbers may include the letter "H" as a suffix.

Also, "n" can freely be defined as any whole number. To enter data/values, refer to the table below.

decimal	hexadecimal	binary	decimal	hexadecimal	binary	decimal	hexadecimal	binary	decimal	hexadecimal	binary
0	00	0000 0000	32	20	0010 0000	64	40	0100 0000	96	60	0110 0000
1	01	0000 0001	33	21	0010 0001	65	41	0100 0001	97	61	0110 0001
2	02	0000 0010	34	22	0010 0010	66	42	0100 0010	98	62	0110 0010
3	03	0000 0011	35	23	0010 0011	67	43	0100 0011	99	63	0110 0011
4	04	0000 0100	36	24	0010 0100	68	44	0100 0100	100	64	0110 0100
5	05	0000 0101	37	25	0010 0101	69	45	0100 0101	101	65	0110 0101
6	06	0000 0110	38	26	0010 0110	70	46	0100 0110	102	66	0110 0110
7	07	0000 0111	39	27	0010 0111	71	47	0100 0111	103	67	0110 0111
8	08	0000 1000	40	28	0010 1000	72	48	0100 1000	104	68	0110 1000
9	09	0000 1001	41	29	0010 1001	73	49	0100 1001	105	69	0110 1001
10	0A	0000 1010	42	2A	0010 1010	74	4A	0100 1010	106	6A	0110 1010
11	0B	0000 1011	43	2B	0010 1011	75	4B	0100 1011	107	6B	0110 1011
12	0C	0000 1100	44	2C	0010 1100	76	4C	0100 1100	108	6C	0110 1100
13	0D	0000 1101	45	2D	0010 1101	77	4D	0100 1101	109	6D	0110 1101
14	0E	0000 1110	46	2E	0010 1110	78	4E	0100 1110	110	6E	0110 1110
15	0F	0000 1111	47	2F	0010 1111	79	4F	0100 1111	111	6F	0110 1111
16	10	0001 0000	48	30	0011 0000	80	50	0101 0000	112	70	0111 0000
17	11	0001 0001	49	31	0011 0001	81	51	0101 0001	113	71	0111 0001
18	12	0001 0010	50	32	0011 0010	82	52	0101 0010	114	72	0111 0010
19	13	0001 0011	51	33	0011 0011	83	53	0101 0011	115	73	0111 0011
20	14	0001 0100	52	34	0011 0100	84	54	0101 0100	116	74	0111 0100
21	15	0001 0101	53	35	0011 0101	85	55	0101 0101	117	75	0111 0101
22	16	0001 0110	54	36	0011 0110	86	56	0101 0110	118	76	0111 0110
23	17	0001 0111	55	37	0011 0111	87	57	0101 0111	119	77	0111 0111
24	18	0001 1000	56	38	0011 1000	88	58	0101 1000	120	78	0111 1000
25	19	0001 1001	57	39	0011 1001	89	59	0101 1001	121	79	0111 1001
26	1A	0001 1010	58	3A	0011 1010	90	5A	0101 1010	122	7A	0111 1010
27	1B	0001 1011	59	3B	0011 1011	91	5B	0101 1011	123	7B	0111 1011
28	1C	0001 1100	60	3C	0011 1100	92	5C	0101 1100	124	7C	0111 1100
29	1D	0001 1101	61	3D	0011 1101	93	5D	0101 1101	125	7D	0111 1101
30	1E	0001 1110	62	3E	0011 1110	94	5E	0101 1110	126	7E	0111 1110
31	1F	0001 1111	63	3F	0011 1111	95	5F	0101 1111	127	7F	0111 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) denotes the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 denotes the Control Change Message for each channel (1-16). 192-207/CnH/1100 0000-1100 1111 denotes the Program Change Message for each channel (1-16). 240/FOH/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.

- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.

- bbH/0bbbbbbb denotes the byte count.

- ccH/0ccccccc denotes the check sum.

- ddH/0ddddddd denotes the data/value.

■ Preset Voice List

When you specify a program change as a number in the range of 0-127, specify a number that is one less than the program number listed below. For example, to specify program number 128, you would specify program change 127.

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
GRANDPIANO1	GrandPiano1	0	122	1
	MellowPiano	0	123	1
	RockPiano	0	122	3
	HonkyTonkPiano	0	122	4
GRANDPIANO2	GrandPiano2	0	112	1
	BrightPiano	0	112	2
E.PIANO1	E.Piano1	0	122	6
	SynthPiano	0	122	89
E.PIANO2	E.Piano2	0	122	5
	Vintage E.Piano	0	123	5
HARPSICHORD	Harpsichord8'	0	122	7
	Harpsichord8'+4'	0	123	7
E.CLAVICHORD	E.Clavichord	0	122	8
	Wah Clavi.	0	123	8
VIBRAPHONE	Vibraphone	0	122	12
	Marimba	0	122	13
	Celesta	0	122	9
GUITAR	NylonGuitar	0	122	25
	SteelGuitar	0	122	26

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
CHURCHORGAN	PipeOrganPrincipal	0	123	20
	PipeOrganTutti	0	122	20
	PipeOrganFlute1	0	124	20
	PipeOrganFlute2	0	125	20
JAZZORGAN	JazzOrgan	0	122	17
	RotaryOrgan	0	124	17
	MellowOrgan	0	125	17
STRINGS	Strings	0	122	49
	SynthStrings	0	122	51
	SlowStrings	0	122	50
CHOIR	Choir	0	122	53
	SlowChoir	0	123	53
	Scat	0	122	54
SYNTH.PAD	SynthPad1	0	122	90
	SynthPad2	0	123	89
WOOD BASS	WoodBass	0	122	33
	Bass&Cymbal	0	124	33
E.BASS	ElectricBass	0	122	34
	FretlessBass	0	122	36

MIDI CHANNEL MESSAGE (1)

MIDI Events	Status byte	1st Data byte			2nd Data byte			[MIDI (CLP)] MIDI Reception (respond/ignored)			MIDI Transmission (generated data)			[Internal Sequencer] PLAY		REC
	Status	Data	(Hex)	Parameter	Data	(Hex)	Parameter	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
Key Off [GM1] [GM2]	8nH (n: Channel Number)	kk		Key no. (0-127)	vv		Velocity (0-127)	O	O	O	×	O	×	O	×	×
Key On [GM1] [GM2]	9nH (n: Channel Number)	kk		Key no. (0-127)	vv		Key On: vv=1-127 Key Off: vv=0	O	O	O	O (Keyboard)	O	×	O	×	O
Control Change	BnH	0	(00H)	Bank Select MSB [GM2]	0 64 118 119 120 121 126 127	(00H) (40H) (76H) (77H) (78H) (79H) (7EH) (7FH)	Normal SFX voice GS Rhythm GS Normal GM2 Rhythm GM2 Normal SFX kit Drum kit	O	O	O (Main)	O (Voice)	O	×	O	O	O
		1	(01H)	Modulation [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	×	O	×	O	O	×
		5	(05H)	Portamento Time [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	×	O	×	O	O	×
		6	(06H)	Data Entry MSB [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		7	(07H)	Main Volume [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		10	(0AH)	Panpot [GM1] [GM2]	0-127	(00H...7FH)	L64...C...R63	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		11	(0BH)	Expression [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Pedal)	O	×	O	O	O
		32	(20H)	Bank Select LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice)	O	×	O	O	O
		38	(26H)	Data Entry LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	×	O
		64	(40H)	Sustain (Damper) [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Pedal)	O	×	O	O	O
		65	(41H)	Portamento [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	O	O (All manually played parts)	×	O	×	O	O	×
		66	(42H)	Sostenuto [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	O	O (All manually played parts)	O (Pedal)	O	×	O	O	O
		67	(43H)	Soft Pedal [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	O	O (All manually played parts)	O (Pedal)	O	×	O	O	O
		71	(47H)	Harmonic Content [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		72	(48H)	Release Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		73	(49H)	Attack Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		74	(4AH)	Brightness [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		75	(4BH)	Decay Time [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		76	(4CH)	Vibrate Rate [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		77	(4DH)	Vibrate Depth [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		78	(4EH)	Vibrate Delay [GM2]	0-127	(00H...7FH)	-64...0...+63	O	O	O (All manually played parts)	×	O	×	O	O	×
		84	(54H)	Portamento Control	0-127	(00H...7FH)	Key no. (0-127)	O	O	×	×	O	×	O	×	×
		91	(5BH)	Effect1 Depth (Reverb Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		93	(5DH)	Effect3 Depth (Chorus Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		94	(5EH)	Effect4 Depth (Variation Send Level)	0-127	(00H...7FH)	Data	O	O	O	×	O	×	O	O	×
		96	(60H)	RPN Increment	–	–	The data byte is ignored.	O	O	×	×	O	×	O	×	×
		97	(61H)	RPN Decrement	–	–	The data byte is ignored.	O	O	×	×	O	×	O	×	×
		98	(62H)	NRPN LSB	0-127	(00H...7FH)	Data	O	O	×	×	O	×	O	O	×
		99	(63H)	NRPN MSB	0-127	(00H...7FH)	Data	O	O	×	×	O	×	O	O	×
		100	(64H)	RPN LSB [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		101	(65H)	RPN MSB [GM2]	0-127	(00H...7FH)	Data	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
		120	(78H)	All Sound Off [GM2]	0	(00H)	Data	O	O	O (All manually played parts)	×	O	×	O	O	×
		121	(79H)	Reset All Controllers [GM1] [GM2]	0	(00H)	Data	O	×	×	×	O	×	O	×	×
		122	(7AH)	Local Control	0 127	(00H) (7FH)	OFF ON	O	O	O	×	×	×	×	×	×

MIDI Events	Status	Data	(Hex)	Parameter	Data	(Hex)	Parameter	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
								\[MIDI (CLP)\] MIDI Reception (respond/ignored)			MIDI Transmission (generated data)			\[Internal Sequencer\] PLAY	REW	REC
Mode Message	BnH (n: Channel Number)	123	(7BH)	All Note Off [GM1] [GM2]	0	(00H)	Data	O	O	O (All manually played parts)	X	O	X	O	X	X
		124	(7CH)	Omni Off [GM2]	0	(00H)	Data	O	X	X	X	X	X	X	X	X
		125	(7DH)	Omni On [GM2]	0	(00H)	Data	O	X	X	X	X	X	X	X	X
		126	(7EH)	Mono [GM2]	0-16	(00H...10H)	Data	O	X	X	X	O	X	O	X	X
		127	(7FH)	Poly [GM2]	0	(00H)	Data	O	X	X	X	O	X	O	X	X
Program Change [GM1] [GM2]	CnH (n: Channel Number)	pp	(00H...7FH)	Voice number (0-127)	–	–	–	O	O	O (Main)	O (Voice)	O	X	O	O	O
Channel After Touch [GM1] [GM2]	DnH (n: Channel Number)	vv	(00H...7FH)	Data	–	–	–	O	O	O (All manually played parts)	X	O	X	O	X	X
Polyphonic After Touch	AnH (n: Channel Number)	kk	(00H...7FH)	Key no. (0-127)	vv	(00H...7FH)	Data	O	X	X	X	O	X	O	X	X
Pitch Bend Change [GM1] [GM2]	EnH (n: Channel Number)	cc	(00H...7FH)	LSB	dd	(00H...7FH)	MSB	O	O	O (All manually played parts)	O (Pedal)	O	X	O	O	O
Realtime Message	F8H MIDI Clock	–	–	–	–		X			O			–	–	X
	FAH Start	–	–	–	–		O			O			–	–	X
	FBH Continue	–	–	–	–		X			X			–	–	X
	FCH Stop	–	–	–	–		O			O			–	–	X
	FDH Active Sens [GM2]	–	–	–	–		O			O			–	–	X
	FEH System Reset	–	–	–	–		X			X			–	–	X

MIDI CHANNEL MESSAGE (2)

Parameters controlled by NRPN (Non-Registered Parameter Numbers)

NRPN MSB	NRPN LSB	Data Entry MSB	Data Entry LSB	Parameter	Data Range	[MIDI (CLP)] MIDI Reception (respond/ignore) Song	Main Layer Left Left-layer	Keyboard	MIDI Transmission (generated data) Panel (main generation method)	Song	MIDI	[Internal Sequencer] PLAY	REW	REC Recorded from panel
01H	08H	mmH	–	Vibrato Rate	mm: 00H-40H-7FH (-64...0...+63)	O	O	×	×	O	×	O	O	×
01H	09H	mmH	–	Vibrato Depth	mm: 00H-40H-7FH (-64...0...+63)	O	O	×	×	O	×	O	O	×
01H	0AH	mmH	–	Vibrato Delay	mm: 00H-40H-7FH (-64...0...+63)	O	O	×	×	O	×	O	O	×
01H	20H	mmH	–	Low Pass Filter Cutoff Frequency	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
01H	21H	mmH	–	Low Pass Filter Resonance	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
01H	30H	mmH	–	EQ BASS	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
01H	31H	mmH	–	EQ TREBLE	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
01H	34H	mmH	–	EQ BASS Frequency	mm: 04H-28H (32...2.0k[Hz])	O	×	×	×	O	×	O	O	×
01H	35H	mmH	–	EQ TREBLE Frequency	mm: 1CH-3AH (500...16.0k[Hz])	O	×	×	×	O	×	O	O	×
01H	63H	mmH	–	EG Attack Time	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
01H	64H	mmH	–	EG Decay Time	mm: 00H-40H-7FH (-64...0...+63)	O	O	×	×	O	×	O	O	×
01H	66H	mmH	–	EG Release	mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	O	×
14H	rrH	mmH	–	Drum Low Pass Filter Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
15H	rrH	mmH	–	Drum Low Pass Filter Resonance	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
16H	rrH	mmH	–	Drum EG Attack Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
17H	rrH	mmH	–	Drum EG Decay Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
18H	rrH	mmH	–	Drum Pitch Coarse	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
19H	rrH	mmH	–	Drum Pitch Fine	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	O	×	×	×	O	×	O	×	×
1AH	rrH	mmH	–	Drum Level	rr: drum instrument note number mm: 00H-7FH (0...127)	O	×	×	×	O	×	O	×	×
1CH	rrH	mmH	–	Drum Pan	rr: drum instrument note number mm: 00H, 01H-40H-7FH (RND, L63...C...R63)	O	×	×	×	O	×	O	×	×
1DH	rrH	mmH	–	Drum Reverb Send Level	rr: drum instrument note number mm: 00H-7FH (0...127)	O	×	×	×	O	×	O	×	×
1EH	rrH	mmH	–	Drum Chorus Send Level	rr: drum instrument note number mm: 00H-7FH (0...127)	O	×	×	×	O	×	O	×	×
1FH	rrH	mmH	–	Drum Variation Send Level	rr: drum instrument note number mm: 00H-7FH (0...127) (Variation Connection = SYSTEM) mm: 00H, 01H-7FH (OFF, ON) (Variation Connection = INSERTION)	O	×	×	×	O	×	O	×	×
24H	rrH	mmH	–	Drum HPF Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)	×	×	×	×	×	×	×	×	×
30H	rrH	mmH	–	Drum EQ Bass Gain	rr: drum instrument note number mm: 00H-7FH (0...127)	×	×	×	×	×	×	×	×	×
31H	rrH	mmH	–	Drum EQ Treble Gain	rr: drum instrument note number mm: 00H-7FH (0...127)	×	×	×	×	×	×	×	×	×
34H	rrH	mmH	–	Drum EQ Bass Frequency	rr: drum instrument note number mm: 04H-28H (32...2.0k[Hz])	×	×	×	×	×	×	×	×	×
35H	rrH	mmH	–	Drum EQ Treble Frequency	rr: drum instrument note number mm: 1CH-3AH (500...16.0k[Hz])	×	×	×	×	×	×	×	×	×
40H	rrH	mmH	–	Drum VELOCITY PITCH SENS.	rr: drum instrument note number mm: 00H-0FH (0...15)	×	×	×	×	×	×	×	×	×
41H	rrH	mmH	–	Drum VELOCITY LPF CUTOFF SENS.	rr: drum instrument note number mm: 00H-0FH (0...15)	×	×	×	×	×	×	×	×	×

NRPN MSB: 14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.
Data Entry LSB: Ignored.

Parameters controlled by RPN (Registered Parameter Numbers)

NRPN MSB	NRPN LSB	Data Entry MSB	Data Entry LSB	Parameter	Data Range	[MIDI (CLP)] MIDI Reception (respond/ignore) Song	Main Layer Left Left-layer	Keyboard	MIDI Transmission (generated data) Panel (main generation method)	Song	MIDI	[Internal Sequencer] PLAY	REW	REC Recorded from panel
00H	00H	mmH	–	Pitch Bend Sensitivity [GM1] [GM2]	mm: 00H-18H (0...+24[semitones])	O	O	O (All manually played parts)	O (Function)	O	×	O	O	O
00H	01H	mmH	llH	Fine Tune [GM1] [GM2]	mm ll: 00H 00H -100[cent] ... mm ll: 40H 00H 0[cent] ... mm ll: 7FH 7FH 100[cent]	O	O	O (All manually played parts)	O (Voice Setting)	O	×	O	O	O
00H	02H	mmH	–	Coarse Tune [GM1] [GM2]	mm: 28H-40H-58H (-24...0...+24[semitones])	O	O	O (All manually played parts)	×	O	×	O	O	×
00H	05H	mmH	llH	Modulation Sensitivity [GM2]	mm: Specified in semitone steps ll: Specified in 100/128 cent steps	O	×	×	×	O	×	O	×	×
7FH	7FH	–	–	Null [GM2]	–	O	×	×	×	O	×	O	×	×

MIDI PARAMETER CHANGE TABLE

* Not Received when Receive Parameter SysEx is set to off.
* Not transmitted when Transmit Parameter SysEx is set to on.

MIDI Parameter Change table (XG SYSTEM)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (CLP)] MIDI Reception (effective or not for each part)			[Internal Sequencer] MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
00	00	00 01 02 03	4	00-0F 00-0F 00-0F 00-0F	MASTER TUNE	-102.4...0...+102.3[cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	*Panel setting value		O		×	O	×	O	×	×
		04	1	00-7F	MASTER VOLUME	0...127	7F	O	×	×	×	O	×	O	O	×
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	×	×	×	×	×	×	×	×	×
		06	1	28-58	TRANSPOSE	-24...0...+24[semitones]	40	O	×	×	×	O	×	O	×	×
		7D	1	N	DRUM SETUP RESET	N: Drum setup number	–	O	×	×	×	O	×	O	×	×
		7E	1	00	XG SYSTEM ON	00=XG system ON	–	O	×	×	×	O	×	O	×	×
		7F	1	00	ALL PARAMETER RESET	00=ON	–	O	×	×	×	O	×	O	×	×

TOTAL SIZE 07

MIDI Parameter Change table (SYSTEM INFORMATION)

Address (H)		Size (H)	Data (H)	Parameter	Description	[MIDI (CLP)] MIDI Reception (effective or not for each part)			[Internal Sequencer] MIDI Transmission (generated data)			PLAY		REC
						Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
01	00	00 ... 0D	E	20-7F ... 20-7F	Model Name 1 ... Model Name 14	32...127 (ASCII CHARACTER) ... 32...127 (ASCII CHARACTER)	–	–	–	×	×	O	×	×	×
		0E	1		NOT USED										
		0F	1		NOT USED										

TOTAL SIZE 10
Transmitted in response to Dump Request. Not received.

MIDI Parameter Change table (EFFECT1)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (CLP)] MIDI Reception (effective or not for each part)			[Internal Sequencer] MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	01	00	2	00-7F	REVERB TYPE MSB REVERB TYPE LSB	Refer to Effect Parameter List "	01(=HALL1) 00		O		O (Voice Setting)	O	×	O	O	×
		02	1	00-7F	REVERB PARAMETER 1	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		03	1	00-7F	REVERB PARAMETER 2	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		04	1	00-7F	REVERB PARAMETER 3	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		05	1	00-7F	REVERB PARAMETER 4	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		06	1	00-7F	REVERB PARAMETER 5	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		07	1	00-7F	REVERB PARAMETER 6	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		08	1	00-7F	REVERB PARAMETER 7	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		09	1	00-7F	REVERB PARAMETER 8	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		0A	1	00-7F	REVERB PARAMETER 9	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		0B	1	00-7F	REVERB PARAMETER 10	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...64...127)	40		O		×	O	×	O	O	×
		0D	1	01-7F	REVERB PAN	L63...C...R63	40		O		×	O	×	O	O	×

TOTAL SIZE 0E

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission			PLAY		REC
02	01	10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		11	1	00-7F	REVERB PARAMETER 12	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		12	1	00-7F	REVERB PARAMETER 13	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		13	1	00-7F	REVERB PARAMETER 14	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		14	1	00-7F	REVERB PARAMETER 15	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×
		15	1	00-7F	REVERB PARAMETER 16	"	Depends on Reverb Type		O (Depends on Reverb Type)		×	O	×	O	O	×

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (CLP)] MIDI Reception (effective or not for each part)			[Internal Sequencer] MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	01	20	2	00-7F	CHORUS TYPE MSB CHORUS TYPE LSB	Refer to Effect Parameter List "	01 (=CHORUS1) 00		O		O (Voice Setting)	O	×	O	O	O
		22	1	00-7F	CHORUS PARAMETER 1	"	Depends on Chorus Type		O (Depends on Chorus Type)		×	O	×	O	O	×
		23	1	00-7F	CHORUS PARAMETER 2	"	Depends on Chorus Type		O (Depends on Chorus Type)		×	O	×	O	O	×

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
		24	1	00-7F	CHORUS PARAMETER 3	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		25	1	00-7F	CHORUS PARAMETER 4	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		26	1	00-7F	CHORUS PARAMETER 5	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		27	1	00-7F	CHORUS PARAMETER 6	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		28	1	00-7F	CHORUS PARAMETER 7	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		29	1	00-7F	CHORUS PARAMETER 8	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		2A	1	00-7F	CHORUS PARAMETER 9	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		2B	1	00-7F	CHORUS PARAMETER 10	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...64...127)	40		O		×	O	×	O	O	×
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40		O		×	O	×	O	O	×
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB (0...64...127)	00		O		×	O	×	O	O	×

TOTAL SIZE   0F

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	01	30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List "	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		31	1	00-7F	CHORUS PARAMETER 12	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		32	1	00-7F	CHORUS PARAMETER 13	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		33	1	00-7F	CHORUS PARAMETER 14	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		34	1	00-7F	CHORUS PARAMETER 15	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×
		35	1	00-7F	CHORUS PARAMETER 16	"	Depends on Chorus Type	O (Depends on Chorus Type)		×	O	×	O	O	×

TOTAL SIZE   06

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB	Refer to Effect Parameter List "	05 (=DELAY L, C, R) 00		O		×	O	×	O	O	×
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		44	2	00-7F 00-7F	VARIATION PARAMETER 2 MSB VARIATION PARAMETER 2 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		46	2	00-7F 00-7F	VARIATION PARAMETER 3 MSB VARIATION PARAMETER 3 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB	" "	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...64...127)	40		O		×	O	×	O	O	×
		57	1	01-7F	VARIATION PAN	L63...C...R63	40		O		×	O	×	O	O	×
		58	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB (0...64...127)	00		O		×	O	×	O	O	×
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...64...127)	00		O		×	O	×	O	O	×
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00		O		×	O	×	O	O	×
		5B	1	00-7F	VARIATION PART NUMBER	Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)	7F		O		×	O	×	O	O	×
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40		O		×	O	×	O	O	×
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40		O		×	O	×	O	O	×
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40		O		×	O	×	O	O	×
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40		O		×	O	×	O	O	×
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40		O		×	O	×	O	O	×

TOTAL SIZE   21

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	01	30	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		31	1	00-7F	VARIATION PARAMETER 12	"	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		32	1	00-7F	VARIATION PARAMETER 13	"	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		33	1	00-7F	VARIATION PARAMETER 14	"	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		34	1	00-7F	VARIATION PARAMETER 15	"	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×
		35	1	00-7F	VARIATION PARAMETER 16	"	Depends on Variation Type	O (Depends on Variation Type)		×	O	×	O	O	×

TOTAL SIZE   06

MIDI Parameter Change table (MULTI EQ)

Address (H)			Size (H)	Data (H)	Parameter	Description	MIDI Reception (effective or not for each part) [MIDI (CLP)]			MIDI Transmission (generated data)			PLAY [Internal Sequencer]		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
02	40	00	1	00-04	EQ TYPE	flat, jazz, pops, rock, classic		×		×	×	×	×	×	×
		01	1	34-4C	EQ GAIN1	-12...0...+12[dB]		×		×	×	×	×	×	×
		02	1	04-28	EQ FREQUENCY1	32...2.0k[Hz]		×		×	×	×	×	×	×
		03	1	01-78	EQ Q1	0.1...12.0		×		×	×	×	×	×	×
		04	1	00-01	EQ SHAPE1	shelving, peaking		×		×	×	×	×	×	×
		05	1	34-4C	EQ GAIN2	-12...0...+12[dB]		×		×	×	×	×	×	×
		06	1	0E-36	EQ FREQUENCY2	100...10.0k[Hz]		×		×	×	×	×	×	×
		07	1	01-78	EQ Q2	0.1...12.0		×		×	×	×	×	×	×
		08	1		NOT USED			–		–	–	–	–	–	–
		09	1	34-4C	EQ GAIN3	-12...0...+12[dB]		×		×	×	×	×	×	×
		0A	1	0E-36	EQ FREQUENCY3	100...10.0k[Hz]		×		×	×	×	×	×	×
		0B	1	01-78	EQ Q3	0.1...12.0		×		×	×	×	×	×	×
		0C	1		NOT USED			–		–	–	–	–	–	–
		0D	1	34-4C	EQ GAIN4	-12...0...+12[dB]		×		×	×	×	×	×	×
		0E	1	0E-36	EQ FREQUENCY4	100...10.0k[Hz]		×		×	×	×	×	×	×
		0F	1	01-78	EQ Q4	0.1...12.0		×		×	×	×	×	×	×
		10	1		NOT USED			–		–	–	–	–	–	–
		11	1	34-4C	EQ GAIN5	-12...0...+12[dB]		×		×	×	×	×	×	×
		12	1	1C-3A	EQ FREQUENCY5	0.5k...16.0k[Hz]		×		×	×	×	×	×	×
		13	1	01-78	EQ Q5	0.1...12.0		×		×	×	×	×	×	×
		14	1	00-01	EQ SHAPE5	shelving, peaking		×		×	×	×	×	×	×

TOTAL SIZE　　15

*The MULTI EQ Parameter cannot be reset to its factory setting with XG SYSTEM ON.

MIDI Parameter Change table (EFFECT2)

*The EFFECT2 Parameter canot be reset to its factory setting with XG SYSTEM ON.

Address (H)			Size (H)	Data (H)	Parameter	Description	MIDI Reception (effective or not for each part) [MIDI (CLP)]			MIDI Transmission (generated data)			PLAY [Internal Sequencer]		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from Panel
03	n	00	2	00-7F 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB	Refer to Effect Parameter List "		○		○ (Voice Setting)	○	×	○	○	○
		02	1	00-7F	INSERTION EFFECT PARAMETER 1	"		○ (Depends on Insertion Type)		○ (Voice Setting)	○	×	○	○	○
		03	1	00-7F	INSERTION EFFECT PARAMETER 2	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		04	1	00-7F	INSERTION EFFECT PARAMETER 3	"		○ (Depends on Insertion Type)		○ (Voice Setting)	○	×	○	○	○
		05	1	00-7F	INSERTION EFFECT PARAMETER 4	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		06	1	00-7F	INSERTION EFFECT PARAMETER 5	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		07	1	00-7F	INSERTION EFFECT PARAMETER 6	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		08	1	00-7F	INSERTION EFFECT PARAMETER 7	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		09	1	00-7F	INSERTION EFFECT PARAMETER 8	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	"		○ (Depends on Insertion Type)		○ (Voice Setting)	○	×	○	○	○
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)		○		○ (Voice)	○	×	○	○	○
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63		○		×	○	×	○	○	×
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63		○		×	○	×	○	○	×
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63		○		×	○	×	○	○	×
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63		○		×	○	×	○	○	×
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63		○		×	○	×	○	○	×

TOTAL SIZE　　12

Address (H)			Size (H)	Data (H)	Parameter	Description	MIDI Reception			MIDI Transmission			PLAY	REW	REC
02	01	20	1	00-7F	INSERTION EFFECT PARAMETER 11	Refer to Effect Parameter List		○ (Depends on Insertion Type)		×	○	×	○	○	×
		21	1	00-7F	INSERTION EFFECT PARAMETER 12	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		22	1	00-7F	INSERTION EFFECT PARAMETER 13	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		23	1	00-7F	INSERTION EFFECT PARAMETER 14	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		24	1	00-7F	INSERTION EFFECT PARAMETER 15	"		○ (Depends on Insertion Type)		×	○	×	○	○	×
		25	1	00-7F	INSERTION EFFECT PARAMETER 16	"		○ (Depends on Insertion Type)		○ (Voice Setting)	○	×	○	○	○

TOTAL SIZE　　6

| | | | | | [MIDI (CLP)] | | | | | | [Internal Sequencer] | | |
| Address (H) | Size (H) | Data (H) | Parameter | Description | MIDI Reception (effective or not for each part) | | | MIDI Transmission (generated data) | | | PLAY | | REC |
					Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from Panel
	30	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 1 MSB INSERTION EFFECT PARAMETER 1 LSB	Refer to Effect Parameter List "		O (Depends on Insertion Type)		X	O	X	O	O	X
	32	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 2 MSB INSERTION EFFECT PARAMETER 2 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	34	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 3 MSB INSERTION EFFECT PARAMETER 3 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	36	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 4 MSB INSERTION EFFECT PARAMETER 4 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	38	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 5 MSB INSERTION EFFECT PARAMETER 5 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	3A	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 6 MSB INSERTION EFFECT PARAMETER 6 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	3C	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 7 MSB INSERTION EFFECT PARAMETER 7 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	3E	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 8 MSB INSERTION EFFECT PARAMETER 8 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	40	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 9 MSB INSERTION EFFECT PARAMETER 9 LSB	" "		O (Depends on Insertion Type)		X	O	X	O	O	X
	42	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 10 MSB INSERTION EFFECT PARAMETER 10 LSB	" "		O (Depends on Insertion Type)		O (Voice Setting)	O	X	O	O	O

TOTAL SIZE 14

The second byte of the address is considered as an Insertion effect number.
n : insertion effect number

For effect types that do not require MSB, the Parameters for Address 02-0B will be received and the Parameters for Address 30-42 will not be received.
For effect types that require MSB, the Parameters for Address 30-42 will be received and the Parameters for Address 02-0B will not be received.
When Bulk Dumps that include Effect Type data are transmitted, the Parameters for Address 02-0B will always be transmitted. But, effects that require MSB, when the bulk dump is received the Parameters for Address 02-0B will not be received.

MIDI Parameter Change table (MULTI PART)

| | | | | | | [MIDI (CLP)] | | | | | | [Internal Sequencer] | | |
| Address (H) | Size (H) | Data (H) | Parameter | Description | XG Default (H) | MIDI Reception (effective or no for each part) | | | MIDI Transmission (generated data) | | | PLAY | | REC |
						Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
08 nn 00	1	00-20	NOT USED			X	X	X	X	X	X	X	X	X
01	1	00-7F	BANK SELECT MSB	0…127	part10=7F, other parts=00	O	O	X	X	O	X	O	O	X
02	1	00-7F	BANK SELECT LSB	0…127	00	O	O	X	X	O	X	O	O	X
03	1	00-7F	PROGRAM NUMBER	1…128	00	O	O	X	X	O	X	O	O	X
04	1	00-0F, 7F	Rcv CHANNEL	1…16, OFF	Part No.	O	X	X	X	O	X	O	X	X
05	1	00-01	MONO/POLY MODE	MONO, POLY	01	O	X	X	X	O	X	O	X	X
06	1	00-02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST (for Drum)	01	O	X	X	X	O	X	O	X	X
07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1…2	part10=02, other parts=00	O	X	X	O (Drum Voice)	O	X	O	X	O
08	1	28-58	NOTE SHIFT	-24…0…+24[semitones]	40	O	O	X	X	O	X	O	O	X
09 0A	2	00-0F 00-0F	DETUNE	-12.8…0…+12.7[Hz] 1st bit3-0 → bit7-4 2nd bit3-0 → bit3-0	08 00	O	O	X	X	O	X	O	X	X
0B	1	00-7F	VOLUME	0…127	64	O	O	X	X	O	X	O	X	X
0C	1	00-7F	VELOCITY SENSE DEPTH	0…127	40	O	O	X	O (Voice Setting)	O	X	O	O	O
0D	1	00-7F	VELOCITY SENSE OFFSET	0…127	40	O	O	X	O (Voice Setting)	O	X	O	O	O
0E	1	00-7F	PAN	RND, L63…C…R63	40	O	O	X	X	O	X	O	O	X
0F	1	00-7F	NOTE LIMIT LOW	C-2…G8	00	O	O	X	X	O	X	O	X	X
10	1	00-7F	NOTE LIMIT HIGH	C-2…G8	7F	O	O	X	X	O	X	O	X	X
11	1	00-7F	DRY LEVEL	0…127	7F	O	O	X	X	O	X	O	O	X
12	1	00-7F	CHORUS SEND	0…127	00	O	O	X	X	O	X	O	O	X
13	1	00-7F	REVERB SEND	0…127	28	O	O	X	X	O	X	O	O	X
14	1	00-7F	VARIATION SEND	0…127	00	O	O	X	X	O	X	O	O	X
15	1	00-7F	VIBRATO RATE	-64…0…+63	40	O	O	X	X	O	X	O	O	X
16	1	00-7F	VIBRATO DEPTH	-64…0…+63	40	O	O	X	X	O	X	O	O	X
17	1	00-7F	VIBRATO DELAY	-64…0…+63	40	O	O	X	X	O	X	O	O	X
18	1	00-7F	FILTER CUTOFF FREQUENCY	-64…0…+63	40	O	O	X	X	O	X	O	O	X
19	1	00-7F	FILTER RESONANCE	-64…0…+63	40	O	O	X	X	O	X	O	O	X
1A	1	00-7F	EG ATTACK TIME	-64…0…+63	40	O	O	X	X	O	X	O	O	X
1B	1	00-7F	EG DECAY TIME	-64…0…+63	40	O	O	X	X	O	X	O	O	X
1C	1	00-7F	EG RELEASE TIME	-64…0…+63	40	O	O	X	X	O	X	O	O	X
1D	1	28-58	MW PITCH CONTROL	-24…0…+24[semitones]	40	O	O	X	X	O	X	O	X	X
1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600…0…+9450[cent]	40	O	O	X	X	O	X	O	X	X
1F	1	00-7F	MW AMPLITUDE CONTROL	-100…0…+100[%]	40	O	O	X	X	O	X	O	X	X
20	1	00-7F	MW LFO PMOD DEPTH	0…127	0A	O	O	X	X	O	X	O	X	X
21	1	00-7F	MW LFO FMOD DEPTH	0…127	00	O	O	X	X	O	X	O	X	X
22	1	00-7F	MW LFO AMOD DEPTH	0…127	00	O	O	X	X	O	X	O	X	X
23	1	28-58	BEND PITCH CONTROL	-24…0…+24[semitones]	42	O	O	X	X	O	X	O	X	X
24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600…0…+9450[cent]	40	O	O	X	X	O	X	O	X	X
25	1	00-7F	BEND AMPLITUDE CONTROL	-100…0…+100[%]	40	O	O	X	X	O	X	O	X	X
26	1	00-7F	BEND LFO PMOD DEPTH	0…127	00	O	O	X	X	O	X	O	X	X
27	1	00-7F	BEND LFO FMOD DEPTH	0…127	00	O	O	X	X	O	X	O	X	X
28	1	00-7F	BEND LFO AMOD DEPTH	0…127	00	O	O	X	X	O	X	O	X	X

TOTAL SIZE 29

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or no for each part)			MIDI Transmission (generated data)			PLAY		REC
						Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
30	1	00-01	Rcv PITCH BEND	OFF, ON	01	O	×	×	×	O	×	O	×	×
31	1	00-01	Rcv CH AFTER TOUCH (CAT)	OFF, ON	01	O	×	×	×	O	×	O	×	×
32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	O	×	×	×	O	×	O	×	×
33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	O	×	×	×	O	×	O	×	×
34	1	00-01	Rcv POLY AFTER TOUCH (PAT)	OFF, ON	01	O	×	×	×	O	×	O	×	×
35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	O	×	×	×	O	×	O	×	×
36	1	00-01	Rcv RPN	OFF, ON	01	O	×	×	×	O	×	O	×	×
37	1	00-01	Rcv NRPN	OFF, ON	XGmode=01, GMmode=00	O	×	×	×	O	×	O	×	×
38	1	00-01	Rcv MODULATION	OFF, ON	01	O	×	×	×	O	×	O	×	×
39	1	00-01	Rcv VOLUME	OFF, ON	01	O	×	×	×	O	×	O	×	×
3A	1	00-01	Rcv PAN	OFF, ON	01	O	×	×	×	O	×	O	×	×
3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	O	×	×	×	O	×	O	×	×
3C	1	00-01	Rcv HOLD1	OFF, ON	01	O	×	×	×	O	×	O	×	×
3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	O	×	×	×	O	×	O	×	×
3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	O	×	×	×	O	×	O	×	×
3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	O	×	×	×	O	×	O	×	×
40	1	00-01	Rcv BANK SELECT	OFF, ON	01	O	×	×	×	O	×	O	×	×
41	1	00-7F	SCALE TUNING C	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
42	1	00-7F	SCALE TUNING C#	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
43	1	00-7F	SCALE TUNING D	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
44	1	00-7F	SCALE TUNING D#	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
45	1	00-7F	SCALE TUNING E	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
46	1	00-7F	SCALE TUNING F	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
47	1	00-7F	SCALE TUNING F#	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
48	1	00-7F	SCALE TUNING G	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
49	1	00-7F	SCALE TUNING G#	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
4A	1	00-7F	SCALE TUNING A	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
4B	1	00-7F	SCALE TUNING A#	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
4C	1	00-7F	SCALE TUNING B	-63...0...+63[cent]	40	O	O	×	O (Function)	O	×	O	O	O
4D	1	28-58	CAT PITCH CONTROL	-24...0...+24[semitones]	40	O	×	×	×	O	×	O	×	×
4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	×	×	×	O	×	O	×	×
4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	×	×	×	O	×	O	×	×
50	1	00-7F	CAT LFO PMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
53	1	28-58	PAT PITCH CONTROL	-24...0...+24[semitones]	40	O	×	×	×	O	×	O	×	×
54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	×	×	×	O	×	O	×	×
55	1	00-7F	PAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	×	×	×	O	×	O	×	×
56	1	00-7F	PAT LFO PMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
57	1	00-7F	PAT LFO FMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
58	1	00-7F	PAT LFO AMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	O	×	×	×	O	×	O	×	×
5A	1	28-58	AC1 PITCH CONTROL	-24...0...+24[semitones]	40	O	×	×	×	O	×	O	×	×
5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	×	×	×	O	×	O	×	×
5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	×	×	×	O	×	O	×	×
5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	O	×	×	×	O	×	O	×	×
61	2	28-58	AC2 PITCH CONTROL	-24...0...+24[semitones]	40	O	×	×	×	O	×	O	×	×
62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	×	×	×	O	×	O	×	×
63	1	00-7F	AC2 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	×	×	×	O	×	O	×	×
64	1	00-7F	AC2 LFO PMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
65	1	00-7F	AC2 LFO FMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
66	1	00-7F	AC2 LFO AMOD DEPTH	0...127	00	O	×	×	×	O	×	O	×	×
67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	O	O	×	×	O	×	O	O	×
68	1	00-7F	PORTAMENTO TIME	0...127	00	O	O	×	×	O	×	O	O	×
69	1	00-7F	PITCH EG INITIAL LEVEL	-64...0...+63	40	O	×	×	×	O	×	O	×	×
6A	1	00-7F	PITCH EG ATTACK TIME	-64...0...+63	40	O	×	×	×	O	×	O	×	×
6B	1	00-7F	PITCH EG RELEASE LEVEL	-64...0...+63	40	O	×	×	×	O	×	O	×	×
6C	1	00-7F	PITCH EG RELEASE TIME	-64...0...+63	40	O	×	×	×	O	×	O	×	×
6D	1	00-7F	VELOCITY LIMIT LOW	1...127	01	O	×	×	×	O	×	O	×	×
6E	1	00-7F	VELOCITY LIMIT HIGH	1...127	7F	O	×	×	×	O	×	O	×	×

TOTAL SIZE   3F

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or no for each part)			MIDI Transmission (generated data)			PLAY		REC
						Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
70	1		NOT USED	–	–	–	–	–	–	–	–	–	–	–
71	1		NOT USED	–	–	–	–	–	–	–	–	–	–	–
72	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	O	O	×	O (Voice Setting)	O	×	O	O	O
73	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	O	O	×	O (Voice Setting)	O	×	O	O	O

TOTAL SIZE   04

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (CLP)] MIDI Reception (effective or no for each part)			MIDI Transmission (generated data)			[Internal Sequencer] PLAY		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
		74	1		NOT USED		–	–	–	–	–	–	–	–	–
		75	1		NOT USED		–	–	–	–	–	–	–	–	–
		76	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	O	O	X	O (Voice Setting)	O	X	O	O	O
		77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	O	O	X	O (Voice Setting)	O	X	O	O	O
		78	1		NOT USED		–	–	–	–	–	–	–	–	–
		78	1		NOT USED		–	–	–	–	–	–	–	–	–
		7A	1		NOT USED		–	–	–	–	–	–	–	–	–
		7B	1		NOT USED		–	–	–	–	–	–	–	–	–
		7C	1		NOT USED		–	–	–	–	–	–	–	–	–
		7D	1		NOT USED		–	–	–	–	–	–	–	–	–
		7E	1		NOT USED		–	–	–	–	–	–	–	–	–
		7F	1		NOT USED		–	–	–	–	–	–	–	–	–

TOTAL SIZE   0C

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
0A	nn	40	1	00-7F	MW OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X
		41	1	00-7F	BEND OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X
		42	1	00-7F	CAT OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X
		43	1	00-7F	PAT OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X
		44	1	00-7F	AC1 OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X
		45	1	00-7F	AC2 OFFSET LEVEL CONTROL	-100...0...+100[%]	40	O	X	X	X	O	X	O	O	X

TOTAL SIZE   06

nn = PART NUMBER
If there is a Drum Voice assigned to the part, the following parameters are ineffective.
• BANK SELECT LSB
• PORTAMENTO
• MONO/POLY
• SCALE TUNING
• POLY AFTER TOUCH
• PITCH EG

MIDI Parameter Change table (DRUM SETUP)

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI (CLP)] MIDI Reception (effective or no for each part)			MIDI Transmission (generated data)			[Internal Sequencer] PLAY		REC
							Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
3n	rr	00	1	00-7F	PITCH COARSE	-64...0...+63	40	O	X	X	X	O	X	O	X	X
		01	1	00-7F	PITCH FINE	-64...0...+63[cent]	40	O	X	X	X	O	X	O	X	X
		02	1	00-7F	LEVEL	0...127	Depends on the note	O	X	X	X	O	X	O	X	X
		03	1	00-7F	ALTERNATE GROUP	OF, 0...127	Depends on the note	O	X	X	X	O	X	O	X	X
		04	1	00-7F	PAN	RND, L63...C...R63	Depends on the note	O	X	X	X	O	X	O	X	X
		05	1	00-7F	REVERB SEND	0...127	Depends on the note	O	X	X	X	O	X	O	X	X
		06	1	00-7F	CHORUS SEND	0...127	Depends on the note	O	X	X	X	O	X	O	X	X
		07	1	00-7F	VARIATION SEND	0...127	7F	O	X	X	X	O	X	O	X	X
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	O	X	X	X	O	X	O	X	X
		09	1	00-01	Rcv NOTE OFF	OFF, ON	Depends on the note	O	X	X	X	O	X	O	X	X
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	O	X	X	X	O	X	O	X	X
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40	O	X	X	X	O	X	O	X	X
		0C	1	00-7F	LOW PASS FILTER RESONANCE	-64...0...+63	40	O	X	X	X	O	X	O	X	X
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	O	X	X	X	O	X	O	X	X
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	O	X	X	X	O	X	O	X	X
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	O	X	X	X	O	X	O	X	X

TOTAL SIZE   10

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-layer	Keyboard	Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
		20	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	X	X	X	X	X	X	X	X	X
		21	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	X	X	X	X	X	X	X	X	X
		22	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		23	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		24	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	X	X	X	X	X	X	X	X	X
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	X	X	X	X	X	X	X	X	X
		26	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		27	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		28	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		29	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2A	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2B	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2C	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2D	1		NOT USED		–	–	–	–	–	–	–	–	–	–

TOTAL SIZE   0E

n: Drum Setup Number (0-1)
rr: note number (0D-5B)
In the following cases, the Clavinova will initialize all Drum Setups.
    XG SYSTEM ON received
    GM SYSTEM ON received
    GM LEVEL 2 SYSTEM ON received
    GS RESET received
    DRUM SETUP RESET received (only when in XG mode)

When a part to which a Drum Setup is assigned receives a program change, the assigned Drum Setup will be initialized.
If the same Drum Setup is assigned to two or more parts, changes in Drum Setup parameters (including program changes) will apply to all parts to which it is assigned.

System Exclusive Messages (1)

* Not Received when Receive Parameter System Exclusive is set to off.
* Not transmitted when Transmit Parameter System Exclusive is set to on.

System Exclusive Messages (Universal Realtime messages)

○: available

| MIDI Event | Data Format | [MIDI (CLP)] MIDI Reception (effective or not for each part) | | | MIDI Reception (affecting the panel) | [Internal Sequencer] MIDI Transmission (generated data) | | MIDI | PLAY | | REC |
		Song	Main Layer Left Left-layer	Keyboard		Panel (main generation method)	Song		PLAY	REW	Recorded from panel
Master Volume [GM2]	F0 7F XN 04 01 SS TT F7 11110000　F0　= Exclusive status 01111111　7F　= Universal Real Time 0xxxnnnn　XN　= When N is received N=0-F, whichever is received. X=ignored 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	○	×	×	×	×	× (Output as XG Master Volume)	×	○	○	×
Master Fine Tuning [GM2]	F0 7F XN 04 03 SS TT F7 11110000　F0　= Exclusive status 01111111　7F　= Universal Real Time 0xxxnnnn　XN　= When N is received N=0-F, whichever is received. X=ignored 00000100　04　= Sub-ID #1=Device Control Message 00000011　03　= Sub-ID #2=Master Fine Tuning 0sssssss　SS　= Volume LSB 0ttttttt　TT　= Volume MSB 11110111　F7　= End of Exclusive	○	×	×	×	×	○	×	○	×	×
Master Coarse Tuning [GM2]	F0 7F XN 04 04 00 TT F7 11110000　F0　= Exclusive status 01111111　7F　= Universal Real Time 0xxxnnnn　XN　= When N is received N=0-F, whichever is received. X=ignored 00000100　04　= Sub-ID #1=Device Control Message 00000100　04　= Sub-ID #2=Master Fine Tuning 00000000　00 0ttttttt　TT　= Coarse Tuning MSB 11110111　F7　= End of Exclusive	○	×	×	×	×	○	×	○	×	×
Reverb Parameter [GM2]	F0 7F XN 04 05 01 01 01 01 01 PP VV ... F7 11110000　F0　= Exclusive status 01111111　7F　= Universal Real Time 0xxxnnnn　XN　= When N is received N=0-F, whichever is received. X=ignored 00000100　04　= Sub-ID #1=Device Control Message 00000101　05　= Sub-ID #2=Global Parameter Control 00000001　01　= Slot path length = 1 00000001　01　= Parameter ID width = 1 00000001　01　= Value width = 1 00000001　01　= Slot path MSB = 1 (Reverb) 00000001　01　= Slot path LSB = 1 0ppppppp　PP　= Parameter to be controlled. 0vvvvvvv　VV　= Value for the Parameter. ...　... 11110111　F7　= End of Exclusive Parameter (pp)　　Value (vv)　　Display --- pp=0 Reverb Type　　0...8　　　0: RoomS 　　　　　　　　　　　　　　　1: RoomM 　　　　　　　　　　　　　　　2: RoomL 　　　　　　　　　　　　　　　3: HallM 　　　　　　　　　　　　　　　4: HallL (default) 　　　　　　　　　　　　　　　8: GM Plate pp=1 Reverb Time　　0...128　　0...11.0s		○		○	×	○	×	○	○	×
Chorus Parameter [GM2]	F0 7F XN 04 05 01 01 01 01 02 PP VV ... F7 11110000　F0　= Exclusive status 01111111　7F　= Universal Real Time 0xxxnnnn　XN　= When N is received N=0-F, whichever is received. X=ignored 00000100　04　= Sub-ID #1=Device Control Message 00000101　05　= Sub-ID #2=Global Parameter Control 00000001　01　= Slot path length = 1 00000001　01　= Parameter ID width = 1 00000001　01　= Value width = 1 00000001　01　= Slot path MSB = 1 (Chorus) 00000010　02　= Slot path LSB = 2 0ppppppp　PP　= Parameter to be controlled. 0vvvvvvv　VV　= Value for the Parameter. ...　... 11110111　F7　= End of Exclusive Parameter (pp)　　Value (vv)　　Display --- pp=0 Chorus Type　　0....5　　0: GM Chorus1 　　　　　　　　　　　　　　1: GM Chorus2 　　　　　　　　　　　　　　2: GM Chorus3 (default) 　　　　　　　　　　　　　　3: GM Chorus4 　　　　　　　　　　　　　　4: FB Chorus 　　　　　　　　　　　　　　5: GM Flanger pp=1 Mod Rate　　　0...127　　0...15.5Hz pp=2 Mod Depth　　0...127 pp=3 Feedback　　　0...127 pp=4 Send to Reverb 0...127		○		○	×	○	×	○	○	×

| | | [MIDI (CLP)] | | | | [Internal Sequencer] | | | | | |
| | | MIDI Reception (effective or not for each part) | | | MIDI Reception (affecting the panel) | MIDI Transmission (generated data) | | | PLAY | | REC |
MIDI Event	Data Format	Song	Main Layer Left Left-layer	Keyboard		Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
Channel Pressure (Aftertouch) [GM2]	F0 7F XN 09 01 0M PP RR ... F7 11110000　F0 = Exclusive status 01111111　7F = Universal Real Time 0xxxnnnn　XN = When N is received N=0-F, whichever is received. X=ignored 00001001　09 = Sub-ID #1=Controller Destination Setting 00000001　01 = Sub-ID #2=Controller Type: 01 (Channel Pressure) 0000mmmm　0M = MIDI Channel (00-0F) 0ppppppp　PP = Controlled Parameter 0rrrrrrr　RR = Data ...　　... 11110111　F7 = End of Exclusive Control Parameter (pp)　Data (RR)　Description　Default value --- pp=00 Pitch Control　28H-58H　-24...0...+24 semitones　40H pp=01 Filter Cutoff Control　00H-7FH　-9600...0...+9450 cents　40H pp=02 Amplitude Control　00H-7FH　-100...0...+100%　40H pp=03 LFO Pitch Depth　00H-7FH　0...127　00H pp=04 LFO Filter Depth　00H-7FH　0...127　00H pp=05 LFO Amplitude Depth　00H-7FH　0...127　00H	O	×	×	×	×	O	×	O	×	×
Controller (Control Change) [GM2]	F0 7F XN 09 03 0M CC PP RR ... F7 11110000　F0 = Exclusive status 01111111　7F = Universal Real Time 0xxxnnnn　XN = When N is received N=0-F, whichever is received. X=ignored 00001001　09 = Sub-ID #1=Controller Destination Setting 00000011　03 = Sub-ID #2=Controller Type: 03 (Control Change) 0000mmmm　0M = MIDI Channel (00-0F) 0ccccccc　CC = Controller Number (01H-1FH, 40H-5FH) 0ppppppp　PP = Controlled Parameter 0rrrrrrr　RR = Data ...　　... 11110111　F7 = End of Exclusive Make sure to set both the controlled parameter and the range. Parameters not set will be restored to their default values. Control Parameter (pp)　Data (RR)　Description　Default value --- pp=00 Pitch Control　28H-58H　-24...0...+24 semitones　40H pp=01 Filter Cutoff Control　00H-7FH　-9600...0...+9450 cents　40H pp=02 Amplitude Control　00H-7FH　-100...0...+100%　40H pp=03 LFO Pitch Depth　00H-7FH　0...127　00H pp=04 LFO Filter Depth　00H-7FH　0...127　00H pp=05 LFO Amplitude Depth　00H-7FH　0...127　00H	O	×	×	×	×	O	×	O	×	×
Key-Based Instrument Control [GM2]	F0 7F XN 0A 01 0M KK CC VV ... F7 11110000　F0 = Exclusive status 01111111　7F = Universal Real Time 0xxxnnnn　XN = When N is received N=0-F, whichever is received. X=ignored 00001010　0A = Sub-ID #1=Key-Based Instrument Control 00000011　01 = Sub-ID #2=Controller 0000mmmm　0M = MIDI Channel (00-0F) 0kkkkkkk　KK = Key Number 0ccccccc　CC = Controller Number 0vvvvvvv　VV = Value ...　　... 11110111　F7 = End of Exclusive Make sure to set both the controlled number and the value. Control Number (CC)　Value (VV)　Description　Default value --- CC=07H Volume　00H-7FH　-100...0...+100%　40 CC=0AH Pan　00H-7FH　L63...C...R63　(Preset value) 　　(absolute) CC=5BH Reverb Send Level　00H-7FH　0...Max　(Preset value) 　　(absolute) CC=5DH Chorus Send Level　00H-7FH　0...Max　(Preset value) 　　(absolute)	O	×	×	×	×	O	×	O	×	×

System Exclusive Messages (Universal Non Realtime messages)

		[MIDI (CLP)]				[Internal Sequencer]					
		MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)			PLAY		REC
MIDI Event	Data Format	Song	Main Layer Left Left-layer	Keyboard		Panel (main generation method)	Song	MIDI	PLAY	REW	Recorded from panel
GM1 System On [GM1] [GM2]	F0 7E XN 09 01 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000001 01 = Sub-ID #2=General MIDI On 11110111 F7 = End of Exclusive	O	×	×	O (Voice Setting, Reverb Type, Chorus Type)	×	O	×	O	×	O
GM2 System On [GM2]	F0 7E XN 09 03 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000011 03 = Sub-ID #2=General MIDI2 On 11110111 F7 = End of Exclusive	O	×	×	×	×	O	×	O	×	×
General MIDI System Off [GM1] [GM2]	F0 7E XN 09 02 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000010 02 = Sub-ID #2=General MIDI Off 11110111 F7 = End of Exclusive	O	×	×	O (Voice Setting, Reverb Type, Chorus Type)	×	O	×	O	×	×

Scale/Octave Tuning [GM2]	F0 7E XN 08 08 JJ GG MM SS ... F7
	11110000 F0 = Exclusive status
	01111110 7E = Universal Non-Real Time
	0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored
	00001000 08 = Sub-ID #1=MIDI Tuning Standard
	00001000 08 = Sub-ID #2=scale/octave tuning 1byte form
	0jjjjjjj JJ = Channel/option byte1
	    bits 0 to 1 = channel 15 to 16
	    bits 2 to 6 = reserved
	0ggggggg GG = Channel byte 2 - bits 0 to 6 = channel 8 to 14
	0mmmmmmm MM= Channel byte 2 - bits 0 to 6 = channel 1 to 7
	0sssssss SS = 12 byte tuning offset of 12 semitones from C to B
	    00H means -64cent
	    40H means 0cent
	    7FH means +63cent
	... ...
	11110111 F7 = End of Exclusive
		O	×	×	×	×	O	×	O	×	×

*If the song data to be loaded contains a GM2 System On event, the Bank MSB/LSB values will be removed.

System Exclusive Messages (2)

* Not Received when Receive Parameter System Exclusive is set to off.
* Not transmitted when Transmit Parameter System Exclusive is set to on.

System Exclusive Messages (XG)

		[MIDI (CLP)]				[Internal Sequencer]	
		MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)	
MIDI Event	Data Format	Song	Main Layer Left Left-layer	Keyboard		Panel (main generation method)	Song
XG Parameter Change	F0 43 1n 4C hh mm ll dd ... F7 11110000　　F0　= Exclusive status 01000011　　43　= YAMAHA ID 0001nnnn　　1n　= Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100　　4C　= Model ID 0hhhhhhh　　hh　= Address High 0mmmmmmm　　mm= Address Mid 01111111　　ll　= Address Low 0ddddddd　　dd　= Data ...　　　　　　... 11110111　　F7　= End of Exclusive		○ * Refer to Parameter Change Table		–	○ * Refer to Parameter Change Table	
XG Bulk Dump	F0 43 0n 4C aa bb hh mm ll dd ... dd cc F7 11110000　　F0　= Exclusive status 01000011　　43　= YAMAHA ID 0001nnnn　　1n　= Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100　　4C　= Model ID 0aaaaaaa　　aa　= Byte Count MSB 0bbbbbbb　　bb　= Byte Count LSB 0hhhhhhh　　hh　= Address High 0mmmmmmm　　mm= Address Mid 01111111　　ll　= Address Low 0ddddddd　　dd　= Data 　　:　　　　　　: 0ddddddd　　dd　= Data 0ccccccc　　cc　= Checksum 11110111　　F7　= End of Exclusive		○ * Refer to Parameter Change Table		–	○ * Refer to Parameter Change Table	
XG Parameter Request	F0 43 3n 4C hh mm ll F7 11110000　　F0　= Exclusive status 01000011　　43　= YAMAHA ID 0011nnnn　　3n　= Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100　　4C　= Model ID 0hhhhhhh　　hh　= Address High 0mmmmmmm　　mm= Address Mid 01111111　　ll　= Address Low 11110111　　F7　= End of Exclusive		○ * Refer to Parameter Change Table		–	×	
XG Dump Request	F0 43 2n 4C hh mm ll F7 11110000　　F0　= Exclusive status 01000011　　43　= YAMAHA ID 0010nnnn　　2n　= Device Number n=always 0 (when transmit), n=0-F (when recieve) 01001100　　4C　= Model ID 0hhhhhhh　　hh　= Address High 0mmmmmmm　　mm= Address Mid 01111111　　ll　= Address Low 11110111　　F7　= End of Exclusive		○ * Refer to Parameter Change Table		–	×	

System Exclusive Messages (Others)

		[MIDI (CLP)]				[Internal Sequencer]	
		MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)	
MIDI Event	Data Format	Song	Main Layer Left Left-layer	Keyboard		Panel (main generation method)	Song
IMIDI Master Tuning	F0 43 1n 27 30 00 00 0m 0l cc F7 11110000　　F0　= Exclusive status 01000011　　43　= YAMAHA ID 0001nnnn　　1n　n= always 0 (when transmit), n=0-F (when receive) 00100111　　27　= Model ID of TG100 00110000　　30　= Address High 00000000　　00　= Address Mid 00000000　　00　= Address Low 0000mmmm　　0m　= Master Tune MSB 00001111　　0l　= Master Tune LSB 0ccccccc　　cc　= don't care 11110111　　F7　= End of Exclusive		○		○ (Function)	×	×

System Exclusive Messages (Preset voice)

MIDI Event	Data Format	[MIDI (CLP)] MIDI Reception (effective or not for each part)			[Internal Sequencer]	MIDI Transmission (generated data)	
		Song	Main Layer Left Left-layer	Keyboard	MIDI Reception (affecting the panel)	Panel (main generation method)	Song
String Resonance Depth	F0 43 73 01 50 11 0n 02 dd F7 11110000　　F0 = Exclusive status 01000011　　43 = YAMAHA ID 01110011　　73 = Clavinova ID 00000001　　01 = Model ID (Clavinova common ID) 01010000　　51 = SubID 00010001　　11 = SubID 0000nnnn　　0n = Channel (00-0F) 00000010　　02 = SubID (String Resonance Depth) 0ddddddd　　dd = Depth (00-48) 11110111　　F7 = End of Exclusive	○	○	×	○ (Function)	○ (Function)	○
Sustain Sample Depth	F0 43 73 01 50 11 0n 03 dd F7 11110000　　F0 = Exclusive status 01000011　　43 = YAMAHA ID 01110011　　73 = Clavinova ID 00000001　　01 = Model ID (Clavinova common ID) 01010000　　51 = SubID 00010001　　11 = SubID 0000nnnn　　0n = Channel (00-0F) 00000011　　03 = SubID (Sustain Sample Depth) 0ddddddd　　dd = Depth (00-48) 11110111　　F7 = End of Exclusive	○	○	×	○ (Function)	○ (Function)	○
Key Off Sampling Depth	F0 43 73 01 50 11 0n 04 dd F7 11110000　　F0 = Exclusive status 01000011　　43 = YAMAHA ID 01110011　　73 = Clavinova ID 00000001　　01 = Model ID (Clavinova common ID) 01010000　　51 = SubID 00010001　　11 = SubID 0000nnnn　　0n = Channel (00-0F) 00000100　　04 = SubID (Key Off Sampling Depth) 0ddddddd　　dd = Depth (00-50) 11110111　　F7 = End of Exclusive	○	○	×	○ (Function)	○ (Function)	○
Soft Pedal Depth	F0 43 73 01 50 11 0n 05 dd F7 11110000　　F0 = Exclusive status 01000011　　43 = YAMAHA ID 01110011　　73 = Clavinova ID 00000001　　01 = Model ID (Clavinova common ID) 01010000　　51 = SubID 00010001　　11 = SubID 0000nnnn　　0n = Channel (00-0F) 00000101　　04 = SubID (Soft Pedal Depth) 0ddddddd　　dd = Depth (00-7F) 11110111　　F7 = End of Exclusive	○	○	×	○ (Function)	○ (Function)	○

*For each Depth value, the reset value is 40H = voice parameter.

Function...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 16 1 - 16	1 - 16 1 - 16	
Mode Default Messages Altered	3 ✕ **************	3 ✕ ✕	
Note Number : True voice	0 - 127 **************	0 - 127 0 - 127	
Velocity Note ON Note OFF	O 9nH,v=1-127 ✕ 9nH,v=0	O 9nH,v=1-127 ✕ 9nH,v=0 or 8nH	
After Key's Touch Ch's	✕ ✕	O O	
Pitch Bend	O	O 0 - 24 semi	

Control   0,32
Change   1,5
            7,10,11
               6,38
          64,66,67
                 65
              71,74
              72,73
              84,94
              91,93
              96-97
              98-99
            100-101
	O
	✕
	O
	O
	O
	✕
	O
	✕
	✕
	O
	✕
	✕
	O
		O
		O
		O
		O
		O
		O
		O
		O
		O
		O
		O
		O
		O
			Bank Select
			
			Data Entry
			
			Portament
			Sound Controller
			Sound Controller
			
			RPN Inc,Dec
			NRPN LSB,MSB
			RPN LSB,MSB

Prog Change : True #	O 0 - 127 **************	O 0 - 127	
System Exclusive	O	O	
Common : Song Pos. : Song Sel. : Tune	✕ ✕ ✕	✕ ✕ ✕	
System : Clock Real Time : Commands	O O	✕ O	
: All Sound Off Aux : Reset All Cntrls : Local ON/OFF Mes- : All Notes OFF sages: Active Sense : Reset	✕ ✕ ✕ ✕ O ✕	O (120,126,127) O (121) O (122) O (123-125) O ✕	

Notes:

Mode 1 : OMNI ON , POLY   Mode 2 : OMNI ON ,MONO   O : Yes
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF,MONO   ✕ : No

MEMO

MEMO

YAMAHA