YAMAHA

Digital Workstation

PSR-S670

Data List
Daten-Liste
Liste des données
Lista de datos
データリスト

Contents

EN
DE
FR
ES
JA

Manual Development Department

Published 09/2015 PO-B0

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Piano&E.Piano	ConcertGrand	0	115	1	Live!
	BrightPiano	0	112	2	Live!
	MIDIGrand	0	112	3	Regular
	HonkyTonk	0	112	4	Regular
	OctavePiano1	0	113	4	Regular
	GrandPiano	0	113	1	Live!
	WarmGrand	0	114	1	Live!
	BalladLayer	0	115	3	Regular
	CP80	0	113	3	Regular
	OctavePiano2	0	114	4	Regular
	SuitcaseEP	0	118	5	Cool!
	JazzChorus	0	118	6	Regular
	ElectricPiano	0	119	5	Cool!
	PhaseEP	0	120	5	Regular
	FunkEP	0	112	5	Regular
	TremoloEP	0	113	5	Cool!
	StageEP	0	117	5	Regular
	VintageEP	0	116	5	Regular
	Clavi	0	112	8	Regular
	WahClavi	0	113	8	Regular
	SuperDX	0	117	6	Regular
	ModernEP	0	115	6	Regular
	VenusEP	0	114	6	Regular
	DX Modern	0	112	6	Regular
	Harpsichord	0	112	7	Regular
	NewTines	0	116	6	Regular
	HyperTines	0	113	6	Regular
	PolarisEP	0	115	5	Regular
	GalaxyEP	0	114	5	Cool!
	GrandHarpsi	0	113	7	Regular
Organ	ScannerJazz	0	118	19	Cool!
	ClassicJazz	0	117	17	Cool!
	KeyClickJazz	0	120	17	Regular
	CurvedBars	0	121	17	Cool!
	ElectricOrgan	0	118	18	Regular
	ChoraleJazz	0	112	17	Regular
	RotaryJazz	0	113	17	Regular
	ClickOrgan	0	112	18	Regular
	EvenBars	0	111	17	Cool!
	RotorOrgan	0	117	19	Cool!
	FullRocker	0	115	19	Cool!
	BrightBars	104	37	17	Regular
	DrivenBars	104	38	17	Regular
	GospelOrgan	0	119	17	Regular
	PurpleOrgan	0	114	19	Regular
	RockChorale	0	112	19	Regular
	RockTremolo	0	113	19	Regular
	FullBars	104	40	17	Regular
	60sOrgan	0	116	18	Regular
	RotaryDrive	0	116	19	Regular
	ChapelOrgan	0	113	20	Regular
	HymnOrgan	0	114	20	Regular
	ChurchOrgan	0	115	20	Regular
	PipeOrgan	0	112	20	Regular
	HarmoniumDouble	0	114	21	Regular
	HomeTheater	104	39	17	Regular
	OpenTibias	0	114	17	Regular
	TibiaChorus	0	114	18	Regular
	ReedOrgan	0	112	21	Regular
	HarmoniumTriple	0	115	21	Regular
	EuroOrgan	0	118	17	Regular
	GameShow	0	115	17	Regular
	BalladOrgan	0	115	18	Regular
	BrightWheels	0	116	17	Regular
	DanceOrgan	0	113	18	Regular
	ClickOrganBass	104	27	18	Regular
Guitar&Bass	DynoClassicGuitar	0	113	25	Regular
	SlideClassicGuitar	0	114	25	Regular
	SteelGuitar	0	117	26	Live!
	SlideSteelGuitar	0	118	26	Live!
	JazzGuitar	0	115	27	Cool!
	SixtiesSolid	104	14	28	Cool!
	CleanSolidDelay	104	18	28	Cool!
	CreamyLeadGuitar	104	16	28	Cool!
	HalfWahLead	104	17	28	Cool!
	DistortionWah	104	15	28	Cool!

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Guitar&Bass	DynamicNylon	0	116	25	Regular
	DynamicSteel	0	116	26	Live!
	WarmSolid	104	9	28	Cool!
	SlideSolid	104	12	28	Cool!
	SolidJazz	104	11	28	Regular
	Cavaquinho	0	121	25	Regular
	ViolaCaipira	0	120	25	Regular
	Bandolim	104	14	26	Regular
	TremoloBandolim	0	127	26	Regular
	BandolimTouchTrem	0	126	26	Regular
	12StringGuitar	0	113	26	Live!
	Slide12String	0	125	26	Live!
	RockGuitar	0	116	30	Regular
	MutedGuitar	104	10	28	Cool!
	SmoothJazz	104	13	28	Regular
	DynoDistortion	0	118	31	Regular
	DynoFeedback	0	119	31	Regular
	VintageLead	0	125	28	Cool!
	PowerLead	0	115	31	Cool!
	BluesGuitar	0	117	30	Cool!
	CleanGuitar	0	112	28	Cool!
	SlideClean	0	117	29	Cool!
	ElectricGuitar	0	114	29	Cool!
	VintageStrum	0	126	28	Regular
	PowerChord	0	117	31	Regular
	60sClean	0	117	28	Regular
	SmoothLead	0	119	27	Regular
	PedalSteel	0	115	28	Regular
	AlohaGuitar	0	118	27	Regular
	Mandolin	0	114	26	Sweet!
	VintageAmp	0	115	30	Regular
	CrunchGuitar	0	113	31	Regular
	CampfireGuitar	0	115	26	Regular
	SolidGuitar	0	118	28	Regular
	VintageOpen	0	123	28	Regular
	VintageMutedGt	0	115	29	Regular
	LeadGuitar	0	114	30	Regular
	ChorusGuitar	0	124	28	Regular
	VintageTrem	0	120	28	Regular
	OctaveGuitar	0	113	27	Regular
	DeepChorus	0	114	28	Regular
	BrightClean	0	116	28	Regular
	TremoloGuitar	0	113	28	Regular
	HeavyStack	0	114	31	Regular
	MutedGuitar	0	112	29	Regular
	Electric12String	0	119	28	Regular
	18StringGuitar	0	119	26	Regular
	FeedbackGuitar	0	113	30	Regular
	DistortionGuitar	0	112	31	Regular
	FunkGuitar	0	113	29	Regular
	WahGuitar	0	122	28	Regular
	VodooLead	0	116	31	Regular
	ClassicalGuitar	0	115	25	Regular
	FolkGuitar	0	112	26	Regular
	OverdriveGuitar	0	112	30	Regular
	SteelGuitar	8	0	2	MegaVoice
	12StringGuitar	8	1	3	MegaVoice
	HiStringGuitar	8	0	3	MegaVoice
	NylonGuitar	8	0	1	MegaVoice
	SolidGuitar	8	2	4	MegaVoice
	DistortionGuitar	8	0	6	MegaVoice
	Cavaquinho	8	1	90	MegaVoice
	Bandolim	8	1	91	MegaVoice
	ElectricBass	0	114	34	Cool!
	DynoPickBass	0	113	35	Cool!
	FretlessBass	0	112	36	Cool!
	PickBass	0	112	35	Regular
	MutedPickBass	0	115	35	Regular
	AcousticBass	0	112	33	Regular
	MellowAcoBass	0	116	33	Regular
	RockBass	0	114	35	Regular
	DynoSlapBass	0	114	37	Regular
	SlapBass	0	112	37	Regular
	Bass&Cymbal	0	114	33	Regular
	HardBass	0	114	39	Regular
	ResoBass	0	112	39	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Guitar&Bass	SuperFretless	0	113	36	Regular
	FusionBass	0	113	37	Regular
	SubBass	0	114	40	Regular
	MultiSawBass	104	20	88	Regular
	FilterEnvBass	0	121	40	Regular
	DX100Bass	0	118	40	Regular
	FatLoBass	0	119	39	Regular
	RampBass	0	119	40	Regular
	DarkCoreBass	0	120	40	Regular
	BleepBass	0	122	40	Regular
	AnalogBass	0	112	40	Regular
	DrySynthBass	0	116	40	Regular
	80sSynthBass	0	115	40	Regular
	HiQBass	0	113	39	Regular
	FunkBass	0	112	38	Regular
	ClickBass	0	115	39	Regular
	MellowFingerBass	0	112	34	Regular
	LFOSynBass	0	110	102	Regular
	AcousticBass	8	0	17	MegaVoice
	ElectricBass	8	0	18	MegaVoice
	PickBass	8	0	19	MegaVoice
Accordion& Harmonica	Accordion	0	116	22	Regular
	SmallAccordion	0	115	22	Regular
	TuttiAccordion	0	113	22	Regular
	Steirisch	0	117	22	Regular
	Musette	0	112	22	Regular
	Harmonica	0	112	23	Sweet!
	ModernHarp	0	113	23	Regular
	BluesHarp	0	114	23	Regular
	Bandoneon	0	113	24	Regular
	SoftAccordion	0	114	22	Regular
	BallroomAcc	0	112	24	Regular
Strings&Choir	Strings	0	117	50	Live!
	StudioStrings	104	0	49	Regular
	Allegro	0	122	50	Live!
	SlowStrings	0	113	50	Regular
	OctaveStrings	104	1	49	Regular
	Marcato	0	115	50	Regular
	ConcertoStrings	0	115	49	Regular
	OrchStrings	0	113	49	Regular
	TremoloStrings	0	112	45	Regular
	Pizzicato	0	112	46	Regular
	Violin	0	113	41	Sweet!
	Viola	0	112	42	Regular
	Cello	0	112	43	Regular
	Contrabass	0	112	44	Regular
	Harp	0	112	47	Regular
	Strings&Flutes	0	126	50	Regular
	OctStrings&Flutes	0	119	50	Regular
	OrchestralPad	0	118	50	Regular
	Horns&Strings	0	127	50	Regular
	Tutti	0	120	50	Regular
	SoloViolin	0	112	41	Regular
	FastStrings	0	112	49	Regular
	BowStrings	0	116	49	Regular
	AnalogStrings	0	112	52	Regular
	SynthStrings	0	112	51	Regular
	HahChoir	0	114	53	Regular
	Choir	0	112	53	Regular
	GothicVox	0	113	54	Regular
	AirChoir	0	112	55	Regular
	VoxHumana	0	112	54	Regular
	Fiddle	0	112	111	Regular
	Banjo	0	112	106	Regular
	Hackbrett	0	113	47	Regular
	Sitar	0	112	105	Regular
	BrightSitar	0	113	105	Regular
	Koto	0	112	108	Regular
	Shamisen	0	112	107	Regular
	Oud	0	113	106	Regular
	Kanoun	0	113	108	Regular
	Watariyat	0	125	49	Regular
	ErHu	0	113	111	Regular
	PiPa	0	119	106	Regular
	Orchestra	0	116	50	Live!
	Symphonic	0	114	49	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Strings&Choir	GospelVoices	0	116	53	Regular
	StringQuartet	0	114	50	Regular
	ChamberStrings	0	112	50	Regular
	OrchestraHit	0	112	56	Regular
Brass	PopBrass	0	117	63	Live!
	OctaveBrass	0	116	63	Live!
	BrightBrass	0	120	62	Regular
	MellowBrass	0	116	62	Regular
	SoftBrass	0	123	62	Regular
	FullHorns	0	114	62	Regular
	MellowHorns	0	119	62	Regular
	PopBrass	0	118	62	Regular
	BigBrass	0	121	62	Regular
	BrassSection	0	112	62	Regular
	HyperBrass	0	118	63	Live!
	80sBrass	0	113	63	Regular
	HighBrass	0	115	62	Regular
	OberBrass	0	113	64	Regular
	AnalogBrass	0	112	64	Regular
	SoftAnalog	0	114	64	Regular
	FunkyAnalog	0	115	63	Regular
	TechnoBrass	0	114	63	Regular
	SynthBrass	0	112	63	Regular
	BrassHit	0	113	56	Regular
	FrenchHorns	0	112	61	Live!
	Sforzando	0	125	62	Regular
	SmoothTrombone	0	118	58	Regular
	TrumpetEns	0	122	62	Regular
	TromboneSection	0	113	58	Regular
	BrassCombo	0	115	67	Regular
	BallroomBrass	0	113	60	Regular
	BigBandBrass	0	113	62	Regular
	SmallBrass	0	117	62	Regular
	Tuba	0	112	59	Regular
	Trumpet	0	115	57	Sweet!
	MutedTrumpet	0	114	60	Sweet!
	JazzTrumpet	0	116	57	Regular
	FlugelHorn	0	118	57	Sweet!
	Trombone	0	117	58	Sweet!
	SoftTrombone	0	115	58	Regular
	SoloTrombone	0	112	58	Regular
	BaritoneHorn	0	113	59	Regular
	BaritoneHit	0	114	59	Regular
	AlpBass	0	113	34	Regular
	SoloTrumpet	0	112	57	Regular
	MutedTrumpet	0	112	60	Regular
	Trombone	0	116	58	Regular
	FlugelHorn	0	113	57	Regular
	MellowTrombone	0	114	58	Regular
Woodwind	TenorSax	104	0	67	Sweet!
	AltoSax	0	114	66	Sweet!
	SopranoSax	0	113	65	Sweet!
	JazzTenor	0	125	67	Sweet!
	PopTenor	0	127	67	Sweet!
	GrowlSax	0	118	67	Regular
	SaxSection	0	116	67	Live!
	SaxSectionHard	0	122	67	Live!
	SaxSectionSoft	0	121	67	Live!
	BaritoneSax	0	112	68	Regular
	BalladTenor	0	126	67	Sweet!
	AltoSax	0	112	66	Regular
	SoftSoprano	0	112	65	Regular
	BreathyTenor	0	117	67	Sweet!
	HardTenor	0	112	67	Regular
	ClassicalFlute	0	115	74	Sweet!
	ClassicalClarinet	0	112	72	Regular
	ClassicalOboe	0	113	69	Sweet!
	EnglishHorn	0	112	70	Regular
	Bassoon	0	112	71	Regular
	JazzFlute	0	114	74	Sweet!
	BreathyFlute	0	112	74	Regular
	OrchestralOboe	0	112	69	Regular
	JazzClarinet	0	114	72	Sweet!
	Piccolo	0	112	73	Regular
	BalladPanFlute	0	113	76	Sweet!
	ChiffPanFlute	0	113	74	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Woodwind	Whistle	0	112	79	Regular
	Recorder	0	112	75	Regular
	WoodwindsEns	0	113	67	Regular
	Ocarina	0	112	80	Regular
	Bagpipe	0	112	110	Regular
	EthnicFlute	0	112	76	Regular
	Shakuhachi	0	112	78	Regular
	Nay	0	114	78	Regular
	DiZi	0	118	74	Regular
	Sheng	0	116	110	Regular
Synth	Gemini	104	20	91	Regular
	HandsUp!	104	21	91	Regular
	PunchyChordz	104	24	91	Regular
	DeepSubMW	104	18	88	Regular
	RS DualSquare	0	127	81	Regular
	RS SawLead1	0	104	82	Regular
	RS SawLead2	0	106	82	Regular
	RS DualSaw	0	109	82	Regular
	RS TechSaw	0	108	82	Regular
	RS RampLead	0	107	82	Regular
	RS DistortionLead	0	114	84	Regular
	RS QuackLead	0	119	85	Regular
	BriteDecay	104	5	85	Regular
	RS Sync1	0	105	82	Regular
	RS Sync2	0	119	88	Regular
	RS ShortResonance	0	116	91	Regular
	DancyHook	104	9	82	Regular
	ClubLead	104	21	82	Regular
	ResoLead	104	22	82	Regular
	DanceLead	104	23	82	Regular
	VCF Dance	0	114	87	Regular
	DanceHook	0	112	87	Regular
	TranceSeq	104	4	88	Regular
	Oxygen	0	122	82	Regular
	Matrix	0	123	82	Regular
	WireLead	0	120	82	Regular
	HipLead	0	113	81	Regular
	HopLead	0	117	81	Regular
	FireWire	0	116	82	Regular
	Analogon	0	115	82	Regular
	Blaster	0	114	82	Regular
	Skyline	0	115	85	Regular
	SquareLead	0	112	81	Regular
	SawLead	0	112	82	Regular
	TinyLead	0	118	81	Regular
	FunkyLead	0	121	82	Regular
	Paraglide	0	114	85	Regular
	Portatone	0	112	85	Regular
	BigLead	0	113	82	Regular
	Warp	0	117	82	Regular
	Fargo	0	119	82	Regular
	Adrenaline	0	113	85	Regular
	Stardust	0	112	99	Regular
	AeroLead	0	112	84	Regular
	MiniLead	0	114	81	Regular
	Impact	0	113	88	Regular
	SunBell	0	113	99	Regular
	UnderHeim	0	112	88	Regular
	HiBias	0	116	81	Regular
	VinylLead	0	115	81	Regular
	RS WarmPad	0	113	92	Regular
	RS NoisePad	0	124	90	Regular
	RS TeknoMan	0	125	90	Regular
	RS AnalogPad	0	126	90	Regular
	RS SynthPad	0	123	90	Regular
	VP Soft	104	0	90	Regular
	DarkFatSaw	104	2	90	Regular
	LightPad	104	2	52	Regular
	VanillaPad	104	24	95	Regular
	VanillaWarmth	104	25	95	Regular
	ButterStrings	104	2	51	Regular
	SweetHeaven	0	118	89	Regular
	DreamHeaven	0	121	89	Regular
	Insomnia	0	113	95	Regular
	NeoWarmPad	0	115	90	Regular
	CyberPad	0	113	100	Regular

Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Synth	Wave2001	0	112	96	Regular
	Atmosphere	0	112	100	Regular
	XenonPad	0	112	92	Regular
	Equinox	0	112	95	Regular
	Fantasia	0	112	89	Regular
	DX Pad	0	112	93	Regular
	Symbiont	0	113	89	Regular
	Stargate	0	114	89	Regular
	Area51	0	112	90	Regular
	DarkMoon	0	113	90	Regular
	Ionosphere	0	115	95	Regular
	GoldenAge	0	115	89	Regular
	Solaris	0	114	95	Regular
	Millennium	0	117	89	Regular
	Dunes	0	114	90	Regular
	LFO Sync1	0	108	102	Regular
	LFO Sync2	0	107	102	Regular
	LFO Sync3	0	109	102	Regular
	LFO Sync4	0	106	102	Regular
	LFO Sync5	0	105	102	Regular
	LFO Pad	0	104	102	Regular
	Noise	0	120	123	Regular
Perc.&Drums	Vibraphone	0	112	12	Regular
	JazzVibes	0	113	12	Regular
	Glockenspiel	0	112	10	Regular
	Xylophone	0	112	14	Regular
	Marimba	0	112	13	Regular
	Celesta	0	112	9	Regular
	TubularBells	0	112	15	Regular
	SteelDrums	0	112	115	Regular
	MusicBox	0	112	11	Regular
	Timpani	0	112	48	Regular
	FastRotaryVibes	0	115	12	Regular
	StraightVibes	0	116	12	Regular
	Kalimba	0	112	109	Regular
	Dulcimer	0	112	16	Regular
	PowerKit1	127	0	88	Drums
	PowerKit2	127	0	89	Drums
	StandardKit1	127	0	1	Drums
	StandardKit2	127	0	2	Drums
	HitKit	127	0	5	Drums
	JazzKit	127	0	33	Drums
	BrushKit	127	0	41	Drums
	RoomKit	127	0	9	Drums
	RockKit	127	0	17	Drums
	ElectroKit	127	0	25	Drums
	HouseKit	127	0	61	Drums
	AnalogT8Kit	127	0	59	Drums
	AnalogT9Kit	127	0	60	Drums
	BreakKit	127	0	58	Drums
	HipHopKit	127	0	57	Drums
	AnalogKit	127	0	26	Drums
	DanceKit	127	0	28	Drums
	SymphonyKit	127	0	49	Drums
	BrasilKit1	126	0	98	SFX Kit
	BrasilKit2	126	0	99	SFX Kit
	Berimbau&Surdo	126	0	42	SFX Kit
	CubanKit	126	0	41	SFX Kit
	PopLatinKit	126	0	44	SFX Kit
	ArabicKit1	126	0	37	SFX Kit
	ArabicKit2	126	0	36	SFX Kit
	ArabicMixtureKit	126	0	65	SFX Kit
	IndianKit	126	0	115	SFX Kit
	ChineseKit	126	0	125	SFX Kit
	ChineseMixtureKit	127	0	128	SFX Kit
	BassDrumKit	126	0	21	SFX Kit
	ReverseBsDrumKit	126	0	22	SFX Kit
	SFX Kit1	126	0	1	SFX Kit
	SFX Kit2	126	0	2	SFX Kit
	AnimalKit	126	0	112	SFX Kit

Category: GM&XG

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Piano	GrandPiano	0	0	1	Regular
	GrndPianoKSP	0	1	1	Regular
	MellowGrPno	0	18	1	Regular
	PianoStrings	0	40	1	Regular
	Dream	0	41	1	Regular
	BrightPiano	0	0	2	Regular
	BritePnoKSP	0	1	2	Regular
	ElecGrandPno	0	0	3	Regular
	ElecGrPnoKSP	0	1	3	Regular
	DetunedCP80	0	32	3	Regular
	LayeredCP1	0	40	3	Regular
	LayeredCP2	0	41	3	Regular
	Honkytonk	0	0	4	Regular
	HonkytonkKSP	0	1	4	Regular
	El.Piano1	0	0	5	Regular
	El.Piano1KSP	0	1	5	Regular
	MellowEP	0	18	5	Regular
	ChorusEP1	0	32	5	Regular
	HardEl.Piano	0	40	5	Regular
	VXfadeEl.P1	0	45	5	Regular
	60sEl.Piano	0	64	5	Regular
	El.Piano2	0	0	6	Regular
	El.Piano2KSP	0	1	6	Regular
	ChorusEP2	0	32	6	Regular
	DXEPHard	0	33	6	Regular
	DXLegendEP	0	34	6	Regular
	DXPhaseEP	0	40	6	Regular
	DX+AnalogEP	0	41	6	Regular
	DXKotoEP	0	42	6	Regular
	VXfadeEl.P2	0	45	6	Regular
	Harpsichord	0	0	7	Regular
	Harpsi.KSP	0	1	7	Regular
	Harpsichord2	0	25	7	Regular
	Harpsichord3	0	35	7	Regular
	Clavi.	0	0	8	Regular
	Clavi.KSP	0	1	8	Regular
	Clavi.Wah	0	27	8	Regular
	PulseClavi.	0	64	8	Regular
	PierceClavi.	0	65	8	Regular
ChromaticPerc	Celesta	0	0	9	Regular
	Glockenspiel	0	0	10	Regular
	MusicBox	0	0	11	Regular
	MusicBox2	0	64	11	Regular
	Vibraphone	0	0	12	Regular
	VibesKSP	0	1	12	Regular
	HardVibes	0	45	12	Regular
	Marimba	0	0	13	Regular
	MarimbaKSP	0	1	13	Regular
	SineMarimba	0	64	13	Regular
	Balimba	0	97	13	Regular
	LogDrums	0	98	13	Regular
	Xylophone	0	0	14	Regular
	TubularBells	0	0	15	Regular
	ChurchBells	0	96	15	Regular
	Carillon	0	97	15	Regular
	Dulcimer	0	0	16	Regular
	Dulcimer2	0	35	16	Regular
	Cimbalom	0	96	16	Regular
	Santur	0	97	16	Regular
Organ	DrawbarOrgan	0	0	17	Regular
	DetDrawOrgan	0	32	17	Regular
	60sDrawOrg1	0	33	17	Regular
	60sDrawOrg2	0	34	17	Regular
	70sDrawOrg1	0	35	17	Regular
	DrawbarOrg2	0	36	17	Regular
	60sDrawOrg3	0	37	17	Regular
	EvenBarOrgan	0	38	17	Regular
	16+2'2_3Organ	0	40	17	Regular
	OrganBass	0	64	17	Regular
	70sDrawOrg2	0	65	17	Regular
	CheezyOrgan	0	66	17	Regular
	DrawbarOrg3	0	67	17	Regular
	Perc.Organ	0	0	18	Regular
	70sPercOrg1	0	24	18	Regular
	DetPercOrgan	0	32	18	Regular
	LightOrgan	0	33	18	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Organ	Perc.Organ2	0	37	18	Regular
	RockOrgan	0	0	19	Regular
	RotaryOrgan	0	64	19	Regular
	SlowRotaryOrg	0	65	19	Regular
	FastRotaryOrg	0	66	19	Regular
	ChurchOrgan	0	0	20	Regular
	ChurchOrgan3	0	32	20	Regular
	ChurchOrgan2	0	35	20	Regular
	NotreDame	0	40	20	Regular
	OrganFlute	0	64	20	Regular
	Trem.OrganFl	0	65	20	Regular
	ReedOrgan	0	0	21	Regular
	PuffOrgan	0	40	21	Regular
	Accordion	0	0	22	Regular
	AccordIt	0	32	22	Regular
	Harmonica	0	0	23	Regular
	Harmonica2	0	32	23	Regular
	TangoAccord	0	0	24	Regular
	TangoAccord2	0	64	24	Regular
Guitar	NylonGuitar	0	0	25	Regular
	NylonGuitar2	0	16	25	Regular
	NylonGuitar3	0	25	25	Regular
	VelGtrHarmo	0	43	25	Regular
	Ukulele	0	96	25	Regular
	SteelGuitar	0	0	26	Regular
	SteelGuitar2	0	16	26	Regular
	12StrGuitar	0	35	26	Regular
	Nylon&Steel	0	40	26	Regular
	Steel&Body	0	41	26	Regular
	Mandolin	0	96	26	Regular
	JazzGuitar	0	0	27	Regular
	MellowGuitar	0	18	27	Regular
	JazzAmp	0	32	27	Regular
	CleanGuitar	0	0	28	Regular
	ChorusGuitar	0	32	28	Regular
	MutedGuitar	0	0	29	Regular
	FunkGuitar1	0	40	29	Regular
	MuteSteelGtr	0	41	29	Regular
	FunkGuitar2	0	43	29	Regular
	JazzMan	0	45	29	Regular
	Overdriven	0	0	30	Regular
	GuitarPinch	0	43	30	Regular
	Distortion	0	0	31	Regular
	FeedbackGtr	0	40	31	Regular
	FeedbackGtr2	0	41	31	Regular
	GtrHarmonics	0	0	32	Regular
	GtrFeedback	0	65	32	Regular
	GtrHarmonics2	0	66	32	Regular
Bass	AcousticBass	0	0	33	Regular
	JazzRhythm	0	40	33	Regular
	VXUprghtBass	0	45	33	Regular
	FingerBass	0	0	34	Regular
	FingerBassDark	0	18	34	Regular
	FlangeBass	0	27	34	Regular
	Bass&DistEG	0	40	34	Regular
	FingerSlap	0	43	34	Regular
	FingerBass2	0	45	34	Regular
	Mod.Bass	0	65	34	Regular
	PickBass	0	0	35	Regular
	MutePickBass	0	28	35	Regular
	FretlessBass	0	0	36	Regular
	Fretless2	0	32	36	Regular
	Fretless3	0	33	36	Regular
	Fretless4	0	34	36	Regular
	SynthFretless	0	96	36	Regular
	SmthFretless	0	97	36	Regular
	SlapBass1	0	0	37	Regular
	ResonantSlap	0	27	37	Regular
	PunchThumb	0	32	37	Regular
	SlapBass2	0	0	38	Regular
	Velo.Sw.Slap	0	43	38	Regular
	SynthBass1	0	0	39	Regular
	SynthBass1Dark	0	18	39	Regular
	FastResoBass	0	20	39	Regular
	AcidBass	0	24	39	Regular
	ClaviBass	0	35	39	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Bass	TechnoBass	0	40	39	Regular
	Orbiter	0	64	39	Regular
	SquareBass	0	65	39	Regular
	RubberBass	0	66	39	Regular
	Hammer	0	96	39	Regular
	SynthBass2	0	0	40	Regular
	MellowSyBass	0	6	40	Regular
	SequenceBass	0	12	40	Regular
	ClickSynthBass	0	18	40	Regular
	SynthBass2Dark	0	19	40	Regular
	SmoothSynBass	0	32	40	Regular
	ModulrSynBass	0	40	40	Regular
	DX Bass	0	41	40	Regular
	XWireBass	0	64	40	Regular
Strings	Violin	0	0	41	Regular
	SlwAtkViolin	0	8	41	Regular
	Viola	0	0	42	Regular
	Cello	0	0	43	Regular
	Contrabass	0	0	44	Regular
	TremoloStrings	0	0	45	Regular
	SlwAtkTremStr	0	8	45	Regular
	SuspenseStr	0	40	45	Regular
	PizzicatoStr	0	0	46	Regular
	Orch.Harp	0	0	47	Regular
	YangQin	0	40	47	Regular
	Timpani	0	0	48	Regular
Ensemble	Strings1	0	0	49	Regular
	StereoStrings	0	3	49	Regular
	SlwAtkStrings	0	8	49	Regular
	ArcoStrings	0	24	49	Regular
	60sStrings	0	35	49	Regular
	Orchestra	0	40	49	Regular
	Orchestra2	0	41	49	Regular
	TremOrchstra	0	42	49	Regular
	Velo.Strings	0	45	49	Regular
	Strings2	0	0	50	Regular
	S.SlowStrngs	0	3	50	Regular
	LegatoStrngs	0	8	50	Regular
	WarmStrings	0	40	50	Regular
	Kingdom	0	41	50	Regular
	70sStrings	0	64	50	Regular
	Strings3	0	65	50	Regular
	SynthStrings1	0	0	51	Regular
	ResoStrings	0	27	51	Regular
	SynthStrings4	0	64	51	Regular
	SynthStrings5	0	65	51	Regular
	SynthStrings2	0	0	52	Regular
	ChoirAahs	0	0	53	Regular
	StereoChoir	0	3	53	Regular
	ChoirAahs2	0	16	53	Regular
	MellowChoir	0	32	53	Regular
	ChoirStrings	0	40	53	Regular
	VoiceOohs	0	0	54	Regular
	SynthVoice	0	0	55	Regular
	SynthVoice2	0	40	55	Regular
	Choral	0	41	55	Regular
	AnalogVoice	0	64	55	Regular
	OrchestraHit	0	0	56	Regular
	OrchestraHit2	0	35	56	Regular
	Impact	0	64	56	Regular
Brass	Trumpet	0	0	57	Regular
	Trumpet2	0	16	57	Regular
	BriteTrumpet	0	17	57	Regular
	WarmTrumpet	0	32	57	Regular
	Trombone	0	0	58	Regular
	Trombone2	0	18	58	Regular
	Tuba	0	0	59	Regular
	Tuba2	0	16	59	Regular
	MutedTrumpet	0	0	60	Regular
	FrenchHorn	0	0	61	Regular
	FrenchHornSolo	0	6	61	Regular
	FrenchHorn2	0	32	61	Regular
	HornOrchestra	0	37	61	Regular
	BrassSection	0	0	62	Regular
	Tp&TbSection	0	35	62	Regular
	BrassSection2	0	40	62	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Brass	HighBrass	0	41	62	Regular
	MellowBrass	0	42	62	Regular
	SynthBrass1	0	0	63	Regular
	QuackBrass	0	12	63	Regular
	ResoSynBrass	0	20	63	Regular
	PolyBrass	0	24	63	Regular
	SynthBrass3	0	27	63	Regular
	JumpBrass	0	32	63	Regular
	AnaVelBrass1	0	45	63	Regular
	AnalogBrass1	0	64	63	Regular
	SynthBrass2	0	0	64	Regular
	SoftBrass	0	18	64	Regular
	SynthBrass4	0	40	64	Regular
	ChoirBrass	0	41	64	Regular
	AnaVelBrass2	0	45	64	Regular
	AnalogBrass2	0	64	64	Regular
Reed	SopranoSax	0	0	65	Regular
	AltoSax	0	0	66	Regular
	SaxSection	0	40	66	Regular
	HyperAltoSax	0	43	66	Regular
	TenorSax	0	0	67	Regular
	BreathyTenor	0	40	67	Regular
	SoftTenorSax	0	41	67	Regular
	TenorSax2	0	64	67	Regular
	BaritoneSax	0	0	68	Regular
	Oboe	0	0	69	Regular
	EnglishHorn	0	0	70	Regular
	Bassoon	0	0	71	Regular
	Clarinet	0	0	72	Regular
Pipe	Piccolo	0	0	73	Regular
	Flute	0	0	74	Regular
	Recorder	0	0	75	Regular
	PanFlute	0	0	76	Regular
	BlownBottle	0	0	77	Regular
	Shakuhachi	0	0	78	Regular
	Whistle	0	0	79	Regular
	Ocarina	0	0	80	Regular
Synth.Lead	SquareLead	0	0	81	Regular
	SquareLead2	0	6	81	Regular
	LMSquare	0	8	81	Regular
	Hollow	0	18	81	Regular
	Shroud	0	19	81	Regular
	Mellow	0	64	81	Regular
	SoloSine	0	65	81	Regular
	SineLead	0	66	81	Regular
	SawtoothLead	0	0	82	Regular
	SawtoothLead2	0	6	82	Regular
	ThickSaw	0	8	82	Regular
	DynamicSaw	0	18	82	Regular
	DigitalSaw	0	19	82	Regular
	BigLead	0	20	82	Regular
	HeavySynth	0	24	82	Regular
	WaspySynth	0	25	82	Regular
	PulseSaw	0	40	82	Regular
	Dr.Lead	0	41	82	Regular
	VelocityLead	0	45	82	Regular
	Seq.Analog	0	96	82	Regular
	CalliopeLead	0	0	83	Regular
	PureLead	0	65	83	Regular
	ChiffLead	0	0	84	Regular
	Rubby	0	64	84	Regular
	CharangLead	0	0	85	Regular
	DistortedLead	0	64	85	Regular
	WireLead	0	65	85	Regular
	VoiceLead	0	0	86	Regular
	SynthAahs	0	24	86	Regular
	VoxLead	0	64	86	Regular
	FifthsLead	0	0	87	Regular
	BigFive	0	35	87	Regular
	Bass&Lead	0	0	88	Regular
	Big&Low	0	16	88	Regular
	Fat&Perky	0	64	88	Regular
	SoftWhirl	0	65	88	Regular
Synth.Pad	NewAgePad	0	0	89	Regular
	Fantasy	0	64	89	Regular
	WarmPad	0	0	90	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Synth.Pad	ThickPad	0	16	90	Regular
	SoftPad	0	17	90	Regular
	SinePad	0	18	90	Regular
	HornPad	0	64	90	Regular
	RotaryStrngs	0	65	90	Regular
	PolySynthPad	0	0	91	Regular
	PolyPad80	0	64	91	Regular
	ClickPad	0	65	91	Regular
	AnalogPad	0	66	91	Regular
	SquarePad	0	67	91	Regular
	ChoirPad	0	0	92	Regular
	Heaven	0	64	92	Regular
	Itopia	0	66	92	Regular
	CC Pad	0	67	92	Regular
	BowedPad	0	0	93	Regular
	Glacier	0	64	93	Regular
	GlassPad	0	65	93	Regular
	MetallicPad	0	0	94	Regular
	TinePad	0	64	94	Regular
	PanPad	0	65	94	Regular
	HaloPad	0	0	95	Regular
	SweepPad	0	0	96	Regular
	Shwimmer	0	20	96	Regular
	Converge	0	27	96	Regular
	PolarPad	0	64	96	Regular
	Celestial	0	66	96	Regular
Synth.Effect	Rain	0	0	97	Regular
	ClaviPad	0	45	97	Regular
	HarmoRain	0	64	97	Regular
	AfricanWind	0	65	97	Regular
	Carib	0	66	97	Regular
	SoundTrack	0	0	98	Regular
	Prologue	0	27	98	Regular
	Ancestral	0	64	98	Regular
	Crystal	0	0	99	Regular
	SynthDr.Comp	0	12	99	Regular
	Popcorn	0	14	99	Regular
	TinyBells	0	18	99	Regular
	RoundGlocken	0	35	99	Regular
	GlockenChime	0	40	99	Regular
	ClearBells	0	41	99	Regular
	ChorusBells	0	42	99	Regular
	SynthMallet	0	64	99	Regular
	SoftCrystal	0	65	99	Regular
	LoudGlocken	0	66	99	Regular
	ChristmasBel	0	67	99	Regular
	VibeBells	0	68	99	Regular
	DigitalBells	0	69	99	Regular
	AirBells	0	70	99	Regular
	BellHarp	0	71	99	Regular
	Gamelimba	0	72	99	Regular
	Atmosphere	0	0	100	Regular
	WarmAtmos.	0	18	100	Regular
	HollwRelease	0	19	100	Regular
	NylonElPiano	0	40	100	Regular
	NylonHarp	0	64	100	Regular
	HarpVox	0	65	100	Regular
	Atmos.Pad	0	66	100	Regular
	Planet	0	67	100	Regular
	Brightness	0	0	101	Regular
	FantasyBells	0	64	101	Regular
	Smokey	0	96	101	Regular
	Goblins	0	0	102	Regular
	GoblinsSynth	0	64	102	Regular
	Creeper	0	65	102	Regular
	RingPad	0	66	102	Regular
	Ritual	0	67	102	Regular
	ToHeaven	0	68	102	Regular
	Night	0	70	102	Regular
	Glisten	0	71	102	Regular
	BellChoir	0	96	102	Regular
	Echoes	0	0	103	Regular
	Echoes2	0	8	103	Regular
	EchoPan	0	14	103	Regular
	EchoBells	0	64	103	Regular
	BigPan	0	65	103	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Synth.Effect	SynthPiano	0	66	103	Regular
	Creation	0	67	103	Regular
	Stardust	0	68	103	Regular
	Reso&Panning	0	69	103	Regular
	Sci-Fi	0	0	104	Regular
	Starz	0	64	104	Regular
Ethnic	Sitar	0	0	105	Regular
	DetunedSitar	0	32	105	Regular
	Sitar2	0	35	105	Regular
	Tambra	0	96	105	Regular
	Tamboura	0	97	105	Regular
	Banjo	0	0	106	Regular
	MutedBanjo	0	28	106	Regular
	Rabab	0	96	106	Regular
	Gopichant	0	97	106	Regular
	Oud	0	98	106	Regular
	Shamisen	0	0	107	Regular
	Koto	0	0	108	Regular
	Taisho-kin	0	96	108	Regular
	Kanoon	0	97	108	Regular
	Kalimba	0	0	109	Regular
	Bagpipe	0	0	110	Regular
	Fiddle	0	0	111	Regular
	Shanai	0	0	112	Regular
	Shanai2	0	64	112	Regular
	Pungi	0	96	112	Regular
	Hichiriki	0	97	112	Regular
Percussive	TinkleBell	0	0	113	Regular
	Bonang	0	96	113	Regular
	Altair	0	97	113	Regular
	GamelanGongs	0	98	113	Regular
	StereoGamlan	0	99	113	Regular
	RamaCymbal	0	100	113	Regular
	AsianBells	0	101	113	Regular
	Agogo	0	0	114	Regular
	SteelDrums	0	0	115	Regular
	GlassPerc.	0	97	115	Regular
	ThaiBells	0	98	115	Regular
	Woodblock	0	0	116	Regular
	Castanets	0	96	116	Regular
	TaikoDrum	0	0	117	Regular
	GranCassa	0	96	117	Regular
	MelodicTom	0	0	118	Regular
	MelodicTom2	0	64	118	Regular
	RealTom	0	65	118	Regular
	RockTom	0	66	118	Regular
	SynthDrum	0	0	119	Regular
	AnalogTom	0	64	119	Regular
	ElectroPerc.	0	65	119	Regular
	ReverseCymbal	0	0	120	Regular
SoundEffect	GtrFretNoise	0	0	121	Regular
	BreathNoise	0	0	122	Regular
	Seashore	0	0	123	Regular
	BirdTweet	0	0	124	Regular
	TelephonRing	0	0	125	Regular
	Helicopter	0	0	126	Regular
	Applause	0	0	127	Regular
	Gunshot	0	0	128	Regular
	CuttingNoise	64	0	1	Regular
	CuttingNoise2	64	0	2	Regular
	StringSlap	64	0	4	Regular
	FluteKeyClick	64	0	17	Regular
	Shower	64	0	33	Regular
	Thunder	64	0	34	Regular
	Wind	64	0	35	Regular
	Stream	64	0	36	Regular
	Bubble	64	0	37	Regular
	Feed	64	0	38	Regular
	Dog	64	0	49	Regular
	Horse	64	0	50	Regular
	BirdTweet2	64	0	51	Regular
	Ghost	64	0	55	Regular
	Maou	64	0	56	Regular
	PhoneCall	64	0	65	Regular
	DoorSqueak	64	0	66	Regular
	DoorSlam	64	0	67	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
SoundEffect	ScratchCut	64	0	68	Regular
	ScratchSplit	64	0	69	Regular
	WindChime	64	0	70	Regular
	TelphonRing2	64	0	71	Regular
	CarEngineIgn	64	0	81	Regular
	CarTiresSqel	64	0	82	Regular
	CarPassing	64	0	83	Regular
	CarCrash	64	0	84	Regular
	Siren	64	0	85	Regular
	Train	64	0	86	Regular
	JetPlane	64	0	87	Regular
	Starship	64	0	88	Regular
	Burst	64	0	89	Regular
	RollrCoaster	64	0	90	Regular
	Submarine	64	0	91	Regular
	Laugh	64	0	97	Regular
	Scream	64	0	98	Regular
	Punch	64	0	99	Regular
	Heartbeat	64	0	100	Regular
	FootSteps	64	0	101	Regular
	MachineGun	64	0	113	Regular
	LaserGun	64	0	114	Regular
	Explosion	64	0	115	Regular
	Firework	64	0	116	Regular

Category: GM2

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Piano	GrandPiano	121	0	1	Regular
	GrandPianoW	121	1	1	Regular
	GrandPianoD	121	2	1	Regular
	BrightPiano	121	0	2	Regular
	BrightPianoW	121	1	2	Regular
	ElecGrandPno	121	0	3	Regular
	ElecGrandPW	121	1	3	Regular
	Honkytonk	121	0	4	Regular
	HonkytonkW	121	1	4	Regular
	El.Piano1	121	0	5	Regular
	DetunedEP1	121	1	5	Regular
	EP1VeloMix	121	2	5	Regular
	60sEl.Piano	121	3	5	Regular
	El.Piano2	121	0	6	Regular
	DetunedEP2	121	1	6	Regular
	EP2VeloMix	121	2	6	Regular
	EPLegend	121	3	6	Regular
	EPPhase	121	4	6	Regular
	Harpsichord	121	0	7	Regular
	Harpsi.OctMx	121	1	7	Regular
	HarpsichordW	121	2	7	Regular
	Harpsi.KOff	121	3	7	Regular
	Clavi.	121	0	8	Regular
	PulseClavi.	121	1	8	Regular
ChromaticPerc	Celesta	121	0	9	Regular
	Glockenspiel	121	0	10	Regular
	MusicBox	121	0	11	Regular
	Vibraphone	121	0	12	Regular
	VibraphoneW	121	1	12	Regular
	Marimba	121	0	13	Regular
	MarimbaW	121	1	13	Regular
	Xylophone	121	0	14	Regular
	TubularBells	121	0	15	Regular
	ChurchBells	121	1	15	Regular
	Carillon	121	2	15	Regular
	Dulcimer	121	0	16	Regular
Organ	DrawbarOrgan	121	0	17	Regular
	DetDrawOrgan	121	1	17	Regular
	It60sOrgan	121	2	17	Regular
	DrawbarOrg2	121	3	17	Regular
	Perc.Organ	121	0	18	Regular
	DetPercOrgan	121	1	18	Regular
	Perc.Organ2	121	2	18	Regular
	RockOrgan	121	0	19	Regular
	ChurchOrgan	121	0	20	Regular
	ChrchOrgOctM	121	1	20	Regular
	DetChurchOrg	121	2	20	Regular
	ReedOrgan	121	0	21	Regular
	PuffOrgan	121	1	21	Regular
	Accordion	121	0	22	Regular
	Accordion2	121	1	22	Regular
	Harmonica	121	0	23	Regular
	TangoAccord	121	0	24	Regular
Guitar	NylonGuitar	121	0	25	Regular
	Ukulele	121	1	25	Regular
	NylonGtrKOff	121	2	25	Regular
	NylonGuitar2	121	3	25	Regular
	SteelGuitar	121	0	26	Regular
	12StrGuitar	121	1	26	Regular
	Mandolin	121	2	26	Regular
	Steel&Body	121	3	26	Regular
	JazzGuitar	121	0	27	Regular
	PedlSteelGtr	121	1	27	Regular
	CleanGuitar	121	0	28	Regular
	DetCleanGtr	121	1	28	Regular
	MidToneGtr	121	2	28	Regular
	MutedGuitar	121	0	29	Regular
	FunkGuitar	121	1	29	Regular
	MutedV-SwGtr	121	2	29	Regular
	JazzMan	121	3	29	Regular
	Overdriven	121	0	30	Regular
	GuitarPinch	121	1	30	Regular
	Distortion	121	0	31	Regular
	FeedbackGtr	121	1	31	Regular
	DstRhythmGtr	121	2	31	Regular
	GtrHarmonics	121	0	32	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Guitar	GtrFeedback	121	1	32	Regular
Bass	AcousticBass	121	0	33	Regular
	FingerBass	121	0	34	Regular
	FingerSlap	121	1	34	Regular
	PickBass	121	0	35	Regular
	FretlessBass	121	0	36	Regular
	SlapBass1	121	0	37	Regular
	SlapBass2	121	0	38	Regular
	SynthBass1	121	0	39	Regular
	WarmSyBass	121	1	39	Regular
	ResoSynhBass	121	2	39	Regular
	ClaviBass	121	3	39	Regular
	Hammer	121	4	39	Regular
	SynthBass2	121	0	40	Regular
	AttackBass	121	1	40	Regular
	RubberBass	121	2	40	Regular
	AttackPulse	121	3	40	Regular
Strings	Violin	121	0	41	Regular
	SlwAtkViolin	121	1	41	Regular
	Viola	121	0	42	Regular
	Cello	121	0	43	Regular
	Contrabass	121	0	44	Regular
	Trem.Strings	121	0	45	Regular
	PizzicatoStr	121	0	46	Regular
	Orch.Harp	121	0	47	Regular
	YangChin	121	1	47	Regular
	Timpani	121	0	48	Regular
Ensemble	Strings1	121	0	49	Regular
	StringsBrass	121	1	49	Regular
	60sStrings	121	2	49	Regular
	Strings2	121	0	50	Regular
	SynStrings1	121	0	51	Regular
	SynStrings3	121	1	51	Regular
	SynStrings2	121	0	52	Regular
	ChoirAahs	121	0	53	Regular
	ChoirAahs2	121	1	53	Regular
	VoiceOohs	121	0	54	Regular
	Humming	121	1	54	Regular
	SynthVoice	121	0	55	Regular
	AnalogVoice	121	1	55	Regular
	OrchestraHit	121	0	56	Regular
	BassHitPlus	121	1	56	Regular
	6thHit	121	2	56	Regular
	EuroHit	121	3	56	Regular
Brass	Trumpet	121	0	57	Regular
	DarkTpSoft	121	1	57	Regular
	Trombone	121	0	58	Regular
	Trombone2	121	1	58	Regular
	BriteTrombon	121	2	58	Regular
	Tuba	121	0	59	Regular
	MutedTrumpet	121	0	60	Regular
	MuteTrumpet2	121	1	60	Regular
	FrenchHorn	121	0	61	Regular
	FrenchHorn2	121	1	61	Regular
	BrassSection	121	0	62	Regular
	BrassSect2	121	1	62	Regular
	SynthBrass1	121	0	63	Regular
	SynthBrass3	121	1	63	Regular
	AnaSynBrass1	121	2	63	Regular
	JumpBrass	121	3	63	Regular
	SynthBrass2	121	0	64	Regular
	SynthBrass4	121	1	64	Regular
	AnaSynBrass2	121	2	64	Regular
Reed	SopranoSax	121	0	65	Regular
	AltoSax	121	0	66	Regular
	TenorSax	121	0	67	Regular
	BaritoneSax	121	0	68	Regular
	Oboe	121	0	69	Regular
	EnglishHorn	121	0	70	Regular
	Bassoon	121	0	71	Regular
	Clarinet	121	0	72	Regular
Pipe	Piccolo	121	0	73	Regular
	Flute	121	0	74	Regular
	Recorder	121	0	75	Regular
	PanFlute	121	0	76	Regular
	BlownBottle	121	0	77	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
Pipe	Shakuhachi	121	0	78	Regular
	Whistle	121	0	79	Regular
	Ocarina	121	0	80	Regular
Synth.Lead	SquareLead	121	0	81	Regular
	SquareLead2	121	1	81	Regular
	SineLead	121	2	81	Regular
	SawtoothLead	121	0	82	Regular
	SawtoothLd2	121	1	82	Regular
	SawPulseLead	121	2	82	Regular
	DoublSawLead	121	3	82	Regular
	Seq.Analog	121	4	82	Regular
	CalliopeLead	121	0	83	Regular
	ChiffLead	121	0	84	Regular
	CharangLead	121	0	85	Regular
	WireLead	121	1	85	Regular
	VoiceLead	121	0	86	Regular
	FifthsLead	121	0	87	Regular
	Bass&Lead	121	0	88	Regular
	SoftWhirl	121	1	88	Regular
Synth.Pad	NewAgePad	121	0	89	Regular
	WarmPad	121	0	90	Regular
	SinePad	121	1	90	Regular
	PolySynthPad	121	0	91	Regular
	ChoirPad	121	0	92	Regular
	ItopiaPad	121	1	92	Regular
	BowedPad	121	0	93	Regular
	MetallicPad	121	0	94	Regular
	HaloPad	121	0	95	Regular
	SweepPad	121	0	96	Regular
Synth.Effect	Rain	121	0	97	Regular
	SoundTrack	121	0	98	Regular
	Crystal	121	0	99	Regular
	SynthMallet	121	1	99	Regular
	Atmosphere	121	0	100	Regular
	Brightness	121	0	101	Regular
	Goblins	121	0	102	Regular
	Echoes	121	0	103	Regular
	EchoBell	121	1	103	Regular
	EchoPan	121	2	103	Regular
	Sci-Fi	121	0	104	Regular
Ethnic	Sitar	121	0	105	Regular
	Sitar2	121	1	105	Regular
	Banjo	121	0	106	Regular
	Shamisen	121	0	107	Regular
	Koto	121	0	108	Regular
	TaishoKoto	121	1	108	Regular
	Kalimba	121	0	109	Regular
	Bagpipe	121	0	110	Regular
	Fiddle	121	0	111	Regular
	Shanai	121	0	112	Regular
Percussive	TinkleBell	121	0	113	Regular
	Agogo	121	0	114	Regular
	SteelDrums	121	0	115	Regular
	Woodblock	121	0	116	Regular
	Castanets	121	1	116	Regular
	TaikoDrum	121	0	117	Regular
	ConcertBD	121	1	117	Regular
	MelodicTom	121	0	118	Regular
	MelodicTom2	121	1	118	Regular
	SynthDrum	121	0	119	Regular
	RhythmBoxTom	121	1	119	Regular
	ElectricDrum	121	2	119	Regular
	Rev.Cymbal	121	0	120	Regular
SoundEffect	GtrFretNoise	121	0	121	Regular
	GtrCutNoise	121	1	121	Regular
	StringSlap	121	2	121	Regular
	BreathNoise	121	0	122	Regular
	Fl.KeyClick	121	1	122	Regular
	Seashore	121	0	123	Regular
	Rain	121	1	123	Regular
	Thunder	121	2	123	Regular
	Wind	121	3	123	Regular
	Stream	121	4	123	Regular
	Bubble	121	5	123	Regular
	BirdTweet	121	0	124	Regular
	Dog	121	1	124	Regular

Sub Category	Voice Name	Voice Number			Voice Type
		MSB#	LSB#	Prg#	
SoundEffect	HorseGallop	121	2	124	Regular
	BirdTweet2	121	3	124	Regular
	TelephonRing	121	0	125	Regular
	TelRing2	121	1	125	Regular
	DoorCreaking	121	2	125	Regular
	Door	121	3	125	Regular
	Scratch	121	4	125	Regular
	WindChime	121	5	125	Regular
	Helicopter	121	0	126	Regular
	CarEngine	121	1	126	Regular
	CarStop	121	2	126	Regular
	CarPass	121	3	126	Regular
	CarCrash	121	4	126	Regular
	Siren	121	5	126	Regular
	Train	121	6	126	Regular
	Jetplane	121	7	126	Regular
	Starship	121	8	126	Regular
	BurstNoise	121	9	126	Regular
	Applause	121	0	127	Regular
	Laughing	121	1	127	Regular
	Screaming	121	2	127	Regular
	Punch	121	3	127	Regular
	HeartBeat	121	4	127	Regular
	Footsteps	121	5	127	Regular
	Gunshot	121	0	128	Regular
	MachineGun	121	1	128	Regular
	Lasergun	121	2	128	Regular
	Explosion	121	3	128	Regular
Drum	StandardSet	120	0	1	Drums
	RoomSet	120	0	9	Drums
	PowerSet	120	0	17	Drums
	ElectroSet	120	0	25	Drums
	AnalogSet	120	0	26	Drums
	JazzSet	120	0	33	Drums
	BrushSet	120	0	41	Drums
	OrchestraSet	120	0	49	Drums
	SFXSet	120	0	57	SFX Kit

MSB – LSB – PC#(1)	Voice Name	Velocity Switch Points								above C6	above C8
008 – 000 – 002	Mega SteelGuitar	1 – 20	21 – 40	41 – 60	61 – 75	76 – 90	91 – 105	106 – 120	121 – 127	strum noise	fret noise
		open soft	open med	open hard	dead	mute	hammer	slide	harmonics		
008 – 001 – 003	Mega 12StringGuitar	1 – 71			72 – 115				116 – 127	strum noise	fret noise
	Element1 (Steel)	soft			medium				hard		
	Element2 (HiString)	1 – 89						90 – 127			
		soft						hard			
008 – 000 – 003	Mega HiStringGuitar	1 – 89						90 – 127		strum noise	fret noise
		soft						hard			
008 – 000 – 001	Mega NylonGuitar	1 – 20	21 – 40	41 – 60	61 – 75	76 – 90	91 – 105	106 – 120	121 – 127	strum noise	fret noise
		open soft	open med	open hard	dead	mute	hammer	slide	harmonics		
008 – 002 – 004	Mega SolidGuitar	1 – 20	21 – 40	41 – 60	61 – 75	76 – 90	91 – 105	106 – 120	121 – 127	strum noise	fret noise
		open soft	open med	open hard	dead	mute	hammer	slide	pick harmonics		
008 – 000 – 006	Mega DistortionGuitar	1 – 55			56 – 120				121 – 127	EFX	
		open			mute				pick harmonics		
008 – 001 – 090	Mega Cavaquinho	1 – 75				76 – 100		101 – 127		above C6	above E7
		soft				medium		hard		strum noise	EFX
008 – 001 – 091	Mega Bandolim	1 – 59			60 – 95			96 – 127		above C6	above E7
		soft			medium			hard		strum noise	EFX
008 – 000 – 017	Mega AcousticBass	1 – 60			61 – 80	81 – 120			121 – 127	EFX	
		open soft			open hard	dead			harmonics		
008 – 000 – 018	Mega ElectricBass	1 – 60			61 – 80	81 – 120			121 – 127	EFX	
		open soft			open hard	dead			slap		
008 – 000 – 019	Mega PickBass	1 – 40		41 – 80		81 – 120			121 – 127	EFX	
		open		mute		dead			harmonics		

Kit Name			PowerKit1			PowerKit2			StandardKit1			StandardKit2		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-88			127-0-89			127-0-1			127-0-2		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0							Surdo Mute		3			
14	D-1	D0							Surdo Open		3			
15	D#-1	D#0							Hi Q					
16	E-1	E0							Whip Slap					
17	F-1	F0							Scratch H		4			
18	F#-1	F#0							Scratch L		4			
19	G-1	G0							Finger Snap					
20	G#-1	G#0							Click Noise					
21	A-1	A0							Metronome Click					
22	A#-1	A#0							Metronome Bell					
23	B-1	B0							Seq Click L					
24	C0	C1							Seq Click H					
25	C#0	C#1							Brush Tap					
26	D0	D1							Brush Swirl	●				
27	D#0	D#1							Brush Slap					
28	E0	E1							Brush Tap Swirl	●				
29	F0	F1							Snare Roll	●				
30	F#0	F#1							Castanet					
31	G0	G1	Snare Soft Power 1			Snare Soft Power 2			Snare Soft			Snare Soft 2		
32	G#0	G#1							Sticks					
33	A0	A1	Kick Ambient+			Kick Ambient+			Kick Soft					
34	A#0	A#1	Open Rim Power 1			Open Rim Power 2			Open Rim Shot			Open Rim Shot H Short		
35	B0	B1	Kick Power Open			Kick Power Open			Kick Tight					
36	C1	C2	Kick Power Mute			Kick Power Mute			Kick			Kick Short		
37	C#1	C#2	Side Stick Power			Side Stick Power			Side Stick			Side Stick Light		
38	D1	D2	Snare Power 1			Snare Power 2			Snare			Snare Short		
39	D#1	D#2	Hand Clap Power			Hand Clap Power			Hand Clap					
40	E1	E2	Snare Rough			Snare Loose			Snare Tight			Snare Tight H		
41	F1	F2	Tom Power 1			Tom Power 1			Floor Tom L					
42	F#1	F#2	Hi-Hat Closed Power		1	Hi-Hat Closed Power+Edge		1	Hi-Hat Closed		1			
43	G1	G2	Tom Power 2			Tom Power 2			Floor Tom H					
44	G#1	G#2	Hi-Hat Pedal Power		1	Hi-Hat Pedal Power		1	Hi-Hat Pedal		1			
45	A1	A2	Tom Power 3			Tom Power 3			Low Tom					
46	A#1	A#2	Hi-Hat Open Power		1	Hi-Hat Open Power		1	Hi-Hat Open		1			
47	B1	B2	Tom Power 4			Tom Power 4			Mid Tom L					
48	C2	C3	Tom Power 5			Tom Power 5			Mid Tom H					
49	C#2	C#3	Crash Cymbal Acoustic 1			Crash Cymbal Acoustic 1			Crash Cymbal 1					
50	D2	D3	Tom Power 6			Tom Power 6			High Tom					
51	D#2	D#3	Ride Cymbal Acoustic 1			Ride Cymbal Acoustic 1			Ride Cymbal 1					
52	E2	E3	China Cymbal Acoustic			China Cymbal Acoustic			Chinese Cymbal					
53	F2	F3	Ride Cymbal Cup Acoustic			Ride Cymbal Cup Acoustic			Ride Cymbal Cup					
54	F#2	F#3							Tambourine					
55	G2	G3	Splash Cymbal Acoustic			Splash Cymbal Acoustic			Splash Cymbal					
56	G#2	G#3							Cowbell					
57	A2	A3	Crash Cymbal Acoustic 2			Crash Cymbal Acoustic 2			Crash Cymbal 2					
58	A#2	A#3							Vibraslap					
59	B2	B3	Ride Cymbal Acoustic 2			Ride Cymbal Acoustic 2			Ride Cymbal 2					
60	C3	C4							Bongo H					
61	C#3	C#4							Bongo L					
62	D3	D4							Conga H Mute					
63	D#3	D#4							Conga H Open					
64	E3	E4							Conga L					
65	F3	F4							Timbale H					
66	F#3	F#4							Timbale L					
67	G3	G4							Agogo H					
68	G#3	G#4							Agogo L					
69	A3	A4							Cabasa					
70	A#3	A#4							Maracas					
71	B3	B4							Samba Whistle H	●				
72	C4	C5							Samba Whistle L	●				
73	C#4	C#5							Guiro Short					
74	D4	D5							Guiro Long	●				
75	D#4	D#5							Claves					
76	E4	E5							Wood Block H					
77	F4	F5							Wood Block L					
78	F#4	F#5							Cuica Mute					
79	G4	G5							Cuica Open					
80	G#4	G#5							Triangle Mute		2			
81	A4	A5							Triangle Open		2			
82	A#4	A#5							Shaker					
83	B4	B5							Jingle Bells					
84	C5	C6							Bell Tree					
85	C#5	C#6												
86	D5	D6												
87	D#5	D#6												
88	E5	E6												
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			HitKit			JazzKit			BrushKit			RoomKit		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-5			127-0-33			127-0-41			127-0-9		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0												
14	D-1	D0												
15	D#-1	D#0												
16	E-1	E0												
17	F-1	F0												
18	F#-1	F#0												
19	G-1	G0												
20	G#-1	G#0												
21	A-1	A0												
22	A#-1	A#0												
23	B-1	B0												
24	C0	C1												
25	C#0	C#1												
26	D0	D1												
27	D#0	D#1												
28	E0	E1												
29	F0	F1												
30	F#0	F#1												
31	G0	G1	Snare Electro			Snare Jazz H			Brush Slap 2					
32	G#0	G#1												
33	A0	A1	Kick Tight L											
34	A#0	A#1	Snare Pitched											
35	B0	B1	Kick Wet											
36	C1	C2	Kick Tight H			Kick Jazz			Kick Jazz					
37	C#1	C#2	Stick Ambient			Side Stick Light			Side Stick Light					
38	D1	D2	Snare Ambient			Snare Jazz L			Brush Slap 3			Snare Snappy		
39	D#1	D#2												
40	E1	E2	Snare Tight 2			Snare Jazz M			Brush Tap 2			Snare Tight Snappy		
41	F1	F2	Hybrid Tom 1						Tom Brush 1			Tom Room 1		
42	F#1	F#2	Hi-Hat Closed 2		1									
43	G1	G2	Hybrid Tom 2						Tom Brush 2			Tom Room 2		
44	G#1	G#2	Hi-Hat Pedal 2		1									
45	A1	A2	Hybrid Tom 3						Tom Brush 3			Tom Room 3		
46	A#1	A#2	Hi-Hat Open 2		1									
47	B1	B2	Hybrid Tom 4						Tom Brush 4			Tom Room 4		
48	C2	C3	Hybrid Tom 5						Tom Brush 5			Tom Room 5		
49	C#2	C#3												
50	D2	D3	Hybrid Tom 6						Tom Brush 6			Tom Room 6		
51	D#2	D#3												
52	E2	E3												
53	F2	F3												
54	F#2	F#3	Tambourine Light											
55	G2	G3												
56	G#2	G#3												
57	A2	A3												
58	A#2	A#3												
59	B2	B3												
60	C3	C4												
61	C#3	C#4												
62	D3	D4												
63	D#3	D#4												
64	E3	E4												
65	F3	F4												
66	F#3	F#4												
67	G3	G4												
68	G#3	G#4												
69	A3	A4												
70	A#3	A#4												
71	B3	B4												
72	C4	C5												
73	C#4	C#5												
74	D4	D5												
75	D#4	D#5												
76	E4	E5												
77	F4	F5												
78	F#4	F#5												
79	G4	G5												
80	G#4	G#5												
81	A4	A5												
82	A#4	A#5												
83	B4	B5												
84	C5	C6												
85	C#5	C#6												
86	D5	D6												
87	D#5	D#6												
88	E5	E6												
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			RockKit			ElectroKit			HouseKit			AnalogT8Kit		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-17			127-0-25			127-0-61			127-0-59		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0							W Kick	●				
14	D-1	D0							Disco Fx	●				
15	D#-1	D#0							White Noise Down 1	●				
16	E-1	E0							Pink Noise Down 1	●				
17	F-1	F0							White Noise Down 2	●	4			
18	F#-1	F#0							Pink Noise Down 2	●	4			
19	G-1	G0							White Noise Up 2	●		Snare Hammer		
20	G#-1	G#0							White Noise Up 1	●		Kick Zap Hard		
21	A-1	A0							Pink Noise Up	●		Snare Garg L		
22	A#-1	A#0							White Noise Up Release	●		Kick Tek Power		
23	B-1	B0							Pink Noise Up Release	●		Kick Slimy		
24	C0	C1							Kick T9 4			Kick T8 4		
25	C#0	C#1							Snare T8 Rim			Snare Analog CR		
26	D0	D1							Snare T8 5			Snare T8 7		
27	D#0	D#1							Hand Clap			Snare Clap Analog		
28	E0	E1				Reverse Cymbal	●		Snare Garg L			Snare T8 6		
29	F0	F1										Tom T8 5		
30	F#0	F#1				Hi Q 2			Snare T9 3			Snare T8 5		
31	G0	G1	Snare Noisy			Snare Snappy Electro			Snare T8 1			Kick T8 3		
32	G#0	G#1							Snare T9 5			Snare T8 4		
33	A0	A1				Kick 3			Kick T9 1			Kick T8 2		
34	A#0	A#1							Snare T9 Gate			Snare T8 3		
35	B0	B1	Kick 2			Kick Gate			Kick T9 2			T8 Kick Bass		
36	C1	C2	Kick Gate			Kick Gate Heavy			Kick T9 5			Kick T8 1		
37	C#1	C#2							Snare T9 Rim			Snare T8 Rim		
38	D1	D2	Snare Rock			Snare Noisy 2			Snare T9 1			Snare T8 2		
39	D#1	D#2							Clap T9			Clap T9		
40	E1	E2	Snare Rock Tight			Snare Noisy 3			Snare T9 2			Snare T8 1		
41	F1	F2	Tom Rock 1			Tom Electro 1			Tom T9 1			Tom T8 1		
42	F#1	F#2							Hi-Hat Closed T8		1	Hi-Hat Closed T8		1
43	G1	G2	Tom Rock 2			Tom Electro 2			Tom T9 2			Tom T8 2		
44	G#1	G#2							Hi-Hat Pedal T9		1	Hi-Hat Pedal T8		1
45	A1	A2	Tom Rock 3			Tom Electro 3			Tom T9 3			Tom T8 3		
46	A#1	A#2							Hi-Hat Open T9		1	Hi-Hat Open T8		1
47	B1	B2	Tom Rock 4			Tom Electro 4			Tom T9 4			Tom T8 4		
48	C2	C3	Tom Rock 5			Tom Electro 5			Tom T9 5			Tom T8 6		
49	C#2	C#3							Crash Cymbal T9			Crash Cymbal T8		
50	D2	D3	Tom Rock 6			Tom Electro 6			Tom T9 6			Tom T8 7		
51	D#2	D#3							Ride Cymbal T9			Ride Cymbal T9		
52	E2	E3							Crash Cymbal 4			China Cymbal 2		
53	F2	F3							Ride Cymbal Cup 2			Ride Cymbal Cup 2		
54	F#2	F#3							Tambourine Hit			Tambourine RX5		
55	G2	G3							Splash Cymbal 2					
56	G#2	G#3							Cowbell 1			Cowbell T8		
57	A2	A3										Crash Cymbal 4		
58	A#2	A#3							Cowbell T8					
59	B2	B3							Ride Cymbal 3			Ride Cymbal 3		
60	C3	C4							Bongo H Open One Finger			Conga T8 5		
61	C#3	C#4							Bongo L Open Three Finger			Conga T8 4		
62	D3	D4							Conga H Tip			Conga T8 3		
63	D#3	D#4							Conga H Slap Open			Conga T8 2		
64	E3	E4							Conga H Open 2			Conga T8 1		
65	F3	F4												
66	F#3	F#4												
67	G3	G4										Glass H		
68	G#3	G#4										Glass L		
69	A3	A4												
70	A#3	A#4							Maracas Slur 2			Maracas T8		
71	B3	B4							Vox Drum L			Fx Gun 2	●	
72	C4	C5							Vox Drum H			Fx Gun 1	●	
73	C#4	C#5										Analog Shaker H	●	
74	D4	D5										Analog Shaker L	●	
75	D#4	D#5										Claves T8		
76	E4	E5										Hi Q 1		
77	F4	F5										Hi Q 2		
78	F#4	F#5				Scratch H 2			Cuica H			Scratch H 2		
79	G4	G5				Scratch L 2			Cuica L			Scratch L 2		
80	G#4	G#5												
81	A4	A5												
82	A#4	A#5							Analog Shaker			Analog Shaker		
83	B4	B5										Sleigh Bells		
84	C5	C6												
85	C#5	C#6							Snare Break Roll			Snare Hip 1		
86	D5	D6							Noise Burst			Snare Hip 2		
87	D#5	D#6							Vox Bell			Snare Hip Gate		
88	E5	E6							Snare R&B 1			Snare Break 1		
89	F5	F6							Vox Alk			Kick Blip		
90	F#5	F#6							Udu High			Snare Fx 1		
91	G5	G6							Filter Kick			Kick Fx Hammer		

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			AnalogT9Kit			BreakKit			HipHopKit			AnalogKit		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-60			127-0-58			127-0-57			127-0-26		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0												
14	D-1	D0												
15	D#-1	D#0												
16	E-1	E0												
17	F-1	F0												
18	F#-1	F#0												
19	G-1	G0	Snare Drum&Bass 1						Hi-Hat Closed T8 2		4			
20	G#-1	G#0	Kick Break 2			Snare Break 8			Tom T8 3					
21	A-1	A0	Snare Distortion			Snare Break 9			Hi-Hat Open T8 2		4			
22	A#-1	A#0	Kick Tek Power			Hi-Hat Closed Break 1	●		Tom T8 6					
23	B-1	B0	Kick Distortion RM			Hi-Hat Closed Break 2	●		Crash T8					
24	C0	C1	Kick T9 2			Kick Break Deep			Triangle Mute		1			
25	C#0	C#1	Snare Analog CR			Snare Hip			Triangle Open		1			
26	D0	D1	Snare T9 5			Snare Lo-Fi			Wind Chime					
27	D#0	D#1	Clap Analog Sm			Snare Clappy			Tambourine Light 2					
28	E0	E1	Snare T9 Gate 1			Snare LdwH Mono			Tambourine Light 1			Reverse Cymbal	●	
29	F0	F1	Snare Rock Roll	●		Snare Rock Roll	●		Kick HipHop 9					
30	F#0	F#1	Snare T9 3			Snare Gate 1			Hi-Hat Closed Tek		3	Hi Q 2		
31	G0	G1	Snare T9 4			Snare Mid			Kick Gate			Snare Noisy 4		
32	G#0	G#1	Snare T9 Gate 2			Snare Break Rim			Hi-Hat Open Lo-Fi		3			
33	A0	A1	Kick T9 4			Kick Break Heavy			Kick Gran Casa Open			Kick 3		
34	A#0	A#1	Snare T9 6			Snare Hip Rim 4			Hi-Hat Reverse Drum&Bass					
35	B0	B1	Kick T9 1			Kick Break 2			Kick HipHop 1			Kick Analog Short		
36	C1	C2	Kick T9 3			Kick Break 1			Kick Analog CR			Kick Analog		
37	C#1	C#2	Snare T9 Rim			Snare Hip Rim 1			Snare Analog Sm Rim			Side Stick Analog		
38	D1	D2	Snare T9 1			Snare Break 3			Snare HipHop 1			Snare Analog		
39	D#1	D#2	Clap T9			Snare Break 1			Snare Clappy					
40	E1	E2	Snare T9 2			Snare Break 2			Snare HipHop 2			Snare Analog 2		
41	F1	F2	Tom T9 1			Tom Break 1						Tom Analog 1		
42	F#1	F#2	Hi-Hat Closed T9		1	Hi-Hat Closed Rock Soft		1	Hi-Hat Closed HipHop		2	Hi-Hat Closed Analog		1
43	G1	G2	Tom T9 2			Tom Break 2			Low Tom			Tom Analog 2		
44	G#1	G#2	Hi-Hat Pedal T9		1	Hi-Hat Pedal Rock		1	Hi-Hat Pedal HipHop		2	Hi-Hat Closed Analog 2		1
45	A1	A2	Tom T9 3			Tom Break 3			Mid Tom L			Tom Analog 3		
46	A#1	A#2	Hi-Hat Open T9		1	Hi-Hat Half Open Rock		1	Hi-Hat Open HipHop		2	Hi-Hat Open Analog		1
47	B1	B2	Tom T9 4			Tom Break 4			High Tom			Tom Analog 4		
48	C2	C3	Tom T9 5			Tom Break 5			Ride Cymbal 3			Tom Analog 5		
49	C#2	C#3	Crash Cymbal T9						Crash Cymbal 3			Crash Analog		
50	D2	D3	Tom T9 6			Tom Break 6			Shaker 2			Tom Analog 6		
51	D#2	D#3	Ride Cymbal T9			Ride Cymbal 3			Scratch Bass Drum Forward					
52	E2	E3	China Cymbal 2			China Cymbal 2			Scratch Bass Drum Reverse					
53	F2	F3	Ride Cymbal Cup 2			Ride Cymbal Cup 2			Kick HipHop 2					
54	F#2	F#3	Tambourine RX5			Tambourine 1 Hit			Snare HipHop Rim 2					
55	G2	G3	Splash Cymbal 2			Splash Cymbal 2			HipHop Clap 2					
56	G#2	G#3	Cowbell 1			Cowbell 1			HipHop Snap 1			Cowbell Analog		
57	A2	A3	Crash Cymbal 4						Snare HipHop 3					
58	A#2	A#3	Cowbell T8			Cowbell RX11			Electric Clap 2					
59	B2	B3	Ride Cymbal 3						Kick Hip Deep					
60	C3	C4	Conga T8 5						Kick HipHop 3					
61	C#3	C#4	Conga T8 4						Snare HipHop Rim 3					
62	D3	D4	Conga Tip			Conga H Tip			Snare HipHop 5			Conga Analog H		
63	D#3	D#4	Conga Open Slap			Conga H Open Slap			Electric Clap 1			Conga Analog M		
64	E3	E4	Conga Open			Conga H Open			Handbell H			Conga Analog L		
65	F3	F4				Bongo 2 H			Kick HipHop 4					
66	F#3	F#4				Bongo 2 L			HipHop Clap 3					
67	G3	G4	Analog Click			Conga Open			HipHop Snap 2					
68	G#3	G#4	Conga T8 1						Snare HipHop Rim 5					
69	A3	A4							HipHop Flex 1					
70	A#3	A#4	Maracas Slur 2			Maracas Slur			HipHop Flex 2			Maracas 2		
71	B3	B4	Fx Gun 2	●		Timbale H			Shaker 2					
72	C4	C5	Fx Gun 1	●		Timbale L			Kick HipHop 5					
73	C#4	C#5	Scratch H 3	●		Scratch H 3	●		Snare HipHop Rim 4					
74	D4	D5	Scratch Down	●		Scratch Down	●		Snare HipHop 6					
75	D#4	D#5	Hi Q 3						Snare HipHop 11			Claves 2		
76	E4	E5	Hi Q 1						Kick HipHop 10					
77	F4	F5	Hi Q 2						Snare HipHop 7					
78	F#4	F#5	Scratch H 2			Scratch H 2			HipHop Clap 5			Scratch H 2		
79	G4	G5	Scratch L 2			Scratch L 2			Conga H Tip			Scratch L 2		
80	G#4	G#5							Conga H Heel					
81	A4	A5							Conga H Open					
82	A#4	A#5	Analog Shaker			Kick Break 3			Conga L Open 1					
83	B4	B5				Kick Break 4			Conga L Open 2					
84	C5	C6				Kick Break 5	●		Kick HipHop 8					
85	C#5	C#6	Snare Piccolo			Kick Break 6			HipHop Clap 6					
86	D5	D6	Snare T8 7			Kick Break 7			Snare T8 1					
87	D#5	D#6	SnareRckRollDist			Hi-Hat Closed Break 3			Snare T8 1 H					
88	E5	E6	Snare Brush Mute			Snare Break 4			HipHop Clap 7					
89	F5	F6	Kick Blip Hard			Snare Break 5			Tom T8 1					
90	F#5	F#6	Snare Jungle 1			Snare Break 6			Hi-Hat Closed T8 2					
91	G5	G6	Kick Sustain			Snare Break 7			Tom T8 2					

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			DanceKit			SymphonyKit			BrasilKit1			BrasilKit2		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-28			127-0-49			126-0-98			126-0-99		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0	Kick Dance 1											
14	D-1	D0	Kick Dance 2											
15	D#-1	D#0												
16	E-1	E0												
17	F-1	F0	Scratch Dance 1	●										
18	F#-1	F#0	Scratch Dance 2	●										
19	G-1	G0												
20	G#-1	G#0												
21	A-1	A0	Dance Perc 1											
22	A#-1	A#0	Reverse Dance 1											
23	B-1	B0	Dance Perc 2											
24	C0	C1	Hi Q Dance 1						Repinique 1 Center			Repinique 1 Center		
25	C#0	C#1	Snare Analog 3						Repinique 1 Rim Shot			Repinique 1 Rim Shot		
26	D0	D1	Vinyl Noise	●					Repinique 1 Hard Slap			Repinique 1 Hard Slap		
27	D#0	D#1	Snare Analog 4						Repinique 1 Rim			Repinique 1 Rim		
28	E0	E1	Reverse Cymbal	●					Repinique 2 Center			Repinique 2 Center		
29	F0	F1	Reverse Dance 2	●					Repinique 2 Rim Shot			Repinique 2 Rim Shot		
30	F#0	F#1	Hi Q 2						Zabumba Mute RH		8	Zabumba Mute RH		8
31	G0	G1	Snare Techno						Zabumba Open RH		8	Zabumba Open RH		8
32	G#0	G#1	Snare Dance 1						Zabumba Stick LH			Zabumba Stick LH		
33	A0	A1	Kick Techno Q			Kick Soft 2			Surdo 2 Mute		2	Surdo 2 Mute		2
34	A#0	A#1	Rim Gate						Surdo 2 Open		2	Surdo 2 Open		2
35	B0	B1	Kick Techno L			Gran Cassa			Surdo 2 Stop		2	Surdo 2 Stop		2
36	C1	C2	Kick Techno			Gran Cassa Mute			Surdo 2 Side Stick			Surdo 2 Sdstck		
37	C#1	C#2	Side Stick Analog						Caixa Rim Shot			Caixa 2 Rim Shot		
38	D1	D2	Snare Clap			Band Snare			Caixa Center			Caixa 2 Center		
39	D#1	D#2	Dance Clap						Tamborim WV St Rim			Tamborim WV St Rim		
40	E1	E2	Snare Dry			Band Snare 2			Tamborim WV StCn Open			Tamborim WV StCn Open		
41	F1	F2	Tom Dance 1						Tamborim WV FnBack			Tamborim WV FnBack		
42	F#1	F#2	Hi-Hat Closed 3		1				Tamborim MS t1 Down			Tamborim MS t1 Down		
43	G1	G2	Tom Dance 2						Tamborim MS t1 up			Tamborim MS t1 up		
44	G#1	G#2	Hi-Hat Closed Analog 3		1				Surdo 1 Mute		3	Djambe Abafado		3
45	A1	A2	Tom Dance 3						Surdo 1 Open		3	Djambe Solto		3
46	A#1	A#2	Hi-Hat Open 3		1				Surdo 1 Stop		3	Djambe Keto		3
47	B1	B2	Tom Dance 4						Surdo 3 Mute		4	Djimbal Abafado		4
48	C2	C3	Tom Dance 5						Surdo 3 Open		4	Djimbal Solto		4
49	C#2	C#3	Crash Analog			Hand Cymbal			Surdo 3 Stop		4	Djimbal Keto		4
50	D2	D3	Tom Dance 6						Tan Tan 1 Close RH		5	Tan Tan 2 Open RH		5
51	D#2	D#3				Hand Cymbal Short			Tan Tan 1 Open RH		5	Tan Tan 2 Thm Open RH		5
52	E2	E3							Tan Tan 1 Slap RH		5	Tan Tan 2 Slap RH		5
53	F2	F3							Tan Tan 1 Body LH			Tan Tan 2 Body		
54	F#2	F#3	Tambourine Analog						Pandeiro L Thumb Close		9	Pandeiro Couro Thumb Close		9
55	G2	G3							Pandeiro L Thumb Open		9	Pandeiro Couro Thumb Open		9
56	G#2	G#3	Cowbell Dance						Pandeiro L Toe Rim		9	Pandeiro Couro ToLo Open		9
57	A2	A3				Hand Cymbal 2			Pandeiro L Heel		9	Pandeiro Couro Heel		9
58	A#2	A#3	Vibraslap Analog						Pandeiro L Slap		9	Pandeiro Couro Slap		9
59	B2	B3	Ride Analog			Hand Cymbal Short 2			Pandeiro L Roll	●	9	Pandeiro Couro Roll	●	9
60	C3	C4	Bongo Analog H						Reco-Reco			Reco 2		
61	C#3	C#4	Bongo Analog L						Chocalho			Chocalho		
62	D3	D4	Conga Analog H						Caxixi			Caxixi		
63	D#3	D#4	Conga Analog M						Timbale Hi Rim			Timbale Hi Rim		
64	E3	E4	Conga Analog L						Timbale Lo Rim			Timbale Lo Rim		
65	F3	F4							Timbale Hi			Timbale Hi		
66	F#3	F#4							Timbale Lo			Timbale Lo		
67	G3	G4							Agogo Bell 1		6	Shaker Tone		14
68	G#3	G#4							Agogo Bell 2		6	Shaker Alter		14
69	A3	A4							Agogo Click 1		6	Afoxe Open		
70	A#3	A#4	Maracas 2						Agogo Click 2		6	Cabasa 2 V Short		
71	B3	B4							Cabasa			Cabasa		
72	C4	C5							Ganza			Ganza 2 Loud		
73	C#4	C#5							Repique Anel Thumb Rim LH		7	Timba Abafado		7
74	D4	D5							Repique Anel Thumb Rim RH		7	Timba Solto		7
75	D#4	D#5	Claves 2						Repique Anel Muted		7	Timba Keto		7
76	E4	E5	Dance Perc 3						Repique Anel Open		7	Timba Armacao		7
77	F4	F5	Dance Perc 4	●					Cuica Hi Short			Cuica Hi Short		
78	F#4	F#5	Dance Breath 1						Cuica Mid Short			Cuica Mid Short		
79	G4	G5	Dance Breath 2	●					Cuica Lo Short			Cuica Lo Short		
80	G#4	G#5							Triangulo Close		1	Triangulo 2 Close		1
81	A4	A5							Triangulo Open		1	Triangulo 2 Open		1
82	A#4	A#5							Repique de Mao Slap			Repique de Mao Slap		
83	B4	B5							Repique de Mao Thm Rim			Repique de Mao Thm Rim		
84	C5	C6							Repique de Mao Open			Repique de Mao Open		
85	C#5	C#6							Apito Hi Short	●		Apito Hi Short	●	
86	D5	D6							Apito Lo Short	●		Apito Lo Short	●	
87	D#5	D#6												
88	E5	E6												
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			Berimbau&Surdo			CubanKit			PopLatinKit			ArabicKit1		
MSB(0-127)-LSB(0-127)-PC(1-128)			126-0-42			126-0-41			126-0-44			126-0-37		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0										Zarb Back mf		
14	D-1	D0										Zarb Tom f		
15	D#-1	D#0										Zarb Eshareh		
16	E-1	E0										Zarb Whipping		
17	F-1	F0										Tombak Tom f		
18	F#-1	F#0							Hand Clap			Neghareh Tom f		
19	G-1	G0										Tombak Back f		
20	G#-1	G#0										Neghareh Back f		
21	A-1	A0										Tombak Snap f		
22	A#-1	A#0				Conga H Tip			Conga H Tip			Neghareh Pelang f		
23	B-1	B0				Conga H Heel			Conga H Heel			Tombak Trill	●	
24	C0	C1	Surdo Abafado 1			Conga H Open			Conga H Open			Khaligi Clap 1		
25	C#0	C#1	Surdo Abafado 2			Conga H Mute			Conga H Mute			Arabic Zalgouta Open	●	
26	D0	D1	Surdo Abafado 3			Conga H Slap Open			Conga H Slap Open			Khaligi Clap 2		
27	D#0	D#1	Surdo Abafado 4			Conga H Slap			Conga H Slap			Arabic Zalgouta Close		
28	E0	E1	Surdo Abafado 5			Conga H Slap Mute			Conga H Slap Mute			Arabic Hand Clap		
29	F0	F1	Surdo Abafado 6			Conga L Tip			Conga L Tip			Tabel Tak 1		
30	F#0	F#1	Surdo Abafado 7			Conga L Heel			Conga L Heel			Sagat 1		
31	G0	G1	Surdo Solto 1			Conga L Open			Conga L Open			Tabel Dom		
32	G#0	G#1	Surdo Solto 2			Conga L Mute			Conga L Mute			Sagat 2		
33	A0	A1	Surdo Solto 3			Conga L Slap Open			Conga L Slap Open			Tabel Tak 2		
34	A#0	A#1	Surdo Solto 4			Conga L Slap			Conga L Slap			Sagat 3		
35	B0	B1	Surdo Solto 5			Conga L Slide	●		Conga L Slide	●		Riq Tik 3		
36	C1	C2	Surdo Solto 6			Bongo H Open One Finger			Bongo H Open One Finger			Riq Tik 2		
37	C#1	C#2	Surdo Ponta 1			Bongo H Open Three Finger			Bongo H Open Three Finger			Riq Tik Hard 1		
38	D1	D2	Surdo Ponta 2			Bongo H Rim			Bongo H Rim			Riq Tik 1		
39	D#1	D#2	Surdo Ponta 3			Bongo H Tip			Bongo H Tip			Riq Tik Hard 2		
40	E1	E2	Surdo Ponta 4			Bongo H Heel			Bongo H Heel			Riq Tik Hard 3		
41	F1	F2	Surdo Ponta 5			Bongo H Slap			Bongo H Slap			Riq Tish		
42	F#1	F#2	Surdo Ponta 6			Bongo L Open One Finger			Bongo L Open One Finger			Riq Snouj 2		
43	G1	G2	Surdo Aro 1			Bongo L Open Three Finger			Bongo L Open Three Finger			Riq Roll	●	
44	G#1	G#2	Surdo Aro 2			Bongo L Rim			Bongo L Rim			Riq Snouj 1		
45	A1	A2	Surdo Aro 3			Bongo L Tip			Bongo L Tip			Riq Sak		
46	A#1	A#2	Surdo Aro 4			Bongo L Heel			Bongo L Heel			Riq Snouj 3		
47	B1	B2	Surdo Aro 5			Bongo L Slap			Bongo L Slap			Riq Snouj 4		
48	C2	C3	Surdo Aro 6			Timbale L			Timbale L Open			Riq Tak 1		
49	C#2	C#3	Berimbau Solto 1-1									Riq Brass 1		
50	D2	D3	Berimbau Solto 1-2									Riq Tak 2		
51	D#2	D#3	Berimbau Solto 1-3									Riq Brass 2		
52	E2	E3	Berimbau Solto 1-4									Riq Dom		
53	F2	F3	Berimbau Solto 1-5			Paila L			Paila L			Katem Tak Doff		
54	F#2	F#3	Berimbau Solto 1-6			Timbale H			Timbale H Open			Katem Dom		
55	G2	G3	Berimbau Pedra 1-1									Katem Sak 1		
56	G#2	G#3	Berimbau Pedra 1-2									Katem Tak 1		
57	A2	A3	Berimbau Pedra 1-3									Katem Sak 2		
58	A#2	A#3	Berimbau Pedra 1-4									Katem Tak 2		
59	B2	B3	Berimbau Pedra 1-5			Paila H			Paila H			Daholla Sak 2		
60	C3	C4	Berimbau Pedra 1-6			Cowbell Top			Cowbell Top			Daholla Sak 1		
61	C#3	C#4	Berimbau Abafado 1-1									Daholla Tak 1		
62	D3	D4	Berimbau Abafado 1-2									Daholla Dom		
63	D#3	D#4	Berimbau Abafado 1-3									Daholla Tak 2		
64	E3	E4	Berimbau Abafado 1-4			Guiro Short			Guiro Short			Tablah Prok		
65	F3	F4	Berimbau Abafado 1-5			Guiro Long	●		Guiro Long	●		Tablah Dom 2		
66	F#3	F#4	Berimbau Abafado 1-6									Tablah Roll of Edge	●	
67	G3	G4	Berimbau Solto 2-1									Tablah Tak Finger 4		
68	G#3	G#4	Berimbau Solto 2-2			Tambourine			Tambourine			Tablah Tak Trill 1		
69	A3	A4	Berimbau Solto 2-3									Tablah Tak Finger 3		
70	A#3	A#4	Berimbau Solto 2-4									Tablah Tak Trill 2		
71	B3	B4	Berimbau Solto 2-5									Tablah Tak Finger 2		
72	C4	C5	Berimbau Solto 2-6			Maracas			Maracas			Tablah Tak Finger 1		
73	C#4	C#5	Berimbau Pedra 2-1			Shaker			Shaker			Tablah Tik 2		
74	D4	D5	Berimbau Pedra 2-2			Cabasa			Cabasa			Tablah Tik 4		
75	D#4	D#5	Berimbau Pedra 2-3						Cuica Mute			Tablah Tik 3		
76	E4	E5	Berimbau Pedra 2-4						Cuica Open			Tablah Tik 1		
77	F4	F5	Berimbau Pedra 2-5									Tablah Tak 3		
78	F#4	F#5	Berimbau Pedra 2-6									Tablah Tak 1		
79	G4	G5	Berimbau Abafado 2-1									Tablah Tak 4		
80	G#4	G#5	Berimbau Abafado 2-2									Tablah Tak 2		
81	A4	A5	Berimbau Abafado 2-3						Triangle Mute		1	Tablah Sak 2		
82	A#4	A#5	Berimbau Abafado 2-4						Triangle Open		1	Tablah Tremolo	●	
83	B4	B5	Berimbau Abafado 2-5									Tablah Sak 1		
84	C5	C6	Berimbau Abafado 2-6						Wind Chime			Tablah Dom 1		
85	C#5	C#6												
86	D5	D6												
87	D#5	D#6												
88	E5	E6												
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			ArabicKit2			ArabicMixtureKit			IndianKit			ChineseKit		
MSB(0-127)-LSB(0-127)-PC(1-128)			126-0-36			126-0-65			126-0-115			126-0-125		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0				Conga Analog H								
14	D-1	D0				Conga Analog M								
15	D#-1	D#0				Conga Analog L			Indian Hand Clap					
16	E-1	E0				Vibraslap			Dafli Open					
17	F-1	F0				Kick Techno L			Dafli Slap		1			
18	F#-1	F#0				Side Stick Arabic Mix			Dafli Rim		1			
19	G-1	G0				Snare Techno			Duff Open					
20	G#-1	G#0				Guiro Long	●		Duff Slap					
21	A-1	A0				Kick Techno Q			Duff Rim					
22	A#-1	A#0				Open Rim Shot			Hatheli Long		2			
23	B-1	B0				Funk Snare 2			Hatheli Short		2	Da Cha 2	●	
24	C0	C1	Nakarazan Dom			Kick Arabic Mix			Baya ge		3	Da Gu mp	●	2
25	C#0	C#1	Cabasa			Funk Snare 1			Baya ke		3	Da Gu Rim	●	
26	D0	D1	Nakarazan Edge			Snare Arabic Mix			Baya ghe		3	Da Gu f	●	2
27	D#0	D#1	Hager Dom			Hand Clap			Baya ka		3	Da Gu Hand	●	2
28	E0	E1	Hager Edge			Snare			Tabla na		4	Da Gu Roll	●	2
29	F0	F1	Bongo H			Tom Electro 1			Tabla tin		4	Pai Gu 4	●	
30	F#0	F#1	Bongo L			Hi-Hat Closed Arabic Mix		1	Tablabaya dha		3	Pai Gu 4 High	●	
31	G0	G1	Conga H Mute			Tom Electro 2			Dhol 1 Open			Pai Gu 3	●	
32	G#0	G#1	Conga H Open			Hi-Hat Half Arabic Mix		1	Dhol 1 Slap		5	Pai Gu 3 High	●	
33	A0	A1	Conga L			Tom Electro 3			Dhol 1 Mute		5	Pai Gu 2	●	
34	A#0	A#1	Zagrouda H			Hi-Hat Open Arabic Mix		1	Dhol 1 Open Slap		5	Pai Gu 2 High	●	
35	B0	B1	Zagrouda L	●		Tom Electro 4			Dhol 1 Roll			Pai Gu 1	●	
36	C1	C2	Kick Soft			Tom Electro 5			Dandia Short		6	Luo High 1	●	
37	C#1	C#2	Side Stick			Crash Cymbal 1			Dandia Long		6	Gong Batter	●	
38	D1	D2	Snare Soft			Tom Electro 6			Chutki			Jin Luo	●	
39	D#1	D#2	Arabic Hand Clap			Hi-Hat Open 3		1	Chipri			Luo High 2	●	
40	E1	E2	Snare Drum			Reverse Cymbal	●		Khanjira Open			Luo Mid-Low	●	5
41	F1	F2	Floor Tom L			Timbale L			Khanjira Slap			Luo	●	
42	F#1	F#2	Hi-Hat Closed		1	Conga H Open			Khanjira Mute			Jin Luo Low	●	5
43	G1	G2	Floor Tom H			Timbale H			Khanjira Bendup			Da Cha 1	●	5
44	G#1	G#2	Hi-Hat Pedal		1	Conga H Mute			Khanjira Benddown			Da Cha Effect	●	5
45	A1	A2	Low Tom			Tambourine			Dholak 1 Open			Zhong Cha	●	
46	A#1	A#2	Hi-Hat Open		1	Conga L			Dholak 1 Mute		7	Xiao Cha Effect	●	1
47	B1	B2	Mid Tom L			Cowbell			Dholak 1 Slap		7	Xiao Cha	●	1
48	C2	C3	Mid Tom H			Claves			Dhol 2 Open			Mang Luo Low	●	
49	C#2	C#3	Crash Cymbal 1			Bongo H			Dhol 2 Slap		8	Mang Luo Mid	●	
50	D2	D3	High Tom			Wood Block H			Dhol 2 Rim		8	Qing	●	
51	D#2	D#3	Ride Cymbal 1			Bongo L			Mridangam na		9	Finger Bell	●	
52	E2	E3	Crash Cymbal 2			Wood Block L			Mridangam din		9	Luo Big	●	
53	F2	F3	Duhulla Dom			Kurdish Dohol Low f			Mridangam ki		9	Mu Yu Low	●	
54	F#2	F#3	Tambourine			Cabasa			Mridangam ta		9	Mu Yu Mid-Low	●	
55	G2	G3	Duhulla Tak			Kurdish Dohol High f			Mridangam Chapu		9	Mu Yu Mid	●	
56	G#2	G#3	Cowbell			Shaker			Mridangam Lo Closed		10	Mu Yu High	●	
57	A2	A3	Duhulla Sak			Snap 1			Mridangam Lo Open		10	Nan Bang Zi Roll	●	3
58	A#2	A#3	Claves			Maracas			Chimta Normal		11	Nan Bang Zi	●	3
59	B2	B3	Doff Dom			Snap 2			Chimta Ring		11	Ban Gu	●	4
60	C3	C4	Katem Dom			Khaligi Twaisat 3		4	Dholki Hi Open		12	Ban	●	4
61	C#3	C#4	Katem Tak			Khaligi Twaisat 1		4	Dholki Hi Mute		12	Ban Gu Roll	●	4
62	D3	D4	Katem Sak			Khaligi Twaisat 2		4	Dholki Lo Open		13	Chinese Opera Voice 1	●	
63	D#3	D#4	Katem Tak			Khaligi Twaisat 5 Open		4	Dholki Hi Slap		12	Chinese Opera Voice 2	●	
64	E3	E4	Doff Tak			Khaligi Twaisat 4 Open		4	Dholki Lo Slide		13	Chinese Opera Voice 3	●	
65	F3	F4	Tabla Dom			Khaligi Tablah Small Dom		3	Khol Open		14	Yun Luo F4	●	
66	F#3	F#4	Tabla Tak 1			Khaligi Tar Barashim Group Dom			Khol Slide			Yun Luo F#4	●	
67	G3	G4	Tabla Tik			Khaligi Tablah Small Snap			Khol Mute		14	Yun Luo G4	●	
68	G#3	G#4	Tabla Tak 2			Khaligi Tar Barashim Group Sak			Manjira Open		15	Yun Luo G#4	●	
69	A3	A4	Tabla Sak			Khaligi Tablah Small Sak		3	Manjira Close		15	Yun Luo A4	●	
70	A#3	A#4	Tabla Roll Edge	●		Khaligi Tar Barashim Group Tak			Jhanji Open		16	Yun Luo A#4	●	
71	B3	B4	Tabla Flam			Khaligi Tablah Small Tik		3	Jhanji Close		16	Yun Luo B4	●	
72	C4	C5	Sagat 1			Khaligi Tablah Big Dom 1			Mondira Open		17	Yun Luo C5	●	
73	C#4	C#5	Tabel Dom			Khaligi Tar Segal Dom			Mondira Close		17	Yun Luo C#5	●	
74	D4	D5	Sagat 3			Khaligi Tablah Big Tak 1			Indian Bhangra Scat 1			Yun Luo D5	●	
75	D#4	D#5	Tabel Tak			Khaligi Tar Segal Tak			Indian Bhangra Scat 2			Yun Luo D#5	●	
76	E4	E5	Sagat 2			Khaligi Tablah Big Sak 1			Indian Bhangra Scat 3			Yun Luo E5	●	
77	F4	F5	Rik Dom			Tablah Dom 1			indian Bhangra Scat 4			Yun Luo F5	●	
78	F#4	F#5	Rik Tak 2			Tablah Tak 1			Khomokh Normal			Yun Luo F#5	●	
79	G4	G5	Rik Finger 1			Tablah Tremolo	●		Khomokh Mute			Yun Luo G5	●	
80	G#4	G#5	Rik Tak 1			Tablah Tak 2			Khomokh mltatk			Yun Luo G#5	●	
81	A4	A5	Rik Finger 2			Tablah Tik 1			Thavil Open			Yun Luo A5	●	
82	A#4	A#5	Rik Brass Tremolo	●		Tablah Sak 1			Thavil Slap			Yun Luo A#5	●	
83	B4	B5	Rik Sak			Tablah Tik 3			Thavil Mute			Yun Luo B5	●	
84	C5	C6	Rik Tik			Tablah Tik 2			Khartaal			Yun Luo C6	●	
85	C#5	C#6							Dholak 2 Open		18			
86	D5	D6							Dholak 2 Slide		18			
87	D#5	D#6							Dholak 2 Rim 1					
88	E5	E6							Dholak 2 Rim 2					
89	F5	F6							Dholak 2 Ring					
90	F#5	F#6							Dholak 2 Slap					
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			ChineseMixtureKit			BassDrumKit			ReverseBsDrumKit			SFX Kit1 (*3)		
MSB(0-127)-LSB(0-127)-PC(1-128)			127-0-128			126-0-21			126-0-22			126-0-1		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0				BD Electro			Reverse BD Electro					
14	D-1	D0				BD FX Gate			Reverse BD Fx Gate					
15	D#-1	D#0				BD Hammer			Reverse BD Hammer					
16	E-1	E0				BD Analog Power			Reverse BD Analog Power					
17	F-1	F0				BD Analog Distortion 5								
18	F#-1	F#0				BD Analog Distortion 6			Reverse BD Analog Distortion 6					
19	G-1	G0				BD Analog Distortion 4								
20	G#-1	G#0				BD Analog Distortion 3			Reverse BD Analog Distortion 3					
21	A-1	A0				BD Analog Distortion 2			Reverse BD Analog Distortion 2					
22	A#-1	A#0				BD Analog Tight			Reverse BD Analog Tight					
23	B-1	B0				BD Analog 94			Reverse BD Analog 94					
24	C0	C1				BD Analog Blip 2			Reverse BD Analog Blip 2					
25	C#0	C#1				BD Analog Rubber 2			Reverse BD Analog Rubber 2					
26	D0	D1				BD Analog 93			Reverse BD Analog 93					
27	D#0	D#1				BD Analog 90			Reverse BD Analog 90					
28	E0	E1				BD Analog 83			Reverse BD Analog 83					
29	F0	F1				BD Analog 82			Reverse BD Analog 82					
30	F#0	F#1				BD Analog 92								
31	G0	G1				BD Analog 91			Reverse BD Analog 91					
32	G#0	G#1				BD Analog Deep			Reverse BD Analog Deep					
33	A0	A1				BD Analog Hard 2								
34	A#0	A#1				BD Analog Hard 1			Reverse BD Analog Hard 1					
35	B0	B1				BD Analog Blip 1			Reverse BD Analog Blip 1					
36	C1	C2				BD Analog Rubber 1			Reverse BD Analog Rubber 1			Cutting Noise 1	●	
37	C#1	C#2				BD Analog Loose			Reverse BD Analog Loose			Cutting Noise 2	●	
38	D1	D2				BD Synth 1			Reverse BD Synth 1					
39	D#1	D#2				BD Synth 2			Reverse BD Synth 2			String Slap	●	
40	E1	E2				BD Analog Distortion 1			Reverse BD Analog Distortion 1					
41	F1	F2				Ripper			Reverse Ripper					
42	F#1	F#2				BD Analog 70 L								
43	G1	G2				BD Analog 70			Reverse BD Analog 70					
44	G#1	G#2				BD Analog 80			Reverse BD Analog 81					
45	A1	A2				BD Analog 80 Long								
46	A#1	A#2				BD Dry			Reverse BD Dry					
47	B1	B2				BD Dry Hard								
48	C2	C3				BD Room 1								
49	C#2	C#3				BD Soft			Reverse BD Soft					
50	D2	D3				BD Room 2			Reverse BD Room 2					
51	D#2	D#3				BD Break Lo-fi 2			Reverse BD Break Lo-fi 2					
52	E2	E3	China Cymbal			BD Break Lo-fi 1			Reverse BD Break Lo-fi 1			Flute Key Click	●	
53	F2	F3				BD & Hi-Hat Open			Reverse BD & Hi-Hat Open					
54	F#2	F#3				BD Jungle 2								
55	G2	G3				BD Jungle 1								
56	G#2	G#3				BD Jungle 3			Reverse BD Jungle 3					
57	A2	A3				BD D&B 1			Reverse BD D&B 1					
58	A#2	A#3				BD D&B 2			Reverse BD D&B 2					
59	B2	B3				BD RX5 1			Reverse BD RX5 1					
60	C3	C4				BD RX5 2			Reverse BD RX5 2					
61	C#3	C#4				BD Room 3			Reverse BD Room 3					
62	D3	D4				BD Power Gate			Reverse BD Power Gate					
63	D#3	D#4				BD R&B 1			Reverse BD R&B 1					
64	E3	E4				BD R&B 2			Reverse BD R&B 2					
65	F3	F4				BD Lo-fi			Reverse BD Lo-fi					
66	F#3	F#4				BD Hip Deep								
67	G3	G4	Dagu Mute		4	BD Break Deep			Reverse BD Break Deep					
68	G#3	G#4	Zhongcha Mute		5	BD Break Heavy			Reverse BD Break Heavy			Shower	●	
69	A3	A4	Dagu Heavy		4	BD Break Hard			Reverse BD Break Hard			Thunder	●	
70	A#3	A#4	Zhongcha Open		5	Big Drum			Reverse Big Drum			Wind	●	
71	B3	B4	Paigu Middle	●		Taiko Drum			Reverse Taiko Drum			Stream	●	
72	C4	C5	Paigu Low	●		Surdo Open			Reverse Surdo Open			Bubble	●	
73	C#4	C#5	Xiaocha Mute		6	Feet 2			Reverse Feet 2			Feed	●	
74	D4	D5	Bangu	●		BD Industrial			Reverse Tom Industrial					
75	D#4	D#5	Xiaocha Open		6	Door Slam			Reverse Door Slam					
76	E4	E5	Bangzi			Punch			Reverse Punch					
77	F4	F5	Muyu Low			Heart								
78	F#4	F#5	Zhongluo Mute		7	Feet 1			Reverse Feet 1					
79	G4	G5	Muyu Mid-Low			BD Human			Reverse BD Human					
80	G#4	G#5	Zhongluo Open		7	BD Human Deep			Reverse BD Human Deep					
81	A4	A5	Muyu Middle			Vox Buh!			Reverse Vox Buh!					
82	A#4	A#5	Xiaoluo Open			Vox Muh!			Reverse Vox Muh!					
83	B4	B5	Muyu Mid-High											
84	C5	C6	Muyu High									Dog	●	
85	C#5	C#6										Horse	●	
86	D5	D6										Bird Tweet	●	
87	D#5	D#6												
88	E5	E6												
89	F5	F6												
90	F#5	F#6										Ghost	●	
91	G5	G6										Maou	●	

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			SFX Kit2 (*3)			AnimalKit		
MSB(0-127)-LSB(0-127)-PC(1-128)			126-0-2			126-0-112		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note							
13	C#-1	C#0						
14	D-1	D0						
15	D#-1	D#0						
16	E-1	E0						
17	F-1	F0						
18	F#-1	F#0						
19	G-1	G0						
20	G#-1	G#0						
21	A-1	A0						
22	A#-1	A#0						
23	B-1	B0						
24	C0	C1						
25	C#0	C#1						
26	D0	D1						
27	D#0	D#1						
28	E0	E1						
29	F0	F1						
30	F#0	F#1						
31	G0	G1						
32	G#0	G#1						
33	A0	A1						
34	A#0	A#1						
35	B0	B1						
36	C1	C2	Phone Call	●				
37	C#1	C#2	Door Squeak	●				
38	D1	D2	Door Slam	●				
39	D#1	D#2	Scratch Cut	●				
40	E1	E2	Scratch Split	●				
41	F1	F2	Wind Chime	●				
42	F#1	F#2	Telephone Ring	●				
43	G1	G2						
44	G#1	G#2						
45	A1	A2						
46	A#1	A#2						
47	B1	B2						
48	C2	C3				Rooster	●	
49	C#2	C#3						
50	D2	D3				Elephant	●	
51	D#2	D#3						
52	E2	E3	Car Engine Ignition	●		Horse	●	
53	F2	F3	Car Tires Squeal	●		Cricket	●	
54	F#2	F#3	Car Passing	●				
55	G2	G3	Car Crash	●		Cow	●	
56	G#2	G#3	Siren	●				
57	A2	A3	Train	●		Tiger	●	
58	A#2	A#3	Jet Plane	●				
59	B2	B3	Starship	●		Rattlesnake	●	
60	C3	C4	Burst	●		Monkeies	●	
61	C#3	C#4	Roller Coaster	●				
62	D3	D4	Submarine	●		Crow	●	
63	D#3	D#4						
64	E3	E4						
65	F3	F4						
66	F#3	F#4						
67	G3	G4						
68	G#3	G#4	Laugh	●				
69	A3	A4	Scream	●				
70	A#3	A#4	Punch	●				
71	B3	B4	Heart Beat	●				
72	C4	C5	Foot Steps	●				
73	C#4	C#5						
74	D4	D5						
75	D#4	D#5						
76	E4	E5						
77	F4	F5						
78	F#4	F#5						
79	G4	G5						
80	G#4	G#5						
81	A4	A5						
82	A#4	A#5						
83	B4	B5						
84	C5	C6	Machine Gun	●				
85	C#5	C#6	Laser Gun	●				
86	D5	D6	Explosion	●				
87	D#5	D#6	Firework	●				
88	E5	E6						
89	F5	F6						
90	F#5	F#6						
91	G5	G6						

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*2 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 StandardKit1 No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			(GM2) StandardSet			(GM2) RoomSet			(GM2) PowerSet			(GM2) ElectroSet		
MSB(0-127)-LSB(0-127)-PC(1-128)			120-0-1			120-0-9			120-0-17			120-0-25		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0												
14	D-1	D0												
15	D#-1	D#0												
16	E-1	E0												
17	F-1	F0												
18	F#-1	F#0												
19	G-1	G0												
20	G#-1	G#0												
21	A-1	A0												
22	A#-1	A#0												
23	B-1	B0												
24	C0	C1												
25	C#0	C#1												
26	D0	D1												
27	D#0	D#1	High Q											
28	E0	E1	Slap											
29	F0	F1	Scratch Push		7									
30	F#0	F#1	Scratch Pull		7									
31	G0	G1	Sticks											
32	G#0	G#1	Square Click											
33	A0	A1	Metronome Click											
34	A#0	A#1	Metronome Bell											
35	B0	B1	Acoustic Bass Drum											
36	C1	C2	Bass Drum 1						Power Kick Drum			Electric Bass Drum		
37	C#1	C#2	Side Stick											
38	D1	D2	Acoustic Snare						Power Snare Drum			Electric Snare 1		
39	D#1	D#2	Hand Clap											
40	E1	E2	Electric Snare									Electric Snare 2		
41	F1	F2	Low Floor Tom			Room Low Tom 2			Power Low Tom 2			Electric Low Tom 2		
42	F#1	F#2	Closed Hi-hat		1									
43	G1	G2	High Floor Tom			Room Low Tom 1			Power Low Tom 1			Electric Low Tom 1		
44	G#1	G#2	Pedal Hi-hat		1									
45	A1	A2	Low Tom			Room Mid Tom 2			Power Mid Tom 2			Electric Mid Tom 2		
46	A#1	A#2	Open Hi-hat		1									
47	B1	B2	Low-Mid Tom			Room Mid Tom 1			Power Mid Tom 1			Electric Mid Tom 1		
48	C2	C3	High Mid Tom			Room Hi Tom 2			Power Hi Tom 2			Electric Hi Tom 2		
49	C#2	C#3	Crash Cymbal 1											
50	D2	D3	High Tom			Room Hi Tom 1			Power Hi Tom 1			Electric Hi Tom 1		
51	D#2	D#3	Ride Cymbal 1											
52	E2	E3	Chinese Cymbal									Reverse Cymbal		
53	F2	F3	Ride Bell											
54	F#2	F#3	Tambourine											
55	G2	G3	Splash Cymbal											
56	G#2	G#3	Cowbell											
57	A2	A3	Crash Cymbal 2											
58	A#2	A#3	Vibra-slap											
59	B2	B3	Ride Cymbal 2											
60	C3	C4	High Bongo											
61	C#3	C#4	Low Bongo											
62	D3	D4	Mute Hi Conga											
63	D#3	D#4	Open Hi Conga											
64	E3	E4	Low Conga											
65	F3	F4	High Timbale											
66	F#3	F#4	Low Timbale											
67	G3	G4	High Agogo											
68	G#3	G#4	Low Agogo											
69	A3	A4	Cabasa											
70	A#3	A#4	Maracas											
71	B3	B4	Short Whistle		2									
72	C4	C5	Long Whistle		2									
73	C#4	C#5	Short Guiro		3									
74	D4	D5	Long Guiro		3									
75	D#4	D#5	Claves											
76	E4	E5	Hi Wood Block											
77	F4	F5	Low Wood Block											
78	F#4	F#5	Mute Cuica		4									
79	G4	G5	Open Cuica		4									
80	G#4	G#5	Mute Triangle		5									
81	A4	A5	Open Triangle		5									
82	A#4	A#5	Shaker											
83	B4	B5	Jingle Bell											
84	C5	C6	Bell Tree											
85	C#5	C#6	Castanets											
86	D5	D6	Mute Surdo		6									
87	D#5	D#6	Open Surdo		6									
88	E5	E6												
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 (GM2) StandardSet No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			(GM2) AnalogSet			(GM2) JazzSet			(GM2) BrushSet			(GM2) OrchestraSet		
MSB(0-127)-LSB(0-127)-PC(1-128)			120-0-26			120-0-33			120-0-41			120-0-49		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note													
13	C#-1	C#0												
14	D-1	D0												
15	D#-1	D#0												
16	E-1	E0												
17	F-1	F0												
18	F#-1	F#0												
19	G-1	G0												
20	G#-1	G#0												
21	A-1	A0												
22	A#-1	A#0												
23	B-1	B0												
24	C0	C1												
25	C#0	C#1												
26	D0	D1												
27	D#0	D#1										Closed Hi-hat 2		1
28	E0	E1										Pedal Hi-hat		1
29	F0	F1										Open Hi-hat 2		1
30	F#0	F#1										Ride Cymbal 1		
31	G0	G1												
32	G#0	G#1												
33	A0	A1												
34	A#0	A#1												
35	B0	B1				Jazz Kick 2			Jazz Kick 2			Concert BD 2		
36	C1	C2	Analog Bass Drum			Jazz Kick 1			Jazz Kick 1			Concert BD 1		
37	C#1	C#2	Analog Rim Shot											
38	D1	D2	Analog Snare 1						Brush Tap			Concert SD 1		
39	D#1	D#2							Brush Slap			Castanets		
40	E1	E2							Brush Swirl			Concert SD 2		
41	F1	F2	Analog Low Tom 2									Timpani F		
42	F#1	F#2	Analog CHH 1		1							Timpani F#		
43	G1	G2	Analog Low Tom 1									Timpani G		
44	G#1	G#2	Analog CHH 2		1							Timpani G#		
45	A1	A2	Analog Mid Tom 2									Timpani A		
46	A#1	A#2	Analog OHH		1							Timpani A#		
47	B1	B2	Analog Mid Tom 1									Timpani B		
48	C2	C3	Analog Hi Tom 2									Timpani c		
49	C#2	C#3	Analog Cymbal									Timpani c#		
50	D2	D3	Analog Hi Tom 1									Timpani d		
51	D#2	D#3										Timpani d#		
52	E2	E3										Timpani e		
53	F2	F3										Timpani f		
54	F#2	F#3												
55	G2	G3												
56	G#2	G#3	Analog Cowbell											
57	A2	A3										Concert Cymbal 2		
58	A#2	A#3												
59	B2	B3										Concert Cymbal 1		
60	C3	C4												
61	C#3	C#4												
62	D3	D4	Analog High Conga											
63	D#3	D#4	Analog Mid Conga											
64	E3	E4	Analog Low Conga											
65	F3	F4												
66	F#3	F#4												
67	G3	G4												
68	G#3	G#4												
69	A3	A4												
70	A#3	A#4	Analog Maracas											
71	B3	B4												
72	C4	C5												
73	C#4	C#5												
74	D4	D5												
75	D#4	D#5	Analog Claves											
76	E4	E5												
77	F4	F5												
78	F#4	F#5												
79	G4	G5												
80	G#4	G#5												
81	A4	A5												
82	A#4	A#5												
83	B4	B5												
84	C5	C6												
85	C#5	C#6												
86	D5	D6												
87	D#5	D#6												
88	E5	E6										Applause	●	
89	F5	F6												
90	F#5	F#6												
91	G5	G6												

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 (GM2) StandardSet No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Kit Name			(GM2) SFXSet		
MSB(0-127)-LSB(0-127)-PC(1-128)			120-0-57		
MIDI		Keyboard Note	FullName	Key Off (*1)	Alt Group (*2)
Note#	Note				
13	C#-1	C#0			
14	D-1	D0			
15	D#-1	D#0			
16	E-1	E0			
17	F-1	F0			
18	F#-1	F#0			
19	G-1	G0			
20	G#-1	G#0			
21	A-1	A0			
22	A#-1	A#0			
23	B-1	B0			
24	C0	C1			
25	C#0	C#1			
26	D0	D1			
27	D#0	D#1			
28	E0	E1			
29	F0	F1			
30	F#0	F#1			
31	G0	G1			
32	G#0	G#1			
33	A0	A1			
34	A#0	A#1			
35	B0	B1			
36	C1	C2			
37	C#1	C#2			
38	D1	D2			
39	D#1	D#2	High Q		
40	E1	E2	Slap		
41	F1	F2	Scratch Push		7
42	F#1	F#2	Scratch Pull		7
43	G1	G2	Sticks		
44	G#1	G#2	Square Click		
45	A1	A2	Metronome Click		
46	A#1	A#2	Metronome Bell		
47	B1	B2	Guitar Fret	●	
48	C2	C3	Guitar Cutting Noise Up	●	
49	C#2	C#3	Guitar Cutting Noise Down	●	
50	D2	D3	String Slap of Double Bass	●	
51	D#2	D#3	Fl.Key Click	●	
52	E2	E3	Laughing	●	
53	F2	F3	Scream	●	
54	F#2	F#3	Punch	●	
55	G2	G3	Heart Beat	●	
56	G#2	G#3	Footsteps 1	●	
57	A2	A3	Footsteps 2	●	
58	A#2	A#3	Applause	●	
59	B2	B3	Door Creaking	●	
60	C3	C4	Door	●	
61	C#3	C#4	Scratch	●	
62	D3	D4	Wind Chimes	●	
63	D#3	D#4	Car-Engine	●	
64	E3	E4	Car-Stop	●	
65	F3	F4	Car-Pass	●	
66	F#3	F#4	Car-Crash	●	
67	G3	G4	Siren	●	
68	G#3	G#4	Train	●	
69	A3	A4	Jetplane	●	
70	A#3	A#4	Helicopter	●	
71	B3	B4	Starship	●	
72	C4	C5	Gun Shot	●	
73	C#4	C#5	Machine Gun	●	
74	D4	D5	Lasergun	●	
75	D#4	D#5	Explosion	●	
76	E4	E5	Dog	●	
77	F4	F5	Horse-Gallop	●	
78	F#4	F#5	Birds	●	
79	G4	G5	Rain	●	
80	G#4	G#5	Thunder	●	
81	A4	A5	Wind	●	
82	A#4	A#5	Seashore	●	
83	B4	B5	Stream	●	
84	C5	C6	Bubble	●	
85	C#5	C#6			
86	D5	D6			
87	D#5	D#6			
88	E5	E6			
89	F5	F6			
90	F#5	F#6			
91	G5	G6			

*1 Key Off: Keys marked "●" stop sounding the instant they are released.

*2 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 (GM2) StandardSet No Sound

*3 Actual keyboard notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the list.

Category	Style Name
Pop&Rock	HardRock
	PowerRock
	AcousticRock
	BritRockPop
	IndieRock
	Live8Beat
	Cool8Beat
	VintageGtrPop
	60sVintageRock
	90sRockBallad
	FunkPopRock
	BritPopSwing
	60sGuitarPop
	60sPopRock
	70s8Beat
	90sGuitarPop
	00sBoyband
	Unplugged
	ChartGuitarPop
	BubblegumPop
	RockShuffle
	JazzPop
	KoolShuffle
Ballad	ModernPopBld
	SoulR&B
	PopGtrBallad
	ChilloutLounge
	Chillout
	70sGlamPiano
	80sEPBallad
	90sCoolBallad
	8BeatBallad
	16BeatBallad
	EasyBallad
	EPBallad
	PowerBallad
	6-8SlowRock
	6-8Modern
	OrganBallad
	PianoBallad
	NewR&BBallad
	GuitarSerenade
Dance & R&B	ClubDJHouse
	MiamiHouse
	ElectricHouse
	GangsterHouse
	GrimeHouse
	PianoHouse
	ElectroStep
	EuroDance
	ProgressiveHouse
	FrenchClubHouse
	TripHop
	ElecCity
	HardStep
	NuGrep
	R&BElectro
	Dubstep
	Electronica
	FunkyHouse
	ClubBeat
	RetroClub
	ModChartPop
	AgagBeat
	ClubDance
	WCoastDance
	DreamDance
	70sDisco1
	70sDisco2
	DiscoPhilly
	80sDisco
	DiscoHouse
	USChartHit
	MellowHipHop
	ClassicHipHop
	NewHipHop
	Ibiza2002

Category	Style Name
Dance & R&B	LatinDJ's
	FrenchHouse
	House
	HipHopGroove
	ChartR&B
	ModernShuffle
	BluesRock
	SoulBrothers
	FranklySoul
	6-8Soul
	Rock&Roll
	OldiesR&R
	Soul
	DetroitPop
	GospelSisters
	WorshipMed
	ComboBoogie
	60sRock&Roll
	Twist
Swing&Jazz	ModBigBandShfl
	OrchBigBand
	OrchestraSwing1
	OrchestraSwing2
	BigBandFast
	AcousticJazz
	JazzWaltzFast
	MidnightSwing
	Five-Four
	OrganGroove
	JumpJive
	Ragtime
	Dixieland
	Charleston
	BigBandShuffle
Entertainment	70sTVTheme
	WildWest
	BaroqueAir
	Moonlight6-8
	OrchestralMarch
	SaturdayNight
	ClassicPianoBld
	ChristmasSwing
	ChristmasWaltz
	Showtune
	GermanRock
	DiscoFox
	AlpBallad
	ScandShuffle
	ScandSlowRock
	SchlagerPolka
	SchlagerPop
	SchlagerBeat
	70sFrenchHit
	PubPiano
	PolkaPop
	Tijuana
	8BeatAdria
	DiscoHands
	ViennneseWaltz
	EnglishWaltz
	Slowfox
	Foxtrot
	Quickstep
	Tango
	Pasodoble
	BallroomSamba
	ChaChaCha
	Rumba
	Jive
	Swingfox
	OrganSwing
	OrganSamba
	OrganQuickstep
	9-8Waltz
World	Samba
	SambaMPB
	Chorinho

Category	Style Name
World	Choro
	Pagode
	SertanejoUniv1
	SertanejoUniv2
	Axe
	Frevo
	PartidoAlto
	Forro1
	Forro2
	Xote
	Baiao
	Vanera
	LatinCalypso
	Joropo
	Parranda
	Reggaeton
	ArrochaNordeste
	LatinSamba
	BossaNova
	FastBossa
	Guajira
	Bomba
	Salsa
	CubanSon
	Merengue
	Bachata
	Cumbia
	RumbaFlamenco
	Danzon
	Calypso
	BoleroLento
	PopBossa
	HappyReggae
	LatinDisco
	Beguine
	RumbaIsland
	70sChartCntry
	CountryHits
	Bluegrass
	Hoedown
	NewCountry
	CountryShuffle
	CountryBallad
	CountryWaltz
	Country2-4
	CountryPop
	FolkPop
	SpanishPaso
	PopFlamenco
	FrenchMusette
	IrishDance
	Sirtaki
	GermanWaltz
	OrientalPop
	ArabicEuro
	Saeidy
	Laff
	WehdaSaghira
	Duranguense
	ModernDangdut
	Keroncong
	Bhajan
	Bhangra
	Xi Qing Luo Gu
	Jing Ju Jie Zou
	Grupera
	OberPolka
	OberWalzer
	MariachiWaltz
	Reel
	Jig
	Tarantella
	USMarch
	6-8March
	GermanMarch
	Norteno

Category	Bank Name
Keyboard Phrase	PianoArp8Beat
	PianoArp16Beat
	PianoGlissando
	LatinKeys
	BoogieLoops
	OrganBlues
	HeavenArpeggio
	TwinkleArpeggio
Guitar Phrase	E.Gtr16BtCut1
	E.Gtr16BtCut2
	E.Gtr16BtCut3
	FunkyGtr16Bt1
	FunkyGtr16Bt2
	FunkyGtr16Bt3
	DiscoGuitar
	E.Gtr16BtShfl1
	E.Gtr16BtShfl2
	E.Gtr16BtPick
	E.Gtr8BtShfl
	E.Guitar6-8
	E.Gtr8BtStrm1
	E.Gtr8BtStrm2
	E.GtrRock1
	E.GtrRock2
	Steel8BtStrum1
	Steel8BtStrum2
	SteelBsChdSlow
	SteelBsChdFast
	SteelTriplet1
	SteelTriplet2
	SteelGuitar6-8
	SteelGtrPick1
	SteelGtrPick2
	SteelGtrPick3
	SteelGtrPick4
	NylonGtrPick
	NylonAccomp
	NylonBossa1
	NylonBossa2
	FlamencoGtr
	A.GtrAccomp
	SambaGuitar
Strings Phrase	StringBallad
	StringLegato
	BaroqueStrings
	Classical
	OrchestraHit
	Harpeggio1
	Harpeggio2
Brass Phrase	Swingy Brass1
	Swingy Brass2
	Swingy Brass3
	Brassy 1
	Brassy 2
	Big Band
	AttentionDuo
	Fanfare
	Brass Fall
	SynthBrassSlide
Synth Phrase	TranceSeq1
	TranceSeq2
	TechnoSeq1
	TechnoSeq2
	TechnoSeq3
	Garage
	EuroDance
	DanceSynth
Percussion Loop	LatinPerc1
	LatinPerc2
	LatinPerc3
	LatinPerc4
	LatinPerc5
	Conga&Bongo1
	CarnivalDeRio
	LatinPop
	Rumba&Soca
	SambaPerc

Category	Bank Name
Percussion Loop	TimbalesPaila
	Shaker&Maracas
	Shaker&Tamb
	Timbales&Tom
	BatucadaPerc
	Oriental1
	Oriental2
	Oriental3
	Oriental4
	Oriental5
	Oriental6
	Oriental7
	Oriental8
	EthnicPerc
Percussion Oneshot	Gong&Chime
	BigBells
	MagicBells
	ArabicPerc1
	ArabicPerc2
	LatinKit1
	LatinKit2
	LatinKit3
	Conga&Bongo2
	ChineseKit2
Drum Loop	House1
	House2
	House3
	ElectroStep
	BigRoom
	Tribal
	BreakBeatz
	HipHop1
	HipHop2
	HeavyShuffle
	NewR&B
	SnarePlay1
	SnarePlay2
Drum Oneshot	PowerToms
	PowerSnares
	CrashCymbals
	PowerKit1
	PowerKit2
	DrumEndings
	DanceKit
	DJ-BasicSet
	DJ-SFX
	ScratchBank
DJ Phrase	ClubDJHouse A
	ClubDJHouse B
	ClubDJHouse C
	ClubDJHouse D
	MiamiHouse A
	MiamiHouse B
	MiamiHouse C
	MiamiHouse D
	ElectricHouse A
	ElectricHouse B
	ElectricHouse C
	ElectricHouse D
	GangsterHouse A
	GangsterHouse B
	GangsterHouse C
	GangsterHouse D
	GrimeHouse A
	GrimeHouse B
	GrimeHouse C
	GrimeHouse D
	PianoHouse A
	PianoHouse B
	PianoHouse C
	PianoHouse D
	ElectroStep A
	ElectroStep B
	ElectroStep C
	ElectroStep D
	EuroDance A
	EuroDance B

Category	Bank Name
DJ Phrase	EuroDance C
	EuroDance D
	ProgressiveHouse A
	ProgressiveHouse B
	ProgressiveHouse C
	ProgressiveHouse D
	FrenchClubHouse A
	FrenchClubHouse B
	FrenchClubHouse C
	FrenchClubHouse D
SFX	Car SE
	Day SE
	Horror SE
	Night SE
	Water SE
Combination	EDM Kit1
	EDM Kit2
	DanceMix1
	DanceMix2
	DanceMix3
	ReggaeAccomp
	Comedy
	XmasLoops
	IndianKit
	ChineseKit1

Category	Type
Harmony	Standard Duet
	Standard Trio
	Full Chord
	Rock Duet
	Country Duet
	Country Trio
	Block
	4-Way Close1
	4-Way Close2
	4-Way Open
	1+5
	Octave
	Strum
	Multi Assign
Echo	Echo4
	Echo6
	Echo8
	Echo12
	Tremolo8
	Tremolo12
	Tremolo16
	Tremolo32
	Trill12
	Trill16
	Trill24
	Trill32
Arp/Up&Down	UpOct1
	UpOct2
	UpOct3
	UpOct4
	DownOct1
	DownOct2
	DownOct3
	DownOct4
	U&D A Oct1
	U&D A Oct2
	U&D A Oct3
	U&D A Oct4
	U&D B Oct1
	U&D B Oct2
	U&D B Oct3
	U&D B Oct4
	Oct2Up
	Oct4Up
	Up&Down1
	Up&Down2
	Up&Down3
	Up&Down4
	Up&Random1
	Up&Random2
	Up&Random3
	Up&Random4
Arp/Synth Seq	SynthSeq1
	SynthSeq2
	SynthSeq3
	SynthSeq4
	SynthSeq5
	SynthSeq6
	SynthSeq7
	SynthSeq8
	SynthSeq9
	SynthSeq10
	SynthSeq11
	SynthSeq12
	SynthSeq13
	SynthSeq14
	SynthSeq15
	SynthSeq16
	SynthSeq17
	OctSeq1
	OctSeq2
	OctSeq3
	OctSeq4
	OctSeq5
	OctSeq6
	OctSeq7

Category	Type
Arp/Synth Seq	OctSeq8
	MuteArp1
	MuteArp2
	MuteArp3
	SeqS&H1
	SeqS&H2
	PolyArp1
	PolyArp2
	Syncopa1
	Syncopa2
	X-Sweep1
	X-Sweep2
	X-Sweep3
	RandomOct1
	RandomOct2
	RandomOct3
	RandomOct4
Arp/Chord Seq	SynChord1
	SynChord2
	SynChord3
	SynChord4
	SynChord5
	SynChord6
	SynChord7
	SynChord8
	SynChord9
	SynChord10
	SynChord11
	SynChord12
	SynChord13
	SynChord14
	SynChord15
	SynChord16
	SynChord17
Arp/Electro	Trance1
	Trance2
	Trance3
	Trance4
	Trance5
	Trance6
	Trance7
	Trance8
	Trance9
	Trance10
	Trance11
	Trance12
	DreamDance1
	DreamDance2
	Techno
	Acid1
	Acid2
	Acid3
	Electro1
	Electro2
	Electro3
	Electro4
	Electro5
	Electro6
	Electro7
	Electro8
	Electro9
	Electro10
	Electro11
	Electro12
	Electro13
Arp/Keyboard	PianoArp1
	PianoArp2
	PianoArp3
	PianoArp4
	PianoArp5
	PianoArp6
	PianoArp7
	PianoArp8
	PianoArp9
	PianoArp10
	PianoArp11

Category	Type
Arp/Keyboard	PianoArp12
	PianoArp13
	PianoArp14
	PianoArp15
	PianoClub1
	PianoClub2
	Slowfeel1
	Slowfeel2
	AnalogPop1
	AnalogPop2
	AnalogPop3
	NewGospel1
	NewGospel2
	Clavi1
	Clavi2
	Clavi3
	HouseOrg1
	HouseOrg2
	HouseOrg3
Arp/Guitar	OverDrive
	PopGuitar
	RockGuitar
	FunkGuitar
	SpanishGuitar
	CuttingGuitar
Arp/Strings	Strings1
	Strings2
	Strings3
	Strings4
	Strings5
	Strings6
	Strings7
	Strings8
	Strings9
	Strings10
	Strings11
	Strings12
	Strings13
	Pizzicato

Reverb Block

Category	Type	Description	MSB	LSB	Parameter List
Reverb	Basic Hall	Reverb simulating the acoustics of a hall. Standard setting.	1	21	REVERB1
	Light Hall	Reverb simulating the acoustics of a hall. Light setting.	1	22	REVERB1
	Ballad Hall	Reverb simulating the acoustics of a hall. For ballad type music.	1	19	REVERB2
	Piano Hall	Reverb simulating the acoustics of a hall. For piano sound.	1	20	REVERB2
	Hall 1	Reverb simulating the acoustics of a hall.	1	0	REVERB1
	Hall 2	Reverb simulating the acoustics of a hall.	1	16	REVERB1
	Hall 3	Reverb simulating the acoustics of a hall.	1	17	REVERB1
	Hall 4	Reverb simulating the acoustics of a hall.	1	18	REVERB1
	Hall 5	Reverb simulating the acoustics of a hall.	1	1	REVERB1
	Vocal Hall 1	Reverb suitable for vocals.	1	27	REVERB1
	Vocal Hall 2	Reverb suitable for vocals.	1	28	REVERB1
	Acoustic Room	Reverb simulating the acoustics of a room. Standard setting.	2	20	REVERB1
	Drums Room	Reverb simulating the acoustics of a room. For drum sounds.	2	21	REVERB1
	Stage	Reverb suitable for a solo instrument.	3	16	REVERB1
	Plate	Reverb simulating a plate reverb unit.	4	16	REVERB1
Legacy	Hall M	Reverb simulating the acoustics of a hall.	1	6	REVERB1
	Hall L	Reverb simulating the acoustics of a hall.	1	7	REVERB1
	Atmosphere Hall	A unique long reverb with atmosphere.	1	23	REVERB1
	Large Hall	Reverb simulating the acoustics of a hall.	1	2	REVERB2
	Medium Hall	Reverb simulating the acoustics of a hall.	1	3	REVERB2
	Percussion Room	Reverb simulating the acoustics of a room. For percussion sounds.	2	22	REVERB1
	Room 1	Reverb simulating the acoustics of a room.	2	16	REVERB1
	Room 2	Reverb simulating the acoustics of a room.	2	17	REVERB1
	Room 3	Reverb simulating the acoustics of a room.	2	18	REVERB1
	Room 4	Reverb simulating the acoustics of a room.	2	19	REVERB1
	Room 5	Reverb simulating the acoustics of a room.	2	0	REVERB1
	Room 6	Reverb simulating the acoustics of a room.	2	1	REVERB1
	Room 7	Reverb simulating the acoustics of a room.	2	2	REVERB1
	Room S	Reverb simulating the acoustics of a room.	2	5	REVERB1
	Room M	Reverb simulating the acoustics of a room.	2	6	REVERB1
	Room L	Reverb simulating the acoustics of a room.	2	7	REVERB1
	Warm Room	Reverb simulating the acoustics of a warm room.	2	3	REVERB2
	White Room	A unique short reverb with a bit of initial delay.	16	0	REVERB3
	Woody Room	Reverb simulating the acoustics of a wood-built room.	2	4	REVERB2
	Stage 2	Reverb suitable for a solo instrument.	3	17	REVERB1
	Stage 3	Reverb suitable for a solo instrument.	3	0	REVERB1
	Stage 4	Reverb suitable for a solo instrument.	3	1	REVERB1
	Plate 2	Reverb simulating a plate reverb unit.	4	17	REVERB1
	Plate 3	Reverb simulating a plate reverb unit.	4	0	REVERB1
	GM Plate	Reverb simulating a plate reverb unit.	4	7	REVERB1
	Rich Plate	Reverb simulating a rich plate reverb unit.	4	1	REVERB2
	Tunnel	Simulates a cylindrical space expanding to left and right.	17	0	REVERB3
	Canyon	A hypothetical acoustic space which extends without limit.	18	0	REVERB3
	Basement	A bit of initial delay followed by reverb with a unique resonance.	19	0	REVERB3
---	No Effect	No effect.	0	0	NO EFFECT

Chorus Block

Category	Type	Description	MSB	LSB	Parameter List
Reverb	Hall 1	Reverb simulating the acoustics of a hall.	1	0	REVERB1
	Hall 2	Reverb simulating the acoustics of a hall.	1	16	REVERB1
	Hall 3	Reverb simulating the acoustics of a hall.	1	17	REVERB1
	Hall 4	Reverb simulating the acoustics of a hall.	1	18	REVERB1
	Hall 5	Reverb simulating the acoustics of a hall.	1	1	REVERB1
	Acoustic Room	Reverb simulating the acoustics of a room. Standard setting.	2	20	REVERB1
	Drums Room	Reverb simulating the acoustics of a room. For drum sounds.	2	21	REVERB1
	Stage	Reverb suitable for a solo instrument.	3	16	REVERB1
	Plate	Reverb simulating a plate reverb unit.	4	16	REVERB1
Delay	Tempo Delay 1	Tempo-synchronized delay.	21	0	TEMPO DELAY
	Tempo Delay 2	Tempo-synchronized delay.	21	16	TEMPO DELAY
	Tempo Echo	Tempo-synchronized echo.	21	8	TEMPO DELAY
	Tempo Cross 1	Tempo-synchronized cross delay.	22	0	TEMPO CROSS DELAY
	Tempo Cross 2	Tempo-synchronized cross delay.	22	16	TEMPO CROSS DELAY
	Tempo Cross 3	Tempo-synchronized cross delay.	22	17	TEMPO CROSS DELAY
	Tempo Cross 4	Tempo-synchronized cross delay.	22	18	TEMPO CROSS DELAY
Modulation	Chorus 1	Conventional chorus program with rich, warm chorusing.	66	17	CHORUS
	Chorus 2	Conventional chorus program with rich, warm chorusing.	66	8	CHORUS
	Symphonic	Adds more stages to the modulation of Celeste.	68	16	SYMPHONIC
	Flanger	Creates a sound similar to that of a jet airplane.	67	8	FLANGER
	Phaser	Cyclically modulates the phase to add modulation to the sound.	72	0	PHASER1
	E-Piano Phaser	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	17	PHASER1
Legacy	Hall M	Reverb simulating the acoustics of a hall.	1	6	REVERB1
	Hall L	Reverb simulating the acoustics of a hall.	1	7	REVERB1
	Atmosphere Hall	A unique long reverb with atmosphere.	1	23	REVERB1
	Percussion Room	Reverb simulating the acoustics of a room. For percussion sounds.	2	22	REVERB1
	Room 1	Reverb simulating the acoustics of a room.	2	16	REVERB1
	Room 2	Reverb simulating the acoustics of a room.	2	17	REVERB1
	Room 3	Reverb simulating the acoustics of a room.	2	18	REVERB1
	Room 4	Reverb simulating the acoustics of a room.	2	19	REVERB1
	Room 5	Reverb simulating the acoustics of a room.	2	0	REVERB1
	Room 6	Reverb simulating the acoustics of a room.	2	1	REVERB1
	Room 7	Reverb simulating the acoustics of a room.	2	2	REVERB1
	Room S	Reverb simulating the acoustics of a room.	2	5	REVERB1
	Room M	Reverb simulating the acoustics of a room.	2	6	REVERB1
	Room L	Reverb simulating the acoustics of a room.	2	7	REVERB1
	Stage 2	Reverb suitable for a solo instrument.	3	17	REVERB1
	Stage 3	Reverb suitable for a solo instrument.	3	0	REVERB1
	Stage 4	Reverb suitable for a solo instrument.	3	1	REVERB1
	Plate 2	Reverb simulating a plate reverb unit.	4	17	REVERB1
	Plate 3	Reverb simulating a plate reverb unit.	4	0	REVERB1
	GM Plate	Reverb simulating a plate reverb unit.	4	7	REVERB1
	Karaoke 1	Echo for karaoke.	20	0	KARAOKE
	Karaoke 2	Echo for karaoke.	20	1	KARAOKE
	Karaoke 3	Echo for karaoke.	20	2	KARAOKE
	Chorus 3	Conventional chorus program with rich, warm chorusing.	66	16	CHORUS
	Chorus 4	Conventional chorus program with rich, warm chorusing.	66	1	CHORUS
	Chorus 5	Conventional chorus program with rich, warm chorusing.	65	2	CHORUS
	Chorus 6	Conventional chorus program with rich, warm chorusing.	65	0	CHORUS
	Chorus 7	Conventional chorus program with rich, warm chorusing.	65	1	CHORUS
	Chorus 8	Conventional chorus program with rich, warm chorusing.	65	8	CHORUS
	Chorus Fast	Conventional chorus program with rich, warm chorusing.	65	16	CHORUS
	Chorus Lite	Conventional chorus program with rich, warm chorusing.	65	17	CHORUS
	GM Chorus 1	Conventional chorus program with rich, warm chorusing.	65	3	CHORUS
	GM Chorus 2	Conventional chorus program with rich, warm chorusing.	65	4	CHORUS
	GM Chorus 3	Conventional chorus program with rich, warm chorusing.	65	5	CHORUS
	GM Chorus 4	Conventional chorus program with rich, warm chorusing.	65	6	CHORUS
	Feedback Chorus	Conventional chorus program with rich, warm chorusing.	65	7	CHORUS
	Celeste 1	A 3-phase LFO adds modulation and spaciousness to the sound.	66	0	CHORUS
	Celeste 2	A 3-phase LFO adds modulation and spaciousness to the sound.	66	2	CHORUS
	Symphonic 2	Adds more stages to the modulation of Celeste.	68	0	SYMPHONIC
	Ensemble Detune 1	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	0	ENSEMBLE DETUNE
	Ensemble Detune 2	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	16	ENSEMBLE DETUNE
	Flanger 2	Creates a sound similar to that of a jet airplane.	67	16	FLANGER
	Flanger 3	Creates a sound similar to that of a jet airplane.	67	17	FLANGER
	Flanger 4	Creates a sound similar to that of a jet airplane.	67	1	FLANGER
	Flanger 5	Creates a sound similar to that of a jet airplane.	67	0	FLANGER
	GM Flanger	Creates a sound similar to that of a jet airplane.	67	7	FLANGER
	E-Piano Phaser 2	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	18	PHASER1
	E-Piano Phaser 3	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	16	PHASER1
	Rotary Speaker 5	Simulates a rotary speaker.	66	18	CHORUS
---	No Effect	No effect.	0	0	NO EFFECT

DSP1–4 Block

LCD Block Name	XG Block Name
DSP1	XG Variation Block
DSP2	XG Insertion1 Block
DSP3	XG Insertion2 Block
DSP4	XG Insertion3 Block

Category	Type	Description	MSB	LSB	Parameter List
Reverb	Hall 1	Reverb simulating the acoustics of a hall.	1	0	REVERB1
	Hall 2	Reverb simulating the acoustics of a hall.	1	16	REVERB1
	Hall 3	Reverb simulating the acoustics of a hall.	1	17	REVERB1
	Hall 4	Reverb simulating the acoustics of a hall.	1	18	REVERB1
	Hall 5	Reverb simulating the acoustics of a hall.	1	1	REVERB1
	Acoustic Room	Reverb simulating the acoustics of a room. Standard setting.	2	20	REVERB1
	Drums Room	Reverb simulating the acoustics of a room. For drum sounds.	2	21	REVERB1
	Stage	Reverb suitable for a solo instrument.	3	16	REVERB1
	Plate	Reverb simulating a plate reverb unit.	4	16	REVERB1
Delay	Delay LCR 1	Produces three delayed sounds: L, R and C (center).	5	16	DELAY LCR
	Delay LCR 2	Produces three delayed sounds: L, R and C (center).	5	0	DELAY LCR
	Delay LR	Produces two delayed sounds: L and R. Two feedback delays are provided.	6	0	DELAY LR
	Echo	Two delayed sounds (L and R), and independent feedback delays for L and R.	7	0	ECHO
	Cross Delay 1	The feedback of the two delayed sounds is crossed.	8	0	CROSS DELAY
	Cross Delay 2	The feedback of the two delayed sounds is crossed.	8	16	CROSS DELAY
	Tempo Delay 1	Tempo-synchronized delay.	21	0	TEMPO DELAY
	Tempo Delay 2	Tempo-synchronized delay.	21	16	TEMPO DELAY
	Tempo Echo	Tempo-synchronized echo.	21	8	TEMPO DELAY
	Tempo Cross 1	Tempo-synchronized cross delay.	22	0	TEMPO CROSS DELAY
	Tempo Cross 2	Tempo-synchronized cross delay.	22	16	TEMPO CROSS DELAY
	Tempo Cross 3	Tempo-synchronized cross delay.	22	17	TEMPO CROSS DELAY
	Tempo Cross 4	Tempo-synchronized cross delay.	22	18	TEMPO CROSS DELAY
Distortion	Multi FX Distortion Solo	Multi effector for guitar. Setting for guitar solo.	95	32	MULTI FX
	Multi FX Distortion Basic	Multi effector for guitar. Setting for basic distortion.	95	33	MULTI FX
	Multi FX Overdrive Chorus	Multi effector for guitar. Setting for overdrive & chorus.	95	34	MULTI FX
	Multi FX Crunch Wah	Multi effector for guitar. Setting for crunch & wah.	95	35	MULTI FX
	Multi FX Oldies Delay	Multi effector for guitar. Setting for vintage delay.	95	36	MULTI FX
	Multi FX Vintage Echo	Multi effector for guitar. Setting for vintage echo.	95	37	MULTI FX
	Small Stereo Distortion	Stereo distortion for guitar. Setting for distortion sound.	96	32	SMALL STEREO DIST
	Small Stereo Overdrive	Stereo distortion for guitar. Setting for overdrive sound.	96	33	SMALL STEREO DIST
	Small Stereo Vintage Amp	Stereo distortion for guitar. Setting for vintage sound.	96	34	SMALL STEREO DIST
	Small Stereo Heavy Dist	Stereo distortion for guitar. Setting for heavy sound.	96	35	SMALL STEREO DIST
	British Combo Classic	British combo amp simulator. Setting for classic sound.	97	32	BRITISH COMBO
	British Combo Top Boost	British combo amp simulator. Setting for "TOP BOOST" sound.	97	33	BRITISH COMBO
	British Combo Custom	British combo amp simulator. Setting for custom sound.	97	34	BRITISH COMBO
	British Combo Heavy	British combo amp simulator. Setting for heavy sound.	97	35	BRITISH COMBO
	British Legend Blues	British stack amp simulator. Setting for blues sound.	98	32	BRITISH LEGEND
	British Legend Heavy1	British stack amp simulator. Setting for heavy sound 1.	98	33	BRITISH LEGEND
	British Legend Heavy2	British stack amp simulator. Setting for heavy sound 2.	98	34	BRITISH LEGEND
	British Legend Clean	British stack amp simulator. Setting for clean sound.	98	35	BRITISH LEGEND
	British Legend Dirty Clean	British stack amp simulator. Setting for crunch sound.	98	36	BRITISH LEGEND
	V Distortion Crunch	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	18	V DISTORTION
	V Distortion Blues	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	21	V DISTORTION
	Stereo Amp Sim Solid	Stereo amp simulator.	75	29	STEREO AMP SIMULATOR
	Stereo Amp Sim Crunch	Stereo amp simulator.	75	30	STEREO AMP SIMULATOR
	Stereo Amp Sim Blues	Stereo amp simulator.	75	28	STEREO AMP SIMULATOR
	V Distortion Hard + Delay	V Distortion Hard and Delay are connected in series.	98	1	V DISTORTION DELAY
EQ & Comp	Compressor Medium	Compressor with medium setting.	83	16	COMPRESSOR
	Compressor Heavy	Compressor with heavy setting.	83	17	COMPRESSOR
	Compressor Melody	Compressor for the Melody part.	105	16	MULTI BAND COMP
	Compressor Bass	Compressor for the Bass part.	105	17	MULTI BAND COMP
	EQ Telephone	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.	76	17	3BAND EQ
	3Band EQ	A mono EQ with adjustable LOW, MID, and HIGH equalization.	76	0	3BAND EQ
Modulation	Chorus 1	Conventional chorus program with rich, warm chorusing.	66	17	CHORUS
	Chorus 2	Conventional chorus program with rich, warm chorusing.	66	8	CHORUS
	Symphonic	Adds more stages to the modulation of Celeste.	68	16	SYMPHONIC
	Flanger	Creates a sound similar to that of a jet airplane.	67	8	FLANGER
	V Flanger	A simulation of an analog flanger effect. The LFO has a random setting.	104	0	V FLANGER
	Tempo Flanger	Tempo-synchronized flanger.	107	0	TEMPO FLANGER
	Phaser	Cyclically modulates the phase to add modulation to the sound.	72	0	PHASER1
	Tempo Phaser	Tempo-synchronized phaser.	108	0	TEMPO PHASER
	E-Piano Phaser	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	17	PHASER1
	Auto Wah	Cyclically modulates the center frequency of a wah filter.	78	16	AUTO WAH
	Auto Wah + Distortion	Distortion can be applied to the output of Auto Wah.	78	17	AUTO WAH DISTORTION
	Tempo Auto Wah	Tempo-synchronized Auto Wah.	79	0	TEMPO AUTO WAH1
	Touch Wah	Changes the center frequency of a wah filter according to the input level.	82	0	TOUCH WAH1
	Touch Wah + Distortion	Distortion can be applied to the output of Touch Wah.	82	16	TOUCH WAH1

Category	Type	Description	MSB	LSB	Parameter List
Modulation	Pedal Wah	Changes the center frequency of a wah filter according to "Pedal Control" parameter. (See Effect Parameter List.)	122	0	PEDAL WAH1
	Pedal Wah + Distortion	Distortion can be applied to the output of Pedal Wah.	122	1	PEDAL WAH2
	Dual Rotary Speaker Bright	Simulates a rotary speaker.	99	16	ROTARY SPEAKER1
	Dual Rotary Speaker Warm	Simulates a rotary speaker.	99	17	ROTARY SPEAKER1
	Rotary Speaker	Simulates a rotary speaker.	69	16	ROTARY SPEAKER2
	Tremolo	Rich Tremolo effect with both volume and pitch modulation.	70	16	TREMOLO
	E-Piano Tremolo	Rich Tremolo effect with both volume and pitch modulation.	70	18	TREMOLO
	Tempo Tremolo	Tempo-synchronized rich Tremolo effect with both volume and pitch modulation.	120	0	TEMPO TREMOLO
	Auto Pan	Several panning effects that automatically shift the sound position (left, right, front, back).	71	16	AUTO PAN1
	Tempo Auto Pan	Tempo-synchronized auto pan.	121	0	TEMPO AUTO PAN1
Legacy	Hall M	Reverb simulating the acoustics of a hall.	1	6	REVERB1
	Hall L	Reverb simulating the acoustics of a hall.	1	7	REVERB1
	Atmosphere Hall	A unique long reverb with atmosphere.	1	23	REVERB1
	Percussion Room	Reverb simulating the acoustics of a room. For percussion sounds.	2	22	REVERB1
	Room 1	Reverb simulating the acoustics of a room.	2	16	REVERB1
	Room 2	Reverb simulating the acoustics of a room.	2	17	REVERB1
	Room 3	Reverb simulating the acoustics of a room.	2	18	REVERB1
	Room 4	Reverb simulating the acoustics of a room.	2	19	REVERB1
	Room 5	Reverb simulating the acoustics of a room.	2	0	REVERB1
	Room 6	Reverb simulating the acoustics of a room.	2	1	REVERB1
	Room 7	Reverb simulating the acoustics of a room.	2	2	REVERB1
	Room S	Reverb simulating the acoustics of a room.	2	5	REVERB1
	Room M	Reverb simulating the acoustics of a room.	2	6	REVERB1
	Room L	Reverb simulating the acoustics of a room.	2	7	REVERB1
	White Room	A unique short reverb with a bit of initial delay.	16	0	REVERB3
	Stage 2	Reverb suitable for a solo instrument.	3	17	REVERB1
	Stage 3	Reverb suitable for a solo instrument.	3	0	REVERB1
	Stage 4	Reverb suitable for a solo instrument.	3	1	REVERB1
	Plate 2	Reverb simulating a plate reverb unit.	4	17	REVERB1
	Plate 3	Reverb simulating a plate reverb unit.	4	0	REVERB1
	GM Plate	Reverb simulating a plate reverb unit.	4	7	REVERB1
	Tunnel	Simulates a cylindrical space expanding to left and right.	17	0	REVERB3
	Canyon	A hypothetical acoustic space which extends without limit.	18	0	REVERB3
	Basement	A bit of initial delay followed by reverb with a unique resonance.	19	0	REVERB3
	Karaoke 1	Echo for karaoke.	20	0	KARAOKE
	Karaoke 2	Echo for karaoke.	20	1	KARAOKE
	Karaoke 3	Echo for karaoke.	20	2	KARAOKE
	Early Reflection 1	This effect isolates only the early reflection components of the reverb.	9	0	EARLY REFLECTION
	Early Reflection 2	This effect isolates only the early reflection components of the reverb.	9	1	EARLY REFLECTION
	Gate Reverb 1	Simulation of gated reverb.	10	0	GATE REVERB
	Gate Reverb 2	Simulation of gated reverb.	10	16	GATE REVERB
	Reverse Gate	Simulation of gated reverb played back in reverse.	11	0	GATE REVERB
	V Distortion Warm	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	22	V DISTORTION
	V Distortion Classic Hard	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	23	V DISTORTION
	V Distortion Classic Soft	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	20	V DISTORTION
	V Distortion Metal	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	24	V DISTORTION
	V Distortion Edgy	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	19	V DISTORTION
	V Distortion Solid	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	25	V DISTORTION
	V Distortion Clean 1	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	17	V DISTORTION
	V Distortion Clean 2	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	26	V DISTORTION
	V Distortion Twin	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	16	V DISTORTION
	V Distortion Rockabilly	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	103	18	V DIST TEMPO DELAY
	V Distortion Jazz Clean	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	27	V DISTORTION
	V Distortion Fusion	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	103	19	V DIST TEMPO DELAY
	V Distortion Hard	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	0	V DISTORTION
	V Distortion Soft	Distortion which simulates the sound of a vintage tube, fuzz effect, etc.	98	2	V DISTORTION
	Stereo Amp Sim Clean	Stereo amp simulator.	75	27	STEREO AMP SIMULATOR
	Stereo Amp Sim BluesHarp	Stereo amp simulator.	75	31	STEREO AMP SIMULATOR
	Distortion Hard 1	Hard-edge distortion.	75	16	AMP SIMULATOR1
	Distortion Hard 2	Hard-edge distortion.	75	22	AMP SIMULATOR1
	Distortion Soft 1	Soft, warm distortion.	75	17	AMP SIMULATOR1
	Distortion Soft 2	Soft, warm distortion.	75	23	AMP SIMULATOR1
	Distortion Heavy	Heavy distortion.	73	0	DISTORTION
	Overdrive	Adds mild distortion to the sound.	74	0	DISTORTION
	Stereo Distortion	Stereo distortion.	73	8	STEREO DISTORTION
	Stereo Overdrive	Stereo overdrive.	74	8	STEREO DISTORTION
	Stereo Distortion Hard	Hard-edge stereo distortion.	75	18	STEREO AMP SIMULATOR
	Stereo Distortion Soft	Soft, warm soft distortion.	75	19	STEREO AMP SIMULATOR
	Amp Simulator 1	A simulation of a guitar amp.	75	0	AMP SIMULATOR1
	Amp Simulator 2	A simulation of a guitar amp.	75	1	AMP SIMULATOR2
	Stereo Amp Simulator 1	Stereo amp simulator.	75	20	STEREO AMP SIMULATOR
	Stereo Amp Simulator 2	Stereo amp simulator.	75	21	STEREO AMP SIMULATOR
	Stereo Amp Simulator 3	Stereo amp simulator.	75	8	STEREO AMP SIMULATOR
	Stereo Amp Simulator 4	Stereo amp simulator.	75	24	STEREO AMP SIMULATOR
	Stereo Amp Simulator 5	Stereo amp simulator.	75	25	STEREO AMP SIMULATOR

Category	Type	Description	MSB	LSB	Parameter List
Legacy	Stereo Amp Simulator 6	Stereo amp simulator.	75	26	STEREO AMP SIMULATOR
	Distortion + Delay 1	Distortion and Delay are connected in series.	95	16	DISTORTION DELAY
	Distortion + Delay 2	Distortion and Delay are connected in series.	95	0	DISTORTION DELAY
	Overdrive + Delay 1	Overdrive and Delay are connected in series.	95	17	DISTORTION DELAY
	Overdrive + Delay 2	Overdrive and Delay are connected in series.	95	1	DISTORTION DELAY
	Comp + Dist + Delay 1	Compressor, Distortion and Delay are connected in series.	96	16	COMP DIST DELAY
	Comp + Dist + Delay 2	Compressor, Distortion and Delay are connected in series.	96	0	COMP DIST DELAY
	Comp + OD + Delay 1	Compressor, Overdrive and Delay are connected in series.	96	17	COMP DIST DELAY
	Comp + OD + Delay 2	Compressor, Overdrive and Delay are connected in series.	96	1	COMP DIST DELAY
	V Distortion Soft + Delay	V Distortion Soft and Delay are connected in series.	98	3	V DISTORTION DELAY
	V Dist Hard + Tmp Delay 1	V Distortion Hard and Tempo Delay are connected in series.	103	0	V DIST TEMPO DELAY
	V Dist Hard + Tmp Delay 2	V Distortion Hard and Tempo Delay are connected in series.	103	17	V DIST TEMPO DELAY
	V Dist Soft + Tmp Delay 1	V Distortion Soft and Tempo Delay are connected in series.	103	1	V DIST TEMPO DELAY
	V Dist Soft + Tmp Delay 2	V Distortion Soft and Tempo Delay are connected in series.	103	16	V DIST TEMPO DELAY
	Distortion + Tempo Delay	Distortion and Tempo Delay are connected in series.	100	0	DIST TEMPO DELAY
	Overdrive + Tempo Delay	Overdrive and Tempo Delay are connected in series.	100	1	DIST TEMPO DELAY
	Comp + Distortion 1	Since a Compressor is included in the first stage, steady distortion can be produced regardless of changes in input level.	73	16	COMP DISTORTION
	Comp + Distortion 2	Since a Compressor is included in the first stage, steady distortion can be produced regardless of changes in input level.	73	1	COMP DISTORTION
	Comp + Dist + Tmp Delay	Compressor, Distortion and Tempo Delay are connected in series.	101	0	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 1	Compressor, Overdrive and Tempo Delay are connected in series.	101	1	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 2	Compressor, Overdrive and Tempo Delay are connected in series.	101	16	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 3	Compressor, Overdrive and Tempo Delay are connected in series.	101	17	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 4	Compressor, Overdrive and Tempo Delay are connected in series.	101	18	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 5	Compressor, Overdrive and Tempo Delay are connected in series.	101	19	COMP DIST TEMPO DELAY
	Comp + OD + Tmp Delay 6	Compressor, Overdrive and Tempo Delay are connected in series.	101	20	COMP DIST TEMPO DELAY
	Multiband Compressor	Multi-band compressor that allows you to adjust the compression effect for individual frequency bands.	105	0	MULTI BAND COMP
	Compressor	Holds down the output level when a specified input level is exceeded. A sense of attack can also be added to the sound.	83	0	COMPRESSOR
	Noise Gate	Gates the input when the input signal falls below a specified level.	84	0	NOISE GATE
	EQ Disco	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.	76	16	3BAND EQ
	2Band EQ	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.	77	0	2BAND EQ
	Stereo 3Band EQ	A stereo EQ with adjustable LOW, MID, and HIGH equalization.	76	18	3BAND EQ
	Harmonic Enhancer 1	Adds new harmonics to the input signal to make the sound stand out.	81	16	HARMONIC ENHANCER
	Harmonic Enhancer 2	Adds new harmonics to the input signal to make the sound stand out.	81	0	HARMONIC ENHANCER
	Isolator	Controls the level of a specified frequency band of the input signal.	115	0	ISOLATOR
	Chorus 3	Conventional chorus program with rich, warm chorusing.	66	16	CHORUS
	Chorus 4	Conventional chorus program with rich, warm chorusing.	66	1	CHORUS
	Chorus 5	Conventional chorus program with rich, warm chorusing.	65	2	CHORUS
	Chorus 6	Conventional chorus program with rich, warm chorusing.	65	0	CHORUS
	Chorus 7	Conventional chorus program with rich, warm chorusing.	65	1	CHORUS
	Chorus 8	Conventional chorus program with rich, warm chorusing.	65	8	CHORUS
	Chorus Fast	Conventional chorus program with rich, warm chorusing.	65	16	CHORUS
	Chorus Lite	Conventional chorus program with rich, warm chorusing.	65	17	CHORUS
	GM Chorus 1	Conventional chorus program with rich, warm chorusing.	65	3	CHORUS
	GM Chorus 2	Conventional chorus program with rich, warm chorusing.	65	4	CHORUS
	GM Chorus 3	Conventional chorus program with rich, warm chorusing.	65	5	CHORUS
	GM Chorus 4	Conventional chorus program with rich, warm chorusing.	65	6	CHORUS
	Feedback Chorus	Conventional chorus program with rich, warm chorusing.	65	7	CHORUS
	Celeste 1	A 3-phase LFO adds modulation and spaciousness to the sound.	66	0	CHORUS
	Celeste 2	A 3-phase LFO adds modulation and spaciousness to the sound.	66	2	CHORUS
	Symphonic 2	Adds more stages to the modulation of Celeste.	68	0	SYMPHONIC
	Ensemble Detune 1	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	0	ENSEMBLE DETUNE
	Ensemble Detune 2	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	16	ENSEMBLE DETUNE
	Ambience Chorus	Chorus which added early reflection sound.	65	9	AMBIENCE CHORUS
	Ambience Celeste	Celeste which added early reflection sound.	66	9	AMBIENCE CHORUS
	Ambience Symphonic	Symphonic which added early reflection sound.	68	9	AMBIENCE SYMPHONIC
	Flanger 2	Creates a sound similar to that of a jet airplane.	67	16	FLANGER
	Flanger 3	Creates a sound similar to that of a jet airplane.	67	17	FLANGER
	Flanger 4	Creates a sound similar to that of a jet airplane.	67	1	FLANGER
	Flanger 5	Creates a sound similar to that of a jet airplane.	67	0	FLANGER
	GM Flanger	Creates a sound similar to that of a jet airplane.	67	7	FLANGER
	Ambience Flanger	Flanger which added early reflection sound.	67	9	AMBIENCE FLANGER
	Phaser 2	Cyclically modulates the phase to add modulation to the sound.	72	8	PHASER2
	Phaser 3	Cyclically modulates the phase to add modulation to the sound.	72	19	PHASER2
	Tempo Phaser 2	Tempo-synchronized phaser.	108	16	TEMPO PHASER
	E-Piano Phaser 2	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	18	PHASER1
	E-Piano Phaser 3	Cyclically modulates the phase to add modulation to the sound. For electric piano.	72	16	PHASER1
	Auto Wah 2	Cyclically modulates the center frequency of a wah filter.	78	0	AUTO WAH
	Auto Wah + Distortion 2	Distortion can be applied to the output of Auto Wah.	78	1	AUTO WAH DISTORTION
	Auto Wah + Dist Hard	Distortion can be applied to the output of Auto Wah.	78	21	AUTO WAH DISTORTION
	Auto Wah + Dist Heavy	Distortion can be applied to the output of Auto Wah.	78	23	AUTO WAH DISTORTION
	Auto Wah + Dist Lite	Distortion can be applied to the output of Auto Wah.	78	25	AUTO WAH DISTORTION
	Auto Wah + Overdrive 1	Overdrive distortion can be applied to the output of Auto Wah.	78	18	AUTO WAH DISTORTION
	Auto Wah + Overdrive 2	Overdrive distortion can be applied to the output of Auto Wah.	78	2	AUTO WAH DISTORTION

Category	Type	Description	MSB	LSB	Parameter List
Legacy	Auto Wah + OD Hard	Overdrive distortion can be applied to the output of Auto Wah.	78	22	AUTO WAH DISTORTION
	Auto Wah + OD Heavy	Overdrive distortion can be applied to the output of Auto Wah.	78	24	AUTO WAH DISTORTION
	Auto Wah + OD Lite	Overdrive distortion can be applied to the output of Auto Wah.	78	26	AUTO WAH DISTORTION
	Tmp AutoWah + Dist	Tempo-synchronized Auto Wah. Distortion can be applied to the output.	79	1	TEMPO AUTO WAH2
	Tmp AutoWah + Dist Hard	Tempo-synchronized Auto Wah. Distortion can be applied to the output.	79	21	TEMPO AUTO WAH2
	Tmp AutoWah + Dist Heavy	Tempo-synchronized Auto Wah. Distortion can be applied to the output.	79	23	TEMPO AUTO WAH2
	Tmp AutoWah + Dist Lite	Tempo-synchronized Auto Wah. Distortion can be applied to the output.	79	25	TEMPO AUTO WAH2
	Tmp AutoWah + OD	Tempo-synchronized Auto Wah. Overdrive distortion can be applied to the output.	79	2	TEMPO AUTO WAH2
	Tmp AutoWah + OD Hard	Tempo-synchronized Auto Wah. Overdrive distortion can be applied to the output.	79	22	TEMPO AUTO WAH2
	Tmp AutoWah + OD Heavy	Tempo-synchronized Auto Wah. Overdrive distortion can be applied to the output.	79	24	TEMPO AUTO WAH2
	Tmp AutoWah + OD Lite	Tempo-synchronized Auto Wah. Overdrive distortion can be applied to the output.	79	26	TEMPO AUTO WAH2
	Touch Wah 2	Changes the center frequency of a wah filter according to the input level.	82	8	TOUCH WAH2
	Touch Wah 3	Changes the center frequency of a wah filter according to the input level.	82	20	TOUCH WAH2
	Touch Wah + Distortion 2	Distortion can be applied to the output of Touch Wah.	82	1	TOUCH WAH1
	Touch Wah + Dist Hard	Distortion can be applied to the output of Touch Wah.	82	21	TOUCH WAH2
	Touch Wah + Dist Heavy	Distortion can be applied to the output of Touch Wah.	82	23	TOUCH WAH2
	Touch Wah + Dist Lite	Distortion can be applied to the output of Touch Wah.	82	25	TOUCH WAH2
	Touch Wah + Overdrive 1	Overdrive distortion can be applied to the output of Touch Wah.	82	17	TOUCH WAH2
	Touch Wah + Overdrive 2	Overdrive distortion can be applied to the output of Touch Wah.	82	2	TOUCH WAH2
	Touch Wah + OD Hard	Overdrive distortion can be applied to the output of Touch Wah.	82	22	TOUCH WAH2
	Touch Wah + OD Heavy	Overdrive distortion can be applied to the output of Touch Wah.	82	24	TOUCH WAH2
	Touch Wah + OD Lite	Overdrive distortion can be applied to the output of Touch Wah.	82	26	TOUCH WAH2
	Wah + Dist + Delay 1	Wah, Distortion and Delay are connected in series.	97	16	WAH DISTORTION DELAY
	Wah + Dist + Delay 2	Wah, Distortion and Delay are connected in series.	97	0	WAH DISTORTION DELAY
	Wah + Dist + Tmp Delay	Wah, Distortion and Tempo Delay are connected in series.	102	0	WAH DIST TEMPO DELAY
	Wah + Overdrive + Delay 1	Wah, Overdrive and Delay are connected in series.	97	17	WAH DISTORTION DELAY
	Wah + Overdrive + Delay 2	Wah, Overdrive and Delay are connected in series.	97	1	WAH DISTORTION DELAY
	Wah + OD + Tmp Delay 1	Wah, Overdrive and Tempo Delay are connected in series.	102	1	WAH DIST TEMPO DELAY
	Wah + OD + Tmp Delay 2	Wah, Overdrive and Tempo Delay are connected in series.	102	16	WAH DIST TEMPO DELAY
	Clavi Touch Wah	Clavinet Touch Wah	82	18	TOUCH WAH2
	EP Touch Wah	EP Touch Wah	82	19	TOUCH WAH2
	Pedal Wah + Dist Hard	Distortion can be applied to the output of Pedal Wah.	122	21	PEDAL WAH2
	Pedal Wah + Dist Heavy	Distortion can be applied to the output of Pedal Wah.	122	23	PEDAL WAH2
	Pedal Wah + Dist Lite	Distortion can be applied to the output of Pedal Wah.	122	25	PEDAL WAH2
	Pedal Wah + Overdrive	Overdrive distortion can be applied to the output of Pedal Wah.	122	2	PEDAL WAH2
	Pedal Wah + OD Hard	Overdrive distortion can be applied to the output of Pedal Wah.	122	22	PEDAL WAH2
	Pedal Wah + OD Heavy	Overdrive distortion can be applied to the output of Pedal Wah.	122	24	PEDAL WAH2
	Pedal Wah + OD Lite	Overdrive distortion can be applied to the output of Pedal Wah.	122	26	PEDAL WAH2
	Dual Rotary Speaker 1	Simulates a rotary speaker.	99	0	ROTARY SPEAKER1
	Dual Rotary Speaker 2	Simulates a rotary speaker.	99	1	ROTARY SPEAKER1
	Rotary Speaker 2	Simulates a rotary speaker.	71	17	AUTO PAN1
	Rotary Speaker 3	Simulates a rotary speaker.	71	18	AUTO PAN1
	Rotary Speaker 4	Simulates a rotary speaker.	70	17	TREMOLO
	Rotary Speaker 5	Simulates a rotary speaker.	66	18	CHORUS
	Rotary Speaker 6	Simulates a rotary speaker.	69	0	ROTARY SPEAKER2
	Rotary Speaker 7	Simulates a rotary speaker.	71	22	AUTO PAN1
	2way Rotary Speaker	Simulates a rotary speaker.	86	0	2WAY ROTARY SPEAKER
	Dist + Rotary SP	Distortion and rotary speaker connected in series.	69	1	DIST ROTARY SPEAKER
	Dist + 2way Rotary SP	Distortion and 2-way rotary speaker connected in series.	86	1	DIST 2WAY ROTARY SP
	OD + Rotary SP	Overdrive and rotary speaker connected in series.	69	2	DIST ROTARY SPEAKER
	OD + 2way Rotary SP	Overdrive and 2-way rotary speaker connected in series.	86	2	DIST 2WAY ROTARY SP
	Amp Sim + Rotary SP	Amp simulator and rotary speaker connected in series.	69	3	AMP ROTARY SPEAKER
	Amp Sim + 2way Rotary SP	Amp simulator and 2-way rotary speaker connected in series.	86	3	AMP 2WAY ROTARY SP
	Tremolo 2	Rich Tremolo effect with both volume and pitch modulation.	71	19	AUTO PAN1
	Tremolo 3	Rich Tremolo effect with both volume and pitch modulation.	70	0	TREMOLO
	Guitar Tremolo 1	Rich Tremolo effect with both volume and pitch modulation.	71	20	AUTO PAN1
	Guitar Tremolo 2	Rich Tremolo effect with both volume and pitch modulation.	70	19	TREMOLO
	Vibraphone Rotor	Vibraphone effect.	119	0	VIBE VIBRATE
	Auto Pan 2	Several panning effects that automatically shift the sound position (left, right, front, back).	71	0	AUTO PAN1
	Auto Pan 3	Several panning effects that automatically shift the sound position (left, right, front, back).	71	1	AUTO PAN2
	E-Piano Auto Pan	Several panning effects that automatically shift the sound position (left, right, front, back).	71	21	AUTO PAN1
	Tempo Auto Pan 2	Tempo-synchronized auto pan.	121	1	TEMPO AUTO PAN2
	Pitch Change 1	Changes the pitch of the input signal.	80	16	PITCH CHANGE1
	Pitch Change 2	Changes the pitch of the input signal.	80	0	PITCH CHANGE1
	Pitch Change 3	Changes the pitch of the input signal.	80	1	PITCH CHANGE2
	Voice Cancel	Attenuates the vocal part of a CD or other source.	85	0	VOICE CANCELAR
	Ambience	Blurs the stereo positioning of the sound to add spatial width.	88	0	AMBIENCE
	Talking Modulation	Adds a vowel sound to the input signal.	93	0	TALKING MODULATION
---	No Effect	No effect.	0	0	NO EFFECT
---	Through	Bypass without applying an effect.	64	0	THRU

- Parameters marked with a ● in the "Control" column can be controlled from an AC1 (assignable controller 1) etc. However, these only affect insertion type effects.
- Parameter 10 Dry/Wet only affects insertion type effects.

(*1) Reverb Block
(*2) Chorus Block, DSP1(Variation) Block and DSP2-4(Insertion) Block
(*3) This parameter is invalid in the Chorus Block.

REVERB

REVERB1

Block : Reverb, Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Reverb Time	0.3s – 30.0s	0	69	Table#1	
2	Diffusion	0 – 10	0	10		
3	Initial Delay	0.1ms – 200.0ms (*1)	0	127	Table#2	
		0.1ms – 99.3ms (96step, 48step)	0	63		
4	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
5	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Reverb Delay	0.1ms – 200.0ms (*1)	0	127	Table#2	
		0.1ms – 99.3ms (96step, 48step)	0	63		
12	Density	0 – 4 (192step, 96step)	0	4		
		0 – 2 (48step)	0	2		
13	ER/Reverb Balance	E63>R – E=R – E<R63	1	127		
14	High Damp	0.1 – 1.0	1	10		
15	Feedback Level	-63 – 0 – +63	1	127		
16						

REVERB2

Block : Reverb

No.	Parameter	Display	Min	Max	Table	Control
1	Reverb Time	0.3s – 30.0s	0	69	Table#1	
2	Diffusion	0 – 10	0	10		
3	Initial Delay	0.1ms – 200.0ms	0	127	Table#2	
4	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
5	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
6						
7						
8						
9						
10						
11						
12						
13						
14	High Damp	0.1 – 1.0	1	10		
15						
16						

REVERB3

Block : Reverb, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Reverb Time	0.3s – 30.0s	0	69	Table#1	
2	Diffusion	0 – 10	0	10		
3	Initial Delay	0.1ms – 200.0ms (*1)	0	127	Table#2	
		0.1ms – 99.3ms (*2)	0	63		
4	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
5	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
6	Width	0.5m – 30.2m (*1)	0	104	Table#4	
		0.5m – 10.2m (*2)	0	37		
7	Height	0.5m – 30.2m (*1)	0	104	Table#4	
		0.5m – 20.2m (*2)	0	73		
8	Depth	0.5m – 30.2m	0	104	Table#4	
9	Wall Vary	0 – 30	0	30		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Reverb Delay	0.1ms – 200.0ms (*1)	0	127	Table#2	
		0.1ms – 99.3ms (*2)	0	63		
12	Density	0 – 4	0	4		
13	ER/Reverb Balance	E63>R – E=R – E<R63	1	127		
14	High Damp	0.1 – 1.0	1	10		
15	Feedback Level	-63 – 0 – +63	1	127		
16						

DELAY

DELAY LCR

Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Lch Delay	0.1ms – 1638.3ms	1	16383		
2	Rch Delay	0.1ms – 1638.3ms	1	16383		
3	Cch Delay	0.1ms – 1638.3ms	1	16383		
4	Feedback Delay	0.1ms – 1638.3ms	1	16383		
5	Feedback Level	-63 – 0 – +63	1	127		
6	Cch Level	0 – 127	0	127		
7	High Damp	0.1 – 1.0	1	10		
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

DELAY LR

Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Lch Delay	0.1ms – 1638.3ms	1	16383		
2	Rch Delay	0.1ms – 1638.3ms	1	16383		
3	Feedback Delay 1	0.1ms – 1638.3ms	1	16383		
4	Feedback Delay 2	0.1ms – 1638.3ms	1	16383		
5	Feedback Level	-63 – 0 – +63	1	127		
6	High Damp	0.1 – 1.0	1	10		
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

ECHO

Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Lch Delay1	0.1ms – 1486.0ms	1	14860		
2	Lch Feedback Level	-63 – 0 – +63	1	127		
3	Rch Delay1	0.1ms – 1486.0ms	1	14860		
4	Rch Feedback Level	-63 – 0 – +63	1	127		
5	High Damp	0.1 – 1.0	1	10		
6	Lch Delay2	0.1ms – 1486.0ms	1	14860		
7	Rch Delay2	0.1ms – 1486.0ms	1	14860		
8	Delay2 Level	0 – 127	0	127		
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

CROSS DELAY

Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	L->R Delay	0.1ms – 1486.0ms	1	14860		
2	R->L Delay	0.1ms – 1486.0ms	1	14860		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Input Select	L, R, L&R	0	2		
5	High Damp	0.1 – 1.0	1	10		
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

TEMPO DELAY
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	32nd/3 – 4thx6	0	19	Table#5	
2	Feedback Level	-63 – 0 – +63	1	127		
3	Feedback High Dump	0.1 – 1.0	1	10		
4	L/R Diffusion	-63ms – 0ms – 63ms	1	127		
5	Lag	-63ms – 0ms – 63ms	1	127		
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40		
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58		
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

TEMPO CROSS DELAY
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time L>R	32nd/3 – 4thx6	0	19	Table#5	
2	Delay Time R>L	32nd/3 – 4thx6	0	19	Table#5	
3	Feedback Level	-63 – 0 – +63	1	127		
4	Input Select	L, R, L&R	0	2		
5	Feedback High Dump	0.1 – 1.0	1	10		
6	Lag	-63ms – 0ms – 63ms	1	127		
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13	EQ Low Frequency	32Hz – 2.0kHz	4	40		
14	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
15	EQ High Frequency	500Hz – 16.0kHz	28	58		
16	EQ High Gain	-12dB – 0dB – +12dB	52	76		

ER/KARAOKE

KARAOKE
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	0.1ms – 400.0ms	0	127	Table#6	
2	Feedback Level	-63 – 0 – +63	1	127		
3	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
4	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Density	0 – 3	0	3		
12						
13						
14						
15						
16						

EARLY REFLECTION
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0	5		
2	Room Size	0.1 – 20.0	0	127	Table#7	
3	Diffusion	0 – 10	0	10		
4	Initial Delay	0.1ms – 200.0ms	0	127	Table#2	
5	Feedback Level	-63 – 0 – +63	1	127		
6	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
7	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Liveness	0 – 10	0	10		
12	Density	0 – 3	0	3		
13	High Damp	0.1 – 1.0	1	10		
14						
15						
16						

GATE REVERB
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Type	TypeA, TypeB	0	1		
2	Room Size	0.1 – 20.0	0	127	Table#7	
3	Diffusion	0 – 10	0	10		
4	Initial Delay	0.1ms – 200.0ms	0	127	Table#2	
5	Feedback Level	-63 – 0 – +63	1	127		
6	HPF Cutoff	Thru, 22Hz – 8.0kHz	0	52	Table#3	
7	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Liveness	0 – 10	0	10		
12	Density	0 – 3	0	3		
13	High Damp	0.1 – 1.0	1	10		
14						
15						
16						

CHORUS

CHORUS
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Delay Offset	0.0ms – 50ms	0	127	Table#9	
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	EQ Mid Frequency (*3)	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain (*3)	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width (*3)	0.1 – 12.0	1	120		
14						
15	Input Mode	Mono, Stereo	0	1		
16						

SYMPHONIC
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Delay Offset	0.0ms – 50ms	0	127	Table#9	
4						
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	EQ Mid Frequency (*3)	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain (*3)	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width (*3)	0.1 – 12.0	1	120		
14						
15						
16						

ENSEMBLE DETUNE
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

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

AMBIENCE CHORUS
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO PMod Depth	0 – 127	0	127		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Delay Offset	0.0ms – 50ms	0	127	Table#9	
5	LFO AMod Depth	0 – 127	0	127		
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14	Ambience	0 – 127	0	127		
15						
16	Connect Mode	Amb->Cho, Cho->Amb	0	1		

AMBIENCE SYMPHONIC
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Delay Offset	0.0ms – 50ms	0	127	Table#9	
4						
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14	Ambience	0 – 127	0	127		
15						
16	Connect Mode	Amb->Sym, Sym->Amb	0	1		

FLANGER

FLANGER
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Delay Offset	0.0ms – 50ms	0	127	Table#9	
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	EQ Mid Frequency (*3)	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain (*3)	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width (*3)	0.1 – 12.0	1	120		
14	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
15						
16						

V FLANGER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	LFO Wave	Triangle, Sine, Random	0	2		
4	Delay Offset	0.09ms – 36.21ms	0	139	Table#10	
5	Feedback Level	-100% – 0% – +100%	0	200		
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14	Modulation Phase	-180deg – 0deg – +180deg	0	16	Table#11	
15	Feedback High Damp	0.1 – 1.0	1	10		
16	Analog Feel	0 – 10	0	10		

TEMPO FLANGER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	
2	LFO Depth	0 – 127	0	127		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Delay Offset	0.0ms – 50ms	0	127	Table#9	
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14	LFO Phase Difference	-180deg – 0deg – +180deg	4	124		
15						
16						

AMBIENCE FLANGER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Feedback Level	-63 – 0 – +63	1	127		
4	Delay Offset	0.0ms – 50ms	0	127	Table#9	
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
15	Ambience	0 – 127	0	127		
16	Connect Mode	Amb->Flg, Flg->Amb	0	1		

PHASER

PHASER1
Block : Chorus, DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Phase Shift Offset	0 – 127	0	127		
4	Feedback Level	-63 – 0 – +63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Stage	4 – 22 (*2)	0	22		
		4 – 12 (48step)	4	12		
12	Diffusion	Mono, Stereo	0	1		
13						
14						
15						
16						

PHASER2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
3	Phase Shift Offset	0 – 127	0	127		
4	Feedback Level	-63 – 0 – +63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Stage	3 – 11	3	11		
12						
13	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
14						
15						
16						

TEMPO PHASER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	
2	LFO Depth	0 – 127	0	127		
3	Phase Shift Offset	0 – 127	0	127		
4	Feedback Level	-63 – 0 – +63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Stage	3 – 11	3	11		
12						
13	LFO Phase Difference	-180deg – 0deg – +180deg	4	124		
14						
15						
16						

DISTORTION/AMP SIMULATOR

V DISTORTION
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Overdrive	0% – 100%	0	100		
2	Device	Transistor, Vintage Tube, Dist1, Dist2, Fuzz	0	4		
3	Speaker Type	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	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14						
15						
16						

V DIST TEMPO DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Overdrive	0% – 100%	0	100		
2	Device	Transistor, Vintage Tube, Dist1, Dist2, Fuzz	0	4		
3	Speaker Type	Flat, Stack, Combo, Twin, Radio, Megaphone	0	5		
4	Presence	0 – 20	0	20		
5	Output Level	0% – 100%	0	100		
6	Delay Time	32nd/3 – 4thx6	0	19	Table#5	
7	Delay Feedback Level	-63 – 0 – +63	1	127		
8	L/R Diffusion	-63ms – 0ms – 63ms	1	127		
9	Lag	-63ms – 0ms – 63ms	1	127		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Delay Mix	0 – 127	0	127		
12	Feedback High Dump	0.1 – 1.0	1	10		
13						
14						
15						
16						

STEREO AMP SIMULATOR
Block : DSP1(Variation), DSP2-4(Insertion)

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

AMP SIMULATOR1
Block : DSP1(Variation), DSP2-4(Insertion)

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

DISTORTION
Block : DSP1(Variation), DSP2-4(Insertion)

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

STEREO DISTORTION
Block : DSP1(Variation), DSP2-4(Insertion)

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

AMP SIMULATOR2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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 – 18kHz, Thru	34	60	Table#3	
4	Output Level	0 – 127	0	127		
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11						
12						
13						
14						
15						
16						

DISTORTION DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

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

COMP DIST DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

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

V DISTORTION DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Overdrive	0% – 100%	0	100		
2	Device	Transistor, Vintage Tube, Dist1, Dist2, Fuzz	0	4		
3	Speaker Type	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	0.1ms – 1638.3ms	1	16383		
7	Delay Time R	0.1ms – 1638.3ms	1	16383		
8	Delay Feedback Time	0.1ms – 1638.3ms	1	16383		
9	Delay Feedback Level	-63 – 0 – +63	1	127		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Delay Mix	0 – 127	0	127		
12	Feedback High Dump	0.1 – 1.0	1	10		
13						
14						
15						
16						

DIST TEMPO DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	32nd/3 – 4thx6	0	19	Table#5	
2	Delay Feedback Level	-63 – 0 – +63	1	127		
3	Delay Mix	0 – 127	0	127		
4	Dist Drive	0 – 127	0	127		
5	Dist Output Level	0 – 127	0	127		
6	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
7	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
8	L/R Diffusion	-63ms – 0ms – 63ms	1	127		
9	Lag	-63ms – 0ms – 63ms	1	127		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14						
15						
16						

COMP DISTORTION
Block : DSP1(Variation), DSP2-4(Insertion)

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

COMP DIST TEMPO DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	32nd/3 – 4thx6	0	19	Table#5	
2	Delay Feedback Level	-63 – 0 – +63	1	127		
3	Delay Mix	0 – 127	0	127		
4	Dist Drive	0 – 127	0	127		
5	Dist Output Level	0 – 127	0	127		
6	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
7	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
8	L/R Diffusion	-63ms – 0ms – 63ms	1	127		
9	Lag	-63ms – 0ms – 63ms	1	127		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Comp. Attack	1ms – 40ms	0	19	Table#12	
12	Comp. Release	10ms – 680ms	0	15	Table#13	
13	Comp. Threshold	-48dB – -6dB	79	121		
14	Comp. Ratio	1.0 – 20.0	0	7	Table#14	
15						
16						

MULTI FX
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Comp. Sustain	Off, 0.1 – 10.0	0	100		
2	Wah SW	Off, Wah Pedal, Auto+ Full, Auto+ Mid, Auto+ Light, Auto- Full, Auto- Mid, Auto- Light	0	7		
3	Wah Pedal	0 – 127	0	127		●
4	Dist SW	Off, Overdrive, Distortion1, Distortion2, Clean, Crunch, Hi-Gain, Modern	0	7		
5	Dist Drive	0.0 – 10.0	0	100		
6	Dist EQ	High Boost, Mid Boost, Mid Cut 1, Mid Cut 2, Mid Cut 3, Low Cut 1, Low Cut 2, High Cut, High/Low	0	8		
7	Dist Tone	0.0 – 10.0	0	100		
8	Dist Presence	0.0 – 10.0	0	100		
9	Output	0 – 127	0	127		
10						
11	Speaker Type	Off, Stack, Twin, Tweed, Oldies, Modern, Mean, Soft, Small, Dip1, Dip2, Metal, Light	0	12		
12	LFO Speed	0.1Hz – 9.925Hz	0	127	Table#15	
13	Phaser SW	Off, Standard, Wide, Vibe, Tremolo	0	4		
14	Delay SW	Off, Delay M, Echo1 M, Echo2 M, Chorus M, Dl Chorus M, Flanger1 M, Flanger2 M, Flanger3 M, Delay St, Echo1 St, Echo2 St, Chorus St, Dl Chorus St, Flanger1 St, Flanger2 St, Flanger3 St	0	16		
15	Delay Ctrl	0 – 127	0	127		
16	Delay Time	0 – 127	0	127		

SMALL STEREO DIST
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Comp. SW	Off, On	0	1		
2	Comp. Sustain	0.0 – 10.0	0	100		
3	Comp. Level	0.0 – 10.0	0	100		
4	Dist Type	Overdrive, Distortion1, Distortion2, Clean, Crunch, Hi-Gain, Modern	1	7		
5	Dist Drive	0.0 – 10.0	0	100		
6	Dist EQ	High Boost, Mid Boost, Mid Cut 1, Mid Cut 2, Mid Cut 3, Low Cut 1, Low Cut 2, High Cut, High/Low	0	8		
7	Dist Tone	0.0 – 10.0	0	100		
8	Dist Presence	0.0 – 10.0	0	100		
9	Output	0 – 127	0	127		●
10						
11	Speaker Type	Off, Stack, Twin, Tweed, Oldies, Modern, Mean, Soft, Small, Dip1, Dip2, Metal, Light	0	12		
12						
13						
14						
15						
16						

BRITISH COMBO
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Mode	Bright, Top Boost	0	1		
2	Normal	0.0 – 10.0	0	100		
3	Brilliant	0.0 – 10.0	0	100		
4	Bass	0.0 – 10.0	0	100		
5						
6	Treble	0.0 – 10.0	0	100		
7	Cut	0.0 – 10.0	0	100		
8						
9	Output	0 – 127	0	127		●
10						
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	0	10		
12	Speaker Air	0 – 2	0	2		
13	Mic Position	Center, Edge	0	1		
14						
15						
16						

BRITISH LEGEND
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Sensitivity	High, Low	0	1		
2	Preamp	0.0 – 10.0	0	100		
3						
4	Bass	0.0 – 10.0	0	100		
5	Middle	0.0 – 10.0	0	100		
6	Treble	0.0 – 10.0	0	100		
7	Presence	0.0 – 10.0	0	100		
8	Master Volume	0.0 – 10.0	0	100		
9	Output	0 – 127	0	127		●
10						
11	Speaker Type	Off, BS 4x12, AC 2x12, AC 1x12, AC 4x10, BC 2x12, AM 4x12, YC 4x12, JC 2x12, OC 2x12, OC 1x8	0	10		
12	Speaker Air	0 – 2	0	2		
13	Mic Position	Center, Edge	0	1		
14						
15						
16						

PITCH CHANGE

PITCH CHANGE1
Block : DSP1(Variation), DSP2-4(Insertion)

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

PITCH CHANGE2
Block : DSP1(Variation), DSP2-4(Insertion)

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

AUTO WAH

AUTO WAH
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12						
13						
14						
15						
16						

AUTO WAH DISTORTION
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	
2	LFO Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
13	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
14	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
15	Output Level	0 – 127	0	127		
16						

TEMPO AUTO WAH1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	
2	LFO Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12						
13						
14						
15						
16						

TEMPO AUTO WAH2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	
2	LFO Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
13	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
14	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
15	Output Level	0 – 127	0	127		
16						

TOUCH WAH/PEDAL WAH

TOUCH WAH1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12						
13						
14						
15						
16						

TOUCH WAH2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
13	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
14	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
15	Output Level	0 – 127	0	127		
16	Release	10ms – 680ms	52	67	Table#16	

WAH DISTORTION DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

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

WAH DIST TEMPO DELAY
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	32nd/3 – 4thx6	0	19	Table#5	
2	Delay Feedback Level	-63 – 0 – +63	1	127		
3	Delay Mix	0 – 127	0	127		
4	Dist Drive	0 – 127	0	127		
5	Dist Output Level	0 – 127	0	127		
6	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
7	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
8	L/R Diffusion	-63ms – 0ms – 63ms	1	127		
9	Lag	-63ms – 0ms – 63ms	1	127		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11	Wah Sensitivity	0 – 127	0	127		
12	Wah Cutoff Frequency Offset	0 – 127	0	127		
13	Wah Resonance	1.0 – 12.0	10	120		
14	Wah Release	10ms – 680ms	52	67	Table#16	
15						
16						

PEDAL WAH1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Pedal Control	0 – 127	0	127		●
2	Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12						
13						
14						
15						
16						

PEDAL WAH2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Pedal Control	0 – 127	0	127		●
2	Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	Drive	0 – 127	0	127		
12	Dist EQ Low Gain	-12dB – 0dB – +12dB	52	76		
13	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
14	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
15	Output Level	0 – 127	0	127		
16						

COMPRESSOR/NOISE GATE

COMPRESSOR
Block : DSP1(Variation), DSP2-4(Insertion)

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

MULTI BAND COMP
Block : DSP1(Variation), DSP2-4(Insertion), Master (96step)

No.	Parameter	Display	Min	Max	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 – 0 – +63	1	127		
4	Mid Gain Offset	-63 – 0 – +63	1	127		
5	High Gain Offset	-63 – 0 – +63	1	127		
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

NOISE GATE
Block : DSP1(Variation), DSP2-4(Insertion)

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

ROTARY SPEAKER/AUTO PAN/TREMOLO

ROTARY SPEAKER1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Rotor Speed Slow	0.00Hz – 2.65Hz	0	63	Table#8	
2	Horn Speed Slow	0.00Hz – 2.65Hz	0	63	Table#8	
3	Rotor Speed Fast	2.69Hz – 39.7Hz	64	127	Table#8	
4	Horn Speed Fast	2.69Hz – 39.7Hz	64	127	Table#8	
5	Slow-Fast Time of Rotor	0 – 127	0	127		
6	Slow-Fast Time of Horn	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<H63	1	127		
10						
11	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
12	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
13	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
14	EQ High Gain	-12dB – 0dB – +12dB	52	76		
15	Mic L-R Angle	0deg – 180deg	0	60		
16	Speed Control	Slow, Fast	0	1		●

ROTARY SPEAKER2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
2	LFO Depth	0 – 127	0	127		
3						
4						
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14						
15						
16						

AUTO PAN1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14						
15						
16						

TREMOLO
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
15	Input Mode	Mono, Stereo	0	1		
16						

2WAY ROTARY SPEAKER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Rotor Speed	0.00Hz – 39.7Hz	0	127	Table#8	●
2	Drive Low	0 – 127	0	127		
3	Drive High	0 – 127	0	127		
4	Low/High Balance	L63>H – L=H – L<H63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +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						

DIST ROTARY SPEAKER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
2	LFO Depth	0 – 127	0	127		
3						
4						
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11						
12						
13						
14	Drive	0 – 127	0	127		
15	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
16	Output Level	0 – 127	0	127		

DIST 2WAY ROTARY SP
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Rotor Speed	0.00Hz – 39.7Hz	0	127	Table#8	●
2	Drive Low	0 – 127	0	127		
3	Drive High	0 – 127	0	127		
4	Low/High Balance	L63>H – L=H – L<H63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	Crossover Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	Mic L-R Angle	0deg – 180deg	0	60		
13						
14	Drive	0 – 127	0	127		
15	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
16	Output Level	0 – 127	0	127		

AMP ROTARY SPEAKER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
2	LFO Depth	0 – 127	0	127		
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11						
12						
13						
14	Drive	0 – 127	0	127		
15	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
16	Output Level	0 – 127	0	127		

AMP 2WAY ROTARY SP
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Rotor Speed	0.00Hz – 39.7Hz	0	127	Table#8	●
2	Drive Low	0 – 127	0	127		
3	Drive High	0 – 127	0	127		
4	Low/High Balance	L63>H – L=H – L<H63	1	127		
5						
6	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	Crossover Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	Mic L-R Angle	0deg – 180deg	0	60		
13	AMP Type	Off, Stack, Combo, Tube	0	3		
14	Drive	0 – 127	0	127		
15	LPF Cutoff	1.0kHz – 18kHz, Thru	34	60	Table#3	
16	Output Level	0 – 127	0	127		

VIBE VIBRATE
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Rotor Speed	0.00Hz – 39.7Hz	0	127	Table#8	
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
15	Input Mode	Mono, Stereo	0	1		
16	Rotor SW	Off, On	0	1		●

TEMPO TREMOLO
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14	LFO Phase Difference	-180deg – 0deg – +180deg(resolution=3deg.)	4	124		
15	Input Mode	Mono, Stereo	0	1		
16						

AUTO PAN2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0	127	Table#8	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14						
15	Input Mode	Mono, Stereo	0	1		
16						

TEMPO AUTO PAN1
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14						
15						
16						

TEMPO AUTO PAN2
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	LFO Frequency	16th – 4thx16	5	29	Table#5	●
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10						
11	EQ Mid Frequency	100Hz – 10.0kHz	14	54	Table#3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
13	EQ Mid Width	0.1 – 12.0	1	120		
14						
15	Input Mode	Mono, Stereo	0	1		
16						

EQ/ENHANCER

3BAND EQ
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
2	EQ Mid Frequency	100Hz – 16.0kHz	14	58	Table#3	
3	EQ Mid Gain	-12dB – 0dB – +12dB	52	76		
4	EQ Mid Width	0.1 – 12.0	1	120		
5	EQ High Gain	-12dB – 0dB – +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						

2BAND EQ
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	EQ Low Frequency	32Hz – 2.0kHz	4	40	Table#3	
2	EQ Low Gain	-12dB – 0dB – +12dB	52	76		
3	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
4	EQ High Gain	-12dB – 0dB – +12dB	52	76		
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

HARMONIC ENHANCER
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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						

MISC

VOICE CANCELAR
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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						

AMBIENCE
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	Table	Control
1	Delay Time	0.0ms – 50ms	0	127	Table#9	
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	-12dB – 0dB – +12dB	52	76		
8	EQ High Frequency	500Hz – 16.0kHz	28	58	Table#3	
9	EQ High Gain	-12dB – 0dB – +12dB	52	76		
10	Dry/Wet	D63>W – D=W – D<W63	1	127		●
11						
12						
13						
14						
15						
16						

TALKING MODULATION
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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		
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

ISOLATOR
Block : DSP1(Variation), DSP2-4(Insertion)

No.	Parameter	Display	Min	Max	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						

NO EFFECT
Block : Reverb, Chorus, DSP1(Variation)

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

THRU
Block : DSP1(Variation), DSP2-4(Insertion)

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

Effect Data Assign Table / Effektdaten-Zuordnungstabelle / Tableau d'assignation des données d'effets / Tabla de asignación de datos para efectos / エフェクトデータアサインテーブル

Table#1
Reverb Time[s]

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#2
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#3
EQ Frequency[Hz]

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 Width;Depth;Height[m]

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#5
Tempo

Data	Value	Data	Value	Data	Value
0	32nd/3	32	4thX19	64	4thX51
1	64th.	33	4thX20	65	4thX52
2	32nd	34	4thX21	66	4thX53
3	16th/3	35	4thX22	67	4thX54
4	32nd.	36	4thX23	68	4thX55
5	16th	37	4thX24	69	4thX56
6	8th/3	38	4thX25	70	4thX57
7	16th.	39	4thX26	71	4thX58
8	8th	40	4thX27	72	4thX59
9	4th/3	41	4thX28	73	4thX60
10	8th.	42	4thX29	74	4thX61
11	4th	43	4thX30	75	4thX62
12	2nd/3	44	4thX31	76	4thX63
13	4th.	45	4thX32	77	4thX64
14	2nd	46	4thX33		
15	Whole/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#6
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#7
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#8
LFO Frequency[Hz]

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#9
Modulation Delay Offset[ms]

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

Table#10
V-Flanger Delay Offset[ms]

Data	Value	Data	Value	Data	Value	Data	Value	Data	Value
0	0.09	32	0.97	64	4.72	96	17.32	128	31.38
1	0.11	33	1.02	65	4.96	97	17.76	129	31.82
2	0.13	34	1.07	66	5.21	98	18.20	130	32.25
3	0.15	35	1.12	67	5.47	99	18.64	131	32.69
4	0.18	36	1.18	68	5.75	100	19.08	132	33.13
5	0.20	37	1.24	69	6.04	101	19.52	133	33.57
6	0.22	38	1.30	70	6.35	102	19.96	134	34.01
7	0.24	39	1.37	71	6.67	103	20.40	135	34.45
8	0.27	40	1.44	72	7.01	104	20.83	136	34.89
9	0.29	41	1.51	73	7.37	105	21.27	137	35.33
10	0.31	42	1.59	74	7.74	106	21.71	138	35.77
11	0.34	43	1.67	75	8.13	107	22.15	139	36.21
12	0.36	44	1.76	76	8.54	108	22.59		
13	0.38	45	1.84	77	8.97	109	23.03		
14	0.40	46	1.94	78	9.41	110	23.47		
15	0.42	47	2.04	79	9.85	111	23.91		
16	0.43	48	2.14	80	10.29	112	24.35		
17	0.46	49	2.25	81	10.73	113	24.79		
18	0.48	50	2.36	82	11.17	114	25.23		
19	0.51	51	2.48	83	11.61	115	25.66		
20	0.53	52	2.61	84	12.05	116	26.10		
21	0.56	53	2.74	85	12.49	117	26.54		
22	0.59	54	2.88	86	12.93	118	26.98		
23	0.62	55	3.03	87	13.37	119	27.42		
24	0.65	56	3.18	88	13.81	120	27.86		
25	0.68	57	3.34	89	14.24	121	28.30		
26	0.72	58	3.51	90	14.68	122	28.74		
27	0.76	59	3.69	91	15.12	123	29.18		
28	0.79	60	3.87	92	15.56	124	29.62		
29	0.83	61	4.07	93	16.00	125	30.06		
30	0.88	62	4.28	94	16.44	126	30.50		
31	0.92	63	4.49	95	16.88	127	30.94		

Table#11
V-Flanger Modulation Phase[deg]

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

Table#12
Compressor Attack Time[ms]

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#13
Compressor Release Time[ms]

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#14
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#15
EgMultiFx LFO Freq[Hz]

Data	Value	Data	Value	Data	Value	Data	Value
0	0.100	32	0.318	64	1.009	96	3.238
1	0.103	33	0.329	65	1.051	97	3.365
2	0.105	34	0.342	66	1.093	98	3.491
3	0.110	35	0.352	67	1.125	99	3.617
4	0.113	36	0.368	68	1.167	100	3.743
5	0.118	37	0.379	69	1.22	101	3.869
6	0.124	38	0.394	70	1.262	102	4.037
7	0.129	39	0.410	71	1.304	103	4.164
8	0.131	40	0.426	72	1.346	104	4.332
9	0.137	41	0.442	73	1.409	105	4.500
10	0.142	42	0.457	74	1.451	106	4.668
11	0.147	43	0.473	75	1.514	107	4.837
12	0.152	44	0.489	76	1.556	108	5.005
13	0.158	45	0.51	77	1.619	109	5.173
14	0.166	46	0.526	78	1.682	110	5.383
15	0.171	47	0.547	79	1.745	111	5.552
16	0.176	48	0.568	80	1.808	112	5.804
17	0.184	49	0.589	81	1.872	113	5.972
18	0.192	50	0.61	82	1.956	114	6.224
19	0.197	51	0.631	83	2.019	115	6.393
20	0.205	52	0.657	84	2.103	116	6.645
21	0.213	53	0.673	85	2.166	117	6.897
22	0.221	54	0.704	86	2.25	118	7.15
23	0.229	55	0.725	87	2.334	119	7.402
24	0.237	56	0.757	88	2.418	120	7.738
25	0.247	57	0.789	89	2.502	121	7.991
26	0.255	58	0.81	90	2.608	122	8.327
27	0.265	59	0.841	91	2.692	123	8.58
28	0.276	60	0.873	92	2.776	124	8.916
29	0.284	61	0.904	93	2.902	125	9.253
30	0.294	62	0.946	94	2.986	126	9.589
31	0.308	63	0.978	95	3.112	127	9.925

Table#16
Wah Release Time[ms]

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

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
Main															
Song File	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Style File	X	X	X	O	X	-	X	-	X	X	X	O	STYLE	-	
Multi Pad File	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	MULTI PAD	-	
Part On/Off(Right1)	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Part On/Off(Right2)	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Part On/Off(Left)	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Audio Player File	X	X	X	X	X	-	X	-	X	X	X	O	AUDIO		
Song															
Sync. Start	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Channel On/Off	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Song Function															
Score															
Left On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Right On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Chord On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Lyric/Pedal On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Note Name On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Fingering On/Off	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Size	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Score>Setup															
Left Ch	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Right Ch	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Key Signature	X	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Quantize	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Note Name	O	X	X	X	X	-	O	SCORE SETTING	X	X	X	X	-	-	
Lyrics															
Text File	X	X	X	X	X	-	X	-	X	X	X	O	TEXT	-	
Viewer Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Setting															
Left Channel	O	X	X	X	X	-	O	-	X	X	X	X	-	-	
Right Channel	O	X	X	X	X	-	O	-	X	X	X	X	-	-	
Auto Ch Set	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Guide Mode	O	X	X	X	X	-	O	GUIDE SETTING	X	X	X	X	-	-	
Repeat Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Fast Forward Type	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Lyrics Language	O	X	X	X	X	-	O	LYRICS SETTING	X	X	X	X	-	-	
Quick Start	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Tempo															
Master Tempo	X	X	X	X	X	-	O	TEMPO	O	X	X	O	TEMPO	-	
Creator>Song Creator															
Setup															
Setup Select	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Style															
Accompaniment On/Off	X	X	X	X	X	-	X	-	X	O (On)	X	O	STYLE	-	
OTS Link	X	X	X	O (On)	X	-	X	-	X	X	X	X	-	-	
Auto Fill In	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Section	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Synchro Start	X	X	X	X	X	-	X	-	X	O (On)	X	O	STYLE	-	
Synchro Stop	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Function Menu>Style Setting															
Style Setting															
OTS Link Timing	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Stop ACMP	O	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Dynamics Control	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Synchro Stop Window	O	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Section Set	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Tempo Hold	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Part On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Function Menu>Split Point/Chord Fingering															
Split Point															
Chord Detection Area	O	X	X	X	X	-	X	-	X	X	X	O	STYLE		
Manual Bass	O	X	X	X	X	-	X	-	X	X	X	O	STYLE		
Split Point(Left)	O	X	X	X	X	-	X	-	X	X	X	O	STYLE	SPLIT POINT	
Split Point(Style)	O	X	X	X	X	-	O	GUIDE SETTING	X	X	X	O	STYLE	SPLIT POINT	
Chord Fingering															
Fingering Type	O	X	X	X	X	-	X	-	X	X	X	O	STYLE	FINGERING	

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
Creator>Style Creator															
Basic															
Pattern Length	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Tempo	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Beat	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Parameter															
Play Root	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Play Chord	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
NTR	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
NTT	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
NTT BASS	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
High Key	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Note Limit Low	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Note Limit High	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
RTR	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Music Finder															
Sort By	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Sort Order	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Style Tempo	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Information On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Search1/2 Display															
Search Result	X	X	X	O	X	-	X	-	X	X	X	X	-	-	
Record(=Property Setting)	X	X	X	O	X	-	X	-	X	X	X	X	-	-	
Multi Pad															
Sync Start	X	X	X	X	X	-	X	-	X	X	X	O	MULTI PAD	-	
Voice Effect(On Panel)															
Harmony/Arpeggio On/Off	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
DSP(Right1)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP(Right2)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP(Left)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Variation(Right1)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Variation(Right2)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Variation(Left)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Voice Open/Save>Voice Set															
Voice(Right1)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Voice(Right2)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Voice(Left)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Common															
Volume for Balance(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Volume for Balance(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Volume for Balance(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Touch Sense Depth(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Touch Sense Depth(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Touch Sense Depth(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Touch Sense Offset(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Touch Sense Offset(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Touch Sense Offset(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Part Octave for Right1/Right2	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Part Octave for Left	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Controller															
Modulation Low Pass Filter Control (Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation Low Pass Filter Control (Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation Low Pass Filter Control(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Modulation Amplitude Control(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation Amplitude Control(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation Amplitude Control(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Modulation LFO PMOD Depth(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO PMOD Depth(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO PMOD Depth(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Modulation LFO FMOD Depth(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO FMOD Depth(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO FMOD Depth(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Modulation LFO AMOD Depth(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO AMOD Depth(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Modulation LFO AMOD Depth(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Sound															
EG Attack(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
EG Attack(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
EG Attack(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
EG Decay(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
EG Decay(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
EG Decay(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
EG Release(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
EG Release(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
EG Release(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Vibrato Depth(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Depth(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Depth(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Vibrato Speed(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Speed(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Speed(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Vibrato Delay(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Delay(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Vibrato Delay(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Effect/EQ															
Panel Sustain(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Panel Sustain(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Panel Sustain(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
DSP Type(Right1)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Type(Right1) Effect Parameter	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE		
DSP Type(Right2)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Type(Right2) Effect Parameter	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE		
DSP Type(Left)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
DSP Type(Left) Effect Parameter	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE		
DSP Variation Value(Right1)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Variation Value(Right2)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Variation Value(Left)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Main>Mixing Console>Vol/Voice															
Volume															
Offset Volume Song	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Offset Volume Style	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Volume Multi Pad	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	MULTI PAD	-	
Volume Left	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Volume Right1	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Volume Right2	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Part Volume Song	X	X	X	X	X	-	O	VOLUME	X	X	X	X	-	-	
Part Volume Style	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Keyboard Volume	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
WLAN Volume	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Audio Volume	O	X	X	X	X	-	X	-	X	X	X	O	AUDIO	-	
AUX In Volume	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
PanPot															
Offset Pan Style	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Pan Multi Pad	X	X	X	X	X	-	X	-	X	X	X	O	MULTI PAD	-	
Pan Left	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Pan Right1	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Pan Right2	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Part Pan Song	X	X	X	X	X	-	O	PAN	X	X	X	X	-	-	
Part Pan Style	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Voice															
Voice(Right1)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Voice(Right2)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Voice(Left)	X	X	X	X	O	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Voice(Style Part)	X	X	X	X	X	-	X	-	O	X	X	O	STYLE		
Voice(Song Part)	X	X	X	X	X	-	O	VOICE	X	X	X	X	-		
Main>Mixing Console>Filter															
Brightness															
Brightness Song Part	X	X	X	X	X	-	O	FILTER	X	X	X	X	-	-	
Brightness Style Part	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Brightness Right1	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Brightness Right2	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Brightness Left	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Harmonic Content															
Harmonic Content Song Part	X	X	X	X	X	-	O	FILTER	X	X	X	X	-	-	
Harmonic Content Style Part	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Harmonic Content Right1	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Harmonic Content Right2	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Harmonic Content Left	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Main>Mixing Console>Tune															
Octave															
Octave Right1	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Octave Right2	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Octave Left	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
Tuning															
Tune Right1	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Tune Right2	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Tune Left	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Portamento Time															
Portamento Time Right1	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Portamento Time Right2	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Portamento Time Left	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Pitch Bend Range															
Pitch Bend Range Right1	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Pitch Bend Range Right2	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Pitch Bend Range Left	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Transpose															
Master Transpose	X	X	X	X	X	-	X	-	X	X	X	O	TRANSPOSE	-	
Song Transpose	X	X	X	X	X	-	X	-	X	X	X	O	TRANSPOSE	-	
Keyboard Transpose	X	X	X	X	X	-	X	-	X	X	X	O	TRANSPOSE	-	
Main>Mixing Console>Master Compressor															
Master Compressor Type	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Master Compressor Threshold Offset	X	X	O	X	X	-	X	-	X	X	X	X	-	-	
Master Compressor Ratio Offset	X	X	O	X	X	-	X	-	X	X	X	X	-	-	
Master Compressor Output Gain Offset	X	X	O	X	X	-	X	-	X	X	X	X	-	-	
Master Compressor On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Main>Mixing Console>MEQ															
Master EQ Type	O	X	X	X	X	-	X	-	X	X	X	X	-	MASTER EQ	
Master EQ Parameter	X	X	O	X	X	-	X	-	X	X	X	X	-	MASTER EQ	
Main>Mixing Console>Effect															
Reverb Type															
Reverb Type	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	REVERB TYPE	
Reverb Return Level	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	REVERB RETURN LEVEL	
Reverb Depth															
Reverb Depth Style Part	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Reverb Depth Song Part	X	X	X	X	X	-	O	EFFECT	X	X	X	X	-		
Reverb Depth Multi Pad	X	X	X	X	X	-	X	-	X	X	X	O	MULTI PAD	-	
Reverb Depth Right1	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE		
Reverb Depth Right2	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE		
Reverb Depth Left	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Reverb Depth Style(Offset)	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
Chorus Type															
Chorus Type	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	-	
Chorus Return Level	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	CHORUS RETURN LEVEL	
Chorus Depth															
Chorus Depth Style Part	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
Chorus Depth Song Part	X	X	X	X	X	-	O	EFFECT	X	X	X	X	-	-	
Chorus Depth Multi Pad	X	X	X	X	X	-	X	-	X	X	X	O	MULTI PAD	-	
Chorus Depth Right1	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Chorus Depth Right2	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Chorus Depth Left	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Chorus Depth Style(Offset)	X	X	X	X	X	-	X	-	X	X	X	O	STYLE	-	
DSP Type															
DSP1(Variation) Type	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	-	
DSP1(Variation) Return Level	X	X	X	X	X	-	O	EFFECT	O	X	X	O	STYLE/SONG	DSP RETURN LEVEL	
DSP2Type	X	X	X	X	X	-	O	EFFECT	X	X	X	O	VOICE/ STYLE/SONG	-	
DSP3Type	X	X	X	X	X	-	O	EFFECT	X	X	X	O	VOICE/ STYLE/SONG	-	
DSP Depth															
DSP Depth Style Part	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	
DSP Depth Song Part	X	X	X	X	X	-	O	EFFECT	X	X	X	X	-	-	
DSP Depth Right1	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Depth Right2	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
DSP Depth Left	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Insertion Type															
Insertion Type(Right1)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Insertion Type(Right2)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Insertion Type(Left)	X	X	X	X	O	Effect	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Insertion Type(Song)	X	X	X	X	X	-	O	EFFECT	X	X	X	X	-	-	
Effect Parameter(Reverb/Chorus/DSP1)	X	X	O	X	X	-	O	EFFECT	X	X	X	X	-		
Effect Parameter(Reverb/Chorus/ DSP2–4)	X	X	O	X	X	-	O	EFFECT	X	O	X	O	VOICE/STYLE		
Main>Channel>Channel On/Off Popup															
Channel On/Off(Song)	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Channel On/Off(Style)	X	X	X	X	X	-	X	-	O	X	X	O	STYLE	-	

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
Function Menu>MIDI															
MIDI Template															
Template No.	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Preset Template Name	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Function Menu>MIDI>EDIT															
System															
Local Control	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Clock	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Transmit Clock	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Receive Transpose	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Receive Start/Stop	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
SysEx Transmit	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
SysEx Receive	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Chord SysEx Transmit	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Chord SysEx Receive	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Transmit															
Part Select	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Ch Select	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Filter(for each part)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Receive															
Ch Select	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Part Select	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Filter(for each part)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Bass(On Bass Note)															
Bass(On Bass Note)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Chord Detect															
Chord Detect	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
Function Menu>Mater Tune/Scale Tune															
Master Tune															
Master Tune	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Scale Tune															
Scale Type	X	X	X	X	X	-	X	-	X	X	X	O	SCALE	-	
Base Note	X	X	X	X	X	-	X	-	X	X	X	O	SCALE	-	
Tune	X	X	X	X	X	-	X	-	X	X	X	O	SCALE	-	
Part Select (Right1/Right2,Left,Style, Multi Pad)	X	X	X	X	X	-	X	-	X	X	X	O	SCALE	-	
Function Menu>Controller															
Live Control															
Live Control Assign Type	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 1-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 2-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 3-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 4-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 5-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 6-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 7-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 8-1	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 1-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 2-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 3-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 4-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 5-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 6-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 7-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Live Control Assign Set 8-2	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Foot Pedal															
Pedal Function	X	X	X	X	X	-	X	-	X	X	X	O	PEDAL	-	
Pedal Settings	X	X	X	X	X	-	X	-	X	X	X	O	PEDAL	-	
Pedal Polarity	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Keyboard/Panel															
Touch Response	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Initial Touch Off Level	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
Initial Touch Part On/Off	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
Modulation Wheel Part On/Off	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
Transpose Assign	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Function Menu>Regist Sequence/Freeze															
Regist Sequence															
Regist Sequence Data	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
Regist Sequence Enable	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Regist(+)Pedal	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Regist(-)Pedal	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Regist Sequence End	X	X	X	X	X	-	X	-	X	X	X	O	-	-	

Parameter	System				VoiceSet	Voice Set Group	Song		Style		Multi Pad	Registration		Parameter Lock Group	Note
	Setup	MIDI Setup	User Effect	Music Finder			Song	Song Setup Group	Style Data	OTS		Regist	Freeze Group		
Freeze Group															
Freeze Group Setting	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Voice Set															
Voice Set Group Right1 On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Voice Set Group Right2 On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Voice Set Group Left On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Voice Effect															
Initial Touch On/Off	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
Poly/Mono(Right1)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Poly/Mono(Right2)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	VOICE	-	
Poly/Mono(Left)	X	X	X	X	O	Voice	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Panel Sustain	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
Type	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Volume	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Speed	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Assign	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Chord Note Only	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Touch Limit	X	X	X	X	O	Harmony/ Arpeggio	O	KEYBOARD VOICE	X	O	X	O	HARMONY/ ARPEGGIO	-	
Function Menu>Utility															
Configration1															
Fade In Time	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Fade Out Time	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Fade Out Hold Time	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Metronome Volume	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Metronome Sound	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Time Signature	X	X	X	X	X	-	O	-	O	X	X	X	-	-	
Tap Count Percussion	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Tap Count Velocity	X	X	X	X	X	-	O	KEYBOARD VOICE	X	O	X	O	STYLE	-	
Auto Power Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Configration2															
Speaker	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Display Style Tempo	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Display Voice Number	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Display Time Stamp	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Voice Category Button Options	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Popup Display Time	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Arpeggio Quantize	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Arpeggio Hold Sw	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Parameter Lock															
Parameter Lock	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
USB															
Song Auto Open	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Function Menu>System															
Owner															
Language	O	X	X	X	X	-	X	-	X	X	X	X	-	-	Cannot be reset with Factory Reset.
Owner Name	O	X	X	X	X	-	X	-	X	X	X	X	-	-	Cannot be reset with Factory Reset.
Registration															
Regist Memory Contents	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Regist Contents Name	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
Transpose															
Transpose	X	X	X	X	X	-	X	-	X	X	X	O	TRANSPOSE	-	
Upper Octave															
Upper Octave	X	X	X	X	X	-	X	-	X	X	X	O	VOICE	-	
USB Audio Player															
Audio Volume	O	X	X	X	X	-	X	-	X	X	X	O	AUDIO	-	
Audio Player Repeat Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Audio Player File	X	X	X	X	X	-	X	-	X	X	X	O	AUDIO	-	

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers. Hexa-decimal 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
0	00	0000 0000
1	01	0000 0001
2	02	0000 0010
3	03	0000 0011
4	04	0000 0100
5	05	0000 0101
6	06	0000 0110
7	07	0000 0111
8	08	0000 1000
9	09	0000 1001
10	0A	0000 1010
11	0B	0000 1011
12	0C	0000 1100
13	0D	0000 1101
14	0E	0000 1110
15	0F	0000 1111
16	10	0001 0000
17	11	0001 0001
18	12	0001 0010
19	13	0001 0011
20	14	0001 0100
21	15	0001 0101
22	16	0001 0110
23	17	0001 0111
24	18	0001 1000
25	19	0001 1001
26	1A	0001 1010
27	1B	0001 1011
28	1C	0001 1100
29	1D	0001 1101
30	1E	0001 1110
31	1F	0001 1111

Decimal	Hexadecimal	Binary
32	20	0010 0000
33	21	0010 0001
34	22	0010 0010
35	23	0010 0011
36	24	0010 0100
37	25	0010 0101
38	26	0010 0110
39	27	0010 0111
40	28	0010 1000
41	29	0010 1001
42	2A	0010 1010
43	2B	0010 1011
44	2C	0010 1100
45	2D	0010 1101
46	2E	0010 1110
47	2F	0010 1111
48	30	0011 0000
49	31	0011 0001
50	32	0011 0010
51	33	0011 0011
52	34	0011 0100
53	35	0011 0101
54	36	0011 0110
55	37	0011 0111
56	38	0011 1000
57	39	0011 1001
58	3A	0011 1010
59	3B	0011 1011
60	3C	0011 1100
61	3D	0011 1101
62	3E	0011 1110
63	3F	0011 1111

Decimal	Hexadecimal	Binary
64	40	0100 0000
65	41	0100 0001
66	42	0100 0010
67	43	0100 0011
68	44	0100 0100
69	45	0100 0101
70	46	0100 0110
71	47	0100 0111
72	48	0100 1000
73	49	0100 1001
74	4A	0100 1010
75	4B	0100 1011
76	4C	0100 1100
77	4D	0100 1101
78	4E	0100 1110
79	4F	0100 1111
80	50	0101 0000
81	51	0101 0001
82	52	0101 0010
83	53	0101 0011
84	54	0101 0100
85	55	0101 0101
86	56	0101 0110
87	57	0101 0111
88	58	0101 1000
89	59	0101 1001
90	5A	0101 1010
91	5B	0101 1011
92	5C	0101 1100
93	5D	0101 1101
94	5E	0101 1110
95	5F	0101 1111

Decimal	Hexadecimal	Binary
96	60	0110 0000
97	61	0110 0001
98	62	0110 0010
99	63	0110 0011
100	64	0110 0100
101	65	0110 0101
102	66	0110 0110
103	67	0110 0111
104	68	0110 1000
105	69	0110 1001
106	6A	0110 1010
107	6B	0110 1011
108	6C	0110 1100
109	6D	0110 1101
110	6E	0110 1110
111	6F	0110 1111
112	70	0111 0000
113	71	0111 0001
114	72	0111 0010
115	73	0111 0011
116	74	0111 0100
117	75	0111 0101
118	76	0111 0110
119	77	0111 0111
120	78	0111 1000
121	79	0111 1001
122	7A	0111 1010
123	7B	0111 1011
124	7C	0111 1100
125	7D	0111 1101
126	7E	0111 1110
127	7F	0111 1111

- Except the table above, for example 144–159 (decimal)/9nH/10010000–1001 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/F0H/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.

- aaH (hexadecimal)/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.

MIDI CHANNEL MESSAGE (1)

[MIDI] [Internal sequencer]

MIDI Events	Status byte		1st Data byte			2nd Data byte			Voice	MIDI Reception					MIDI Transmission					PLAY		REC
	Status		Data	(HEX)	Parameter	Data	(HEX)	Parameter	Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
Key Off [GM1][GM2] [GS]	8nH	(n:Channel Number)	kk		Key no. (0–127)	vv		Velocity(0–127)	O	O	O	O	O	O	X	X	X	O	X	O	X	X
Key On [GM1][GM2] [GS]	9nH	(n:Channel Number)	kk		Key no. (0–127)	vv		Key On :vv=1–127 Key Off :vv=0	O	O	O	O	O	O	●	O	O	O	●	O	X	O
Control Change [GM2][GS]	BnH		0	(00H)	Bank Select MSB	0 8 64 104 118 119 120 121 126 127	(00H) (08H) (40H) (68H) (76H) (77H) (78H) (79H) (7EH) (7FH)	Normal Mega voice SFX voice Normal GS Rhythm GS Normal GM2 Rhythm GM2 Normal SFX kit Drum kit	O	O	O	O (Right1)	O	O	●	O	●	●	X	O	O	O
			1	(01H)	Modulation [GM1][GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	●	O	O	O
			5	(05H)	Portamento Time [GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	X	O	●	O	X	O	X	O	O	O
			6	(06H)	Data Entry MSB [GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	X	O
			7	(07H)	Main Volume [GM1][GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	●	●	●	X	O	O	O
			10	(0AH)	Panpot [GM1][GM2][GS]	0–127	(00H... 7FH)	L64...C...R63	O	O	O	O (All Keyboard parts)	O	O	●	●	●	●	X	O	O	O
			11	(0BH)	Expression [GM1][GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	●	●	●	●	O	O	O
			16	(10H)	General Purpose Controller	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	X	O	×	O	X	O	×	O	O	X
			32	(20H)	Bank Select LSB [GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (Right1)	O	O	●	O	●	●	X	O	O	O
			38	(26H)	Data Entry LSB [GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	O	X	O	X	O	X	O
			64	(40H)	Sustain(Damper) [GM1][GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
			65	(41H)	Portamento [GM2][GS]	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	O	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
			66	(42H)	Sostenuto [GM2][GS]	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	O	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
			67	(43H)	Soft Pedal [GM2][GS]	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	O	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
			71	(47H)	Harmonic Content [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	●	O	●	●	X	O	O	O
			72	(48H)	Release Time [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
			73	(49H)	Attack Time [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
			74	(4AH)	Brightness [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	●	O	●	●	X	O	O	O
			75	(4BH)	Decay Time [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	X	X	X	O	X	O	O	X
			76	(4CH)	Vibrato Rate [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	X	X	X	O	X	O	O	X
			77	(4DH)	Vibrato Depth [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	X	X	X	O	X	O	O	X
			78	(4EH)	Vibrato Delay [GM2]	0–127	(00H... 7FH)	-64...0...+63	O	O	O	O (All Keyboard parts)	O	O	X	X	X	O	X	O	O	X
			80	(50H)	General Purpose Controller (Articuration 1)	0–127	(00H... 7FH)	0: OFF 127:ON	X	O	X	X	X	X	X	X	O	O	X	O	O	O
			81	(51H)	General Purpose Controller (Articuration 2)	0–127	(00H... 7FH)	0: OFF 127:ON	X	O	X	X	X	X	X	X	O	O	X	O	O	O
			84	(54H)	Portamento Control	0–127	(00H... 7FH)	Key no. (0–127)	O	O	O	X	O	O	O	O	●	O	X	O	X	O
			91	(5BH)	Effect1 Depth (Reverb Send Level) [GM2][GS]	0–127	(00H... 7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	●	●	●	X	O	O	O

●: Transmitted via panel operations and keyboard/controller performances. O : Available
*1: Same operation as when receiving All Note Off.
*2: Same operation as when receiving All Note Off. OMNI ON is not enabled.

[GM1]...GM Required Parameter
[GM2]...GM Level2 Required Parameter

										[MIDI]													[Internal sequencer]	
MIDI Events	**Status byte**		**1st Data byte**			**2nd Data byte**			**Voice**	**MIDI Reception**					**MIDI Transmission**					**PLAY**		**REC**
	Status		**Data**	**(HEX)**	**Parameter**	**Data**	**(HEX)**	**Parameter**	**Regular/ Drum/ Natural/ Organ Voice**	**Song**	**Right1/ Right2/ Left**	**Keyboard**	**Style**	**Extra**	**Right1/ Right2/ Left**	**M.Pad**	**Style**	**Song**	**Upper Lower**	**PLAY**	**REW**	**From panel (Right1/ Right2/ Left)**
Control Change [GM2][GS]	BnH		93	(5DH)	Effect3 Depth (Chorus Send Level) [GM2][GS]	0–127	(00H...7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	●	●	●	X	O	O	O
			94	(5EH)	Effect4 Depth (Variation Send Level)	0–127	(00H...7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	O	O	●	●	X	O	O	X Multi Part Recording
			96	(60H)	RPN Increment	-	-	The data byte is ignored.	O	O	O	X	O	O	X	O	X	O	X	O	X	X
			97	(61H)	RPN Decrement	-	-	The data byte is ignored.	O	O	O	X	O	O	X	O	X	O	X	O	X	X
			98	(62H)	NRPN LSB [GS]	0–127	(00H...7FH)	Data	O	O	O	X	O	O	●	O	O	O	X	O	O	O
			99	(63H)	NRPN MSB [GS]	0–127	(00H...7FH)	Data	O	O	O	X	O	O	●	O	O	O	X	O	O	O
			100	(64H)	RPN LSB [GM2][GS]	0–127	(00H...7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
			101	(65H)	RPN MSB [GM2][GS]	0–127	(00H...7FH)	Data	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
Mode Message	BnH	(n:Channel Number)	120	(78H)	All Sound Off [GM2][GS]	0	(00H)	Data	O	O	O	O (All Keyboard parts) (Same operation as when All Note Off)	O	O	X	O	X	O	X	O	X	X
			121	(79H)	Reset All Controllers [GM1][GM2][GS]	0	(00H)	Data	O	O	X	X	X	X	X	O	X	O	X	O	X	X
			122	(7AH)	Local Control	0 127	(00H) (7FH)	OFF ON	-			O			X	X	X	X	X	X	X	X
			123	(7BH)	All Note Off [GM1][GM2][GS]	0	(00H)	Data	O	O	O	O (All Keyboard parts)	O	O	X	O	X	O	X	O	X	X
			124	(7CH)	Omni Off [GM2][GS]	0	(00H)	Data	O	O *1	X	X	X	X	X	O	X	O	X	O	X	X
			125	(7DH)	Omni On [GM2][GS]	0	(00H)	Data	O	O *2	X	X	X	X	X	O	X	O	X	O	X	X
			126	(7EH)	Mono [GM2][GS]	0–16	(00H...10H)	Data	O	O	X	X	X	X	X	O	X	O	X	O	X	X
			127	(7FH)	Poly [GM2][GS]	0	(00H)	Data	O	O	X	X	X	X	X	O	X	O	X	O	X	X
Program Change [GM1][GM2][GS]	CnH	(n:Channel Number)	pp	(00H...7FH)	Voice Number (0–127)	-	-	-	O	O	O	O (Right1)	O	O	●	O	●	●	X	O	O	O
Channel After Touch [GM1][GM2][GS]	DnH	(n:Channel Number)	vv	(00H...7FH)	Data	-	-	-	O	O	O	O (All Keyboard parts)	X	O	×	O	×	O	×	O	X	O
Polyphonic After Touch [GS]	AnH	(n:Channel Number)	kk	(00H...7FH)	Key no. (0–127)	vv	(00H...7FH)	Data	O	O	X	X	X	X	X	X	X	O	X	O	X	X
Pitch Bend Change [GM1][GM2][GS]	EnH	(n:Channel Number)	cc	(00H...7FH)	LSB	dd	(00H...7FH)	MSB	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	●	O	O	O
Realtime Message	F8H	MIDI Clock	-		-	-		-	-	O (Received when the Clock is set to MIDI A, USB1, or USB2.)					O (Transmitted when the Clock is set to Internal and the Transmit Clock is set to on.)					-	-	-
	FAH	Start	-		-	-		-	-	O (Received when the Clock is set to MIDI A, USB1, or USB2.)					O (Transmitted when the Transmit Clock is set to on.)					-	-	-
	FBH	Continue	-		-	-		-	-	X					X					-	-	-
	FCH	Stop	-		-	-		-	-	O (Received when the Clock is set to MIDI A, USB1, or USB2.)					O (Transmitted when the Transmit Clock is set to on.)					-	-	-
	FEH	Active Sense [GM2]	-		-	-		-	-	O					O					-	-	-
	FFH	System Reset	-		-	-		-	-	X					X					-	-	-

●: Transmitted via panel operations and keyboard/controller performances. O : Available

*1: Same operation as when receiving All Note Off.

*2: Same operation as when receiving All Note Off. OMNI ON is not enabled.

[GM1]...GM Required Parameter

[GM2]...GM Level2 Required Parameter

MIDI CHANNEL MESSAGE (2)

NRPN (Non Registered Parameter Number) [MIDI] [Internal sequencer]

NRPN		Data Entry		Parameter	Data Range	Voice	MIDI Reception					MIDI Transmission					PLAY		REC
MSB	LSB	MSB	LSB			Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
01H	08H	mmH	--	Vibrato Rate [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	09H	mmH	--	Vibrato Depth [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	0AH	mmH	--	Vibrato Delay [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	20H	mmH	--	Low Pass Filter Cutoff Frequency [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X	X	O	X	O	X	O	O	X
01H	21H	mmH	--	Low Pass Filter Resonance [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X	X	O	X	O	X	O	O	X
01H	30H	mmH	--	EQ Bass Gain	mm : 00H-40H-7FH (-64...0...+63)	O	X	X	X	X	X	X	X	X	O	X	O	O	X
01H	31H	mmH	--	EQ Treble Gain	mm : 00H-40H-7FH (-64...0...+63)	O	X	X	X	X	X	X	X	X	O	X	O	O	X
01H	34H	mmH	--	EQ Bass Frequency	mm : 04H-28H (32...2.0k[Hz])	O	X	X	X	X	X	X	X	X	O	X	O	O	X
01H	35H	mmH	--	EQ Treble Frequency	mm : 1CH-3AH (500...16.0k[Hz])	O	X	X	X	X	X	X	X	X	O	X	O	O	X
01H	63H	mmH	--	EG Attack Time [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X	X	O	X	O	X	O	O	X
01H	64H	mmH	--	EG Decay Time [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	66H	mmH	--	EG Release [GS]	mm : 00H-40H-7FH (-64...0...+63)	O	O	X	X	O	X	X	O	X	O	X	O	O	X
14H	rrH	mmH	--	Drum Low Pass Filter Cutoff Frequency	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
15H	rrH	mmH	--	Drum Low Pass Filter Resonance	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
16H	rrH	mmH	--	Drum EG Attack Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
17H	rrH	mmH	--	Drum EG Decay Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
18H	rrH	mmH	--	Drum Pitch Coarse [GS]	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
19H	rrH	mmH	--	Drum Pitch Fine	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
1AH	rrH	mmH	--	Drum Level [GS]	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
1CH	rrH	mmH	--	Drum Pan [GS]	rr : drum instrument note number mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
1DH	rrH	mmH	--	Drum Reverb Send Level [GS]	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
1EH	rrH	mmH	--	Drum Chorus Send Level [GS]	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
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 (Drum Only)	O	X	X	X	X	X	X	O	O	X	O	X	X
30H	rrH	mmH	--	Drum EQ Bass Gain	rr : drum instrument note number mm : 00H-7FH (0...127)	X	X	X	X	X	X	X	X	X	O	X	X	X	X
31H	rrH	mmH	--	Drum EQ Treble Gain	rr : drum instrument note number mm : 00H-7FH (0...127)	X	X	X	X	X	X	X	X	X	O	X	X	X	X
34H	rrH	mmH	--	Drum EQ Bass Frequency	rr : drum instrument note number mm : 04H-28H (32...2.0k[Hz])	X	X	X	X	X	X	X	X	X	O	X	X	X	X
35H	rrH	mmH	--	Drum EQ Treble Frequency	rr : drum instrument note number mm : 1CH-3AH (500...16.0k[Hz])	X	X	X	X	X	X	X	X	X	O	X	X	X	X

● : Transmitted via panel operations and keyboard/controller performances. O : Available

NRPN MSB: 14H-35H (for drums) message is accepted as long as the channel is set with a drum voice.
Data Entry LSB: Ignored.

RPN (Registered Parameter Number) [MIDI] [Internal sequencer]

RPN		Data Entry		Parameter	Data Range	Voice	MIDI Reception					MIDI Transmission					PLAY		REC
MSB	LSB	MSB	LSB			Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
00H	00H	mmH	--	Pitch Bend Sensitivity [GM1][GM2][GS]	mm : 00H-18H (0...+24[semitones])	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
00H	01H	mmH	llH	Fine Tune [GM1][GM2][GS]	mm ll : 00H 00H -100[cent] : : mm ll : 40H 00H 0[cent] : : mm ll : 7FH 7FH 100[cent]	O	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
00H	02H	mmH	--	Coarse Tune [GM1][GM2][GS]	mm : 28H-40H-58H (-24...0...+24[semitones])	O	O	O	O (All Keyboard parts)	O	O	X	O	O	O	X	O	O	X
00H	05H	mmH	llH	Modulation Sensitivity [GM2]	mm: Specified in semitone steps ll: Specified in 100/128 cent steps	O	O	X	X	X	X	X	X	X	O	X	O	X	X
7FH	7FH	--	--	Null [GM2][GS]	-	O	O	O	O (All Keyboard parts)	O	O	X	O	O	O	X	O	X	X

● : Transmitted via panel operations and keyboard/controller performances. O : Available

[GM1]...GM Required Parameter
[GM2]...GM Level2 Required Parameter

XG PARAMETER CHANGE TABLE

* Not received when Receive System Exclusive Message Parameters is set to off.
* Not transmitted when Transmit System Exclusive Message Parameters is set to off.

MIDI Parameter Change table (XG SYSTEM)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
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	X	X
		04	1	00-7F	MASTER VOLUME	0...127	7F	O	O (Available for extra parts and Song)					O					O	O	X
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	X	X					X					X	X	X
		06	1	28-58	TRANSPOSE	-24...0...+24[semitones]	40	O	O (Available for extra parts and Song)					O					O	O	X
		7D	1	N	DRUM SETUP RESET	N:Drum setup number	-	O (Drum Only)	O (Available for extra parts and Song)					O					O	X	X
		7E	1	00	XG SYSTEM ON	00=XG system ON	-	O	O (Available for extra parts and Song)					O					O	X	O
		7F	1	00	ALL PARAMETER RESET	00=ON	-	O	O (Available for extra parts and Song)					O					O	X	X

TOTAL SIZE 07

● : Transmitted via panel operations O : Available

MIDI Parameter Change table (SYSTEM INFORMATION)

Address (H)			Size (H)	Data (H)	Parameter	Description	[MIDI] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
							Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
01	00	00 : 0D 0E 0F	E : 1 1	20-7F : 20-7F	Model Name 1 : Model Name 14 NOT USED NOT USED	32...127(ASCII CHARACTER) : 32...127(ASCII CHARACTER)	-	-					O (Available only when receiving requests via MIDI)					-	-	-

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] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	00	2	00-7F 00-7F	REVERB TYPE MSB REVERB TYPE LSB	Refer to Effect Parameter List Refer to Effect Parameter List	01(=HALL1) 00	O	O					●					O	O	O
		02	1	00-7F	REVERB PARAMETER 1	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		03	1	00-7F	REVERB PARAMETER 2	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		04	1	00-7F	REVERB PARAMETER 3	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		05	1	00-7F	REVERB PARAMETER 4	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		06	1	00-7F	REVERB PARAMETER 5	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		07	1	00-7F	REVERB PARAMETER 6	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		08	1	00-7F	REVERB PARAMETER 7	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		09	1	00-7F	REVERB PARAMETER 8	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		0A	1	00-7F	REVERB PARAMETER 9	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		0B	1	00-7F	REVERB PARAMETER 10	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB(0...64...127)	40	O	O					●					O	O	O
		0D	1	01-7F	REVERB PAN	L63...C...R63	40	O	O					O					O	O	X

TOTAL SIZE 0E

02	01	10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		11	1	00-7F	REVERB PARAMETER 12	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		12	1	00-7F	REVERB PARAMETER 13	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		13	1	00-7F	REVERB PARAMETER 14	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		14	1	00-7F	REVERB PARAMETER 15	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O
		15	1	00-7F	REVERB PARAMETER 16	Refer to Effect Parameter List	Depends on Reverb Type	O	O					●					O	O	O

TOTAL SIZE 06

● : Transmitted via panel operations O : Available

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	20	2	00-7F 00-7F	CHORUS TYPE MSB CHORUS TYPE LSB	Refer to Effect Parameter List Refer to Effect Parameter List	41(=CHORUS1) 00	O		O						●			O	O	O
		22	1	00-7F	CHORUS PARAMETER 1	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		23	1	00-7F	CHORUS PARAMETER 2	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		24	1	00-7F	CHORUS PARAMETER 3	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		25	1	00-7F	CHORUS PARAMETER 4	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		26	1	00-7F	CHORUS PARAMETER 5	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		27	1	00-7F	CHORUS PARAMETER 6	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		28	1	00-7F	CHORUS PARAMETER 7	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		29	1	00-7F	CHORUS PARAMETER 8	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		2A	1	00-7F	CHORUS PARAMETER 9	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		2B	1	00-7F	CHORUS PARAMETER 10	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...64...127)	40	O		O						●			O	O	O
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40	O		O						O			O	O	X
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB(0...64...127)	00	O		O						O			O	O	X

TOTAL SIZE 0F

02	01	30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		31	1	00-7F	CHORUS PARAMETER 12	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		32	1	00-7F	CHORUS PARAMETER 13	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		33	1	00-7F	CHORUS PARAMETER 14	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		34	1	00-7F	CHORUS PARAMETER 15	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O
		35	1	00-7F	CHORUS PARAMETER 16	Refer to Effect Parameter List	Depends on Chorus Type	O		O						●			O	O	O

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB	Refer to Effect Parameter List Refer to Effect Parameter List	05(=DELAY L,C,R) 00	O		O						●			O	O	O
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		44	2	00-7F 00-7F	VARIATION PARAMETER 2 MSB VARIATION PARAMETER 2 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		46	2	00-7F 00-7F	VARIATION PARAMETER 3 MSB VARIATION PARAMETER 3 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	Depends on Variation Type	O		O						●			O	O	O
		56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB(0...64...127)	40	O		O						●			O	O	O
		57	1	01-7F	VARIATION PAN	L63...C...R63	40	O		O						O			O	O	X
		58	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB(0...64...127)	00	O		O						O			O	O	X
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB(0...64...127)	00	O		O						O			O	O	X
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00	O		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	O
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40	O		O						O			O	O	X
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40	O		O						O			O	O	X
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40	O		O						O			O	O	X
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40	O		O						O			O	O	X
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40	O		O						O			O	O	X

TOTAL SIZE 21

02	01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O
		71	1	00-7F	VARIATION PARAMETER 12	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O
		72	1	00-7F	VARIATION PARAMETER 13	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O
		73	1	00-7F	VARIATION PARAMETER 14	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O
		74	1	00-7F	VARIATION PARAMETER 15	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O
		75	1	00-7F	VARIATION PARAMETER 16	Refer to Effect Parameter List	Depends on Variation Type	O	O	●	O	O	O

TOTAL SIZE 06

● : Transmitted via panel operations O : Available

MIDI Parameter Change table (MULTI EQ)

								[MIDI]										[Internal sequencer]		
Address (H)			Size (H)	Data (H)	Parameter	Description		Voice	MIDI Reception					MIDI Transmission					PLAY		REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	40	00	1	00-04	EQ TYPE	flat, jazz, pops, rock, classic	*The MULTI EQ Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O				O					O	X	X
		01	1	34-4C	EQ GAIN1	-12...0...+12[dB]		O		O				●					O	X	X
		02	1	04-28	EQ FREQUENCY1	32...2.0k[Hz]		O		O				●					O	X	X
		03	1	01-78	EQ Q1	0.1...12.0		O		O				O					O	X	X
		04	1	00-01	EQ SHAPE1	shelving, peaking		O		O				O					O	X	X
		05	1	34-4C	EQ GAIN2	-12...0...+12[dB]		O		O				●					O	X	X
		06	1	0E-36	EQ FREQUENCY2	100...10.0k[Hz]		O		O				●					O	X	X
		07	1	01-78	EQ Q2	0.1...12.0		O		O				●					O	X	X
		08	1		NOT USED			-		-				-					-	-	-
		09	1	34-4C	EQ GAIN3	-12...0...+12[dB]		O		O				●					O	X	X
		0A	1	0E-36	EQ FREQUENCY3	100...10.0k[Hz]		O		O				●					O	X	X
		0B	1	01-78	EQ Q3	0.1...12.0		O		O				●					O	X	X
		0C	1		NOT USED			-		-				-					-	-	-
		0D	1	34-4C	EQ GAIN4	-12...0...+12[dB]		O		O				●					O	X	X
		0E	1	0E-36	EQ FREQUENCY4	100...10.0k[Hz]		O		O				●					O	X	X
		0F	1	01-78	EQ Q4	0.1...12.0		O		O				●					O	X	X
		10	1		NOT USED			-		-				-					-	-	-
		11	1	34-4C	EQ GAIN5	-12...0...+12[dB]		O		O				●					O	X	X
		12	1	1C-3A	EQ FREQUENCY5	0.5k...16.0k[Hz]		O		O				●					O	X	X
		13	1	01-78	EQ Q5	0.1...12.0		O		O				O					O	X	X
		14	1	00-01	EQ SHAPE5	shelving, peaking		O		O				O					O	X	X

TOTAL SIZE 15

● : Transmitted via panel operations O : Available

		20	1	34 - 4C	EQ GAIN6	-12 - +12[dB]	*The MULTI EQ Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O				●					O	X	X
		21	1	0E - 36	EQ FREQUENCY6	100-10.0[kHz]		O		O				●					O	X	X
		22	1	01 - 78	EQ Q6	0.1-12.0		O		O				●					O	X	X
		23	1		NOT USED			O		O				O					O	X	X
		24	1	34 - 4C	EQ GAIN7	-12 - +12[dB]		O		O				●					O	X	X
		25	1	0E - 36	EQ FREQUENCY7	100-10.0[kHz]		O		O				●					O	X	X
		26	1	01 - 78	EQ Q7	0.1-12.0		O		O				●					O	X	X
		27	1		NOT USED			-		-				-					-	-	-
		28	1	34 - 4C	EQ GAIN8	-12 - +12[dB]		O		O				●					O	X	X
		29	1	0E - 36	EQ FREQUENCY8	100-10.0[kHz]		O		O				●					O	X	X
		2A	1	01 - 78	EQ Q8	0.1-12.0		O		O				O					O	X	X
		2B	1		NOT USED			-		-				-					-	-	-
		2C	1	34 - 4C	EQ GAIN9	-12 - +12[dB]		O		O				●					O	X	X
		2D	1	0E - 36	EQ FREQUENCY9	100-10.0[kHz]		O		O				●					O	X	X
		2E	1	01 - 78	EQ Q9	0.1-12.0		O		O				●					O	X	X
		2F	1		NOT USED			-		-				-					-	-	-
		30	1	34 - 4C	EQ GAIN10	-12 - +12[dB]		O		O				●					O	X	X
		31	1	0E - 36	EQ FREQUENCY10	100-10.0[kHz]		O		O				●					O	X	X
		32	1	01 - 78	EQ Q10	0.1-12.0		O		O				●					O	X	X
		33	1		NOT USED			O		O				O					O	X	X

TOTAL SIZE 14

● : Transmitted via panel operations O : Available

MIDI Parameter Change table (EFFECT2)

								[MIDI]										[Internal sequencer]		
Address (H)			Size (H)	Data (H)	Parameter	Description		Voice	MIDI Reception					MIDI Transmission					PLAY		REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
03	n	00	2	00-7F 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB	Refer to Effect Parameter List Refer to Effect Parameter List	*The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O				●					O	O	O
		02	1	00-7F	INSERTION EFFECT PARAMETER 1	Refer to Effect Parameter List		O		O				●					O	O	O
		03	1	00-7F	INSERTION EFFECT PARAMETER 2	Refer to Effect Parameter List		O		O				●					O	O	O
		04	1	00-7F	INSERTION EFFECT PARAMETER 3	Refer to Effect Parameter List		O		O				●					O	O	O
		05	1	00-7F	INSERTION EFFECT PARAMETER 4	Refer to Effect Parameter List		O		O				●					O	O	O
		06	1	00-7F	INSERTION EFFECT PARAMETER 5	Refer to Effect Parameter List		O		O				●					O	O	O

Address (H)			Size (H)	Data (H)	Parameter	Description		Voice	MIDI Reception					MIDI Transmission					PLAY		REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
		07	1	00-7F	INSERTION EFFECT PARAMETER 6	Refer to Effect Parameter List	*The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O						●			O	O	O
		08	1	00-7F	INSERTION EFFECT PARAMETER 7	Refer to Effect Parameter List		O		O						●			O	O	O
		09	1	00-7F	INSERTION EFFECT PARAMETER 8	Refer to Effect Parameter List		O		O						●			O	O	O
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9	Refer to Effect Parameter List		O		O						●			O	O	O
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	Refer to Effect Parameter List		O		O						●			O	O	O
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	Reception: Part1...16(0...15) Transmission: Part1...16(0...15) AD(64) OFF(127)		O		O						●			O	O	O
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63		O		O						O			O	O	X
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63		O		O						O			O	O	X
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63		O		O						O			O	O	X
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63		O		O						O			O	O	X
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63		O		O						O			O	O	O
TOTAL SIZE			12																		
		20	1	00-7F	INSERTION EFFECT PARAMETER 11	Refer to Effect Parameter List	*The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O						●			O	O	O
		21	1	00-7F	INSERTION EFFECT PARAMETER 12	Refer to Effect Parameter List		O		O						●			O	O	O
		22	1	00-7F	INSERTION EFFECT PARAMETER 13	Refer to Effect Parameter List		O		O						●			O	O	O
		23	1	00-7F	INSERTION EFFECT PARAMETER 14	Refer to Effect Parameter List		O		O						●			O	O	O
		24	1	00-7F	INSERTION EFFECT PARAMETER 15	Refer to Effect Parameter List		O		O						●			O	O	O
		25	1	00-7F	INSERTION EFFECT PARAMETER 16	Refer to Effect Parameter List		O		O						●			O	O	O
TOTAL SIZE			6																		
		30	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 1 MSB INSERTION EFFECT PARAMETER 1 LSB	Refer to Effect Parameter List Refer to Effect Parameter List	*The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	O		O						●			O	O	O
		32	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 2 MSB INSERTION EFFECT PARAMETER 2 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		34	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 3 MSB INSERTION EFFECT PARAMETER 3 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		36	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 4 MSB INSERTION EFFECT PARAMETER 4 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		38	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 5 MSB INSERTION EFFECT PARAMETER 5 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		3A	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 6 MSB INSERTION EFFECT PARAMETER 6 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		3C	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 7 MSB INSERTION EFFECT PARAMETER 7 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		3E	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 8 MSB INSERTION EFFECT PARAMETER 8 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		40	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 9 MSB INSERTION EFFECT PARAMETER 9 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
		42	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 10 MSB INSERTION EFFECT PARAMETER 10 LSB	Refer to Effect Parameter List Refer to Effect Parameter List		O		O						●			O	O	O
TOTAL SIZE			14																		

● : Transmitted via panel operations O : Available

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

n : insertion effect number (n = 0–2)

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.

Type MSB of the effect types that require Parameter MSB are: 5, 6, 7, 8, 95, 96, 97, 98, 104.

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)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice	MIDI Reception					MIDI Transmission					[Internal sequencer] PLAY		REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
08	nn	00	1	00-20	ELEMENT RESERVE	0...32	part10,26=0, other parts=2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		01	1	00-7F	BANK SELECT MSB	0...127	part10=7F, other parts=00	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		02	1	00-7F	BANK SELECT LSB	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		03	1	00-7F	PROGRAM NUMBER	1...128	00	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		04	1	00-0F, 7F	Rcv CHANNEL	1...16, OFF	Part No.	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	O	O	X	X	X	X	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	O	X	X	O	X	X	X	X	O	X	O	X	X
		07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1...2	part10=02, other parts=00	O	O	X	X	X	X	●	X	●	●	X	O	X	O
		08	1	28-58	NOTE SHIFT	-24...0...+24[semitones]	40	O	O	O	X	O	O	X	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	O	X	O	O	X	X	X	O	X	O	X	X
		0B	1	00-7F	VOLUME	0...127	64	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		0C	1	00-7F	VELOCITY SENSE DEPTH	0...127	40	O	O	O	X	X	O	●	O	X	O	X	O	O	O
		0D	1	00-7F	VELOCITY SENSE OFFSET	0...127	40	O	O	O	X	X	O	●	O	X	O	X	O	O	O
		0E	1	00-7F	PAN	RND,L63...C...R63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		0F	1	00-7F	NOTE LIMIT LOW	C-2...G8	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		10	1	00-7F	NOTE LIMIT HIGH	C-2...G8	7F	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		11	1	00-7F	DRY LEVEL	0...127	7F	O	O	O	X	O	O	X	O	O	O	X	O	O	O
		12	1	00-7F	CHORUS SEND	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		13	1	00-7F	REVERB SEND	0...127	28	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		14	1	00-7F	VARIATION SEND	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	O	O
		15	1	00-7F	VIBRATO RATE	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		16	1	00-7F	VIBRATO DEPTH	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		17	1	00-7F	VIBRATO DELAY	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		18	1	00-7F	FILTER CUTOFF FREQUENCY	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		19	1	00-7F	FILTER RESONANCE	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		1A	1	00-7F	EG ATTACK TIME	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		1B	1	00-7F	EG DECAY TIME	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		1C	1	00-7F	EG RELEASE TIME	-64...0...+63	40	O	O	O	X	O	O	X	X	X	O	X	O	O	X
		1D	1	28-58	MW PITCH CONTROL	-24...0...+24[semitones]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	X	O	●	O	X	O	X	O	O	O
		1F	1	00-7F	MW AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		20	1	00-7F	MW LFO PMOD DEPTH	0...127	0A	O	O	O	X	X	O	●	O	O	O	X	O	O	O
		21	1	00-7F	MW LFO FMOD DEPTH	0...127	00	O	O	O	X	X	O	●	O	O	O	X	O	O	O
		22	1	00-7F	MW LFO AMOD DEPTH	0...127	00	O	O	O	X	X	O	●	O	O	O	X	O	O	O
		23	1	28-58	BEND PITCH CONTROL	-24...0...+24[semitones]	42	O	O	O	X	O	O	X	X	X	O	X	O	X	X
		24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	O	O	X	X	X	O	X	O	X	X
		25	1	00-7F	BEND AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	O	O	X	X	X	O	X	O	X	X
		26	1	00-7F	BEND LFO PMOD DEPTH	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	X	X
		27	1	00-7F	BEND LFO FMOD DEPTH	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	X	X
		28	1	00-7F	BEND LFO AMOD DEPTH	0...127	00	O	O	O	X	O	O	X	X	X	O	X	O	X	X

TOTAL SIZE 29

		30	1	00-01	Rcv PITCH BEND	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		31	1	00-01	Rcv CH AFTER TOUCH(CAT)	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		34	1	00-01	Rcv POLY AFTER TOUCH(PAT)	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		36	1	00-01	Rcv RPN	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		37	1	00-01	Rcv NRPN	OFF, ON	XGmode=01, GMmode=00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		38	1	00-01	Rcv MODULATION	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		39	1	00-01	Rcv VOLUME	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3A	1	00-01	Rcv PAN	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3C	1	00-01	Rcv HOLD1	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		40	1	00-01	Rcv BANK SELECT	OFF, ON	01	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		41	1	00-7F	SCALE TUNING C	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		42	1	00-7F	SCALE TUNING C#	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		43	1	00-7F	SCALE TUNING D	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		44	1	00-7F	SCALE TUNING D#	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		45	1	00-7F	SCALE TUNING E	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		46	1	00-7F	SCALE TUNING F	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		47	1	00-7F	SCALE TUNING F#	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		48	1	00-7F	SCALE TUNING G	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		49	1	00-7F	SCALE TUNING G#	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		4A	1	00-7F	SCALE TUNING A	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		4B	1	00-7F	SCALE TUNING A#	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		4C	1	00-7F	SCALE TUNING B	-64...0...+63[cent]	40	O	O	O	X	O	O	●	●	●	O	X	O	O	O
		4D	1	28-58	CAT PITCH CONTROL	-24...0...+24[semitones]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X

		4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	X	O	×	O	×	O	×	O	O	X
		4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		50	1	00-7F	CAT LFO PMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	×	O	×	O	O	X
		51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	×	O	×	O	O	X
		52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	×	O	×	O	O	X
		53	1	28-58	PAT PITCH CONTROL	-24...0...+24[semitones]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		55	1	00-7F	PAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		56	1	00-7F	PAT LFO PMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		57	1	00-7F	PAT LFO FMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		58	1	00-7F	PAT LFO AMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		5A	1	28-58	AC1 PITCH CONTROL	-24...0...+24[semitones]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	O	X	X	O	×	O	X	O	X	O	O	O
		5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	X	O	X	O	O	O
		5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	X	O	X	O	O	O
		5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	O	O	O	X	X	O	×	O	X	O	X	O	O	O
		60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	O	O	O	X	X	X	X	X	X	O	X	O	O	O
		61	1	28-58	AC2 PITCH CONTROL	-24...0...+24[semitones]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		63	1	00-7F	AC2 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		64	1	00-7F	AC2 LFO PMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		65	1	00-7F	AC2 LFO FMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		66	1	00-7F	AC2 LFO AMOD DEPTH	0...127	00	O	O	X	X	X	X	X	X	X	O	X	O	X	X
		67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	O	O	O	X	X	O	X	X	X	O	X	O	O	X
		68	1	00-7F	PORTAMENTO TIME	0...127	00	O	O	O	X	X	O	X	X	X	O	X	O	O	X
		69	1	00-7F	PITCH EG INITIAL LEVEL	-64...0...+63	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		6A	1	00-7F	PITCH EG ATTACK TIME	-64...0...+63	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		6B	1	00-7F	PITCH EG RELEASE LEVEL	-64...0...+63	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		6C	1	00-7F	PITCH EG RELEASE TIME	-64...0...+63	40	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		6D	1	01-7F	VELOCITY LIMIT LOW	1...127	01	O	O	O	X	X	O	X	X	X	O	X	O	X	X
		6E	1	01-7F	VELOCITY LIMIT HIGH	1...127	7F	O	O	O	X	X	O	X	X	X	O	X	O	X	X

TOTAL SIZE 3F

		70	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		71	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		72	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	O	X	X	X	X	X	X	X	X	O	X	O	O	O
		73	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	O	X	X	X	X	X	X	X	X	O	X	O	O	O

TOTAL SIZE 04

		74	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		75	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		76	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	O	X	X	X	X	X	X	X	X	O	X	O	O	O
		77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	O	X	X	X	X	X	X	X	X	O	X	O	O	O
		78	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		79	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

● : Transmitted via panel operations O : Available

0A	nn	40	1	00-7F	MW OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	O	X	X	O	●	O	X	O	X	O	O	O
		41	1	00-7F	BEND OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	X	X	X	X	X	O	X	O	O	X
		42	1	00-7F	CAT OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	O	X	X	O	×	O	×	O	X	O	O	X
		43	1	00-7F	PAT OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	X	X	X	X	X	O	X	O	O	X
		44	1	00-7F	AC1 OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	O	X	X	O	×	O	X	O	X	O	O	O
		45	1	00-7F	AC2 OFFSET LEVEL CONTROL	-100 - 100[%]	40	O	O	X	X	X	X	X	X	X	O	X	O	O	X

TOTAL SIZE 06

● : Transmitted via panel operations O : Available

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] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
								Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
3n	rr	00	1	00-7F	PITCH COARSE	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		01	1	00-7F	PITCH FINE	-64...0...+63[cent]	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		02	1	00-7F	LEVEL	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		03	1	00-7F	ALTERNATE GROUP	OFF, 1...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		04	1	00-7F	PAN	RND, L63...C...R63	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		05	1	00-7F	REVERB SEND	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		06	1	00-7F	CHORUS SEND	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		07	1	00-7F	VARIATION SEND	0...127	7F	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		09	1	00-01	Rcv NOTE OFF	OFF, ON	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0C	1	00-7F	LOW PASS FILTER RESONANCE	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	O (Drum Only)	O (Available only for song parts)					O					O	X	X
TOTAL SIZE			10																		
		20	1	00-7F	EQ BASS GAIN	-12...+12[dB]	40	X	X					O					X	X	X
		21	1	00-7F	EQ TREBLE GAIN	-12...+12[dB]	40	X	X					O					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					O					X	X	X
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	X	X					O					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																		
		70	4	00-7F	SOURCE DRUM KIT (Bank Select MSB)	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
				00-7F	SOURCE DRUM KIT (Bank Select LSB)	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
				00-7F	SOURCE DRUM KIT (Program Number)	0...127	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
				0D-5B	SOURCE DRUM KIT (Note Number)	C-1...G5	Depends on the note	O (Drum Only)	O (Available only for song parts)					O					O	X	X
TOTAL SIZE			04																		

n: Drum Setup Number (0-1)
rr: note number(0D-5B)

In the following cases, the instrument will initialize all Drum Setups.

- XG SYSTEM ON received
- GM SYSTEM ON received
- GM LEVEL2 SYSTEM ON received
- GS RESET received
- DRUM SETUP RESET received (only when in XG mode)

[Note]
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)

[GM1]...GM Required Parameter
[GM2]...GM Level2 Required Parameter

- Not received when Receive System Exclusive Message Parameters is set to off.
- Not transmitted when Transmit System Exclusive Message Parameters is set to off.

System Exclusive Messages (Universal Real Time Messages)

		[MIDI]											[Internal sequencer]		
MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission					PLAY		REC
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
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 0ssssssss SS = Volume LSB 0ttttttt TT = Volume MSB 11110111 F7 = End of Exclusive	O	O (Available for extra parts and Song)					O					O	O	X
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 0ssssssss SS = Fine Tuning LSB 0ttttttt TT = Fine Tuning MSB 11110111 F7 = End of Exclusive	O	O (Available for extra parts and Song)					O					O	X	X
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 Coarse Tuning 00000000 00 0ttttttt TT = Coarse Tuning MSB 11110111 F7 = End of Exclusive	O	O (Available for extra parts and Song)					O					O	X	X
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 00000001 01 = Slot path LSB = 1 (Reverb) 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 Type0...8 0:RoomS 1:RoomM 2:RoomL 3:HallM 4:HallL(default) 8:GM Plate pp=1 Reverb Time0...127 0...11.0s	O	O					O					O	O	X
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 00000010 02 = Slot path LSB = 2 (Chorus) 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 Type0...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	O	O					O					O	O	X

[MIDI] [Internal sequencer]

MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission					PLAY		REC
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
Channel Pressure (Aftertouch) [GM2]	F0 7F XN 09 01 0M PP RR ... F7	O	O	X	X	X	X	X	X	X	O	X	O	X	X
Controller (Control Change) [GM2]	F0 7F XN 09 03 0M CC PP RR ... F7	O	O	X	X	X	X	X	X	X	O	X	O	X	X
Key-Based Instrument Control [GM2]	F0 7F XN 0A 01 0M KK CC VV ... F7	O (Drum Only)	O	X	X	X	X	X	X	X	O	X	O	X	X

Channel Pressure (Aftertouch) [GM2]

```
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
```

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...+24semitones	40H
pp=01 Filter Cutoff Control	00H–7FH	-9600...0...+9450cents	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

Controller (Control Change) [GM2]

```
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  = Range
    :         :
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...+24semitones	40H
pp=01 Filter Cutoff Control	00H–7FH	-9600...0...+9450cents	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

Key-Based Instrument Control [GM2]

```
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
00000001  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%	40H
CC=0AH Pan	00H–7FH (absolute)	L63...C...R63	(Preset value)
CC=5BH Reverb Send Level	00H–7FH (absolute)	0...Max	(Preset value)
CC=5DH Chorus Send Level	00H–7FH (absolute)	0...Max	(Preset value)

System Exclusive Messages (Universal Non-Real Time Messages)

MIDI Event	Data Format	[MIDI] Voice	[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Internal sequencer] PLAY		[Internal sequencer] REC
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
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 (Available for extra parts and Song)					O					O	X	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 (Available for extra parts and Song)					O					O	X	X
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 (Available for extra parts and Song)					O					O	X	X
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 byte2 - bits0 to 6 = channel 8 to 14 0mmmmmmm MM = Channel byte2 - bits0 to 6 = channel 1 to 7 0sssssss SS = 12byte 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 (Available for extra parts and Song)					O					O	X	X

System Exclusive Messages (2)

- Not received when Receive System Exclusive Message Parameters is set to off.
- Not transmitted when Transmit System Exclusive Message Parameters is set to off.

System Exclusive Messages (Style)

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower
Section Control	F0 43 7E 00 ss dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01111110 7E = Style 00000000 00 = 0ssssssss ss = Switch No. 00H INTRO 1 01H INTRO 2 02H INTRO 3 03H INTRO 4 08H MAIN A 09H MAIN B 0AH MAIN C 0BH MAIN D 10H FILL IN AA 11H FILL IN BB 12H FILL IN CC 13H FILL IN DD 18H BREAK FILL 20H ENDING 1 21H ENDING 2 22H ENDING 3 23H ENDING 4 0ddddddd dd = Switch On/Off 00H(Off) 7FH(On) 11110111 F7 = End of Exclusive	-			O					●		
Tempo Control	F0 43 7E 01 t4 t3 t2 t1 F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01111110 7E = Style 00000001 01 = 0ttttttt t4 = tempo4 0ttttttt t3 = tempo3 0ttttttt t2 = tempo2 0ttttttt t1 = tempo1 11110111	-			O					●		
Chord Control	F0 43 7E tt d1 d2 d3 d4 F7 Type1 (tt=02) 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01111110 7E = Style 00000010 02 = type 1 0ddddddd d1 = chord root(cr) 0ddddddd d2 = chord type(ct) 0ddddddd d3 = bass note(bn) 0ddddddd d4 = bass type(bt) 11110111 F7 = End of Exclusive cr : Chord Root 0fffnnnn fff: b or #, nnnn: note(root) 0000nnnn 0n bbb 0001nnnn 1n bb 0010nnnn 2n b 0011nnnn 3n natural 0100nnnn 4n # 0101nnnn 5n ## 0110nnnn 6n ### 0fff0000 x0 reserved 0fff0001 x1 C 0fff0010 x2 D 0fff0011 x3 E 0fff0100 x4 F 0fff0101 x5 G 0fff0110 x6 A 0fff0111 x7 B ct : Chord Type 0 - 34,127 00000000 00 0 Maj 00000001 01 1 Maj6 00000010 02 2 Maj7 00000011 03 3 Maj7(#11) 00000100 04 4 Maj(9) 00000101 05 5 Maj7(9) 00000110 06 6 Maj6(9) 00000111 07 7 aug 00001000 08 8 min 00001001 09 9 min6 00001010 0A 10 min7 00001011 0B 11 min7b5 00001100 0C 12 min(9) 00001101 0D 13 min7(9) 00001110 0E 14 min7(11) 00001111 0F 15 minMaj7 00010000 10 16 minMaj7(9) 00010001 11 17 dim 00010010 12 18 dim7 00010011 13 19 7th 00010100 14 20 7sus4 00010101 15 21 7b5 00010110 16 22 7(9) 00010111 17 23 7(#11) 00011000 18 24 7(13) 00011001 19 25 7(b9) 00011010 1A 26 7(b13) 00011011 1B 27 7(#9) 00011100 1C 28 Maj7aug 00011101 1D 29 7aug 00011110 1E 30 1+8 00011111 1F 31 1+5 00100000 20 32 sus4 00100001 21 33 1+2+5 00100010 22 34 cc bn : On Bass Note Same as Chord root 127:No bass chord bt : Bass Chord Same as Chord type 127:No bass chord * Not received when Receive Chord System Exclusive Message Parameters is set to off. * Not transmitted when Transmit Chord System Exclusive Message Parameters is set to off.	-			O					●		
	Type2 (tt=03) 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01111110 7E = Style 00000011 03 = type 2 0ddddddd dd = note1 0ddddddd dd = note2 0ddddddd dd = note3 : : 0ddddddd dd = note10 11110111 F7 = End of Exclusive	-			O					X		

● : Transmitted via panel operations O : Available

System Exclusive Messages (XG)

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower
XG Parameter Changes	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 XG Parameter Change Table.	O * Refer to XG Parameter Change Table.					O * Refer to XG 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 0000nnnn 0n = 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 XG Parameter Change Table.	O * Refer to XG Parameter Change Table.					O * Refer to XG 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	-	O * Refer to XG Parameter Change Table.					O * Refer to XG 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	-	O * Refer to XG Parameter Change Table.					O * Refer to XG Parameter Change Table.				

System Exclusive Messages (Others)

11110000 F0 = Exclusive status
01000011 43 = YAMAHA ID
01110011 73 = Clavinova ID
: :
11110111 F7 = End of Exclusive

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower
Internal Clock (Clavinova compliance)	F0 43 73 01 02 F7 00000001 01 = Model ID (Clavinova common ID) 00000010 02 = Internal Clock Substatus	-	O					X				
External Clock (Clavinova compliance)	F0 43 73 01 03 F7 00000001 01 = Model ID (Clavinova common ID) 00000011 03 = External Clock Substatus	-	O					X				
Display open/close (Clavinova compliance)	F0 43 73 01 51 00 00 02 05 A1 A2 A3 A4 dd F7 00000001 01 = Model ID (Clavinova common ID) 01010001 51 = PK/CL common variable length data 00000000 00 = 00000000 00 = Panel 00000001 02 = Display open/close 00000011 05 = Size A1 = Display address1 A2 = Display address2 A3 = Display address3 A4 = Display address4 dd = 00 → Display is opened at the time of starting and closed at the time of stopping. * This message is effective only for playback from an internal sequencer. Display address / Score display / Lyrics display A1 00H 00H A2 00H 00H A3 00H 01H A4 00H 00H	X	X					X				

● : Transmitted via panel operations o : Available

[MIDI]

MIDI Event	Data Format	Voice	MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Song	Right1/ Right2/ Left	Keyboard	Style	Extra	Right1/ Right2/ Left	M.Pad	Style	Song	Upper Lower
MIDI 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	O	O					X				
GuideON	F0 43 73 01 1F 00 cc dd F7 00000001 01 = Model ID (Clavinova common ID) 00011111 1F = Guide On Substatus 00000000 00 = 0ccccccc cc = Part Select Number (1/Right, 2/Left) cc 1/Right 2/Left 00 On On 01 Off On 02 On Off 03 Off Off 0ddddddd dd = Mode 00:Off, 01:Follow Lights, 02:Any Key, 03:Karao Key, 04:Vocal Cue Time 06=YourTempo 11110111 F7 = End of Exclusive	-	O					X				

Song System Exclusive Message List / Liste der System-Exclusive-Meldungen der Songs / Liste des messages exclusifs au système de morceaux / Lista de mensajes exclusivos del sistema de canciones / ソングシステムエクスクルーシブメッセージ

Data Format	Parameter	Description	Note

Guide

F0 43 73 01 1F 00 cc dd F7	Guide Mode	ccH = Part Select No 00H (TRACK1=ON, TRACK2=ON) 01H (TRACK1=OFF, TRACK2=ON) 02H (TRACK1=ON, TRACK2=OFF) 03H (TRACK1=OFF, TRACK2=OFF) ddH = Mode 00H=Guide OFF 01H=Follow Lights 02H=Any Key 03H=Karao-Key 06=Your Tempo	Entered to the song from the [SONG CREATOR] → SETUP display.

Score

F0 43 73 01 50 12 00 00 dd F7	Left Part indication On/Off	00H: OFF, 7FH:ON	Entered to the song from the [SONG CREATOR] → SETUP display.
F0 43 73 01 50 12 00 01 dd F7	Right Part indication On/Off	00H: OFF, 7FH:ON	
F0 43 73 01 50 12 00 02 dd F7	Lyrics indication On/Off	00H: OFF, 7FH:ON	
F0 43 73 01 50 12 00 03 dd F7	Chord indication On/Off	00H: OFF, 7FH:ON	
F0 43 73 01 50 12 00 04 dd F7	N.Name indication On/Off	00H: OFF, 7FH:ON	
F0 43 73 01 50 12 00 05 dd F7	Size designation	00H: SMALL, 02H:LARGE	
F0 43 73 01 50 12 00 06 dd F7	Left Ch	00H – 0FH=CH, 7EH=OFF, 7FH=AUTO	
F0 43 73 01 50 12 00 07 dd F7	Right Ch	00H – 0FH=CH, 7EH=OFF, 7FH=AUTO	
F0 43 73 01 50 12 00 08 dd F7	Quantize triplet On/Off	(00H:TripletOFF, 7FH:TripletON)	
F0 43 73 01 50 12 00 09 dd F7	Quantize	00H: quarter, 01H: eighth, 02H: sixteenth, 03H: thirty-second	
F0 43 73 01 50 12 00 0A dd F7	NoteName	00H:ABC, 01H:FixedDo, 02H:MovableDo	

Style

F0 43 73 01 51 00 00 00 03 10 00 dd F7	STYLE SPLIT POINT	dd=STYLE SPLIT POINT (Note Number)	Entered to the song from the [SONG CREATOR] → SETUP display.
F0 43 73 01 51 05 00 03 04 00 00 dd dd F7	Style No.	dd dd = Style No.	Entered when recording.
F0 43 7E 00 ss dd F7	Section Control	Refer to the MIDI Data Format.	Entered when recording.

Song Meta Event List / Liste der Meta-Events der Songs / Liste des métaévénements des morceaux / Lista de meta-eventos de canciones / ソングメタイベントリスト

Data Format	Parameter	Description	Note
FF 05 len [Data]	Lyrics	len=Data length, [Data]=Lyrics Data	-
FF 51 03 t1 t2 t3	Set Tempo	t1 t2 t3 =Tempo value B7 1B 00 – 01 D4 C0 (Tempo 5 – 500)	Entered when recording.
FF 58 04 nn dd cc bb	Beat	nn=Numerator, dd=Denominator (2n) cc=MIDI clock per metronome click, bb=Number of thirty-second notes in MIDI quarter note	Entered when recording.
FF 59 02 sf mi	Key Signature	sf=-7 – 7 mi=0: Major key, 1: minor key	Entered from the [Score] → SETUP display.

YAMAHA META EVENT

FF 7F 06 43 73 0A 00 07 dd	Score Start Bar	ddH: Start from this measure dd= -100 – 1, 1 – 100	-
FF 7F len 43 73 0D 01 [Data]	Keyboard Voice	Voice settings for the RIGHT1 – 2 and LEFT	Entered to the song from the [SONG CREATOR] → SETUP display.

YAMAHA XF META EVENT

FF 7F 07 43 7B 01 cr ct bn bt	Chord Name	Refer to "Chord Control" in the MIDI Data Format (System Exclusive Messages)	Entered when recording.
FF 7F 05 43 7B 03 20 08	Phrase Mark	Used as a marker for each phrase when executing Phrase Mark repeat playback.	Used when performing the Phrase Mark repeat playback.
FF 7F 04 43 7B 04 dd	Phrase Max	Maximum Phrase Number	Used when performing the Phrase Mark repeat playback.
FF 7F 05 43 7B 0C rr ll	Guide Track Flag	Sets the TRACK1 and TRACK2 parameters on the [FUNCTION] → [SONG SETTING] display. rr = RIGHT CH (0: OFF, 1 – 16CH) ll = LEFT CH (0: OFF, 1 – 16CH)	Entered when recording.

Yamaha [Digital Keyboard] Date:25-Feb-2015
Model PSR-S670 MIDI Implementation Chart Version : 1.0

Function...	Transmitted	Recognized	Remarks
Basic Default	1 - 16	1 - 16	
Channel Changed	1 - 16	1 - 16	
Default	3	3	
Mode Messages	x	x	
Altered	**********	x	
Note	0 - 127	0 - 127	
Number : True voice	**********	0 - 127	
Velocity Note ON	o 9nH,v=1-127	o 9nH,v=1-127	
Note OFF	x 9nH,v=0	x	
After Key's	x	o	
Touch Ch's	x	o	
Pitch Bend	o	o 0 - 24 semi	
0,32	o	o	Bank Select
1,5,7,10,11	o	o	
16	x	o	General Purpose Controller
6,38	o	o	Data Entry
Control 64,65,66,67	o	o	
71,72,73,74	o	o	Sound Controller
Change 80,81	o	o	
84	o	o	Portamento Cntrl
91,93,94	o	o	Effect Depth
96,97	x	o	RPN Inc,Dec
98,99	o	o	NRPN LSB,MSB
100,101	o	o	RPN LSB,MSB
Prog	o 0 - 127	o 0 - 127	
Change : True #	**********		
System Exclusive	o	o	
: Song Pos.	x	x	
Common : Song Sel.	x	x	
: Tune	x	x	
System :Clock	o	o	
Real Time:Commands	o	o	
:All Sound Off	x	o(120,126,127)	
Aux :Reset All Cntrls	x	o(121)	
:Local ON/OFF	x	o(122)	
Mes- :All Notes Off	x	o(123 - 125)	
sages:Active Sense	o	o	
:Reset	x	x	
Notes:			

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON , MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO x : No