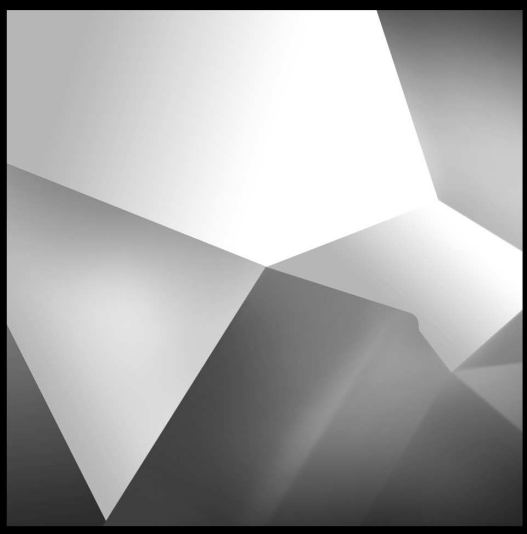
YAMAHA

DIGITAL WORKSTATION

Tyros2



Data List / Daten-Liste / Liste des données

Contents

EN
DE
FR

Panel Voice

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Piano	GrandPiano	0	113	1	Live!
	WarmGrand	0	114	1	Live!
	BrightPiano	0	112	2	Live!
	BalladStack	0	114	3	-
	MidiGrand	0	112	3	-
	Harpsichord	8	32	113	S.Articulation!
	OctavePiano1	0	113	4	-
	OctavePiano2	0	114	4	-
	HonkyTonk	0	112	4	-
	CP80	0	113	3	-
	Harpsichord	0	112	7	Live!
	GrandHarpsi	0	113	7	Live!
E.Piano	SparkleStack	0	121	6	Cool!
	DX Dynamics	0	123	6	Cool!
	GalaxyEP	0	114	5	Cool!
	BalladDX	0	122	6	Cool!
	HyperTines	0	113	6	-
	SuitcaseEP	0	118	5	Cool!
	ElectricPiano	0	119	5	Cool!
	TremoloEP	0	113	5	Cool!
	JazzChorus	0	118	6	-
	VintageEP	0	116	5	-
	VenusEP	0	114	6	-
	SuperDX	0	117	6	-
	PolarisEP	0	115	5	-
	DX Modern	0	112	6	-
	NewTines	0	116	6	-
	StageEP	0	117	5	-
	PhaseEP	0	120	5	-
	SmoothTine	0	119	6	-
	ModernEP	0	115	6	-
	FunkEP	0	112	5	-
	ChorusBell	0	120	6	-
	StereoClavi	0	114	8	-
	Clavi	0	112	8	-
	WahClavi	0	113	8	-
	PhaseClavi	0	115	8	-
Organ	JazzRotary	8	32	114	S.Articulation!
	CurvedBars	0	118	20	Cool!
	EvenBars	0	126	18	Cool!
	VintageFast	0	119	20	Cool!
	RotorOrgan	0	117	19	Cool!
	Organ	0	118	19	Cool!
	JazzOrgan	0	117	17	Cool!
	TwoChannels	0	125	20	Cool!
	RockRotary	8	33	114	S.Articulation!
	FullRocker	0	115	19	Cool!
	Hold It Fast	0	111	17	Cool!
	RotarySwitch	0	127	17	Cool!
	R&B Tremolo	0	111	19	Cool!
	JazzSlow	0	125	19	Cool!
	JazzFast	0	126	19	Cool!
	StadiumOrgan	0	118	17	-
	GospelOrgan	0	119	17	-
	RotaryDrive	0	116	19	-
	DanceOrgan	0	113	18	-
	PurpleOrgan	0	114	19	-
	FullTheatre	0	127	19	-
	SweetTheatre	0	126	20	-
	Tibia 8&4	0	122	17	-
	Tibia 16&4	0	114	17	-
	BallroomOrgan	0	115	4	-
	PipeOrgan	0	112	20	-
	ChapelOrgan1	0	113	20	-
	ChapelOrgan2	0	114	20	-
	ChapelOrgan3	0	115	20	-
	Tibia Full	0	114	18	-
	RockOrgan1	0	112	19	-
	RockOrgan2	0	119	19	-
	RockOrgan3	0	113	19	-
	60sOrgan	0	116	18	-
	ClickOrgan	0	112	18	-
	JazzOrgan1	0	112	17	-
	JazzOrgan2	0	113	17	-
	JazzOrgan3	0	120	17	-
	DrawbarOrgan1	0	120	18	-
	DrawbarOrgan2	0	115	17	-
	OrganAccomp1	0	120	20	-
	OrganAccomp2	0	121	20	-
	OrganAccomp3	0	122	20	-
	OrganAccomp4	0	123	20	-
	OrganAccomp5	0	124	20	-
	MellowDraw	0	115	18	-
	BrightDraw	0	116	17	-
	PercOrgan	0	119	18	-
	ElectricOrgan	0	118	18	-
	ReedOrgan	0	112	21	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Organ	Tibia 8	0	122	18	-
	Trumpet8	0	124	17	-
	Vox 8	0	123	18	-
	Vox&Tibia	0	125	17	-
	Kinura 8	0	123	17	-
	Tpt&Kinura	0	125	18	-
	Trumpet16&8	0	124	18	-
Strings	ConcertStrings	8	32	50	S.Articulation!
	StudioStrings	8	32	49	S.Articulation!
	DynamicStrings	0	122	49	Live!
	Spiccato	0	120	49	Live!
	Pizzicato	0	113	46	Live!
	Violin	0	113	41	Sweet!
	DiscoStrings1	0	123	50	Live!
	DiscoStrings2	0	124	50	Live!
	MovieStrings	0	123	49	Live!
	TremoloStrings	0	113	45	Live!
	TremoloBowing1	8	34	49	S.Articulation!
	TremoloBowing2	8	35	49	S.Articulation!
	Strings p	0	117	49	Live!
	Strings mf	0	118	49	Live!
	Strings f	0	119	49	Live!
	Strings	0	117	50	Live!
	Allegro	0	122	50	Live!
	StringFalls	0	121	49	Live!
	Spiccato	8	33	49	S.Articulation!
	Orchestra	0	116	50	Live!
	Tutti	0	120	50	-
	OrchFlute	0	119	50	-
	OrchOboe	0	121	50	-
	OrchHorns	0	118	50	-
	Marcato	0	115	50	-
	SynthStrings1	0	112	51	-
	SynthStrings2	0	113	51	-
	OberStrings	0	113	52	-
	AnalogStrings	0	112	52	-
	ChamberStrings	0	112	50	-
	SlowStrings	0	113	50	-
	Strings	0	112	49	-
	OrchStrings	0	113	49	-
	Symphonic	0	114	49	-
	ConcertoString	0	115	49	-
	BowStrings	0	116	49	-
	StringQuartet	0	114	50	-
	TremoloStrings	0	112	45	-
	Pizzicato	0	112	46	-
	Harp	0	112	47	-
	SoloViolin	0	112	41	-
	Viola	0	112	42	-
	Cello	0	112	43	-
	Contrabass	0	112	44	-
	Fiddle	0	112	111	-
	Hackbrett	0	113	47	-
	Banjo	0	112	106	-
	Sitar	0	112	105	-
	Koto	0	112	108	-
	Shamisen	0	112	107	-
	OrchestraHit	0	112	56	-
	SmallStrings	8	0	49	MegaVoice
	LargeStrings	8	0	50	MegaVoice
Choir	GospelVoices	0	116	53	Live!
	Humming	0	118	53	Live!
	HahChoir	0	114	53	-
	SweetHeaven	0	118	89	-
	DreamHeaven	0	121	89	-
	Mmh	0	117	53	Live!
	GothicVox	0	113	54	-
	Sunbeam	0	123	89	-
	BellHeaven	0	119	89	-
	PanHeaven	0	120	89	-
	ProHeaven	0	122	89	-
	Choir	0	112	53	-
	AirChoir	0	112	55	-
	VoxHumana	0	112	54	-
	Voices	0	113	55	-
	UuhChoir	0	115	53	-
Brass	BigBandBrass	8	37	57	S.Articulation!
	SmoothBrass	8	36	57	S.Articulation!
	DynamicBrass	0	127	62	Live!
	PowerBrass	0	121	63	Live!
	AccentBrass	0	109	62	Live!
	BrassFalls f	8	34	57	S.Articulation!
	BrassFalls mf	8	35	57	S.Articulation!
	Brass p	0	111	62	Live!
	Brass mf	0	110	62	Live!
	Brass f	0	108	62	Live!
	FrenchHorns	0	112	61	Live!

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Brass	SymphonyBrass	0	119	61	Live!
	BrassBand	0	123	57	Live!
	SoftHorns	0	117	61	Live!
	SoftTrombones	0	118	61	Live!
	BrassShake1	8	32	57	S.Articulation!
	BrassShake2	8	33	57	S.Articulation!
	AccentFalls	8	38	57	S.Articulation!
	Sforzando	0	105	62	Live!
	SforzandoFall	0	107	62	Live!
	BrassDynamics	0	106	62	Live!
	SmallBrass	0	120	61	Live!
	SymphonyHorns	0	115	61	Live!
	HyperBrass	0	118	63	Live!
	PopBrass	0	117	63	Live!
	OctaveBrass	0	116	63	Live!
	BrassCombo	0	115	67	-
	BrassSection	0	112	62	-
	BreathBrass	0	116	61	-
	HybridComp	0	119	63	-
	NaturalBrass	0	124	62	-
	Sforzando	0	125	62	-
	BigBrass	0	121	62	-
	BallroomBrass	0	113	60	-
	BrightBrass	0	120	62	-
	MellowBrass	0	116	62	-
	Hybrihorn	0	113	61	-
	Hybripad	0	114	61	-
	SoftVeloBrass	0	120	63	-
	80sBrass	0	113	63	-
	SoftBrass	0	123	62	-
	FullHorns	0	114	62	-
	SmoothTrombone	0	118	58	-
	HighBrass	0	115	62	-
	OberBrass	0	113	64	-
	TrumpetEns	0	122	62	-
	MellowHorns	0	119	62	-
	BigBandBrass	0	113	62	-
	PopBrass	0	118	62	-
	BrassHit	0	126	62	-
	AnalogBrass	0	112	64	-
	TbnSection	0	113	58	-
	SmallBrass	0	117	62	-
	SoftAnalog	0	114	64	-
	FunkyAnalog	0	115	63	-
	TechnoBrass	0	114	63	-
	SynthBrass	0	112	63	-
	OberHorns	0	115	64	-
	FatSynthBrass	0	116	64	-
	Brass	8	0	57	MegaVoice
Trumpet	Trumpet	8	32	65	S.Articulation!
	SilverTrumpet	8	33	65	S.Articulation!
	GoldenTrumpet	8	34	65	S.Articulation!
	BigBandTrumpet	8	37	65	S.Articulation!
	TrumpetFall	8	38	65	S.Articulation!
	Cornet	0	119	57	Sweet!
	FlugelHorn	0	118	57	Sweet!
	MutedTrumpet	0	114	60	Sweet!
	Trumpet	0	115	57	Sweet!
	Trombone	0	117	58	Sweet!
	JazzTrumpet	0	120	57	Sweet!
	SilverTrumpet	0	121	57	Sweet!
	GoldenTrumpet	0	122	57	Sweet!
	TrumpetShake1	8	35	65	S.Articulation!
	TrumpetShake2	8	36	65	S.Articulation!
	SoloTrumpet	0	112	57	-
	MutedTrumpet	0	112	60	-
	FlugelHorn	0	113	57	-
	SoloTrombone	0	112	58	-
	JazzTrumpet	0	116	57	-
	Trombone	0	116	58	-
	SoftTrombone	0	115	58	-
	MellowTrombone	0	114	58	-
	BaritoneHorn	0	113	59	-
	BaritoneHit	0	114	59	-
	AlpBass	0	113	34	-
	Tuba	0	112	59	-
	Trumpet	8	0	65	MegaVoice
Saxophone	Saxophone	8	32	83	S.Articulation!
	BigBandSax	8	35	83	S.Articulation!
	JazzTenor	0	125	67	Sweet!
	BalladTenor	0	126	67	Sweet!
	PopTenor	0	127	67	Sweet!
	SopranoSax	0	113	65	Sweet!
	AltoSax	0	114	66	Sweet!
	TenorSax	0	117	67	Sweet!
	GrowlSax	0	111	67	Sweet!
	SaxSection	0	116	67	Live!

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Saxophone	RockSax1	8	33	83	S.Articulation!
	RockSax2	8	34	83	S.Articulation!
	BigBandSaxes	0	110	67	Live!
	BigBandUnison	0	109	67	Live!
	BigBandOctave	0	108	67	Live!
	SaxSectionSoft	0	121	67	Live!
	SaxSectionHard	0	122	67	Live!
	SaxAppeal	0	123	67	Live!
	SaxyMood	0	120	67	-
	Moonlight	0	115	72	-
	GrowlSax	0	118	67	-
	SopranoSax	0	112	65	-
	AltoSax	0	112	66	-
	TenorSax	0	112	67	-
	BaritoneSax	0	112	68	-
	BalladSection	0	119	67	-
	SaxStack	0	124	67	-
	WoodwindsEns	0	113	67	-
	TenorSax	8	0	83	MegaVoice
Flute&Clarinet	Flute	0	114	74	Sweet!
	Clarinet	0	114	72	Sweet!
	Oboe	0	113	69	Sweet!
	EnglishHorn	0	112	70	-
	Bassoon	0	112	71	-
	PanFlute	0	113	76	Sweet!
	ClassicalFlute	0	115	74	Sweet!
	Piccolo	0	112	73	-
	FluteEnsemble	0	116	74	-
	Whistle	0	112	79	-
	Flute	0	112	74	-
	Clarinet	0	112	72	-
	Oboe	0	112	69	-
	Shakuhachi	0	112	78	-
	Bagpipe	0	112	110	-
	PanFlute	0	113	74	-
	EthnicFlute	0	112	76	-
	Recorder	0	112	75	-
	Ocarina	0	112	80	-
Guitar	ConcertGuitar	8	32	1	S.Articulation!
	SteelGuitar	8	32	2	S.Articulation!
	FlamencoGtr	8	33	1	S.Articulation!
	12StringGtr	0	113	26	Live!
	PedalSteel	8	36	4	S.Articulation!
	WarmSolid	8	33	4	S.Articulation!
	CleanSolid	8	34	4	S.Articulation!
	GuitarHero	8	32	6	S.Articulation!
	HeavyRock	8	32	5	S.Articulation!
	70sSolidGtr	8	38	4	S.Articulation!
	NylonGuitar	8	34	1	S.Articulation!
	FolkGuitar	8	33	2	S.Articulation!
	WarmElectric	8	32	4	S.Articulation!
	CleanElectric	8	35	4	S.Articulation!
	HalfDrive	8	37	4	S.Articulation!
	Mandolin	0	114	26	Sweet!
	JazzGuitar	0	115	27	Cool!
	VintageLead	0	125	28	Cool!
	BluesGuitar	0	117	30	Cool!
	MutedGuitar	0	119	29	Cool!
	SlideNylon	0	117	25	Live!
	SlideSteel	0	118	26	Live!
	SlideSolid	0	110	28	Cool!
	SlideClean	0	117	29	Cool!
	DynamicMute	0	118	29	Cool!
	Feedbacker	8	33	5	S.Articulation!
	ElectricGtr	0	114	29	Cool!
	TremoloSolid	0	111	28	Cool!
	ChorusSolid	0	107	28	Cool!
	BalladSolid	0	109	28	Cool!
	DynamicNylon	0	116	25	Live!
	DynamicSteel	0	116	26	Live!
	HardFlamenco	0	118	25	Live!
	AlohaGuitar	0	118	27	-
	PedalSteel	0	115	28	-
	PowerLead	0	115	31	Cool!
	CleanGuitar	0	112	28	Cool!
	SlapSolid	0	108	28	Cool!
	FunkGuitar	0	116	29	Cool!
	JazzSoloGtr	0	116	27	Cool!
	ClassicalGtr	0	115	25	Live!
	SteelGuitar	0	117	26	Live!
	60sClean	0	117	28	-
	VintageOpen	0	123	28	-
	VintageStrum	0	126	28	-
	HeavyStack	0	114	31	-
	CrunchGuitar	0	113	31	-
	VintageAmp	0	115	30	-
	SolidChord	0	121	28	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Guitar	SolidGuitar	0	118	28	-
	NylonMute	0	119	25	Live!
	SteelMute	0	120	26	Live!
	CampfireGtr	0	115	26	-
	Electric12Str	0	119	28	-
	DXJazzGuitar	0	117	27	-
	SmoothLead	0	119	27	-
	PowerChord	0	117	31	-
	RockGuitar	0	116	30	-
	VodooLead	0	116	31	-
	VintageMute	0	115	29	-
	TremoloGuitar	0	113	28	-
	WahGuitar	0	122	28	-
	LeadGuitar	0	114	30	-
	18String	0	119	26	-
	ChorusGuitar	0	124	28	-
	OctaveGuitar	0	113	27	-
	VintageTrem	0	120	28	-
	DeepChorus	0	114	28	-
	BrightClean	0	116	28	-
	DistortionGtr	0	112	31	-
	FunkGuitar	0	113	29	-
	MutedGuitar	0	112	29	-
	OverdriveGtr	0	112	30	-
	FeedbackGtr	0	113	30	-
	FolkGuitar	0	112	26	-
	NylonGuitar	8	0	1	MegaVoice
	SteelGuitar	8	0	2	MegaVoice
	12StringGtr	8	1	3	MegaVoice
	HiStringGtr	8	0	3	MegaVoice
	SolidGuitar1	8	1	4	MegaVoice
	SolidGuitar2	8	2	4	MegaVoice
	CleanGuitar	8	0	4	MegaVoice
	OverdriveGtr	8	0	5	MegaVoice
	DistortionGtr	8	0	6	MegaVoice
Bass	ElectricBass	0	114	34	Cool!
	AcousticBass	0	112	33	-
	DynoPickBass	0	113	35	Cool!
	FretlessBass	0	112	36	Cool!
	SlapBass	0	112	37	-
	SubBass	0	114	40	-
	HardBass	0	114	39	-
	ResoBass	0	112	39	-
	HouseBass	0	116	39	-
	BigDrone	0	118	39	-
	RockBass	0	114	35	-
	SuperFretless	0	113	36	-
	PickBass	0	112	35	-
	FusionBass	0	113	37	-
	Bass&Cymbal	0	114	33	-
	AnalogBass	0	112	40	-
	DX FunkBass	0	113	38	-
	DrySynthBass	0	116	40	-
	80sSynthBass	0	115	40	-
	HiQBass	0	113	39	-
	FunkBass	0	112	38	-
	MellowFinger	0	112	34	-
	ClickBass	0	115	39	-
	PunchyBass	0	117	39	-
	TB Bass	0	117	40	-
	AcousticBass	8	0	17	MegaVoice
	ElectricBass	8	0	18	MegaVoice
	PickBass	8	0	19	MegaVoice
	FretlessBass	8	0	20	MegaVoice
Perc&Drum	Vibraphone	0	112	12	-
	JazzVibes	0	113	12	-
	Suspense	0	114	12	-
	Marimba	0	112	13	-
	Xylophone	0	112	14	-
	SteelDrums	0	112	115	-
	Celesta	0	112	9	-
	Glockenspiel	0	112	10	-
	MusicBox	0	112	11	-
	TubularBells	0	112	15	-
	Kalimba	0	112	109	-
	Dulcimer	0	112	16	-
	Timpani	0	112	48	-
	PowerKit1	127	0	88	Live!Drums
	PowerKit2	127	0	89	Live!Drums
	StandardKit1	127	0	1	Live!Drums
	StandardKit2	127	0	2	Live!Drums
	StudioKit	127	0	87	Live!Drums
	JazzKit	127	0	33	Drums
	BrushKit	127	0	41	Live!Drums
	HitKit	127	0	5	Drums
	RoomKit	127	0	9	Drums
	RockKit	127	0	17	Drums

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Perc&Drum	ElectroKit	127	0	25	Drums
	AnalogKit	127	0	26	Drums
	DanceKit	127	0	28	Drums
	SymphonyKit	127	0	49	Live!Drums
	CubanKit	126	0	41	Live!SFX
	PopLatinKit	126	0	44	Live!SFX
	ArabicKit	126	0	36	SFX Kit
	SFX Kit1	126	0	1	SFX Kit
	SFX Kit2	126	0	2	SFX Kit
Accordion	FrenchMusette	0	119	22	-
	MasterAccord	0	118	22	-
	JazzAccordion	0	120	22	-
	TangoAccordion	0	114	24	-
	Steirisch	0	117	22	-
	Harmonica	0	112	23	Sweet!
	Accordion	0	116	22	-
	SmallAccordion	0	115	22	-
	TuttiAccordion	0	113	22	-
	Musette	0	112	22	-
	MasterBass	0	122	22	-
	MusetteBass	0	123	22	-
	AccordionBass	0	121	22	-
	TangoBass	0	115	24	-
	BallroomAcc	0	112	24	-
	SoftAccordion	0	114	22	-
	Bandoneon	0	113	24	-
	ModernHarp	0	113	23	-
	BluesHarp	0	114	23	-
Pad	MagicBell	8	32	121	S.Articulation!
	SuperDarkPad	0	119	90	-
	AnalogPad	0	120	90	-
	DarkAngelPad	0	121	90	-
	LitePad	0	122	90	-
	PopPad	0	112	91	-
	BrightSawPad	0	113	91	-
	GloriousPhase	0	114	91	-
	BigOctavePad	0	115	91	-
	DigitalPad	0	115	94	-
	HahPad	0	116	95	-
	AnalogSwell	0	119	96	-
	PsychoPad	0	118	102	-
	Insomnia	0	113	95	-
	Skydiver	0	112	102	-
	Bubblespace	0	113	102	-
	HipaStrings	0	114	96	-
	MellowPad	0	117	96	-
	Mediterrain	0	114	100	-
	NeoWarmPad	0	115	90	-
	CyberPad	0	113	100	-
	OberSweep	0	115	96	-
	Messenger	0	116	96	-
	Wave2001	0	112	96	-
	FarEast	0	112	98	-
	Disclosure	0	116	90	-
	BrightOber	0	113	96	-
	DarkPad	0	118	96	-
	Mystery	0	113	98	-
	Sirius	0	114	102	-
	S&H Groove	0	115	102	-
	VeloAshrami	0	116	102	-
	EveningStars	0	117	102	-
	AngelVibes	0	114	99	-
	Atmosphere	0	112	100	-
	XenonPad	0	112	92	-
	Equinox	0	112	95	-
	GlassPad	0	114	94	-
	Fantasia	0	112	89	-
	DX Pad	0	112	93	-
	Symbiont	0	113	89	-
	Stargate	0	114	89	-
	Area51	0	112	90	-
	DarkMoon	0	113	90	-
	Ionosphere	0	115	95	-
	GoldenAge	0	115	89	-
	Solaris	0	114	95	-
	TimeTravel	0	116	89	-
	Millennium	0	117	89	-
	Dunes	0	114	90	-
Synth	Oxygen	0	122	82	-
	Matrix	0	123	82	-
	WireLead	0	120	82	-
	SoftR&B	0	119	81	-
	EarlyLead	0	118	82	-
	DanceHook	0	112	87	-
	OctaveHook	0	113	87	-
	HipaLead	0	118	85	-
	PunchyHook	0	127	82	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Synth	CryingLead	0	114	88	-
	HipLead	0	113	81	-
	HopLead	0	117	81	-
	OrbitSine	0	126	81	-
	TechLead	0	117	85	-
	Tekkline	0	116	85	-
	SoftMini	0	124	81	-
	TranceLead	0	121	81	-
	FireWire	0	116	82	-
	Analogon	0	115	82	-
	Blaster	0	114	82	-
	Skyline	0	115	85	-
	SquareLead	0	112	81	-
	SawLead	0	112	82	-
	PopLead	0	120	81	-
	ProLead	0	113	84	-
	BrightMini	0	125	81	-
	TinyLead	0	118	81	-
	FunkyLead	0	121	82	-
	Paraglide	0	114	85	-
	Robolead	0	124	82	-
	Fargo	0	119	82	-
	Portatone	0	112	85	-
	BigLead	0	113	82	-
	Warp	0	117	82	-
	Adrenaline	0	113	85	-
	Stardust	0	112	99	-
	AeroLead	0	112	84	-
	MiniLead	0	114	81	-
	Impact	0	113	88	-
	SunBell	0	113	99	-
	UnderHeim	0	112	88	-
	HiBias	0	116	81	-
	VinylLead	0	115	81	-
	PanLead	0	122	81	-
	StringBells	0	124	89	-
	CrystalEyes	0	125	89	-
	Padbells	0	126	89	-
	MelodyMaker	0	117	90	-
	BigTune	0	118	90	-
	TrumpetSaw	0	125	82	-
	AttackSaw	0	126	82	-
	PercSquare	0	123	81	-
OrganFlutes	JazzDraw!	0	126	17	OrganFlutes
	BluesOrgan!	0	126	17	OrganFlutes
	Sixteen&One!	0	126	17	OrganFlutes
	EvenBars!	0	126	17	OrganFlutes
	PopOrgan!	0	126	17	OrganFlutes
	RockingOrgan!	0	126	17	OrganFlutes
	Percussive!	0	126	17	OrganFlutes
	GospelOrgan!	0	126	17	OrganFlutes
	PadOrgan!	0	126	17	OrganFlutes
	FullRanks!	0	126	17	OrganFlutes

GM & XG Voice

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Piano	GrandPiano	0	0	1	-
	GrndPianoKSP	0	1	1	-
	MellowGrPno	0	18	1	-
	PianoStrings	0	40	1	-
	Dream	0	41	1	-
	BrightPiano	0	0	2	-
	BritePnoKSP	0	1	2	-
	ElecGrandPno	0	0	3	-
	ElecGrPnoKSP	0	1	3	-
	DetunedCP80	0	32	3	-
	LayeredCP1	0	40	3	-
	LayeredCP2	0	41	3	-
	Honkytonk	0	0	4	-
	HonkytonkKSP	0	1	4	-
	El.Piano1	0	0	5	-
	El.Piano1KSP	0	1	5	-
	MellowEP1	0	18	5	-
	ChorusEP1	0	32	5	-
	HardEl.Piano	0	40	5	-
	VXfadeEl.P1	0	45	5	-
	60'sEl.Piano1	0	64	5	-
	El.Piano2	0	0	6	-
	El.Piano2KSP	0	1	6	-
	ChorusEP2	0	32	6	-
	DXEPHard	0	33	6	-
	DXLegend	0	34	6	-
	DXPhaseEP	0	40	6	-
	DX+AnalogEP	0	41	6	-
	DXKotoEP	0	42	6	-
	VXfadeEl.P2	0	45	6	-
	Harpsichord	0	0	7	-
	Harpsi.KSP	0	1	7	-
	Harpsichord2	0	25	7	-
	Harpsichord3	0	35	7	-
	Clavi.	0	0	8	-
	Clavi.KSP	0	1	8	-
	Clavi.Wah	0	27	8	-
	PulseClavi.	0	64	8	-
	PierceClavi.	0	65	8	-
ChromaticPerc	Celesta	0	0	9	-
	Glockenspiel	0	0	10	-
	MusicBox	0	0	11	-
	Orgel	0	64	11	-
	Vibraphone	0	0	12	-
	VibesKSP	0	1	12	-
	HardVibes	0	45	12	-
	Marimba	0	0	13	-
	MarimbaKSP	0	1	13	-
	SineMarimba	0	64	13	-
	Balimba	0	97	13	-
	LogDrums	0	98	13	-
	Xylophone	0	0	14	-
	TubularBells	0	0	15	-
	ChurchBells	0	96	15	-
	Carillon	0	97	15	-
	Dulcimer	0	0	16	-
	Dulcimer2	0	35	16	-
	Cimbalom	0	96	16	-
	Santur	0	97	16	-
Organ	DrawbarOrgan	0	0	17	-
	DetDrawOrgan	0	32	17	-
	60'sDrawOrg1	0	33	17	-
	60'sDrawOrg2	0	34	17	-
	70'sDrawOrg1	0	35	17	-
	DrawbarOrg2	0	36	17	-
	60'sDrawOrg3	0	37	17	-
	EvenBarOrg	0	38	17	-
	16+2'2_3Org	0	40	17	-
	OrganBass	0	64	17	-
	70'sDrawOrg2	0	65	17	-
	CheezyOrgan	0	66	17	-
	DrawbarOrg3	0	67	17	-
	Perc.Organ	0	0	18	-
	70'sPercOrg1	0	24	18	-
	DetPercOrgan	0	32	18	-
	LightOrgan	0	33	18	-
	Perc.Organ2	0	37	18	-
	RockOrgan	0	0	19	-
	RotaryOrgan	0	64	19	-
	SlowRotary	0	65	19	-
	FastRotary	0	66	19	-
	ChurchOrgan	0	0	20	-
	ChurchOrgan3	0	32	20	-
	ChurchOrgan2	0	35	20	-
	NotreDame	0	40	20	-
	OrganFlute	0	64	20	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Organ	Trem.OrganFl	0	65	20	-
	ReedOrgan	0	0	21	-
	PuffOrgan	0	40	21	-
	Accordion	0	0	22	-
	AccordIt	0	32	22	-
	Harmonica	0	0	23	-
	Harmonica2	0	32	23	-
	TangoAccord	0	0	24	-
	TangoAccord2	0	64	24	-
Guitar	NylonGuitar	0	0	25	-
	NylonGuitar2	0	16	25	-
	NylonGuitar3	0	25	25	-
	VelGtrHarmo	0	43	25	-
	Ukulele	0	96	25	-
	SteelGuitar	0	0	26	-
	SteelGuitar2	0	16	26	-
	12StrGuitar	0	35	26	-
	Nylon&Steel	0	40	26	-
	Steel&Body	0	41	26	-
	Mandolin	0	96	26	-
	JazzGuitar	0	0	27	-
	MellowGuitar	0	18	27	-
	JazzAmp	0	32	27	-
	CleanGuitar	0	0	28	-
	ChorusGuitar	0	32	28	-
	MutedGuitar	0	0	29	-
	FunkGuitar1	0	40	29	-
	MuteSteelGtr	0	41	29	-
	FunkGuitar2	0	43	29	-
	JazzMan	0	45	29	-
	Overdriven	0	0	30	-
	GuitarPinch	0	43	30	-
	Distortion	0	0	31	-
	FeedbackGtr	0	40	31	-
	FeedbackGtr2	0	41	31	-
	GtrHarmonics	0	0	32	-
	GtrFeedback	0	65	32	-
	GtrHarmonic2	0	66	32	-
Bass	AcousticBass	0	0	33	-
	JazzRhythm	0	40	33	-
	VXUprghtBass	0	45	33	-
	FingerBass	0	0	34	-
	FingerDark	0	18	34	-
	FlangeBass	0	27	34	-
	Bass&DistEG	0	40	34	-
	FingerSlap	0	43	34	-
	FingerBass2	0	45	34	-
	Mod.Bass	0	65	34	-
	PickBass	0	0	35	-
	MutePickBass	0	28	35	-
	FretlessBass	0	0	36	-
	Fretless2	0	32	36	-
	Fretless3	0	33	36	-
	Fretless4	0	34	36	-
	Syn.Fretless	0	96	36	-
	SmthFretless	0	97	36	-
	SlapBass1	0	0	37	-
	ResonantSlap	0	27	37	-
	PunchThumb	0	32	37	-
	SlapBass2	0	0	38	-
	Velo.Sw.Slap	0	43	38	-
	SynthBass1	0	0	39	-
	SynBass1Dark	0	18	39	-
	FastResoBass	0	20	39	-
	AcidBass	0	24	39	-
	ClaviBass	0	35	39	-
	TechnoBass	0	40	39	-
	Orbiter	0	64	39	-
	SquareBass	0	65	39	-
	RubberBass	0	66	39	-
	Hammer	0	96	39	-
	SynthBass2	0	0	40	-
	MellowSyBass	0	6	40	-
	SequenceBass	0	12	40	-
	ClickSynBass	0	18	40	-
	SynBass2Dark	0	19	40	-
	SmoothSyBass	0	32	40	-
	ModulrSyBass	0	40	40	-
	DXBass	0	41	40	-
	XWireBass	0	64	40	-
Strings	Violin	0	0	41	-
	SlwAtkViolin	0	8	41	-
	Viola	0	0	42	-
	Cello	0	0	43	-
	Contrabass	0	0	44	-
	Trem.Strings	0	0	45	-
	SlwAtTremStr	0	8	45	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Strings	SuspenseStr	0	40	45	-
	PizzicatoStr	0	0	46	-
	Orch.Harp	0	0	47	-
	YangChin	0	40	47	-
	Timpani	0	0	48	-
Ensemble	Strings1	0	0	49	-
	StereoStrngs	0	3	49	-
	SlwAtkStrngs	0	8	49	-
	ArcoStrings	0	24	49	-
	60'sStrings	0	35	49	-
	Orchestra	0	40	49	-
	Orchestra2	0	41	49	-
	TremOrchstra	0	42	49	-
	Velo.Strings	0	45	49	-
	Strings2	0	0	50	-
	S.SlowStrngs	0	3	50	-
	LegatoStrngs	0	8	50	-
	WarmStrings	0	40	50	-
	Kingdom	0	41	50	-
	70'sStrings	0	64	50	-
	Strings3	0	65	50	-
	SynStrings1	0	0	51	-
	ResoStrings	0	27	51	-
	SynStrings4	0	64	51	-
	SynStrings5	0	65	51	-
	SynStrings2	0	0	52	-
	ChoirAahs	0	0	53	-
	StereoChoir	0	3	53	-
	ChoirAahs2	0	16	53	-
	MellowChoir	0	32	53	-
	ChoirStrings	0	40	53	-
	VoiceOohs	0	0	54	-
	SynthVoice	0	0	55	-
	SynthVoice2	0	40	55	-
	Choral	0	41	55	-
	AnalogVoice	0	64	55	-
	OrchestraHit	0	0	56	-
	OrchestrHit2	0	35	56	-
	Impact	0	64	56	-
Brass	Trumpet	0	0	57	-
	Trumpet2	0	16	57	-
	BriteTrumpet	0	17	57	-
	WarmTrumpet	0	32	57	-
	Trombone	0	0	58	-
	Trombone2	0	18	58	-
	Tuba	0	0	59	-
	Tuba2	0	16	59	-
	MutedTrumpet	0	0	60	-
	FrenchHorn	0	0	61	-
	Fr.HornSolo	0	6	61	-
	FrenchHorn2	0	32	61	-
	HornOrchestr	0	37	61	-
	BrassSection	0	0	62	-
	Tp&TbSection	0	35	62	-
	BrassSect2	0	40	62	-
	HighBrass	0	41	62	-
	MellowBrass	0	42	62	-
	SynthBrass1	0	0	63	-
	QuackBrass	0	12	63	-
	ResoSynBrass	0	20	63	-
	PolyBrass	0	24	63	-
	SynthBrass3	0	27	63	-
	JumpBrass	0	32	63	-
	AnaVelBrass1	0	45	63	-
	AnalogBrass1	0	64	63	-
	SynthBrass2	0	0	64	-
	SoftBrass	0	18	64	-
	SynthBrass4	0	40	64	-
	ChoirBrass	0	41	64	-
	AnaVelBrass2	0	45	64	-
	AnalogBrass2	0	64	64	-
Reed	SopranoSax	0	0	65	-
	AltoSax	0	0	66	-
	SaxSection	0	40	66	-
	HyperAltoSax	0	43	66	-
	TenorSax	0	0	67	-
	BreathyTenor	0	40	67	-
	SoftTenorSax	0	41	67	-
	TenorSax2	0	64	67	-
	BaritoneSax	0	0	68	-
	Oboe	0	0	69	-
	EnglishHorn	0	0	70	-
	Bassoon	0	0	71	-
	Clarinet	0	0	72	-
Pipe	Piccolo	0	0	73	-
	Flute	0	0	74	-
	Recorder	0	0	75	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Pipe	PanFlute	0	0	76	-
	BlownBottle	0	0	77	-
	Shakuhachi	0	0	78	-
	Whistle	0	0	79	-
	Ocarina	0	0	80	-
Synth.Lead	SquareLead	0	0	81	-
	SquareLead2	0	6	81	-
	LMSquare	0	8	81	-
	Hollow	0	18	81	-
	Shroud	0	19	81	-
	Mellow	0	64	81	-
	SoloSine	0	65	81	-
	SineLead	0	66	81	-
	SawtoothLead	0	0	82	-
	SawtoothLd2	0	6	82	-
	ThickSaw	0	8	82	-
	DynamicSaw	0	18	82	-
	DigitalSaw	0	19	82	-
	BigLead	0	20	82	-
	HeavySynth	0	24	82	-
	WaspySynth	0	25	82	-
	PulseSaw	0	40	82	-
	Dr.Lead	0	41	82	-
	VelocityLead	0	45	82	-
	Seq.Analog	0	96	82	-
	CalliopeLead	0	0	83	-
	PureLead	0	65	83	-
	ChiffLead	0	0	84	-
	Rubby	0	64	84	-
	CharangLead	0	0	85	-
	DistortedLd	0	64	85	-
	WireLead	0	65	85	-
	VoiceLead	0	0	86	-
	SynthAahs	0	24	86	-
	VoxLead	0	64	86	-
	FifthsLead	0	0	87	-
	BigFive	0	35	87	-
	Bass&Lead	0	0	88	-
	Big&Low	0	16	88	-
	Fat&Perky	0	64	88	-
	SoftWhirl	0	65	88	-
Synth.Pad	NewAgePad	0	0	89	-
	Fantasy	0	64	89	-
	WarmPad	0	0	90	-
	ThickPad	0	16	90	-
	SoftPad	0	17	90	-
	SinePad	0	18	90	-
	HornPad	0	64	90	-
	RotaryStrngs	0	65	90	-
	PolySynthPad	0	0	91	-
	PolyPad80	0	64	91	-
	ClickPad	0	65	91	-
	AnalogPad	0	66	91	-
	SquarePad	0	67	91	-
	ChoirPad	0	0	92	-
	Heaven	0	64	92	-
	Itopia	0	66	92	-
	CCPad	0	67	92	-
	BowedPad	0	0	93	-
	Glacier	0	64	93	-
	GlassPad	0	65	93	-
	MetallicPad	0	0	94	-
	TinePad	0	64	94	-
	PanPad	0	65	94	-
	HaloPad	0	0	95	-
	SweepPad	0	0	96	-
	Shwimmer	0	20	96	-
	Converge	0	27	96	-
	PolarPad	0	64	96	-
	Celestial	0	66	96	-
Synth.Effect	Rain	0	0	97	-
	ClaviPad	0	45	97	-
	HarmoRain	0	64	97	-
	AfricanWind	0	65	97	-
	Carib	0	66	97	-
	SoundTrack	0	0	98	-
	Prologue	0	27	98	-
	Ancestral	0	64	98	-
	Crystal	0	0	99	-
	SynthDr.Comp	0	12	99	-
	Popcorn	0	14	99	-
	TinyBells	0	18	99	-
	RoundGlocken	0	35	99	-
	GlockenChime	0	40	99	-
	ClearBells	0	41	99	-
	ChorusBells	0	42	99	-
	SynthMallet	0	64	99	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Synth.Effect	SoftCrystal	0	65	99	-
	LoudGlocken	0	66	99	-
	ChristmasBel	0	67	99	-
	VibeBells	0	68	99	-
	DigitalBells	0	69	99	-
	AirBells	0	70	99	-
	BellHarp	0	71	99	-
	Gamelimba	0	72	99	-
	Atmosphere	0	0	100	-
	WarmAtmos.	0	18	100	-
	HollwRelease	0	19	100	-
	NylonElPiano	0	40	100	-
	NylonHarp	0	64	100	-
	HarpVox	0	65	100	-
	Atmos.Pad	0	66	100	-
	Planet	0	67	100	-
	Brightness	0	0	101	-
	FantasyBells	0	64	101	-
	Smokey	0	96	101	-
	Goblins	0	0	102	-
	GoblinsSynth	0	64	102	-
	Creeper	0	65	102	-
	RingPad	0	66	102	-
	Ritual	0	67	102	-
	ToHeaven	0	68	102	-
	Night	0	70	102	-
	Glisten	0	71	102	-
	BellChoir	0	96	102	-
	Echoes	0	0	103	-
	Echoes2	0	8	103	-
	EchoPan	0	14	103	-
	EchoBells	0	64	103	-
	BigPan	0	65	103	-
	SynthPiano	0	66	103	-
	Creation	0	67	103	-
	StarDust	0	68	103	-
	Reso&Panning	0	69	103	-
	Sci-Fi	0	0	104	-
	Starz	0	64	104	-
Ethnic	Sitar	0	0	105	-
	DetunedSitar	0	32	105	-
	Sitar2	0	35	105	-
	Tambra	0	96	105	-
	Tamboura	0	97	105	-
	Banjo	0	0	106	-
	MutedBanjo	0	28	106	-
	Rabab	0	96	106	-
	Gopichant	0	97	106	-
	Oud	0	98	106	-
	Shamisen	0	0	107	-
	Koto	0	0	108	-
	Taisho-kin	0	96	108	-
	Kanoon	0	97	108	-
	Kalimba	0	0	109	-
	Bagpipe	0	0	110	-
	Fiddle	0	0	111	-
	Shanai	0	0	112	-
	Shanai2	0	64	112	-
	Pungi	0	96	112	-
	Hichiriki	0	97	112	-
Percussive	TinkleBell	0	0	113	-
	Bonang	0	96	113	-
	Altair	0	97	113	-
	GamelanGongs	0	98	113	-
	StereoGamlan	0	99	113	-
	RamaCymbal	0	100	113	-
	AsianBells	0	101	113	-
	Agogo	0	0	114	-
	SteelDrums	0	0	115	-
	GlassPerc.	0	97	115	-
	ThaiBells	0	98	115	-
	Woodblock	0	0	116	-
	Castanets	0	96	116	-
	TaikoDrum	0	0	117	-
	GranCassa	0	96	117	-
	MelodicTom	0	0	118	-
	MelodicTom2	0	64	118	-
	RealTom	0	65	118	-
	RockTom	0	66	118	-
	SynthDrum	0	0	119	-
	AnalogTom	0	64	119	-
	ElectroPerc.	0	65	119	-
	Rev.Cymbal	0	0	120	-
SoundEffect	GtrFretNoise	0	0	121	-
	BreathNoise	0	0	122	-
	Seashore	0	0	123	-
	BirdTweet	0	0	124	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
SoundEffect	TelephonRing	0	0	125	-
	Helicopter	0	0	126	-
	Applause	0	0	127	-
	Gunshot	0	0	128	-
	CuttingNoise	64	0	1	-
	CuttingNoiz2	64	0	2	-
	StringSlap	64	0	4	-
	Fl.KeyClick	64	0	17	-
	Shower	64	0	33	-
	Thunder	64	0	34	-
	Wind	64	0	35	-
	Stream	64	0	36	-
	Bubble	64	0	37	-
	Feed	64	0	38	-
	Dog	64	0	49	-
	Horse	64	0	50	-
	BirdTweet2	64	0	51	-
	Ghost	64	0	55	-
	Maou	64	0	56	-
	PhoneCall	64	0	65	-
	DoorSqueak	64	0	66	-
	DoorSlam	64	0	67	-
	ScratchCut	64	0	68	-
	ScratchSplit	64	0	69	-
	WindChime	64	0	70	-
	TelphonRing2	64	0	71	-
	CarEngineIgn	64	0	81	-
	CarTiresSqel	64	0	82	-
	CarPassing	64	0	83	-
	CarCrash	64	0	84	-
	Siren	64	0	85	-
	Train	64	0	86	-
	JetPlane	64	0	87	-
	Starship	64	0	88	-
	Burst	64	0	89	-
	RollrCoaster	64	0	90	-
	Submarine	64	0	91	-
	Laugh	64	0	97	-
	Scream	64	0	98	-
	Punch	64	0	99	-
	Heartbeat	64	0	100	-
	FootSteps	64	0	101	-
	MachineGun	64	0	113	-
	LaserGun	64	0	114	-
	Explosion	64	0	115	-
	Firework	64	0	116	-

GM2 Voice

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Piano	GrandPiano	121	0	1	-
	GrandPianoW	121	1	1	-
	GrandPianoD	121	2	1	-
	BrightPiano	121	0	2	-
	BrightPianoW	121	1	2	-
	ElecGrandPno	121	0	3	-
	ElecGrandPW	121	1	3	-
	Honkytonk	121	0	4	-
	HonkytonkW	121	1	4	-
	El.Piano1	121	0	5	-
	DetunedEP1	121	1	5	-
	EP1VeloMix	121	2	5	-
	60'sEl.Piano	121	3	5	-
	El.Piano2	121	0	6	-
	DetunedEP2	121	1	6	-
	EP2VeloMix	121	2	6	-
	EPLegend	121	3	6	-
	EPPhase	121	4	6	-
	Harpsichord	121	0	7	-
	Harpsi.OctMx	121	1	7	-
	HarpsichordW	121	2	7	-
	Harpsi.KOff	121	3	7	-
	Clavi.	121	0	8	-
	PulseClavi.	121	1	8	-
ChromaticPerc	Celesta	121	0	9	-
	Glockenspiel	121	0	10	-
	MusicBox	121	0	11	-
	Vibraphone	121	0	12	-
	VibraphoneW	121	1	12	-
	Marimba	121	0	13	-
	MarimbaW	121	1	13	-
	Xylophone	121	0	14	-
	TubularBells	121	0	15	-
	ChurchBells	121	1	15	-
	Carillon	121	2	15	-
	Dulcimer	121	0	16	-
Organ	DrawbarOrgan	121	0	17	-
	DetDrawOrgan	121	1	17	-
	It60'sOrgan	121	2	17	-
	DrawbarOrg2	121	3	17	-
	Perc.Organ	121	0	18	-
	DetPercOrgan	121	1	18	-
	Perc.Organ2	121	2	18	-
	RockOrgan	121	0	19	-
	ChurchOrgan	121	0	20	-
	ChrchOrgOctM	121	1	20	-
	DetChurchOrg	121	2	20	-
	ReedOrgan	121	0	21	-
	PuffOrgan	121	1	21	-
	Accordion	121	0	22	-
	Accordion2	121	1	22	-
	Harmonica	121	0	23	-
	TangoAccord	121	0	24	-
Guitar	NylonGuitar	121	0	25	-
	Ukulele	121	1	25	-
	NylonGtrKOff	121	2	25	-
	NylonGuitar2	121	3	25	-
	SteelGuitar	121	0	26	-
	12StrGuitar	121	1	26	-
	Mandolin	121	2	26	-
	Steel&Body	121	3	26	-
	JazzGuitar	121	0	27	-
	PedlSteelGtr	121	1	27	-
	CleanGuitar	121	0	28	-
	DetCleanGtr	121	1	28	-
	MidToneGtr	121	2	28	-
	MutedGuitar	121	0	29	-
	FunkGuitar	121	1	29	-
	MutedV-SwGtr	121	2	29	-
	JazzMan	121	3	29	-
	Overdriven	121	0	30	-
	GuitarPinch	121	1	30	-
	Distortion	121	0	31	-
	FeedbackGtr	121	1	31	-
	DstRhythmGtr	121	2	31	-
	GtrHarmonics	121	0	32	-
	GtrFeedback	121	1	32	-

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
Bass	AcousticBass	121	0	33	-
	FingerBass	121	0	34	-
	FingerSlap	121	1	34	-
	PickBass	121	0	35	-
	FretlessBass	121	0	36	-
	SlapBass1	121	0	37	-
	SlapBass2	121	0	38	-
	SynthBass1	121	0	39	-
	WarmSyBass	121	1	39	-
	ResoSynhBass	121	2	39	-
	ClaviBass	121	3	39	-
	Hammer	121	4	39	-
	SynthBass2	121	0	40	-
	AttackBass	121	1	40	-
	RubberBass	121	2	40	-
	AttackPulse	121	3	40	-
Strings	Violin	121	0	41	-
	SlwAtkViolin	121	1	41	-
	Viola	121	0	42	-
	Cello	121	0	43	-
	Contrabass	121	0	44	-
	Trem.Strings	121	0	45	-
	PizzicatoStr	121	0	46	-
	Orch.Harp	121	0	47	-
	YangChin	121	1	47	-
	Timpani	121	0	48	-
Ensemble	Strings1	121	0	49	-
	StringsBrass	121	1	49	-
	60'sStrings	121	2	49	-
	Strings2	121	0	50	-
	SynStrings1	121	0	51	-
	SynStrings3	121	1	51	-
	SynStrings2	121	0	52	-
	ChoirAahs	121	0	53	-
	ChoirAahs2	121	1	53	-
	VoiceOohs	121	0	54	-
	Humming	121	1	54	-
	SynthVoice	121	0	55	-
	AnalogVoice	121	1	55	-
	OrchestraHit	121	0	56	-
	BassHitPlus	121	1	56	-
	6thHit	121	2	56	-
	EuroHit	121	3	56	-
Brass	Trumpet	121	0	57	-
	DarkTpSoft	121	1	57	-
	Trombone	121	0	58	-
	Trombone2	121	1	58	-
	BriteTrombon	121	2	58	-
	Tuba	121	0	59	-
	MutedTrumpet	121	0	60	-
	MuteTrumpet2	121	1	60	-
	FrenchHorn	121	0	61	-
	FrenchHorn2	121	1	61	-
	BrassSection	121	0	62	-
	BrassSect2	121	1	62	-
	SynthBrass1	121	0	63	-
	SynthBrass3	121	1	63	-
	AnaSynBrass1	121	2	63	-
	JumpBrass	121	3	63	-
	SynthBrass2	121	0	64	-
	SynthBrass4	121	1	64	-
	AnaSynBrass2	121	2	64	-
Reed	SopranoSax	121	0	65	-
	AltoSax	121	0	66	-
	TenorSax	121	0	67	-
	BaritoneSax	121	0	68	-
	Oboe	121	0	69	-
	EnglishHorn	121	0	70	-
	Bassoon	121	0	71	-
	Clarinet	121	0	72	-
Pipe	Piccolo	121	0	73	-
	Flute	121	0	74	-
	Recorder	121	0	75	-
	PanFlute	121	0	76	-
	BlownBottle	121	0	77	-
	Shakuhachi	121	0	78	-

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

Category	Voice Name	Voice Number			Voice Type
		MSB	LSB	PRG	
SoundEffect	BirdTweet2	121	3	124	-
	TelephonRing	121	0	125	-
	TelRing2	121	1	125	-
	DoorCreaking	121	2	125	-
	Door	121	3	125	-
	Scratch	121	4	125	-
	WindChime	121	5	125	-
	Helicopter	121	0	126	-
	CarEngine	121	1	126	-
	CarStop	121	2	126	-
	CarPass	121	3	126	-
	CarCrash	121	4	126	-
	Siren	121	5	126	-
	Train	121	6	126	-
	Jetplane	121	7	126	-
	Starship	121	8	126	-
	BurstNoise	121	9	126	-
	Applause	121	0	127	-
	Laughing	121	1	127	-
	Screaming	121	2	127	-
	Punch	121	3	127	-
	HeartBeat	121	4	127	-
	Footsteps	121	5	127	-
	Gunshot	121	0	128	-
	MachineGun	121	1	128	-
	Lasergun	121	2	128	-
	Explosion	121	3	128	-
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	Drums

MSB (0-127)	8			8			8			8			
LSB (0-127)	0			0			0			1			
PRG (0-127)	0			1			2			2			
PRG (1-128)	1			2			3			3			
Voice Name	Mega NylonGuitar			Mega SteelGuitar			Mega HiStringGtr			Mega 12StringGtr			
Key Range	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5		above C6	above C8
										Element1 (Steel)	Element2 (HiString)		
Key On Velocity Value	Harmonics 127–121 Slide 120–106 Hammer 105–91 Mute 90–76 Dead 75–61 Open Hard 60–41 Open Medium 40–21 Open Soft 20–1	Strum Noise 127–1	Fret Noise 127–1	Harmonics 127–121 Slide 120–106 Hammer 105–91 Mute 90–76 Dead 75–61 Open Hard 60–41 Open Medium 40–21 Open Soft 20–1	Strum Noise 127–1	Fret Noise 127–1	Hard 127–90 Soft 89–1	Strum Noise 127–1	Fret Noise 127–1	Hard 127–116 Medium 115–72 Soft 71–1	Hard 127–90 Soft 89–1	Strum Noise 127–1	Fret Noise 127–1

: No Sound

MSB (0-127)	8			8			8			8			8		
LSB (0-127)	0			1			2			0			0		
PRG (0-127)	3			3			3			4			5		
PRG (1-128)	4			4			4			5			6		
Voice Name	Mega CleanGuitar			Mega SolidGuitar1			Mega SolidGuitar2			Mega OverdriveGtr			Mega DistortionGtr		
Key Range	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8
127	127	127	127	127	127	127	127	127	127	127	127		127	127	
	Pick Harmonics			Pick Harmonics			Pick Harmonics			Pick Harmonics			Pick Harmonics		
	121			121			121			121			121		
120	120			120			120			120			120		
	Slide			Slide			Slide								
110															
	106			106			106								
	105			105			105								
100	Hammer			Hammer			Hammer								
	91			91			91								
90	90			90			90			Mute			Mute		
	Mute			Mute			Mute								
80															
	76			76			76								
	75			75			75								
70	Dead			Dead			Dead								
Key On Velocity Value	61	Strum Noise	Fret Noise	61	Strum Noise	Fret Noise	61	Strum Noise	Fret Noise		EFX			EFX	
60	60			60			60			56			56		
										55			55		
50	Slap			Slap			Open Hard								
	41			41			41								
40	40			40			40								
	Open Hard			Open Hard			Open Medium			Open			Open		
30															
	21			21			21								
20	20			20			20								
	Open Soft			Open Soft			Open Soft								
10															
1	1	1	1	1	1	1	1	1	1	1	1		1	1	

MSB (0-127)	8			8			8			8		
LSB (0-127)	0			0			0			0		
PRG (0-127)	16			17			18			19		
PRG (1-128)	17			18			19			20		
Voice Name	Mega AcousticBass			Mega ElectricBass			Mega PickBass			Mega FretlessBass		
Key Range	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8
127	127	127		127	127		127	127		127	127	
	Harmonics			Slap			Harmonics			Harmonics		
	121			121			121			121		
120	120			120			120			120		
110												
100	Dead			Dead			Dead			Dead		
90												
	81			81			81			81		
80	80			80			80			80		
70	Open Hard			Open Hard								
Key On Velocity Value		EFX			EFX			EFX			EFX	
	61			61			Mute					
60	60			60								
50												
							41					
40							40			Open		
30	Open Soft			Open Soft								
20							Open					
10												
1	1	1		1	1		1	1		1	1	

MSB (0-127)	8			8			8			8			8		
LSB (0-127)	0			0			0			0			0		
PRG (0-127)	48			49			56			64			82		
PRG (1-128)	49			50			57			65			83		
Voice Name	Mega SmallStrings			Mega LargeStrings			Mega Brass			Mega Trumpet			Mega TenorSax		
Key Range	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8	below B5	above C6	above C8
127	127			127			127			127	127	127	127	127	127
	Glissando Down			Glissando Down			Glissando Up			Glissando Up					
	121			121			121			121					
120	120			120			120			120					
	Tremolo			Tremolo			Falls Fast f			Falls			Falls		
	111			111			111			111					
110	110			110			110			110					
	Spicato ff			Spicato ff			Falls Fast mf			Shake					
							101			101			101		
100							100			100			100		
	96			96			Shake								
	95			95			91								
90	Spicato f			Spicato f			90			Straight			Growl		
							Scoops								
	81			81			81			81			81		
80	80			80			80			80			80		
70	Legato			Legato			Attack			Legato			Legato		
Key On Velocity Value	61			61			61			61	Valve Noise	Breath Noise	61	Valve Noise (C6–B6 Key On Noise, C7–B7 Key Off Noise)	Breath Noise
60	60			60			60			60			60		
50	f			f			f			ff			f		
	41			41			41			41			41		
40	40			40			40			40			40		
30	mf			mf			mf			f			mf		
	21			21			21			21			21		
20	20			20			20			20			20		
10	p			p			p			mf			mp		
1	1			1			1			1	1	1	1	1	1

Panel Drum Kit

Bank Select MSB (0-127)					127	127	127	127	127	127
Bank Select LSB (0-127)					0	0	0	0	0	0
Program Change (0-127)					0	1	4	8	16	24
Program Change (1-128)					1	2	5	9	17	25
MIDI		Keyboard Note	Key Off	Alternate Group	Live! Standard Kit 1	Live! Standard Kit 2	Hit Kit	Room Kit	Rock Kit	Electro Kit
Note#	Note									
13	C#-1	C#1		3	Surdo Mute					
14	D-1	D1		3	Surdo Open					
15	D#-1	D#1			Hi Q					
16	E-1	E1			Whip Slap					
17	F-1	F1		4	Scratch H					
18	F#-1	F#1		4	Scratch L					
19	G-1	G1			Finger Snap					
20	G#-1	G#1			Click Noise					
21	A-1	A1			Metronome Click					
22	A#-1	A#1			Metronome Bell					
23	B-1	B1			Seq Click L					
24	C0	C2			Seq Click H					
25	C#0	C#2			Brush Tap					
26	D0	D2	O		Brush Swirl					
27	D#0	D#2			Brush Slap					
28	E0	E2	O		Brush Tap Swirl					Reverse Cymbal
29	F0	F2	O		Snare Roll					
30	F#0	F#2			Castanet					Hi Q 2
31	G0	G2			Snare Soft	Snare Soft 2	Snare Electro		Snare Noisy	Snare Snappy Electro
32	G#0	G#2			Sticks					
33	A0	A2			Kick Soft		Kick Tight L			Kick 3
34	A#0	A#2			Open Rim Shot	Open Rim Shot H Short	Snare Pitched			
35	B0	B2			Kick Tight		Kick Wet		Kick 2	Kick Gate
36	C1	C3			Kick	Kick Short	Kick Tight H		Kick Gate	Kick Gate Heavy
37	C#1	C#3			Side Stick	Side Stick Light	Stick Ambient			
38	D1	D3			Snare	Snare Short	Snare Ambient	Snare Snappy	Snare Rock	Snare Noisy 2
39	D#1	D#3			Hand Clap					
40	E1	E3			Snare Tight	Snare Tight H	Snare Tight 2	Snare Tight Snappy	Snare Rock Tight	Snare Noisy 3
41	F1	F3			Floor Tom L		Hybrid Tom 1	Tom Room 1	Tom Rock 1	Tom Electro 1
42	F#1	F#3		1	Hi-Hat Closed		Hi-Hat Closed 2			
43	G1	G3			Floor Tom H		Hybrid Tom 2	Tom Room 2	Tom Rock 2	Tom Electro 2
44	G#1	G#3		1	Hi-Hat Pedal		Hi-Hat Pedal 2			
45	A1	A3			Low Tom		Hybrid Tom 3	Tom Room 3	Tom Rock 3	Tom Electro 3
46	A#1	A#3		1	Hi-Hat Open		Hi-Hat Open 2			
47	B1	B3			Mid Tom L		Hybrid Tom 4	Tom Room 4	Tom Rock 4	Tom Electro 4
48	C2	C4			Mid Tom H		Hybrid Tom 5	Tom Room 5	Tom Rock 5	Tom Electro 5
49	C#2	C#4			Crash Cymbal 1					
50	D2	D4			High Tom		Hybrid Tom 6	Tom Room 6	Tom Rock 6	Tom Electro 6
51	D#2	D#4			Ride Cymbal 1					
52	E2	E4			Chinese Cymbal					
53	F2	F4			Ride Cymbal Cup					
54	F#2	F#4			Tambourine		Tambourine Light			
55	G2	G4			Splash Cymbal					
56	G#2	G#4			Cowbell					
57	A2	A4			Crash Cymbal 2					
58	A#2	A#4			Vibraslap					
59	B2	B4			Ride Cymbal 2					
60	C3	C5			Bongo H					
61	C#3	C#5			Bongo L					
62	D3	D5			Conga H Mute					
63	D#3	D#5			Conga H Open					
64	E3	E5			Conga L					
65	F3	F5			Timbale H					
66	F#3	F#5			Timbale L					
67	G3	G5			Agogo H					
68	G#3	G#5			Agogo L					
69	A3	A5			Cabasa					
70	A#3	A#5			Maracas					
71	B3	B5	O		Samba Whistle H					
72	C4	C6	O		Samba Whistle L					
73	C#4	C#6			Guiro Short					
74	D4	D6	O		Guiro Long					
75	D#4	D#6			Claves					
76	E4	E6			Wood Block H					
77	F4	F6			Wood Block L					
78	F#4	F#6			Cuica Mute					Scratch H 2
79	G4	G6			Cuica Open					Scratch L 2
80	G#4	G#6		2	Triangle Mute					
81	A4	A6		2	Triangle Open					
82	A#4	A#6			Shaker					
83	B4	B6			Jingle Bells					
84	C5	C7			Bell Tree					
85	C#5	(C#7)								
86	D5	(D7)								
87	D#5	(D#7)								
88	E5	(E7)								
89	F5	(F7)								
90	F#5	(F#7)								
91	G5	(G7)								

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

Same as Standard Kit 1

No Sound

Bank Select MSB (0-127)					127	127	127	127	127	127
Bank Select LSB (0-127)					0	0	0	0	0	0
Program Change (0-127)					25	27	32	40	48	86
Program Change (1-128)					26	28	33	41	49	87
MIDI		Keyboard	Key	Alternate	Analog Kit	Dance Kit	Jazz Kit	Live! Brush Kit	Live! Symphony Kit	Live! Studio Kit
Note#	Note	Note	Off	Group						
13	C#-1	C#1		3		Kick Dance 1				
14	D-1	D1		3		Kick Dance 2				
15	D#-1	D#1								
16	E-1	E1								
17	F-1	F1		4		Scratch Dance 1				
18	F#-1	F#1		4		Scratch Dance 2				
19	G-1	G1								
20	G#-1	G#1								
21	A-1	A1				Dance Perc 1				
22	A#-1	A#1				Reverse Dance 1				
23	B-1	B1				Dance Perc 2				
24	C0	C2				Hi Q Dance 1				
25	C#0	C#2				Snare Analog 3				Brush Tap
26	D0	D2	O			Vinyl Noise				Brush Swirl
27	D#0	D#2				Snare Analog 4				Brush Slap
28	E0	E2	O		Reverse Cymbal	Reverse Cymbal				Brush Tap Swirl
29	F0	F2	O			Reverse Dance 2				Snare Roll
30	F#0	F#2			Hi Q 2	Hi Q 2				
31	G0	G2			Snare Noisy 4	Snare Techno	Snare Jazz H	Brush Slap 2		Snare Studio L
32	G#0	G#2				Snare Dance 1				
33	A0	A2			Kick 3	Kick Techno Q			Kick Soft 2	Kick Amb H
34	A#0	A#2				Rim Gate		Open Rim Shot Light		Open Rim Shot
35	B0	B2			Kick Analog Short	Kick Techno L			Gran Cassa	Kick Amb L
36	C1	C3			Kick Analog	Kick Techno	Kick Jazz	Kick Jazz	Gran Cassa Mute	Kick Studio
37	C#1	C#3			Side Stick Analog	Side Stick Analog	Side Stick Light	Side Stick Light		Side Stick
38	D1	D3			Snare Analog	Snare Clap	Snare Jazz L	Brush Slap 3	Band Snare	Snare Studio M
39	D#1	D#3				Dance Clap				Hand Clap
40	E1	E3			Snare Analog 2	Snare Dry	Snare Jazz M	Brush Tap 2	Band Snare 2	Snare Studio L
41	F1	F3			Tom Analog 1	Tom Analog 1		Tom Brush 1		Floor Tom L
42	F#1	F#3		1	Hi-Hat Closed Analog	Hi-Hat Closed 3				Hi-Hat Closed
43	G1	G3			Tom Analog 2	Tom Analog 2		Tom Brush 2		Floor Tom H
44	G#1	G#3		1	Hi-Hat Closed Analog 2	Hi-Hat Closed Analog 3				Hi-Hat Pedal
45	A1	A3			Tom Analog 3	Tom Analog 3		Tom Brush 3		Low Tom
46	A#1	A#3		1	Hi-Hat Open Analog	Hi-Hat Open 3				Hi-Hat Open
47	B1	B3			Tom Analog 4	Tom Analog 4		Tom Brush 4		Mid Tom L
48	C2	C4			Tom Analog 5	Tom Analog 5		Tom Brush 5		Mid Tom H
49	C#2	C#4			Crash Analog	Crash Analog			Hand Cymbal	Crash Cymbal 1
50	D2	D4			Tom Analog 6	Tom Analog 6		Tom Brush 6		High Tom
51	D#2	D#4							Hand Cymbal Short	Ride Cymbal 1
52	E2	E4								Chinese Cymbal
53	F2	F4								Ride Cymbal Cup
54	F#2	F#4				Tambourine Analog				Tambourine
55	G2	G4								Splash Cymbal
56	G#2	G#4			Cowbell Analog	Cowbell Dance				Cowbell
57	A2	A4							Hand Cymbal 2	Crash Cymbal 2
58	A#2	A#4				Vbraslap Analog				
59	B2	B4				Ride Analog			Hand Cymbal 2 Short	Ride Cymbal 2
60	C3	C5				Bongo Analog H				Bongo H
61	C#3	C#5				Bongo Analog L				Bongo L
62	D3	D5			Conga Analog H	Conga Analog H				Conga H Mute
63	D#3	D#5			Conga Analog M	Conga Analog M				Conga H Open
64	E3	E5			Conga Analog L	Conga Analog L				Conga L
65	F3	F5								Timbale H
66	F#3	F#5								Timbale L
67	G3	G5								
68	G#3	G#5								
69	A3	A5								Cabasa
70	A#3	A#5			Maracas 2	Maracas 2				Maracas
71	B3	B5	O							
72	C4	C6	O							
73	C#4	C#6								Guiro Short
74	D4	D6	O							Guiro Long
75	D#4	D#6			Claves 2	Claves 2				
76	E4	E6				Dance Perc 3				
77	F4	F6				Dance Perc 4				
78	F#4	F#6			Scratch H 2	Dance Breath 1				Cuica Mute
79	G4	G6			Scratch L 2	Dance Breath 2				Cuica Open
80	G#4	G#6		2						Triangle Mute
81	A4	A6		2						Triangle Open
82	A#4	A#6								Shaker
83	B4	B6								
84	C5	C7								Wind Chime
85	C#5	(C#7)								
86	D5	(D7)								
87	D#5	(D#7)								
88	E5	(E7)								
89	F5	(F7)								
90	F#5	(F#7)								
91	G5	(G7)								

Bank Select MSB (0-127)					127	127
Bank Select LSB (0-127)					0	0
Program Change (0-127)					87	88
Program Change (1-128)					88	89
MIDI		Keyboard Note	Key Off	Alternate Group	Live! Power Kit 1	Live! Power Kit 2
Note#	Note					
13	C#-1	C#1		3		
14	D-1	D1		3		
15	D#-1	D#1				
16	E-1	E1				
17	F-1	F1		4		
18	F#-1	F#1		4		
19	G-1	G1				
20	G#-1	G#1				
21	A-1	A1				
22	A#-1	A#1				
23	B-1	B1				
24	C0	C2				
25	C#0	C#2				
26	D0	D2	O			
27	D#0	D#2				
28	E0	E2	O			
29	F0	F2	O			
30	F#0	F#2				
31	G0	G2			Snare Soft Power 1	Snare Soft Power 2
32	G#0	G#2				
33	A0	A2			Kick Amb+	Kick Amb+
34	A#0	A#2			Open Rim Power 1	Open Rim Power 2
35	B0	B2			Kick Power Open	Kick Power Open
36	C1	C3			Kick Power Closed	Kick Power Closed
37	C#1	C#3			Side Stick Power	Side Stick Power
38	D1	D3			Snare Power	Snare Power Snappy
39	D#1	D#3			Hand Clap Power	Hand Clap Power
40	E1	E3			Snare Rough	Snare Loose
41	F1	F3			Tom Power 1	Tom Power 1
42	F#1	F#3		1	Hi-Hat Closed Power	Hi-Hat Closed Power+Edge
43	G1	G3			Tom Power 2	Tom Power 2
44	G#1	G#3		1	Hi-Hat Pedal Power	Hi-Hat Pedal Power
45	A1	A3			Tom Power 3	Tom Power 3
46	A#1	A#3		1	Hi-Hat Open Power	Hi-Hat Open Power
47	B1	B3			Tom Power 4	Tom Power 4
48	C2	C4			Tom Power 5	Tom Power 5
49	C#2	C#4				
50	D2	D4			Tom Power 6	Tom Power 6
51	D#2	D#4				
52	E2	E4				
53	F2	F4				
54	F#2	F#4				
55	G2	G4				
56	G#2	G#4				
57	A2	A4				
58	A#2	A#4				
59	B2	B4				
60	C3	C5				
61	C#3	C#5				
62	D3	D5				
63	D#3	D#5				
64	E3	E5				
65	F3	F5				
66	F#3	F#5				
67	G3	G5				
68	G#3	G#5				
69	A3	A5				
70	A#3	A#5				
71	B3	B5	O			
72	C4	C6	O			
73	C#4	C#6				
74	D4	D6	O			
75	D#4	D#6				
76	E4	E6				
77	F4	F6				
78	F#4	F#6				
79	G4	G6				
80	G#4	G#6		2		
81	A4	A6		2		
82	A#4	A#6				
83	B4	B6				
84	C5	C7				
85	C#5	(C#7)				
86	D5	(D7)				
87	D#5	(D#7)				
88	E5	(E7)				
89	F5	(F7)				
90	F#5	(F#7)				
91	G5	(G7)				

Bank Select MSB (0-127)			126	126	126	126	126
Bank Select LSB (0-127)			0	0	0	0	0
Program Change (0-127)			35	0	1	40	43
Program Change (1-128)			36	1	2	41	44
MIDI		Keyboard	Arabic Kit	SFX Kit 1*	SFX Kit 2*	Live! Cuban Kit	Live! PopLatin Kit
Note#	Note	Note					
13	C#-1	C#1					Cajon Low
14	D-1	D1					Cajon Slap
15	D#-1	D#1					Cajon Tip
16	E-1	E1					Claves High
17	F-1	F1					Claves Low
18	F#-1	F#1					Hand Clap
19	G-1	G1					
20	G#-1	G#1					Finger Snap
21	A-1	A1					Castanet
22	A#-1	A#1				Conga H Tip	Conga H Tip
23	B-1	B1				Conga H Heel	Conga H Heel
24	C0	C2	Nakarazan Dom			Conga H Open	Conga H Open
25	C#0	C#2	Cabasa			Conga H Mute	Conga H Mute
26	D0	D2	Nakarazan Edge			Conga H Slap Open	Conga H Slap Open
27	D#0	D#2	Hager Dom			Conga H Slap	Conga H Slap
28	E0	E2	Hager Edge			Conga H Slap Mute	Conga H Slap Mute
29	F0	F2	Bongo H			Conga L Tip	Conga L Tip
30	F#0	F#2	Bongo L			Conga L Heel	Conga L Heel
31	G0	G2	Conga H Mute			Conga L Open	Conga L Open
32	G#0	G#2	Conga H Open			Conga L Mute	Conga L Mute
33	A0	A2	Conga L			Conga L Slap Open	Conga L Slap Open
34	A#0	A#2	Zagrouda H			Conga L Slap	Conga L Slap
35	B0	B2	Zagrouda L			Conga L Slide	Conga L Slide
36	C1	C3	Kick Soft	Cutting Noise	Phone Call	Bongo H Open 1 Finger	Bongo H Open 1 finger
37	C#1	C#3	Side Stick	Cutting Noise 2	Door Squeak	Bongo H Open 3 Finger	Bongo H Open 3 finger
38	D1	D3	Snare Soft		Door Slam	Bongo H Rim	Bongo H Rim
39	D#1	D#3	Arabic Hand Clap	String Slap	Scratch Cut	Bongo H Tip	Bongo H Tip
40	E1	E3	Snare		Scratch H 3	Bongo H Heel	Bongo H Heel
41	F1	F3	Floor Tom L		Wind Chime	Bongo H Slap	Bongo H Slap
42	F#1	F#3	Hi-Hat Closed		Telephone Ring 2	Bongo L Open 1 Finger	Bongo L Open 1 finger
43	G1	G3	Floor Tom H			Bongo L Open 3 Finger	Bongo L Open 3 finger
44	G#1	G#3	Hi-Hat Pedal			Bongo L Rim	Bongo L Rim
45	A1	A3	Low Tom			Bongo L Tip	Bongo L Tip
46	A#1	A#3	Hi-Hat Open			Bongo L Heel	Bongo L Heel
47	B1	B3	Mid Tom L			Bongo L Slap	Bongo L Slap
48	C2	C4	Mid Tom H			Timbale L Open	Timbale L Open
49	C#2	C#4	Crash Cymbal 1				
50	D2	D4	High Tom				
51	D#2	D#4	Ride Cymbal 1				
52	E2	E4	Crash Cymbal 2	Flute Key Click	Car Engine Ignition		
53	F2	F4	Duhulla Dom		Car Tires Squeal	Paila L	Paila L
54	F#2	F#4	Tambourine		Car Passing	Timbale H Open	Timbale H Open
55	G2	G4	Duhulla Tak		Car Crash		
56	G#2	G#4	Cowbell		Siren		
57	A2	A4	Duhulla Sak		Train		
58	A#2	A#4	Claves		Jet Plane		
59	B2	B4	Doff Dom		Starship	Paila H	Paila H
60	C3	C5	Katem Dom		Burst	Cowbell Top	Cowbell Top
61	C#3	C#5	Katem Tak		Roller Coaster		Cowbell 1
62	D3	D5	Katem Sak		Submarine		Cowbell 2
63	D#3	D#5	Katem Tak				Cowbell 3
64	E3	E5	Doff Tak			Guiro Short	Guiro Short
65	F3	F5	Tabla Dom			Guiro Long	Guiro Long
66	F#3	F#5	Tabla Tak1				Metal Guiro Short
67	G3	G5	Tabla Tik				Metal Guiro Long
68	G#3	G#5	Tabla Tak2	Shower	Laugh	Tambourine	Tambourine
69	A3	A5	Tabla Sak	Thunder	Scream		Tambourim Open
70	A#3	A#5	Tabla Roll of Edge	Wind	Punch		Tambourim Mute
71	B3	B5	Tabla Flam	Stream	Heart Beat		Tambourim Tip
72	C4	C6	Sagat 1	Bubble	Foot Steps	Maracas	Maracas
73	C#4	C#6	Tabel Dom	Feed		Shaker	Shaker
74	D4	D6	Sagat 3			Cabasa	Cabasa
75	D#4	D#6	Tabel Tak				Cuica Mute
76	E4	E6	Sagat 2				Cuica Open
77	F4	F6	Rik Dom				Cowbell High 1
78	F#4	F#6	Rik Tak 2				Cowbell High 2
79	G4	G6	Rik Finger 1				Shekere
80	G#4	G#6	Rik Tak 1				Shekere Tone
81	A4	A6	Rik Finger 2				Triangle Mute
82	A#4	A#6	Rik Brass Tremolo				Triangle Open
83	B4	B6	Rik Sak				
84	C5	C7	Rik Tik	Dog	Machine Gun		Wind Chime
85	C#5	(C#7)		Horse	Laser Gun		
86	D5	(D7)		Bird Tweet 2	Explosion		
87	D#5	(D#7)			Firework		
88	E5	(E7)					
89	F5	(F7)					
90	F#5	(F#7)		Ghost			
91	G5	(G7)		Maou			

* Actual Keyboard Notes of the SFX Kit 1 and 2 are one octave lower than the ones described in the above list.

GM2 Drum Kit / SFX Kit

Bank Select MSB (0-127)		120	120	120	120	120
Bank Select LSB (0-127)		0	0	0	0	0
Program Change (0-127)		0	8	16	24	25
Program Change (1-128)		1	9	17	25	26
MIDI		Standard Set	Room Set	Power Set	Electronic Set	Analog Set
Note#	Note					
13	C#-1					
14	D-1					
15	D#-1					
16	E-1					
17	F-1					
18	F#-1					
19	G-1					
20	G#-1					
21	A-1					
22	A#-1					
23	B-1					
24	C0					
25	C#0					
26	D0					
27	D#0	High Q				
28	E0	Slap				
29	F0	Scratch Push				
30	F#0	Scratch Pull				
31	G0	Sticks				
32	G#0	Square Click				
33	A0	Metronome Click				
34	A#0	Metronome Bell				
35	B0	Acoustic Bass Drum				
36	C1	Bass Drum 1		Power Kick Drum	Electric Bass Drum	Analog Bass Drum
37	C#1	Side Stick				Analog Rim Shot
38	D1	Acoustic Snare		Power Snare Drum	Electric Snare 1	Analog Snare 1
39	D#1	Hand Clap				
40	E1	Electric Snare			Electric Snare 2	
41	F1	Low Floor Tom	Room Low Tom 2	Power Low Tom 2	Electric Low Tom 2	Analog Low Tom 2
42	F#1	Closed Hi-hat				Analog CHH 1
43	G1	High Floor Tom	Room Low Tom 1	Power Low Tom 1	Electric Low Tom 1	Analog Low Tom 1
44	G#1	Pedal Hi-hat				Analog CHH 2
45	A1	Low Tom	Room Mid Tom 2	Power Mid Tom 2	Electric Mid Tom 2	Analog Mid Tom 2
46	A#1	Open Hi-hat				Analog OHH
47	B1	Low-Mid Tom	Room Mid Tom 1	Power Mid Tom 1	Electric Mid Tom 1	Analog Mid Tom 1
48	C2	High Mid Tom	Room Hi Tom 2	Power Hi Tom 2	Electric Hi Tom 2	Analog Hi Tom 2
49	C#2	Crash Cymbal 1				Analog Cymbal
50	D2	High Tom	Room Hi Tom 1	Power Hi Tom 1	Electric Hi Tom 1	Analog Hi Tom 1
51	D#2	Ride Cymbal 1				
52	E2	Chinese Cymbal			Reverse Cymbal	
53	F2	Ride Bell				
54	F#2	Tambourine				
55	G2	Splash Cymbal				
56	G#2	Cowbell				Analog Cowbell
57	A2	Crash Cymbal 2				
58	A#2	Vibra-slap				
59	B2	Ride Cymbal 2				
60	C3	High Bongo				
61	C#3	Low Bongo				
62	D3	Mute Hi Conga				Analog High Conga
63	D#3	Open Hi Conga				Analog Mid Conga
64	E3	Low Conga				Analog Low Conga
65	F3	High Timbale				
66	F#3	Low Timbale				
67	G3	High Agogo				
68	G#3	Low Agogo				
69	A3	Cabasa				
70	A#3	Maracas				Analog Maracas
71	B3	Short Whistle				
72	C4	Long Whistle				
73	C#4	Short Guiro				
74	D4	Long Guiro				
75	D#4	Claves				Analog Claves
76	E4	Hi Wood Block				
77	F4	Low Wood Block				
78	F#4	Mute Cuica				
79	G4	Open Cuica				
80	G#4	Mute Triangle				
81	A4	Open Triangle				
82	A#4	Shaker				
83	B4	Jingle Bell				
84	C5	Bell Tree				
85	C#5	Castanets				
86	D5	Mute Surdo				
87	D#5	Open Surdo				
88	E5					
89	F5					
90	F#5					
91	G5					

Same as Standard Kit 1

No Sound

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

Category	Style Name
Pop&Rock	HardRock
	PowerRock
	FunkPopRock
	ContempRock
	AcousticRock
	Live8Beat
	Cool8Beat
	8BeatModern
	VintageGtrPop
	WestCoastPop
	60's8Beat
	70's8Beat
	BubblegumPop
	60'sGuitarPop
	90'sGuitarPop
	BritPop
	BritPopSwing
	ContempRockBld
	RockBallad
	SoftRock
	60'sRock1
	60'sRock2
	StandardRock
	RockShuffle
	SouthernRock
	Unplugged1
	Unplugged2
	CaribbeanRock
	8BeatGtrPop
	JazzPop
	FusionShuffle
	PopShuffle
	ScandPopShuffle
	KoolShuffle
	J-PopHit1
	J-PopHit2
Ballad	8BeatBallad
	EasyBallad
	EPBallad
	PowerBallad
	EpicBallad
	16BeatBallad1
	16BeatBallad2
	70'sPopBallad
	80'sMovieBallad
	80'sBoyBand
	6-8SlowRock1
	6-8SlowRock2
	6-8Modern
	6-8Orchestral
	12-8Ballad
	Chillout1
	Chillout2
	NewR&BBallad
	PopNewAge
	PopWaltz
	16BeatPop
	LoveSong
	AnalogBallad
	GuitarBallad
	ChartBallad
	OrganBallad
	PianoBallad
	RomanticBallad
	AcousticBallad
	GuitarSerenade
	PopPianoBallad
	ContempPopBld
	Slow&Easy
	R&B
Dance	Ibiza2004
	Ibiza2002
	EuroTrance
	RetroPop
	CelticTrance
	70'sDisco1
	70'sDisco2
	70'sDiscoFunk
	DiscoPhilly
	90'sDisco
	DreamDance
	TrancePop
	FrenchHouse
	ClubHouse
	DiscoHouse
	ClassicHipHop
	NewHipHop
	PopR&B
	NewR&B

Category	Style Name
Dance	ChartR&B
	ChartPop1
	ChartPop2
	EuroHipHop
	USHipHop
	LatinDJ's
	DiscoChocolate
	DiscoTeens
	USPop
	80'sDisco
	6-8Trance
	Garage
	TechnoParty
	House
	SwingHouse
	DiscoGroove
	Clubdance
	ClubLatin
	HipHopLight
	HipHopGroove
	Groundbeat
	TripHop
Swing&Jazz	OrchBigBand1
	ClassicBigBand
	ModernBigBand
	ModernJazz
	Bebop
	OrchBigBand2
	AcousticJazz
	MediumJazz
	FastJazz
	MORSwing
	BigBandFast1
	BigBandMed1
	Swingin'BigBand
	30'sBigBand
	40'sBigBand
	OrchestraSwing1
	OrchestraSwing2
	CoolJazzBallad
	ModernJazzBld
	OrganCombo
	BigBandFast2
	BigBandMed2
	EasyListening
	OrchJazzBallad
	MidnightSwing
	JazzWaltzSlow
	JazzWaltzMed
	JazzWaltzFast
	Five-Four
	AfroCuban
	Dixieland1
	Ragtime1
	Charleston
	FrenchJazz
	JazzClub
	Dixieland2
	Ragtime2
	LoungePiano
	OrganGroove
	JumpJive
	BigBandShuffle
	MoonlightBallad
	BigBandBallad
R&B	BluesRock
	70'sChartSoul
	SoulBrothers
	FranklySoul
	JazzFunk
	LiveSoulBand
	SoulSwing
	6-8Soul
	MotorCity
	SlowBlues
	Rock&Roll1
	Rock&RollShfl
	Skiffle
	OldiesR&R
	Swingin'Boogie
	DetroitPop1
	DetroitPop2
	SoulShuffle
	Soul
	SoulBeat
	GospelSwing
	GospelSisters
	SouthernGospel
	GospelBrothers

Category	Style Name
R&B	GospelFunk
	WorshipSlow
	WorshipMed
	WorshipFast
	WorshipIrishRk
	Worship6-8
	PianoBoogie
	ShuffleBlues
	R&BBallad
	LovelyShuffle
	KoolFunk
	BlueberryBlues
	60'sRock&Roll
	Rock&Roll2
	Twist
	CrocoTwist
	WorshpPowerBld
	ModernR&B
	NewGospel
	ComboTwist
	BluesBallad
	AmazingGospel
	ComboBoogie
Country	NewCountry
	EasyCountry
	CountryHits
	ModCntryBld1
	ModCntryBld2
	Bluegrass
	Hoedown
	CountryShuffle
	CntrySing-along
	CountryWaltz
	CountrySwing1
	Country2-4
	CountryTwoStep
	CountryBrothers
	Country8Beat
	CountrySwing2
	CountryPop
	CountryRock
	CountryBallad
	ModernCntryPop
	CountryRockBld
	SingerSongWriter
	FingerPickin
Latin	BrazilianSamba
	BossaNova
	Bomba
	Salsa
	Guijira
	Guaguanco
	CubanSon
	BoleroLento
	Merengue
	Bachata
	RumbaFlamenco1
	PopLatin
	LatinDisco1
	LatinDisco2
	RockChaCha
	OrchestralBossa
	SlowBossa
	FastBossa
	PopBossa1
	PopBossa2
	Cumbia
	Danzon
	Vallenato4-4
	Beguine
	Calypso
	OrganBossa
	GuitarRumba
	BigBandSamba
	BigBandMambo
	BigBandSalsa
	RumbaFlamenco2
	RumbaIsland
	HappyReggae
	SheriffReggae
	JumboReggae
	PopRumba
	PopMambo
	PopSalsa
Ballroom	ViennneseWaltz1
	ViennneseWaltz2
	EnglishWaltz
	Slowfox
	Foxtrot

Category	Style Name
Ballroom	Quickstep
	Tango1
	Tango2
	Swingfox
	Pasodoble
	Samba
	ChaChaCha
	Rumba
	Jive
	OrganChaCha
	OrganSwing
	OrganSamba
	OrganQuickstep
	OrganRumba
	TheatreFoxtrot
	TheatreQuickstep
	TheatreMarch
	9-8Waltz
	SwingWaltz
	ClassicWaltz
	TraditionalWaltz
Movie&Show	AniFantasy
	Sci-fiMarch
	SecretService
	70'sTVTheme
	WildWest
	BaroqueConcerto
	BaroqueAir
	OrchestralBolero
	OrchestralMarch
	OrchestralPolka
	BroadwayBld
	MovieBallad
	MovieSwing
	MovieDisco
	SaturdayNight
	Moonlight6-8
	ClassicPianoBld
	PopClassics
	Showtune
	French50's
	TapDanceSwing
	MoviePanther
	ChristmasSwing1
	ChristmasSwing2
	ChristmasWaltz
	Learning2-4
	Learning3-4
	Learning4-4
	Learning6-8
	ChildrensMarch
	Fun3-4
	Fun4-4
	Fun6-8
Entertainer	EuroPopOrgan
	70'sFrenchHit
	DiscoFox
	AlpBallad1
	AlpBallad2
	ScandShuffle
	ScandCountry1
	ScandCountry2
	ScandSlowRock
	ScandBugg
	Schlager6-8
	SchlagerPolka
	SchlagerSamba
	SchlagerShuffle
	SchlagerItalia
	SchlagerRock
	SchlagerAlp
	SchlagerPop
	SchlagerBeat
	SchlagerRumba
	PartyPolka
	Tijuana
	Latin-a-GoGo
	AlpRock
	8BeatAdria
	PubPiano
	PolkaPop
	DiscoHands
	Carnival
	Caribbean

Category	Style Name
World	Flamenco
	SpanishPaso
	PopFlamenco
	FrenchMusette
	ItalianMazurka
	IrishHymn
	IrishDance
	CelticDance
	Sirtaki
	OrientalPop
	HighlandWaltz
	ItalianWaltz
	FrenchWaltz
	ScandWaltz
	MariachiWaltz
	Zouk
	Casatchock
	Hawaiian
	OberPolka1
	OberWaltzer1
	Strathspey
	Reel
	Jig
	GayGordons
	MexicanDance
	ItalianPolka
	ItalianTango
	Tarantella
	ScandHambo
	ScandSchottis
	USMarch
	6-8March
	GermanMarch1
	GermanMarch2
	BrassBand
	Norteno
	CumbiaTejana
	BandaPolka
	BandaVals
	HullyGully
	OberPolka2
	OberWaltzer2
	LimboRock
	Enka1
	Enka2
	NewAge
	JapaneseFolk
	FolkRock
	PopEnka

Order	Bank Name
1	E.Gtr16BtCut1
2	E.Gtr16BtCut2
3	E.Gtr16BtCut3
4	FunkyGtr16Bt1
5	FunkyGtr16Bt2
6	FunkyGtr16Bt3
7	DiscoGuitar
8	E.Gtr16BtShfl1
9	E.Gtr16BtShfl2
10	E.Gtr16BtPick
11	SteelTriplet1
12	SteelTriplet2
13	E.Gtr8BtShfl
14	SteelGuitar6-8
15	E.Guitar6-8
16	SteelGtrPick1
17	SteelGtrPick2
18	SteelGtrPick3
19	SteelGtrPick4
20	NylonGtrPick
21	NylonAccomp
22	NylonBossa1
23	NylonBossa2
24	FlamencoGtr
25	A.GtrAccomp
26	Steel8BtStrum1
27	Steel8BtStrum2
28	SteelBsChdSlow
29	SteelBsChdFast
30	ReggaeAccomp
31	E.Gtr8BtStrm1
32	E.Gtr8BtStrm2
33	E.GtrRock1
34	E.GtrRock2
35	OrganBlues
36	BoogieLoops
37	LatinKeys
38	BaroqueStrings
39	StringsArpeggio
40	StrRun&Fall
41	TrumpetSwing
42	BrassSwing
43	BigBandSwing1
44	BigBandSwing2
45	BigBandSwing3
46	Brass8Beat
47	BrassChords1
48	BrassChords2
49	BrassChords3
50	Breathing
51	Falls
52	SynthBrassSlide
53	OrchestraHit
54	Classical
55	Comedy
56	AttentionDuo
57	Fanfare
58	PianoGlissando
59	Gong&Chime
60	DrumEndings

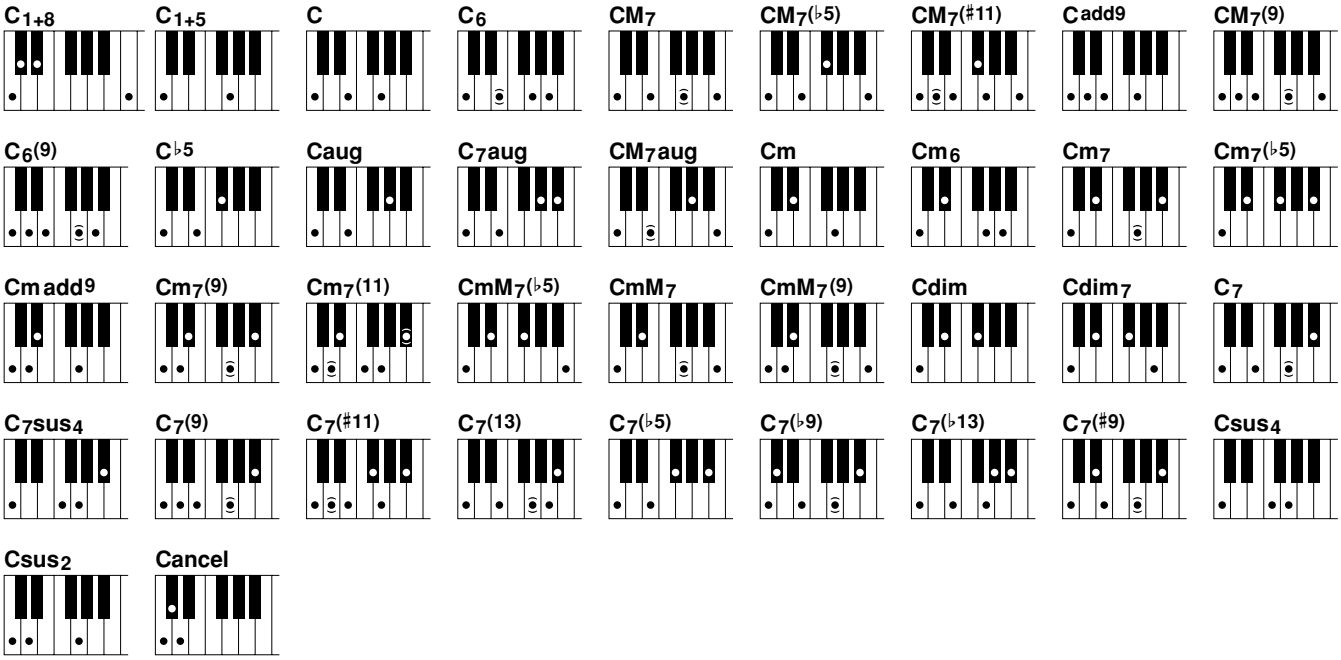
Order	Bank Name
61	PianoArp16Bt
62	PianoArp8Bt
63	HeavenArpegio
64	TwinkleArpegio
65	TechSeq1
66	TechSeq2
67	TranceSeq1
68	TranceSeq2
69	Harpeggio1
70	Harpeggio2
71	LatinPerc1
72	LatinPerc2
73	LatinPerc3
74	LatinPerc4
75	LatinPerc5
76	Conga&Bongo1
77	CarnivalDeRio
78	LatinPop
79	Rumba&Soca
80	SambaPerc
81	Oriental1
82	Oriental2
83	Oriental3
84	Oriental4
85	Oriental5
86	Oriental6
87	Oriental7
88	Oriental8
89	ArabicPerc1
90	ArabicPerc2
91	SnarePlay1
92	SnarePlay2
93	Cajon1
94	Cajon2
95	Shaker&Tamb
96	Timbales&Tom
97	EthnicPerc
98	BigBells
99	MagicBells
100	XmasLoops
101	PowerToms
102	PowerSnares
103	CrashCymbals
104	PowerKit1
105	PowerKit2
106	DanceKit
107	LatinKit1
108	LatinKit2
109	LatinKit3
110	Conga&Bongo2
111	DanceMix1
112	DanceMix2
113	BreakBeatz
114	DJ-BasicSet
115	DJ-SFX
116	HipHop1
117	HipHop2
118	HeavyShuffle
119	NewR&B
120	ScratchBank

Operation: [DIRECT ACCESS] button + button listed below		Function of the accessed LCD display				
STYLE	[ACMP]	FUNCTION	STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	CHORD FINGERRING		
	[AUTO FILL IN]					
	[OTS LINK]			STYLE SETTING		
	[BREAK]	MIXING CONSOLE		EFFECT (STYLE)	DSP	
	INTRO [I]			VOL/VOICE (STYLE)	VOICE	
	INTRO [II]				PAN	
	INTRO [III]				VOLUME	
	MAIN VARIATION [A]			FILTER (STYLE)	HARMONIC CONTENT	
	MAIN VARIATION [B]				BRIGHTNESS	
	MAIN VARIATION [C]			EFFECT (STYLE)	REVERB	
	MAIN VARIATION [D]				CHORUS	
	ENDING/rit. [I]			EQ (STYLE)	EQ HIGH	
	ENDING/rit. [II]				EQ LOW	
	ENDING/rit. [III]			MASTER COMP		
	[SYNC START]	FUNCTION	STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	SPLIT POINT	SPLIT POINT (ACMP) SETTING	
	[SYNC STOP]			STYLE SETTING	SYNCSTOP WINDOW SETTING	
	[START/STOP]					
	[POP & ROCK]	MIXING CONSOLE		VOL/VOICE (STYLE)	VOICE	
	[BALLAD]				PAN	
	[DANCE]				VOLUME	
	[SWING & JAZZ]			FILTER (STYLE)	HARMONIC CONTENT	
	[R & B]					
	[COUNTRY]				BRIGHTNESS	
	[LATIN]			EFFECT (STYLE)	REVERB	
	[BALLROOM]				CHORUS	
	[MOVIE & SHOW]				DSP	
	[ENTERTAINER]			EQ	MASTER EQ EDIT	
	[WORLD]			EQ (STYLE)	EQ HIGH	
	[FILE ACCESS]				EQ LOW	
SONG	[LYRICS/TEXT]	FUNCTION	SONG SETTING		LYRICS LANGUAGE SETTING	
	[SCORE]				-	
	[GUIDE]				GUIDE MODE SETTING	
	[P.A.T.]				-	
	[SP1]	MIXING CONSOLE		VOL/VOICE (SONG 1–8)	VOLUME	
	[SP2]			FILTER (SONG 1–8)	HARMONIC CONTENT	
	[SP3]			TUNE		
	[SP4]			EFFECT (SONG 1–8)		
	[LOOP]			EQ (SONG 1–8)		
	[FF]			EQ (SONG 9–16)		
	[RW]			EFFECT (SONG 9–16)		
	[PLAY/PAUSE]			TUNE		
	[STOP]			FILTER (SONG 9–16)	HARMONIC CONTENT	
	[REC]			VOL/VOICE (SONG 9–16)	VOLUME	
	[I]	FUNCTION	SONG SETTING			
	[II]	MIXING CONSOLE		MASTER COMP		
	[III]					
	[IV]	FUNCTION	SONG SETTING			
	[V]	MIXING CONSOLE		LINE IN	LINE OUT PANEL	
	[VI]				LINE OUT DRUM	
(Other buttons)	[DEMO]	FUNCTION	UTILITY	OWNER	LANGUAGE SETTING	
	[FADE IN/OUT]			CONFIG 1	FADE IN/OUT SETTING	
	[METRONOME ON/OFF]				METRONOME SETTING	
	[TAP TEMPO]				TAP SETTING	
	TEMPO [+]		MIDI TEMPLATE EDIT	SYSTEM	MIDI CLOCK SETTING	
	TEMPO [-]		STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	STYLE SETTING		
TRANSPOSE	TRANSPOSE [+]	MIXING CONSOLE		TUNE	TRANSPOSE	**
	TRANSPOSE [-]	FUNCTION	CONTROLLER	KEYBOARD/PANEL	TRANSPOSE ASSIGNMENT	
UPPER OCTAVE	UPPER OCTAVE [+]	MIXING CONSOLE		TUNE	OCTAVE	*
	UPPER OCTAVE [-]					
HARD DISK RECORDER	[NEXT]	FUNCTION	UTILITY	SYSTEM RESET		
	[PREV]			OWNER		
	[PLAY/PAUSE]			MEDIA		
	[STOP]			CONFIG 2	SPEAKER	
	[REC]			CONFIG 1	FADE IN/OUT SETTING	
	[SELECT]	PLAY LIST				
	[SETTING]					
MULTIPAD	[SELECT]	DIGITAL REC	MULTI PAD CREATOR	RECORD		
	[STOP]					
	[1]	MULTIPAD OPEN SAVE		MULTIPAD EDIT	MULTIPAD 1	
	[2]				MULTIPAD 2	
	[3]				MULTIPAD 3	
	[4]				MULTIPAD 4	

Operation: [DIRECT ACCESS] button + button listed below		Function of the accessed LCD display				
MENU	[FUNCTION]	FUNCTION	MIDI TEMPLATE SELECT			
	[VOICE CREATOR]		MASTER TUNE/SCALE TUNE	MASTER TUNE		
	[DIGITAL RECORDING]		VIDEO OUT			
[BALANCE]		MIXING CONSOLE		TUNE	OCTAVE	*
[MIXING CONSOLE]		MIXING CONSOLE		EQ	MASTER EQ EDIT	
[CHANNEL ON/OFF]		FUNCTION	MASTER TUNE/SCALE TUNE	SCALE TUNE		
[EXIT]		MAIN				
VOICE	PART SELECT [LEFT]	FUNCTION	REGIST SEQUENCE/FREEZE/ VOICE SET	VOICE SET	LEFT	
	PART SELECT [RIGHT 1]				R1	
	PART SELECT [RIGHT 2]				R2	
	PART SELECT [RIGHT 3]				R3	
	PART ON/OFF [LEFT]		STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	SPLIT POINT	SPLIT POINT (LEFT) SETTING	
	PART ON/OFF [RIGHT 1]				SPLIT POINT (RIGHT3) SETTING	
	PART ON/OFF [RIGHT 2]					
	PART ON/OFF [RIGHT 3]					
	[LEFT HOLD]		STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	SPLIT POINT	SPLIT POINT (LEFT) SETTING	
	[HARMONY/ECHO]	FUNCTION	HARMONY/ECHO		HARMONY ECHO SETTING	
	[INITIAL TOUCH]		CONTROLLER	KEYBOARD/PANEL	INITIAL TOUCH	
	[SUSTAIN]				AFTER TOUCH	
	[MONO]	MIXING CONSOLE		TUNE	PORTAMENTO TIME SETTING	*
	[DSP]			EFFECT	DSP DEPTH SETTING	*
	[DSP VARIATION]				EFFECT TYPE	
	[PIANO]			VOL/VOICE (PANEL)	VOICE	*
	[E. PIANO]				PAN	*
	[ORGAN]				VOLUME	*
	[STRINGS]			TUNE	PORTAMENT TIME SETTING	*
	[CHOIR]			FILTER	HARMONIC CONTENT	*
	[BRASS]				BRIGHTNESS	*
	[TRUMPET]			TUNE	PITCHBEND RANGE	*
	[SAXOPHONE]				OCTAVE	*
	[FLUTE/CLARINET]				TUNING	*
	[GUITAR]			EFFECT	REVERB	*
	[BASS]				CHORUS	*
	[PERC./DRUM KIT]				DSP	*
	[ACCORDION]			EQ	MASTER EQ EDIT	
	[PAD]			EQ (PANEL)	EQ HIGH	*
	[SYNTH]				EQ LOW	*
	[ORGAN FLUTES]	FUNCTION	UTILITY	CONFIG 2	-	
	[CUSTOM VOICE]					
	[USER DRIVE]		REGIST SEQUENCE/FREEZE/ VOICE SET	VOICE SET	-	*
MUSIC FINDER		MUSIC FINDER			MUSIC FINDER SEARCH 1	
ONE TOUCH SETTING	[1]	FUNCTION	STYLE SETTING/SPLIT POINT/ CHORD FINGERRING	SPLIT POINT	SPLIT POINT (ACMP) SETTING	
	[2]					
	[3]					
	[4]					
MIC/LINE IN	[VOCAL HARMONY]	VOCAL HARMONY		VOCAL HARMONY EDIT	-	
	[TALK]	MIC SETTING		TALK SETTING	1	
	[EFFECT]	MIXING CONSOLE		EFFECT	MIC.DSP SETTING	
	[VH TYPE SELECT]	VOCAL HARMONY		VOCAL HARMONY EDIT	-	
	[MIC SETTING]	MIXING CONSOLE		EFFECT	MIC.EFFECT TYPE SELECT	
REGISTRATION	REGIST BANK [+]	FUNCTION	REGIST SEQUENCE/FREEZE/ VOICE SET	REGISTRATION SEQUENCE		
	REGIST BANK [-]					
	[FREEZE]			FREEZE		
	[MEMORY]			REGISTRATION SEQUENCE		
	[1]	REGIST BANK OPEN SAVE	REGISTRATION EDIT		REGISTRATION 1	
	[2]				REGISTRATION 2	
	[3]				REGISTRATION 3	
	[4]				REGISTRATION 4	
	[5]				REGISTRATION 5	
	[6]				REGISTRATION 6	
	[7]				REGISTRATION 7	
	[8]				REGISTRATION 8	
PEDAL	PEDAL 1	FUNCTION	CONTROLLER	FOOT PEDAL	PEDAL1	
	PEDAL 2				PEDAL2	
	PEDAL 3				PEDAL3	
WHEEL	MODULATION	FUNCTION	CONTROLLER	KEYBOARD/PANEL	MODULATION WHEEL	
	PITCH BEND	MIXING CONSOLE		TUNE	PITCH BEND RANGE	*

* The current position differs depending on the current keyboard part.
** The cursor position differs depending on the current function assigned to the [TRANSPOSE] button.

Chord Types Recognized in the Fingered Mode / Im Fingered-Modus erkannte Akkordarten / Types d'accords reconnus en mode Fingered



Chord Name [Abbreviation]	Normal Voicing	Display for root "C"
1+8	1+8	C1+8
1+5	1+5	C1+5
Major [M]	1+3+5	C
Sixth [6]	1+(3)+5+6	C6
Major seventh [M7]	1+3+(5)+7	CM7
Major seventh flatted fifth [M7♭5]	1+3+♭5+7	CM7(♭5)
Major seventh add sharp eleventh [M7(♯11)]	1+(2)+3+♯4+5+7	CM7(♯11)
Add ninth [(9)]	1+2+3+5	Cadd9
Major seventh ninth [M7_9]	1+2+3+(5)+7	CM7(9)
Sixth ninth [6_9]	1+2+3+(5)+6	C6(9)
Flatted fifth [(♭5)]	1+3+♭5	C♭5
Augmented [aug]	1+3+♯5	Caug
Seventh augmented [7aug]	1+3+♯5+♭7	C7aug
Major seventh augmented [M7aug]	1+(3)+♯5+7	CM7aug
Minor [m]	1+♭3+5	Cm
Minor sixth [m6]	1+♭3+5+6	Cm6
Minor seventh [m7]	1+♭3+(5)+♭7	Cm7
Minor seventh flatted fifth [m7♭5]	1+♭3+♭5+♭7	Cm7(♭5)
Minor add ninth [m(9)]	1+2+♭3+5	Cm add9
Minor seventh ninth [m7(9)]	1+2+♭3+(5)+♭7	Cm7(9)
Minor seventh eleventh [m7(11)]	1+(2)+♭3+4+5+(♭7)	Cm7(11)
Minor major seventh flatted fifth [mM7♭5]	1+♭3+♭5+7	CmM7(♭5)
Minor major seventh [mM7]	1+♭3+(5)+7	CmM7
Minor major seventh ninth [mM7(9)]	1+2+♭3+(5)+7	CmM7(9)
Diminished [dim]	1+♭3+♭5	Cdim
Diminished seventh [dim7]	1+♭3+♭5+6	Cdim7
Seventh [7]	1+3+(5)+♭7	C7
Seventh suspended fourth [7sus4]	1+4+5+♭7	C7sus4
Seventh ninth [7(9)]	1+2+3+(5)+♭7	C7(9)
Seventh add sharp eleventh [7(♯11)]	1+(2)+3+♯4+5+♭7	C7(♯11)
Seventh add thirteenth [7(13)]	1+3+(5)+6+♭7	C7(13)
Seventh flatted fifth [7♭5]	1+3+♭5+♭7	C7(♭5)
Seventh flatted ninth [7(♭9)]	1+♭2+3+(5)+♭7	C7(♭9)
Seventh add flatted thirteenth [7(♭13)]	1+3+5+♭6+♭7	C7(♭13)
Seventh sharp ninth [7(♯9)]	1+♯2+3+(5)+♭7	C7(♯9)
Suspended fourth [sus4]	1+4+5	Csus4
One plus two plus five [sus2]	1+2+5	Csus2
cancel	1+♭2+2	Cancel

* Notes in parentheses can be omitted.

Reverb Block

Type	Description	MSB	LSB
HALL1	Reverb simulating the acoustics of a hall.	1	0
HALL2		1	16
HALL3		1	17
HALL4		1	18
HALL5		1	1
HALL M		1	6
HALL L		1	7
ROOM1	Reverb simulating the acoustics of a room.	2	16
ROOM2		2	17
ROOM3		2	18
ROOM4		2	19
ROOM5		2	0
ROOM6		2	1
ROOM7		2	2
ROOM S		2	5
ROOM M		2	6
ROOM L		2	7
STAGE1	Reverb suitable for a solo instrument.	3	16
STAGE2		3	17
STAGE3		3	0
STAGE4		3	1
PLATE1	Reverb simulating a plate reverb unit.	4	16
PLATE2		4	17
PLATE3		4	0
GM PLATE		4	7
WHITE ROOM	A unique short reverb with a bit of initial delay.	16	0
TUNNEL	Simulates a cylindrical space expanding to left and right.	17	0
CANYON	A hypothetical acoustic space which extends without limit.	18	0
BASEMENT	A bit of initial delay followed by reverb with a unique resonance.	19	0
LARGE HALL	Reverb simulating the acoustics of a hall.	1	2
MEDIUM HALL		1	3
WARM ROOM	Reverb simulating the acoustics of a warm room.	2	3
WOODY ROOM	Reverb simulating the acoustics of a woody room.	2	4
RICH PLATE	Reverb simulating a rich plate reverb unit.	4	1
NO EFFECT	No effect.	0	0

Chorus Block

Type	Description	MSB	LSB
CHORUS1	Conventional chorus program with rich, warm chorusing.	66	17
CHORUS2		66	8
CHORUS3		66	16
CHORUS4		66	1
CHORUS5		65	2
CHORUS6		65	0
CHORUS7		65	1
CHORUS8		65	8
GM CHORUS1		65	3
GM CHORUS2		65	4
GM CHORUS3		65	5
GM CHORUS4		65	6
FB CHORUS		65	7
CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.	66	0
CELESTE2		66	2
FLANGER1	Creates a sound reminiscent of a jet airplane.	67	8
FLANGER2		67	16
FLANGER3		67	17
FLANGER4		67	1
FLANGER5		67	0
GM FLANGER		67	7
SYMPHONIC1	Adds more stages to the modulation of Celeste.	68	16
SYMPHONIC2		68	0
PHASER1	Cyclically modulates the phase to add modulation to the sound.	72	0
PHASER2		72	8
EP PHASER1		72	17
EP PHASER2		72	18
EP PHASER3		72	16
ENS DETUNE (Ensemble Detune)	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	0
ROTARY SP5	Simulates a rotary speaker.	66	18
NO EFFECT	No effect.	0	0

DSP1-6 Block

Panel Block Name	XG Block Name
DSP1	XG Variation Block
DSP2	XG Insertion1 Block
DSP3	XG Insertion2 Block
DSP4	XG Insertion3 Block
DSP5	XG Insertion4 Block
DSP6	XG Insertion5 Block

Type	Description	MSB	LSB
HALL1	Reverb simulating the acoustics of a hall.	1	0
HALL2		1	16
HALL3		1	17
HALL4		1	18
HALL5		1	1
HALL M		1	6
HALL L		1	7
ROOM1	Reverb simulating the acoustics of a room.	2	16
ROOM2		2	17
ROOM3		2	18
ROOM4		2	19
ROOM5		2	0
ROOM6		2	1
ROOM7		2	2
ROOM S		2	5
ROOM M		2	6
ROOM L		2	7
STAGE1	Reverb suitable for a solo instrument.	3	16
STAGE2		3	17
STAGE3		3	0
STAGE4		3	1
PLATE1	Reverb simulating a plate reverb unit.	4	16
PLATE2		4	17
PLATE3		4	0
GM PLATE		4	7
WHITE ROOM	A unique short reverb with a bit of initial delay.	16	0
TUNNEL	Simulates a cylindrical space expanding to left and right.	17	0
CANYON	A hypothetical acoustic space which extends without limit.	18	0
BASEMENT	A bit of initial delay followed by reverb with a unique resonance.	19	0
DELAY LCR1	Produces three delayed sounds: L, R and C (center).	5	16
DELAY LCR2		5	0
DELAY LR	Produces two delayed sounds: L and R. Two feedback delays are provided.	6	0
ECHO	Two delayed sounds (L and R), and independent feedback delays for L and R.	7	0
CROSS DELAY	The feedback of the two delayed sounds is crossed.	8	0
TEMPO DELAY	Tempo-synchronized delay.	21	0
TEMPO ECHO	Tempo-synchronized echo.	21	8
TEMPO CROSS	Tempo-synchronized cross delay.	22	0
KARAOKE1	Echo for karaoke.	20	0
KARAOKE2		20	1
KARAOKE3		20	2
ER1	This effect isolates only the early reflection components of the reverb.	9	0
ER2		9	1
GATE REVERB	Simulation of gated reverb.	10	0
REVERS GATE	Simulation of gated reverb played back in reverse.	11	0
CHORUS1	Conventional chorus program with rich, warm chorusing.	66	17
CHORUS2		66	8
CHORUS3		66	16
CHORUS4		66	1
CHORUS5		65	2
CHORUS6		65	0
CHORUS7		65	1
CHORUS8		65	8
GM CHORUS1		65	3
GM CHORUS2		65	4
GM CHORUS3		65	5
GM CHORUS4		65	6
FB CHORUS		65	7
CELESTE1	A 3-phase LFO adds modulation and spaciousness to the sound.	66	0
CELESTE2		66	2
SYMPHONIC1	Adds more stages to the modulation of Celeste.	68	16
SYMPHONIC2		68	0
ENS DETUNE (Ensemble Detune)	Chorus effect without modulation, created by adding a slightly pitch-shifted sound.	87	0
FLANGER1	Creates a sound reminiscent of a jet airplane.	67	8
FLANGER2		67	16
FLANGER3		67	17
FLANGER4		67	1
FLANGER5		67	0
GM FLANGER		67	7
V_FLANGER	A simulation on an analog flanger effect. The LFO has a random setting.	104	0
T_FLANGER	Tempo-synchronized flanger.	107	0
DYN FLANGER	Dynamically controlled flanger.	110	0

Type	Description	MSB	LSB
PHASER1	Cyclically modulates the phase to add modulation to the sound.	72	0
PHASER2		72	8
EP PHASER1		72	17
EP PHASER2		72	18
EP PHASER3		72	16
T_PHASER		108	0
DYN PHASER		111	0
DIST HEAVY (Distortion Heavy)	Heavy distortion.	73	0
ST DIST (Stereo Distortion)	Stereo distortion.	73	8
COMP+DIST1 (Compressor + 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+DIST2 (Compressor + Distortion 2)		73	1
OVERDRIVE	Adds mild distortion to the sound.	74	0
ST OD (Stereo Overdrive)	Stereo Overdrive.	74	8
DIST HARD (Distortion Hard)	Hard-edge distortion.	75	16
DIST HARD2 (Distortion Hard 2)		75	22
DIST SOFT (Distortion Soft)	Soft, warm distortion.	75	17
DIST SOFT2 (Distortion Soft2)		75	23
ST DIST HARD (Stereo Distortion Hard)	Hard-edge stereo distortion.	75	18
ST DIST SOFT (Stereo Distortion Soft)	Soft, warm soft distortion.	75	19
V_DIST HARD (V Distortion Hard)	Distortion which simulates vintage tube and fuzz sounds.	98	0
V_DIST SOFT (V Distortion Soft)		98	2
AMP SIM1 (Amp Simulator 1)	A simulation of a guitar amp.	75	0
AMP SIM2 (Amp Simulator 2)		75	1
ST AMP1 (Stereo Amp Simulator 1)	Stereo amp simulator.	75	20
ST AMP2 (Stereo Amp Simulator 2)		75	21
ST AMP3 (Stereo Amp Simulator 3)		75	8
ST AMP4 (Stereo Amp Simulator 4)		75	24
DST+DELAY1 (Distortion + Delay 1)	Distortion and Delay are connected in series.	95	16
DST+DELAY2 (Distortion + Delay 2)		95	0
OD+DELAY1 (Overdrive + Delay 1)	Overdrive and Delay are connected in series.	95	17
OD+DELAY2 (Overdrive + Delay 2)		95	1
CMP+DST+DLY1 (Compressor + Distortion + Delay 1)	Compressor, Distortion and Delay are connected in series.	96	16
CMP+DST+DLY2 (Compressor + Distortion + Delay2)		96	0
CMP+OD+DLY1 (Compressor + Overdrive + Delay 1)	Compressor, Overdrive and Delay are connected in series.	96	17
CMP+OD+DLY2 (Compressor + Overdrive + Delay 2)		96	1
V_DST H+DLY (V Distortion Hard + Delay)	V Distortion and Delay are connected in series.	98	1
V_DST S+DLY (V Distortion Soft + Delay)		98	3
DST+TDLY (Distortion + Tempo Delay)	Distortion and Tempo Delay are connected in series.	100	0
OD+TDLY (Overdrive + Tempo Delay)	Overdrive and Tempo Delay are connected in series.	100	1
CMP+DST+TDL (Compressor + Distortion + Tempo Delay)	Compressor, Distortion and Tempo Delay are connected in series.	101	0
CMP+OD+TDLY1 (Compressor + Overdrive + Tempo Delay 1)	Compressor, Overdrive and Tempo Delay are connected in series.	101	1
CMP+OD+TDLY2 (Compressor + Overdrive + Tempo Delay 2)		101	16
CMP+OD+TDLY3 (Compressor + Overdrive + Tempo Delay 3)		101	17
CMP+OD+TDLY4 (Compressor + Overdrive + Tempo Delay 4)		101	18
CMP+OD+TDLY5 (Compressor + Overdrive + Tempo Delay 5)		101	19
CMP+OD+TDLY6 (Compressor + Overdrive + Tempo Delay 6)		101	20
V_DST H+TDLY (V Distortion Hard + Tempo Delay)	V Distortion Hard and Tempo Delay are connected in series.	103	0
V_DST S+TDLY1 (V Distortion Soft + Tempo Delay 1)	V Distortion Soft and Tempo Delay are connected in series.	103	1
V_DST S+TDLY2 (V Distortion Soft + Tempo Delay 2)		103	16
PITCH CHG1 (Pitch Change 1)	Changes the pitch of the input signal.	80	16
PITCH CHG2 (Pitch Change 2)		80	0
PITCH CHG3 (Pitch Change 3)		80	1
AUTO WAH1	Cyclically modulates the center frequency of a wah filter.	78	16
AUTO WAH2		78	0
AT WAH+DST1 (Auto Wah + Distortion 1)	The output of an Auto Wah can be distorted by Distortion.	78	17
AT WAH+DST2 (Auto Wah + Distortion 2)		78	1
AT WAH+OD1 (Auto Wah + Overdrive 1)	The output of an Auto Wah can be distorted by Overdrive.	78	18
AT WAH+OD2 (Auto Wah + Overdrive 2)		78	2
TOUCH WAH1	Changes the center frequency of a wah filter according to the input level.	82	0
TOUCH WAH2		82	8
TC WAH+DST1 (Touch Wah + Distortion 1)	The output of an Touch Wah can be distorted by Distortion.	82	16
TC WAH+DST2 (Touch Wah + Distortion 2)		82	1
TC WAH+OD1 (Touch Wah + Overdrive 1)	The output of an Touch Wah can be distorted by Overdrive.	82	17
TC WAH+OD2 (Touch Wah + Overdrive 2)		82	2
CLAVI TC WAH (Clavi Touch Wah)	Clavinet Touch Wah	82	18
EP TC WAH (EP Touch Wah)	EP Touch Wah	82	19
WH+DST+DLY1 (Wah + Distortion + Delay 1)	Wah, Distortion and Delay are connected in series.	97	16
WH+DST+DLY2 (Wah + Distortion + Delay 2)		97	0
WH+DST+TDLY (Wah + Distortion + Tempo Delay)	Wah, Distortion and Tempo Delay are connected in series.	102	0
WH+OD+DLY1 (Wah + Overdrive + Delay 1)	Wah, Overdrive and Delay are connected in series.	97	17
WH+OD+DLY2 (Wah + Overdrive + Delay 2)		97	1
WH+OD+TDLY1 (Wah + Overdrive + Tempo Delay 1)	Wah, Overdrive and Tempo Delay are connected in series.	102	1
WH+OD+TDLY2 (Wah + Overdrive + Tempo Delay 2)		102	16

Type	Description	MSB	LSB
MBAND COMP	Multi-band compressor that allows you to adjust the compression effect for individual frequency bands.	105	0
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
NOISE GATE	Gates the input when the input signal falls below a specified level.	84	0
ROTARY SP1 (Rotary Speaker 1)	Simulates a rotary speaker.	69	16
ROTARY SP2 (Rotary Speaker 2)		71	17
ROTARY SP3 (Rotary Speaker 3)		71	18
ROTARY SP4 (Rotary Speaker 4)		70	17
ROTARY SP5 (Rotary Speaker 5)		66	18
ROTARY SP6 (Rotary Speaker 6)		69	0
ROTARY SP7 (Rotary Speaker 7)		71	22
2WAY ROT SP (2-way Rotary Speaker)		86	0
DST+ROT SP (Distortion + Rotary Speaker)	Distortion and rotary speaker connected in series.	69	1
DST+2ROT SP (Distortion + 2-way Rotary Speaker)	Distortion and 2-way rotary speaker connected in series.	86	1
OD+ROT SP (Overdrive + Rotary Speaker)	Overdrive and rotary speaker connected in series.	69	2
OD+2ROT SP (Overdrive + 2-way Rotary Speaker)	Overdrive and 2-way rotary speaker connected in series.	86	2
AMP+ROT SP (Amp Simulator + Rotary Speaker)	Amp simulator and rotary speaker connected in series.	69	3
AMP+2ROT SP (Amp Simulator + 2-way Rotary Speaker)	Amp simulator and 2-way rotary speaker connected in series.	86	3
DUAL ROT SP1 (Dual Rotor Speaker 1)	Rotary speaker simulation with speed switching.	99	0
DUAL ROT SP2 (Dual Rotor Speaker 2)		99	1
TREMOLO1	Rich Tremolo effect with both volume and pitch modulation.	70	16
TREMOLO2		71	19
TREMOLO3		70	0
EP TREMOLO		70	18
GT TREMOLO1 (Guitar Tremolo 1)		71	20
GT TREMOLO2 (Guitar Tremolo 2)		70	19
VIBE VIBRATE	Vibraphone effect	119	0
AUTO PAN1	Several panning effects that automatically shift the sound position (left, right, front, back).	71	16
AUTO PAN2		71	0
EP AUTOPAN		71	21
AUTO PAN3		71	1
EQ DISCO	Equalizer effect that boosts both high and low frequencies, as is typical in most disco music.	76	16
EQ TEL	Equalizer effect that cuts both high and low frequencies, to simulate the sound heard through a telephone receiver.	76	17
2BAND EQ	A stereo EQ with adjustable LOW and HIGH. Ideal for drum Parts.	77	0
3BAND EQ	A mono EQ with adjustable LOW, MID, and HIGH equalizing.	76	0
HM ENHANCE1 (Harmonic Enhancer 1)	Adds new harmonics to the input signal to make the sound stand out.	81	16
HM ENHANCE2 (Harmonic Enhancer 2)		81	0
ST 3BAND EQ	An EQ which allows equalization of low, mid and high bands.	76	18
VCE CANCEL (Voice Cancel)	Attenuates the vocal part of a CD or other source.	85	0
AMBIENCE	Blurs the stereo positioning of the sound to add spatial width.	88	0
TALKING MOD (Talking Modulation)	Adds a vowel sound to the input signal.	93	0
LO-FI	Degrades the audio quality of the input signal.	94	0
DYN FILTER	Dynamically controlled filter.	109	0
DYN RINGMOD	Dynamically controlled Ring Modulator.	112	0
RING MOD	An effect that modifies the pitch by applying amplitude modulation to the frequency of the input.	113	0
ISOLATOR	Controls the level of a specified frequency band of the input signal.	115	0
NO EFFECT	No effect.	0	0
THRU	Bypass without applying an effect.	64	0

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.

Panel Effect Name — **Type MSB (Type LSB)**

HALL1, 2, 3, 4, 5, HALLM, HALLL — **MSB = 01, LSB = 0, 1, 6, 7, 16, 17, 18**

ROOM1, 2, 3, 4, 5, 6, 7, ROOMS, ROOMM, ROOML — **MSB = 0, 2, LSB = 0, 1, 2, 5, 6, 7, 16, 17, 18, 19**

STAGE1, 2, 3, 4 — **MSB = 03**

PLATE1, 2, 3, GM PLATE — **MSB = 04, LSB = 0, 7, 16, 17**

(Reverb, all the DSP blocks)

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

LARGE HALL, MEDIUM HALL — **MSB = 01, LSB = 2, 3**

WARM ROOM, WOODY ROOM — **MSB = 02, LSB = 3, 4**

RICH PLATE — **MSB = 04, LSB = 1**

(Reverb block)

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

DELAY LCR1, DELAY LCR2 — **MSB = 05**

(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1 – 1638.3ms	1 – 16383		
2	Rch Delay	0.1 – 1638.3ms	1 – 16383		
3	Cch Delay	0.1 – 1638.3ms	1 – 16383		
4	Feedback Delay	0.1 – 1638.3ms	1 – 16383		
5	Feedback Level	-63 – +63	1 – 127	(table#16)	
6	Cch Level	0 – 127	0 – 127	(table#18)	
7	High Damp	0.1 – 1.0	1 – 10		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
16	EQ High Gain	-12 – +12dB	52 – 76		

DELAY LR — **MSB = 06**

(All the DSP blocks)

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

ECHO — **MSB = 07**

(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay1	0.1 – 1486.0ms	1 – 14860		
2	Lch Feedback Level	-63 – +63	1 – 127	(table#16)	
3	Rch Delay1	0.1 – 1486.0ms	1 – 14860		
4	Rch Feedback Level	-63 – +63	1 – 127	(table#16)	
5	High Damp	0.1 – 1.0	1 – 10		
6	Lch Delay2	0.1 – 1486.0ms	1 – 14860		
7	Rch Delay2	0.1 – 1486.0ms	1 – 14860		
8	Delay2 Level	0 – 127	0 – 127	(table#18)	
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
14	EQ Low Gain	-12 – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
16	EQ High Gain	-12 – +12dB	52 – 76		

CROSS DELAY — **MSB = 08**

(All the DSP blocks)

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

ER1, ER2 **MSB = 09**
(All the DSP blocks)

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

GATE REVERB **MSB = 10**
REVERS GATE **MSB = 11**
(All the DSP blocks)

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

WHITE ROOM **MSB = 16**
TUNNEL **MSB = 17**
CANYON **MSB = 18**
BASEMENT **MSB = 19**
(Reverb and all the DSP blocks)

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

KARAOKE1, 2, 3 **MSB = 20**
(All the DSP blocks)

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

TEMPO DELAY
TEMPO ECHO **MSB = 21**
(All the DSP blocks)

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

TEMPO CROSS **MSB = 22**
(All the DSP blocks)

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

CHORUS1, 2, 3, 4, 5, 6, 7, 8, GMCHORUS1, 2, 3, 4 **MSB = 65**
FB CHORUS, CELESTE1, 2, ROTARY SP5 **MSB = 66**
(Chorus and all the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15	Input Mode	mono/stereo	0 – 1		
16					

FLANGER1, 2, 3, 4, 5, GM FLANGER **MSB = 67**
(Chorus and all the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Feedback Level	-63 – +63	1 – 127	(table#17)	
4	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15					
16					

SYMPHONIC1, 2 **MSB = 68**
(Chorus and all the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Delay Offset	0.0mS – 50mS	0 – 127	table#2	
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15					
16					

ROTARY SP1, 6 **MSB = 69, LSB = 0, 16**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15					
16					

DST+ROT SP **MSB = 69, LSB = 1**
OD+ROT SP **MSB = 69, LSB = 2**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3					
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W=63	1 – 127	(table#15)	
11					
12					
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60	table#3	
16	Output Level	0 – 127	0 – 127	(table#18)	

AMP+ROT SP **MSB = 69, LSB = 3**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	AMP Type	Off, Stack, Combo, Tube	0 – 3		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W=63	1 – 127	(table#15)	
11					
12					
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60	table#3	
16	Output Level	0 – 127	0 – 127	(table#18)	

TREMOLO1, 3, EP TREMOLO, GT TREMOLO2,
ROTARY SP4 **MSB = 70**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	AM Depth	0 – 127	0 – 127		
3	PM Depth	0 – 127	0 – 127		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15	Input Mode	mono/stereo	0 – 1		
16					

AUTO PAN1, 2, EP AUTOPAN, TREMOLO2,
GT TREMOLO1, ROTARY SP2, 3, 7 **MSB = 71,**
(All the DSP blocks) **LSB = 0,16,17,18,19, 20, 21, 22**

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	L/R Depth	0 – 127	0 – 127		
3	F/R Depth	0 – 127	0 – 127		
4	PAN Direction	L<->R, L->R, L<-R, Lturn, Rturn, L/R	0 – 5		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15					
16					

AUTO PAN3 **MSB = 71, LSB = 1**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	●
2	L/R Depth	0 – 127	0 – 127		
3	F/R Depth	0 – 127	0 – 127		
4	PAN Direction	L<->R, L->R, L<-R, Lturn, Rturn, L/R	0 – 5		
5	LFO Wave	0 – 28	0 – 28		
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	EQ Mid Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain	-12 – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		

No.	Parameter	Display	Value	See Table	Control
14					
15	Input Mode	Mono, Stereo	0 – 1		
16					

PHASER 1, EP PHASER1, 2, 3 **MSB = 72, LSB = 0, 16, 17, 18**
(Chorus and all the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – +63	1 – 127	(table#16)	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Stage	4 – 22	4 – 22		
12	Diffusion	mono/stereo	0 – 1		
13					
14					
15					
16					

PHASER 2 **MSB = 72, LSB = 8**
(Chorus and all the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – +63	1 – 127	(table#16)	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Stage	3 – 11	3 – 11		
12					
13	LFO Phase Difference	-180deg – +180deg (resolution=3deg.)	4 – 124		
14					
15					
16					

DIST HEAVY **MSB = 73, LSB = 0**
OVERDRIVE **MSB = 74, LSB = 0**
(All the DSP blocks)

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

COMP+DIST1,2 **MSB = 73, LSB = 1, 16**
(All the DSP blocks)

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

ST DIST **MSB = 73, LSB = 8**
ST OD **MSB = 74, LSB = 8**
(All the DSP blocks)

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

AMP SIM1, DIST HARD, DIST HARD2,
DIST SOFT, DIST SOFT2 **MSB = 75, LSB = 0,16,17, 22, 23**
(All the DSP blocks)

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

AMP SIM2 **MSB = 75, LSB = 1**
(All the DSP blocks)

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

ST AMP1, 3, ST DIST HARD, ST DIST SOFT **MSB = 75, LSB = 8, 18, 19, 20**
ST AMP2, 4 **MSB = 75, LSB = 21, 24**
(All the DSP blocks)

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

3BAND EQ, EQ DISCO, EQ TEL, ST 3BAND EQ **MSB = 76**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Gain	-12 – +12dB	52 – 76		
2	EQ Mid Frequency	100Hz – 16.0kHz	14 – 58	table#3	
3	EQ Mid Gain	-12 – +12dB	52 – 76		
4	EQ Mid Width	0.1 – 12.0	1 – 120		
5	EQ High Gain	-12 – +12dB	52 – 76		
6	EQ Low Frequency	50Hz – 2.0kHz	8 – 40	table#3	
7	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
8					
9					
10					
11					
12					
13					
14					
15	Input Mode	mono/stereo	0 – 1		
16					

2BAND EQ **MSB = 77**
(All the DSP blocks)

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

AUTO WAH1, 2 **MSB = 78, LSB = 0, 16**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12					
13					
14					
15					
16					

AT WAH+DST1, 2, AT WAH+OD1, 2 **MSB = 78, LSB = 1, 2, 17, 18**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz – 39.7Hz	0 – 127	table#1	
2	LFO Depth	0 – 127	0 – 127	(table#19)	
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12	EQ Low Gain (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff	1.0kHz – thru	34 – 60	table#3	
15	Output Level	0 – 127	0 – 127	(table#18)	
16					

PITCH CHG1, 2 **MSB = 80, LSB = 0, 16**
(All the DSP blocks)

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

PITCH CHG3 **MSB = 80, LSB = 1**
(All the DSP blocks)

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

HM ENHANCER1, 2 **MSB = 81**
(All the DSP blocks)

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

TOUCH WAH1 **MSB = 82, LSB = 0**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12					
13					
14					
15					
16					

TC WAH+DIST1, 2 **MSB = 82, LSB = 1, 16**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12					
13					
14					
15					
16					

TOUCH WAH2, CLAVI TC WAH, EP TC WAH **MSB = 82, LSB = 8, 18, 19**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12	EQ Low Gain (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff	1.0kHz – thru	34 – 60	table#3	
15	Output Level	0 – 127	0 – 127	(table#18)	
16	Release	10 – 680mS	52 – 67	table#12	

TC WAH+OD1, 2 **MSB = 82, LSB = 2, 17**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Sensitivity	0 – 127	0 – 127		
2	Cutoff Frequency Offset	0 – 127	0 – 127		●
3	Resonance	1.0 – 12.0	10 – 120		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	Drive	0 – 127	0 – 127		
12	EQ Low Gain (distortion)	-12 – +12dB	52 – 76		
13	EQ Mid Gain (distortion)	-12 – +12dB	52 – 76		
14	LPF Cutoff	1.0kHz – thru	34 – 60	table#3	
15	Output Level	0 – 127	0 – 127	(table#18)	
16	Release	10 – 680mS	52 – 67	table#12	

COMPRESSOR **MSB = 83**
(All the DSP blocks)

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

NOISE GATE **MSB = 84**
(All the DSP blocks)

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

VCE CANCEL **MSB = 85**
(All the DSP blocks)

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

2WAY ROT SP **MSB = 86, LSB = 0**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0Hz – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High	L63>H – L=H – L<H63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0deg – 180deg (resolution=3deg.)	0 – 60		
13					
14					
15					
16					

DST+2ROT SP **MSB = 86, LSB = 1**
OD+2ROT SP **MSB = 86, LSB = 2**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0 – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High Balance	L63>H – L=H – L<H=63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0 – 180deg	0 – 60		
13					
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60		
16	Output Level	0 – 127	0 – 127	(table#18)	

AMP+2ROT SP **MSB = 86, LSB = 3**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0 – 39.7Hz	0 – 127	table#1	●
2	Drive Low	0 – 127	0 – 127		
3	Drive High	0 – 127	0 – 127		
4	Low/High Balance	L63>H – L=H – L<H=63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10					
11	Crossover Frequency	100Hz – 10.0kHz	14 – 54	table#3	
12	Mic L-R Angle	0 – 180deg	0 – 60		
13	AMP Type	Off, Stack, Combo, Tube	0 – 3		
14	Drive	0 – 127	0 – 127		
15	LPF Cutoff	1kHz – Thru	34 – 60		
16	Output Level	0 – 127	0 – 127	(table#18)	

ENS DETUNE **MSB = 87**
(Chorus and all the DSP blocks)

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

AMBIENCE **MSB = 88**
(All the DSP blocks)

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

TALKING MOD **MSB = 93**
(All the DSP blocks)

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

LO-FI **MSB = 94**
(All the DSP blocks)

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

DST+DELAY1, 2, OD+DELAY1, 2 **MSB = 95**
(All the DSP blocks)

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

CMP+DST+DLY1, 2, CMP+OD+DLY1, 2 **MSB = 96**
(All the DSP blocks)

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

WH+DST+DLY1, 2, WH+OD+DLY1, 2 **MSB = 97**
(All the DSP blocks)

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

V_DIST HARD **MSB = 98, LSB = 0**
V_DIST SOFT **MSB = 98, LSB = 2**
(All the DSP blocks)

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

V DST H+DLY **MSB = 98, LSB = 1**
V_DST S+DLY **MSB = 98, LSB = 3**
(All the DSP blocks)

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

DUAL ROT SP1, 2 **MSB = 99**
(All the DSP blocks)

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

DST+TDLY, OD+TDLY **MSB = 100**
(All the DSP blocks)

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

CMP+DST+TDL, CMP+OD+TDLY1, 2, 3, 4, 5, 6 **MSB = 101**
(All the DSP blocks)

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

WH+DST+TDL, WH+OD+TDLY1, 2 **MSB = 102**
(All the DSP blocks)

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

V_DST H+TDLY,V_DST S+TDLY1, 2 **MSB = 103**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0 – 100%	0 – 100		
2	Device	Transistor/Vintage Tube/ Dist1/Dist2/Fuzz	0 – 4		
3	Speaker	Flat/Stack/Combo/Twin/ Radio/Megaphone	0 – 5		
4	Presence	0 – 20	0 – 20		
5	Output Level	0 – 100%	0 – 100		
6	Delay Time	64th/3 – 4thx6	0 – 19	table#14	
7	Delay Feedback Level	-63 – +63	1 – 127	(table#16)	
8	L/R Diffusion	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		

No.	Parameter	Display	Value	See Table	Control
9	Lag	1(-63ms) – 64(0ms) – 127(63ms)	1 – 127		
10	Dry/Wet Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	●
11	Delay Mix	0 – 127	0 – 127		
12	Feedback High Dump	0.1 – 1.0	1 – 10		
13					
14					
15					
16					

V_FLANGER **MSB = 104**
(All the DSP blocks)

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

MBAND COMP **MSB = 105**
(All the DSP blocks)

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

T_FLANGER **MSB = 107**
(All the DSP blocks)

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

T_PHASER **MSB = 108**
(All the DSP blocks)

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

DYN FILTER **MSB = 109**
(All the DSP blocks)

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

DYN FLANGER **MSB = 110**
(All the DSP blocks)

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

DYN PHASER **MSB = 111**
(All the DSP blocks)

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

DYN RINGMOD **MSB = 112**
(All the DSP blocks)

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

RING MOD **MSB = 113**
(All the DSP blocks)

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

ISOLATOR **MSB = 115**
(All the DSP blocks)

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

VIBE VIBRATE **MSB = 119**
(All the DSP blocks)

No.	Parameter	Display	Value	See Table	Control
1	Vibrate Speed	0.00Hz – 39.7Hz	0 – 127	table#1	
2	Vibrate Depth (AM)	0 – 127	0 – 127		
3	Vibrate Depth (PM)	0 – 127	0 – 127		
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	table#3	
7	EQ Low Gain	-12 – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16.0kHz	28 – 58	table#3	
9	EQ High Gain	-12 – +12dB	52 – 76		
10	Dry/Wet Balance	D63>W – D=W – D<W63	1 – 127	(table#15)	
11	EQ Mid Frequency (*)	100Hz – 10.0kHz	14 – 54	table#3	
12	EQ Mid Gain (*)	-12 – +12dB	52 – 76		
13	EQ Mid Width (*)	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180 – +180deg (resolution=3deg.)	4 – 124		
15	Input Mode	mono/stereo	0 – 1		
16	Vibrate SW	Off, On	0 – 1		●

NO EFFECT **MSB = 0**
(Reverb, Chorus and DSP1)

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

THRU **MSB = 64**
(All the DSP blocks)

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

Parameter 10 Dry/Wet only affects insertion type effects.

(*1) Reverb Block
(*2) Chorus Block, DSP1 Block, DSP2 – 6 Block

Effect Data Assign Table / Effektdaten-Zuordnungstabelle / Tableau d'assignation des données d'effets

table#1
LFO Frequency

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

table#2
Modulation Delay Offset

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

table#3
EQ Frequency

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

table#4
Reverb time

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

table#5
Delay Time (0.1 – 200.0 [ms])

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

table#6
Room Size

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

table#7
Delay Time (0.1 – 400.0 [ms])

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

table#8
Compressor Attack Time

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

table#9
Compressor Release Time

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

table#10
Compressor Ratio

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

table#11
Reverb Width; Depth; Height

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

table#12
Wah Release Time

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

table#13
LO-FI Sampling Frequency Control

Data	Value	Data	Value	Data	Value	Data	Value
0	44.1k	32	1.34k	64	678.0	96	455.0
1	22.1k	33	1.30k	65	668.0	97	450.0
2	14.7k	34	1.26k	66	658.0	98	445.0
3	11.0k	35	1.23k	67	649.0	99	441.0
4	8.8k	36	1.19k	68	639.0	100	437.0
5	7.4k	37	1.16k	69	630.0	101	432.0
6	6.3k	38	1.13k	70	621.0	102	428.0
7	5.5k	39	1.10k	71	613.0	103	424.0
8	4.9k	40	1.08k	72	604.0	104	420.0
9	4.4k	41	1.05k	73	596.0	105	416.0
10	4.0k	42	1.03k	74	588.0	106	412.0
11	3.7k	43	1.00k	75	580.0	107	408.0
12	3.4k	44	980.0	76	573.0	108	405.0
13	3.2k	45	959.0	77	565.0	109	401.0
14	2.9k	46	938.0	78	558.0	110	397.0
15	2.8k	47	919.0	79	551.0	111	394.0
16	2.6k	48	900.0	80	544.0	112	390.0
17	2.5k	49	882.0	81	538.0	113	387.0
18	2.3k	50	865.0	82	531.0	114	383.0
19	2.2k	51	848.0	83	525.0	115	380.0
20	2.1k	52	832.0	84	519.0	116	377.0
21	2.0k	53	817.0	85	513.0	117	374.0
22	1.92k	54	802.0	86	507.0	118	371.0
23	1.84k	55	788.0	87	501.0	119	368.0
24	1.76k	56	774.0	88	496.0	120	364.0
25	1.70k	57	760.0	89	490.0	121	361.0
26	1.63k	58	747.0	90	485.0	122	359.0
27	1.58k	59	735.0	91	479.0	123	356.0
28	1.52k	60	723.0	92	474.0	124	353.0
29	1.47k	61	711.0	93	469.0	125	350.0
30	1.42k	62	700.0	94	464.0	126	347.0
31	1.38k	63	689.0	95	459.0	127	345.0

table#14
Tempo

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

table#15
Dry/Wet

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

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

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

table#17
Feedback Level (Chorus types)

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

table#18
Level

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

table#19
LFO Depth

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

table#20
Dyna Attack Time (ms)

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

table#21
Dyna Release Time (ms)

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

table#22
Ring Mod Carrier Freq Course (Hz)

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

table#23
V-Flanger Delay Offset

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

table#24
Modulation Phase

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

Harmony/Echo Type List / Liste der Harmony/Echo-Effekttypen / Liste des types d'harmonie/d'écho

STANDARD DUET
STANDARD TRIO
FULL CHORD
ROCK DUET
COUNTRY DUET
COUNTRY TRIO

BLOCK
4-WAY CLOSE 1
4-WAY CLOSE 2
4-WAY OPEN
1+5
OCTAVE

STRUM
MULTI ASSIGN
ECHO
TREMOLO
TRILL

Vocal Harmony Type List / Liste der Vocal-Harmony-Effekttypen / Liste des types d'harmonie vocale

Order	Type	LCD Name	Mode	Vocoder Type		Chordal Type		Detune Type		Chromatic Type		Thru Type	
				MSB	LSB	MSB	LSB	MSB	LSB	MSB	LSB	MSB	LSB
1	CountryQuartet	CountryQuar	Chordal/Vocorder	89	111	90	47						
2	ClosedMenQuartet	ClsdMenQuar	Chordal/Vocorder	89	117	90	53						
3	MixAcapQuartet	MixAcapQuar	Chordal/Vocorder	89	119	90	55						
4	Women Choir	WomenChoir	Chordal/Vocorder	89	88	90	24						
5	Jazz Sisters	JazzSisters	Chordal/Vocorder	89	120	90	56						
6	Standard Duet	Std Duet	Chordal/Vocorder	89	80	90	16						
7	Men Choir	MenChoir	Chordal/Vocorder	89	87	90	23						
8	Closed Choir	ClosedChoir	Chordal/Vocorder	89	90	90	26						
9	Girl in Duet	Girl Duet	Chordal/Vocorder	89	81	90	17						
10	Speedy Mouse	SpdyMouse	Chromatic							92	17		
11	HighMaleQuartet	HighMaleQua	Chordal/Vocorder	89	115	90	51						
12	Jazz Quartet	JazzQuartet	Chordal/Vocorder	89	114	90	50						
13	Mixed Choir	MixedChoir	Chordal/Vocorder	89	91	90	27						
14	Country Girls	CntryGirls	Chordal/Vocorder	89	89	90	25						
15	Sisters Trio	SistersTrio	Chordal/Vocorder	89	113	90	49						
16	Country Men	CountryMen	Chordal/Vocorder	89	83	90	19						
17	A Capella Boy	ACapellBoy	Chordal/Vocorder	89	85	90	21						
18	A Capella Mix	ACapellaMix	Chordal/Vocorder	89	86	90	22						
19	Gospel Diva	GospelDiva	Chordal/Vocorder	89	112	90	48						
20	Lisa and Tina	Lisa&Tina	Chordal/Vocorder	89	82	90	18						
21	AcapMenQuartet	AcapMenQuar	Chordal/Vocorder	89	118	90	54						
22	JazzMenChoir	JazzMenCho	Chordal/Vocorder	89	101	90	37						
23	JazzClosedCho	J_CloseCho	Chordal/Vocorder	89	103	90	39						
24	JazzWomenCho	J_WomenCho	Chordal/Vocorder	89	102	90	38						
25	LadiesQuartet	LadiesQuart	Chordal/Vocorder	89	116	90	52						
26	Sing B+G	Sing B+G	Chordal/Vocorder	89	93	90	29						
27	Barbershop	Barbershop	Chordal/Vocorder	89	96	90	32						
28	JazzMixedCho	J_MixedCho	Chordal/Vocorder	89	104	90	40						
29	Dream Girls	Dream Girls	Chordal/Vocorder	89	94	90	30						
30	Sing the Bass	SingBass	Chromatic							92	16		
31	Falsetto Duet	FalsetDuet	Chordal/Vocorder	89	84	90	20						
32	Falsetto Trio	FalsettTrio	Chordal/Vocorder	89	92	90	28						
33	Falsetto Dia	FalsettoDia	Chordal/Vocorder	89	100	90	36						
34	Fal A Capella	FalACapella	Chordal/Vocorder	89	95	90	31						
35	Falsetto Jazz	FalsetJazz	Chordal/Vocorder	89	105	90	41						
36	2 Unison Low	2UnisonLow	Chordal/Vocorder	89	106	90	42						
37	3 Unison Low	3UnisonLow	Chordal/Vocorder	89	108	90	44						
38	Diatonic Jazz	DiatncJazz	Chordal/Vocorder	89	97	90	33						
39	Diatonic Girl	DiatncGirl	Chordal/Vocorder	89	98	90	34						
40	A Capella Dia	ACapellaDia	Chordal/Vocorder	89	99	90	35						
41	ChordalXG	ChordalXG	Chordal/Vocorder	89	64	90	0						
42	Karaoke Auto	KaraokAuto	Chordal/Vocorder	89	24	90	88						
43	Karaoke Mode	KaraokMode	Chordal/Vocorder	89	25	90	89						
44	Karaoke Girl	KaraokGirl	Chordal/Vocorder	89	26	90	90						
45	Pitch Correct	PitchCorrect	Chordal/Vocorder	89	27	90	91						
46	2 Unison High	2UnisonHigh	Chordal/Vocorder	89	107	90	43						
47	3 Unison High	3UnisonHigh	Chordal/Vocorder	89	109	90	45						
48	Vocoder Auto Upper	VocodAutoU	Chordal/Vocorder	89	16	90	80						
49	Vocoder Auto Lower	VocodAutoL	Chordal/Vocorder	89	17	90	81						
50	DetuneXG	DetuneXG	Detune					91	0				
51	VocoderXG	VocoderXG	Chordal/Vocorder	89	0	90	64						
52	Vocoder Mode Upper	VocodModeU	Chordal/Vocorder	89	18	90	82						
53	Vocoder Mode Lower	VocodModeL	Chordal/Vocorder	89	19	90	83						
54	Vocoder Girl Upper	VocodGirlU	Chordal/Vocorder	89	20	90	84						
55	Vocoder Girl Lower	VocodGirlL	Chordal/Vocorder	89	21	90	85						
56	Vocoder Pitch Upper	VocodPichU	Chordal/Vocorder	89	22	90	86						
57	Vocoder Pitch Lower	VocodPichL	Chordal/Vocorder	89	23	90	87						
58	ChromaticXG	ChromatXG	Chromatic							92	0		
59	Voice&Inst	Voice&Inst	Chordal/Vocorder	89	110	90	46						
60	Pop Vocal	Pop Vocal	Chordal/Vocorder	89	121	90	57						
61	Thru	Thru	-									64	0

Settings are saved/called up for each type.

Data Type	The data is saved...	The data is called up...	Saved Location
Setup	When you change settings in a display page and then exit from the page.	When you turn off the power and then turn on the power.	System area of the internal memory (Flash ROM)
UserEffect	When saving a User Effect.	When selecting a UserEffect.	
MusicFinder	When changing the property of the Music Finder or importing a Style file.	When selecting a Record of the Music Finder.	
Voice	When you change the settings in the Sound Creator or Mixing Console display and then save the data as a Voice file.	When you call up a voice.	VoiceFile
Song	When you save the recorded or edited (current) song as a Song file.	When you call up a song, play a song or move the song position.	SongFile
Style	When you save the recorded or edited data as a Style file.	When you call up a style.	StyleFile
OTS	When you memorize settings with the REGISTRATION buttons and then save the current style as a Style file.	When you call up an OTS by pressing one of OTS buttons.	
Regist	When you memorize settings with the REGISTRATION buttons and then save the data as a Registaration Bank File.	When you call up an Regist. by pressing one of REGISTRATION MEMORY buttons.	RegistBankFile

If parameters belonging to more than one type are set, the new settings take priority over the old.

Parameter	System				Voice Set	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															
SongFile	X	X	X	X	X	-	X	-	X	X	X	O	Song	-	
StyleFile	X	X	X	O	X	-	X	-	X	X	X	O	Style	-	
MultiPad File	X	X	X	X	X	-	X	-	X	X	X	O	Multi Pad	-	
Right1 VoiceFile	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Right2 VoiceFile	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Right3 VoiceFile	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Left VoiceFile	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
PartSelect	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
PartOnOff (Right1)	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
PartOnOff (Right2)	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
PartOnOff (Right3)	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
PartOnOff (Left)	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Style	-	
RegistrationBankFile	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
File System															
CharacterSelect	X	X	X	X	X	-	X	-	X	X	X	X	-	-	One setting for all the Name related pop-up window.
Open/Save display															
Select View Setup	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Song Path															
Song File Path	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Style Path															
Style File Path	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
FILE ACCESS SW	X	X	X	X	X	-	X	-	X	X	-	X	-	-	
MultiPad Path															
Multi Pad File Path	X	X	X	X	X	-	X	-	X	X	-	X	-	-	
Song															
Synchro Start	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
StartStop	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel On/Off	X	X	X	X	X	-	X	-	X	X	X	O	SONG	-	
Menu > Function > SongSetting															
Guide Mode	O	X	X	X	X	-	O	Guide Setting	X	X	-	X	-	-	Reset to its default setting when song data doesn't include this data.
Repeat Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Repeat Directory	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Phrase Mark Repeat	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Right Channel	O	X	X	X	X	-	O	-	X	X	X	X	-	-	Set by recording. Different from one of the Track2.
Left Channel	O	X	X	X	X	-	O	-	X	X	X	X	-	-	Set by recording. Different from one of the Track1.
Auto Ch Set	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Lyrics Language	O	X	X	X	X	-	O	Lyrics Language	X	X	X	X	-	-	Specified from the song when set to Auto.
QuickStart	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	-	
DigitalStudio > DigitalRecording > Song Creator															
REC Mode															
Rec Start	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
PunchInAt	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Rec End	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
PunchOutAt	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Pedal Punch In/Out	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Quantize															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Size	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Strength	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Track Delete															
Track Delete	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Track Mix															
Source1	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source2	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Destination	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Channel Transpose															
Channel Transpose	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
REC Mode > Channel > Setup															
Setup Select	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Chd/1–16/SysEx./Lyric > Filter															
Main Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Control Change Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Style Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	

Parameter	System				Voice Set	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		
Lyric/Text															
BackGround (Panel Setting)	O	X	X	X	X	-	O	Lyrics Setting	X	X	-	X	-	-	Cannot be reset with Factory Reset.
Back Ground (Song Setting)	X	X	X	X	X	-	O	Lyrics Setting	X	X	-	X	-	-	Reset to the background selected last via the panel operation with Factory Reset.
Viewer Mode	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Text File (Panel Setting)	X	X	X	X	X	-	X	-	X	X	-	O	TEXT	-	
Text Sw															
Text Size	X	X	X	X	X	-	X	-	X	X	-	X	-	-	
Score Sw															
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	-	-	
Lyric 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	-	-	
NoteName 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	-	-	
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	-	-	
KeySignature	X	X	X	X	X	-	O	-	X	X	X	X	-	-	
Quantize	O	X	X	X	X	-	O	Score Setting	X	X	X	X	-	-	
NoteName	O	X	X	X	X	-	O	Score Setting	X	X	X	X	-	-	
ColorNote On/Off	O	X	X	X	X	-	O	Score Setting	X	X	-	X	-	-	
Song Position Jump															
SP1–4 Position Sw On/Off	X	X	X	X	X	-	O	-	X	X	X	X	-	-	
Loop Sw On/Off	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Recording data															
Song XG data	X	X	X	X	X	-	O	-	X	X	X	X	-	-	
Style															
AccompanimentOnOff	X	X	X	X	X	-	X	-	X	O (On)	X	O	Style	-	
OTSLink	X	X	X	O (On)	X	-	X	-	X	X	X	X	-	-	
AutoFillIn	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Section	X	X	X	X	X	-	X	-	X	X	X	O	Style	-	
SynchroStart	X	X	X	X	X	-	X	-	X	O (On)	X	O	Style	-	Regist: Unavailable during style playback.
SynchroStop	X	X	X	X	X	-	X	-	X	X	X	O	Style	-	Regist: Unavailable during style playback.
StartStop	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Menu > Function > StyleSetting/SplitPoint/Chord Fingering															
Style Setting															
StopAcmp	O	X	X	X	X	-	X	-	X	X	X	O	Style	-	
OTSLinkTiming	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
SynchroStopWindow	O	X	X	X	X	-	X	-	X	X	X	O	Style	-	
StyleTouch	O	X	X	X	X	-	X	-	X	X	X	O	Style	-	
SectionSet	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	-	-	
SplitPoint															
SplitPoint (Left)	O	X	X	X	X	-	X	-	X	X	X	O	Style	Split	
SplitPoint (Style)	O	X	X	X	X	-	O	Guide Setting	X	X	X	O	Style	Split	
SplitPoint (Right3)	O	X	X	X	X	-	X	-	X	X	X	O	Voice	Split	
Chord Fingering															
FingeringType	O	X	X	X	X	-	X	-	X	X	X	O	Style	Fingering	
Chord Root Note	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
ChordRoot Type	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
DigitalStudio > DigitalRecording > Style Creator															
BASIC															
Section	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
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	-	-	
Assembly															
Source Pattern	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Section	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Play Type	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Groove > Groove															
Original Beat	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Beat Converter	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Swing	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Fine	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Groove > Dynamics															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Accent Type	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Strength	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Expand/Comp.	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Boost/Cut	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Quantize															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Size	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Strength	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Velocity Change															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Boost/Cut	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Bar Copy															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source Top	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source Last	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Destination	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Channel > Bar Clear															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source Top	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source Last	X	X	X	X	X	-	X	-	X	X	X	X	-	-	

Parameter	System				Voice Set	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		
Channel > Remove Event															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Event	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Parameter															
Channel	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Source Root	X	X	X	X	X	-	X	-	O	X	X	X	-	-	
Source 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	-	-	
Edit > Filter															
Main Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Control Change Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
MusicFinder															
SortBy	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
SortOrder	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
TempoLock	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Search1/2 display															
Music	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Keyword	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Style (FileNumber)	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Beat	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
SearchArea	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Tempo (From)	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Tempo (To)	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Genre	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Search Result	X	X	X	O	X	-	X	-	X	X	X	X	-	-	
Record (=Property settings)	X	X	X	O	X	-	X	-	X	X	X	X	-	-	
Recording data															
SFF data									O						
MultiPad															
Multi Pad ContentsName	X	X	X	X	X	-	X	-	X	X	O	X	-	-	
DigitalStudio > DigitalRecording > Multi Pad Creator															
Record															
Repeat	X	X	X	X	X	-	X	-	X	X	O	X	-	-	
Chord Match	X	X	X	X	X	-	X	-	X	X	O	X	-	-	
Edit > Filter															
Main Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Control Change Filter	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Recording data															
Multi Pad data											O				
Voice															
LastSelectedVoice	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
LeftHold	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Style	-	
Voice Effect															
Initial Touch On Off	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
Harmony/Echo	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Harmony	-	
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 (Right3)	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	-	
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 (Right3)	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 (Right3)	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 (Editer)															
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 (Right3)	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 (Right3)	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 (Right3)	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 (Right3)	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	-	
Octave for Right1	X	X	X	X	O	Voice	X	-	X	O	X	O	Voice	-	
Octave for Right2	X	X	X	X	O	Voice	X	-	X	O	X	O	Voice	-	
Octave for Right3	X	X	X	X	O	Voice	X	-	X	O	X	O	Voice	-	
Octave for Left	X	X	X	X	O	Voice	X	-	X	O	X	O	Style	-	
CONTROLLER															
MW Low Pass Filter Control (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW Low Pass Filter Control (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW Low Pass Filter Control (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW Low Pass Filter Control (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	

Parameter	System				Voice Set	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		
MW Amplitude Control (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW Amplitude Control (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW Amplitude Control (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW AmpLitude Control (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
MW LFO PMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO PMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO PMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO PMOD Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
MW LFO FMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO FMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO FMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO FMOD Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
MW LFO AMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO AMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO AMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
MW LFO AMOD Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
CAT Low Pass Filter Control (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Low Pass Filter Control (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Low Pass Filter Control (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Low Pass Filter Control (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
CAT Amplitude Control (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Amplitude Control (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Amplitude Control (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT Amplitude Control (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
CAT LFO PMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO PMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO PMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO PMOD Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
CAT LFO FMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO FMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO FMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO FMOD Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
CAT LFO AMOD Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO AMOD Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT LFO AMOD Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
CAT 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 (Right3)	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	-	
EG Decay (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
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 (Right3)	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 (Right3)	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 (Right3)	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 (Right3)	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 (Right3)	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 (Right2)	X	X	X	X	O	Effect	O	Keyboard Voice	X	O	X	O	Voice	-	
DSP Type (Right3)	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	-	
LastSelectedDSP	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
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 (Right3)	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	-	
EQ Low Freq (Right1)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Freq (Right2)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Freq (Right3)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Freq (Left)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Style	-	
EQ High Freq (Right1)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Freq (Right2)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Freq (Right3)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Freq (Left)	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Style	-	
OrganFlute > Footage															
Organ Flutes Footage (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Footage (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Footage (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Footage (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Flutes Type (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	

Parameter	System				Voice Set	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		
Organ Flutes Type (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Type (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ FlutesType (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Vib On/Off (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib On/Off (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib On/Off (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib On/Off (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Vib Depth (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Depth (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Depth (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Depth (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Vib Speed (Right1)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Speed (Right2)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Speed (Right3)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Vib Speed (Left)	X	X	X	X	O	Voice	O	Keyboard Voice	X	O	X	O	Style	-	
OrganFlute > Footage															
Organ Flutes Attack Footage (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Footage (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Footage (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Footage (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Flutes Attack Mode (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Mode (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Mode (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack Mode (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Flutes Attack length (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack length (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack length (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Attack length (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Flutes Response (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Response (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Response (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Response (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Organ Flutes Volume (Right1)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Volume (Right2)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Volume (Right3)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Organ Flutes Volume (Left)	X	X	X	X	O	-	O	Keyboard Voice	X	O	X	O	Style	-	
Mic															
VocalHarmonyOnOff	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
TalkOnOff	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Mic EffectOnOff	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VHType	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VHParameters	X	X	O	X	X	-	O	Mic.Setting	X	X	X	X	-	Mic.Setting	
Main > Mic Setting															
Mic Setting > OverAll Setting															
EQ Low Freq.	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ Low Gain	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ Mid Freq.	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ Mid Gain	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ High Freq.	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ High Gain	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Noise Gate SW	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Noise Gate TH	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Compressor SW	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Compressor TH	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Compressor RAT	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Compressor OUT	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
VH Song Channel Mute	X	X	X	X	X	-	X	-	X	X	X	O	Mic	Mic.Setting	
VH Song Channel	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VH Keyboard	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VH Balance	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VH Mode	X	X	X	X	X	-	X	-	X	X	X	O	Mic	Mic.Setting	
VH Chord Detect	X	X	X	X	X	-	X	-	X	X	X	O	Mic	Mic.Setting	
Mute	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
MicVolume	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
VocalRange	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Mic Setting > Talk Setting															
Talk Setting Volume	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting Pan	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting ReverbDepth	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting ChorusDepth	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting TotalVolumeAttenuator	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting DSPOnOff	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting DSPDepth	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Talk Setting DSPType	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Main > Mixing Console > 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 M.Pad	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	MultiPad	-	
Volume Mic	X	X	X	X	X	-	O	Mic. Setting	X	X	X	O	Mic	Mic.Setting	
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	-	
Volume Right3	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	-	
PanPot															
Offset PanPot Song	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Offset PanPot Style	X	X	X	X	X	-	X	-	X	X	X	O	Style	-	

Parameter	System				Voice Set	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		
PanPot M.Pad	X	X	X	X	X	-	X	-	X	X	X	O	MultiPad	-	
PanPot Mic	X	X	X	X	X	-	O	Mic. Setting	X	X	X	O	Mic	Mic.Setting	
PanPot Left	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Style	-	
PanPot Right1	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
PanPot Right2	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
PanPot Right3	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Voice	-	
Part PanPot Song	X	X	X	X	X	-	O	Pan	X	X	X	X	-	-	
Part PanPot 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 (Right3)	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	-	-	
Auto Revoice															
Auto Revoice On/Off	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Auto Revoice Setup	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Main > Mixing Console > Filter															
Brighress															
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 Right3	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 Right3	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 Right3	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	-	
Tune															
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 Right3	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 Right3	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 Right3	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	Tune Trans	-	
Song Transpose	X	X	X	X	X	-	X	-	X	X	X	O	Tune Trans	-	
Keyboard Transpose	X	X	X	X	X	-	X	-	X	X	X	O	Tune Trans	-	
Main > Mixing Console > CMP															
MasterCmpressor Type	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor Basic Type	X	X	O	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor Threshold Offset	X	X	O	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor Low Gain Offset	X	X	O	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor Mid Gain Offset	X	X	O	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor High Gain Offset	X	X	O	X	X	-	X	-	X	X	-	X	-	-	
MasterCmpressor On/Off	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Main > Mixing Console > LineOut															
LineOut	O	X	X	X	X	-	X	-	X	X	-	O	LineOut	-	
Main > Mixing Console > EQ															
MasterEQ Type	O	X	X	X	X	-	X	-	X	X	X	X	-	MasterEQ	
MasterEQ Parameter	X	X	O	X	X	-	X	-	X	X	X	X	-	MasterEQ	
EQ Low Gain															
EQ Low Gain Style Part	X	X	X	X	X	-	X	-	O	X	X	O	Style	-	
EQ Low Gain Song Part	X	X	X	X	X	-	O	EQ	X	X	X	X	-	-	
EQ Low Gain Multi Pad	X	X	X	X	X	-	X	-	X	X	X	O	Multi Pad	-	
EQ Low Gain Right1	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Gain Right2	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Gain Right3	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ Low Gain Left	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Style	-	
EQ Low Gain Style (Offset)	X	X	X	X	X	-	X	-	X	X	X	O	Style	-	
EQ Low Gain Song (Offset)	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
EQ High Gain															
EQ High Gain Style Part	X	X	X	X	X	-	X	-	O	X	X	O	Style	-	
EQ High Gain Song Part	X	X	X	X	X	-	O	EQ	X	X	X	X	-	-	
EQ High Gain Multi Pad	X	X	X	X	X	-	X	-	X	X	X	O	Multi Pad	-	
EQ High Gain Right1	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Gain Right2	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Gain Right3	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Voice	-	
EQ High Gain Left	X	X	X	X	O	EQ	O	Keyboard Voice	X	O	X	O	Style	-	
EQ High Gain Style (Offset)	X	X	X	X	X	-	X	-	X	X	X	O	Style	-	
EQ High Gain Song (Offset)	X	X	X	X	X	-	X	-	X	X	X	X	-	-	

Parameter	System				Voice Set	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 > 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 Mic	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
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 Right3	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	-	
Reverb Depth Song (Offset)	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
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 Mic	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
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 Right3	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	-	
Chorus Depth Song (Offset)	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
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	DSP1 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	-	
DSP4Type	X	X	X	X	X	-	O	Effect	X	X	X	O	Voice/Style/Song	-	
DSP5Type	X	X	X	X	X	-	O	Effect	X	X	X	O	Voice/Style/Song	-	
DSP6Type	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Song/Mic	Mic.Setting	
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 Right3	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	-	
DSP Depth Mic	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	-	
InsertionType															
Ins.Type (Right1)	X	X	X	X	O	Effect	O	Keyboard Voice	X	O	X	O	Voice	-	
Ins.Type (Right2)	X	X	X	X	O	Effect	O	Keyboard Voice	X	O	X	O	Voice	-	
Ins.Type (Right3)	X	X	X	X	O	Effect	O	Keyboard Voice	X	O	X	O	Voice	-	
Ins.Type (Left)	X	X	X	X	O	Effect	O	Keyboard Voice	X	O	X	O	Style	-	
Ins. Type (Song)	X	X	X	X	X	-	O	Effect	X	X	X	X	-	-	
Ins.Type (Mic)	X	X	X	X	X	-	O	Mic.Setting	X	X	X	O	Mic	Mic.Setting	
Effect Parameter (Reverb/Chorus/ DSP1-5)	X	X	O	X	X	-	O	Effect	X	X	X	X	-	-	
Effect Parameter (DSP6)	X	X	O	X	X	-	O	Mic.Setting	X	X	X	X	-	-	
Main > Channel > Channel OnOffPopup															
ChannelOnOff (Song)	X	X	X	X	X	-	X	-	X	X	X	O	Song	-	
ChannelOnOff (Style)	X	X	X	X	X	-	X	-	O	X	X	O	Style	-	
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	-	-	
Menu > Function > MIDI															
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 (for each part)	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 channel)	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	-	-	
MFC10															
MFC10 SW Function (0-29)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
MFC10 Foot Function (1-5)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
MFC10 Receive Port	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
MFC10 Foot Part (0-4)	X	O	X	X	X	-	X	-	X	X	X	X	-	-	
MFC10 Receive (Ch1-16)	O	X	X	X	X	-	X	-	X	X	X	X	-	-	

Parameter	System				Voice Set	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		
Menu > Function > Mater Tune/Scale Tune															
Master Tune															
MasterTune	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Scale Tune															
Scale	X	X	X	X	X	-	X	-	X	X	X	O	Scale	-	
Tune	X	X	X	X	X	-	X	-	X	X	X	O	Scale	-	
BaseNote	X	X	X	X	X	-	X	-	X	X	X	O	Scale	-	
Part Select (Right1/Right2/Right3, Left,Style,Multi Pad)	X	X	X	X	X	-	X	-	X	X	X	O	Scale	-	
Menu > Function > Controller															
Foot Pedal															
PedalFunction	X	X	X	X	X	X	X	X	X	X	X	O	Pedal	-	
PedalSettings	X	X	X	X	X	X	X	X	X	X	X	O	Pedal	-	
PedalPolarity	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Keyboard/Panel															
Initial Touch	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Initial TouchOffLevel	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
Initial Touch Part OnOff	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
After Touch	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
After Touch Part OnOff	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
ModulationWheelPartOnOff	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
TransposeAssign	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Menu > Function > Regist.Sequence/Freeze/VoiceSet															
Regist Sequence															
RegistSequenceData	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
RegistSequenceEnable	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	-	-	
SequenceEnd	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
Freeze Group															
FreezeGroupSetting	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
VoiceSet															
VoiceSet Group Right1 OnOff	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
VoiceSet Group Right2 OnOff	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
VoiceSet Group Left OnOff	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
VoiceSet Group Right3 OnOff	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Menu > Function > Harmony/Echo															
Type	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
Volume	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
Speed	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
Assign	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
ChordNoteOnly	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
TouchLimit	X	X	X	X	O	Harmony	O	Keyboard Voice	X	O	X	O	Harmony	-	
Menu > Function > Screen Out															
Monitor Type	O	X	X	X	X	-	X	-	X	X	-	X	-	-	Cannot be reset with Factory Reset.
ScreenContent	O	X	X	X	X	-	X	-	X	X	-	X	-	-	Cannot be reset with Factory Reset.
Menu > Function > Utility															
Configration1															
FadeInTime	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
FadeOutTIme	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
FadeOutHoldTime	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
MetronomeVolume	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
MetronomeSound	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
TimeSignature	X	X	X	X	X	-	O	-	O	X	X	X	-	-	Set when the song/style is loaded.
ParameterLock	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
TapCountPercussion	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Style	-	
TapCountVelocity	X	X	X	X	X	-	O	Keyboard Voice	X	O	X	O	Style	-	
Configration2															
DisplayVoiceNumber	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Speaker	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Aux Out/Loop Send	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
VoiceCategory Button Options	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Display Style Tempo	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Popup Display Time	O	X	X	X	X	-	X	-	X	X	-	X	-	-	
Media															
SongAutoOpen	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
HD Sleep Time	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Owner															
Language	O	X	X	X	X	-	X	-	X	X	X	X	-	-	Cannot be reset with Factory Reset.
OwnerName	O	X	X	X	X	-	X	-	X	X	X	X	-	-	Cannot be reset with Factory Reset.
MainPicture	O	X	X	X	X	-	X	-	X	X	-	X	-	-	Cannot be reset with Factory Reset.
SystemReset															
FactoryResetSetting	X	X	X	X	X	-	X	-	X	X	-	X	-	-	Language, Owner Name, Main Picture Back-Ground, Lyric Picture BackGround, and Screen Out related parameters are not reset.
Registration															
FreezeOnOff	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
RegistMemory Contents	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
RegistNumber	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
RegistContentsName	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
OTS															
OTSNumber	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Demo															
	X	X	X	X	X	-	X	-	X	X	X	X	-	-	

Parameter	System				Voice Set	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		
Master Volume Fade In/Out															
Fade in/out	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Metronome															
StartStop	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Transpose															
Transpose	X	X	X	X	X	-	X	-	X	X	X	O	Tune/Trans	-	
Upper Octave															
UpperOctave	X	X	X	X	X	-	X	-	X	X	X	O	Voice	-	
Direct Access															
	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
PAT															
PAT On/Off	X	X	X	X	X	-	X	-	X	X	X	X	-	-	Set to OFF when a song is selected. Set to ON if the selected song has the Sys Ex at the top of the data.
Hard Disk Recorder															
Hard Disk Recorder Audio Player File	X	X	X	X	X	-	X	-	X	X	X	O	-	-	
Basic/Playlist Mode	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Hard Disk Recorder Play Balance	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Input Volume	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Output Volume	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Output Mute Sw	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Recording Mode	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Nudge Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
PlayList															
Repeat Mode	O	X	X	X	X	-	X	-	X	X	X	X	-	-	
Mark Sw	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Custom Voice															
Wave Import															
Wave Element	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Start Key	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
End Key	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Add Wave															
Fixed Pitch	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Center Key	X	X	X	X	X	-	X	-	X	X	X	X	-	-	
Start Key	X	X	X	X	X	-	X	-	X	X	X	X	-	-	

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 Sys-tem Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.

• aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
• bbH/0bbbbbbb denotes the byte count.
• ccH/0ccccccc denotes the check sum.
• ddH/0ddddddd denotes the data/value.

MIDI CHANNEL MESSAGE (1)

								[MIDI]										[Song Creator]		
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**	**Mic/Vocal Harmony**	**Song**	**Right1 Right2 Right3 Left**	**Keyboard**	**Style**	**Extra**	**Right1 Right2 Right3 Left**	**M.Pad**	**Style**	**Song**	**Upper Lower**	**PLAY**	**REW**	**From panel (Right1/ Right2/ Left)**
Key Off [GM1] [GM2]	8nH (n:Channel Number)	kk		Key no. (0-127)	vv		Velocity(0-127)	O	O (Harmony Channel/ Melody Channel)	O	O	O	O	O	X	X	O	O	X	O	X	X
Key On [GM1] [GM2]	9nH (n:Channel Number)	kk		Key no. (0-127)	vv		Key On : vv=1-127 Key Off : vv=0	O	O (Harmony Channel/ Melody Channel)	O	O	O	O	O	●	O	O	O	●	O	X	O
Control Change	BnH	0	(00H)	Bank Select MSB [GM2]	0 8 8 62 63 64 120 121 126 127	(00H) (08H) (08H) (3EH) (3FH) (40H) (78H) (79H) (7EH) (7FH)	Normal MegaVoice S.Articulation Voice Drum Custom Voice Custom Voice SFX voice GM2 Rhythm GM2 Normal SFX kit Drum kit	O	X	O	O	O (Regist)	O	O	●	O	●	O	●	X	O	O	O
		1	(01H)	Modulation [GM1] [GM2]	0-127	(00H...7FH)	Data	O	X	O	O	O (All Keyboard parts)	O	O	●	O	O	O	●	O	O	O
		5	(05H)	Portamento Time [GM2]	0-127	(00H...7FH)	Data	O (Except Organ Flutes)	X	O	O	O (All Keyboard parts)	X	O	●	O	X	O	X	O	O	O
		6	(06H)	Data Entry MSB [GM2]	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	X	O
		7	(07H)	Main Volume [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O (A/D Part Receive Channel)	O	O	O (All Keyboard parts)	O	O	●	O	●	●	X	O	O	O
		10	(0AH)	Panpot [GM1] [GM2]	0-127	(00H...7FH)	L64...C...R63	O	O (A/D Part Receive Channel)	O	O	O (All Keyboard parts)	O	O	●	O	●	●	X	O	O	O
		11	(0BH)	Expression [GM1] [GM2]	0-127	(00H...7FH)	Data	O	X	O	O	O (All Keyboard parts)	O	O	●	●	●	●	●	O	O	O
		32	(20H)	Bank Select LSB [GM2]	0-127	(00H...7FH)	Data	O	X	O	O	O (Regist)	O	O	●	O	●	●	X	O	O	O
		38	(26H)	Data Entry LSB [GM2]	0-127	(00H...7FH)	Data	O	X	O	O	O (All Keyboard parts)	X	O	●	O	X	O	X	O	X	O
		64	(40H)	Sustain (Damper) [GM1] [GM2]	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
		65	(41H)	Portamento [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O (Except Organ Flutes)	X	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
		66	(42H)	Sostenuto [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	X	O	O	O (All Keyboard parts)	X	O	●	O	X	O	●	O	O	O
		67	(43H)	Soft Pedal [GM2]	0-127	(00H...7FH)	0...63, 64...127 (OFF, ON)	O	X	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	X	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	X	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	X	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	X	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	X	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	X	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	X	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	X	O	O	O (All Keyboard parts)	O	O	X	X	X	O	X	O	O	X
		84	(54H)	Portamento Control	0-127	(00H...7FH)	Key no. (0-127)	O	X	O	O	X	O	O	O	O	●	O	X	O	X	O
		91	(5BH)	Effect1 Depth (Reverb Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O (A/D Part Receive Channel)	O	O	O (All Keyboard parts)	O	O	●	●	●	●	X	O	O	O
		93	(5DH)	Effect3 Depth (Chorus Send Level) [GM2]	0-127	(00H...7FH)	Data	O	O (A/D Part Receive Channel)	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	X	O	O	O (All Keyboard parts)	O	O	O	O	●	●	X	O	O	X

[MIDI] [Song Creator]

MIDI Events	Status byte	1st Data byte			2nd Data byte			Voice		MIDI Reception					MIDI Transmission					PLAY	REW	REC
	Status	Data	(HEX)	Parameter	Data	(HEX)	Parameter	Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
		96	(60H)	RPN Increment	-	-	The data byte is ignored.	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	X	O	X	O	X	O	X	X
		97	(61H)	RPN Decrement	-	-	The data byte is ignored.	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	X	O	X	O	X	O	X	X
		98	(62H)	NRPN LSB	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	●	O	O	O	X	O	O	O
		99	(63H)	NRPN MSB	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	●	O	O	O	X	O	O	O
		100	(64H)	RPN LSB [GM2]	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
		101	(65H)	RPN MSB [GM2]	0-127	(00H...7FH)	Data	O	O (Harmony Channel/ Melody Channel)	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]	0	(00H)	Data	O	X	O	O	O (All Keyboard parts)	O	O	X	O	X	O	X	O	X	X
		121	(79H)	Reset All Controllers [GM1] [GM2]	0	(00H)	Data	O	X	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]	0	(00H)	Data	O	O (Harmony Channel/ Melody Channel)	O	O	O (All Keyboard parts)	O	O	X	O	X	O	X	O	X	X
		124	(7CH)	Omni Off [GM2]	0	(00H)	Data	O	X	O	X	X	X	X	X	O	X	O	X	O	X	X
		125	(7DH)	Omni On [GM2]	0	(00H)	Data	O	X	O	X	X	X	X	X	O	X	O	X	O	X	X
		126	(7EH)	Mono [GM2]	0-16	(00H...10H)	Data	O	X	O	X	X	X	X	X	O	X	O	X	O	X	X
		127	(7FH)	Poly [GM2]	0	(00H)	Data	O	X	O	X	X	X	X	X	O	X	O	X	O	X	X
Program Change [GM1] [GM2]	CnH (n:Channel Number)	pp	(00H... 7FH)	Voice Number (0-127)	-	-	-	O	X	O	O	O (Regist)	O	O	●	O	●	●	X	O	O	O
Channel After Touch [GM1] [GM2]	DnH (n:Channel Number)	vv	(00H... 7FH)	Data	-	-	-	O	X	O	O	O (All Keyboard parts)	X	O	X	O	X	O	X	O	X	O
Polyphonic After Touch	AnH (n:Channel Number)	kk	(00H... 7FH)	Key no. (0-127)	vv	(00H...7FH)	Data	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
Pitch Bend Change [GM1] [GM2]	EnH (n:Channel Number)	cc	(00H... 7FH)	LSB	dd	(00H...7FH)	MSB	O	O (Harmony Channel/ Melody Channel)	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, MIDI B, 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, MIDI B, 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, MIDI B, 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

About Mic/Vocal Harmony column:
Harmony Channel/Melody Channel: The relevant parameters are received by the song part designated by the Effect's Harmony Channel Parameter or Melody Channel Parameter.
A/D Part Receive Channel: The relevant parameters are received by the song part designated by the AD Part Receive Channel of the XG format.

[GM1]...GM Required Parameter
[GM2]...GM Leve2 Required Parameter

MIDI CHANNEL MESSAGE (2)

NRPN [MIDI] [Song Creator]

NRPN		Data Entry		Parameter	Data Range	Voice		MIDI Reception					MIDI Transmission					PLAY		REC
MSB	LSB	MSB	LSB			Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
01H	08H	mmH	--	Vibrato Rate	mm : 00H-40H-7FH (-64...0...+63)	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	09H	mmH	--	Vibrato Depth	mm : 00H-40H-7FH (-64...0...+63)	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	0AH	mmH	--	Vibrato Delay	mm : 00H-40H-7FH (-64...0...+63)	O	O (Harmony Channel/ Melody Channel)	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	20H	mmH	--	Low Pass Filter Cutoff Frequency	mm : 00H-40H-7FH (-64...0...+63)	O	X	O	X	X	O	X	X	O	X	O	X	O	O	X
01H	21H	mmH	--	Low Pass Filter Resonance	mm : 00H-40H-7FH (-64...0...+63)	O	X	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	O	X	X	O	X	X	X	X	O	X	O	O	X
01H	31H	mmH	--	EQ Treble Gain	mm :00H-40H-7FH (-64...0...+63)	O	X	O	X	X	O	X	X	X	X	O	X	O	O	X
01H	34H	mmH	--	EQ Bass Frequency	mm : 04H-28H (32...2.0k[Hz])	O	X	O	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	O	X	X	X	X	X	X	X	O	X	O	O	X
01H	63H	mmH	--	EG Attack Time	mm :00H-40H-7FH (-64...0...+63)	O	X	O	X	X	O	X	X	O	X	O	X	O	O	X
01H	64H	mmH	--	EG Decay Time	mm :00H-40H-7FH (-64...0...+63)	O	X	O	O	X	O	O	●	O	O	O	X	O	O	O
01H	66H	mmH	--	EG Release	mm :00H-40H-7FH (-64...0...+63)	O	X	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)	X	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)	X	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)	X	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)	X	O	X	X	X	X	X	X	O	O	X	O	X	X
18H	rrH	mmH	--	Drum Pitch Coarse	rr : drum instrument note number mm :00H-40H-7FH (-64...0...+63)	O (Drum Only)	X	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)	X	O	X	X	X	X	X	X	O	O	X	O	X	X
1AH	rrH	mmH	--	Drum Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	X	O	X	X	X	X	X	X	O	O	X	O	X	X
1CH	rrH	mmH	--	Drum Pan	rr : drum instrument note number mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	O (Drum Only)	X	O	X	X	X	X	X	X	O	O	X	O	X	X
1DH	rrH	mmH	--	Drum Reverb Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	X	O	X	X	X	X	X	X	O	O	X	O	X	X
1EH	rrH	mmH	--	Drum Chorus Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	O (Drum Only)	X	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)	X	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	X	X	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	X	X	X	X	X	X
34H	rrH	mmH	--	Drum EQ Bass Frequency	rr : drum instrument note number mm : 04H-28H (32...2.0[Hz])	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
35H	rrH	mmH	--	Drum EQ Treble Frequency	rr : drum instrument note number mm : 1CH-3AH (500...16.0[Hz])	X	X	X	X	X	X	X	X	X	X	X	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.

NRPN (VocalHarmony)

[MIDI] [Song Creator]

NRPN		Data Entry		Parameter	Data Range	Voice		MIDI Reception					MIDI Transmission					PLAY		REC
MSB	LSB	MSB	LSB			Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
00H	00H	mmH	--	Harmony Mute	mm : 00H-3FH, 40H-7FH (Off, On)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	O	X	O	X	X
01H	1AH	mmH	--	Detune Modulation	mm : 00H-7FH (0...127)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	O	X	O	X	X
02H	10H	mmH	--	Harmony1 Volume	mm : 00H-7FH (0...127)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	11H	mmH	--	Harmony2 Volume	mm : 00H-7FH (0...127)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	12H	mmH	--	Harmony3 Volume	mm : 00H-7FH (0...127)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	20H	mmH	--	Harmony1 Pan	mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	21H	mmH	--	Harmony2 Pan	mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	22H	mmH	--	Harmony3 Pan	mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	30H	mmH	--	Harmony1 Detune	mm : 00H-40H-7FH (-64...0...+63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	31H	mmH	--	Harmony2 Detune	mm : 00H-40H-7FH (-64...0...+63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X
02H	32H	mmH	--	Harmony3 Detune	mm : 00H-40H-7FH (-64...0...+63)	X	O (Harmony Channel)	X	X	X	X	X	X	X	X	●	X	O	X	X

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

Data Entry LSB: Ignored.

RPN

[MIDI] [Song Creator]

RPN		Data Entry		Parameter	Data Range	Voice		MIDI Reception					MIDI Transmission					PLAY		REC
MSB	LSB	MSB	LSB			Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3m Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
00H	00H	mmH	--	Pitch Bend Sensitivity [GM1][GM2]	mm : 00H-18H (0...+24 [semitones])	O	O (Harmony Channel/ Melody Channel)	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
00H	01H	mmH	llH	Fine Tune [GM1][GM2]	mm ll : 00H 00H -100[cent] ... mm ll : 40H 00H 0[cent] ... mm ll : 7FH 7FH 100[cent]	O	X	O	O	O (All Keyboard parts)	O	O	●	O	O	O	X	O	O	O
00H	02H	mmH	--	Coarse Tune [GM1][GM2]	mm : 28H-40H-58H (-24...0...+24[semitones])	O	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
7FH	7FH	--	--	Null [GM2]	-	O	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

About Mic/Vocal Harmony column:
The relevant parameters are received by the song part designated by the Effect's Harmony Channel Parameter or Melody Channel Parameter.

[GM1]...GM Required Parameter
[GM2]...GM Leve2 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 Parmeters 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					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/ Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
00	00	00	4	00-0F	MASTER TUNE	-102.4...0...+102.3[cent]	*Panel setting value	O	O	O					●					O	X	X
		01		00-0F		1st bit3-0→bit15-12																
		02		00-0F		2nd bit3-0→bit11-8																
		03		00-0F		3rd bit3-0→bit7-4																
						4th bit3-0→bit3-0																
		04	1	00-7F	MASTER VOLUME	0...127	7F	O	X	O (Available for extra parts of a song)					O					O	O	X
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	X	X	X					X					X	X	X
		06	1	28-58	TRANSPOSE	-24...0...+24 [semitones]	40	O	O	O (Available for extra parts of a song)					O					O	O	X
		7D	1	N	DRUM SETUP RESET	N:Drum setup number	-	O (Drum Only)	X	O (Available for extra parts of a song)					O					O	X	X
		7E	1	00	XG SYSTEM ON	00=XG system ON	-	O	X	O (Available for extra parts of a song)					O					O	X	O
		7F	1	00	ALL PARAMETER RESET	00=ON	-	O	X	O (Available for extra parts of a 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					[Song Creator] PLAY		[Song Creator] REC
							Regular/ Drum/ Natural/ Organ Voice	Mic/ Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
01	00	00	E	20-7F	Model Name 1	32...127(ASCII CHATACTER)	-		-					O (Available only when receiving requests via MIDI)					-	-	-
		...		...	...	...															
		0D		20-7F	Model Name 14	32...127(ASCII CHATACTER)															
		0E	1		NOT USED																
		0F	1		NOT USED																

TOTAL SIZE 10

Transmitted in response to Dump Request. Not received.

MIDI Parameter Change table (EFFECT1)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	00	2	00-7F	REVERB TYPE MSB	Refer to Effect Parameter List	01(=HALL1)	O	O	O					●					O	O	O
				00-7F	REVERB TYPE LSB	Refer to Effect Parameter List	00															
		02	1	00-7F	REVERB PARAMETER 1	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		04	1	00-7F	REVERB PARAMETER 3	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		06	1	00-7F	REVERB PARAMETER 5	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		08	1	00-7F	REVERB PARAMETER 7	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		0A	1	00-7F	REVERB PARAMETER 9	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB (0...64...127)	40	O	O	O					●					O	O	O
		0D	1	01-7F	REVERB PAN	L63...C...R63	40	O	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	O
		11	1	00-7F	REVERB PARAMETER 12	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		13	1	00-7F	REVERB PARAMETER 14	Refer to Effect Parameter List	Depends on Reverb Type	O	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	O
		15	1	00-7F	REVERB PARAMETER 16	Refer to Effect Parameter List	Depends on Reverb Type	O	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					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	20	2	00-7F	CHORUS TYPE MSB	Refer to Effect Parameter List	41(=CHORUS1)	O	O		O						●			O	O	O
				00-7F	CHORUS TYPE LSB	Refer to Effect Parameter List	00															
		22	1	00-7F	CHORUS PARAMETER 1	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		24	1	00-7F	CHORUS PARAMETER 3	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		26	1	00-7F	CHORUS PARAMETER 5	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		28	1	00-7F	CHORUS PARAMETER 7	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		2A	1	00-7F	CHORUS PARAMETER 9	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB (0...64...127)	40	O	O		O						●			O	O	O
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40	O	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	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	O
		31	1	00-7F	CHORUS PARAMETER 12	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		33	1	00-7F	CHORUS PARAMETER 14	Refer to Effect Parameter List	Depends on Chorus Type	O	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	O
		35	1	00-7F	CHORUS PARAMETER 16	Refer to Effect Parameter List	Depends on Chorus Type	O	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					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	40	2	00-7F	VARIATION TYPE MSB	Refer to Effect Parameter List	05(=DELAY L,C,R)	O	O		O						●			O	O	O
				00-7F	VARIATION TYPE LSB	Refer to Effect Parameter List	00															
		42	2	00-7F	VARIATION PARAMETER 1 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 1 LSB	Refer to Effect Parameter List																
		44	2	00-7F	VARIATION PARAMETER 2 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 2 LSB	Refer to Effect Parameter List																
		46	2	00-7F	VARIATION PARAMETER 3 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 3 LSB	Refer to Effect Parameter List																
		48	2	00-7F	VARIATION PARAMETER 4 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 4 LSB	Refer to Effect Parameter List																
		4A	2	00-7F	VARIATION PARAMETER 5 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 5 LSB	Refer to Effect Parameter List																
		4C	2	00-7F	VARIATION PARAMETER 6 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 6 LSB	Refer to Effect Parameter List																
		4E	2	00-7F	VARIATION PARAMETER 7 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 7 LSB	Refer to Effect Parameter List																
		50	2	00-7F	VARIATION PARAMETER 8 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 8 LSB	Refer to Effect Parameter List																
		52	2	00-7F	VARIATION PARAMETER 9 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 9 LSB	Refer to Effect Parameter List																
		54	2	00-7F	VARIATION PARAMETER 10 MSB	Refer to Effect Parameter List	Depends on Variation Type	O	O		O						●			O	O	O
				00-7F	VARIATION PARAMETER 10 LSB	Refer to Effect Parameter List																
		56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB (0...64...127)	40	O	O		O						●			O	O	O
		57	1	01-7F	VARIATION PAN	L63...C...R63	40	O	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	O	X
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB (0...64...127)	00	O	O		O						O			O	O	X
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00	O	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	O
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40	O	O		O						O			O	O	X
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40	O	O		O						O			O	O	X
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40	O	O		O						O			O	O	X
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40	O	O		O						O			O	O	X
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40	O	O		O						O			O	O	X

TOTAL SIZE 21

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice		[MIDI] MIDI Reception				[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
02	01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on Variation Type	O	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	O
		72	1	00-7F	VARIATION PARAMETER 13	Refer to Effect Parameter List	Depends on Variation Type	O	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	O
		74	1	00-7F	VARIATION PARAMETER 15	Refer to Effect Parameter List	Depends on Variation Type	O	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	O

TOTAL SIZE 06

● : Transmitted via panel operations O: Available

MIDI Parameter Change table (MULTI EQ)

Address (H)			Size (H)	Data (H)	Parameter	Description	* The MULTI EQ Parameter cannot be reset to its factory setting with XG SYSTEM ON.	[MIDI] Voice		[MIDI] MIDI Reception				[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 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		O	O		O				O					O	X	X
		01	1	34-4C	EQ GAIN1	-12...0...+12[dB]		O	O		O				●					O	X	X
		02	1	04-28	EQ FREQUENCY1	32...2.0k[Hz]		O	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					O	X	X
		05	1	34-4C	EQ GAIN2	-12...0...+12[dB]		O	O		O				●					O	X	X
		06	1	0E-36	EQ FREQUENCY2	100...10.0k[Hz]		O	O		O				●					O	X	X
		07	1	01-78	EQ Q2	0.1...12.0		O	O		O				●					O	X	X
		08	1		NOT USED			-	-		-				-					-	-	-
		09	1	34-4C	EQ GAIN3	-12...0...+12[dB]		O	O		O				●					O	X	X
		0A	1	0E-36	EQ FREQUENCY3	100...10.0k[Hz]		O	O		O				●					O	X	X
		0B	1	01-78	EQ Q3	0.1...12.0		O	O		O				●					O	X	X
		0C	1		NOT USED			-	-		-				-					-	-	-
		0D	1	34-4C	EQ GAIN4	-12...0...+12[dB]		O	O		O				●					O	X	X
		0E	1	0E-36	EQ FREQUENCY4	100...10.0k[Hz]		O	O		O				●					O	X	X
		0F	1	01-78	EQ Q4	0.1...12.0		O	O		O				●					O	X	X
		10	1		NOT USED			-	-		-				-					-	-	-
		11	1	34-4C	EQ GAIN5	-12...0...+12[dB]		O	O		O				●					O	X	X
		12	1	1C-3A	EQ FREQUENCY5	0.5k...16.0k[Hz]		O	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					O	X	X

TOTAL SIZE 15

● : Transmitted via panel operations O: Available

MIDI Parameter Change table (EFFECT2)

Address (H)			Size (H)	Data (H)	Parameter	Description	* The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	[MIDI] Voice		[MIDI] MIDI Reception				[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 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		O	O		O				●					O	O	O
		02	1	00-7F	INSERTION EFFECT PARAMETER 1	Refer to Effect Parameter List		O	O		O				●					O	O	O
		03	1	00-7F	INSERTION EFFECT PARAMETER 2	Refer to Effect Parameter List		O	O		O				●					O	O	O
		04	1	00-7F	INSERTION EFFECT PARAMETER 3	Refer to Effect Parameter List		O	O		O				●					O	O	O
		05	1	00-7F	INSERTION EFFECT PARAMETER 4	Refer to Effect Parameter List		O	O		O				●					O	O	O
		06	1	00-7F	INSERTION EFFECT PARAMETER 5	Refer to Effect Parameter List		O	O		O				●					O	O	O
		07	1	00-7F	INSERTION EFFECT PARAMETER 6	Refer to Effect Parameter List		O	O		O				●					O	O	O
		08	1	00-7F	INSERTION EFFECT PARAMETER 7	Refer to Effect Parameter List		O	O		O				●					O	O	O
		09	1	00-7F	INSERTION EFFECT PARAMETER 8	Refer to Effect Parameter List		O	O		O				●					O	O	O
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9	Refer to Effect Parameter List		O	O		O				●					O	O	O
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	Refer to Effect Parameter List		O	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	O
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63		O	O		O				O					O	O	X
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63		O	O		O				O					O	O	X
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63		O	O		O				O					O	O	X
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63		O	O		O				O					O	O	X
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63		O	O		O				O					O	O	X

TOTAL SIZE 12

Address (H)			Size (H)	Data (H)	Parameter	Description	* The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.	[MIDI] Voice: Regular/ Drum/ Natural/ Organ Voice	Voice: Mic/Vocal Harmony	MIDI Reception: Song	MIDI Reception: Right1 Right2 Right3 Left	MIDI Reception: Keyboard	MIDI Reception: Style	MIDI Reception: Extra	MIDI Transmission: Right1 Right2 Right3 Left	MIDI Transmission: M.Pad	MIDI Transmission: Style	MIDI Transmission: Song	MIDI Transmission: Upper Lower	[Song Creator] PLAY: PLAY	PLAY: REW	REC: From panel (Right1/ Right2/ Left)
		20	1	00-7F	INSERTION EFFECT PARAMETER 11	Refer to Effect Parameter List		O	O		O				●					O	O	O
		21	1	00-7F	INSERTION EFFECT PARAMETER 12	Refer to Effect Parameter List		O	O		O				●					O	O	O
		22	1	00-7F	INSERTION EFFECT PARAMETER 13	Refer to Effect Parameter List		O	O		O				●					O	O	O
		23	1	00-7F	INSERTION EFFECT PARAMETER 14	Refer to Effect Parameter List		O	O		O				●					O	O	O
		24	1	00-7F	INSERTION EFFECT PARAMETER 15	Refer to Effect Parameter List		O	O		O				●					O	O	O
		25	1	00-7F	INSERTION EFFECT PARAMETER 16	Refer to Effect Parameter List		O	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		O	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	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	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	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	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	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	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	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	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	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=0-4)

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

MIDI Parameter Change table (SPECIAL EFFECT)

Address (H)			Size (H)	Data (H)	Parameter	Description	* The SPECIAL EFFECT Parameter cannot be reset to its factory setting with XG SYSTEM ON.	[MIDI] Voice: Regular/ Drum/ Natural/ Organ Voice	Voice: Mic/Vocal Harmony	MIDI Reception: Song	MIDI Reception: Right1 Right2 Right3 Left	MIDI Reception: Keyboard	MIDI Reception: Style	MIDI Reception: Extra	MIDI Transmission: Right1 Right2 Right3 Left	MIDI Transmission: M.Pad	MIDI Transmission: Style	MIDI Transmission: Song	MIDI Transmission: Upper Lower	[Song Creator] PLAY: PLAY	PLAY: REW	REC: From panel (Right1/ Right2/ Left)
04	00	00	2	00-7F 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB	Vocoder(89), Chordal(90), Detune(91), Chromatic(92), Thru(0...88, 93...127)		X	O		O				●					O	O	X
		02	1	00-7F	INSERTION EFFECT PARAMETER 1 Harmony Mode			X	O		O				●					O	O	X
		03	1	00-7F	INSERTION EFFECT PARAMETER 2 Harmony Gender Type	Off(0), Auto(1)		X	O		O				●					O	O	X
		04	1	00-7F	INSERTION EFFECT PARAMETER 3 Lead Gender Type	Off(0), Unison(1), Male(2), Female(3)		X	O		O				●					O	O	X
		05	1	00-7F	INSERTION EFFECT PARAMETER 4 Lead Gender Depth	-64...0...+63(0...127)		X	O		O				●					O	O	X
		06	1	00-7F	INSERTION EFFECT PARAMETER 5 Lead Pitch Correction	Free(0), Correct(1)		X	O		O				●					O	O	X
		07	1	00-7F	INSERTION EFFECT PARAMETER 6 Auto Upper Gender Threshold	0...12(0...12)		X	O		O				●					O	O	X

Address (H)			Size (H)	Data (H)	Parameter	Description	* The SPECIAL EFFECT Parameter cannot be reset to its factory setting with XG SYSTEM ON.	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
		08	1	00-7F	INSERTION EFFECT PARAMETER 7 Auto Lower Gender Threshold	0...12(0...12)		X	O		O				●					O	O	X
		09	1	00-7F	INSERTION EFFECT PARAMETER 8 Upper Gender Depth	-64...0+63(0...127)		X	O		O				●					O	O	X
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9 Lower Gender Depth	-64...0...+63(0...127)		X	O		O				●					O	O	X
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	L63>H...L=H...L<H63 (1...64...127)		X	O		O				●					O	O	X
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	AD(64), OFF(0...63, 65...127)		X	O		O				●					O	O	O
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63		X	X		X				X					X	X	X
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63		X	X		X				X					X	X	X
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63		X	X		X				X					X	X	X
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63		X	X		X				X					X	X	X
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63		X	X		X				X					X	X	X
TOTAL SIZE 12																						
		14	1	00-7F	UNIQUE INSERTION EFFECT EXTERNAL CONTROL CH1 (HARMONY CHANNEL)	1...16(0...15), OFF(127)		X	O		O				●					O	O	X
		15	1	00-7F	UNIQUE INSERTION EFFECT EXTERNAL CONTROL CH1 (MELODY CHANNEL)	1...16(0...15), OFF(127)		X	O		O				O					O	O	X
TOTAL SIZE 2																						
		20	1	00-7F	INSERTION EFFECT PARAMETER 11 Vibrato Depth	0...100cemt(0...127)		X	O		O				●					O	O	X
		21	1	00-7F	INSERTION EFFECT PARAMETER 12 Vibrato Rate	0Hz(0),0.1...12.7Hz(1...127)		X	O		O				●					O	O	X
		22	1	00-7F	INSERTION EFFECT PARAMETER 13 Vibrato Delay	0...2.54sec(0...127)		X	O		O				●					O	O	X
		23	1	00-7F	INSERTION EFFECT PARAMETER 14			X	X		X				X					X	X	X
		24	1	00-7F	INSERTION EFFECT PARAMETER 15			X	X		X				X					X	X	X
		25	1	00-7F	INSERTION EFFECT PARAMETER 16			X	X		X				X					X	X	X
TOTAL SIZE 6																						

● : Transmitted via panel operations O: Available

MIDI Parameter Change table (MULTI PART)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
8	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	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		02	1	00-7F	BANK SELECT LSB	0...127	00	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		03	1	00-7F	PROGRAM NUMBER	1...128	00	O	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	O	X	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	X	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	X	O	X	X	X	X	●	X	●	●	X	O	X	O
		08	1	28-58	NOTE SHIFT	-24...0...+24[semitones]	40	O	X	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	X	O	O	X	O	O	X	X	X	O	X	O	X	X
		0B	1	00-7F	VOLUME	0...127	64	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		0C	1	00-7F	VELOCITY SENSE DEPTH	0...127	40	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
		0D	1	00-7F	VELOCITY SENSE OFFSET	0...127	40	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
		0E	1	00-7F	PAN	RND,L63...C...R63	40	O	X	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	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
		11	1	00-7F	DRY LEVEL	0...127	7F	O	X	O	O	X	O	O	X	O	●	●	X	O	O	O
		12	1	00-7F	CHORUS SEND	0...127	00	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		13	1	00-7F	REVERB SEND	0...127	28	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		14	1	00-7F	VARIATION SEND	0...127	00	O	X	O	O	X	O	O	X	X	X	O	X	O	O	O
		15	1	00-7F	VIBRATO RATE	-64...0...+63	40	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		16	1	00-7F	VIBRATO DEPTH	-64...0...+63	40	O	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		17	1	00-7F	VIBRATO DELAY	-64...0...+63	40	O	X	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	X	O	O	X	O	O	X	X	X	O	X	O	O	X
		19	1	00-7F	FILTER RESONANCE	-64...0...+63	40	O	X	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	X	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	X	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	X	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	X	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	X	O	O	X	X	O	●	O	X	O	X	O	O	O

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
							Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
	1F	1	00-7F	MW AMPLITUDE CONTROL	-100...0...+100[%]	40	O	X	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	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	21	1	00-7F	MW LFO FMOD DEPTH	0...127	00	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	22	1	00-7F	MW LFO AMOD DEPTH	0...127	00	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	23	1	28-58	BEND PITCH CONTROL	-24...0...+24[semitones]	42	O	X	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	X	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	X	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	X	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	X	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	X	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	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	O	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	36	1	00-01	Rcv RPN	OFF, ON	01	O	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	38	1	00-01	Rcv MODULATION	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	39	1	00-01	Rcv VOLUME	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3A	1	00-01	Rcv PAN	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3C	1	00-01	Rcv HOLD1	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	40	1	00-01	Rcv BANK SELECT	OFF, ON	01	O	X	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	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	42	1	00-7F	SCALE TUNING C#	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	43	1	00-7F	SCALE TUNING D	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	44	1	00-7F	SCALE TUNING D#	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	45	1	00-7F	SCALE TUNING E	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	46	1	00-7F	SCALE TUNING F	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	47	1	00-7F	SCALE TUNING F#	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	48	1	00-7F	SCALE TUNING G	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	49	1	00-7F	SCALE TUNING G#	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	4A	1	00-7F	SCALE TUNING A	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	4B	1	00-7F	SCALE TUNING A#	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	4C	1	00-7F	SCALE TUNING B	-64...0...+63[cent]	40	O	X	O	O	X	O	O	●	X	●	O	X	O	O	O
	4D	1	28-58	CAT PITCH CONTROL	-24...0...+24[semitones]	40	O	X	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	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100[%]	40	O	X	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	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	O	X	O	O	X	X	O	●	O	X	O	X	O	O	O
	53	1	28-58	PAT PITCH CONTROL	-24...0...+24[semitones]	40	O	X	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	X	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	X	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	X	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	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	O	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450[cent]	40	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100[%]	40	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	O	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	61	1	28-58	AC2 PITCH CONTROL	-24...0...+24[semitones]	40	O	X	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	X	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	X	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	X	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	X	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	X	O	X	X	X	X	X	X	X	O	X	O	X	X
	67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	O (Except Organ Flutes)	X	O	O	X	X	O	X	X	X	O	X	O	O	X
	68	1	00-7F	PORTAMENTO TIME	0...127	00	O	X	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	X	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	X	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	X	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	X	O	O	X	X	O	X	X	X	O	X	O	X	X
	6D	1	01-7F	VELOCITY LIMIT LOW	1...127	01	O	X	O	O	X	X	O	X	X	X	O	X	O	X	X
	6E	1	01-7F	VELOCITY LIMIT HIGH	1...127	7F	O	X	O	O	X	X	O	X	X	X	O	X	O	X	X

TOTAL SIZE 3F

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	[MIDI] Voice		[MIDI] MIDI Reception				[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
								Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
		70	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		71	1		NOT USED		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		72	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	O	X	O	O	X	O	O	●	●	●	●	X	O	O	O
		73	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	O	X	O	O	X	O	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	O	O	X	X	O	●	O	X	O	X	O	O	O
		77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	O	X	O	O	X	X	O	●	O	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																							
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	X	O	X	O	O	O
		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	X	X	X	X	X	X	X	O	X	O	O	X
		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 (A/D PART)

Address (H)			Size (H)	Data (H)	Parameter	Description	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY		[Song Creator] REC
							Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
10	0n	00	1	00-01	INPUT GAIN	MIC, LINE	X	X	X					X					X	X	X
		01	1	00-7F	BANK SELECT MSB	0...127	X	X	X					X					X	X	X
		02	1	00-7F	BANK SELECT LSB	0...127	X	X	X					X					X	X	X
		03	1	00-7F	PROGRAM NUMBER	1...128	X	X	X					X					X	X	X
		04	1	00-0F,7F	Rcv CHANNEL	1...16,OFF	X	O	O					O					O	X	X
		05	1		NOT USED		-	-	-					-					-	-	-
		06	1		NOT USED		-	-	-					-					-	-	-
		07	1		NOT USED		-	-	-					-					-	-	-
		08	1		NOT USED		-	-	-					-					-	-	-
		09	1		NOT USED		-	-	-					-					-	-	-
		0A	1		NOT USED		-	-	-					-					-	-	-
		0B	1	00-7F	VOLUME	0...127	X	O	O					●					O	X	X
		0C	1		NOT USED		-	-	-					-					-	-	-
		0D	1		NOT USED		-	-	-					-					-	-	-
		0E	1	01-7F	PAN	L63...C...R63	X	O	O					●					O	X	X
		0F	1		NOT USED		-	-	-					-					-	-	-
		10	1		NOT USED		-	-	-					-					-	-	-
		11	1	00-7F	DRY LEVEL	0...127	X	O	O					●					O	X	X
		12	1	00-7F	CHORUS SEND	0...127	X	O	O					●					O	X	X
		13	1	00-7F	REVERB SEND	0...127	X	O	O					●					O	X	X
		14	1	00-7F	VARIATION SEND	0...127	X	O	O					●					O	X	X

TOTAL SIZE 15

● : Transmitted via panel operations O: Available

n : A/D Part Number (0)

The A/D PART parameter cannot be reset to its factory setting with XG System On.

MIDI Parameter Change table (DRUM SETUP)

[MIDI] [Song Creator]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice		MIDI Reception					MIDI Transmission						PLAY	REC
								Regular/ Drum/Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 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)	X	O(Available only for song parts)					O					O	X	X
		01	1	00-7F	PITCH FINE	-64...0...+63[cent]	40	O(Drum Only)	X	O(Available only for song parts)					O					O	X	X
		02	1	00-7F	LEVEL	0...127	Depends on the note	O(Drum Only)	X	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)	X	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)	X	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)	X	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)	X	O(Available only for song parts)					O					O	X	X
		07	1	00-7F	VARIATION SEND	0...127	7F	O(Drum Only)	X	O(Available only for song parts)					O					O	X	X
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	O(Drum Only)	X	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)	X	O(Available only for song parts)					O					O	X	X
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	O(Drum Only)	X	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)	X	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)	X	O(Available only for song parts)					O					O	X	X
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	O(Drum Only)	X	O(Available only for song parts)					O					O	X	X
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	O(Drum Only)	X	O(Available only for song parts)					O					O	X	X
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	O(Drum Only)	X	O(Available only for song parts)					O					O	X	X

TOTAL SIZE 10

[MIDI] [Song Creator]

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Voice		MIDI Reception					MIDI Transmission						PLAY	REC
								Regular/ Drum/Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel (Right1/ Right2/ Left)
		20	1	00-7F	EQ BASS GAIN	-12...+12[dB]	40	X	X	X					X					X	X	X
		21	1	00-7F	EQ TREBLE GAIN	-12...+12[dB]	40	X	X	X					X					X	X	X
		22	1		NOT USED		-	-	-	-					-					-	-	-
		23	1		NOT USED		-	-	-	-					-					-	-	-
		24	1	04-28	EQ BASS FREQUENCY	32...2.0k[Hz]	0C	X	X	X					X					X	X	X
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k[Hz]	36	X	X	X					X					X	X	X
		26	1		NOT USED		-	-	-	-					-					-	-	-
		27	1		NOT USED		-	-	-	-					-					-	-	-
		28	1		NOT USED		-	-	-	-					-					-	-	-
		29	1		NOT USED		-	-	-	-					-					-	-	-
		2A	1		NOT USED		-	-	-	-					-					-	-	-
		2B	1		NOT USED		-	-	-	-					-					-	-	-
		2C	1		NOT USED		-	-	-	-					-					-	-	-
		2D	1		NOT USED		-	-	-	-					-					-	-	-

TOTAL SIZE 0E

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

In the following cases, the instrument will initialize all Drum Setups.
- XG SYSTEM ON received
- GM SYSTEM ON received
- GM LEVEL2 SYSTEM ON 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 Leve2 Required Parameter

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

System Exclusive Messages (Universal Real Time Messages)

MIDI Event	Data Format	[MIDI] Voice		MIDI Reception					MIDI Transmission					[Song Creator] PLAY		REC
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel operations
Master Volume [GM2]	F0 7F XN 04 01 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000001 01 = Sub-ID #2=Master Volume 0sssssss SS = Volume LSB 0ttttttt TT = Volume MSB 11110111 F7 = End of Exclusive	O	X	O (Available for extra parts of a 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 0sssssss SS = Fine Tuning LSB 0ttttttt TT = Fine Tuning MSB 11110111 F7 = End of Exclusive	O	X	O (Available for extra parts of a song)					O					O	X	X
Master Coase Tuning [GM2]	F0 7F XN 04 04 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 00000100 04 = Sub-ID #2=Master Coarse Tuning 00000000 00 0ttttttt TT = Coarse Tuning MSB 11110111 F7 = End of Exclusive	O	X	O (Available for extra parts of a 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 Type 0...8 0:RoomS 1:RoomM 2:RoomL 3:HallM 4:HallL(default) 8:GM Plate pp=1 Reverb Time 0...127 0...11.0s	O	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 Type 0...5 0:GM Chorus1 1:GM Chorus2 2:GM Chorus3 (default) 3:GM Chorus4 4:FB Chorus 5:GM Flanger pp=1 Mod Rate 0...127 0...15.5Hz pp=2 Mod Depth 0...127 pp=3 Feedback 0...127 pp=4 Send to Reverb 0...127	O	O	O					O					O	O	X

		[MIDI]												[Song Creator]		
MIDI Event	**Data Format**	**Voice**		**MIDI Reception**					**MIDI Transmission**					**PLAY**		**REC**
		Regular/ Drum/ Natural/ Organ Voice	**Mic/Vocal Harmony**	**Song**	**Right1 Right2 Right3 Left**	**Keyboard**	**Style**	**Extra**	**Right1 Right2 Right3 Left**	**M.Pad**	**Style**	**Song**	**Upper Lower**	**PLAY**	**REW**	**From panel operations**
Channel Pressure (Aftertouch) [GM2]	F0 7F XN 09 01 0M PP RR ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=Controller Destination Setting 00000001 01 = Sub-ID #2=Controller Type:01(Channel Pressure) 0000mmmm 0M = MIDI Channel (00-0F) 0ppppppp PP = Controlled Parameter 0rrrrrrr RR = Data : : 11110111 F7 = End of Exclusive 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	O	X	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 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	O	X	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 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)	O (Drum Only)	X	O	X	X	X	X	X	X	X	O	X	O	X	X

System Exclusive Messages (Universal Non-Real Time Messages)

MIDI Event	Data Format	[MIDI] Voice		[MIDI] MIDI Reception					[MIDI] MIDI Transmission					[Song Creator] PLAY	[Song Creator] REC
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower	PLAY	REW	From panel operations
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					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					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					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	X	O (Available for song parts)					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 Parmeters is set to off.

System Exclusive Messages (Style)

[MIDI]

MIDI Event	Data Format	Voice		MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 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 = 0sssssss ss = Switch No. 00H INTRO A 01H INTRO B 02H INTRO C 03H INTRO D 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 A 21H ENDING B 22H ENDING C 23H ENDING D 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 F7 = End of Exclusive	-	-			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	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 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 Prameter 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 (Hard Disk Recorder Control)

[MIDI]

MIDI Event	Data Format	Voice		MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower
Hard Disk Recorder Control	F0 43 73 01 50 19 00 00 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Tyros ID 00000001 01 = Model ID 01010000 50 = SubID 00011001 19 = SubID (Hard Disk Recorder Control) 00000000 00 = SubID 00000000 00 = SubID (Start/Stop Control) 0ddddddd dd = data dd=00H:Start, 01H:Stop, 02H:Pause 11110111 F7 = End of Exclusive Controls start/stop of the audio song, but this is not synchronized with the MIDI song.	X	X	O					X	X	X	O	X

System Exclusive Messages Special Operators (Vocal Harmony Additional Parameters)

[MIDI]

MIDI Event	Data Format	Voice		MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower
Vocal Harmony Pitch to Note ON/OFF	F0 43 73 01 11 0n 50 00 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Tyros ID 00000001 01 = Model ID 00010001 11 = Special Operators 0000nnnn 0n = Channel No. (Always 00) 01010000 50 = Vocal Harmony Additional Parameter Control No. 00000000 00 = Pitch to Note Parameter No. 0ddddddd dd = data (00H : Off, 01H : On) 11110111 F7 = End of Exclusive	X	O			O					●		
Vocal Harmony Pitch to Note Part	F0 43 73 01 11 0n 50 01 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Tyros ID 00000001 01 = Model ID 00010001 11 = Special Operators 0000nnnn 0n = Channel No. (Always 00) 01010000 50 = Vocal Harmony Additional Parameter Control No. 00000001 01 = Pitch to Note Part Parameter No. 0ddddddd dd = data 00H : Right1 01H : Right2 02H : Left 03H : (not used) 04H : Upper 11110111 F7 = End of Exclusive	X	O			O					●		
Vocal Harmony Vocoder Part (Harmony Part(Panel))	F0 43 73 01 11 0n 50 10 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Tyros ID 00000001 01 = Model ID 00010001 11 = Special Operators 0000nnnn 0n = Channel No. (Always 00) 01010000 50 = Vocal Harmony Additional Parameter Control No. 00010000 10 = Vocoder Part Parameter No. 0ddddddd dd = data 00H : Off 01H : Upper 02H : Lower 11110111 F7 = End of Exclusive	X	O			O					●		

● : Transmitted via panel operations O: Available

System Exclusive Messages (Others)

[MIDI]

MIDI Event	Data Format	Voice		MIDI Reception					MIDI Transmission				
		Regular/ Drum/ Natural/ Organ Voice	Mic/Vocal Harmony	Song	Right1 Right2 Right3 Left	Keyboard	Style	Extra	Right1 Right2 Right3 Left	M.Pad	Style	Song	Upper Lower
Internal Clock	F0 43 73 01 02 F7 00000001 01 = Model ID 00000010 02 = Internal Clock Substatus	-	-			O					X		
External Clock	F0 43 73 01 03 F7 00000001 01 = Model ID 00000011 03 = External Clock Substatus	-	-			O					X		
Organ Flutes data Bulk Dump	F0 43 73 01 06 0B 00 00 01 06 0n [Bulk Data] sum F7 01H Model ID 06H Bulk ID 0BH Bulk No. (Organ Flutes data Bulk Dump) 00H,00H,01H,06H Data Length :16bytes 1st Channel No. 0nH 2nd Footage [1'] 00 - 08H 3rd [1 1/3'] 00 - 08H 4th [1 3/5'] 00 - 08H 5th [2'] 00 - 08H 6th [2 2/3'] 00 - 08H 7th [4'] 00 - 08H 8th [5 1/3'] 00 - 08H 9th [8'] 00 - 08H 10th [16'] 00 - 08H 11th [Attack 2'] 00 - 08H 12th [Attack 2 2/3'] 00 - 08H 13th [Attack 4'] 00 - 08H 14th Settings [Attack Length] 00 - 08H 15th [Response] 00 - 08H 16th [Attack Mode] 00 - 01H 00H: Each, 01H: First 17th [Wave Variation] 00 - 01H 00H: Sine, 01H: Vintage 18th [Volume] 01 - 09H 19th [aux] 00H 20th [aux] 00H 21th [aux] 00H 22th [aux] 00H sum Check Sum = 0-sum(BULK DATA)	O (Organ Flute)	X	O	O	X	X	O	●	X	X	O	X
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			O					X		

● : Transmitted via panel operations O: Available

Data Format	Parameter	Description	Note

Guide

F0 43 73 01 1F 00 cc dd F7	Guide Mode	ccH = Part Select No 00H (RIGHT CH=ON, LEFT CH=ON) 01H (RIGHT CH=OFF, LEFT CH=ON) 02H (RIGHT CH=ON, LEFT CH=OFF) 03H (RIGHT CH=OFF, LEFT CH=OFF) ddH = Mode 00H=Guide OFF 01H=Follow Lights 02H=Any Key 03H=Karao-Key 04H=Vocal CueTIME	Entered to the song from the [SONG CREATOR]->CHANNEL->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]->CHANNEL->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, 01H:MIDDLE, 02H:LARGE, 03H:X-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: Triplet OFF, 7FH: Triplet ON	
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	
F0 43 73 01 50 12 00 0B dd F7	Color Note	00H:OFF, 7FH:ON	

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]->CHANNEL->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.

Hard Disk Recorder

F0 43 73 01 50 19 00 00 dd F7	Hard Disk Recorder Control	Controls start/pause/stop of the audio song, but this is not synchronized with the MIDI song. 00H:Start, 01H:Stop.02H:Pause	Edited from the [SONG CREATOR]->SYS->EX display.

Data Format	Parameter	Description	Note
FF 05 len [Data]	Lyrics	len=Data length, [Data]=Lyrics Data	-
FF 06 len [Data]	Marker	len=Data length, [Data]=Marker	Used as a Song Position Jump Marker.
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	Same as ScBar entered from the [SONG CREATOR] ->SYS/EX. Display
FF 7F len 43 73 0D 01 [Data]	Keyboard Voice	Voice settings for the RIGHT1-3 and LEFT	Entered to the song from the [SONG CREATOR]->CHANNEL ->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 dd 08	Phrase Mark	dd Phrase mark 0hfccccc bit6(h) 0:Right, 1:Left Right hand/Left hand bit5(f) 0:Channel available, 1:Channel not available Flag for whether channel information (bit 4-0) is valid or not Phrases common to all channels assigned to 1 bit4-0(ccccc) CH(0:1ch-31:32ch) Channel information whose phrase mark is available	Used when performing the Phrase Mark repeat playback.
FF 7F 04 43 7B 04 dd	Phrase Max	Max 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 = TRACK1 (0: OFF, 1-16CH) ll = TRACK2 (0: OFF, 1-16CH)	Entered when recording.
FF 7F len 43 7B 21 00 pp [Data]	Lyrics Bitmap	Specifies the background picture of the Lyrics display. pp=Display type (0: Center, 1: Tile) [Data]=File Path	Entered to the song from the [SONG CREATOR]->CHANNEL ->SETUP display.

YAMAHA [Digital Workstation] Date:21-June-2005
Model Tyros2 MIDI Implementation Chart Version : 1.00

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	o	o	
Pitch Bend	o	o 0-24 semi	
0,32	o	o	Bank Select
1,5,7,10,11	o	o	
6,38	o	o	Data Entry
64,65,66,67	o	o	
Control 71,72,73,74	o	o	Sound Controller
Change 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	
Aux :All Sound OFF	x	o(120,126,127)	
:Reset All Cntrls	x	o(121)	
:Local ON/OFF	x	o(122)	
:All Notes OFF	x	o(123-125)	
Mes- :Active Sense	o	o	
sages: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

MEMO

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