

## DIGITAL PIANO

**P-525****DATA LIST**

## DATENLISTE

## LISTE DES DONNÉES

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# XG Voice List / XG Voice-Liste / Liste des sonorités XG / Lista de sonidos XG

Voice group	Voice name	MSB	LSB	PrgNo.	
PIANO	GrandPiano	0	0	1	
	GrandPiano KSP	0	1	1	
	MellowGndPiano	0	18	1	
	PianoStrings	0	40	1	
	Dream	0	41	1	
	BrightPiano	0	0	2	
	BrightPiano KSP	0	1	2	
	E.GrandPiano	0	0	3	
	E.GndPiano KSP	0	1	3	
	DetunedCP80	0	32	3	
	LayeredCP1	0	40	3	
	LayeredCP2	0	41	3	
	Honkytonk	0	0	4	
	Honkytonk KSP	0	1	4	
	ElectricPiano1	0	0	5	
	E.Piano1 KSP	0	1	5	
	Mellow E. Piano	0	18	5	
	ChorusEP1	0	32	5	
	Hard E. Piano	0	40	5	
	Vxfade E. Piano1	0	45	5	
	60s E. Piano1	0	64	5	
	ElectricPiano2	0	0	6	
	E.Piano2 KSP	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	
	VXfade E. Piano2	0	45	6	
	Harpsichord	0	0	7	
	Harpsichord KSP	0	1	7	
	Harpsichord2	0	25	7	
	Harpsichord3	0	35	7	
	Clavi	0	0	8	
	Clavi KSP	0	1	8	
	ClaviWah	0	27	8	
	PulseClavi	0	64	8	
	PierceClavi	0	65	8	
	CHROMATIC PERC.	Celesta	0	0	9
		Glockenspiel	0	0	10
		MusicBox	0	0	11
		MusicBox2	0	64	11
		Vibraphone	0	0	12
		Vibraphone KSP	0	1	12
		HardVibes	0	45	12
		Marimba	0	0	13
		Marimba KSP	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	
	60sDrawOrgan1	0	33	17	
	60sDrawOrgan2	0	34	17	
	70sDrawOrgan1	0	35	17	
	DrawbarOrgan2	0	36	17	
	60sDrawOrgan3	0	37	17	
	EvenBarOrgan	0	38	17	
	16+2'2_3Organ	0	40	17	

Voice group	Voice name	MSB	LSB	PrgNo.
ORGAN	OrganBass	0	64	17
	70sDrawOrgan2	0	65	17
	CheezyOrgan	0	66	17
	DrawbarOrgan3	0	67	17
	Perc.Organ1	0	0	18
	70sPerc.Organ1	0	24	18
	DetPerc.Organ	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
	Trem.OrganFlute	0	65	20
	ReedOrgan	0	0	21
	PuffOrgan	0	40	21
	Accordion	0	0	22
AccordionItalian	0	32	22	
Harmonica	0	0	23	
Harmonica2	0	32	23	
TangoAccordion	0	0	24	
TangoAccord2	0	64	24	
GUITAR	NylonGuitar	0	0	25
	NylonGuitar2	0	16	25
	NylonGuitar3	0	25	25
	VelocityGtHarmo	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
	MuteSteelGuitar	0	41	29
	FunkGuitar2	0	43	29
JazzMan	0	45	29	
Overdriven	0	0	30	
GuitarPinch	0	43	30	
DistortionGuitar	0	0	31	
FeedbackGuitar	0	40	31	
FeedbackGtr2	0	41	31	
GuitarHarmonics	0	0	32	
GuitarFeedback	0	65	32	
GuitarHarmonic2	0	66	32	
BASS	AcousticBass	0	0	33
	JazzRhythm	0	40	33
	VXUprghtBass	0	45	33
	FingerBass	0	0	34
	FingerBassDark	0	18	34
	FlangeBass	0	27	34
	Bass&DistEG	0	40	34
	FingerSlapBass	0	43	34
	FingerBass2	0	45	34
	ModulatedBass	0	65	34
	PickBass	0	0	35
	MutePickBass	0	28	35

Voice group	Voice name	MSB	LSB	PrgNo.
BASS	FretlessBass	0	0	36
	FretlessBass2	0	32	36
	FretlessBass3	0	33	36
	FretlessBass4	0	34	36
	SynthFretless	0	96	36
	SmthFretless	0	97	36
	SlapBass1	0	0	37
	ResonantSlap	0	27	37
	PunchThumb	0	32	37
	SlapBass2	0	0	38
	VeloSwitchSlap	0	43	38
	SynthBass1	0	0	39
	SynthBass1Dark	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
	MellowSynBass	0	6	40
	SequenceBass	0	12	40
	ClickSynthBass	0	18	40
	SynthBass2Dark	0	19	40
	SmoothSynBass	0	32	40
	ModulrSynBass	0	40	40
	DXBass	0	41	40
	XWireBass	0	64	40
STRINGS	Violin	0	0	41
	SlowAttackViolin	0	8	41
	Viola	0	0	42
	Cello	0	0	43
	Contrabass	0	0	44
	TremoloStrings	0	0	45
	SlwAtkTremStr	0	8	45
	SuspenseStrings	0	40	45
	PizzicatoStrings	0	0	46
	OrchestralHarp	0	0	47
	YangQin	0	40	47
	Timpani	0	0	48
	ENSEMBLE	Strings1	0	0
StereoStrings		0	3	49
SlwAtkStrings		0	8	49
ArcoStrings		0	24	49
60sStrings		0	35	49
Orchestra		0	40	49
Orchestra2		0	41	49
TremoloOrchestra		0	42	49
VelocityStrings		0	45	49
Strings2		0	0	50
StereoSlwStrings		0	3	50
LegatoStrings		0	8	50
WarmStrings		0	40	50
Kingdom		0	41	50
70sStrings		0	64	50
Strings3		0	65	50
SynthStrings1		0	0	51
ResonantStrings		0	27	51
SynthStrings4		0	64	51
SynthStrings5		0	65	51
SynthStrings2		0	0	52
ChoirAahs		0	0	53
StereoChoir		0	3	53
ChoirAahs2		0	16	53
MellowChoir		0	32	53
ChoirStrings		0	40	53

Voice group	Voice name	MSB	LSB	PrgNo.	
ENSEMBLE	VoiceOohs	0	0	54	
	SynthVoice	0	0	55	
	SynthVoice2	0	40	55	
	Choral	0	41	55	
	AnalogVoice	0	64	55	
	OrchestraHit	0	0	56	
	OrchestraHit2	0	35	56	
	Impact	0	64	56	
	BRASS	Trumpet	0	0	57
		Trumpet2	0	16	57
BrightTrumpet		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	
FrenchHornSolo		0	6	61	
FrenchHorn2		0	32	61	
HornOrchestra		0	37	61	
BrassSection		0	0	62	
Tp&TbSection		0	35	62	
BrassSection2		0	40	62	
HighBrass		0	41	62	
MellowBrass		0	42	62	
SynthBrass1		0	0	63	
QuackBrass		0	12	63	
ResoSynthBrass		0	20	63	
PolyBrass		0	24	63	
SynthBrass3		0	27	63	
JumpBrass		0	32	63	
An.VeloBrass1		0	45	63	
AnalogBrass1		0	64	63	
SynthBrass2		0	0	64	
SoftBrass		0	18	64	
SynthBrass4		0	40	64	
ChoirBrass		0	41	64	
An.VeloBrass2	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	
PIPE	Clarinet	0	0	72	
	Piccolo	0	0	73	
	Flute	0	0	74	
	Recorder	0	0	75	
	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	

Voice group	Voice name	MSB	LSB	PrgNo.	
SYNTH LEAD	SineLead	0	66	81	
	SawtoothLead	0	0	82	
	SawtoothLead2	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	
	SequenceAnalog	0	96	82	
	CalliopeLead	0	0	83	
	PureLead	0	65	83	
	ChiffLead	0	0	84	
	Rubby	0	64	84	
	CharangLead	0	0	85	
	DistortedLead	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	
RotaryStrings		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 EFFECTS		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	
	SynthDrumComp	0	12	99	

Voice group	Voice name	MSB	LSB	PrgNo.
SYNTH EFFECTS	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
	SoftCrystal	0	65	99
	LoudGlocken	0	66	99
	ChristmasBells	0	67	99
	VibraphoneBells	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
	NylonEl.Piano	0	40	100
	NylonHarp	0	64	100
	HarpVox	0	65	100
	AtmospherePad	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
	ScienceFiction	0	0	104
	Starz	0	64	104
	ETHNIC	Sitar	0	0
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

Voice group	Voice name	MSB	LSB	PrgNo.
PERCUSSIVE	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
	GlassPercussion	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
	ReverseCymbal	0	0	120
	SOUND EFFECTS	GuitarFretNoise	0	0
BreathNoise		0	0	122
Seashore		0	0	123
BirdTweet		0	0	124
TelephoneRing		0	0	125
Helicopter		0	0	126
Applause		0	0	127
Gunshot		0	0	128
SFX	CuttingNoise	64	0	1
	CuttingNoise2	64	0	2
	StringSlap	64	0	4
	FluteKeyClick	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
	TelephoneRing2	64	0	71
	CarEngineIgn	64	0	81
	CarTiresSql	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
RollerCoaster	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	

Voice group	Voice name	MSB	LSB	PrgNo.
SFX	MachineGun	64	0	113
	LaserGun	64	0	114
	Explosion	64	0	115
	Firework	64	0	116
DRUM KIT	Standard Kit 1	127	0	1
	Standard Kit 2	127	0	2
	Room Kit	127	0	9
	Rock Kit	127	0	17
	Electro Kit	127	0	25
	Analog Kit	127	0	26
	Dance Kit	127	0	28
	Jazz Kit	127	0	33
	Brush Kit	127	0	41
	Real Brushes	127	0	42
	Symphony Kit	127	0	49
	Hip Hop Kit	127	0	57
	Break Kit	127	0	58
	Power Kit	127	0	88
	Real Drums	127	0	92
	SFX Kit 1	126	0	1
	SFX Kit 2	126	0	2
Pop Latin Kit	126	0	44	

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

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

Same as Standard Kit 1

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

No Sound

\*2 Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

## P-525 Data List

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

Same as Standard Kit 1 \*1 Key Off: Keys marked "●" stop sounding the instant they are released.

No Sound

\*2 Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

P-525 Data List





Kit Name		SFX Kit 1			SFX Kit 2			Pop Latin Kit		
MSB-LSB-PC# (Org:1)		126-0-1			126-0-2			126-0-44		
Note#	MIDI Note	FullName	KeyOff (*1)	Alt Grp (*2)	FullName	KeyOff	Alt Grp	FullName	KeyOff	Alt Grp
13	C#-1							Cajon Low		
14	D-1							Cajon Slap		
15	D#-1							Cajon Tip		
16	E-1							Claves High		
17	F-1							Claves Low		
18	F#-1							Hand Clap		
19	G-1									
20	G#-1							Finger Snap		
21	A-1							Castanet		
22	A#-1							Conga H Tip		
23	B-1							Conga H Heel		
24	C0							Conga H Open		
25	C#0							Conga H Mute		
26	D0							Conga H Slap Open		
27	D#0							Conga H Slap		
28	E0							Conga H Slap Mute		
29	F0							Conga L Tip		
30	F#0							Conga L Heel		
31	G0							Conga L Open		
32	G#0							Conga L Mute		
33	A0							Conga L Slap Open		
34	A#0							Conga L Slap		
35	B0							Conga L Slide	●	
36	C1	Cutting Noise 1	●		Phone Call	●		Bongo H Open One Finger		
37	C#1	Cutting Noise 2	●		Door Squeak	●		Bongo H Open Three Finger		
38	D1				Door Slam	●		Bongo H Rim		
39	D#1	String Slap	●		Scratch Cut	●		Bongo H Tip		
40	E1				Scratch Split	●		Bongo H Heel		
41	F1				Wind Chime	●		Bongo H Slap		
42	F#1				Telephone Ring	●		Bongo L Open One Finger		
43	G1							Bongo L Open Three Finger		
44	G#1							Bongo L Rim		
45	A1							Bongo L Tip		
46	A#1							Bongo L Heel		
47	B1							Bongo L Slap		
48	C2							Timbale L		
49	C#2									
50	D2									
51	D#2									
52	E2	Flute Key Click	●		Car Engine Ignition	●		Flute Key Click	●	
53	F2				Car Tires Squeal	●		Paila L		
54	F#2				Car Passing	●		Timbale H		
55	G2				Car Crash	●				
56	G#2				Siren	●				
57	A2				Train	●				
58	A#2				Jet Plane	●				
59	B2				Starship	●		Paila H		
60	C3				Burst	●		Cowbell Top		
61	C#3				Roller Coaster	●		Cowbell 1		
62	D3				Submarine	●		Cowbell 2		
63	D#3							Cowbell 3		
64	E3							Guiro Short		
65	F3							Guiro Long	●	
66	F#3							Metal Guiro Short		
67	G3							Metal Guiro Long	●	
68	G#3	Shower	●		Laugh	●		Tambourine		
69	A3	Thunder	●		Scream	●		Tambourim Open		
70	A#3	Wind	●		Punch	●		Tambourim Mute		
71	B3	Stream	●		Heart Beat	●		Tambourim Tip		
72	C4	Bubble	●		Foot Steps	●		Maracas		
73	C#4	Feed	●		Feed	●		Shaker		
74	D4							Cabasa		
75	D#4							Cuica Mute		
76	E4							Cuica Open		
77	F4							Cowbell High 1		
78	F#4							Cowbell High 2		
79	G4							Shekere		
80	G#4							Shekere Tone		
81	A4							Triangle Mute		1
82	A#4							Triangle Open		1
83	B4									
84	C5	Dog	●		Machine Gun	●		Wind Chime		
85	C#5	Horse	●		Laser Gun	●		Horse	●	
86	D5	Bird Tweet	●		Explosion	●		Bird Tweet	●	
87	D#5				Firework	●				
88	E5									
89	F5									
90	F#5	Ghost	●		Ghost	●		Ghost	●	
91	G5	Maou	●		Maou	●		Maou	●	

Same as Standard Kit 1

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

No Sound

\*2 Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.

## P-525 Data List

# Effect Type List / Liste der Effekttypen / Liste des types d'effets / Lista de tipos de efectos

## Reverb Block

Reverb types that can be selected by Voice Menu.

Effect Name	MSB	LSB
Off	0	0
Recital Hall	1	24
Concert Hall	1	4
Chamber	2	24
Room	2	16
Cathedral	1	5
Club	3	24
Plate	4	24

## Chorus Block

Chorus types that can be selected by Voice Menu.

Effect Name	MSB	LSB
Off	0	0
Chorus	65	8
Celeste	66	8
Flanger	67	1

## DSP Block

Effect types that can be selected by Voice Menu.

Effect Name	MSB	LSB
Off	64	0
DelayLCR	5	16
DelayLR	6	0
Echo	7	0
CrossDelay	8	0
Symphonic	68	16
Rotary	69	32
Tremolo	70	18
VibeRotor	119	0
AutoPan	71	21
Phaser	72	16
AutoWah	78	16
Distortion	97	33

Effect types used for the specific Voice (that cannot be selected by Voice Menu)

Effect Name	MSB	LSB
VCM EQ 501	77	33
CompDistortion	73	16
VintagePhaserStereo	124	3
StereoOverdrive	74	8

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

Parameters marked with a ● in the "Control" column can be controlled from an AC1 (assignable controller 1) etc.

## REVERB

### Room

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

### Recital Hall, Concert Hall, Chamber, Cathedral, Club, Plate

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

## CHORUS

### Chorus, Celeste

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		
3	Feedback Level	-63 – 0 – +63	1 – 127		
4	Delay Offset	0.0ms – 50.0ms	0 – 127	Table #2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11	EQ Mid Frequency	100Hz – 10kHz	14 – 54	Table #3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15	Input Mode	Mono, Stereo	0 – 1		
16					

### Flanger

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		
3	Feedback Level	-63 – 0 – +63	1 – 127		
4	Delay Offset	0.0ms – 50.0ms	0 – 127	Table #2	
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11	EQ Mid Frequency	100Hz – 10kHz	14 – 54	Table #3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14	LFO Phase Difference	-180deg – 0deg – +180deg (resolution=3deg.)	4 – 124		
15					
16					

## DSP

### DelayLCR

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay Time	0.1ms – 1.6383s	1 – 16383		
2	Rch Delay Time	0.1ms – 1.6383s	1 – 16383		
3	Cch Delay Time	0.1ms – 1.6383s	1 – 16383		
4	Feedback Delay Time	0.1ms – 1.6383s	1 – 16383		
5	Feedback Level	-63 – 0 – +63	1 – 127		
6	Cch Level	0 – 127	0 – 127		
7	Feedback High Damp	0.1 – 1.0	1 – 10		
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
16	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		

### DelayLR

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay Time	0.1ms – 1.6383s	1 – 16383		
2	Rch Delay Time	0.1ms – 1.6383s	1 – 16383		
3	Feedback Delay 1 Time	0.1ms – 1.6383s	1 – 16383		
4	Feedback Delay 2 Time	0.1ms – 1.6383s	1 – 16383		
5	Feedback Level	-63 – 0 – +63	1 – 127		
6	Feedback High Damp	0.1 – 1.0	1 – 10		
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
16	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		

### Echo

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay 1 Time	0.1ms – 1.4860s	1 – 14860		
2	Lch Feedback Level	-63 – 0 – +63	1 – 127		
3	Rch Delay 1 Time	0.1ms – 1.4860s	1 – 14860		
4	Rch Feedback Level	-63 – 0 – +63	1 – 127		
5	Feedback High Damp	0.1 – 1.0	1 – 10		
6	Lch Delay 2 Time	0.1ms – 1.4860s	1 – 14860		
7	Rch Delay 2 Time	0.1ms – 1.4860s	1 – 14860		
8	Delay 2 Level	0 – 127	0 – 127		
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
16	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		

## CrossDelay

No.	Parameter	Display	Value	See Table	Control
1	L->R Delay Time	0.1ms – 1.4860s	1 – 14860		
2	R->L Delay Time	0.1ms – 1.4860s	1 – 14860		
3	Feedback Level	-63 – 0 – +63	1 – 127		
4	Input Select	L, R, L&R	0 – 2		
5	Feedback High Damp	0.1 – 1.0	1 – 10		
6					
7					
8					
9					
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11					
12					
13	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
14	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
15	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
16	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		

## Symphonic

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		
3	Delay Offset	0.0ms – 50.0ms	0 – 127	Table #2	
4					
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11	EQ Mid Frequency	100Hz – 10kHz	14 – 54	Table #3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15					
16					

## Rotary

No.	Parameter	Display	Value	See Table	Control
1	Speed Control	Slow, Fast	0 – 1		●
2	Drive	0.0 – 10.0	0 – 100		
3	Tone	0.0 – 10.0	0 – 100		
4	Low/High Balance	L63>H – L=H – L<H63	1 – 127		
5	Output Level	0 – 127	0 – 127		
6	Mic L-R Angle	0deg, 90deg, 120deg, 180deg	0 – 3		
7	Input Level	-6.0dB – 0.0dB – +6.0dB	52 – 76		
8	Modulation Intensity	0 – 63	0 – 63		
9					
10					
11	Slow-Fast Time of Horn	x0.21 – x1.00 – x2.00	14 – 127	Table #4	
12	Fast-Slow Time of Horn	x0.21 – x1.00 – x2.00	14 – 127	Table #4	
13	Woofer Speed Slow	0.0rpm – 88.3rpm	0 – 127	Table #5	
14	Horn Speed Slow	0.0rpm – 89.6rpm	0 – 127	Table #6	
15	Woofer Speed Fast	189.3rpm – 736.8rpm	1 – 127	Table #7	
16	Horn Speed Fast	209.4rpm – 817.6rpm	1 – 127	Table #8	

### Tremolo

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		
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		
11	Drive	0 – 127	0 – 127		
12	Dist EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
13	Dist EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
14	LPF Cutoff Frequency	1.0kHz – 18kHz, Thru	34 – 60	Table #3	
15	Output Level	0 – 127	0 – 127		
16					

### Phaser

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		
3	Phase Shift Offset	0 – 127	0 – 127		
4	Feedback Level	-63 – 0 – +63	1 – 127		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		●
11	Stage	4 – 22	4 – 22		
12	Diffusion	Mono, Stereo	0 – 1		
13					
14					
15					
16					

### VibeRotor

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

### AutoWah

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		
3	Cutoff Frequency Offset	0 – 127	0 – 127		●
4	Resonance	1.0 – 12.0	10 – 120		
5					
6	EQ Low Frequency	32Hz – 2.0kHz	4 – 40	Table #3	
7	EQ Low Gain	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		
11	Drive	0 – 127	0 – 127		
12					
13					
14					
15					
16					

### AutoPan

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	-12dB – 0dB – +12dB	52 – 76		
8	EQ High Frequency	500Hz – 16kHz	28 – 58	Table #3	
9	EQ High Gain	-12dB – 0dB – +12dB	52 – 76		
10					
11	EQ Mid Frequency	100Hz – 10kHz	14 – 54	Table #3	
12	EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
13	EQ Mid Width	0.1 – 12.0	1 – 120		
14					
15					
16					

### Distortion

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

### VCM EQ 501

No.	Parameter	Display	Value	See Table	Control
1	EQ1 Freq	31.5Hz – 2.0kHz	12 – 84	Table #15	
2	EQ1 Gain	-12.0dB – +12.0dB	40 – 88		
3	EQ2 Q	0.50 – 16.00	0 – 60	Table #15	
4	EQ2 Freq	50.0 Hz – 20.0kHz	20 – 124	Table #15	
5	EQ2 Gain	-18.0dB – +18.0dB	28 – 100		
6	EQ3 Q	0.50 – 16.00	0 – 60	Table #16	
7	EQ3 Freq	50.0 Hz – 20.0kHz	20 – 124	Table #15	
8	EQ3 Gain	-18.0dB – +18.0dB	28 – 100		
9					
10					
11	EQ4 Q	0.50 – 16.00	0 – 60	Table #16	
12	EQ4 Freq	50.0 Hz – 20.0kHz	20 – 124	Table #15	
13	EQ4 Gain	-18.0dB – +18.0dB	28 – 100		
14	EQ5 Freq	500Hz – 20.0kHz	60 – 124	Table #15	
15	EQ5 Gain	-12.0dB – +12.0dB	40 – 88		
16	Output Level	-12.0dB – +12.0dB	40 – 88		

### StereoOverdrive

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	-12dB – 0dB – +12dB	52 – 76		
4	LPF Cutoff Frequency	1.0kHz – 18kHz, Thru	34 – 60	Table #3	
5	Output Level	0 – 127	0 – 127		
6					
7	EQ Mid Frequency	100Hz – 10kHz	14 – 54	Table #3	
8	EQ Mid Gain	-12dB – 0dB – +12dB	52 – 76		
9	EQ Mid Width	0.1 – 12.0	1 – 120		
10	Dry/Wet	D63>W – D=W – D<W63	1 – 127		
11	Edge (Clip Curve)	0 – 127	0 – 127		
12					
13					
14					
15					
16					

### CompDistortion

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

### VintagePhaserStereo

No.	Parameter	Display	Value	See Table	Control
1	Speed	0.100Hz – 10.00Hz	0 – 252	Table #11	●
2	Manual	0 – 127	0 – 127		
3	Depth	0 – 127	0 – 127		
4	Feedback	0 – 127	0 – 127		
5	Stage	4, 6, 8, 10	0 – 3		
6	Mode	1, 2	0 – 1		
7	Color (*)	0 – 127	0 – 127		
8	Spread	0 – 127	0 – 127		
9					
10					
11					
12					
13					
14					
15					
16					

For the following settings, the Color parameter is not available.  
When Stage is set to 4, 6 or 8 (with Mode at 1), and 4 or 10 (with Mode at 2).

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

**Table #1**  
LFO Frequency [Hz]

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

**Table #2**  
Modulation Delay Offset [ms]

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

**Table #3**  
EQ Frequency [Hz]

Data	Value	Data	Value
0	THRU (20)	31	700
		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	10k
23	280	55	11k
24	315	56	12k
25	355	57	14k
26	400	58	16k
27	450	59	18k
28	500	60	THRU (20k)
29	560		
30	630		

**Table #4**  
Real Rotary Windup/down Accel

Data	Value	Data	Value
14	0.21	71	1.11
15	0.22	72	1.13
16	0.24	73	1.14
17	0.25	74	1.16
18	0.27	75	1.17
19	0.29	76	1.19
20	0.30	77	1.21
21	0.32	78	1.22
22	0.33	79	1.24
23	0.35	80	1.25
24	0.37	81	1.27
25	0.38	82	1.29
26	0.40	83	1.30
27	0.41	84	1.32
28	0.43	85	1.33
29	0.44	86	1.35
30	0.46	87	1.37
31	0.48	88	1.38
32	0.49	89	1.40
33	0.51	90	1.41
34	0.52	91	1.43
35	0.54	92	1.44
36	0.56	93	1.46
37	0.57	94	1.48
38	0.59	95	1.49
39	0.60	96	1.51
40	0.62	97	1.52
41	0.63	98	1.54
42	0.65	99	1.56
43	0.67	100	1.57
44	0.68	101	1.59
45	0.70	102	1.60
46	0.71	103	1.62
47	0.73	104	1.63
48	0.75	105	1.65
49	0.76	106	1.67
50	0.78	107	1.68
51	0.79	108	1.70
52	0.81	109	1.71
53	0.83	110	1.73
54	0.84	111	1.75
55	0.86	112	1.76
56	0.87	113	1.78
57	0.89	114	1.79
58	0.90	115	1.81
59	0.92	116	1.83
60	0.94	117	1.84
61	0.95	118	1.86
62	0.97	119	1.87
63	0.98	120	1.89
64	1.00	121	1.90
65	1.02	122	1.92
66	1.03	123	1.94
67	1.05	124	1.95
68	1.06	125	1.97
69	1.08	126	1.98
70	1.10	127	2.00







**Table #12**  
Compressor Attack Time [ms]

Data	Value
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	12
11	14
12	16
13	18
14	20
15	23
16	26
17	30
18	35
19	40
20	50
21	60
22	70
23	80
24	100
25	120
26	140
27	160
28	180
29	200

**Table #13**  
Compressor Release Time [ms]

Data	Value
0	10
1	15
2	25
3	35
4	45
5	55
6	65
7	75
8	85
9	100
10	115
11	140
12	170
13	230
14	340
15	680
16	850
17	1000
18	1200
19	1500
20	1700
21	2000
22	2400
23	3000

**Table #14**  
Compressor Ratio

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

**Table #15**  
VCM EQ Frequency [Hz]

Data	Value	Data	Value	Data	Value
0	16.0	46	224	92	3.15k
1	17.0	47	236	93	3.35k
2	18.0	48	250	94	3.55k
3	19.0	49	265	95	3.75k
4	20.0	50	280	96	4.00k
5	21.2	51	300	97	4.25k
6	22.4	52	315	98	4.50k
7	23.6	53	335	99	4.75k
8	25.0	54	355	100	5.00k
9	26.5	55	375	101	5.30k
10	28.0	56	400	102	5.60k
11	30.0	57	425	103	6.00k
12	31.5	58	450	104	6.30k
13	33.5	59	475	105	6.70k
14	35.5	60	500	106	7.10k
15	37.5	61	530	107	7.50k
16	40.0	62	560	108	8.00k
17	42.5	63	600	109	8.50k
18	45.0	64	630	110	9.00k
19	47.5	65	670	111	9.50k
20	50.0	66	710	112	10.0k
21	53.0	67	750	113	10.6k
22	56.0	68	800	114	11.2k
23	60.0	69	850	115	11.8k
24	63.0	70	900	116	12.5k
25	67.0	71	950	117	13.2k
26	71.0	72	1.00k	118	14.0k
27	75.0	73	1.06k	119	15.0k
28	80.0	74	1.12k	120	16.0k
29	85.0	75	1.18k	121	17.0k
30	90.0	76	1.25k	122	18.0k
31	95.0	77	1.32k	123	19.0k
32	100	78	1.40k	124	20.0k
33	106	79	1.50k	125	21.2k
34	112	80	1.60k	126	22.4k
35	118	81	1.70k	127	23.6k
36	125	82	1.80k	128	25.0k
37	132	83	1.90k	129	26.5k
38	140	84	2.00k	130	28.0k
39	150	85	2.12k	131	30.0k
40	160	86	2.24k	132	31.5k
41	170	87	2.36k	133	33.5k
42	180	88	2.50k	134	35.5k
43	190	89	2.65k	135	37.5k
44	200	90	2.80k	136	40.0k
45	212	91	3.00k		

**Table #16**  
VCM EQ Q

Data	Value
0	0.50
1	0.53
2	0.56
3	0.59
4	0.63
5	0.67
6	0.71
7	0.75
8	0.79
9	0.84
10	0.89
11	0.94
12	1.00
13	1.06
14	1.12
15	1.19
16	1.26
17	1.33
18	1.41
19	1.50
20	1.59
21	1.68
22	1.78
23	1.89
24	2.00
25	2.12
26	2.24
27	2.38
28	2.52
29	2.67
30	2.83
31	3.00
32	3.17
33	3.36
34	3.56
35	3.78
36	4.00
37	4.24
38	4.49
39	4.76
40	5.04
41	5.34
42	5.66
43	5.99
44	6.35
45	6.73
46	7.13
47	7.55
48	8.00
49	8.48
50	8.98
51	9.51
52	10.08
53	10.68
54	11.31
55	11.99
56	12.70
57	13.45
58	14.25
59	15.10
60	16.00

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

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

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

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

- Except the table above, for example 144-159 (decimal)/9nH/1001 0000-1001 1111 (binary) denotes the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 denotes the Control Change Message for each channel (1-16). 192-207/CnH/1100 0000-1100 1111 denotes the Program Change Message for each channel (1-16). 240/FOH/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexadecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

## ■ Preset Voice List

Program change numbers are often specified as numbers "0 – 127." Since this list uses a "1 – 128" numbering system, in such cases it is necessary to subtract 1 from the transmitted program change numbers to select the appropriate sound: e.g. to select No. 2 in the list below, transmit program change number 1.

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
Piano	CFX Grand (Binaural included)	108	0	1
	Bösendorfer	108	6	1
	Studio Grand	108	1	3
	Bright Grand	108	0	2
	Ballad Grand	108	1	1
	Warm Grand	108	7	1
	Pop Grand	108	1	2
	Jazz Grand	108	6	2
	Rock Grand	108	0	3
	Dance Grand	108	8	3
	Old School Pf	108	9	3
HonkyTonk Pf	108	5	4	
E.Piano	Stage E.Piano	108	0	5
	DX E.Piano	108	0	6
	Vintage E.Piano	108	1	5
	Auto Pan EP	108	5	5
	Soft EP	108	2	5
	Phaser EP	108	3	5
	Dyno E.Piano	108	6	5
	DX Bright	108	1	6
Tremolo Vintage	108	4	5	

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
Organ	Jazz Organ 1	108	0	17
	Jazz Organ 2	108	3	17
	Rock Organ	108	0	18
	Vintage Organ	108	1	18
	Organ Principal	108	1	20
	Organ Tutti	108	0	20
CLV/VIB.	Harpsichord 8'	108	0	7
	Harpsi.8'+4'	108	1	7
	E. Clavichord	108	0	8
	Vibraphone	108	0	12
Strings	Strings	108	0	49
	Slow Strings	108	0	50
	Choir	108	0	53
	Slow Choir	108	1	53
	Dark Pad	108	120	90
	Lite Pad	108	122	90
Others	Bell Pad	108	12	89
	Acoustic Bass	108	0	33
	Electric Bass	108	0	34
	Bass & Cymbal	108	1	33
	Fretless Bass	108	0	36
	Nylon Guitar	108	0	25
Steel Guitar	108	0	26	
XG	XG	-	-	-

\* For details on XG Voices, refer to the "XG Voice List" on pages 2-5.

# MIDI CHANNEL MESSAGE (1)

<b>Application Range</b>	MIDI, Internal Sequencer
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MIDI Events	Status byte		1st Data byte			2nd Data byte			MIDI Formats	MIDI Reception			MIDI Transmission	
	Status	Data (Hex)	Data (Hex)	Parameter	Data (Hex)	Parameter	Data (Hex)	Parameter		Song	R1 R2 L	Keyboard (All manually played parts)	Panel	Song
Key Off	8nH (n: Channel Number)	kk		Key no. (0-127)	vv	Velocity (64)			[GM1] [GM2]	○	○	○	○	○
Key On	9nH (n: Channel Number)	kk		Key no. (0-127)	vv	Key On: vv=1-127 Key Off: vv=0			[GM1] [GM2]	○	○	○	○	○
Control Change	BnH	0 (00H)		Bank Select MSB	0 (00H) 64 (40H) 118 (76H) 119 (77H) 120 (78H) 121 (79H) 126 (7EH) 127 (7FH)	Normal SFX Voice GS Rhythm GS Normal GM2 Rhythm GM2 Normal SFX kit Drum kit			[GM2]	○	○	×	○	○
			1 (01H)	Modulation	0-127 (00H...7FH)	Data		[GM1] [GM2]	○	○	○	○	×	○
			5 (05H)	Portamento Time	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	×	○
			6 (06H)	Data Entry MSB	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			7 (07H)	Main Volume	0-127 (00H...7FH)	Data		[GM1] [GM2]	○	○	○	○	○	○
			10 (0AH)	Panpot	0-127 (00H...7FH)	L64...C...R63		[GM1] [GM2]	○	○	○	○	○	○
			11 (0BH)	Expression	0-127 (00H...7FH)	Data		[GM1] [GM2]	○	○	○	○	×	○
			19 (13H)	Key Acceleration	0-127 (00H...7FH)	Key Acceleration (0-127)			○	○	○	○	○	○
			32 (20H)	Bank Select LSB	0-127 (00H...7FH)	Data		[GM2]	○	○	×	○	○	○
			38 (26H)	Data Entry LSB	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			64 (40H)	Sustain (Damper)	0-127 (00H...7FH)	Data		[GM1] [GM2]	○	○	○	○	○	○
			65 (41H)	Portamento	0-127 (00H...7FH)	0...63, 64...127 (OFF, ON)		[GM2]	○	○	○	○	×	○
			66 (42H)	Sostenuto	0-127 (00H...7FH)	0...63, 64...127 (OFF, ON)		[GM2]	○	○	○	○	○	○
			67 (43H)	Soft Pedal	0-127 (00H...7FH)	0...63, 64...127 (OFF, ON)		[GM2]	○	○	○	○	○	○
			71 (47H)	Harmonic Content	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	○	○
			72 (48H)	Release Time	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			73 (49H)	Attack Time	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			74 (4AH)	Brightness	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	○	○
			75 (4BH)	Decay Time	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			76 (4CH)	Vibrate Rate	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			77 (4DH)	Vibrate Depth	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			78 (4EH)	Vibrate Delay	0-127 (00H...7FH)	-64...0...+63		[GM2]	○	○	○	○	×	○
			84 (54H)	Portamento Control	0-127 (00H...7FH)	Key no. (0-127)			○	○	×	○	×	○
			88 (58H)	Expand Velocity	0-127 (00H...8FH)	Velocity (0-127)			○	○	○	○	○	○
			91 (5BH)	Effect1 Depth (Reverb Send Level)	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			93 (5DH)	Effect3 Depth (Chorus Send Level)	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			94 (5EH)	Effect4 Depth (Variation Send Level)	0-127 (00H...7FH)	Data			○	○	○	○	×	○
			96 (60H)	RPN Increment	- -	The data byte is ignored.			○	○	×	○	×	○
			97 (61H)	RPN Decrement	- -	The data byte is ignored.			○	○	×	○	×	○
			98 (62H)	NRPN LSB	0-127 (00H...7FH)	Data			○	×	×	○	×	○
			99 (63H)	NRPN MSB	0-127 (00H...7FH)	Data			○	×	×	○	×	○
			100 (64H)	RPN LSB	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			101 (65H)	RPN MSB	0-127 (00H...7FH)	Data		[GM2]	○	○	○	○	○	○
			Mode Message	BnH (n: Channel Number)	120 (78H)	All Sound Off	0 (00H)	Data				[GM2]	○	○
121 (79H)	Reset All Controllers	0 (00H)			Data				[GM1] [GM2]	○	×	×	○	○
122 (7AH)	Local Control	0 (00H) 127 (7FH)			OFF ON						○		×	×
123 (7BH)	All Note Off	0 (00H)			Data		[GM1] [GM2]	○	○	○	○	×	○	
124 (7CH)	Omni Off	0 (00H)			Data		[GM2]	○	×	×	○	×	○	
125 (7DH)	Omni On	0 (00H)			Data		[GM2]	○	×	×	○	×	○	
126 (7EH)	Mono	0-16 (00H...10H)			Data		[GM2]	○	×	×	○	×	○	
127 (7FH)	Poly	0 (00H)			Data		[GM2]	○	×	×	○	×	○	
Program Change	CnH (n: Channel Number)	pp (00H...7FH)	Voice number (0-127)	- -	-				[GM1] [GM2]	○	○	×	○	○
Channel After Touch	DnH (n: Channel Number)	vv (00H...7FH)	Data	- -	-				[GM1] [GM2]	○	×	×	○	○
Polyphonic After Touch	AnH (n: Channel Number)	kk (00H...7FH)	Key no. (0-127)	vv (00H...7FH)	Data					○	○	○	○	○
Pitch Bend Change	EnH (n: Channel Number)	cc (00H...7FH)	LSB	dd (00H...7FH)	MSB				[GM1] [GM2]	○	○	○	○	○
Realtime Message	F8H MIDI Clock	-	-	-	-						×		○	
	FAH Start	-	-	-	-						○		○	
	FBH Continue	-	-	-	-						×		×	
	FCH Stop	-	-	-	-						○		○	
	FEH Active Sens	-	-	-	-				[GM2]		○		○	
FFH System Reset	-	-	-	-	-					×		×		

\*1 Ignored when Bank Select MSB/LSB/Program Change are received in Keyboard mode.

## MIDI CHANNEL MESSAGE (2)

Application Range MIDI, Internal Sequencer

### Parameters controlled by NRPN (Non-Registered Parameter Numbers)

NRPN		Data Entry		Parameter	Data Range	MIDI Formats	MIDI Reception			MIDI Transmission	
MSB	LSB	MSB	LSB				Song	R1 R2 L	Keyboard (All manually played parts)	Panel	Song
01H	08H	mmH	-	Vibrato Rate	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	09H	mmH	-	Vibrato Depth	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	0AH	mmH	-	Vibrato Delay	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	20H	mmH	-	Low Pass Filter Cutoff Frequency	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	21H	mmH	-	Low Pass Filter Resonance	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	30H	mmH	-	EQ BASS	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	31H	mmH	-	EQ TREBLE	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	34H	mmH	-	EQ BASS Frequency	mm: 04H-28H (32...2.0k [Hz])		○	×	×	×	○
01H	35H	mmH	-	EQ TREBLE Frequency	mm: 1CH-3AH (500...16.0k [Hz])		○	×	×	×	○
01H	63H	mmH	-	EG Attack Time	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	64H	mmH	-	EG Decay Time	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
01H	66H	mmH	-	EG Release	mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
14H	rrH	mmH	-	Drum Low Pass Filter Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
15H	rrH	mmH	-	Drum Low Pass Filter Resonance	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
16H	rrH	mmH	-	Drum EG Attack Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
17H	rrH	mmH	-	Drum EG Decay Rate	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
18H	rrH	mmH	-	Drum Pitch Coarse	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
19H	rrH	mmH	-	Drum Pitch Fine	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
1AH	rrH	mmH	-	Drum Level	rr: drum instrument note number mm: 00H-7FH (0...127)		○	×	×	×	○
1CH	rrH	mmH	-	Drum Pan	rr: drum instrument note number mm: 00H, 01H-40H-7FH (RND, L63...C...R63)		○	×	×	×	○
1DH	rrH	mmH	-	Drum Reverb Send Level	rr: drum instrument note number mm: 00H-7FH (0...127)		○	×	×	×	○
1EH	rrH	mmH	-	Drum Chorus Send Level	rr: drum instrument note number mm: 00H-7FH (0...127)		○	×	×	×	○
1FH	rrH	mmH	-	Drum Variation Send Level	rr: drum instrument note number mm: 00H-7FH (0...127)		○	×	×	×	○
24H	rrH	mmH	-	Drum HPF Cutoff Frequency	rr: drum instrument note number mm: 00H-40H-7FH (-64...0...+63)		○	×	×	×	○
30H	rrH	mmH	-	Drum EQ Bass Gain	rr: drum instrument note number mm: 00H-7FH (0...127)		×	×	×	×	○
31H	rrH	mmH	-	Drum EQ Treble Gain	rr: drum instrument note number mm: 00H-7FH (0...127)		×	×	×	×	○
34H	rrH	mmH	-	Drum EQ Bass Frequency	rr: drum instrument note number mm: 04H-28H (32...2.0k [Hz])		×	×	×	×	○
35H	rrH	mmH	-	Drum EQ Treble Frequency	rr: drum instrument note number mm: 1CH-3AH (500...16.0k [Hz])		×	×	×	×	○
40H	rrH	mmH	-	Drum VELOCITY PITCH SENS.	rr: drum instrument note number mm: 00H-0FH (0...15)		×	×	×	×	○
41H	rrH	mmH	-	Drum VELOCITY LPF CUTOFF SENS.	rr: drum instrument note number mm: 00H-0FH (0...15)		×	×	×	×	○

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

### Parameters controlled by RPN (Registered Parameter Numbers)

NRPN		Data Entry		Parameter	Data Range	MIDI Formats	MIDI Reception (respond/ignored)			MIDI Transmission (generated data)	
MSB	LSB	MSB	LSB				Song	R1 R2 L	Keyboard (All manually played parts)	Panel	Song
00H	00H	mmH	-	Pitch Bend Sensitivity	mm: 00H-18H (0...+24 [semitones])	[GM1] [GM2]	○	○	○	○	○
00H	01H	mmH	llH	Fine Tune	mm ll: 00H 00H -100 [cent] ... mm ll: 40H 00H 0 [cent] ... mm ll: 7FH 7FH 100 [cent]	[GM1] [GM2]	○	○	○	○	○
00H	02H	mmH	-	Coarse Tune	mm: 28H-40H-58H (-24...0...+24 [semitones])	[GM1] [GM2]	○	○	○	×	○
00H	05H	mmH	llH	Modulation Sensitivity	mm: Specified in semitone steps ll: Specified in 100/128 cent steps	[GM2]	○	○	○	×	○
7FH	7FH	-	-	Null	-	[GM2]	○	○	○	×	○

# MIDI PARAMETER CHANGE TABLE

Application Range	MIDI, Internal Sequencer
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\* Not Received when Receive Parameter SysEx is set to off.  
 \* Not transmitted when Transmit Parameter SysEx is set to off.

## MIDI Parameter Change Table (XG SYSTEM)

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission				
						Song	R1 R2 L	Keyboard	Panel	Song			
00	00	00	4	00-0F 00-0F 00-0F 00-0F	MASTER TUNE	-102.4...0...+102.3 [cent] 1st bit3-0→bit15-12 2nd bit3-0→bit11-8 3rd bit3-0→bit7-4 4th bit3-0→bit3-0	*Panel setting value		○		×	○	
		04	1	00-7F	MASTER VOLUME	0...127	7F	○	×	×	×	×	○
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	×	×	×	×	×	×
		06	1	28-5B	TRANPOSE	-24...0...+24 [semitones]	40	○	×	×	×	×	○
		7D	1	N	DRUM SETUP RESET	N: Drum setup number	–	○	×	×	×	×	○
		7E	1	00	XG SYSTEM ON	00=XG system ON	–	○	×	×	×	×	○
		7F	1	00	ALL PARAMETER RESET	00=ON	–	○	×	×	×	×	×

TOTAL SIZE 07

## MIDI Parameter Change Table (SYSTEM INFORMATION)

Address (H)	Size (H)	Data (H)	Parameter	Description	MIDI Reception			MIDI Transmission				
					Song	R1 R2 L	Keyboard	Panel	Song			
01	00	00 ... 0D	E	20-7F ... 20-7F	Model Name 1 ... Model Name 14	32...127 (ASCII CHARACTER) ... 32...127 (ASCII CHARACTER)	–	–	–	×	×	
		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 Reception			MIDI Transmission			
						Song	R1 R2 L	Keyboard	Panel	Song		
02	01	00	2	00-7F	REVERB TYPE MSB REVERB TYPE LSB	Refer to Effect Type List.	01 (=HALL1) 00		○		○	○
		02	1	00-7F	REVERB PARAMETER 1	Refer to Effect Parameter List.	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		03	1	00-7F	REVERB PARAMETER 2	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		04	1	00-7F	REVERB PARAMETER 3	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		05	1	00-7F	REVERB PARAMETER 4	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		06	1	00-7F	REVERB PARAMETER 5	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		07	1	00-7F	REVERB PARAMETER 6	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		08	1	00-7F	REVERB PARAMETER 7	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		09	1	00-7F	REVERB PARAMETER 8	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		0A	1	00-7F	REVERB PARAMETER 9	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		0B	1	00-7F	REVERB PARAMETER 10	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		0C	1	00-7F	REVERB RETURN	→dB...0dB...+6dB (0...64...127)	40		○		×	○
		0D	1	01-7F	REVERB PAN	L63...C...R63	40		○		×	○

TOTAL SIZE 0E

02	01	10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List.	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		11	1	00-7F	REVERB PARAMETER 12	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		12	1	00-7F	REVERB PARAMETER 13	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		13	1	00-7F	REVERB PARAMETER 14	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		14	1	00-7F	REVERB PARAMETER 15	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○
		15	1	00-7F	REVERB PARAMETER 16	*	Depends on Reverb Type		○ (Depends on Reverb Type)		×	○

TOTAL SIZE 06

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission			
						Song	R1 R2 L	Keyboard	Panel	Song		
02	01	20	2	00-7F	CHORUS TYPE MSB CHORUS TYPE LSB	Refer to Effect Type List.	41 (=CHORUS1) 00		○		○	○
		22	1	00-7F	CHORUS PARAMETER 1	Refer to Effect Parameter List.	Depends on Chorus Type		○ (Depends on Chorus Type)		×	○
		23	1	00-7F	CHORUS PARAMETER 2	*	Depends on Chorus Type		○ (Depends on Chorus Type)		×	○
		24	1	00-7F	CHORUS PARAMETER 3	*	Depends on Chorus Type		○ (Depends on Chorus Type)		×	○

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission		
						Song	R1 R2 L	Keyboard	Panel	Song	
		25	1	00-7F	CHORUS PARAMETER 4	Refer to Effect Parameter List.	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		26	1	00-7F	CHORUS PARAMETER 5	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		27	1	00-7F	CHORUS PARAMETER 6	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		28	1	00-7F	CHORUS PARAMETER 7	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		29	1	00-7F	CHORUS PARAMETER 8	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		2A	1	00-7F	CHORUS PARAMETER 9	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		2B	1	00-7F	CHORUS PARAMETER 10	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		2C	1	00-7F	CHORUS RETURN	--odB...0dB...+6dB (0...64...127)	40		○	×	○
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40		○	×	○
		2E	1	00-7F	SEND CHORUS TO REVERB	--odB...0dB...+6dB (0...64...127)	00		○	×	○

TOTAL SIZE 0F

02	01	30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List.	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		31	1	00-7F	CHORUS PARAMETER 12	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		32	1	00-7F	CHORUS PARAMETER 13	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		33	1	00-7F	CHORUS PARAMETER 14	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		34	1	00-7F	CHORUS PARAMETER 15	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○
		35	1	00-7F	CHORUS PARAMETER 16	*	Depends on Chorus Type		○ (Depends on Chorus Type)	×	○

TOTAL SIZE 06

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission		
						Song	R1 R2 L	Keyboard	Panel	Song	
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB	Refer to Effect Parameter List.	05 (=DELAY L, C, R) 00		○	×	○
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		44	2	00-7F 00-7F	VARIATION PARAMETER 2 MSB VARIATION PARAMETER 2 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		46	2	00-7F 00-7F	VARIATION PARAMETER 3 MSB VARIATION PARAMETER 3 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		56	1	00-7F	VARIATION RETURN	--odB...0dB...+6dB (0...64...127)	40		○	×	○
		57	1	01-7F	VARIATION PAN	L63...C...R63	40		○	×	○
		58	1	00-7F	SEND VARIATION TO REVERB	--odB...0dB...+6dB (0...64...127)	00		○	×	○
		59	1	00-7F	SEND VARIATION TO CHORUS	--odB...0dB...+6dB (0...64...127)	00		○	×	○
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00		○	×	○
		5B	1	00-7F	VARIATION PART NUMBER	Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)	7F		○	×	○
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40		○	×	○
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40		○	×	○
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40		○	×	○
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40		○	×	○
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40		○	×	○

TOTAL SIZE 21

02	01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List.	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		71	1	00-7F	VARIATION PARAMETER 12	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		72	1	00-7F	VARIATION PARAMETER 13	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		73	1	00-7F	VARIATION PARAMETER 14	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		74	1	00-7F	VARIATION PARAMETER 15	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○
		75	1	00-7F	VARIATION PARAMETER 16	*	Depends on Variation Type		○ (Depends on Variation Type)	×	○

TOTAL SIZE 06

## MIDI Parameter Change Table (MULTI EQ)

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

Address (H)		Size (H)	Data (H)	Parameter	Description	MIDI Reception			MIDI Transmission	
						Song	R1 R2 L	Keyboard	Panel	Song
02	40	00	1	00-04	EQ TYPE			x	x	x
		01	1	34-4C	EQ GAIN1			x	x	x
		02	1	04-28	EQ FREQUENCY1			x	x	x
		03	1	01-78	EQ Q1			x	x	x
		04	1	00-01	EQ SHAPE1			x	x	x
		05	1	34-4C	EQ GAIN2			x	x	x
		06	1	0E-36	EQ FREQUENCY2			x	x	x
		07	1	01-78	EQ Q2			x	x	x
		08	1		NOT USED			-	-	-
		09	1	34-4C	EQ GAIN3			x	x	x
		0A	1	0E-36	EQ FREQUENCY3			x	x	x
		0B	1	01-78	EQ Q3			x	x	x
		0C	1		NOT USED			-	-	-
		0D	1	34-4C	EQ GAIN4			x	x	x
		0E	1	0E-36	EQ FREQUENCY4			x	x	x
		0F	1	01-78	EQ Q4			x	x	x
		10	1		NOT USED			-	-	-
		11	1	34-4C	EQ GAIN5			x	x	x
		12	1	1C-3A	EQ FREQUENCY5			x	x	x
		13	1	01-78	EQ Q5			x	x	x
		14	1	00-01	EQ SHAPE5			x	x	x

TOTAL SIZE 15

## MIDI Parameter Change Table (EFFECT2)

\*The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.

Address (H)		Size (H)	Data (H)	Parameter	Description	MIDI Reception			MIDI Transmission	
						Song	R1 R2 L	Keyboard	Panel	Song
03	n	00	2	00-7F 00-7F	INSERTION EFFECT TYPE MSB INSERTION EFFECT TYPE LSB			o	o	o
		02	1	00-7F	INSERTION EFFECT PARAMETER 1			o (Depends on Insertion Type)	o	o
		03	1	00-7F	INSERTION EFFECT PARAMETER 2			o (Depends on Insertion Type)	o	o
		04	1	00-7F	INSERTION EFFECT PARAMETER 3			o (Depends on Insertion Type)	o	o
		05	1	00-7F	INSERTION EFFECT PARAMETER 4			o (Depends on Insertion Type)	o	o
		06	1	00-7F	INSERTION EFFECT PARAMETER 5			o (Depends on Insertion Type)	o	o
		07	1	00-7F	INSERTION EFFECT PARAMETER 6			o (Depends on Insertion Type)	o	o
		08	1	00-7F	INSERTION EFFECT PARAMETER 7			o (Depends on Insertion Type)	o	o
		09	1	00-7F	INSERTION EFFECT PARAMETER 8			o (Depends on Insertion Type)	o	o
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9			o (Depends on Insertion Type)	o	o
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10			o (Depends on Insertion Type)	o	o
		0C	1	00-7F	INSERTION EFFECT PART NUMBER			o Reception: Part1...16 (0...15) Transmission: Part1...16 (0...15) AD (64) OFF (127)	o	o
		0D	1	00-7F	MW INSERTION CONTROL DEPTH			o	x	o
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH			o	x	o
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH			o	x	o
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH			o	o	o
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH			o	x	o

TOTAL SIZE 12

		20	1	00-7F	INSERTION EFFECT PARAMETER 11			o (Depends on Insertion Type)	o	o
		21	1	00-7F	INSERTION EFFECT PARAMETER 12			o (Depends on Insertion Type)	o	o
		22	1	00-7F	INSERTION EFFECT PARAMETER 13			o (Depends on Insertion Type)	o	o
		23	1	00-7F	INSERTION EFFECT PARAMETER 14			o (Depends on Insertion Type)	o	o
		24	1	00-7F	INSERTION EFFECT PARAMETER 15			o (Depends on Insertion Type)	o	o
		25	1	00-7F	INSERTION EFFECT PARAMETER 16			o (Depends on Insertion Type)	o	o

TOTAL SIZE 6

		30	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 1 MSB INSERTION EFFECT PARAMETER 1 LSB			o (Depends on Insertion Type)	x	o
		32	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 2 MSB INSERTION EFFECT PARAMETER 2 LSB			o (Depends on Insertion Type)	x	o
		34	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 3 MSB INSERTION EFFECT PARAMETER 3 LSB			o (Depends on Insertion Type)	x	o
		36	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 4 MSB INSERTION EFFECT PARAMETER 4 LSB			o (Depends on Insertion Type)	x	o
		38	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 5 MSB INSERTION EFFECT PARAMETER 5 LSB			o (Depends on Insertion Type)	x	o
		3A	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 6 MSB INSERTION EFFECT PARAMETER 6 LSB			o (Depends on Insertion Type)	x	o
		3C	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 7 MSB INSERTION EFFECT PARAMETER 7 LSB			o (Depends on Insertion Type)	x	o
		3E	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 8 MSB INSERTION EFFECT PARAMETER 8 LSB			o (Depends on Insertion Type)	x	o



		40	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 9 MSB INSERTION EFFECT PARAMETER 9 LSB	Refer to Effect Type List.	○ (Depends on Insertion Type)	×	○
		42	2	00-7F 00-7F	INSERTION EFFECT PARAMETER 10 MSB INSERTION EFFECT PARAMETER 10 LSB	*	○ (Depends on Insertion Type)	○	○

TOTAL SIZE 14

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

The Insertion Effect No. range is from 0 to 11. Values outside the range are handled as unknown and ignored.

For effect types that do not require MSB, the Parameters for Address 02-0B will be received and the Parameters for Address 30-42 will not be received.

For effect types that require MSB, the Parameters for Address 30-42 will be received and the Parameters for Address 02-0B will not be received.

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

## MIDI Parameter Change Table (MULTI PART)

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission			
						Song	R1 R2 L	Keyboard	Panel	Song		
08	nn	00	1	00-20	NOT USED		×	×	×	×	×	
		01	1	00-7F	BANK SELECT MSB	0...127	part 10=7F, other parts=00	○	○	×	×	○
		02	1	00-7F	BANK SELECT LSB	0...127	00	○	○	×	×	○
		03	1	00-7F	PROGRAM NUMBER	1...128	00	○	○	×	×	○
		04	1	00-0F, 7F	Rcv CHANNEL	1...16, OFF	Part No.	○	×	×	×	○
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	○	×	×	×	○
		06	1	00-02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST (for Drum)	01	○	×	×	×	○
		07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1...2	part 10=02, other parts=00	○	×	×	○	○
		08	1	28-58	NOTE SHIFT	-24...0...+24 [semitones]	40	○	○	×	×	○
		09	2	00-0F 00-0F	DETUNE	-12.8...0...+12.7 [Hz] 1st bit3-0 → bit7-4 2nd bit3-0 → bit3-0	08 00	○	○	×	×	○
		0B	1	00-7F	VOLUME	0...127	64	○	○	×	×	○
		0C	1	00-7F	VELOCITY SENSE DEPTH	0...127	40	○	○	×	○	○
		0D	1	00-7F	VELOCITY SENSE OFFSET	0...127	40	○	○	×	○	○
		0E	1	00-7F	PAN	RND, L63...C...R63	40	○	○	×	×	○
		0F	1	00-7F	NOTE LIMIT LOW	C-2...G8	00	○	○	×	×	○
		10	1	00-7F	NOTE LIMIT HIGH	C-2...G8	7F	○	○	×	×	○
		11	1	00-7F	DRY LEVEL	0...127	7F	○	○	×	×	○
		12	1	00-7F	CHORUS SEND	0...127	00	○	○	×	×	○
		13	1	00-7F	REVERB SEND	0...127	28	○	○	×	×	○
		14	1	00-7F	VARIATION SEND	0...127	00	○	○	×	×	○
		15	1	00-7F	VIBRATO RATE	-64...0...+63	40	○	○	×	×	○
		16	1	00-7F	VIBRATO DEPTH	-64...0...+63	40	○	○	×	×	○
		17	1	00-7F	VIBRATO DELAY	-64...0...+63	40	○	○	×	×	○
		18	1	00-7F	FILTER CUTOFF FREQUENCY	-64...0...+63	40	○	○	×	×	○
		19	1	00-7F	FILTER RESONANCE	-64...0...+63	40	○	○	×	×	○
		1A	1	00-7F	EG ATTACK TIME	-64...0...+63	40	○	○	×	×	○
		1B	1	00-7F	EG DECAY TIME	-64...0...+63	40	○	○	×	×	○
		1C	1	00-7F	EG RELEASE TIME	-64...0...+63	40	○	○	×	×	○
		1D	1	28-58	MW PITCH CONTROL	-24...0...+24 [semitones]	40	○	○	×	×	○
		1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	○	×	×	○
		1F	1	00-7F	MW AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	○	×	×	○
		20	1	00-7F	MW LFO PMOD DEPTH	0...127	0A	○	○	×	×	○
		21	1	00-7F	MW LFO FMOD DEPTH	0...127	00	○	○	×	×	○
		22	1	00-7F	MW LFO AMOD DEPTH	0...127	00	○	○	×	×	○
		23	1	28-58	BEND PITCH CONTROL	-24...0...+24 [semitones]	42	○	○	×	×	○
		24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	○	×	×	○
		25	1	00-7F	BEND AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	○	×	×	○
		26	1	00-7F	BEND LFO PMOD DEPTH	0...127	00	○	○	×	×	○
		27	1	00-7F	BEND LFO FMOD DEPTH	0...127	00	○	○	×	×	○
		28	1	00-7F	BEND LFO AMOD DEPTH	0...127	00	○	○	×	×	○

TOTAL SIZE 29

		30	1	00-01	Rcv PITCH BEND	OFF, ON	01	○	×	×	×	○
		31	1	00-01	Rcv CH AFTER TOUCH (CAT)	OFF, ON	01	○	×	×	×	○
		32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	○	×	×	×	○
		33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	○	×	×	×	○
		34	1	00-01	Rcv POLY AFTER TOUCH (PAT)	OFF, ON	01	○	×	×	×	○
		35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	○	×	×	×	○
		36	1	00-01	Rcv RPN	OFF, ON	01	○	×	×	×	○
		37	1	00-01	Rcv NRPN	OFF, ON	XG mode=01, GM mode=00	○	×	×	×	○
		38	1	00-01	Rcv MODULATION	OFF, ON	01	○	×	×	×	○
		39	1	00-01	Rcv VOLUME	OFF, ON	01	○	×	×	×	○
		3A	1	00-01	Rcv PAN	OFF, ON	01	○	×	×	×	○
		3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	○	×	×	×	○
		3C	1	00-01	Rcv HOLD1	OFF, ON	01	○	×	×	×	○
		3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	○	×	×	×	○
		3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	○	×	×	×	○
		3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	○	×	×	×	○
		40	1	00-01	Rcv BANK SELECT	OFF, ON	01	○	×	×	×	○
		41	1	00-7F	SCALE TUNING C	-63...0...+63 [cent]	40	○	○	×	○	○
		42	1	00-7F	SCALE TUNING C#	-63...0...+63 [cent]	40	○	○	×	○	○
		43	1	00-7F	SCALE TUNING D	-63...0...+63 [cent]	40	○	○	×	○	○
		44	1	00-7F	SCALE TUNING D#	-63...0...+63 [cent]	40	○	○	×	○	○
		45	1	00-7F	SCALE TUNING E	-63...0...+63 [cent]	40	○	○	×	○	○
		46	1	00-7F	SCALE TUNING F	-63...0...+63 [cent]	40	○	○	×	○	○
		47	1	00-7F	SCALE TUNING F#	-63...0...+63 [cent]	40	○	○	×	○	○
		48	1	00-7F	SCALE TUNING G	-63...0...+63 [cent]	40	○	○	×	○	○
		49	1	00-7F	SCALE TUNING G#	-63...0...+63 [cent]	40	○	○	×	○	○
		4A	1	00-7F	SCALE TUNING A	-63...0...+63 [cent]	40	○	○	×	○	○
		4B	1	00-7F	SCALE TUNING A#	-63...0...+63 [cent]	40	○	○	×	○	○
		4C	1	00-7F	SCALE TUNING B	-63...0...+63 [cent]	40	○	○	×	○	○
		4D	1	28-58	CAT PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○
		4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○

		4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○
		50	1	00-7F	CAT LFO PMOD DEPTH	0...127	00	○	×	×	×	○
		51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	○	×	×	×	○
		52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	○	×	×	×	○
		53	1	28-58	PAT PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○
		54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○
		55	1	00-7F	PAT AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○
		56	1	00-7F	PAT LFO PMOD DEPTH	0...127	00	○	×	×	×	○
		57	1	00-7F	PAT LFO FMOD DEPTH	0...127	00	○	×	×	×	○
		58	1	00-7F	PAT LFO AMOD DEPTH	0...127	00	○	×	×	×	○
		59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	○	○	×	○	○
		5A	1	28-58	AC1 PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○
		5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○
		5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○
		5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	○	×	×	×	○
		5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	○	×	×	×	○
		5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	○	×	×	×	○
		60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	○	×	×	×	○
		61	2	28-58	AC2 PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○
		62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○
		63	1	00-7F	AC2 AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○
		64	1	00-7F	AC2 LFO PMOD DEPTH	0...127	00	○	×	×	×	○
		65	1	00-7F	AC2 LFO FMOD DEPTH	0...127	00	○	×	×	×	○
		66	1	00-7F	AC2 LFO AMOD DEPTH	0...127	00	○	×	×	×	○
		67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	○	○	×	×	○
		68	1	00-7F	PORTAMENTO TIME	0...127	00	○	○	×	×	○
		69	1	00-7F	PITCH EG INITIAL LEVEL	-64...0...+63	40	○	×	×	×	○
		6A	1	00-7F	PITCH EG ATTACK TIME	-64...0...+63	40	○	×	×	×	○
		6B	1	00-7F	PITCH EG RELEASE LEVEL	-64...0...+63	40	○	×	×	×	○
		6C	1	00-7F	PITCH EG RELEASE TIME	-64...0...+63	40	○	×	×	×	○
		6D	1	01-7F	VELOCITY LIMIT LOW	1...127	01	○	×	×	×	○
		6E	1	01-7F	VELOCITY LIMIT HIGH	1...127	7F	○	×	×	×	○

TOTAL SIZE 3F

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

TOTAL SIZE 04

		74	1		NOT USED		-	-	-	-	-	-
		75	1		NOT USED		-	-	-	-	-	-
		76	1	04-28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C	○	×	×	×	○
		77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36	○	×	×	×	○
		78	1		NOT USED		-	-	-	-	-	-
		78	1		NOT USED		-	-	-	-	-	-
		7A	1		NOT USED		-	-	-	-	-	-
		7B	1		NOT USED		-	-	-	-	-	-
		7C	1		NOT USED		-	-	-	-	-	-
		7D	1		NOT USED		-	-	-	-	-	-
		7E	1		NOT USED		-	-	-	-	-	-
		7F	1		NOT USED		-	-	-	-	-	-

TOTAL SIZE 0C

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

TOTAL SIZE 06

nn = PART NUMBER

If there is a Drum Voice assigned to the part, the following parameters are ineffective.

- BANK SELECT LSB
- PORTAMENTO
- MONO/POLY
- SCALE TUNING
- POLY AFTER TOUCH
- PITCH EG

## MIDI Parameter Change Table (DRUM SETUP)

Address (H)		Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception			MIDI Transmission		
							Song	R1 R2 L	Keyboard	Panel	Song	
3n	rr	00	1	00-7F	PITCH COARSE	-64...0...+63	40	○	×	×	×	○
		01	1	00-7F	PITCH FINE	-64...0...+63 [cent]	40	○	×	×	×	○
		02	1	00-7F	LEVEL	0...127	Depends on the note	○	×	×	×	○
		03	1	00-7F	ALTERNATE GROUP	OFF, 1...127	Depends on the note	○	×	×	×	○
		04	1	00-7F	PAN	RND, L63...C...R63	Depends on the note	○	×	×	×	○
		05	1	00-7F	REVERB SEND	0...127	Depends on the note	○	×	×	×	○
		06	1	00-7F	CHORUS SEND	0...127	Depends on the note	○	×	×	×	○
		07	1	00-7F	VARIATION SEND	0...127	7F	○	×	×	×	○
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	○	×	×	×	○
		09	1	00-01	Rev NOTE OFF	OFF, ON	Depends on the note	○	×	×	×	○
		0A	1	00-01	Rev NOTE ON	OFF, ON	01	○	×	×	×	○
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40	○	×	×	×	○
		0C	1	00-7F	LOW PASS FILTER RESONANCE	-64...0...+63	40	○	×	×	×	○
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	○	×	×	×	○
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	○	×	×	×	○
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	○	×	×	×	○

TOTAL SIZE 10

		20	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	×	×	×	×	×
		21	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	×	×	×	×	×
		22	1		NOT USED		-	-	-	-	-	-
		23	1		NOT USED		-	-	-	-	-	-
		24	1	04-28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C	×	×	×	×	×
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36	×	×	×	×	×
		26	1		NOT USED		-	-	-	-	-	-
		27	1		NOT USED		-	-	-	-	-	-
		28	1		NOT USED		-	-	-	-	-	-
		29	1		NOT USED		-	-	-	-	-	-
		2A	1		NOT USED		-	-	-	-	-	-
		2B	1		NOT USED		-	-	-	-	-	-
		2C	1		NOT USED		-	-	-	-	-	-
		2D	1		NOT USED		-	-	-	-	-	-

TOTAL SIZE 0E

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

In the following cases, the Clavinova will initialize all Drum Setups.  
XG SYSTEM ON received  
GM SYSTEM ON received  
GM LEVEL 2 SYSTEM ON received  
GS RESET received  
DRUM SETUP RESET received (only when in XG mode)

### NOTICE

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)

**Application Range** | MIDI, Internal Sequencer

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

## System Exclusive Messages (Universal Realtime Messages)

MIDI Event	Data Format	MIDI Formats	MIDI Reception			MIDI Transmission																		
			Song	R1 R2 L	Keyboard	Panel	Song																	
Master Volume	F0 7F XN 04 01 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn 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	[GM2]	○	×	×	×	△ (Changed to XG, and output)																	
Master Fine Tuning	F0 7F XN 04 03 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn 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	[GM2]	○	×	×	×	△ (Changed to XG, and output)																	
Master Coarse Tuning	F0 7F XN 04 04 00 TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored 00000100 04 = Sub-ID #1 = Device Control Message 00000100 04 = Sub-ID #2 = Master Fine Tuning 00000000 00 0ttttttt TT = Coarse Tuning MSB 11110111 F7 = End of Exclusive	[GM2]	○	×	×	×	△ (Changed to XG, and output)																	
Reverb Parameter	F0 7F XN 04 05 01 01 01 01 01 PP VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored 00000100 04 = Sub-ID #1 = Device Control Message 00000101 05 = Sub-ID #2 = Global Parameter Control 00000001 01 = Slot path length = 1 00000001 01 = Parameter ID width = 1 00000001 01 = Value width = 1 00000001 01 = Slot path MSB = 1 (Reverb) 00000001 01 = Slot path LSB = 1 0pppppppp PP = Parameter to be controlled. 0vvvvvvvv VV = Value for the Parameter. ... 11110111 F7 = End of Exclusive  <table border="1" style="font-size: 8px; width: 100%;"> <thead> <tr> <th>Parameter (pp)</th> <th>Value (vv)</th> <th>Display</th> </tr> </thead> <tbody> <tr> <td>pp=0 Reverb Type</td> <td>0..8</td> <td>0: RoomS 1: RoomM 2: RoomL 3: HallM 4: HallL (default) 8: GM Plate</td> </tr> <tr> <td>pp=1 Reverb Time</td> <td>0..127</td> <td>0...11.0s</td> </tr> </tbody> </table>	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	[GM2]	○		×	△ (Changed to XG, and output)									
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																						
Chorus Parameter	F0 7F XN 04 05 01 01 01 01 02 PP VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored 00000100 04 = Sub-ID #1 = Device Control Message 00000101 05 = Sub-ID #2 = Global Parameter Control 00000001 01 = Slot path length = 1 00000001 01 = Parameter ID width = 1 00000001 01 = Value width = 1 00000001 01 = Slot path MSB = 1 (Chorus) 00000010 02 = Slot path LSB = 2 0pppppppp PP = Parameter to be controlled. 0vvvvvvvv VV = Value for the Parameter. ... 11110111 F7 = End of Exclusive  <table border="1" style="font-size: 8px; width: 100%;"> <thead> <tr> <th>Parameter (pp)</th> <th>Value (vv)</th> <th>Display</th> </tr> </thead> <tbody> <tr> <td>pp=0 Chorus Type</td> <td>0...5</td> <td>0: GM Chorus1 1: GM Chorus2 2: GM Chorus3 (default) 3: GM Chorus4 4: FB Chorus 5: GM Flanger</td> </tr> <tr> <td>pp=1 Mod Rate</td> <td>0...127</td> <td>0...15.5Hz</td> </tr> <tr> <td>pp=2 Mod Depth</td> <td>0...127</td> <td></td> </tr> <tr> <td>pp=3 Feedback</td> <td>0...127</td> <td></td> </tr> <tr> <td>pp=4 Send to Reverb</td> <td>0...127</td> <td></td> </tr> </tbody> </table>	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		[GM2]	○		×	△ (Changed to XG, and output)
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																						
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pp=3 Feedback	0...127																							
pp=4 Send to Reverb	0...127																							

MIDI Event	Data Format	MIDI Formats	MIDI Reception			MIDI Transmission																													
			Song	R1 R2 L	Keyboard	Panel	Song																												
Channel Pressure (Aftertouch)	F0 7F XN 09 01 0M PP RR ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn 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) 0pppppppp PP = Controlled Parameter 0rrrrrrrr 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.  <table border="1"> <thead> <tr> <th>Control Parameter (pp)</th> <th>Data (RR)</th> <th>Description</th> <th>Default value</th> </tr> </thead> <tbody> <tr> <td>pp=00 Pitch Control</td> <td>2BH-58H</td> <td>-24...0...+24 semitones</td> <td>40H</td> </tr> <tr> <td>pp=01 Filter Cutoff Control</td> <td>00H-7FH</td> <td>-9600...0...+9450 cents</td> <td>40H</td> </tr> <tr> <td>pp=02 Amplitude Control</td> <td>00H-7FH</td> <td>-100...0...+100%</td> <td>40H</td> </tr> <tr> <td>pp=03 LFO Pitch Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> <tr> <td>pp=04 LFO Filter Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> <tr> <td>pp=05 LFO Amplitude Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> </tbody> </table>	Control Parameter (pp)	Data (RR)	Description	Default value	pp=00 Pitch Control	2BH-58H	-24...0...+24 semitones	40H	pp=01 Filter Cutoff Control	00H-7FH	-9600...0...+9450 cents	40H	pp=02 Amplitude Control	00H-7FH	-100...0...+100%	40H	pp=03 LFO Pitch Depth	00H-7FH	0...127	00H	pp=04 LFO Filter Depth	00H-7FH	0...127	00H	pp=05 LFO Amplitude Depth	00H-7FH	0...127	00H	[GM2]	O	x	x	x	△ (Changed to XG, and output)
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Controller (Control Change)	F0 7F XN 09 03 0M CC PP RR ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn 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) 0pppppppp PP = Controlled Parameter 0rrrrrrrr 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.  <table border="1"> <thead> <tr> <th>Control Parameter (pp)</th> <th>Data (RR)</th> <th>Description</th> <th>Default value</th> </tr> </thead> <tbody> <tr> <td>pp=00 Pitch Control</td> <td>2BH-58H</td> <td>-24...0...+24 semitones</td> <td>40H</td> </tr> <tr> <td>pp=01 Filter Cutoff Control</td> <td>00H-7FH</td> <td>-9600...0...+9450 cents</td> <td>40H</td> </tr> <tr> <td>pp=02 Amplitude Control</td> <td>00H-7FH</td> <td>-100...0...+100%</td> <td>40H</td> </tr> <tr> <td>pp=03 LFO Pitch Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> <tr> <td>pp=04 LFO Filter Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> <tr> <td>pp=05 LFO Amplitude Depth</td> <td>00H-7FH</td> <td>0...127</td> <td>00H</td> </tr> </tbody> </table>	Control Parameter (pp)	Data (RR)	Description	Default value	pp=00 Pitch Control	2BH-58H	-24...0...+24 semitones	40H	pp=01 Filter Cutoff Control	00H-7FH	-9600...0...+9450 cents	40H	pp=02 Amplitude Control	00H-7FH	-100...0...+100%	40H	pp=03 LFO Pitch Depth	00H-7FH	0...127	00H	pp=04 LFO Filter Depth	00H-7FH	0...127	00H	pp=05 LFO Amplitude Depth	00H-7FH	0...127	00H	[GM2]	O	x	x	x	△ (Changed to XG, and output)
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pp=05 LFO Amplitude Depth	00H-7FH	0...127	00H																																
Key-Based Instrument Control	F0 7F XN 0A 01 0M KK CC VV ... F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxxnnnn XN = When N is received N=0-F, whichever is received. X=ignored 00001010 0A = Sub-ID #1 = Key-Based Instrument Control 00000011 01 = Sub-ID #2 = Controller 0000mmmm 0M = MIDI Channel (00-0F) 0kkkkkkk KK = Key Number 0ccccccc CC = Controller Number 0vvvvvvvv VV = Value ... 11110111 F7 = End of Exclusive  Make sure to set both the controlled number and the value.  <table border="1"> <thead> <tr> <th>Control Number (CC)</th> <th>Value (VV)</th> <th>Description</th> <th>Default value</th> </tr> </thead> <tbody> <tr> <td>CC=07H Volume</td> <td>00H-7FH</td> <td>-100...0...+100%</td> <td>40H</td> </tr> <tr> <td>CC=0AH Pan</td> <td>00H-7FH</td> <td>L63...C...R63 (absolute)</td> <td>(Preset value)</td> </tr> <tr> <td>CC=5BH Reverb Send Level</td> <td>00H-7FH</td> <td>0...Max (absolute)</td> <td>(Preset value)</td> </tr> <tr> <td>CC=5DH Chorus Send Level</td> <td>00H-7FH</td> <td>0...Max (absolute)</td> <td>(Preset value)</td> </tr> </tbody> </table>	Control Number (CC)	Value (VV)	Description	Default value	CC=07H Volume	00H-7FH	-100...0...+100%	40H	CC=0AH Pan	00H-7FH	L63...C...R63 (absolute)	(Preset value)	CC=5BH Reverb Send Level	00H-7FH	0...Max (absolute)	(Preset value)	CC=5DH Chorus Send Level	00H-7FH	0...Max (absolute)	(Preset value)	[GM2]	O	x	x	x	△ (Changed to XG, and output)								
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### System Exclusive Messages (Universal Non Realtime Messages)

MIDI Event	Data Format	MIDI Formats	MIDI Reception			MIDI Transmission	
			Song	R1 R2 L	Keyboard	Panel	Song
GM1 System On	F0 7E XN 09 01 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxxnnnn 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	[GM1] [GM2]	O	x	x	x	△ (Changed to XG, and output)
GM2 System On	F0 7E XN 09 03 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxxnnnn 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	[GM2]	O	x	x	x	△ (Changed to XG, and output)
General MIDI System Off	F0 7E XN 09 02 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxxnnnn 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	[GM1] [GM2]	O	x	x	x	△ (Changed to XG, and output)

MIDI Event	Data Format	MIDI Formats	MIDI Reception			MIDI Transmission	
			Song	R1 R2 L	Keyboard	Panel	Song
Scale/Octave Tuning	F0 7E XN 08 08 JJ GG MM SS ... F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxxnnnn 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 0jjjjjjjj JJ = Channel/option byte1 bits 0 to 1 = channel 15 to 16 bits 2 to 6 = reserved 0gggggggg GG = Channel byte 2 - bits 0 to 6 = channel 8 to 14 0mmmmmmmm MM = Channel byte 2 - bits 0 to 6 = channel 1 to 7 0ssssssss SS = 12 byte tuning offset of 12 semitones from C to B 00H means -64cent 40H means 0cent 7FH means +63cent ... .. 11110111 F7 = End of Exclusive	[GM2]	○	×	×	×	△ (Changed to XG, and output)

## System Exclusive Messages (2)

<b>Application Range</b>	MIDI, Internal Sequencer
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\* Not Received when Receive Parameter System Exclusive is set to off.  
 \* Not transmitted when Transmit Parameter System Exclusive is set to off.

## System Exclusive Messages (XG)

MIDI Event	Data Format	MIDI Reception			MIDI Transmission	
		Song	R1 R2 L	Keyboard	Panel	Song
XG Parameter Change	F0 43 1n 4C hh mm ll dd ... F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n = Device Number n=always 0 (when transmit), n=0-F (when receive) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 0ddddddd dd = Data ... .. 11110111 F7 = End of Exclusive	○			○	*Refer to Parameter Change Table
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 receive) 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 0cccccce cc = Checksum 11110111 F7 = End of Exclusive	○			○	*Refer to Parameter Change Table
XG Parameter Request	F0 43 3n 4C hh mm ll F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0011nnnn 3n = Device Number n=always 0 (when transmit), n=0-F (when receive) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 11110111 F7 = End of Exclusive	○	×	×		×
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 receive) 01001100 4C = Model ID 0hhhhhhh hh = Address High 0mmmmmmm mm = Address Mid 01111111 ll = Address Low 11110111 F7 = End of Exclusive	○	×	×		×

## System Exclusive Messages (Others)

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)	
		Song	R1 R2 L	Keyboard	Panel	Song
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 0cccccce cc = don't care 11110111 F7 = End of Exclusive	○			×	×

## System Exclusive Messages (Preset Voice)

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)	
		Song	R1 R2 L	Keyboard	Panel	Song
String Resonance Depth	F0 43 73 01 50 11 0n 02 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 0000nnnn 0n = Channel (00-0F) 00000010 02 = Sub-ID (String Resonance Depth) 0ddddd 02 = Depth (00-48) 11110111 F7 = End of Exclusive	x	x	x	x	○
Sustain Sample Depth	F0 43 73 01 50 11 0n 03 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 0000nnnn 0n = Channel (00-0F) 00000011 03 = Sub-ID (Sustain Sample Depth) 0ddddd 03 = Depth (00-48) 11110111 F7 = End of Exclusive	x	x	x	x	○
Key Off Sampling Depth	F0 43 73 01 50 11 0n 04 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 0000nnnn 0n = Channel (00-0F) 00000100 04 = Sub-ID (Key Off Sampling Depth) 0ddddd 04 = Depth (00-50) 11110111 F7 = End of Exclusive	○	○	x	○	○
Soft Pedal Depth	F0 43 73 01 50 11 0n 05 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = Sub-ID 00010001 11 = Sub-ID 0000nnnn 0n = Channel (00-0F) 00000101 05 = Sub-ID (Soft Pedal Depth) 0ddddd 05 = Depth (00-7F) 11110111 F7 = End of Exclusive	○	○	x	○	○

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

Function...	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1 - 16 ○	1 - 16 ○	
Mode Default Messages Altered	3 × *****	3 × ×	
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON Note OFF	○ 9nH, v=1-127 ○ 8nH, v=64	○ 9nH, v=1-127 ○ 9nH, v=0 or 8nH	
After Touch Key's Ch's	○ ×	○ ○	
Pitch Bend	○	○ 0 - 24 semi	*1
Control Change	0,32 ○ 1,5,11 × *2 7,10 ○ 19 ○ 6,38 ○ 64,66,67 ○ 65 × *2 71,74 ○ 72,73 × *2 84,94 × *2 88 ○ 91,93 ○ 96-97 × *2 98-99 × *2 100-101 ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	Bank Select  Key Acceleration Data Entry Pedal Portamento Sound Controller Sound Controller  Expand Velocity Effect Depth RPN Inc,Dec NRPN LSB,MSB RPN LSB,MSB
Prog Change : True #	○ 0 - 127 *****	○ 0 - 127	
System Exclusive	○	○	
Common : Song Pos. : Song Sel. : Tune	× × ×	× × ×	
System : Clock Real Time: Commands	○ ○	× ○	
Aux : All Sound Off : Reset All Cntrls : Local ON/OFF Mes- : All Notes OFF sages: Active Sense : Reset	× × × × ○ ×	○ (120,126,127) ○ (121) ○ (122) ○ (123-125) ○ ×	
<p>Notes: *1 For some Voices, the pitch may not be changed according to the pitch bend setting range.</p> <p>*2 These Control Change messages cannot be transmitted by panel operations, but can be transmitted by Song playback data.</p>			

Mode 1 : OMNI ON , POLY                      Mode 2 : OMNI ON ,MONO                      ○ : Yes  
Mode 3 : OMNI OFF, POLY                      Mode 4 : OMNI OFF,MONO                      × : No