



**YAMAHA**

**Clavinova®**

**Reference Booklet**

**CVP-109  
CVP-107  
CVP-105  
CVP-103  
CVP-103M  
CVP-700**

## Table of Contents

Voice List .....	3
Demo Songs .....	9
Drum/key Assignment List .....	10
Style List .....	12
Vocal Harmony Type List (CVP-109/107/700) .....	13
Parameter Chart .....	13
Fingering Chart .....	15
MIDI Data Format .....	16
MIDI Implementation Chart .....	38
CVP-103: Assembly .....	40
CVP-105: Assembly .....	46
CVP-700: Assembly .....	52
CVP-109/107: Assembly .....	60
Specifications .....	67

# Voice List

CVP-109/107/700

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Piano	Grand Piano	0	112	0	
	Bright Piano	0	112	1	
	Mellow Piano	0	114	0	
	Rock Piano	0	113	1	
	Midi Grand	0	115	2	
	Harpsichord1	0	112	6	
	Harpsichord2	0	113	6	
	Grand Harpsi	0	115	6	
	Honky Tonk	0	112	3	
	NewAgePiano	0	118	2	
E.Piano	Stage EP 1	0	112	4	
	Galaxy EP	0	118	5	
	New Tines	0	113	5	
	Funk EP	0	113	4	
	DX EP Modern	0	115	5	
	Vintage EP	0	115	4	
	CP80	0	116	2	
	Tremolo EP	0	118	4	
	Hyper Tines	0	117	5	
	Clavi.	0	112	7	
	DX EP	0	112	5	
	Venus EP	0	116	5	
	Dream EP	0	114	5	
	Stage EP 2	0	117	4	
	Wah Clavi.	0	113	7	
	DX treme	0	113	92	
	Funky Clavi.	0	114	7	
	Galaxian EP	0	113	100	
	DX-EP & Str.	0	118	88	
	Guitar	Spanish Gtr.	0	113	24
12Str.Guitar		0	115	25	
Solid Guitar		0	115	27	
Bright Clean		0	113	27	
Solid Chord		0	117	27	
Jazz Guitar1		0	113	26	
Mute Guitar		0	112	28	
Banjo		0	112	105	
HawaiianGtr.		0	114	26	
Crunch Gtr		0	113	30	
Smooth Nylon		0	114	24	
Elec12string		0	126	27	
Folk Guitar1		0	116	25	
60's Clean		0	124	27	
Clean Guitar		0	112	27	
Jazz Guitar2		0	112	26	
OctaveGuitar		0	115	26	
Mandolin		0	114	25	
Pedal Steel		0	114	27	
Feedback Gtr		0	113	29	
Gut Guitar		0	112	24	
Folk Guitar2		0	112	25	
StackCrunch		0	114	30	
Dist. Guitar		0	112	30	
Synth		Golden Age	0	115	88
		Insomnia	0	113	94
		Wave 2010	0	114	95
		NewAge Pad	0	113	88
		Fire Wire	0	113	81
		Wire Lead	0	114	81
	Blaster	0	112	87	

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Synth	Square Lead	0	112	80	
	Analogon	0	115	81	
	Funky Lead	0	116	81	
	Cyber Pad	0	113	99	
	Choir Pad	0	112	91	
	Atmosphere	0	112	99	
	Brass Pad	0	112	90	
	Warm Pad	0	112	89	
	Saw. Lead	0	112	81	
	Equinox	0	112	94	
	Stardust	0	112	96	
	Millenium	0	114	88	
	Template	0	113	95	
	Loch Ness	0	113	93	
	Strings Pad	0	112	51	
	Wave 2001	0	112	95	
	Harp Pad	0	112	88	
	DX Pad	0	112	92	
	Organ	Pipe Organ	0	112	19
		Chapel Org.1	0	115	19
Chapel Org.2		0	116	19	
Accordion1		0	112	21	
Small Accrd.		0	113	21	
Rotor Organ		0	112	18	
Jazz Organ 1		0	114	17	
Rock Organ		0	116	18	
Elec. Organ		0	113	16	
Organ Flutes		0	116	16	
Class. Organ		0	113	19	
Chapel Org.3		0	114	19	
Tango Accrd.		0	112	23	
Accordion2		0	114	21	
Tutti Accord		0	115	21	
Rotary Drive		0	115	18	
Jazz Organ 2		0	117	16	
Jazz Organ 3		0	115	16	
Perc. Organ		0	115	17	
Full Rocker		0	114	18	
Theatre Org.	0	114	16		
60's Organ	0	113	17		
Strings / Choir	Strings	0	118	48	
	Orch.Str.1	0	115	48	
	ClassicalStr	0	114	48	
	Popular Str	0	116	48	
	Vivaldi Str	0	116	49	
	Violin	0	112	40	
	Sweet Cello	0	113	42	
	Choir	0	112	52	
	Air Choir	0	112	54	
	Pizzicato	0	112	45	
	Orch.Str.2	0	117	48	
	ChamberStr	0	113	48	
	Strings Slow	0	113	49	
	Str.Quartet	0	113	40	
	Fiddle	0	112	110	
	Cello	0	114	42	
	Choir Oohs	0	112	53	
	Choir Slow	0	113	52	
Harp	0	112	46		
OrchestraHit	0	112	55		

# Voice List

## CVP-109/107/700

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Brass	SweetTrumpet	0	115	56	
	Trombone	0	114	57	
	MuteTrumpet1	0	113	59	
	Soft Trumpet	0	114	56	
	Brass Band	0	118	57	
	BrassSection	0	112	61	
	Mellow Brass	0	123	61	
	BigBnd Brass	0	115	61	
	Soft Brass	0	116	61	
	Analog Brass	0	112	63	
	Solo Trumpet	0	112	56	
	Trb.Section	0	113	57	
	MuteTrumpet2	0	112	59	
	Flugel Horn	0	113	56	
	Tuba	0	113	58	
	Big Brass	0	114	61	
	Bright Brass	0	117	61	
	French Horn	0	112	60	
	Ballroom Brs	0	114	59	
	Synth Brass	0	112	62	
Sax / Flute	Sweet Tenor	0	113	66	
	Sweet Flute	0	115	73	
	Sweet Clari.	0	113	71	
	Sweet Alto	0	116	65	
	Growl Sax	0	114	66	
	Soprano Sax	0	112	64	
	Pan Flute 1	0	113	75	
	Modern Harp	0	113	22	
	Sax Section	0	114	65	
	WindEnsemble	0	113	73	
	Breath Tenor	0	115	66	
	Classical Fl	0	116	73	
	Clarinet	0	112	71	
	Breath Alto	0	115	65	
	Baritone Sax	0	113	67	
	Oboe	0	112	68	
	Piccolo	0	113	72	
	Blues Harm.	0	114	22	
	Bassoon	0	113	70	
	Whistle	0	112	78	
	Tenor Sax	0	116	66	
	Flute	0	112	73	
	Alto Sax	0	112	65	
	English Horn	0	112	69	
	Recorder	0	113	74	
	Harmonica	0	112	22	
	Pan Flute 2	0	112	75	
	Bass	Acous.Bass 1	0	112	32
		Elec. Bass	0	113	33
		Finger Bass	0	114	33
E. Bass Slap		0	112	33	
Pick Bass		0	112	34	
FretlessBass		0	112	35	
Slap Bass		0	112	36	
Synth Bass 1		0	112	38	
Analog Bass		0	113	39	
Bass&Cymbal		0	114	32	
Acous.Bass 2		0	113	32	
Bert's Bass		0	113	34	

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
Bass	Synth Bass 2	0	112	39
	Hi Q Bass	0	114	38
	Synth Bass 3	0	113	38
Percussion	Vibes	0	112	11
	Marimba	0	112	12
	Music Box	0	113	10
	Steel Drums	0	112	114
	Celesta	0	113	8
	Jazz Vibes	0	113	11
	Xylophone	0	112	13
	Glockenspiel	0	113	9
	TubularBells	0	112	14
	Timpani	0	112	47
	Xylomarimba	0	113	12
	Dulcimer	0	112	15
	Kalimba	0	112	108
	Standard Kit	127	0	0
	Standard2Kit	127	0	1
	Hit Kit	127	0	4
	Room Kit	127	0	8
	Rock Kit	127	0	16
	Electro Kit	127	0	24
	Analog Kit	127	0	25
Dance Kit	127	0	27	
Jazz Kit	127	0	32	
Brush Kit	127	0	40	
Classic Kit	127	0	48	
SFX1 Kit	126	0	0	
SFX2 Kit	126	0	1	
Ensemble	1 Oct. Piano	0	113	3
	2 Oct. Piano	0	114	3
	Piano & Str	0	118	1
	Piano Heaven	0	114	100
	Piano&Choir	0	118	0
	Orchestral 1	0	117	49
	Orchestral 2	0	118	49
	Orchestral 3	0	118	68
	Orchestral 4	0	116	68
	Orchestral 5	0	117	68
	Baroque	0	118	6
	Flute&Mallet	0	118	73
	Guitar&Flute	0	118	24
	Guitar&Str	0	115	99
	TwelveString	0	114	99
	Hallelujah	0	113	53
	Evensong 1	0	118	53
	Evensong 2	0	118	52
	X'mas Organ	0	118	19
	Sunrise Pad	0	116	100
	Brass&Sax 1	0	118	65
	Brass&Sax 2	0	118	66
	Moon Sax 1	0	117	71
	Moon Sax 2	0	118	71
	Trump.&Clari	0	118	56
	Brass&Lyra	0	118	63
	Flute&Lyra	0	118	72
ElectricJazz	0	116	26	
Galaxy Choir	0	117	100	
Heaven Stack	0	115	100	

## CVP-105/103

Category	Voice Name	Voice #			
		MSB #	LSB #	Program Change #	
Piano	Grand Piano	0	112	0	
	Bright Piano	0	112	1	
	Mellow Piano	0	114	0	
	Rock Piano	0	113	1	
	Midi Grand	0	115	2	
	Harpsichord1	0	112	6	
	Harpsichord2	0	113	6	
	Grand Harpsi	0	115	6	
	Honky Tonk	0	112	3	
	NewAge Piano	0	118	2	
E.Piano	Stage EP 1	0	112	4	
	Galaxy EP	0	118	5	
	New Tines	0	113	5	
	Funk EP	0	113	4	
	DX EP Modern	0	115	5	
	CP80	0	116	2	
	Tremolo EP	0	118	4	
	Hyper Tines	0	117	5	
	Venus EP	0	116	5	
	Clavi.	0	112	7	
	Dream EP	0	114	5	
	Stage EP 2	0	117	4	
	Wah Clavi.	0	113	7	
	DX treme	0	113	92	
	Funky Clavi.	0	114	7	
	Galaxian EP	0	113	100	
	DX-EP & Str.	0	118	88	
	Guitar	Spanish Gtr.	0	113	24
		12Str.Guitar	0	115	25
		Solid Guitar	0	115	27
Bright Clean		0	113	27	
Clean Guitar		0	112	27	
Jazz Guitar1		0	113	26	
Mute Guitar		0	112	28	
Banjo		0	112	105	
HawaiianGtr.		0	114	26	
Dist. Guitar		0	112	30	
Smooth Nylon		0	114	24	
Elec12string		0	126	27	
Folk Guitar1		0	116	25	
Jazz Guitar2		0	112	26	
OctaveGuitar		0	115	26	
Gut Guitar		0	112	24	
Folk Guitar2		0	112	25	
Pedal Steel		0	114	27	
Synth		Golden Age	0	115	88
		Insomnia	0	113	94
	Wave 2010	0	114	95	
	NewAge Pad	0	113	88	
	Fire Wire	0	113	81	
	Wire Lead	0	114	81	
	Blaster	0	112	87	

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
Synth	Square Lead	0	112	80
	Analogon	0	115	81
	Saw. Lead	0	112	81
	Cyber Pad	0	113	99
	Choir Pad	0	112	91
	Atmosphere	0	112	99
	Brass Pad	0	112	90
	Warm Pad	0	112	89
	Equinox	0	112	94
	Stardust	0	112	96
	Millenium	0	114	88
	Strings Pad	0	112	51
	Wave 2001	0	112	95
	Harp Pad	0	112	88
DX Pad	0	112	92	
Organ	Pipe Organ	0	112	19
	ChapelOrgan1	0	115	19
	ChapelOrgan2	0	116	19
	Accordion	0	112	21
	Tutti Accord	0	115	21
	Rotor Organ	0	112	18
	Jazz Organ 1	0	114	17
	Rock Organ	0	116	18
	Elec. Organ	0	113	16
	Jazz Organ 2	0	117	16
	Class. Organ	0	113	19
	ChapelOrgan3	0	114	19
	Tango Accrd.	0	112	23
	Jazz Organ 3	0	115	16
	Perc. Organ	0	115	17
	Theatre Org.	0	114	16
	60's Organ	0	113	17
Strings / Choir	OrchStrings1	0	115	48
	ClassicalStr	0	114	48
	Popular Str	0	116	48
	Vivaldi Str	0	116	49
	Chamber Str	0	113	48
	Violin	0	112	40
	Cello	0	114	42
	Choir	0	112	52
	Air Choir	0	112	54
	Pizzicato	0	112	45
	OrchStrings2	0	117	48
	Strings Slow	0	113	49
	Str.Quartet	0	113	40
	Fiddle	0	112	110
	Choir Oohs	0	112	53
Choir Slow	0	113	52	
Harp	0	112	46	
OrchestraHit	0	112	55	



# Voice List

## CVP-105/103

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
Brass	SweetTrumpet	0	115	56
	Trombone	0	114	57
	MuteTrumpet1	0	113	59
	Soft Trumpet	0	114	56
	Brass Band	0	118	57
	BrassSection	0	112	61
	Mellow Brass	0	123	61
	Big Brass	0	114	61
	Analog Brass	0	112	63
	Synth Brass	0	112	62
	Solo Trumpet	0	112	56
	Trb.Section	0	113	57
	MuteTrumpet2	0	112	59
	Flugel Horn	0	113	56
	Tuba	0	113	58
	French Horn	0	112	60
	BallroomBrs	0	114	59
	Sax / Flute	Breath Tenor	0	115
Flute		0	112	73
Clarinet		0	112	71
Breath Alto		0	115	65
Baritone Sax		0	113	67
Soprano Sax		0	112	64
Pan Flute 1		0	113	75
Harmonica		0	112	22
Sax Section		0	114	65
WindEnsemble		0	113	73
Tenor Sax		0	116	66
Alto Sax		0	112	65
Oboe		0	112	68
Piccolo		0	113	72
Bassoon		0	113	70
Whistle		0	112	78
English Horn		0	112	69
Recorder		0	113	74
Pan Flute 2		0	112	75
Bass		Acous.Bass	0	112
	Elec. Bass	0	113	33
	Finger Bass	0	114	33
	E. Bass Slap	0	112	33
	Pick Bass	0	112	34
	FretlessBass	0	112	35
	Slap Bass	0	112	36
	Synth Bass 1	0	112	38
	Analog Bass	0	113	39
	Bass&Cymbal	0	114	32
	Bert's Bass	0	113	34
	Synth Bass 2	0	112	39
	Hi Q Bass	0	114	38
	Synth Bass 3	0	113	38

Category	Voice Name	Voice #		
		MSB #	LSB #	Program Change #
Percussion	Vibes	0	112	11
	Marimba	0	112	12
	Music Box	0	113	10
	Steel Drums	0	112	114
	Celesta	0	113	8
	Jazz Vibes	0	113	11
	Xylophone	0	112	13
	Glockenspiel	0	113	9
	TubularBells	0	112	14
	Timpani	0	112	47
	Xylomarimba	0	113	12
	Dulcimer	0	112	15
	Kalimba	0	112	108
	Standard Kit	127	0	0
	Standard2Kit	127	0	1
	Room Kit	127	0	8
	Rock Kit	127	0	16
	Electro Kit	127	0	24
	Analog Kit	127	0	25
	Dance Kit	127	0	27
Jazz Kit	127	0	32	
Brush Kit	127	0	40	
Classic Kit	127	0	48	
SFX1 Kit	126	0	0	
SFX2 Kit	126	0	1	
Ensemble	1 Oct. Piano	0	113	3
	2 Oct. Piano	0	114	3
	Piano & Str	0	118	1
	Piano Heaven	0	114	100
	Piano&Choir	0	118	0
	Orchestral 1	0	117	49
	Orchestral 2	0	118	49
	Orchestral 3	0	118	68
	Orchestral 4	0	116	68
	Orchestral 5	0	117	68
	Baroque	0	118	6
	Flute&Mallet	0	118	73
	Guitar&Flute	0	118	24
	Guitar&Str	0	115	99
	TwelveString	0	114	99
	Hallelujah	0	113	53
	Evensong 1	0	118	53
	Evensong 2	0	118	52
	X'mas Organ	0	118	19
	Sunrise Pad	0	116	100
	Brass&Sax 1	0	118	65
	Brass&Sax 2	0	118	66
	Moonsax 1	0	117	71
	Moonsax 2	0	118	71
Trump.&Clari	0	118	56	
Brass&Lyra	0	118	63	
Flute&Lyra	0	118	72	
ElectricJazz	0	116	26	
GalaxyChoir	0	117	100	
Heaven Stack	0	115	100	

## XG

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
GrandPno	0	0	0
GrndPnoK	0	1	0
MelloGrP	0	18	0
PianoStr	0	40	0
Dream	0	41	0
BritePno	0	0	1
BritPnoK	0	1	1
El.Grand	0	0	2
ElGrPnoK	0	1	2
Det.CP80	0	32	2
LayerCP1	0	40	2
LayerCP2	0	41	2
HnkyTonk	0	0	3
HnkyTnkK	0	1	3
E.Piano1	0	0	4
El.Pno1K	0	1	4
MelloEP1	0	18	4
Chor.EP1	0	32	4
HardEl.P	0	40	4
VX El.P1	0	45	4
60sEl.P1	0	64	4
E.Piano2	0	0	5
El.Pno2K	0	1	5
Chor.EP2	0	32	5
DX Hard	0	33	5
DXLegend	0	34	5
DX Phase	0	40	5
DX+Analg	0	41	5
DXKotoEP	0	42	5
VX El.P2	0	45	5
Harpsi.	0	0	6
Harpsi.K	0	1	6
Harpsi.2	0	25	6
Harpsi.3	0	35	6
Clavi	0	0	7
Clavi K	0	1	7
ClaviWah	0	27	7
PulseClv	0	64	7
PierceCl	0	65	7
Celesta	0	0	8
Glocken	0	0	9
MusicBox	0	0	10
Orgel	0	64	10
Vibes	0	0	11
Vibes K	0	1	11
HardVibe	0	45	11
Marimba	0	0	12
MarimbaK	0	1	12
SineMrb	0	64	12
Balimba	0	97	12
Log Drum	0	98	12
Xylophon	0	0	13
TubulBel	0	0	14
ChrchBel	0	96	14
Carillon	0	97	14
Dulcimer	0	0	15
Dulcimr2	0	35	15
Cimbalom	0	96	15
Santur	0	97	15
DrawOrgn	0	0	16

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
DetDrwOr	0	32	16
60sDrOr1	0	33	16
60sDrOr2	0	34	16
70sDrOr1	0	35	16
DrawOrg2	0	36	16
60sDrOr3	0	37	16
EvenBar	0	38	16
16+2'2/3	0	40	16
Organ Ba	0	64	16
70sDrOr2	0	65	16
CheezOrg	0	66	16
DrawOrg3	0	67	16
PercOrgn	0	0	17
70sPcOr1	0	24	17
DetPrcOr	0	32	17
Lite Org	0	33	17
PercOrg2	0	37	17
RockOrgn	0	0	18
RotaryOr	0	64	18
SloRotar	0	65	18
FstRotar	0	66	18
ChrchOrg	0	0	19
ChurOrg3	0	32	19
ChurOrg2	0	35	19
NotreDam	0	40	19
OrgFlute	0	64	19
TrmOrgFl	0	65	19
ReedOrgn	0	0	20
Puff Org	0	40	20
Acordion	0	0	21
AccordIt	0	32	21
Harmnica	0	0	22
Harmo. 2	0	32	22
TangoAcid	0	0	23
TngoAcid2	0	64	23
NylonGtr	0	0	24
NylonGt2	0	16	24
NylonGt3	0	25	24
VelGtHrm	0	43	24
Ukulele	0	96	24
SteelGtr	0	0	25
SteelGt2	0	16	25
12StrGtr	0	35	25
Nyln&Stl	0	40	25
Stl&Body	0	41	25
Mandolin	0	96	25
Jazz Gtr	0	0	26
MelloGtr	0	18	26
Jazz Amp	0	32	26
CleanGtr	0	0	27
ChorusGt	0	32	27
Mute Gtr	0	0	28
FunkGtr1	0	40	28
MuteStlG	0	41	28
FunkGtr2	0	43	28
Jazz Man	0	45	28
Ovrdrive	0	0	29
Gt.Pinch	0	43	29
Dist.Gtr	0	0	30
FeedbkGt	0	40	30

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
FeedbGt2	0	41	30
GtrHarmo	0	0	31
GtFeedbk	0	65	31
GtrHrmo2	0	66	31
Aco.Bass	0	0	32
JazzRthm	0	40	32
VXUprght	0	45	32
FngrBass	0	0	33
FngrDrk	0	18	33
FlangeBa	0	27	33
Ba&DstEG	0	40	33
FngrSlap	0	43	33
FngBass2	0	45	33
Mod.Bass	0	65	33
PickBass	0	0	34
MutePkBa	0	28	34
Fretless	0	0	35
Fretles2	0	32	35
Fretles3	0	33	35
Fretles4	0	34	35
SynFretl	0	96	35
SmthFrt1	0	97	35
SlapBas1	0	0	36
ResoSlap	0	27	36
PunchThm	0	32	36
SlapBas2	0	0	37
VeloSlap	0	43	37
SynBass1	0	0	38
SynBa1Dk	0	18	38
FastResB	0	20	38
AcidBass	0	24	38
Clv Bass	0	35	38
TechnoBa	0	40	38
Orbiter	0	64	38
Sqr.Bass	0	65	38
RubberBa	0	66	38
Hammer	0	96	38
SynBass2	0	0	39
MelloSBa	0	6	39
Seq Bass	0	12	39
ClkSynBa	0	18	39
SynBa2Dk	0	19	39
SmthSynB	0	32	39
ModulrBa	0	40	39
DX Bass	0	41	39
X WireBa	0	64	39
Violin	0	0	40
Slow Vln	0	8	40
Viola	0	0	41
Cello	0	0	42
Contrabs	0	0	43
Trem.Str	0	0	44
SlwTrStr	0	8	44
Susp. Str	0	40	44
Pizz.Str	0	0	45
Harp	0	0	46
YangChin	0	40	46
Timpani	0	0	47
Strings1	0	0	48
S.Strngs	0	3	48

# Voice List

## XG

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
Slow Str	0	8	48
Arco Str	0	24	48
60sStrng	0	35	48
Orchestr	0	40	48
Orchstr2	0	41	48
TremOrch	0	42	48
Velo.Str	0	45	48
Strings2	0	0	49
S.SlwStr	0	3	49
LegatoSt	0	8	49
Warm Str	0	40	49
Kingdom	0	41	49
70s Str	0	64	49
Strings3	0	65	49
Syn Str1	0	0	50
Reso Str	0	27	50
Syn Str4	0	64	50
Syn Str5	0	65	50
Syn Str2	0	0	51
ChoirAah	0	0	52
S.Choir	0	3	52
Ch.Aahs2	0	16	52
MelChoir	0	32	52
ChoirStr	0	40	52
VoiceOoh	0	0	53
SynVoice	0	0	54
SyVoice2	0	40	54
Choral	0	41	54
AnaVoice	0	64	54
Orch.Hit	0	0	55
OrchHit2	0	35	55
Impact	0	64	55
Trumpet	0	0	56
Trumpet2	0	16	56
BriteTrp	0	17	56
Warm Trp	0	32	56
Trombone	0	0	57
Trmbone2	0	18	57
Tuba	0	0	58
Tuba 2	0	16	58
Mute Trp	0	0	59
Fr.Horn	0	0	60
FrHrSolo	0	6	60
FrHorn 2	0	32	60
HornOrch	0	37	60
BrssSect	0	0	61
Tp&TbSec	0	35	61
BrssSec2	0	40	61
HiBrass	0	41	61
MelloBrs	0	42	61
SynBrss1	0	0	62
Quack Br	0	12	62
RezSynBr	0	20	62
PolyBrss	0	24	62
SynBrss3	0	27	62
JumpBrss	0	32	62
AnVelBr1	0	45	62
AnVelBr2	0	64	62
SynBrss2	0	0	63
Soft Brs	0	18	63
SynBrss4	0	40	63

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
ChoirBrs	0	41	63
VelBrss2	0	45	63
AnaBrss2	0	64	63
SprnoSax	0	0	64
Alto Sax	0	0	65
Sax Sect	0	40	65
HyprAlto	0	43	65
TenorSax	0	0	66
BrthTnSx	0	40	66
SoftTenr	0	41	66
TnrSax 2	0	64	66
Bari.Sax	0	0	67
Oboe	0	0	68
Eng.Horn	0	0	69
Bassoon	0	0	70
Clarinet	0	0	71
Piccolo	0	0	72
Flute	0	0	73
Recorder	0	0	74
PanFlute	0	0	75
Bottle	0	0	76
Shakhchi	0	0	77
Whistle	0	0	78
Ocarina	0	0	79
SquareLd	0	0	80
SquarLd2	0	6	80
LMSquare	0	8	80
Hollow	0	18	80
Shroud	0	19	80
Mellow	0	64	80
SoloSine	0	65	80
SineLead	0	66	80
Saw Lead	0	0	81
Saw Ld 2	0	6	81
ThickSaw	0	8	81
Dyna Saw	0	18	81
Digi Saw	0	19	81
Big Lead	0	20	81
HeavySyn	0	24	81
WaspySyn	0	25	81
PulseSaw	0	40	81
Dr. Lead	0	41	81
VeloLead	0	45	81
Seq Ana.	0	96	81
CalioplD	0	0	82
PureLead	0	65	82
Chiff Ld	0	0	83
Rubby	0	64	83
CharanLd	0	0	84
DistLead	0	64	84
WireLead	0	65	84
Voice Ld	0	0	85
SynthAah	0	24	85
Vox Lead	0	64	85
Fifth Ld	0	0	86
Big Five	0	35	86
Bass&Ld	0	0	87
Big&Low	0	16	87
Fat&Prky	0	64	87
Soft Wrl	0	65	87
NewAgePd	0	0	88

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
Fantasy	0	64	88
Warm Pad	0	0	89
ThickPad	0	16	89
Soft Pad	0	17	89
Sine Pad	0	18	89
Horn Pad	0	64	89
RotarStr	0	65	89
PolySyPd	0	0	90
PolyPd80	0	64	90
ClickPad	0	65	90
Ana. Pad	0	66	90
SquarPad	0	67	90
ChoirPad	0	0	91
Heaven	0	64	91
Itopia	0	66	91
CC Pad	0	67	91
BowedPad	0	0	92
Glacier	0	64	92
GlassPad	0	65	92
MetalPad	0	0	93
Tine Pad	0	64	93
Pan Pad	0	65	93
Halo Pad	0	0	94
SweepPad	0	0	95
Shwimmer	0	20	95
Converge	0	27	95
PolarPad	0	64	95
Celstial	0	66	95
Rain	0	0	96
ClaviPad	0	45	96
HrmoRain	0	64	96
AfrcnWnd	0	65	96
Carib	0	66	96
SoundTrk	0	0	97
Prologue	0	27	97
Ancestrl	0	64	97
Crystal	0	0	98
SynDrCmp	0	12	98
Popcorn	0	14	98
TinyBell	0	18	98
RndGlock	0	35	98
GlockChi	0	40	98
ClearBel	0	41	98
ChorBell	0	42	98
SynMalet	0	64	98
SftCryst	0	65	98
LoudGlok	0	66	98
ChrstBel	0	67	98
VibeBell	0	68	98
DigiBell	0	69	98
AirBells	0	70	98
BellHarp	0	71	98
Gamelmba	0	72	98
Atmosphr	0	0	99
WarmAtms	0	18	99
HollwRls	0	19	99
Nylon EP	0	40	99
NylnHarp	0	64	99
Harp Vox	0	65	99
AtmosPad	0	66	99
Planet	0	67	99



# XG

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
Bright	0	0	100
FantaBel	0	64	100
Smokey	0	96	100
Goblins	0	0	101
GobSynth	0	64	101
Creeper	0	65	101
Ring Pad	0	66	101
Ritual	0	67	101
ToHeaven	0	68	101
Night	0	70	101
Glisten	0	71	101
BelChoir	0	96	101
Echoes	0	0	102
Echoes 2	0	8	102
Echo Pan	0	14	102
EchoBell	0	64	102
Big Pan	0	65	102
SynPiano	0	66	102
Creation	0	67	102
StarDust	0	68	102
Reso&Pan	0	69	102
Sci-Fi	0	0	103
Starz	0	64	103
Sitar	0	0	104
DetSitar	0	32	104
Sitar 2	0	35	104
Tambra	0	96	104
Tamboura	0	97	104
Banjo	0	0	105
MuteBnjo	0	28	105
Rabab	0	96	105
Gopichnt	0	97	105
Oud	0	98	105
Shamisen	0	0	106
Koto	0	0	107
Taisho-k	0	96	107
Kanoon	0	97	107
Kalimba	0	0	108
Bagpipe	0	0	109

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
Fiddle	0	0	110
Shanai	0	0	111
Shanai 2	0	64	111
Pungi	0	96	111
Hichriki	0	97	111
TnklBell	0	0	112
Bonang	0	96	112
Altair	0	97	112
Gamelan	0	98	112
S.Gamlan	0	99	112
Rama Cym	0	100	112
AsianBel	0	101	112
Agogo	0	0	113
SteelDrm	0	0	114
GlasPerc	0	97	114
ThaiBell	0	98	114
WoodBlok	0	0	115
Castanet	0	96	115
TaikoDrm	0	0	116
Gr.Cassa	0	96	116
MelodTom	0	0	117
Mel Tom2	0	64	117
Real Tom	0	65	117
Rock Tom	0	66	117
Syn Drum	0	0	118
Ana Tom	0	64	118
ElecPerc	0	65	118
RevCymb1	0	0	119
FretNoiz	0	0	120
BrthNoiz	0	0	121
Seashore	0	0	122
Tweet	0	0	123
Telephone	0	0	124
Helicptr	0	0	125
Applause	0	0	126
Gunshot	0	0	127
CuttngNz	64	0	0
CttngNz2	64	0	1
Str Slap	64	0	3

Voice Name	Voice #		
	MSB #	LSB #	Program Change #
Fl.KClik	64	0	16
Shower	64	0	32
Thunder	64	0	33
Wind	64	0	34
Stream	64	0	35
Bubble	64	0	36
Feed	64	0	37
Dog	64	0	48
Horse	64	0	49
Tweet 2	64	0	50
Ghost	64	0	54
Maou	64	0	55
Tel.Dial	64	0	64
DoorSqek	64	0	65
DoorSlam	64	0	66
ScratchC	64	0	67
ScratchS	64	0	68
WindChim	64	0	69
Telphon2	64	0	70
CarElgnt	64	0	80
CarTSqel	64	0	81
Car Pass	64	0	82
CarCrash	64	0	83
Siren	64	0	84
Train	64	0	85
JetPlane	64	0	86
Starship	64	0	87
Burst	64	0	88
Coaster	64	0	89
Submarin	64	0	90
Laugh	64	0	96
Scream	64	0	97
Punch	64	0	98
Heart	64	0	99
Footstep	64	0	100
MchinGun	64	0	112
LaserGun	64	0	113
Xplosion	64	0	114
Firework	64	0	115

## Demo Songs

### SONG DEMO

	Title	Composer
Song 1	Klavier Konzert a moll op.16 (Piano Concert a minor op.16)	E.Grieg
Song 3	Beautiful Dreamer	S.C.Foster
Song 4	Annie Laurie	Traditional

### VOICE DEMO

	Title	Composer
PIANO	Walzer op.70-1	F.Chopin
SYNTHESIZER	Bruyeres	C.A.Debussy
ORGAN	Choralvorspiele "Ich ruf' zu dir, Herr Jesus Christ"	J.S.Bach
PERCUSSION	Air de Ballet	M.Moszkowski
XG	TREPAK from "Nutcracker Suite" op.71a	P.I.Tschaikovsky

• Some of the demonstration pieces listed above are specially-arranged excerpts from the original compositions listed above.  
All other songs are original (©1999 Yamaha Corporation).

# Drum/key Assignment List

Bank Select MSB					127	127	127	127	127	127	127	
Bank Select LSB					0	0	0	0	0	0	0	
Program # (1-128)					1	2	4	9	17	25	26	
Keyboard Note	MIDI		Key off	Alternate assign	Standard Kit	Standard 2 Kit	Hit Kit (CVP-109/107/700)	Room Kit	Rock Kit	Electro Kit	Analog Kit	
	Note #	Note										
C#	1	13	C#	-1		3	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute
D	1	14	D	-1		3	Surdo Open	Surdo Open	Surdo Open	Surdo Open	Surdo Open	Surdo Open
D#	1	15	D#	-1			Hi Q	Hi Q	Hi Q	Hi Q	Hi Q	Hi Q
E	1	16	E	-1			Whip Slap	Whip Slap	Whip Slap	Whip Slap	Whip Slap	Whip Slap
F	1	17	F	-1		4	Scratch H	Scratch H	Scratch H	Scratch H	Scratch H	Scratch H
F#	1	18	F#	-1		4	Scratch L	Scratch L	Scratch L	Scratch L	Scratch L	Scratch L
G	1	19	G	-1			Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap
G#	1	20	G#	-1			Click Noise	Click Noise	Click Noise	Click Noise	Click Noise	Click Noise
A	1	21	A	-1			Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click
A#	1	22	A#	-1			Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell
B	1	23	B	-1			Seq Click L	Seq Click L	Seq Click L	Seq Click L	Seq Click L	Seq Click L
C	2	24	C	0			Seq Click H	Seq Click H	Seq Click H	Seq Click H	Seq Click H	Seq Click H
C#	2	25	C#	0			Brush Tap	Brush Tap	Brush Tap	Brush Tap	Brush Tap	Brush Tap
D	2	26	D	0	○		Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl
D#	2	27	D#	0			Brush Slap	Brush Slap	Brush Slap	Brush Slap	Brush Slap	Brush Slap
E	2	28	E	0	○		BrushTapSwrl	BrushTapSwrl	BrushTapSwrl	BrushTapSwrl	ReversCymbal	ReversCymbal
F	2	29	F	0	○		Snare Roll	Snare Roll 2	Snare Roll	Snare Roll	Snare Roll	Snare Roll
F#	2	30	F#	0			Castanet	Castanet	Castanet	Castanet	Hi Q 2	Hi Q 2
G	2	31	G	0			Snare Soft	Snare Soft 2	Snare Electro	Snare Soft	SnrSnpyElctr	SnareNoisy 4
G#	2	32	G#	0			Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
A	2	33	A	0			Kick Soft	Kick Soft	Kick Tight L	Kick Soft	Kick Tight 2	Kick Tight 2
A#	2	34	A#	0			OpenRimShot	RimShothShrt	Snare Pitched	OpenRimShot	OpenRimShot	OpenRimShot
B	2	35	B	0			Kick Tight	KickTghtShrt	Kick Wet	Kick Tight	Kick 2	Kick Gate
C	3	36	C	1			Kick	Kick Short	Kick Tight H	Kick	Kick Gate	KckGateHeavy
C#	3	37	C#	1			Side Stick	Side Stick	Stick Ambient	Side Stick	Side Stick	Side Stick
D	3	38	D	1			Snare	Snare Short	Snare Ambient	Snare Snappy	Snare Rock	SnareNoisy 2
D#	3	39	D#	1			Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap
E	3	40	E	1			Snare Tight	SnareTight H	Snare Tight 2	SnrTightSnpy	SnareRockRim	SnareNoisy 3
F	3	41	F	1			Floor Tom L	Floor Tom L	Hybrid Tom 1	Tom Room 1	Tom Rock 1	Tom Electro 1
F#	3	42	F#	1	1		Hi-HatClosed	Hi-HatClosed	Hi-Hat Closed Light	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed
G	3	43	G	1			Floor Tom H	Floor Tom H	Hybrid Tom 2	Tom Room 2	Tom Rock 2	Tom Electro 2
G#	3	44	G#	1	1		Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal Light	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal
A	3	45	A	1			Low Tom	Low Tom	Hybrid Tom 3	Tom Room 3	Tom Rock 3	Tom Electro 3
A#	3	46	A#	1	1		Hi-Hat Open	Hi-Hat Open	Hi-Hat Open Light	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open
B	3	47	B	1			Mid Tom L	Mid Tom L	Hybrid Tom 4	Tom Room 4	Tom Rock 4	Tom Electro 4
C	4	48	C	2			Mid Tom H	Mid Tom H	Hybrid Tom 5	Tom Room 5	Tom Rock 5	Tom Electro 5
C#	4	49	C#	2			CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1
D	4	50	D	2			High Tom	High Tom	Hybrid Tom 6	Tom Room 6	Tom Rock 6	Tom Electro 6
D#	4	51	D#	2			RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1	RideCymbal 1
E	4	52	E	2			Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym
F	4	53	F	2			Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup
F#	4	54	F#	2			Tambourine	Tambourine	Tambourine Light	Tambourine	Tambourine	Tambourine
G	4	55	G	2			SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal
G#	4	56	G#	2			Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell
A	4	57	A	2			CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2
A#	4	58	A#	2			Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
B	4	59	B	2			RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2	RideCymbal 2
C	5	60	C	3			Bongo H	Bongo H	Bongo H	Bongo H	Bongo H	Bongo H
C#	5	61	C#	3			Bongo L	Bongo L	Bongo L	Bongo L	Bongo L	Bongo L
D	5	62	D	3			Conga H Mute	Conga H Mute	Conga H Mute	Conga H Mute	Conga H Mute	Conga H Mute
D#	5	63	D#	3			Conga H Open	Conga H Open	Conga H Open	Conga H Open	Conga H Open	Conga H Open
E	5	64	E	3			Conga L	Conga L	Conga L	Conga L	Conga L	Conga L
F	5	65	F	3			Timbale H	Timbale H	Timbale H	Timbale H	Timbale H	Timbale H
F#	5	66	F#	3			Timbale L	Timbale L	Timbale L	Timbale L	Timbale L	Timbale L
G	5	67	G	3			Agogo H	Agogo H	Agogo H	Agogo H	Agogo H	Agogo H
G#	5	68	G#	3			Agogo L	Agogo L	Agogo L	Agogo L	Agogo L	Agogo L
A	5	69	A	3			Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
A#	5	70	A#	3			Maracas	Maracas	Maracas	Maracas	Maracas	Maracas 2
B	5	71	B	3	○		SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH
C	6	72	C	4	○		SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL
C#	6	73	C#	4			Guiro Short	Guiro Short	Guiro Short	Guiro Short	Guiro Short	Guiro Short
D	6	74	D	4	○		Guiro Long	Guiro Long	Guiro Long	Guiro Long	Guiro Long	Guiro Long
D#	6	75	D#	4			Claves	Claves	Claves	Claves	Claves	Claves 2
E	6	76	E	4			Wood Block H	Wood Block H	Wood Block H	Wood Block H	Wood Block H	Wood Block H
F	6	77	F	4			Wood Block L	Wood Block L	Wood Block L	Wood Block L	Wood Block L	Wood Block L
F#	6	78	F#	4			Cuica Mute	Cuica Mute	Cuica Mute	Cuica Mute	Cuica Mute	Scratch H 2
G	6	79	G	4			Cuica Open	Cuica Open	Cuica Open	Cuica Open	Cuica Open	Scratch L 2
G#	6	80	G#	4		2	TriangleMute	TriangleMute	TriangleMute	TriangleMute	TriangleMute	TriangleMute
A	6	81	A	4		2	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen
A#	6	82	A#	4			Shaker	Shaker	Shaker	Shaker	Shaker	Shaker
B	6	83	B	4			Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells
C	7	84	C	5			Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
-	-	85	C#	5								
-	-	86	D	5								
-	-	87	D#	5								
-	-	88	E	5								
-	-	89	F	5								
-	-	90	F#	5								
-	-	91	G	5								

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

# Drum/key Assignment List

Bank Select MSB					127	127	127	127	126	126
Bank Select LSB					0	0	0	0	0	0
Program # (1-128)					28	33	41	49	1	2
Keyboard Note	MIDI Note		Key off	Alternate assign	Dance Kit	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit 1	SFX Kit 2
	Note #	Note								
C#	1	13	C#	-1						
D	1	14	D	-1	3	Surdo Mute	Surdo Mute	Surdo Mute	Surdo Mute	
D#	1	15	D#	-1	3	Surdo Open	Surdo Open	Surdo Open	Surdo Open	
E	1	16	E	-1		Hi Q	Hi Q	Hi Q	Hi Q	
F	1	17	F	-1	4	Whip Slap	Whip Slap	Whip Slap	Whip Slap	
F#	1	18	F#	-1	4	Scratch H	Scratch H	Scratch H	Scratch H	
G	1	19	G	-1		Scratch L	Scratch L	Scratch L	Scratch L	
G#	1	20	G#	-1		Finger Snap	Finger Snap	Finger Snap	Finger Snap	
A	1	21	A	-1		Click Noise	Click Noise	Click Noise	Click Noise	
A#	1	22	A#	-1		Mtrnm Click	Mtrnm Click	Mtrnm Click	Mtrnm Click	
B	1	23	B	-1		Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	Mtrnm Bell	
C	2	24	C	0		Seq Click L	Seq Click L	Seq Click L	Seq Click L	
C#	2	25	C#	0		Seq Click H	Seq Click H	Seq Click H	Seq Click H	
D	2	26	D	0	○	Brush Tap	Brush Tap	Brush Tap	Brush Tap	
D#	2	27	D#	0		Brush Swirl	Brush Swirl	Brush Swirl	Brush Swirl	
E	2	28	E	0	○	Brush Slap	Brush Slap	Brush Slap	Brush Slap	
F	2	29	F	0	○	ReversCymbal	BrushTapSwrl	BrushTapSwrl	BrushTapSwrl	
F#	2	30	F#	0		Snare Roll	Snare Roll	Snare Roll	Snare Roll	
G	2	31	G	0		Hi Q 2	Castanet	Castanet	Castanet	
G#	2	32	G#	0		Snare Techno3	Snare Soft	Brush Slap 2	Brush Slap 2	
A	2	33	A	0		Sticks	Sticks	Sticks	Sticks	
A#	2	34	A#	0		KickTechno Q	Kick Soft	Kick Soft	Kick Soft 2	
B	2	35	B	0		Rim Gate	OpenRimShot	OpenRimShot	OpenRimShot	
C	3	36	C	1		KickTechno L	Kick Tight	Kick Tight	Gran Cassa	
C#	3	37	C#	1		KickTechno 2	Kick Jazz	Kick Small	GranCassa Mu	CuttingNoiz
D	3	38	D	1		SideStickAn	Side Stick	Side Stick	Side Stick	CuttingNoiz2
D#	3	39	D#	1		Snare Clap	Snare	Brush Slap 3	Band Snare	Door Squeak
E	3	40	E	1		Hand Clap	Hand Clap	Hand Clap	Hand Clap	Door Slam
F	3	41	F	1		Snare Dry 2	Snare Tight	Brush Tap 2	Band Snare 2	Scratch H 3
F#	3	42	F#	1		Tom Analog 1	Tom Jazz 1	Tom Brush 1	Tom Jazz 1	Wind Chime
G	3	43	G	1		HiHatClose 3	Hi-HatClosed	Hi-HatClosed	Hi-HatClosed	Telephone 2
G#	3	44	G#	1		Tom Analog 2	Tom Jazz 2	Tom Brush 2	Tom Jazz 2	
A	3	45	A	1		HatCloseAn 2	Hi-Hat Pedal	Hi-Hat Pedal	Hi-Hat Pedal	
A#	3	46	A#	1		Tom Analog 3	Tom Jazz 3	Tom Brush 3	Tom Jazz 3	
B	3	47	B	1		HiHat Open 3	Hi-Hat Open	Hi-Hat Open	Hi-Hat Open	
C	4	48	C	2		Tom Analog 4	Tom Jazz 4	Tom Brush 4	Tom Jazz 4	
C#	4	49	C#	2		Tom Analog 5	Tom Jazz 5	Tom Brush 5	Tom Jazz 5	
D	4	50	D	2		Crash Analog	CrashCymbal1	CrashCymbal1	Hand Cymbal	
D#	4	51	D#	2		Tom Analog 6	Tom Jazz 6	Tom Brush 6	Tom Jazz 6	
E	4	52	E	2		RideCymbal 1	RideCymbal 1	RideCymbal 1	HandCymShort	
F	4	53	F	2		Chinese Cym	Chinese Cym	Chinese Cym	Chinese Cym	Fl.Key Click
F#	4	54	F#	2		Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ride Cym Cup	Ignition
G	4	55	G	2		Tambourine	Tambourine	Tambourine	Tambourine	Squeal
G#	4	56	G#	2		SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	Exhaust
A	4	57	A	2		Cowbell Anlg	Cowbell	Cowbell	Cowbell	Crash
A#	4	58	A#	2		CrashCymbal2	CrashCymbal2	CrashCymbal2	HandCymbal 2	Siren
B	4	59	B	2		Vibraslap	Vibraslap	Vibraslap	Vibraslap	Train
C	5	60	C	3		RideCymbal 2	RideCymbal 2	RideCymbal 2	HandCym2Shrt	Jet Plane
C#	5	61	C#	3		Bongo H	Bongo H	Bongo H	Bongo H	Starship
D	5	62	D	3		Bongo L	Bongo L	Bongo L	Bongo L	Burst
D#	5	63	D#	3		Conga Anlg H	Conga H Mute	Conga H Mute	Conga H Mute	Coaster
E	5	64	E	3		Conga Anlg M	Conga H Open	Conga H Open	Conga H Open	Submarine
F	5	65	F	3		Conga Anlg L	Conga L	Conga L	Conga L	
F#	5	66	F#	3		Timbale H	Timbale H	Timbale H	Timbale H	
G	5	67	G	3		Timbale L	Timbale L	Timbale L	Timbale L	
G#	5	68	G#	3		Agogo H	Agogo H	Agogo H	Agogo H	
A	5	69	A	3		Agogo L	Agogo L	Agogo L	Agogo L	
A#	5	70	A#	3		Cabasa	Cabasa	Cabasa	Cabasa	Shower
B	5	71	B	3	○	Maracas 2	Maracas	Maracas	Maracas	Thunder
C	6	72	C	4	○	SambaWhistlH	SambaWhistlH	SambaWhistlH	SambaWhistlH	Wind
C#	6	73	C#	4	○	SambaWhistlL	SambaWhistlL	SambaWhistlL	SambaWhistlL	Stream
D	6	74	D	4	○	Guiro Short	Guiro Short	Guiro Short	Guiro Short	Bubble
D#	6	75	D#	4	○	Guiro Long	Guiro Long	Guiro Long	Guiro Long	Feed
E	6	76	E	4		Claves 2	Claves	Claves	Claves	
F	6	77	F	4		Wood Block H	Wood Block H	Wood Block H	Wood Block H	
F#	6	78	F#	4		Wood Block L	Wood Block L	Wood Block L	Wood Block L	
G	6	79	G	4		Scratch H 2	Cuica Mute	Cuica Mute	Cuica Mute	
G#	6	80	G#	4		Scratch L 3	Cuica Open	Cuica Open	Cuica Open	
A	6	81	A	4	2	TriangleMute	TriangleMute	TriangleMute	TriangleMute	
A#	6	82	A#	4	2	TriangleOpen	TriangleOpen	TriangleOpen	TriangleOpen	
B	6	83	B	4		Shaker	Shaker	Shaker	Shaker	
C	7	84	C	5		Jingle Bells	Jingle Bells	Jingle Bells	Jingle Bells	
-	-	85	C#	5		Bell Tree	Bell Tree	Bell Tree	Bell Tree	Dog
-	-	86	D	5						Horse
-	-	87	D#	5						Bird Tweet 2
-	-	88	E	5						
-	-	89	F	5						
-	-	90	F#	5						Ghost
-	-	91	G	5						Maou

# Style List .....

Category	Style Name	Category	Style Name	Category	Style Name	Category	Style Name	
8 BEAT	8 Beat 1	DANCE	Clubdance	SWING/JAZZ	Big Band 2	TRAD./WALTZ	U.S. March	
	8 Beat 2		Techno		Big Band 3 ■♦♦		German March	
	8Bt Adria		Entrance		Jazz Club 1 ■♦♦		6/8 March 1	
	8Bt Pop 1		Eurobeat		Jazz Club 2 ■♦♦		Showtune	
	8Bt Pop 2		Trance ♦•		Boogie 2 ■♦♦		Polka Pop	
	British Pop		70's Disco 1 *1		Dixieland 2		Ober Polka	
	8 Beat Rock ♦•		80's Disco ♦•		Swing Ballad ■♦♦		Oberkrain.W.	
	8 Beat Soft		90's Disco		Jazz Waltz 1		Tarantella	
	8Beat Ballad		Disco Soul		Jazz Waltz 2		Musette	
	Light Pop		Cool Dance		Samba Rio		Guitar Waltz	
	16 BEAT		16 Beat 1		Miami Pop		Bossa Nova 1 *7	6/8 March 2
			16 Beat 2		Disco Tropic		Bossa Nova 2 •	Enka 1
			16 Beat 3		Disco Hands		Reggae ■♦•	Enka 2
16 Beat 4		Electro Pop •	Swing Reggae	Stride 1				
16 Beat 5		70's Disco 2 ♦•	GuitarRhumba	Stride 2				
Soft Fusion		ROCK/R&B	Guitar Bossa	Swing 1				
Groundbeat ♦•			Rock 1 *2	Swing 2				
Hip Hop Pop			Hard Rock	Jazz Ballad				
16Bt Funk			R & Roll 1 *3	Blues 1				
Funky Pop			Rock Shuffle	Blues 2				
Funky Dance			Gospel Shffl	BoogieWoogie				
80's Fusion			R & B 1	Jazz Waltz				
Jazz Rock			Twist 1 *4	Arpeggio 1				
Funk ♦•	Motown		8Bt Ballad 1					
FusionShfl. •	Soul ■♦♦		8Bt Ballad 2					
16 Beat 6	4/4 Blues		8 Beat					
BALLAD	16-Ballad 1		Rock 2 •	Country Rock	Rock'n' Roll			
	16-Ballad 2		8 Beat Heat	Country 8Bt	Slow Rock			
	Piano Ballad	R & Roll 2 ♦•	Country Pop	2Beat Swing				
	Rock Ballad	Soul Shuffle	CntryShuffle	Ragtime 1				
	U.S. Ballad	Pop Shuffle	Cntry Swing	Ragtime 2				
	Slow Rock 1	R & B 2	Bluegrass	March 1				
	Slow Rock 2	Twist 2 ■♦♦	Cntry Ballad	6/8 March				
	Slow Ballad	6/8 Blues	Two Step	4 Stroke				
	Analog Pop •	Blues Rock ■♦♦	CowboyBoogie •	March 2				
	Modern 6/8	6/8 Rock	Hoedown	Musical				
	Pop Ballad 1	Swing 1 *5	CountryWaltz	Traditional1				
	Pop Ballad 2	Big Band 1	Folk	Traditional2				
	Cool Night	BigBand Bld	Vienna Waltz	Traditional3				
	GuitarBallad	Jazz Ballad	Slow Waltz	Arpeggio 2				
	Organ Ballad	Jazz Trio	Slow Fox	Arpeggio 3				
	Pop Ballad 3	Boogie 1 *6	Quickstep 1	Waltz				
	Pop Ballad 4 ♦•	Dixieland 1	Tango	Slow Waltz				
	Blues Ballad ■♦♦	BBand Boogie •	Cha Cha	Bossa Nova				
	Epic Ballad	Gypsy Swing •	Samba	Samba				
	Pop Waltz	Bebop	Rhumba	Rhumba				
		Swing 2 •	Pasodoble	Cha Cha				
			Jive	Beguine				
			Orch.Waltz	Quickstep 2				
		Beguine						
		Foxtrot						
		Quickstep 2						

- Styles marked with a ■ are not available on the CVP-107/700.
- ♦ Styles marked with a ♦ are not available on the CVP-105.
- Styles marked with a • are not available on the CVP-103.

\*1 "70's Disco" on the CVP-105/103.  
 \*2 "Rock" on the CVP-103.  
 \*3 "R & Roll" on the CVP-105/103.  
 \*4 "Twist" on the CVP-107/105/103/700.  
 \*5 "Swing" on the CVP-103.  
 \*6 "Boogie" on the CVP-107/105/103/700.  
 \*7 "Bossa Nova" on the CVP-103.  
 \*8 "Pop Bossa" on the CVP-105/103.

# Vocal Harmony Type List (CVP-109/107/700)

Display Name	Harmony Type	Harmony Mode
Std:Duet	Standard:Duet	Chordal/Vocoder
Girl:Duet	Girl:Duet	Chordal/Vocoder
Lisa&Tina	Lisa and Tina	Chordal/Vocoder
Singer	Singer	Chordal/Vocoder
Dream Girls	Dream Girls	Chordal/Vocoder
MenChoir	Men Choir	Chordal/Vocoder
WomenChoir	Women Choir	Chordal/Vocoder
ClosedChoir	Closed Choir	Chordal/Vocoder
MixedChoir	Mixed Choir	Chordal/Vocoder
CountryMen	Country Men	Chordal/Vocoder
CntryGirls	Country Girls	Chordal/Vocoder
Barbershop	Barbershop	Chordal/Vocoder
MenCho:Jazz	MenChoir:Jazz	Chordal/Vocoder
WomenCho:J	WomenCho:Jazz	Chordal/Vocoder
CloseCho:J	ClosedCho:Jazz	Chordal/Vocoder
MixedCho:J	MixedCho:Jazz	Chordal/Vocoder
MenCho:Dia	MenCho:Diatonic	Chordal/Vocoder
Girl:Diatnc	Girl:Diatonic	Chordal/Vocoder
ACapellBoy	A Capella Boy	Chordal/Vocoder
ACapellaMix	A Capella Mix	Chordal/Vocoder
ACapellaDia	A Capella Dia	Chordal/Vocoder

Display Name	Harmony Type	Harmony Mode
Falset:Duet	Falsetto:Duet	Chordal/Vocoder
Falset:Trio	Falsetto:Trio	Chordal/Vocoder
Falsetto:Dia	Falsetto:Dia	Chordal/Vocoder
Falset:Jazz	Falsetto:Jazz	Chordal/Vocoder
FalACapella	Fal A Capella	Chordal/Vocoder
UnisonLow:2	Unison Low:2	Chordal/Vocoder
UnisonHigh:2	Unison High:2	Chordal/Vocoder
UnisonLow:3	Unison Low:3	Chordal/Vocoder
UnisonHigh:3	Unison High:3	Chordal/Vocoder
XG	XG	Chordal/Vocoder
Karaok:Duet	Karaoke:Duet	Chordal/Vocoder
Karaok:Trio	Karaoke:Trio	Chordal/Vocoder
KaraokGirl	Karaoke:Girl	Chordal/Vocoder
KaraokPich	Karaoke:Pitch	Chordal/Vocoder
SingBass	Sing the Bass	Chromatic
SpdyMouse	Speedy Mouse	Chromatic
ChromatXG	ChromaticXG	Chromatic
DetuneXG	DetuneXG	Detune
Voice&Inst	Voice & Inst	Chromatic
VoiceToInst	Voice to Inst	Chromatic
Thru	Thru	---

Note: Vocal harmony types that have "Chordal/Vocoder" in the Harmony Mode column can be used in either Chordal or Vocoder mode.

## Parameter Chart

Group	Contents	Default	V. Harmony Memory	One Touch Setting	Music Database	Set Up Memory	Registration Freeze Group	All Set Up	Backup Group	Recall Group
VOICE	RIGHT1 VOICE	Grand Piano	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT1 OCTAVE SHIFT	0	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT1 PAN	Center	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT1 VOLUME	127	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	Selected voice in each VOICE SELECT page	Top voice	—	—	—	—	—	○	VOICE SETTING	VOICE SETTING
	HARMONY ON/OFF	OFF	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	HARMONY TYPE	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	HARMONY VOLUME	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	HARMONY SPEED	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	DUAL	DUAL ON/OFF	OFF	—	○	○	○	VOICE SETTING	○	VOICE SETTING
DUAL	RIGHT2 VOICE	Strings Slow	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT2 OCTAVE SHIFT	0	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	DUAL DETUNE DEPTH	5	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT2 PAN	Center	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	RIGHT2 VOLUME	127	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	SPLIT	SPLIT ON/OFF	OFF	—	○	○	○	VOICE SETTING	○	VOICE SETTING
SPLIT	LEFT VOICE	Acous.Bass 1	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	LEFT OCTAVE SHIFT	+1	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	SPLIT POINT	F#2	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	LEFT PAN	Center	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	LEFT VOLUME	127	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	PEDAL RANGE	RIGHT	—	○	○	○	PEDAL	○	PEDAL	PEDAL
ORGAN FLUTES (109/107/700) <sup>1</sup>	ORGAN FLUTES VOICE	JAZZ ORGAN	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	FOOTAGE (16', 8', 5+1/3', 4', 2+2/3', 2', 1+1/3', 1')	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	ATTACK (4', 2+2/3', 2', LENGTH, RESPONSE)	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	ATTACK MODE (EACH/FIRST)	Depends on voice selection.	—	○	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
REVERB	REVERB ON/OFF	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	REVERB TYPE	Depends on style (voice) selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	Natural Reverb Type (109)	Depends on style (voice) selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	Reverb System (RIGHT1, RIGHT2, LEFT) (109)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	REVERB TOTAL DEPTH	64	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	REVERB PART DEPTH (RHYTHM, ACMP)	64	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
EFFECT	REVERB PART DEPTH (LEFT, RIGHT1, RIGHT2)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT ON/OFF	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT TYPE (RIGHT1, RIGHT2, LEFT) (105/103)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT1 TYPE (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT2 TYPE (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT DEPTH (105/103)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT1 DEPTH (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT2 DEPTH (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT VARIATION (105/103)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT1 VARIATION (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT2 VARIATION (109/107/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT1 PART (109/107/700)	RIGHT 1	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	EFFECT2 PART (109/107/700)	RIGHT 2	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
	CHORUS	CHORUS ON/OFF (109/107/105/700)	Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF
CHORUS TYPE		Depends on style selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
CHORUS DEPTH (RIGHT1, RIGHT2, LEFT)		Depends on voice selection.	—	○	○	○	REV/CHO/EFF	○	REV/CHO/EFF	REV/CHO/EFF
EQUALIZER <sup>2</sup> (109/107/700)	EQUALIZER TYPE	STANDARD	—	—	—	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING
	EQUALIZER GAIN	Depends on equalizer type selection.	—	—	—	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING



# Parameter Chart

Group	Contents	Default	V. Harmony Memory	One Touch Setting	Music Database	Set Up Memory	Registration Freeze Group	All Set Up	Backup Group	Recall Group	
REGISTRATION	REGISTRATION FREEZE ON/OFF	OFF	—	—	—	—	—	—	REGISTRATION	REGISTRATION	
	FREEZE CATEGORY ON/OFF (VOICE SETTING, REV/CHO/EFF (109/107/700), REVERB/EFFECT(105/103), TUNE, PEDAL, ACMP.SETTING, VOCAL HARMONY (109/107/700))	ACMP. SETTING: ON Others: OFF	—	—	—	—	—	—	REGISTRATION	REGISTRATION	
	REGISTRATION NAME (109/107/105/700)	REGIST Bank-Num.	—	—	—	—	Always recalled.	○	REGISTRATION	REGISTRATION	
	ALL REGISTRATION Memory Data (20)	Factory preset data	—	—	—	—	—	○	REGISTRATION	REGISTRATION	
MIXER	MIXER PART VOLUME (RHYTHM, BASS, CHORD, PAD, PHRASE)	110	—	—	○	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	KEYBOARD VOLUME	127	—	—	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
ACCOMPANIMENT	STYLE	8 Beat 1	—	—	○	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	Selected style in each STYLE SELECT page	Top style	—	—	—	—	—	○	ACMP SETTING	ACMP SETTING	
	MAIN A/B/C/D	MAIN C	—	—	○	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	ACMP. ON/OFF	OFF	—	ON	ON	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	ACCOMPANIMENT MODE	MULTI FINGER	—	—	—	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	TEMPO <sup>3</sup>	Depends on style selection.	—	—	○	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
	INTRO/FILL IN/ENDING	OFF	—	—	—	—	ACMP. SETTING	○	ACMP SETTING	ACMP SETTING	
METRONOME	METRONOME TYPE	NORMAL	—	—	—	—	—	○	ACMP SETTING	ACMP SETTING	
	METRONOME VOLUME	64	—	—	—	—	—	○	ACMP SETTING	ACMP SETTING	
	GUIDE MODE	NORMAL	—	—	—	—	—	—	—	—	
SONG	SOUND REPEAT	AUTO	—	—	—	—	—	○	SONG SETTING	SONG SETTING	
	PIANO ROLL DISPLAY	AUTO	—	—	—	—	—	○	SONG SETTING	SONG SETTING	
	GUIDE LAMP ON/OFF	ON	—	—	—	—	—	○	SONG SETTING	SONG SETTING	
	LYRICS ON/OFF	ON	—	—	—	—	—	○	SONG SETTING	SONG SETTING	
	SONG VOLUME	[ACMP/SONG VOLUME] slider value	—	—	—	—	—	—	SONG SETTING	—	
	HELP FUNCTION	LANGUAGE	ENGLISH	—	—	—	—	—	○	Always backed up.	—
		TUNE	440.0Hz (A3)	—	—	—	—	—	○	TUNE	TUNE
	TRANSPOSE (ALL)	0	—	—	—	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	TRANSPOSE (SONG)	0	—	—	—	—	—	○	VOICE SETTING	VOICE SETTING	
	VOICE SETTING	AUTO	—	—	—	—	—	○	VOICE SETTING	VOICE SETTING	
	KEY TOUCH	NORMAL	—	—	—	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	FIXED VELOCITY	76	—	—	—	—	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	LEFT PEDAL FUNCTION	SOFT	—	—	○	○	PEDAL	○	PEDAL	PEDAL	
	RIGHT PEDAL FUNCTION (109/107/700)	Depends on R1 voice selection.	—	—	○	○	VOICE SETTING	○	VOICE SETTING	VOICE SETTING	
	LEFT PART MIDI SEND Ch.	3	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	RIGHT 1 PART MIDI SEND Ch.	1	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	RIGHT 2 PART MIDI SEND Ch.	2	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	LOCAL CONTROL ON/OFF	ON	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	SYNC. CLOCK	INT.	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	PROGRAM CHANGE SEND/RECEIVE ON/OFF	TX&RX (ON)	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	CONTROL CHANGE SEND/RECEIVE ON/OFF	TX&RX (ON)	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	SYSTEM EXCLUSIVE SEND/RECEIVE ON/OFF	TX&RX (ON)	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	START/STOP SEND/RECEIVE ON/OFF	OFF	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	MIDI FILTER ON/OFF (all channels)	ON	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	MIDI TRANSPOSE RECEIVE ON/OFF	ON	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	ACMP & RHY SEND ON/OFF	OFF	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	HARMONY SEND ON/OFF	OFF	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	SEQUENCER SEND ON/OFF	OFF	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	REMOTE KEYBOARD	OFF	—	—	—	—	—	○	MIDI SETTING	MIDI SETTING	
	MICRO TUNING ON/OFF	OFF	—	—	—	—	—	○	TUNE	TUNE	
	MICRO TUNE. SETTING	0	—	—	—	—	—	○	TUNE	TUNE	
	SCALE TUNING SELECT	PRESET	—	—	—	—	TUNE	○	TUNE	TUNE	
	PRESET SCALE SELECT	EQUAL	—	—	—	—	TUNE	○	TUNE	TUNE	
	PRESET SCALE KEY	C	—	—	—	—	TUNE	○	TUNE	TUNE	
	USER SCALE SETTING	0	—	—	—	—	TUNE	○	TUNE	TUNE	
	BACKUP ON/OFF	Set separately for each group. <sup>4</sup>	—	—	—	—	—	—	Always backed up.	—	
	Video Out Screen SIZE (109/107/700)	LARGE	—	—	—	—	—	—	Always backed up.	—	
	Video Out CHARACTER Color (109/107/700)	BLUE (19)	—	—	—	—	—	—	Always backed up.	—	
	Video Out BACKGROUND Color (109/107/700)	WHITE	—	—	—	—	—	—	Always backed up.	—	
VOCAL HARMONY (109/107/700)	VOCAL HARMONY ON/OFF	OFF	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY TYPE	MenChoir	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY REVERB DEPTH	64	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY CHORUS DEPTH	0	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY EFFECT DEPTH	50	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY EFFECT TYPE	KARAOKE1	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY BALANCE	Depends on Vocal Harmony type.	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY PITCH TO NOTE PART	Depends on Vocal Harmony type.	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY GENDER TYPE	Depends on Vocal Harmony type.	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY HARMONY PART	Automatically set	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY HARMONY MODE	AUTO	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY PITCH CORRECTION	Depends on Vocal Harmony type.	○	—	—	—	VOCAL HARMONY	○	VOCAL HARMONY	VOCAL HARMONY	
	VOCAL HARMONY LOCK ON/OFF	OFF	—	—	—	—	—	○	VOCAL HARMONY	VOCAL HARMONY	

1 The One Touch Setting function can only set this parameter for the RIGHT1 part. The Registration function and All Set Up files can set this item for the RIGHT1, RIGHT2, and LEFT parts. Parameters related to the Organ Flutes voice will be recalled with a registration, Music Database setup, or All Setup file only if the Organ Flutes voice is selected by the recalled data.

2 The Registration function only stores the gain values for the currently selected equalizer type. The Backup function backs up the gain values for all equalizer types.

3 When a Music Database setup or registration is recalled during Auto Accompaniment playback, the style thereby selected will begin playing immediately if it is the same as the style that is currently playing, or from the top of the next measure if it is a different style.

4 REGISTRATION: ON; Others: OFF

# Fingering Chart .....

\* All fingerings shown are simple root-position types.

\* Die hier gezeigten Akkorde sind jeweils die Grundakkorde.

\* Tous les doigts indiqués sont du type à position fondamentale simple.

\* Todos los digitados se muestran como tipos de posición de raíz sencilla.

## Example for "C" chords Beispiele für "C"-Akkorde Exemples d'accords en "C" Ejemplo de acordes "C"

C	C6	CM7	CM7(b5)	CM7(#11)
Cadd9	CM7(9)	C6(9)	C(b5)	Caug
C7(#5)	CM7(#5)	Cm	Cm6	Cm7
Cm7(b5)	Cmadd9	CM7(9)	Cm7(11)	CmM7(b5)
CmM7	CmM7(9)	Cm(b5)	Cdim7	C7
C7sus4	C7(9)	C7(#11)	C7(13)	C7(b5)
C7(b9)	C7(b13)	C7(#9)	Csus4	

# MIDI Data Format

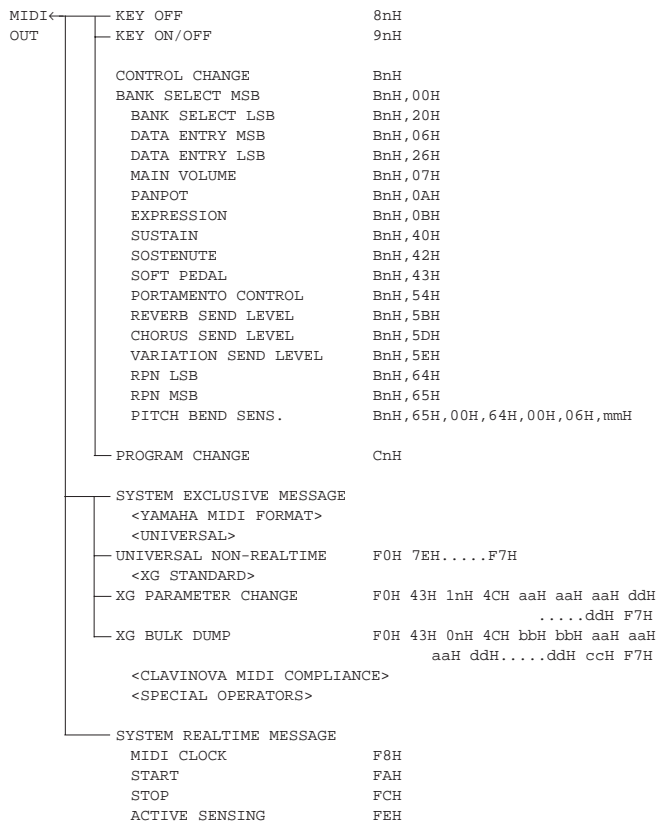
Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers. Hexadecimal numbers may include the letter "H" as a suffix. Also, "n" can freely be defined as any whole number.

To enter data/values, refer to the table below.

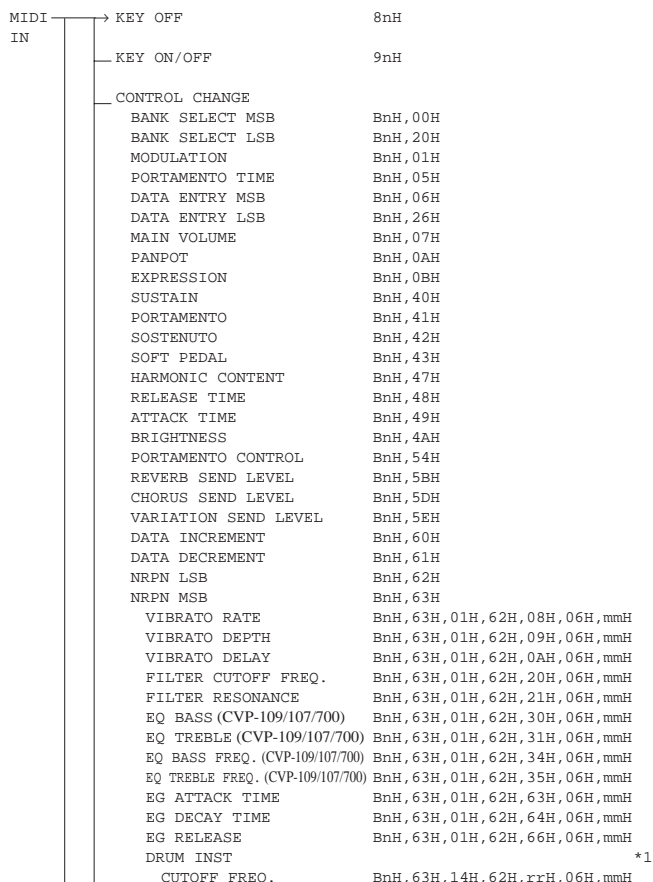
Decimal	Hexadecimal	Binary
0	00	0000 0000
1	01	0000 0001
2	02	0000 0010
3	03	0000 0011
4	04	0000 0100
5	05	0000 0101
6	06	0000 0110
7	07	0000 0111
8	08	0000 1000
9	09	0000 1001
10	0A	0000 1010
11	0B	0000 1011
12	0C	0000 1100
13	0D	0000 1101
14	0E	0000 1110
15	0F	0000 1111
16	10	0001 0000
17	11	0001 0001
18	12	0001 0010
19	13	0001 0011
20	14	0001 0100
21	15	0001 0101
22	16	0001 0110
23	17	0001 0111
24	18	0001 1000
25	19	0001 1001
26	1A	0001 1010
27	1B	0001 1011
28	1C	0001 1100
29	1D	0001 1101
30	1E	0001 1110
31	1F	0001 1111
32	20	0010 0000
33	21	0010 0001
34	22	0010 0010
35	23	0010 0011
36	24	0010 0100
37	25	0010 0101
38	26	0010 0110
39	27	0010 0111
40	28	0010 1000
41	29	0010 1001
42	2A	0010 1010
43	2B	0010 1011
44	2C	0010 1100
45	2D	0010 1101
46	2E	0010 1110
47	2F	0010 1111
48	30	0011 0000
49	31	0011 0001
50	32	0011 0010
51	33	0011 0011
52	34	0011 0100
53	35	0011 0101
54	36	0011 0110
55	37	0011 0111
56	38	0011 1000
57	39	0011 1001
58	3A	0011 1010
59	3B	0011 1011
60	3C	0011 1100
61	3D	0011 1101
62	3E	0011 1110
63	3F	0011 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) displays the Note On Message for each channel (1-16). 176-191/ BnH/1011 0000-1011 1111 displays the Control Change Message for each channel (1-16). 192-207/CnH/1100 0000-1100 1111 displays the Program Change Message for each channel (1-16). 240/F0H/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

## (1) TRANSMIT FLOW



## (2) RECEIVE FLOW



FILTER RESONANCE	BnH, 63H, 15H, 62H, rrH, 06H, mmH
EG ATTACK RATE	BnH, 63H, 16H, 62H, rrH, 06H, mmH
EG DECAY RATE	BnH, 63H, 17H, 62H, rrH, 06H, mmH
PITCH COARSE	BnH, 63H, 18H, 62H, rrH, 06H, mmH
PITCH FINE	BnH, 63H, 19H, 62H, rrH, 06H, mmH
LEVEL	BnH, 63H, 1AH, 62H, rrH, 06H, mmH
PANPOT	BnH, 63H, 1CH, 62H, rrH, 06H, mmH
REVERB SEND	BnH, 63H, 1DH, 62H, rrH, 06H, mmH
CHORUS SEND	BnH, 63H, 1EH, 62H, rrH, 06H, mmH
VARIATION SEND	BnH, 63H, 1FH, 62H, rrH, 06H, mmH
RPN LSB	BnH, 64H
RPN MSB	BnH, 65H
PITCH BEND SENS.	BnH, 65H, 00H, 64H, 00H, 06H, mmH
FINE TUNING	BnH, 65H, 00H, 64H, 01H, 06H, mmH, 26H, 11H
COARSE TUNING	BnH, 65H, 00H, 64H, 02H, 06H, mmH
NULL	BnH, 65H, 7FH, 64H, 7FH
ALL SOUND OFF	BnH, 78H, 00H
RESET ALL CONTROLLERS	BnH, 79H, 00H
ALL NOTES OFF	BnH, 7BH, 00H
OMNI OFF	BnH, 7CH, 00H
OMNI ON	BnH, 7DH, 00H
MONO	BnH, 7EH
POLY	BnH, 7FH
PROGRAM CHANGE	CnH
CHANNEL AFTER TOUCH	DnH
PITCH BEND CHANGE	EnH
SYSTEM EXCLUSIVE MESSAGE	
<YAMAHA MIDI FORMAT>	
<UNIVERSAL>	
UNIVERSAL REALTIME	F0H 7FH....F7H
UNIVERSAL NON-REALTIME	F0H 7EH....F7H
<XG STANDARD>	
XG PARAMETER CHANGE	F0H 43H 1nH 4CH aaH aaH aaH ddH .....ddH F7H
XG BULK DUMP	F0H 43H 0nH 4CH bbH bbH aaH aaH aaH ddH.....ddH ccH F7H
PARAMETER REQUEST	F0H 43H 3nH 4CH aaH aaH aaH F7H
DUMP REQUEST	F0H 43H 2nH 4CH aaH aaH aaH F7H
<CLAVINOVA MIDI COMPLIANCE>	
<SPETIAL OPERATORS>	
<Others>	
SYSTEM REALTIME MESSAGE	
MIDI CLOCK	F8H
START	FAH
STOP	FCH
ACTIVE SENSING	FEH

## (3) TRANSMIT/RECEIVE DATA

### (3-1) CHANNEL VOICE MESSAGES

#### (3-1-1) KEY OFF

STATUS	1000nnnn(8nH)	n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk	k = 0 (C-2) - 127 (G8)
VELOCITY	0vvvvvvv	v: ignored

#### (3-1-2) KEY ON/OFF

STATUS	1001nnnn(9nH)	n = 0 - 15 VOICE CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk	k = 0 (C-2) - 127 (G8)
VELOCITY	0vvvvvvv	(v ≠ 0) NOTE ON (v = 0) NOTE OFF

#### (3-1-3) PROGRAM CHANGE

STATUS	1100nnnn(CnH)	n = 0 - 15 VOICE CHANNEL NUMBER
PROGRAM NUMBER	0ppppppp	p = 0 - 127

#### \* PROGRAM NUMBER: XG DRUM VOICE number correspondence

P = 0	Standard Kit
P = 1	Standard2 Kit
P = 4	Hit Kit (CVP-109/107/700)
P = 8	Room Kit
P = 16	Rock Kit
P = 24	Electro Kit
P = 25	Analog Kit
P = 27	Dance Kit
P = 32	Jazz Kit
P = 40	Brush Kit
P = 48	Classic Kit

#### \* PROGRAM NUMBER: XG SFX KIT number correspondence

P = 0	SFX1 Kit
P = 1	SFX2 Kit

When DRUM VOICE is selected and program change data for a different DRUM VOICE is received, the currently selected Drum Setup data will be replaced with the new DRUM VOICE DATA.

### (3-1-4) CHANNEL AFTER TOUCH (Receive only)

STATUS	1101nnnn(DnH)	n = 0 - 15 VOICE CHANNEL NUMBER
VALUE	0vvvvvvv	v = 0 - 127 AFTER TOUCH VALUE

### (3-1-5) PITCH BEND CHANGE

STATUS	1110nnnn(EnH)	n = 0 - 15 VOICE CHANNEL NUMBER
LSB	0vvvvvvv	PITCH BEND CHANGE LSB
MSB	0vvvvvvv	PITCH BEND CHANGE MSB

### (3-1-6) CONTROL CHANGE

STATUS	1011nnnn(BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER	0ccccccc	
CONTROL VALUE	0vvvvvvv	

#### \* Transmit CONTROL NUMBER.

c = 0	BANK SELECT MSB	; v = 0: XG NORMAL, 64: SFX NORMAL, 126: XG SFX KIT, 127: XG DRUM
c = 32	BANK SELECT LSB	; v = 0 - 127
c = 6	DATA ENTRY MSB	; v = 0 - 127 *1
c = 38	DATA ENTRY LSB	; v = 0 - 127 *1
c = 7	MAIN VOLUME	; v = 0 - 127
c = 10	PANPOT	; v = 0 - 127
c = 11	EXPRESSION	; v = 0 - 127
c = 64	SUSTAIN	; v = 0-63: OFF, 64-127: ON *2
c = 66	SOSTENUTO	; v = 0-63: OFF, 64-127: ON *2
c = 67	SOFT PEDAL	; v = 0-63: OFF, 64-127: ON *2
c = 84	PORTAMENTO CONTROL	; v = 0 - 127
c = 91	REVERB SEND LEVEL	; v = 0 - 127
c = 93	CHORUS SEND LEVEL	; v = 0 - 127
c = 94	VARIATION SEND LEVEL	; v = 0 - 127
(When only Connection = 1[System])		
c = 100	RPN LSB	; v = 0 - 127
c = 101	RPN MSB	; v = 0 - 127

#### \* Receive CONTROL NUMBER.

c = 0	BANK SELECT MSB	; v = 0: XG NORMAL, 64: SFX NORMAL, 126: XG SFX KIT, 127: XG DRUM
c = 32	BANK SELECT LSB	; v = 0 - 127
c = 1	MODULATION	; v = 0 - 127 *2
c = 5	PORTAMENTO TIME	; v = 0 - 127 *2
c = 6	DATA ENTRY MSB	; v = 0 - 127 *1
c = 38	DATA ENTRY LSB	; v = 0 - 127 *1
c = 7	MAIN VOLUME	; v = 0 - 127
c = 10	PANPOT	; v = 0 - 127
c = 11	EXPRESSION	; v = 0 - 127
c = 64	SUSTAIN	; v = 0-63: OFF, 64-127: ON *2
c = 65	PORTAMENTO	; v = 0-63: OFF, 64-127: ON *2
c = 66	SOSTENUTO	; v = 0-63: OFF, 64-127: ON *2
c = 67	SOFT PEDAL	; v = 0-63: OFF, 64-127: ON *2
c = 71	HARMONIC CONTENT	; v = 0:-64 - 64:0 - 127:+63 *2
c = 72	RELEASE TIME	; v = 0:-64 - 64:0 - 127:+63 *2
c = 73	ATTACK TIME	; v = 0:-64 - 64:0 - 127:+63 *2
c = 74	BRIGHTNESS	; v = 0:-64 - 64:0 - 127:+63 *2
c = 84	PORTAMENTO CONTROL	; v = 0 - 127 *2
c = 91	REVERB SEND LEVEL	; v = 0 - 127
c = 93	CHORUS SEND LEVEL	; v = 0 - 127
c = 94	VARIATION SEND LEVEL	; v = 0 - 127
(When only Connection = 1[System])		
c = 96	DATA INCREMENT	; v = 0 - 127 *1
c = 97	DATA DECREMENT	; v = 0 - 127 *1
RPN MSB/LSB, NRPN MSB/LSB		

\*1 Only when setting the appointed parameter with RPN, NRPN.

\*2 Does not effect Rhythm Voice.

- Until a PROGRAM CHANGE message is received, the BANK SELECT operation will be suspended. When a Voice, including VOICE BANK, is changed, set the BANK SELECT and Program Change Message, and transmit in the following order, BANK SELECT MSB, LSB, PROGRAM CHANGE.

- MODULATION controls the Vibrato Depth.

- PORTAMENTO TIME controls the Pitch Change Speed when the Portamento Switch = ON. 0 being the shortest time, and 127 being the longest.

- PANPOT changes the value for the melody voice and rhythm voice in relation to the preset value.

- Portamento time is fixed to 0 when the PORTAMENTO CONTROL is used.

- **HARMONIC CONTENT** applies adjustment to the resonance value that is set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. As values get higher the sound becomes increasingly eccentric. Note that for some voices the effective parameter range is narrower than the legal parameter range.
- **RELEASE TIME** applies adjustment to the envelope release time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- **ATTACK TIME** applies adjustment to the envelope attack time set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment.
- **BRIGHTNESS** applies adjustment to the cut-off frequency set by the voice. This parameter specifies relative change with the value of 64 producing 0 adjustment. Lower voices produce a softer sound. For some voices the effective parameter range is narrower than the legal parameter range.

### (3-2) CHANNEL MODE MESSAGES

STATUS	1011nnnn (BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
CONTROL NUMBER	0cccccc	c = CONTROL NUMBER
CONTROL VALUE	0vvvvvvv	v = DATA VALUE

#### (3-2-1) ALL SOUND OFF (Receive only)

(CONTROL NUMBER = 78H , DATA VALUE = 0)

Switches off all sound from the channel. Reset Note On and Hold On conditions established by Channel Messages.

#### (3-2-2) RESET ALL CONTROLLERS (Receive only)

(CONTROL NUMBER = 79H , DATA VALUE = 0)

Resets controllers as follows.

PITCH BEND CHANGE	0 (Center)
AFTER TOUCH	0 (min.)
MODULATION	0 (min.)
EXPRESSION	127 (max.)
SUSTAIN	0 (off)
SOSTENUTO	0 (off)
SOFT PEDAL	0 (off)
NRPN	Sets number to null. (Internal data remains unchanged)
RPN	Sets number to null. (Internal data remains unchanged)
PORTAMENT CONTROL	Resets portamento source note number
PORTAMENTO	0 (off)

#### (3-2-3) ALL NOTES OFF (Receive only)

(CONTROL NUMBER = 7BH , DATA VALUE = 0)

Switches off all of the channel's "on" notes. However, any notes being held by SUSTAIN or SOSTENUTO continue to sound until SUSTAIN/SOSTENUTO goes off.

#### (3-2-4) OMNI OFF (Receive only) (CONTROL NUMBER = 7CH , DATA VALUE = 0)

Same processing as for All Notes Off.

#### (3-2-5) OMNI ON (Receive only) (CONTROL NUMBER = 7DH , DATA VALUE = 0)

Same processing as for All Notes Off. Omni On is not executed.

#### (3-2-6) MONO (Receive only) (CONTROL NUMBER = 7EH , DATA VALUE = 0)

Same processing as for All Notes Off. If the 3rd byte is in a range of 0-16 the corresponding channel will be changed to Mode 4 (m=1).

#### (3-2-7) POLY (Receive only) (CONTROL NUMBER = 7FH , DATA VALUE = 0)

Same processing as for All Sounds Off and the corresponding channel will be changed to Mode 3.

### (3-3) REGISTERED PARAMETER NUMBER(RPN)

STATUS	1011nnnn (BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
RPN LSB	01100100 (64H)	
RPN LSB NUMBER	0ppppppp	p = RPN LSB (refer to the list below)
RPN MSB	01100101 (65H)	
RPN MSB NUMBER	0qqqqqqq	q = RPN MSB (refer to the list below)
DATA ENTRY MSB	00000110 (06H)	
DATA VALUE	0mmmmmmm	m = Data Value
DATA ENTRY LSB	00100110 (26H)	
DATA VALUE	01111111	l = Data Value

First appoints the parameter for RPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

RPN	D. ENTRY		
LSB MSB	MSB LSB	PARAMETER NAME	DATA RANGE
00H 00H	mmH -	PITCH BEND SENSITIVITY	00H-18H (0 - 24 semitones)
01H 00H	mmH 11H	FINE TUNE	{mmH,11H} = {00H,00H} - {40H,00H} - {7FH,7FH} (-8192*100/8192) - 0 - (+8192*100/8192)
02H 00H	mmH -	COARSE TUNE	28H - 40H - 58H (-24 - 0 - +24 semitones)
7FH 7FH	- -	NULL	Clears the current RPN number setting.

Does not change the internal parameter settings.

### (3-4) NON-REGISTERED PARAMETER NUMBER(NRPN) (Receive only)

STATUS	1011nnnn (BnH)	n = 0 - 15 VOICE CHANNEL NUMBER
NRPN LSB	01100010 (62H)	
NRPN LSB NUMBER	0ppppppp	p = NRPN LSB (refer to the list below)
NRPN MSB	01100011 (63H)	
NRPN MSB NUMBER	0qqqqqqq	q = NRPN MSB (refer to the list below)
DATA ENTRY MSB	00000110 (06H)	
DATA VALUE	0mmmmmmm	m = Data Value

First appoints the parameter for NRPN MSB/LSB, then sets the parameter value for data entry MSB/LSB.

NRPN	D. ENTRY		
MSB LSB	MSB LSB	PARAMETER NAME	DATA RANGE
01H 08H	mmH -	VIBRATO RATE	00H - 40H - 7FH (-64 - 0 - +63)
01H 09H	mmH -	VIBRATO DEPTH	00H - 40H - 7FH (-64 - 0 - +63)
01H 0AH	mmH -	VIBRATO DELAY	00H - 40H - 7FH (-64 - 0 - +63)
01H 20H	mmH -	FILTER CUTOFF FREQUENCY	00H - 40H - 7FH (-64 - 0 - +63)
01H 21H	mmH -	FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
01H 30H	mmH -	EQ BASS (CVP-109/107/700)	00H - 40H - 7FH (-64 - 0 - +63)
01H 31H	mmH -	EQ TREBLE (CVP-109/107/700)	00H - 40H - 7FH (-64 - 0 - +63)
01H 34H	mmH -	EQ BASS FREQ. (CVP-109/107/700)	00H - 40H - 7FH (-64 - 0 - +63)
01H 35H	mmH -	EQ TREBLE FREQ. (CVP-109/107/700)	00H - 40H - 7FH (-64 - 0 - +63)
01H 63H	mmH -	EG ATTACK TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H 64H	mmH -	EG DECAY TIME	00H - 40H - 7FH (-64 - 0 - +63)
01H 66H	mmH -	EG RELEASE	00H - 40H - 7FH (-64 - 0 - +63)
14H rrH	mmH -	DRUM FILTER CUTOFF FREQ.	00H - 40H - 7FH (-64 - 0 - +63)
15H rrH	mmH -	DRUM FILTER RESONANCE	00H - 40H - 7FH (-64 - 0 - +63)
16H rrH	mmH -	DRUM AEG ATTACK RATE	00H - 40H - 7FH (-64 - 0 - +63)
17H rrH	mmH -	DRUM AEG DECAY RATE	00H - 40H - 7FH (-64 - 0 - +63)
18H rrH	mmH -	DRUM PITCH COARSE	00H - 40H - 7FH (-64 - 0 - +63)
19H rrH	mmH -	DRUM PITCH FINE	00H - 40H - 7FH (-64 - 0 - +63)
1AH rrH	mmH -	DRUM LEVEL	00H - 7FH (0 - max.)
1CH rrH	mmH -	DRUM PANPOT	00H ,01H - 40H - 7FH (random, left - center - right)
1DH rrH	mmH -	DRUM REVERB SEND LEVEL	00H - 7FH (0 - max.)
1EH rrH	mmH -	DRUM CHORUS SEND LEVEL	00H - 7FH (0 - max.)
1FH rrH	mmH -	DRUM VARIATION SEND LEVEL	00H - 7FH (0 - max.)

The MSB 14H-1FH (for drums) message is received when multi-part parameters PART MODE = DRUMS1...2.

rrH : drum instrument note number

### (3-5) SYSTEM REALTIME MESSAGES

#### (3-5-1) MIDI CLOCK

STATUS	11111000 (F8H)
--------	----------------

**Transmission:** 96 clocks per measure are transmitted.

**Reception:** If the instrument's clock is set to external, after FAH is received from the external device the instrument's clock will sync with the 96 beats per measure received from the external device.

Decides whether the internal clock, or Timing Clocks received via the MIDI IN will be used.

#### (3-5-2) START

STATUS	11111010 (FAH)
--------	----------------

**Transmission:** Transmitted when instrument's Rhythm or Song playback is started.

**Reception:** Depending upon the condition, Rhythm, Song Playback, or Song Rec will start.

#### (3-5-3) STOP

STATUS	11111100 (FCH)
--------	----------------

**Transmission:** Transmitted when instrument's Rhythm or Song playback is stopped.

**Reception:** Depending upon the condition, Rhythm, Song Playback, or Song Rec will stop.

#### (3-5-4) ACTIVE SENSING

STATUS	11111110 (FEH)
--------	----------------

**Transmission:** Transmitted approximately once every 200msec.

**Reception:** Sensing is started once this Code is received. If Status or Data is not received within 40ms, the MIDI Receive Buffer will be cleared, and all notes, including those being sustained, will be cut OFF. Also, all control values will be reset to their factory defaults.



## (3-6) SYSTEM EXCLUSIVE MESSAGE

### (3-6-1) YAMAHA MIDI FORMAT

#### (3-6-1-1) SECTION CONTROL

binary	hexadecimal	Exclusive status
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	00	
0sssssss	SS	Switch No.
		00H : INTRO A
		01H : INTRO B
		02H : INTRO C/D
		03H~07H : INTRO C/D
		08H : MAIN A
		09H : MAIN B
		0AH : MAIN C
		0BH~0FH : MAIN D
		10H : FILL IN A
		11H : FILL IN B
		12H : FILL IN C
		13H~17H : FILL IN D
		18H : BREAK FILL
		19H : BREAK FILL
		1AH : BREAK FILL
		1BH~1FH : BREAK FILL
		20H : ENDING A
		21H : ENDING B
		22H : ENDING C/D
		23H~27H : ENDING C/D
0ddddddd	DD	Switch On/Off: 00H(Off), 7FH(On)
11110111	F7	End of Exclusive

When an ON code is received, the appointed section will be changed.

#### (3-6-1-2) TEMPO CONTROL

binary	hexadecimal	Exclusive status
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000000	01	
0ttttttt	TT	Tempo4
0ttttttt	TT	Tempo3
0ttttttt	TT	Tempo2
0ttttttt	TT	Tempo1
11110111	F7	End of Exclusive

The internal clock will be set to the received Tempo value.

Tempo Meta Event is a large data block (24-bit), it is divided into 4 groups with 7-bits going into each of the Tempos 1-4 (4 receives the remaining 3 bits).

#### (3-6-1-3) CHORD CONTROL type1

binary	hexadecimal	Exclusive status
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01111110	7E	Style
00000010	02	type 1
0ddddddd	dd	chord root(cr)
0ddddddd	dd	chord type(ct)
0ddddddd	dd	bass note(bn)
0ddddddd	dd	bass type(bt)
11110111	F7	End of Exclusive

Chord transmit: Transmitted using type 1 format.

cr	Chord Root	0kkknnnn (k:Change symbol, n:Note)
Binary	Hex	Change symbol Binary Hex Note
0000nnnn	0n	bbb(3 flats) 0kkk0000 k0 reserved
0001nnnn	1n	bb(2 flats) 0kkk0001 k1 C
0010nnnn	2n	b(1 flat) 0kkk0010 k2 D
0011nnnn	3n	natural 0kkk0011 k3 E
0100nnnn	4n	#(1 sharp) 0kkk0100 k4 F
0101nnnn	5n	##(2 sharps) 0kkk0101 k5 G
0110nnnn	6n	###(3 sharps) 0kkk0110 k6 A
		0kkk0111 k7 B

ct	Chord Type	0 - 34,127					
Binary	Hex	Dec	Chord type	Binary	Hex	Dec	Chord type
00000000	00	0	Maj	00010010	12	18	dim7
00000001	01	1	Maj6	00010011	13	19	7th
00000010	02	2	Maj7	00010100	14	20	7sus4
00000011	03	3	Maj7(#11)	00010101	15	21	7b5
00000100	04	4	Maj(9)	00010110	16	22	7(9)
00000101	05	5	Maj7(9)	00010111	17	23	7(#11)
00000110	06	6	Maj6(9)	00011000	18	24	7(13)
00000111	07	7	aug	00011001	19	25	7(b9)
00001000	08	8	min	00011010	1A	26	7(b13)
00001001	09	9	min6	00011011	1B	27	7(#9)
00001010	0A	10	min7	00011100	1C	28	Maj7aug
00001011	0B	11	min7b5	00011101	1D	29	7aug
00001100	0C	12	min(9)	00011110	1E	30	1+8
00001101	0D	13	min7(9)	00011111	1F	31	1+5
00001110	0E	14	min7(11)	00100000	20	32	sus4
00001111	0F	15	minMaj7	00100001	21	33	1+2+5
00010000	10	16	minMaj7(9)	00100010	22	34	cc
00010001	11	17	dim				
bn	On Bass Note			Same as Chord root,			
				127:No bass chord			
bt	Bass Chord			Same as Chord type			
				127:No bass chord			

### (3-6-2) UNIVERSAL SYSTEM EXCLUSIVE

#### (3-6-2-1) UNIVERSAL REALTIME MESSAGE

##### (3-6-2-1-1) MIDI MASTER VOLUME (Receive only)

binary	hexadecimal	Exclusive status
11110000	F0	Exclusive status
01111110	7F	Universal Realtime
01111111	7F	ID of target Device
00001001	04	Sub-ID #1=Device Control Message
00000001	01	Sub-ID #2=Master Volume
0sssssss	SS	Volume LSB
0ttttttt	TT	Volume MSB
11110111	F7	End of Exclusive
		or
11110000	F0	Exclusive status
01111110	7F	Universal Realtime
0xxxxnnn	XN	When N is received N=0-F, whichever is received.
		When N is transmitted N always=0.
		X = don't care
00001001	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

The volume for all channels will be changed simultaneously.

The TT value is used as the MIDI Master Volume value. (the SS value is ignored.)

#### (3-6-2-2) UNIVERSAL NON REALTIME MESSAGE

##### (3-6-2-2-1) GENERAL MIDI SYSTEM ON

binary	hexadecimal	Exclusive status
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
01111111	7F	ID of target Device
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive
		or
11110000	F0	Exclusive status
01111110	7E	Universal Non-Realtime
0xxxxnnn	XN	When N is received N=0-F, whichever is received.
		When N is transmitted N always=0.
		X = don't care
00001001	09	Sub-ID #1=General MIDI Message
00000001	01	Sub-ID #2=General MIDI On
11110111	F7	End of Exclusive

Depending upon the received ON message, the System Mode will be changed to XG.

Except MIDI Master Tuning, all control data be reset to default values.

This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

After the GM System ON message is received, message reception of the following will be limited.

- Bank Select MSB-LSB in channel 10 will be ignored and the drum voice will be fixed.
- Bank Select MSB-LSB except in channel 10 will be ignored except 127/0.
- NRPN is not received.

When XG SYSTEM ON is received, these restrictions will be cancelled.

## (3-6-3) XG STANDARD

### (3-6-3-1) XG PARAMETER CHANGE

#### (3-6-3-1-1) XG SYSTEM ON

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
00000000	00	Address High
00000000	00	Address Mid
01111110	7E	Address Low
00000000	00	Data
11110111	F7	End of Exclusive

Depending upon the received ON message, the SYSTEM MODE will be changed to XG. Controllers will be reset, all values of Multi Part and Effect, and All System values denoted by "XG" data within All System will be reset to default values in the table. This message requires approximately 50ms to execute, so sufficient time should be allowed before the next message is sent.

#### (3-6-3-1-2) XG PARAMETER CHANGE

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	Device Number
01001100	4C	Model ID
0aaaaaaaa	AA	Address High
0aaaaaaaa	AA	Address Mid
0aaaaaaaa	AA	Address Low
0ddddd	DD	Data
11110111	F7	End of Exclusive

For parameters with data size of 2 or 4, transmit the appropriate number of data bytes. For more information on Address and Parameters, refer to < Table 1-2 > (page 23) and < Table 1-4 > ~ < Table 1-10 > (pages 23-29).

The following Parameter Changes are handled.

- XG System Data
- Multi Effect 1 Data
- Multi EQ Data (CVP-109/107/700)
- Multi Effect 2 Data (CVP-109/107/700)
- Special Effect Data (CVP-109/107/700)
- Multi Part Data
- A/D Part Data (CVP-109/107/700)
- Drums Setup Data

### (3-6-3-2) XG BULK DUMP

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0N	Device Number
01001100	4C	Model ID
0bbbbbbb	BB	ByteCount
0bbbbbbb	BB	ByteCount
0aaaaaaaa	AA	Address High
0aaaaaaaa	AA	Address Mid
0aaaaaaaa	AA	Address Low
0ddddd	DD	Data
0ccccccc	CC	Check sum
11110111	F7	End of Exclusive

For more information on Address and Byte Count, refer to < Table 1-2 > ~ < Table 1-10 > (pages 23-29).

The Check Sum value is set such that the sum of Byte Count, Address, Data, and Check Sum has value zero in its seven least significant bits.

If the top of the block is appointed to the Address the XG Bulk Dump, Bulk Request will be received.

The Block is a unit that consists of the data, arranged in the list, as the Total Size.

The following Bulk Dumps are handled.

- XG System Data
- Multi Effect 1 Data (Individual effect unit)
- Multi EQ Data (CVP-109/107/700)
- Multi Effect 2 Data (CVP-109/107/700)
- Special Effect Data (CVP-109/107/700)
- Multi Part Data (Individual part unit)
- A/D Part Data (CVP-109/107/700)
- Drums Setup Data (Individual note unit)
- System Information (Transmit only)

### (3-6-3-3) XG PARAMETER REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01001100	4C	Model ID
0aaaaaaaa	AA	Address High
0aaaaaaaa	AA	Address Mid
0aaaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > (page 23) and < Table 1-4 > ~ < Table 1-10 > (pages 23-29).

The following Parameter Requests are handled.

- XG System Data
- Multi Effect 1 Data
- Multi EQ Data (CVP-109/107/700)
- Multi Effect 2 Data (CVP-109/107/700)
- Special Effect Data (CVP-109/107/700)
- Multi Part Data
- A/D Part Data (CVP-109/107/700)
- Drums Setup Data

### (3-6-3-4) XG DUMP REQUEST (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01001100	4C	Model ID
0aaaaaaaa	AA	Address High
0aaaaaaaa	AA	Address Mid
0aaaaaaaa	AA	Address Low
11110111	F7	End of Exclusive

For more information on Address and Byte Count refer to < Table 1-2 > ~ < Table 1-10 > (pages 23-29).

The following Dump Requests are handled.

- XG System Data
- Multi Effect 1 Data (Individual module unit)
- Multi EQ Data (CVP-109/107/700)
- Multi Effect 2 Data (CVP-109/107/700)
- Special Effect Data (CVP-109/107/700)
- Multi Part Data (Individual part unit)
- A/D Part Data (CVP-109/107/700)
- Drums Setup Data (Individual note unit)
- System Information

## (3-6-4) CLAVINOVA MIDI COMPLIANCE

### (3-6-4-1) INTERNAL CLOCK / EXTERNAL CLOCK (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
0000001n	0N	N: 2 (Internal Clock), 3 (External Clock)
11110111	F7	End of Exclusive

### (3-6-4-2) BULK DUMP ORGAN FLUTE DATA (CVP-109/107/700)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA
01110011	73	CLAVINOVA ID
00000001	01	Model ID (Clavinova common ID)
00000110	06	Bulk ID
00001011	0B	Bulk No. (ORGAN FLUTE Bulk Dump DATA)
0000nnnn	0n	Data Length
0000nnnn	0n	Data Length
0000nnnn	0n	Data Length
0000nnnn	0n	Data Length (Data Length=nnnnH bytes)
0ddddd	dd1	Bulk Data
0ccccccc	cc	don't care
11110111	F7	End of Exclusive

Data Length = 16Hbytes

[BULK DATA items ddl...dd22]

1st	OnH	n: MIDI Channel No.	Description
2nd	Drawber	[1'] 00 - 07H	0: -∞ [dB]
3rd		[1 1/3'] 00 - 07H	1: -12 [dB]
4th		don't care 00H	2: -9 [dB]
5th		[2'] 00 - 07H	3: -6 [dB]
6th		[2 2/3'] 00 - 07H	4: -4.5 [dB]
7th		[4'] 00 - 07H	5: -3 [dB]
8th		[5 1/3'] 00 - 07H	6: -1.5 [dB]
9th		[8'] 00 - 07H	7: 0 [dB]
10th		[16'] 00 - 07H	
11th		[Attack 2'] 00 - 07H	
12th		[Attack 2 2/3'] 00 - 07H	
13th		[Attack 4'] 00 - 07H	
14th	Settings	[Attack Length] 00 - 07H	
15th		[Response] 00 - 07H	
16th		[Attack Mode] 00 - 01H 00H:Each, 01H:First	
17th		don't care 00H	
18th		don't care 00H	
19th		don't care 00H	
20th		don't care 00H	
21th		don't care 00H	
22th		don't care 00H	

### (3-6-4-3) DOC MULTI TIMBRE ON / OFF (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00000110	1N	N:3 (DOC Multi Timbre Off), 4 (DOC Multi Timbre On)
11110111	F7	End of Exclusive

### (3-6-4-4) PANEL LED ON / OFF (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
00000001	01	Clavinova common ID
00011010	1A	PANEL LED On/Off
0mmmmmm	MM	MM:00H (LED Off), 01H (LED On), 02H (The LED flashes) 03H (LED All off), 04H (Panel LED returns to normal operation)
00000000	00	
0nnnnnnn	NN	LED No.
11110111	F7	End of Exclusive

Remotely switches the Panel LED On/Off.

### (3-6-4-5) PANEL VOICE SETTING (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00100010	22	Piano Live Exclusive Substatus
00000000	00	Panel Voice Setting Substatus
0000nnnn	0n	Panel Part No. 00H (RIGHT 1) 01H (RIGHT 2) 02H (LEFT)
0mmmmmm	mm	Bank Select MSB
01111111	11	Bank Select LSB
0ppppppp	pp	Program Change
11110111	F7	End of Exclusive

### (3-6-4-6) PANEL VOICE VOLUME SETTING (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00100010	22	Piano Live Exclusive Substatus
00000001	01	Panel Voice Volume Setting Substatus
0000nnnn	0n	Panel Part No. 00H (RIGHT 1) 01H (RIGHT 2) 02H (LEFT)
0vvvvvvv	vv	Value (0 - 7FH)
11110111	F7	End of Exclusive

### (3-6-4-7) PANEL VOICE REVERB DEPTH SETTING (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00100010	22	Piano Live Exclusive Substatus
00000010	02	Panel Voice Reverb Depth Setting Substatus
0000nnnn	0n	Panel Part No. 00H (RIGHT 1) 01H (RIGHT 2) 02H (LEFT)
0vvvvvvv	vv	Value (0 - 7FH)
11110111	F7	End of Exclusive

### (3-6-4-8) PANEL VOICE EFFECT DEPTH SETTING (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00100010	22	Piano Live Exclusive Substatus
00000011	03	Panel Voice Effect Depth Setting Substatus
0000nnnn	0n	Panel Part No. 00H (RIGHT 1) 01H (RIGHT 2) 02H (LEFT)
0vvvvvvv	vv	Value (0 - 7FH)
11110111	F7	End of Exclusive

### (3-6-4-9) MIDI FA CANCEL (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
01100001	61	MIDI FA Cancel
11110111	F7	End of Exclusive

If this message is received, even if FAH is received the Rhythm will not start.

### (3-6-5) SPECIAL OPERATORS

#### (3-6-5-1) SPLIT POINT

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	
00010100	14	Split Point
0ddddd	DD	Split Key No.
11110111	F7	End of Exclusive

#### (3-6-5-2) STYLE NUMBER

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01011010	5E	CVP-103/105/107/109/700 ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
00010110	16	Style No. Control No.
0mmmmmm	mm	Style No. MSB
01111111	11	Style No. LSB
11110111	F7	End of Exclusive

#### (3-6-5-3) FINGERING

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	
01000000	40	Fingering
0000ddd	0D	0D: 00H(Off),01H(Single Finger), 02H(Fingered 1),03H(Fingered 2), 04H(Full Keyboard),07H(Multi Finger)
11110111	F7	End of Exclusive

## (3-6-5-4) ACCOMP VOLUME

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	Part: 00H(All Part), 05H(Rhythm), 0AH(Bass), 06H(Chord), 0DH(Pad), 07H(Phrase)
01000000	42	Accomp Volume
0ddddd	DD	Volume Data: 00H-7FH
11110111	F7	End of Exclusive

## (3-6-5-5) CHANNEL DETUNE

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01000011	43	Dual Detune
0vvvvvvv	VV	Value VV: 00H - 40H - 7FH (-64 - 0 - +63)
11110111	F7	End of Exclusive

The Channel Detune message only affects the specified channel.

## (3-6-5-6) VOLUME ,EXPRESSION AND PAN REALTIME CONTROL OFF

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01001001	45	Volume and Expression Realtime Control Off
0vvvvvvv	VV	Value VV: off=7FH, on=00H
11110111	F7	End of Exclusive

When "On" is received, subsequent volume, expression, and PAN changes are only valid after the reception of the next key on. Normal operation resumes when "Off" is received.

## (3-6-5-7) MIDI KEY LED MODE ON / OFF (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
0000nnnn	0N	N = MIDI Channel
01000111	47	MIDI Key LED Mode On / Off
0ddddd	DD	DD: 00H(Key LED Mode Off), 01H(Key LED Mode On + no tone), 02H(Key LED Mode On + tone)
11110111	F7	End of Exclusive

## (3-6-5-8) NATURAL REVERB TYPE (CVP-109)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01011001	5D	CVP-109 ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010010	52	Natural Reverb Control No.
00000000	00	Natural Reverb Type Parameter No.
0mmmmmm	mm	Natural Reverb Type MSB
01111111	11	Natural Reverb Type LSB
11110111	F7	End of Exclusive

## (3-6-5-9) NATURAL REVERB TRACK ON/OFF (CVP-109)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01011001	5D	CVP-109 ID
00010001	11	Sub ID
0000nnnn	0n	Channel No. (00H - 0FH)
01010011	53	Natural Reverb Track On/Off Control No.
0ddddd	dd	Natural Reverb Track On/Off
		dd Natural Rev. XG Rev.
		0 Off On (default)
		1 Off Off
		2 On On
		3 On Off
11110111	F7	End of Exclusive

## (3-6-5-10) VOCAL HARMONY PITCH TO NOTE (CVP-109/107/700) (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00000000	00	Pitch to Note Parameter No.
0sssssss	ss	Pitch to Note Switch
		00H (Off)
		01H (On)
11110111	F7	End of Exclusive

## (3-6-5-11) VOCAL HARMONY PITCH TO NOTE PART (CVP-109/107/700) (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00000001	01	Pitch to Note Part Parameter No.
0sssssss	ss	Pitch to Note Part No.
		00H (RIGHT 1)
		01H (RIGHT 2)
		02H (LEFT)
11110111	F7	End of Exclusive

## (3-6-5-12) VOCAL HARMONY VOCODER PART (CVP-109/107/700) (Harmony Part [Panel]) (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
01110011	73	Clavinova ID
01000101	01	Clavinova common ID
00010001	11	Sub ID
00000000	00	Channel No. (always 00)
01010000	50	Vocal Harmony Additional Parameter Control No.
00010000	10	Vocoder Part Parameter No.
0sssssss	ss	Harmony Part No.
		00H (Off)
		01H (RIGHT 1)
		02H (LEFT)
11110111	F7	End of Exclusive

## (3-6-6) Others

### (3-6-6-1) MIDI MASTER TUNING (Receive only)

binary	hexadecimal	
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1N	When N is received N=0-F, whichever is received.
00100111	27	Model ID
00110000	30	Sub ID
00000000	00	
00000000	00	
0mmmmmm	MM	Master Tune MSB
01111111	LL	Master Tune LSB
0ccccccc	CC	don't care
11110111	F7	End of Exclusive

Changes tuning of all channels.

MM, LL values are used to define the MIDI Master Tuning value.

$$T = M - 128$$

T: Tuning value (-99 cents to +99 cents)

M: A single byte value (28-228) that consists of bits 0-3 of MM as MSB, bits 0-3 of LL as LSB.

This setting is not reset when the GM System or XG System is turned on.

< Table 1-1 >

Parameter Basic Address

	Parameter Address	Change Address	Description
SYSTEM	00 00 00	(H)(M)(L)	System
	00 00 7D		Drum Setup Reset
	00 00 7E		XG System On
	00 00 7F		All Parameter Reset
INFORMATION	01 00 00		System Information
EFFECT 1	02 01 00		Effect1(Reverb,Chorus,Variation )
MULTI EQ (CVP-109/107/700)	02 40 00		Multi EQ
EFFECT 2 (CVP-109/107/700)	03 00 00		Effect2 (Insertion Effect1)
	03 02 00		(Insertion Effect3)
SPECIAL EFFECT (CVP-109/107/700)	04 00 00		Special Insertion Effect1
MULTI PART	08 00 00		Multi Part 1
	08 0F 00		Multi Part 16
A/D (CVP-109/107/700)	10 00 00		A/D Part 1
DRUM	30 0D 00		Drum Setup 1
	31 0D 00		Drum Setup 2
	3n 0D 00		note number 13
	3n 0E 00		note number 14
	3n 5B 00		note number 91

< Table 1-2 >

MIDI Parameter Change table ( SYSTEM )

Address (H)	Size (H)	Data (H)	Parameter Name	Description	Default Value(H)
00 00 00	4	0000	Master Tune	-102.4..+102.3[cent]	00 04 00 00
01		..07FF		1st bit3-0 -> bit15-12	(0400)
02				2nd bit3-0 -> bit11-8	
03				3rd bit3-0 -> bit7-4	
				4th bit3-0 -> bit3-0	
04	1	00..7F	Master Volume	0..127	7F
05	1		Not Used		
06	1	28..58	Transpose	-24..+24[semitones]	40
7D		n	Drum Setup Reset	n=Drum Setup Number	
7E		00	XG System On	00=XG Sytem on	
7F		00	All Parameter Reset	00=on (receive only)	
TOTAL SIZE	6				

< Table 1-3 >

MIDI Parameter table ( System information )

Address (H)	Size (H)	Data (H)	Parameter Name	Description
01 00 00	E	20..7F	Model Name	32..127(ASCII)
:				
0D				
0E	1	00		
0F	1	01		
TOTAL SIZE	10			

(Transmitted by Dump Request. Not received. Bulk Dump Only)

< Table 1-4 >

MIDI Parameter Change table ( EFFECT 1)

Address (H)	Size (H)	Data (H)	Parameter Name	Description	Default Value(H)
02 01 00	2	00..7F	Reverb Type MSB	Refer to the Effect Type List	01(=HALL1)
		00..7F	Reverb Type LSB	00 : basic type	00
02	1	00..7F	Reverb Parameter 1	Refer to the Ef. Parameter List	Depend on Reverb type
03	1	00..7F	Reverb Parameter 2	Refer to the Ef. Parameter List	Depend on Reverb type
04	1	00..7F	Reverb Parameter 3	Refer to the Ef. Parameter List	Depend on Reverb type
05	1	00..7F	Reverb Parameter 4	Refer to the Ef. Parameter List	Depend on Reverb type



# MIDI Data Format

06	1	00..7F	Reverb Parameter 5	Refer to the Ef. Parameter List	Depend on Reverb type		
07	1	00..7F	Reverb Parameter 6	Refer to the Ef. Parameter List	Depend on Reverb type		
08	1	00..7F	Reverb Parameter 7	Refer to the Ef. Parameter List	Depend on Reverb type		
09	1	00..7F	Reverb Parameter 8	Refer to the Ef. Parameter List	Depend on Reverb type		
0A	1	00..7F	Reverb Parameter 9	Refer to the Ef. Parameter List	Depend on Reverb type		
0B	1	00..7F	Reverb Parameter 10	Refer to the Ef. Parameter List	Depend on Reverb type		
0C	1	00..7F	Reverb Return	-∞..0..+6dB(0..96..127)	40		
0D	1	01..7F	Reverb Pan	L63..C..R63(1..64..127)	40		
TOTAL SIZE 0E							
02	01	10	1	00..7F	Reverb Parameter 11	Refer to the Ef. Parameter List	Depend on Reverb type
		11	1	00..7F	Reverb Parameter 12	Refer to the Ef. Parameter List	Depend on Reverb type
		12	1	00..7F	Reverb Parameter 13	Refer to the Ef. Parameter List	Depend on Reverb type
		13	1	00..7F	Reverb Parameter 14	Refer to the Ef. Parameter List	Depend on Reverb type
		14	1	00..7F	Reverb Parameter 15	Refer to the Ef. Parameter List	Depend on Reverb type
		15	1	00..7F	Reverb Parameter 16	Refer to the Ef. Parameter List	Depend on Reverb type
TOTAL SIZE 6							
02	01	20	2	00..7F	Chorus Type MSB	Refer to the Effect Type List	41(=Chorus1)
				00..7F	Chorus Type LSB	00 : basic type	00
		22	1	00..7F	Chorus Parameter 1	Refer to the Ef. Parameter List	Depend on Chorus Type
		23	1	00..7F	Chorus Parameter 2	Refer to the Ef. Parameter List	Depend on Chorus Type
		24	1	00..7F	Chorus Parameter 3	Refer to the Ef. Parameter List	Depend on Chorus Type
		25	1	00..7F	Chorus Parameter 4	Refer to the Ef. Parameter List	Depend on Chorus Type
		26	1	00..7F	Chorus Parameter 5	Refer to the Ef. Parameter List	Depend on Chorus Type
		27	1	00..7F	Chorus Parameter 6	Refer to the Ef. Parameter List	Depend on Chorus Type
		28	1	00..7F	Chorus Parameter 7	Refer to the Ef. Parameter List	Depend on Chorus Type
		29	1	00..7F	Chorus Parameter 8	Refer to the Ef. Parameter List	Depend on Chorus Type
		2A	1	00..7F	Chorus Parameter 9	Refer to the Ef. Parameter List	Depend on Chorus Type
		2B	1	00..7F	Chorus Parameter 10	Refer to the Ef. Parameter List	Depend on Chorus Type
		2C	1	00..7F	Chorus Return	-∞..0..+6dB(0..96..127)	40
		2D	1	01..7F	Chorus Pan	L63..C..R63(1..64..127)	40
		2E	1	00..7F	Send Chorus To Reverb	-∞..0..+6dB(0..96..127)	00
TOTAL SIZE 0F							
02	01	30	1	00..7F	Chorus Parameter 11	Refer to the Ef. Parameter List	Depend on Chorus Type
		31	1	00..7F	Chorus Parameter 12	Refer to the Ef. Parameter List	Depend on Chorus Type
		32	1	00..7F	Chorus Parameter 13	Refer to the Ef. Parameter List	Depend on Chorus Type
		33	1	00..7F	Chorus Parameter 14	Refer to the Ef. Parameter List	Depend on Chorus Type
		34	1	00..7F	Chorus Parameter 15	Refer to the Ef. Parameter List	Depend on Chorus Type
		35	1	00..7F	Chorus Parameter 16	Refer to the Ef. Parameter List	Depend on Chorus Type
TOTAL SIZE 6							
02	01	40	2	00..7F	Variation Type MSB	Refer to the Effect Type List	"05(=DELAY L,C,R)"
				00..7F	Variation Type LSB	00 : basic type	00
		42	2	00..7F	Vari. Param. 1 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 1 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		44	2	00..7F	Vari. Param. 2 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 2 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		46	2	00..7F	Vari. Param. 3 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 3 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		48	2	00..7F	Vari. Param. 4 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 4 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4A	2	00..7F	Vari. Param. 5 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 5 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4C	2	00..7F	Vari. Param. 6 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 6 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		4E	2	00..7F	Vari. Param. 7 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 7 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		50	2	00..7F	Vari. Param. 8 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 8 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		52	2	00..7F	Vari. Param. 9 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 9 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		54	2	00..7F	Vari. Param. 10 MSB	Refer to the Ef. Parameter List	Depend on Vari. Type
				00..7F	Vari. Param. 10 LSB	Refer to the Ef. Parameter List	Depend on Vari. Type
		56	1	00..7F	Variation Return	-∞..0..+6dB(0..96..127)	40
		57	1	01..7F	Variation Pan	L63..C..R63(1..64..127)	40
		58	1	00..7F	Send Vari. To Reverb	-∞..0..+6dB(0..96..127)	00
		59	1	00..7F	Send Vari. To Chorus	-∞..0..+6dB(0..96..127)	00
		5A	1	00..01	Variation Connection	0:insertion,1:system	00
		5B	1	00..1F	Variation Part	part1..32(0..31),off(127)	7F
		5C	1	01..7F	MW Vari. Ctrl Depth	-63..+63	40
		5D	1	01..7F	PB Vari. Ctrl Depth	-63..+63	40
		5E	1	01..7F	CAT Vari. Ctrl Depth	-63..+63	40
		5F	1	01..7F	Not Used		
		60	1	01..7F	Not Used		
TOTAL SIZE 21							

02	01	70	1	00..7F	Variation Parameter 11	option Parameter	Depend on Variation Type
		71	1	00..7F	Variation Parameter 12	option Parameter	Depend on Variation Type
		72	1	00..7F	Variation Parameter 13	option Parameter	Depend on Variation Type
		73	1	00..7F	Variation Parameter 14	option Parameter	Depend on Variation Type
		74	1	00..7F	Variation Parameter 15	option Parameter	Depend on Variation Type
		75	1	00..7F	Variation Parameter 16	option Parameter	Depend on Variation Type
TOTAL SIZE 6							

< Table 1-5 >

MIDI Parameter Change table ( MULTI EQ ) ( CVP-109/107/700 )

Address (H)	Size (H)	Data (H)	Parameter Name	Description	Default Value(H)		
02	40	00	1	34..4C	EQ Type	0:FLAT	0
						1:JAZZ	
						2:POPS	
						3:ROCK	
						4:CLASSIC	
	01	1		34..4C	EQ Gain1	-12..+12[dB]	40
	02	1		04..28	EQ Frequency1	32..2000[Hz]	0C
	03	1		01..78	EQ Q1	0.1..12.0	07
	04	1		00..01	EQ Shape1	00:Shelving,01:Peaking	00
	05	1		34..4C	EQ Gain2	-12..+12[dB]	40
	06	1		0E..36	EQ Frequency2	0.1..10[KHz]	1C
	07	1		01..78	EQ Q2	0.1..12.0	07
	08	1			Not Used		
	09	1		34..4C	EQ Gain3	-12..+12[dB]	40
	0A	1		0E..36	EQ Frequency3	0.1..10[KHz]	22
	0B	1		01..78	EQ Q3	0.1..12.0	07
	0C	1			Not Used		
	0D	1		34..4C	EQ Gain4	-12..+12[dB]	40
	0E	1		0E..36	EQ Frequency4	0.1..10[KHz]	2E
	0F	1		01..78	EQ Q4	0.1..12.0	07
	10	1			Not Used		
	11	1		34..4C	EQ Gain5	-12..+12[dB]	40
	12	1		1C..3A	EQ Frequency5	0.5..16.0[KHz]	34
	13	1		01..78	EQ Q5	0.1..12.0	07
	14	1		00..01	EQ Shape5	00:Shelving,01:Peaking	00
TOTAL SIZE 15							

< Table 1-6 >

MIDI Parameter Change table ( EFFECT 2 ) ( CVP-109/107/700 )

Address (H)	Size (H)	Data (H)	Parameter Name	Description	Default	
03	0n	00	2	00..7F	Insertion Type MSB	Refer to the Ef. Type List
				00..7F	Insertion Type LSB	00 : basic type
	02	1		00..7F	Insertion Parameter1	Refer to the Ef. Parameter List
	03	1		00..7F	Insertion Parameter2	Refer to the Ef. Parameter List
	04	1		00..7F	Insertion Parameter3	Refer to the Ef. Parameter List
	05	1		00..7F	Insertion Parameter4	Refer to the Ef. Parameter List
	06	1		00..7F	Insertion Parameter5	Refer to the Ef. Parameter List
	07	1		00..7F	Insertion Parameter6	Refer to the Ef. Parameter List
	08	1		00..7F	Insertion Parameter7	Refer to the Ef. Parameter List
	09	1		00..7F	Insertion Parameter8	Refer to the Ef. Parameter List
	0A	1		00..7F	Insertion Parameter9	Refer to the Ef. Parameter List
	0B	1		00..7F	Insertion Parameter10	Refer to the Ef. Parameter List
	0C	1		00..7F	Insertion Part	Part1..16,OFF
	0D	1		00..7F	MW INS CTRL DPT	
	0E	1		00..7F	BEND INS CTRL DPT	
	0F	1		00..7F	CAT INS CTRL DPT	
	10	1		00..7F	Not Used	
	11	1		00..7F	Not Used	
TOTAL SIZE 12						
03	0n	20	1	00..7F	Insertion Parameter11	Refer to the Ef. Parameter List
		21	1	00..7F	Insertion Parameter12	Refer to the Ef. Parameter List
		22	1	00..7F	Insertion Parameter13	Refer to the Ef. Parameter List
		23	1	00..7F	Insertion Parameter14	Refer to the Ef. Parameter List
		24	1	00..7F	Insertion Parameter15	Refer to the Ef. Parameter List
		25	1	00..7F	Insertion Parameter16	Refer to the Ef. Parameter List
TOTAL SIZE 06						

03	0n	30	2	00..7F	Ins. Param.1 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.1 LSB	Refer to the Ef. Parameter List
03	0n	32	2	00..7F	Ins. Param.2 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.2 LSB	Refer to the Ef. Parameter List
03	0n	34	2	00..7F	Ins. Param.3 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.3 LSB	Refer to the Ef. Parameter List
03	0n	36	2	00..7F	Ins. Param.4 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.4 LSB	Refer to the Ef. Parameter List
03	0n	38	2	00..7F	Ins. Param.5 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.5 LSB	Refer to the Ef. Parameter List
03	0n	3A	2	00..7F	Ins. Param.6 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.6 LSB	Refer to the Ef. Parameter List
03	0n	3C	2	00..7F	Ins. Param.7 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.7 LSB	Refer to the Ef. Parameter List
03	0n	3E	2	00..7F	Ins. Param.8 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.8 LSB	Refer to the Ef. Parameter List
03	0n	40	2	00..7F	Ins. Param.9 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.9 LSB	Refer to the Ef. Parameter List
03	0n	42	2	00..7F	Ins. Param.10 MSB	Refer to the Ef. Parameter List
				00..7F	Ins. Param.10 LSB	Refer to the Ef. Parameter List

TOTAL SIZE 14

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

For effect types that require MSB, the Parameters for Address 30-42 will be received. 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.

n = Insertion Effect No. (0 - 2)

The INSERTION EFFECT Parameter cannot be reset to its factory settings with XG SYSTEM ON or XG ALL PARAMETER RESET, there is no default value.

When a Parameter Request or Bulk Request message is received, the currently set value is always transmitted.

## < Table 1-7 >

### MIDI PARAMETER CHANGE TABLE (SPECIAL EFFECT) (CVP-109/107/700)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default
04 00 00	2	00 - 7F	Insertion Effect Type MSB	Refer to the XG Effect Map	
		00 - 7F	Insertion Effect Type LSB	00 : basic type	
	02	00 - 7F	Insertion Effect Parameter1	Refer to the XG Ef. Parameter List	
	03	00 - 7F	Insertion Effect Parameter2	Refer to the XG Ef. Parameter List	
	04	00 - 7F	Insertion Effect Parameter3	Refer to the XG Ef. Parameter List	
	05	00 - 7F	Insertion Effect Parameter4	Refer to the XG Ef. Parameter List	
	06	00 - 7F	Insertion Effect Parameter5	Refer to the XG Ef. Parameter List	
	07	00 - 7F	Insertion Effect Parameter6	Refer to the XG Ef. Parameter List	
	08	00 - 7F	Insertion Effect Parameter7	Refer to the XG Ef. Parameter List	
	09	00 - 7F	Insertion Effect Parameter8	Refer to the XG Ef. Parameter List	
	0A	00 - 7F	Insertion Effect Parameter9	Refer to the XG Ef. Parameter List	
	0B	00 - 7F	Insertion Effect Parameter10	Refer to the XG Ef. Parameter List	
	0C	00 - 7F	Insertion Effect Part	Part1..16(0..15) AD1(64) OFF(16..63, 65..127)	
	0D	00 - 7F	MW Insertion Control Depth	Don't care	
	0E	00 - 7F	BEND Insertion Control Depth	Don't care	
	0F	00 - 7F	CAT Insertion Control Depth	Don't care	
	10	00 - 7F	AC1 Insertion Control Depth	Don't care	
	11	00 - 7F	AC2 Insertion Control Depth	Don't care	
TOTAL SIZE 12					
04 00 14	1	00 - 7F	Unique Insertion Effect External Control CH1(Harmony Channel)	1..16(0..15), off(127)	
	15	00 - 7F	Unique Insertion Effect External Control CH2 (MELODY CHANNEL)	1..16(0..15), off(127)	
TOTAL SIZE 2					
04 00 20	1	00 - 7F	Insertion Effect Parameter11	Refer to the XG Ef. Parameter List	
	21	00 - 7F	Insertion Effect Parameter12	Refer to the XG Ef. Parameter List	
	22	00 - 7F	Insertion Effect Parameter13	Refer to the XG Ef. Parameter List	
	23	00 - 7F	Insertion Effect Parameter14	Refer to the XG Ef. Parameter List	
	24	00 - 7F	Insertion Effect Parameter15	Refer to the XG Ef. Parameter List	
	25	00 - 7F	Insertion Effect Parameter16	Refer to the XG Ef. Parameter List	
TOTAL SIZE 6					

Insertion Effect Type MSB: Assigns the Harmony Mode.

If the value is not a Harmony Mode value, the Harmony function will be OFF and the input signal will be transmitted as is.

Insertion Effect Type LSB: Assigns the Harmony Kit.

If the value is not an existing harmony kit value, don't care.

Harmony Channel: Harmony control channel.

Melody Channel: Melody play channel.

When both are received, the last message received will take priority.

For example, when the Melody Channel is 3 and the Harmony Channel 3 message is received, the Melody Channel will be OFF and the Harmony Channel will be 3.

Note) The SPECIAL EFFECT Parameter cannot be reset to its factory settings with XG SYSTEM ON or XG ALL PARAMETER RESET, there is no default value.

When a request message is received, the currently set value is always transmitted.

< Table 1-8 >

MIDI Parameter Change table ( MULTI PART )

Address (H)	Size (H)	Data (H)	Parameter Name	Description	Default Value(H)
08	nn 00	1 00..20	Element Reserve	0..32	0(Part10),2(Others)
	nn 01	1 00..7F	Bank Select MSB	0..127	7F(Part10),00(Others)
	nn 02	1 00..7F	Bank Select LSB	0..127	00
	nn 03	1 00..7F	Program Number	1..128	00
	nn 04	1 00..0F, 7F	Rcv Channel	0..16;1..16,127;off	Part No.
	nn 05	1 00..01	Mono/Poly Mode	0:mono,1:poly	01
	nn 06	1 00..02	Same Note Number Key On Assign	0:single 1:multi 2:inst (for DRUM)	01
	nn 07	1 00..02	Part Mode	0:normal 1..3:drum thru,drum1..2	00 (Except Part10) 02 (Part10)
	nn 08	1 28..58	Note Shift	-24..+24[semitones]	40
	nn 09	2 00..FF	Detune	-12.8..+12.7[Hz]	08 00
	nn 0A			1st bit3..0 -> bit7..4 2nd bit3..0 -> bit3..0	(80)
	nn 0B	1 00..7F	Volume	0..127	64
	nn 0C	1 00..7F	Velocity Sense Depth	0..127	40
	nn 0D	1 00..7F	Velocity Sense Offset	0..127	40
	nn 0E	1 00..7F	Pan	0:random L63..C..R63(1..64..127)	40
	nn 0F	1 00..7F	Note Limit Low	C-2..G8	00
	nn 10	1 00..7F	Note Limit High	C-2..G8	7F
	nn 11	1 00..7F	Dry Level	0..127	7F
	nn 12	1 00..7F	Chorus Send	0..127	00
	nn 13	1 00..7F	Reverb Send	0..127	28
	nn 14	1 00..7F	Variation Send	0..127	00
	nn 15	1 00..7F	Vibrato Rate	-64..+63	40
	nn 16	1 00..7F	Vibrato Depth	-64..+63	40
	nn 17	1 00..7F	Vibrato Delay	-64..+63	40
	nn 18	1 00..7F	Filter Cutoff Freq.	-64..+63	40
	nn 19	1 00..7F	Filter Resonance	-64..+63	40
	nn 1A	1 00..7F	EG Attack Time	-64..+63	40
	nn 1B	1 00..7F	EG Decay Time	-64..+63	40
	nn 1C	1 00..7F	EG Release Time	-64..+63	40
	nn 1D	1 28..58	MW Pitch Control	-24..+24[semitones]	40
	nn 1E	1 00..7F	MW Filter Control	-9600..+9450[cent]	40
	nn 1F	1 00..7F	MW Amp. Control	-100..+100[%]	40
	nn 20	1 00..7F	MW LFO PMod Depth	0..127	0A
	nn 21	1 00..7F	MW LFO FMod Depth	0..127	00
	nn 22	1 00..7F	MW LFO AMod Depth	0..127	00
	nn 23	1 28..58	Bend Pitch Control	-24..+24[semitones]	42
	nn 24	1 00..7F	Bend Filter Control	-9600..+9450[cent]	40
	nn 25	1 00..7F	Bend Amp. Control	-100..+100[%]	40
	nn 26	1 00..7F	Bend LFO PMod Depth	0..127	00
	nn 27	1 00..7F	Bend LFO FMod Depth	0..127	00
	nn 28	1 00..7F	Bend LFO AMod Depth	0..127	00
TOTAL SIZE	29				
	nn 30	1	Not Used		
	:	:	:		
	nn 34	1	Not Used		
	nn 35	1 00..01	Rcv Note Message (CVP-109/107/700)	OFF, ON	01
	nn 36	1	Not Used		
	:	:	:		
	nn 40	1	Not Used		
	nn 41	1 00..7F	Scale Tuning C	-64..+63[cent]	40
	nn 42	1 00..7F	Scale Tuning C#	-64..+63[cent]	40
	nn 43	1 00..7F	Scale Tuning D	-64..+63[cent]	40
	nn 44	1 00..7F	Scale Tuning D#	-64..+63[cent]	40
	nn 45	1 00..7F	Scale Tuning E	-64..+63[cent]	40
	nn 46	1 00..7F	Scale Tuning F	-64..+63[cent]	40
	nn 47	1 00..7F	Scale Tuning F#	-64..+63[cent]	40
	nn 48	1 00..7F	Scale Tuning G	-64..+63[cent]	40
	nn 49	1 00..7F	Scale Tuning G#	-64..+63[cent]	40
	nn 4A	1 00..7F	Scale Tuning A	-64..+63[cent]	40
	nn 4B	1 00..7F	Scale Tuning A#	-64..+63[cent]	40
	nn 4C	1 00..7F	Scale Tuning B	-64..+63[cent]	40

# MIDI Data Format

nn	4D	1	28..58	CAT Pitch Control	-24..+24[semitones]	40
nn	4E	1	00..7F	CAT Filter Control	-9600..+9450[cent]	40
nn	4F	1	00..7F	CAT Amplitude Control	-100..+100[%]	40
nn	50	1	00..7F	CAT LFO PMod Depth	0..127	00
nn	51	1	00..7F	CAT LFO FMod Depth	0..127	00
nn	52	1	00..7F	CAT LFO AMod Depth	0..127	00
nn	53			Not Used		
:				:		
66				Not Used		
nn	67	1	00..01	Portamento Switch	off/on	00
nn	68	1	00..7F	Portamento Time	0..127	00
nn	69			Not Used		
:				:		
6E				Not Used		
TOTAL SIZE		3F				

08	nn	70	1	Not Used	Don't care		
	nn	71	1	Not Used	Don't care		
	nn	72	1	00 - 7F	EQ Bass (CVP-109/107/700)	-64 - +63(-12 - +12[dB])	40
	nn	73	1	00 - 7F	EQ Treble (CVP-109/107/700)	-64 - +63(-12 - +12[dB])	40
TOTAL SIZE		04					

08	nn	74	1	Not Used	Don't care		
		75	1	Not Used	Don't care		
		76	1	04 - 28	EQ Bass frequency (CVP-109/107/700)	32-2.0k[Hz]	0C
		77	1	1C - 3A	EQ Treble frequency (CVP-109/107/700)	500-16.0k[Hz]	36
		78	1	Not Used	Don't care		
		79	1	Not Used	Don't care		
	7A	1		Not Used	Don't care		
	7B	1		Not Used	Don't care		
	7C	1		Not Used	Don't care		
	7D	1		Not Used	Don't care		
	7E	1		Not Used	Don't care		
	7F	1		Not Used	Don't care		
TOTAL SIZE		0C					

nn = PartNumber

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

- Bank Select LSB
- Pitch EG
- Portamento
- Soft Pedal
- Mono/Poly
- Scale Tuning

## <Table 1-9 >

MIDI Parameter Change Table (A/D Part) (CVP-109/107/700)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value(H)	
10	nn	0	1	00 - 01	Input Gain	Don't care
		1	1	00 - 7F	Bank Select MSB	Don't care
		2	1	00 - 7F	Bank Select LSB	Don't care
		3	1	00 - 7F	Program Number	Don't care
		4	1	00 - 1F, 7F	Rcv Channel	A1 - A16, OFF
		5	1		Not Used	
		6	1		Not Used	
		7	1		Not Used	
		8	1		Not Used	
		9	1		Not Used	
	0A	1			Not Used	
	0B	1	00 - 7F	Volume	0 - 127	
	0C	1		Not Used		
	0D	1		Not Used		
	0E	1	01 - 7F	Pan	L63...C...R63(1...64...127)	
	0F	1		Not Used		
	10	1		Not Used		
	11	1	00 - 7F	Dry Level	0 - 127	
	12	1	00 - 7F	Chorus Send	0 - 127	
	13	1	00 - 7F	Reverb Send	0 - 127	
	14	1	00 - 7F	Variation Send	0 - 127	
TOTAL SIZE		15				

nn:A/D Part number (fixed 00)

Note) The A/D PART Parameter cannot be reset to its factory settings with XG SYSTEM ON or XG ALL PARAMETER RESET, there is no default value. When a request message is received, the currently set value is always transmitted.

<Table 1-10 >

**MIDI Parameter Change table ( DRUM SETUP )**

Address (H)	Size (H)	Data (H)	Parameter Name (H)	Description	Default Value(H)		
3n	rr	00	1	00..7F	Pitch Coarse	-64..+63	40
3n	rr	01	1	00..7F	Pitch Fine	-64..+63[cent]	40
3n	rr	02	1	00..7F	Level	0..127	Depend on the Note
3n	rr	03	1	00..7F	Alternate Group	0:off,1..127	Depend on the Note
3n	rr	04	1	00..7F	Pan	0:random L63..C..R63(1..64..127)	Depend on the Note
3n	rr	05	1	00..7F	Reverb Send Level	0..127	Depend on the Note
3n	rr	06	1	00..7F	Chorus Send Level	0..127	Depend on the Note
3n	rr	07	1	00..7F	Variation Send Level	0..127	7F
3n	rr	08	1	00..01	Key Assign	0:single,1:multi	00
3n	rr	09	1	00..01	Rcv Note Off	off/on	Depend on the Note
3n	rr	0A	1	00..01	Rcv Note On	off/on	01
3n	rr	0B	1	00..7F	Filter Cutoff Freq.	-64..63	40
3n	rr	0C	1	00..7F	Filter Resonance	-64..63	40
3n	rr	0D	1	00..7F	EG Attack Rate	-64..63	40
3n	rr	0E	1	00..7F	EG Decay1 Rate	-64..63	40
3n	rr	0F	1	00..7F	EG Decay2 Rate	-64..63	40

TOTAL SIZE 10

n:Drum Setup Number(0 - 1)  
rr:note number(0DH - 5BH)

If XG SYSTEM ON and/or GM SYSTEM ON message is received, all Drum Setup Parameter will be reset to default values.  
According to the Drum Setup Reset message, individual Drum Setup Parameters can be reset to default values.

<Table 1-11 > CVP-109/107/700 Effect Map

If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.  
The panel effects are marked by “\*”.

**REVERB TYPE**

TYPE MSB		TYPE LSB													
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20	
000	0	NO EFFECT													
001	1	*HALL1	HALL2							*HALL2	*HALL3	*HALL4			
002	2	ROOM1	ROOM2	ROOM3						*ROOM1	*ROOM2	*ROOM3	*ROOM4		
003	3	STAGE1	STAGE2							*STAGE1	*STAGE2				
004	4	PLATE								*PLATE1	*PLATE2				
005	5	NO EFFECT													
:	:	:													
015	F	NO EFFECT													
016	10	WHITE ROOM													
017	11	TUNNEL													
018	12	CANYON													
019	13	BASEMENT													
020	14	NO EFFECT													
:	:	:													
127	7F	NO EFFECT													

**CHORUS TYPE**

TYPE MSB		TYPE LSB													
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20	
000	0	NO EFFECT													
001	1	NO EFFECT													
:	:	:													
064	40	NO EFFECT													
065	41	CHORUS1	CHORUS2	*CHORUS5				CHORUS4							
066	42	CELESTE1	*CHORUS4	CELESTE3				*CHORUS2	*CHORUS3	*CHORUS1					
067	43	FLANGER 1	*FLANGER 4					*FLANGER1	*FLANGER2	*FLANGER3					
068	44	SYMPHONIC							Symphonic						
069	45	NO EFFECT													
:	:	:													
071	47	NO EFFECT													
072	48	PHASER 1													
073	49	NO EFFECT													
:	:	:													
086	56	NO EFFECT													
087	57	ENSEMBLE DETUNE													
088	58	NO EFFECT													
:	:	:													
127	7F	NO EFFECT													



## VARIATION TYPE(0 – 63)

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
000	0	NO EFFECT												
001	1	HALL	HALL2							HALL	HALL	HALL		
002	2	ROOM1	ROOM2	ROOM3						ROOM	ROOM	ROOM	ROOM	
003	3	STAGE1	STAGE2							STAGE	STAGE			
004	4	PLATE								PLATE	PLATE			
005	5	DELAY L,C,R								DELAY LCR				
006	6	DELAY LR												
007	7	ECHO												
008	8	CROSS DELAY												
009	9	EARLY REF1	EARLY REF											
010	A	GATE REVERB												
011	B	REVERSE GATE												
012	C	NO EFFECT or THRU												
:	:	:												
015	F	NO EFFECT or THRU												
016	10	WHITE ROOM												
017	11	TUNNEL												
018	12	CANYON												
019	13	BASEMENT												
020	14	KARAOKE 1	KARAOKE 2	KARAOKE 3										
021	15	NO EFFECT or THRU												
:	:	:												
063	3F	NO EFFECT or THRU												

## VARIATION TYPE(64 – 127)

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
064	40	THRU												
065	41	CHORUS1	CHORUS2	CHORUS				CHORUS4						
066	42	CELESTE1	CHORUS	CELESTE3				CHORUS	CHORUS	CHORUS	CHORUS	Rotary Sp		
067	43	FLANGER 1	FLANGER					FLANGER	FLANGER	FLANGER	FLANGER			
068	44	SYMPHONIC							SYMPHONIC					
069	45	ROTARY SP.							ROTARY SP					
070	46	TREMOLO							TREMOLO	ROTARY SP				
071	47	AUTO PAN							AUTO PAN	ROTARY SP	ROTARY SP	TREMOLO	GTR TREMOLO	
072	48	PHASER						PHASER 2						
073	49	DISTORTION	COMP+ DISTORTION											
074	4A	OVER DRIVE												
075	4B	AMP SIM.								DIST HARD	DIST SOFT			
076	4C	3BAND EQ								EQ DISCO	EQ TEL			
077	4D	2BAND EQ												
078	4E	AUTO WAH	AUTO WAH+ DIST	AUTO WAH+ OVERDRIVE					AUTO WAH					
079	4F	THRU												
080	50	PITCH CHANGE1	PITCH CHANGE2											
081	51	HARMONIC ENHANCER												
082	52	TOUCH WAH 1	TOUCH WAH+ DIST	TOUCH WAH+ OVERDRIVE				TOUCH WAH 2						
083	53	COMPRESSOR												
084	54	NOISE GATE												
085	55	VOICE CANCEL												
086	56	2WAY ROTARY SP												
087	57	ENSEMBLE DETUNE												
088	58	AMBIENCE												
089	59	THRU												
:	:	:												
092	5C	THRU												
093	5D	TALKING MODULATOR												
094	5E	LO-FI												
095	5F	DIST+DELAY	OVERDRIVE+ DELAY											
096	60	COMP+DIST+DELAY	COMP+ OVERDRIVE+ DELAY											
097	61	WAH+DIST+DELAY	WAH+ OVERDRIVE+ DELAY											
098	62	THRU												
:	:	:												
127	7F	THRU												

## INSERTION TYPE

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
000	0	THRU												
001	1	*HALL1	HALL 2							*HALL2	*HALL3	*HALL4		
002	2	ROOM 1	ROOM 2	ROOM 3						*ROOM1	*ROOM2	*ROOM3	*ROOM4	
003	3	STAGE 1	STAGE 2							*STAGE1	*STAGE2			
004	4	PLATE								*PLATE1	*PLATE2			
005	5	DELAY L,C,R								*DELAY LCR				
006	6	*DELAY LR												
007	7	*ECHO												
008	8	*CROSS DELAY												
009	9	THRU												
:	:	:												
019	13	THRU												
020	14	*KARAOKE1	*KARAOKE2	*KARAOKE3										
021	15	THRU												
:	:	:												
063	3F	THRU												
064	40	THRU												
065	41	CHORUS 1	CHORUS 2	*CHORUS5				CHORUS 4						
066	42	CELESTE 1	*CHORUS4	CELESTE 3				*CHORUS2	*CHORUS3	*CHORUS1	*ROTARY SP5			
067	43	FLANGER 1	*FLANGER4					*FLANGER1	*FLANGER2	*FLANGER3				
068	44	*SYMPHONIC2							*SYMPHONIC1					
069	45	ROTARY SPEAKER 1							*ROTARY SP1					
070	46	TREMOLO							*TREMLO1	*ROTARY SP4				
071	47	*AUTO PAN2							*AUTO PAN1	*ROTARY SP2	*ROTARY SP3	*TREMLO2	*GTR TREMOLO	
072	48	*PHASER												
073	49	DISTORTION												
074	4A	OVER DRIVE												
075	4B	*AMP SIMULATOR							*DIST HARD	*DIST SOFT				
076	4C	3BAND EQ							*EQ DISCO	*EQ TEL				
077	4D	2-BAND EQ												
078	4E	*AUTO WAH2							*AUTO WAH1					
079	4F	THRU												
080	50	THRU												
081	51	HARMONIC ENHANCER												
082	52	*TOUCH WAH1						*TOUCH WAH2						
083	53	COMPRESSOR												
084	54	NOISE GATE												
085	55	THRU												
086	56	THRU												
087	57	ENSEMBLE DETUNE												
088	58	THRU												
:	:	:												
127	7F	THRU												

<Table 1-12 > CVP-105/103 Effect Map

If the received value does not contain an effect type in the TYPE LSB, the LSB will be directed to TYPE 0.  
The panel effects are marked by “\*”.

## REVERB TYPE

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
000	0	NO EFFECT												
001	1	*HALL1	HALL2							*HALL2	*HALL3	*HALL4		
002	2	ROOM 1	ROOM2	ROOM3						*ROOM1	*ROOM2	*ROOM3	*ROOM4	
003	3	STAGE1	STAGE2							*STAGE1	*STAGE2			
004	4	PLATE								*PLATE1	*PLATE2			
005	5	NO EFFECT												
:	:	:												
015	F	NO EFFECT												
016	10	WHITE ROOM												
017	11	TUNNEL												
018	12	CANYON												
019	13	BASEMENT												
020	14	NO EFFECT												
:	:	:												
127	7F	NO EFFECT												

## CHORUS TYPE

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
000	0	NO EFFECT												
001	1	NO EFFECT												
:	:	:												
064	40	NO EFFECT												
065	41	CHORUS1	CHORUS2	*CHORUS5				CHORUS4						
066	42	CELESTE1	*CHORUS4	CELESTE3				*CHORUS2	*CHORUS3	*CHORUS1				
067	43	FLANGER 1	*FLANGER 4					*FLANGER1	*FLANGER2	*FLANGER3				
068	44	NO EFFECT												
:	:	:												
127	7F	NO EFFECT												

## VARIATION TYPE(0 – 63)

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
000	0	NO EFFECT												
001	1	*HALL1	HALL2							*HALL2	*HALL3	*HALL4		
002	2	ROOM1	ROOM2	ROOM3						*ROOM1	*ROOM2	*ROOM3	*ROOM4	
003	3	STAGE1	STAGE2							*STAGE1	*STAGE2			
004	4	PLATE								*PLATE1	*PLATE2			
005	5	DELAY L,C,R								*DELAY LCR				
006	6	*DELAY LR												
007	7	*ECHO												
008	8	*CROSS DELAY												
009	9	*EARLY REF1	*EARLY REF2											
010	A	*GATE REVERB												
011	B	*REVERSE GATE												
012	C	NO EFFECT or THRU												
:	:	:												
019	13	NO EFFECT or THRU												
020	14	KARAOKE 1	KARAOKE 2	KARAOKE 3										
021	15	NO EFFECT or THRU												
:	:	:												
063	3F	NO EFFECT or THRU												

## VARIATION TYPE(64 – 127)

TYPE MSB		TYPE LSB												
DEC	HEX	00	01	02	03	...	07	08	...	16	17	18	19	20
064	40	THRU												
065	41	CHORUS1	CHORUS2	*CHORUS5				CHORUS4						
066	42	CELESTE1	*CHORUS4	CELESTE3				*CHORUS2	*CHORUS3	*CHORUS1	*Rotary Sp5			
067	43	FLANGER 1	*FLANGER4					*FLANGER1	*FLANGER2	*FLANGER3				
068	44	SYMPHONIC							*SYMPHONIC					
069	45	ROTARY SP.							*ROTARY SP1					
070	46	TREMOLO							*TREMOLO1	*ROTARY SP4				
071	47	AUTO PAN							*AUTO PAN	*ROTARY SP2	*ROTARY SP3	*TREMOLO2	*GTR TREMOLO	
072	48	*PHASER						PHASER 2						
073	49	DISTORTION												
074	4A	OVER DRIVE												
075	4B	AMP SIM.							*DIST HARD	*DIST SOFT				
076	4C	3BAND EQ							*EQ DISCO	*EQ TEL				
077	4D	2BAND EQ												
078	4E	AUTO WAH							*AUTO WAH					
079	4F	THRU												
:	:	:												
127	7F	THRU												

<Table 1-13 > Effect Parameter List

**XG Effect Name**  
**HALL1,HALL2**  
**ROOM1,ROOM2,ROOM3**  
**STAGE1,STAGE2**  
**PLATE (reverb, variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Reverb Time	0.3-30.0s	0-69	table#4		
2	Diffusion	0-10	0-10			
3	Initial Delay	0.1mS-99.3mS	0-63	table#5		
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
5	LPF Cutoff	1.0k-Thru	34-60	table#3		
6						
7						
8						
9	Dry/Wet	D63>W - D=W - D<W63	1-127			●
10						
11	Rev Delay	0.1mS-99.3mS	0-63	table#5		
12	Density	0-4 (reverb, variation block)	0-4		CVP-109/107/700	
		0-3 (reverb, variation block)	0-3		CVP-105/103	
		0-2 (insertion block)	0-2		CVP-109/107/700 only	
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127			
14	High Damp	0.1-1.0	1-10		CVP-109/107/700 only	
15	Feedback Level	-63+63	1-127			
16						

**WHITE ROOM**  
**TUNNEL**  
**CANYON**  
**BASEMENT (reverb, variation block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Reverb Time	0.3-30.0s	0-69	table#4		
2	Diffusion	0-10	0-10			
3	Initial Delay	0.1mS-99.3mS	0-63	table#5		
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
5	LPF Cutoff	1.0k-Thru	34-60	table#3		
6	Width	0.5-10.2m	0-37	table#11		
7	Heigt	0.5-20.2m	0-73	table#11		
8	Depth	0.5-30.2m	0-104	table#11		
9	Wall Vary	0-30	0-30			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Rev Delay	0.1mS-99.3mS	0-63	table#5		
12	Density	0-4	0-4		CVP-109/107/700	
		0-3	0-3		CVP-105/103	
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127			
14	High Damp	0.1-1.0	1-10		CVP-109/107/700 only	
15	Feedback Level	-63+63	1-127			
16						

**DELAY L,C,R (variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
2	Rch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
3	Cch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
4	Feedback Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
5	Feedback Level	-63+63	1-127			
6	Cch Level	0-127	0-127			
7	High Damp	0.1-1.0	1-10			
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
14	EQ Low Gain	-12+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12+12dB	52-76			

**DELAY L,R (variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
2	Rch Delay	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
3	Feedback Delay 1	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
4	Feedback Delay 2	0.1-715.0ms (variation block)	1-7150			
		0.1-715.0ms (insertion block)	1-7150		CVP-109/107/700 only	
5	Feedback Level	-63+63	1-127			
6	High Damp	0.1-1.0	1-10			
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
14	EQ Low Gain	-12+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12+12dB	52-76			

**ECHO (variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay1	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
2	Lch Feedback Level	-63+63	1-127			
3	Rch Delay1	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
4	Rch Feedback Level	-63+63	1-127			
5	High Damp	0.1-1.0	1-10			
6	Lch Delay2	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
7	Rch Delay2	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
8	Delay2 Level	0-127	0-127			
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
14	EQ Low Gain	-12+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12+12dB	52-76			

**CROSS DELAY (variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	L->R Delay	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
2	R->L Delay	0.1-355.0ms (variation block)	1-3550			
		0.1-355.0ms (insertion block)	1-3550		CVP-109/107/700 only	
3	Feedback Level	-63+63	1-127			
4	Input Select	L,R,L&R	0-2			
5	High Damp	0.1-1.0	1-10			
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
14	EQ Low Gain	-12+12dB	52-76			
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
16	EQ High Gain	-12+12dB	52-76			

**EARLY REF1,EARLY REF2(variation block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	Type	S,H,L,H,Rdm,Rvs,Plt,Spr	0-5			
2	Room Size	0.1-7.0	0-44	table#6		
3	Diffusion	0-10	0-10			
4	Initial Delay	0.1mS-99.3mS	0-63	table#5		
5	Feedback Level	-63+63	1-127			
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3		
7	LPF Cutoff	1.0k-Thru	34-60	table#3		
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Liveness	0-10	0-10			
12	Density	0-3	0-3			
13	High Damp	0.1-1.0	1-10			
14						
15						
16						

**GATE REVERB REVERSE GATE (variation block)**

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

**KARAOKE1,2,3 (variation, insertion block)**

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

**CHORUS1,2,3,4**  
**CELESTE1,2,3,4 (chorus, variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Feedback Level	-63+63	1-127			
4	Delay Offset	0.0mS-50mS	0-127	table#2		
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
		-12+12dB (variation block)	52-76		CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		CVP-109/107/700 only	
14						
15	Input Mode	mono/stereo	0-1			
16						

**FLANGER1,2,3 (chorus, variation, insertion block)**

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127			
3	Feedback Level	-63+63	1-127			
4	Delay Offset	0.0mS-50mS	0-127	table#2		
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700	
		50Hz-2.0kHz	8-40	table#3	CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
		-12+12dB (variation block)	52-76		CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120		CVP-109/107/700 only	

## SYMPHONIC (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127	table#1		
3	Delay Offset	0.0mS-50mS	0-127	table#2		
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
12	EQ Mid Gain	-12+12dB (variation block)	52-76	table#3	CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120	table#3	CVP-109/107/700 only	
14						
15						
16						

## ENSEMBLE DETUNE (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Detune	-50+50cent	14-114	table#1		
2	Lch Init Delay	0.0mS-50mS	0-127	table#2		
3	Rch Init Delay	0.0mS-50mS	0-127	table#2		
4						
5						
6						
7						
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	EQ Low Frequency	32Hz-2.0kHz (variation, insertion block)	4-40	table#3	CVP-109/107/700 only	
12	EQ Low Gain	-12+12dB (variation, insertion block)	52-76	table#3	CVP-109/107/700 only	
13	EQ High Frequency	500Hz-16.0kHz (variation, insertion block)	28-58	table#3	CVP-109/107/700 only	
14	EQ High Gain	-12+12dB (variation, insertion block)	52-76	table#3	CVP-109/107/700 only	
15						
16						

## AMBIENCE (variation block)

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

## ROTARY SPEAKER (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	LFO Depth	0-127	0-127	table#1		
3						
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
12	EQ Mid Gain	-12+12dB (variation block)	52-76	table#3	CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120	table#3	CVP-109/107/700 only	
14						
15						
16						

## 2WAY ROTARY SPEAKER (variation block)

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

## TREMOLO (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	AM Depth	0-127	0-127	table#1		
3	PM Depth	0-127	0-127	table#1		
4						
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10						
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
12	EQ Mid Gain	-12+12dB (variation block)	52-76	table#3	CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120	table#3	CVP-109/107/700 only	
14	LFO Phase Difference	-180+180deg(resolution=3deg.)	4-124	table#3	CVP-109/107/700 only	
15	Input Mode	mono/stereo	0-1	table#3	CVP-109/107/700 only	
16						

## AUTO PAN (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		●
2	L/R Depth	0-127	0-127	table#1		
3	F/R Depth	0-127	0-127	table#1		
4	PAN Direction	L<->R.L->R.L<-R.Ltum.Rtum.L/R	0-5	table#1		
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10						
11	EQ Mid Frequency	100Hz-10.0kHz (variation block)	14-54	table#3	CVP-109/107/700 only	
12	EQ Mid Gain	-12+12dB (variation block)	52-76	table#3	CVP-109/107/700 only	
13	EQ Mid Width	1.0-12.0 (variation block)	10-120	table#3	CVP-109/107/700 only	
14						
15						
16						

## PHASER 1 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127	table#1		
3	Phase Shift Offset	0-127	0-127	table#1		
4	Feedback Level	-63+63	1-127	table#1		
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Stage	4,5,6 (chorus, insertion block)	4-6		CVP-109/107/700 only	
12		4-12 (variation block)	4-12		CVP-109/107/700 only	
13		6-10 (variation block)	6-10		CVP-109/107/700 only	
14		mono/stereo	0-1		CVP-105/103	
15						
16						

## PHASER 2 (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1		
2	LFO Depth	0-127	0-127	table#1		
3	Phase Shift Offset	0-127	0-127	table#1		
4	Feedback Level	-63+63	1-127	table#1		
5						
6	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
7	EQ Low Gain	-12+12dB	52-76	table#3		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12+12dB	52-76	table#3		
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Stage	3,4,5,6	3-6		CVP-109/107/700	
12		3,4,5	3-5		CVP-105/103	
13	LFO Phase Difference	-180deg+180deg (resolution=3deg.)	4-124			
14						
15						
16						

## DISTORTION OVERDRIVE (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Drive	0-127	0-127	table#1		●
2	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3	CVP-109/107/700 CVP-105/103	
3	EQ Low Gain	-12+12dB	52-76	table#3		
4	LPF Cutoff	1.0k-Thru	34-60	table#3		
5	Output Level	0-127	0-127	table#3		
6						
7	EQ Mid Frequency	100Hz-10.0kHz 500Hz-10.0kHz	14-54 28-54	table#3	CVP-109/107/700 CVP-105/103	
8	EQ Mid Gain	-12+12dB	52-76	table#3		
9	EQ Mid Width	1.0-12.0	10-120	table#3		
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11						
12	Edge(Clip Curve)	0-127	0-127		mild-sharp	
13						
14						
15						
16						

## COMP+DIST (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Drive	0-127	0-127	table#1		●
2	EQ Low Frequency	32Hz-2.0kHz 50Hz-2.0kHz	4-40 8-40	table#3		
3	EQ Low Gain	-12+12dB	52-76	table#3		
4	LPF Cutoff	1.0k-Thru	34-60	table#3		
5	Output Level	0-127	0-127	table#3		
6						
7	EQ Mid Frequency	100Hz-10.0				

### 3BAND EQ(MONO) (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	EQ Low Gain	-12→12dB	52-76			
2	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	CVP-109/107/700 CVP-105/103	
	EQ High Frequency	500Hz-10.0kHz	28-54	table#3		
3	EQ Mid Gain	-12→12dB	52-76			
4	EQ Mid Width	1.0-12.0	10-120			
5	EQ High Gain	-12→12dB	52-76			
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3		
7	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
8						
9						
10						
11						
12						
13						
14						
15	Input Mode	mono/stereo	0-1			
16						

### 2BAND EQ(STEREO) (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700 CVP-105/103	
	EQ High Frequency	50Hz-2.0kHz	8-40	table#3		
2	EQ Low Gain	-12→12dB	52-76			
3	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
4	EQ High Gain	-12→12dB	52-76			
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						

### AUTO WAH (variation, insertion block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	●	
2	LFO Depth	0-127	0-127			
3	Cutoff Frequency	0-127	0-127			
4	Resonance	1.0-12.0	10-120			
5						
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	CVP-109/107/700 CVP-105/103	
	EQ High Frequency	50Hz-2.0kHz	8-40	table#3		
7	EQ Low Gain	-12→12dB	52-76			
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3		
9	EQ High Gain	-12→12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			
11	Drive	0-127(variation block)	0-127			
12						
13						
14						
15						
16						

### AUTO WAH+DIST

### AUTO WAH+ODRV (variation block)

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

### TOUCH WAH 1 (variation, insertion block)

### TOUCH WAH+DIST (variation block)

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

### TOUCH WAH 2 (variation, insertion block)

### TOUCH WAH+ODRV (variation block)

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

### PITCH CHANGE 1 (variation block)

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

### PITCH CHANGE 2 (variation block)

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

### COMPRESSOR (variation, insertion block)

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

### NOISE GATE (variation, insertion block)

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

### VOICE CANCEL (variation block)

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

### NO EFFECT (reverb, chorus, variation block)

### THRU (variation, insertion block)

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



## HARMONIC ENHANCER (variation block)

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

## TALKING MODULATION (variation block)

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

## LO-FI (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Sampling Freq Control	a,i,u,e,o	0-4			
2	Word Length	1-62	1-62			
3	Output Gain	0-127	0-127			
4	LPF Cutoff	0-127	0-127			
5	Filter Type	Thru,PowerBass, Radio, Tel, Clean,Low	0-5			
6	LPF Resonance	1.0-12.0	10-120			
7	Bit Assign	0-6	0-6			
8	Emphasis	Off/On	0-1			
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15	Input Mode	mono/stereo				
16						

## DIST+DELAY (variation block) OVERDRIVE+DELAY (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Lch Delay Time	0.1-1486.0ms	1-14860			
2	Rch Delay Time	0.1-1486.0ms	1-14860			
3	Delay Feedback Time	0.1-1486.0ms	1-14860			
4	Delay Feedback Level	-63+63	1-127			
5	Delay Mix	0-127	0-127			
6	Dist Drive	0-127	0-127			
7	Dist Output Level	0-127	0-127			
8	Dist EQ Low Gain	-12+12dB	52-76			
9	Dist EQ Mid Gain	-12+12dB	52-76			
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11						
12						
13						
14						
15						
16						

## COMP+DIST+DELAY (variation block) COMP+OVERDRIVE+DELAY (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.1-1486.0ms	1-14860			
2	Delay Feedback Level	-63+63	1-127			
3	Delay Mix	0-127	0-127			
4	Dist Drive	0-127	0-127			
5	Dist Output Level	0-127	0-127			
6	Dist EQ Low Gain	-12+12dB	52-76			
7	Dist EQ Mid Gain	-12+12dB	52-76			
8						
9	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Comp. Attack	1ms-40ms	0-19	table#8		
12	Comp. Release	10ms-680ms	0-15	table#9		
13	Comp. Threshold	-48dB-6dB	79-121			
14	Comp. Ratio	1.0-20.0	0-7	table#10		
15						
16						

## WAH+DIST+DELAY (variation block) WAH+OVERDRIVE+DELAY (variation block)

No.	Parameter	Display	Value	See Table	Comment	Control
1	Delay Time	0.1-1486.0ms	1-14860			
2	Delay Feedback Level	-63+63	1-127			
3	Delay Mix	0-127	0-127			
4	Dist Drive	0-127	0-127			
5	Dist Output Level	0-127	0-127			
6	Dist EQ Low Gain	-12+12dB	52-76			
7	Dist EQ Mid Gain	-12+12dB	52-76			
8						
9						
10	Dry/Wet	D63>W - D=W - D<W63	1-127			●
11	Wah Sensitive	0-127	0-127			
12	Wah Cutoff Freq Offset	0-127	0-127			
13	Wah Resonance	1.0-12.0	10-120			
14	Wah Release	10-680ms	52-67			
15						
16						

Note: Parameter 10 (Dry/Wet) can only be set for insertion type effects.

## VOCAL HARMONY MIDI SPECIFICATIONS

### Channel message

- 1) Note on / off

			Harmony ch	Melody ch
9n	kk vv	note on message	<input type="checkbox"/>	<input type="checkbox"/>
		Specifies pitch in the Vocoder mode.		
		Velocity not recognized.		
		Also used as Gender Threshold source for the Melody channel.		
8n	kk vv	note off message	<input type="checkbox"/>	<input type="checkbox"/>
		Turns the current note off in the Vocoder mode.		
9n	kk 00			
		Also used as Gender Threshold source for the Melody channel.		

2) Control change

Bn	40 vv	damper pedal	<input type="checkbox"/>	<input type="checkbox"/>
	64	RPN	<input type="checkbox"/>	<input type="checkbox"/>
	65	RPN	<input type="checkbox"/>	<input type="checkbox"/>
	62	NRPN	<input type="checkbox"/>	<input type="checkbox"/>
	63	NRPN	<input type="checkbox"/>	<input type="checkbox"/>
	06	Data entry MSB	<input type="checkbox"/>	<input type="checkbox"/>
	64	Data Increment	<input type="checkbox"/>	<input type="checkbox"/>
	26	Data Decrement	<input type="checkbox"/>	<input type="checkbox"/>
	7B	All note off	<input type="checkbox"/>	<input type="checkbox"/>

3) RPN

	MSB	LSB		
00	00	Pitch bend sensitivity	<input type="checkbox"/>	<input type="checkbox"/>
7F	7F	NULL	<input type="checkbox"/>	<input type="checkbox"/>

4) NRPN

	MSB	LSB		
00	00	Harmony mute	<input type="checkbox"/>	<input type="checkbox"/>
01	08	Vibrato rate modulation	<input type="checkbox"/>	<input type="checkbox"/>
01	09	Vibrato depth modulation	<input type="checkbox"/>	<input type="checkbox"/>
01	0A	Vibrato delay modulation	<input type="checkbox"/>	<input type="checkbox"/>
01	1A	Detune modulation	<input type="checkbox"/>	<input type="checkbox"/>
		Controls the overall amount of detune.		
02	10	Harmony 1 volume	<input type="checkbox"/>	<input type="checkbox"/>
02	11	Harmony 2 volume	<input type="checkbox"/>	<input type="checkbox"/>
02	20	Harmony 1 pan	<input type="checkbox"/>	<input type="checkbox"/>
02	21	Harmony 2 pan	<input type="checkbox"/>	<input type="checkbox"/>
02	30	Harmony 1 detune	<input type="checkbox"/>	<input type="checkbox"/>
02	31	Harmony 2 detune	<input type="checkbox"/>	<input type="checkbox"/>
03	00	Lead gender type	<input type="checkbox"/>	<input type="checkbox"/>
03	01	Lead gender amount	<input type="checkbox"/>	<input type="checkbox"/>

5) Pitch bend

E0	nn nn		<input type="checkbox"/>	<input type="checkbox"/>
		Only effective when melody channel Lead Gender ON.		

<Table 1-14 > Effect Data Value Assign Table

Table#1

LFO Frequency

Data	Value	Data	Value	Data	Value	Data	Value
0	0.00	32	1.35	64	2.69	96	8.41
1	0.04	33	1.39	65	2.78	97	8.75
2	0.08	34	1.43	66	2.86	98	9.08
3	0.13	35	1.47	67	2.94	99	9.42
4	0.17	36	1.51	68	3.03	100	9.76
5	0.21	37	1.56	69	3.11	101	10.1
6	0.25	38	1.60	70	3.20	102	10.8
7	0.29	39	1.64	71	3.28	103	11.4
8	0.34	40	1.68	72	3.37	104	12.1
9	0.38	41	1.72	73	3.45	105	12.8
10	0.42	42	1.77	74	3.53	106	13.5
11	0.46	43	1.81	75	3.62	107	14.1
12	0.51	44	1.85	76	3.70	108	14.8
13	0.55	45	1.89	77	3.79	109	15.5
14	0.59	46	1.94	78	4.04	110	16.2
15	0.63	47	1.98	79	4.21	111	16.8
16	0.67	48	2.02	80	4.37	112	17.5
17	0.72	49	2.06	81	4.54	113	18.2
18	0.76	50	2.10	82	4.71	114	19.5
19	0.80	51	2.15	83	4.88	115	20.9
20	0.84	52	2.19	84	5.05	116	22.2
21	0.88	53	2.23	85	5.22	117	23.6
22	0.93	54	2.27	86	5.38	118	24.9
23	0.97	55	2.31	87	5.55	119	26.2
24	1.01	56	2.36	88	5.72	120	27.6
25	1.05	57	2.40	89	6.02	121	28.9
26	1.09	58	2.44	90	6.39	122	30.3
27	1.14	59	2.48	91	6.73	123	31.6
28	1.18	60	2.52	92	7.07	124	33.0
29	1.22	61	2.57	93	7.40	125	34.3
30	1.26	62	2.61	94	7.74	126	37.0
31	1.30	63	2.65	95	8.08	127	39.7

Table#5

Delay Time(200.0ms)

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

Table#8

Compressor Attack Time

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

Table#9

Compressor Release Time

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

Table#10

Compressor Ratio

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

Table#2

Modulation Delay Offset

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

Table#6

Room Size

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

Table#11

Reverb Width:Depth:Height

Data	Value	Data	Value	Data	Value	Data	Value
0	0.5	32	8.8	64	17.6	96	27.5
1	0.8	33	9.1	65	17.9	97	27.8
2	1.0	34	9.4	66	18.2	98	28.1
3	1.3	35	9.6	67	18.5	99	28.5
4	1.5	36	9.9	68	18.8	100	28.8
5	1.8	37	10.2	69	19.1	101	29.2
6	2.0	38	10.4	70	19.4	102	29.5
7	2.3	39	10.7	71	19.7	103	29.9
8	2.6	40	11.0	72	20.0	104	30.2
9	2.8	41	11.2	73	20.2		
10	3.1	42	11.5	74	20.5		
11	3.3	43	11.8	75	20.8		
12	3.6	44	12.1	76	21.1		
13	3.9	45	12.3	77	21.4		
14	4.1	46	12.6	78	21.7		
15	4.4	47	12.9	79	22.0		
16	4.6	48	13.1	80	22.4		
17	4.9	49	13.4	81	22.7		
18	5.2	50	13.7	82	23.0		
19	5.4	51	14.0	83			

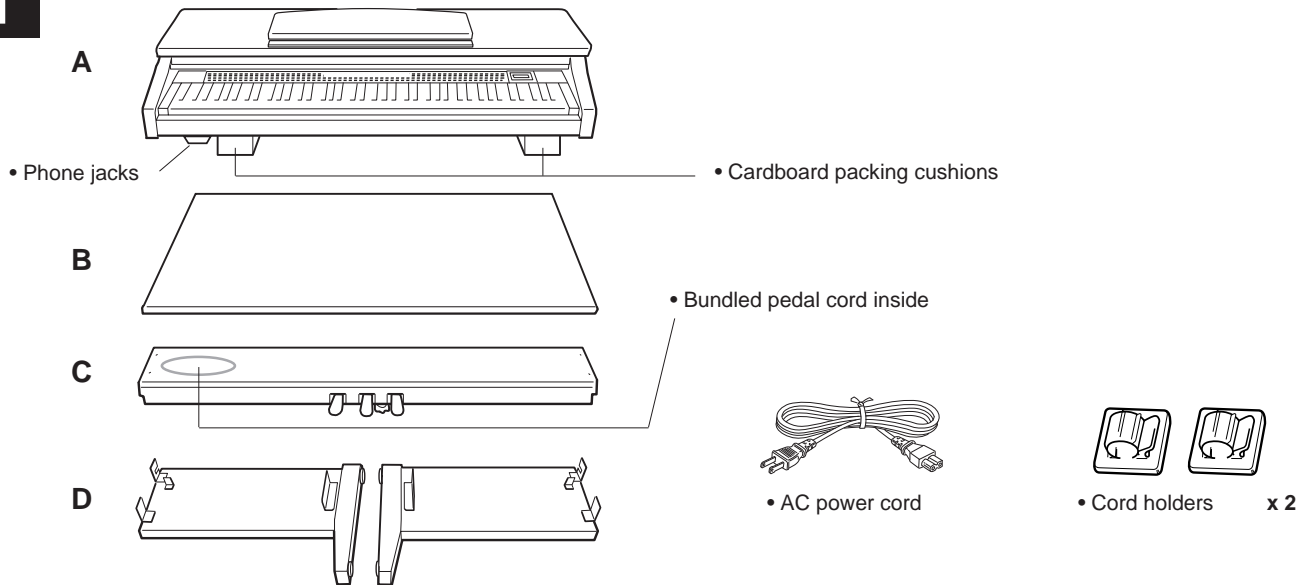
Function ...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 16 1 - 16 *1	1 - 16 1 - 16 *2	Memorized
Mode Default Messages Altered	3 x *****	3 3,4 (m=1) *3 x	
Note Number : True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON Note OFF	o 9nH,v=1-127 x 9nH,v=0	o 9nH,v=1-127 x	
After Key's Touch Ch's	x x	x o	
Pitch Bend	o	o 0-24 semi	
Control change	0,32 1 5 7,10,11 6,38 64,66,67 65 71-74 84 91,93,94 96,97 98,99 100,101	o x *4 x o o o o x x *4 o o o x x *4 o	Bank Select Modulation Portamento Time  Data Entry  Portamento Sound Controller Portamento Cntrl Effect Depth RPN Inc,Dec NRPN LSB,MSB RPN LSB,MSB
Prog Change : True #	o 0 - 127 *****	o 0 - 127	
System Exclusive	o	o	
: Song Pos. Common : Song Sel. : Tune	x x x	x x x	
System :Clock Real Time :Commands	o o	o o	
Aux :All Sound Off :Reset All Cntrls :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	x x x x o x	o(120,126,127) o(121) x o(123-125) o x	
Notes:			

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

Notes:

- \*1: The send channel for the RIGHT1, RIGHT2, and LEFT parts can be set using the Send Channel (Keyboard) function. The transmission of accompaniment, harmony, and song data can be turned on or off using the Send Channel (Accompaniment/Harmony) and Song Transmission functions.
- \*2: Messages received on the channel set by the Remote Keyboard function are handled as operations performed directly on the keyboard or panel. Only the following messages are received on this channel:
- Note On/Off (A-1...C7)
  - Control Changes
    - Bank Select MSB/LSB (RIGHT1 part)
    - Modulation
    - Data Entry MSB (when PITCH BEND SENS. is set by RPN LSB/MSB)
    - Volume
    - Expression
    - Sustain
    - Sostenuto
    - Soft Pedal
    - Data Increment/Decrement (when PITCH BEND SENS. is set by RPN LSB/MSB)
    - RPN LSB/MSB (PITCH BEND SENS. only)
    - All Note Off
  - Program Change (RIGHT1 part)
  - Pitch Bend
- \*3: "m" is always treated as "1" regardless of its value.
- \*4: Transmitted when ACMP&RHY or HARMONY setting of Send Channel (Accompaniment/Harmony) function is on.

# 1



## CVP-103: Assembly

### **⚠ CAUTION**

- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble in accordance with the sequence given below.
- Assembly should be carried out by at least two persons.
- Be sure to use the correct screw size, as indicated above. Use of incorrect screws can cause damage.
- Be sure to tighten up all screws upon completing assembly of each unit.
- To disassemble, reverse the assembly sequence given below.

### **1** Open the box and remove all the parts.

Take out the two cardboard packing cushions on top of the main unit and place them on the floor. Then take out main unit (A) and place it on top of the packing cushions. Position the cushions so as to protect the phone jacks on the base of the unit.

Remove all parts from the box. Confirm that all parts shown in the illustration above are provided.



• 6 x 20 mm round-head screws x 4 ❶



• 4 x 12 mm round-head screws x 2 ❷

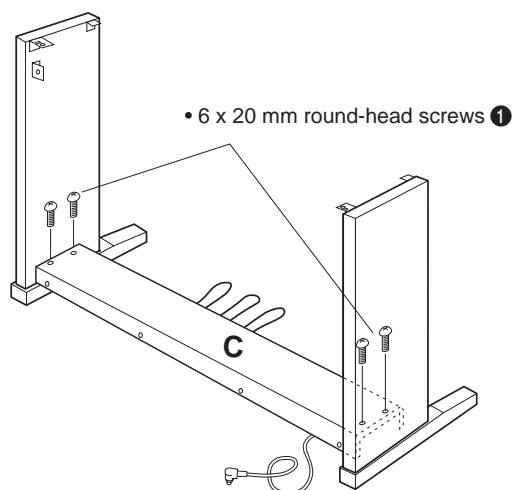


• 4 x 20 mm tapping screws x 4 ❸



• 6 x 16 mm flat-head screws x 4 ❹

## 2

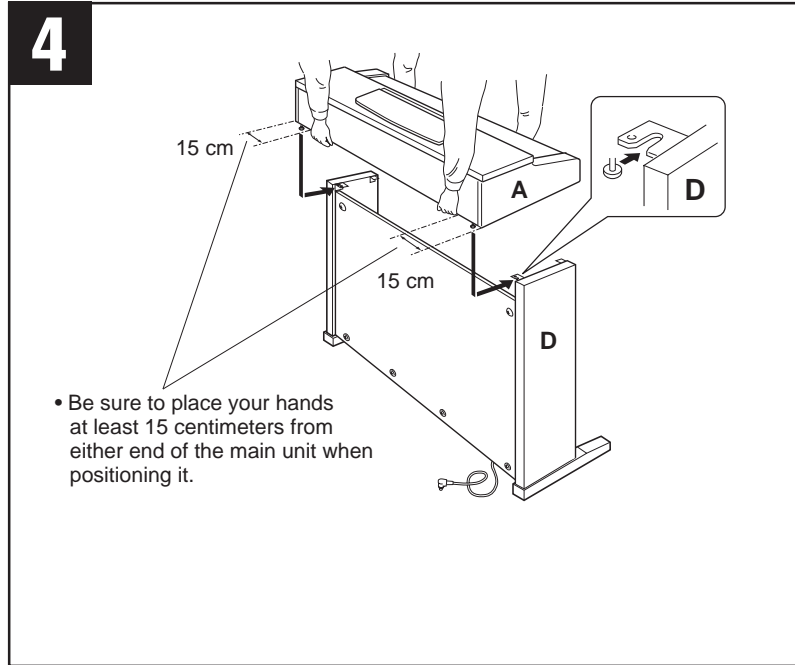
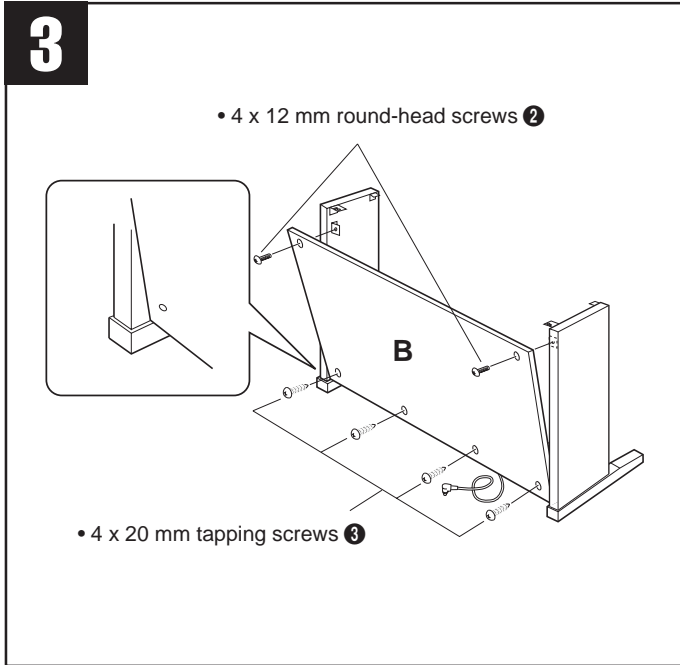


### ❷ Attach the side panels (D) to the pedal box (C).

Before installing the pedal box, untie and straighten out the bundled cord attached to the bottom of the pedal box. Don't discard the vinyl tie, you'll need it later in step ❺.

Place the pedal box on top of the brackets attached to the side panels (D), and attach using the four 6 x 20 millimeter round-head screws ❶ — two screws on each side. Make sure the pedals extend in the same direction as the side panel feet.





### **3 Attach the rear panel (B).**

With the rear panel slightly angled as shown in the illustration, lower it onto the feet's protruding edge at the rear of the pedal box. Then, while eliminating any gaps between the rear and side panels, secure the top of the rear panel to the side panel brackets using two 4 x 12 mm round-head screws ②. Finally, secure the bottom of the rear panel to the pedal box using four 4 x 20 mm tapping screws ③.

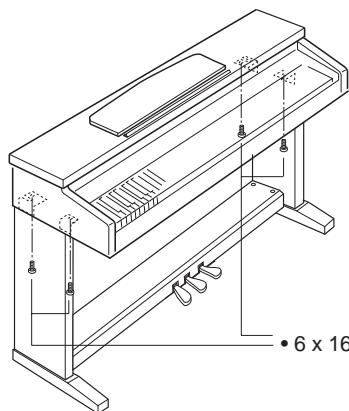
### **4 Install the main unit (A).**

Place the main unit (A) on the side panels (D) with the screws on its bottom panel (toward the rear of the main unit) just behind the grooves in the brackets located at the top of the side panels. Then slide the main unit forward until it stops. **WATCH YOUR FINGERS WHEN DOING THIS!!**

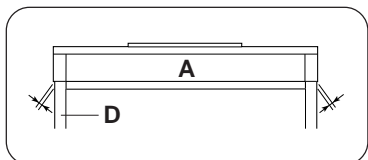
Align the holes on the bottom panel of the main unit with the holes in the brackets on the side panels (also center the main unit to produce equal clearance on the left and right sides, as shown in the illustration), then screw in and securely tighten the four 6 x 16 millimeter flat-head screws ④.

#### **⚠ CAUTION**

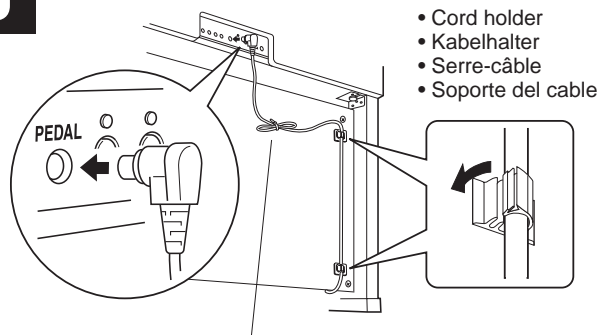
- Do not hold the keyboard in any position other than the position shown in the above illustration.
- Fingers can become pinched between the main unit and the rear or side panels, be extra careful so as not to drop the main unit.



• 6 x 16 mm flat-head screws ④



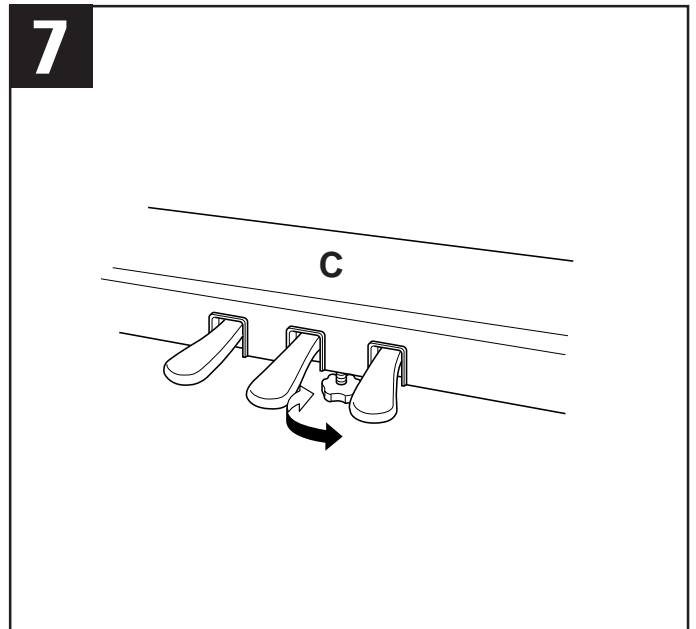
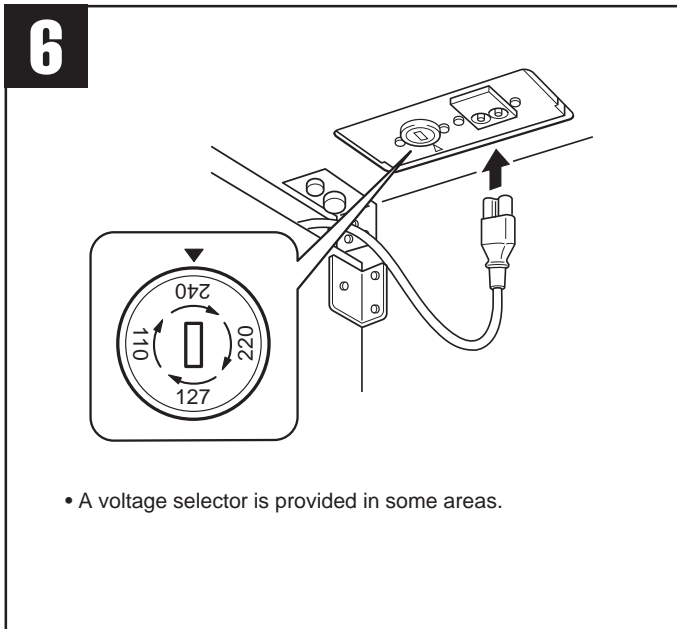
**5**



• Use the vinyl tie that was removed from the bundled pedal cord in step ② to tie up any slack in the pedal cord.

### 5 Connect the pedal cord.

The pedal cord from the pedal box must be plugged into the PEDAL connector on the rear of the main unit. Once connected, attach the cord holders to the rear panel as shown, then clip the cord into the holders.



## 6 Voltage Selector

Before connecting the AC power cord, check the setting of the voltage selector which is provided in some areas. To set the selector for 110V, 127V, 220V or 240V main voltages, use a “minus” screwdriver to rotate the selector dial so that the correct voltage for your region appears next to the pointer on the panel. The voltage selector is set at 240V when the unit is initially shipped.

After the proper voltage has been selected, slide the AC power cord over the rear panel and connect the cord to the AC INLET, then connect the other end of the cord to an AC wall outlet. A plug adaptor may be also provided in some areas to match the pin configuration of the AC wall outlets in your area.

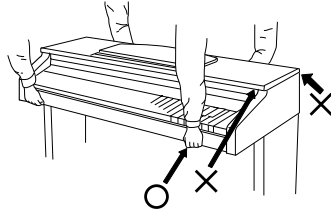
### **CAUTION**

- An improper voltage setting can cause serious damage to the CVP-103 or result in improper operation.

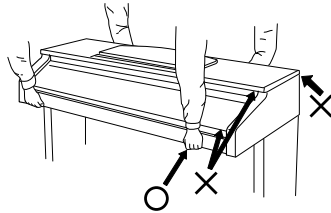
## 7 Set the adjuster.

For stability, an adjuster is provided on the bottom of the pedal box (C). Rotate the adjuster until it comes in firm contact with the floor surface. The adjuster ensures stable pedal operation and facilitates pedal effect control. If the adjuster is not in firm contact with the floor surface, distorted sound may result.

- Models without keyboard cover



- Models with keyboard cover

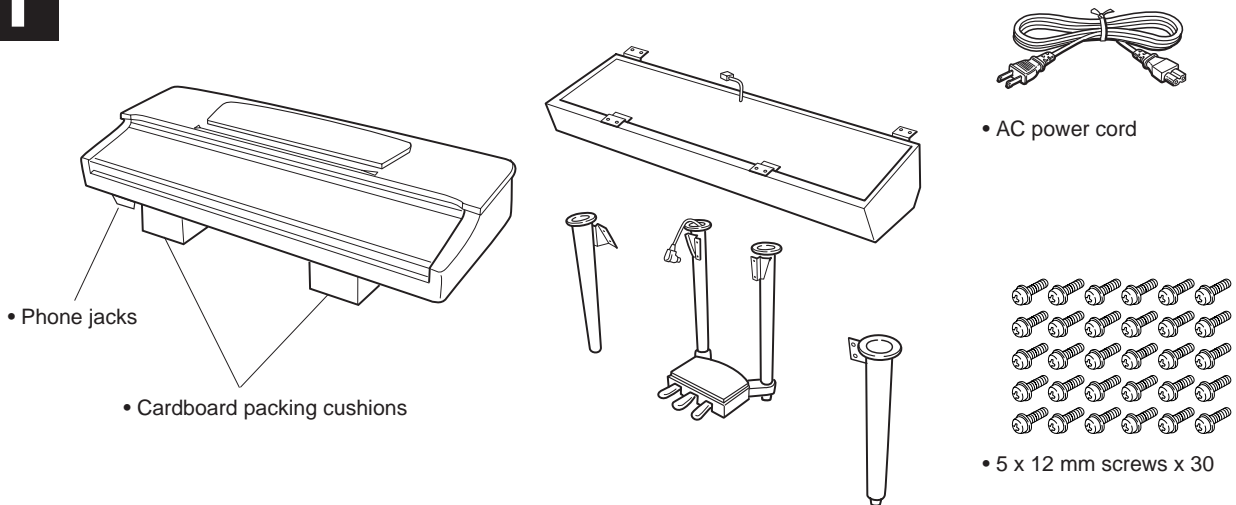


**⚠ CAUTION**

- When moving the instrument after assembly, always hold the lower surface of the main unit, **NEVER** the top portion or keyboard cover. Improper handling can result in damage to the instrument or personal injury.

■ **After completing the assembly, please check the following.**

- Are there any parts left over?
  - ➔ Review the assembly procedure and correct any errors.
- Is the Clavinova clear of doors and other movable fixtures?
  - ➔ Move the Clavinova to an appropriate location.
- Does the Clavinova make a rattling noise when you shake it?
  - ➔ Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?
  - ➔ Turn the adjuster so that it is set firmly against the floor.
- Are the pedal and power cords inserted securely into the sockets?
  - ➔ Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.

**1**

## CVP-105: Assembly

### **⚠ CAUTION**

- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble in accordance with the sequence given below.
- Assembly should be carried out by at least two persons.
- Be sure to use the correct screw size, as indicated above. Use of incorrect screws can cause damage.
- Be sure to tighten up all screws upon completing assembly of each unit.
- To disassemble, reverse the assembly sequence given below.

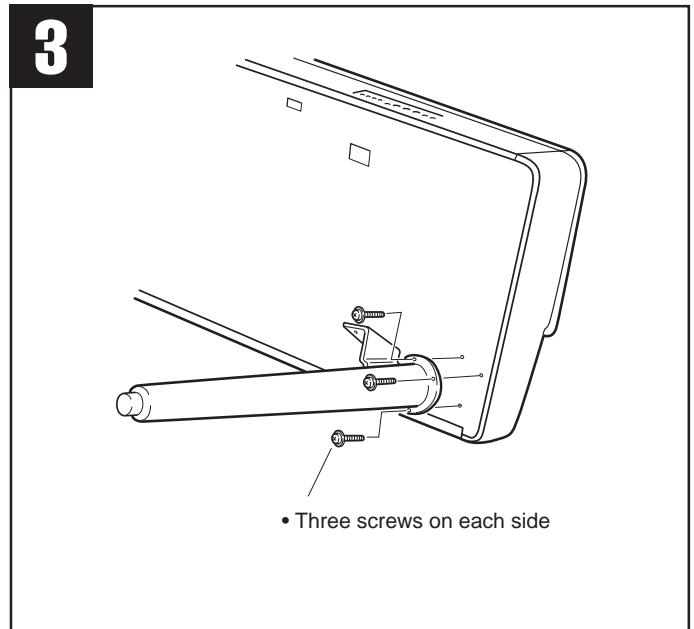
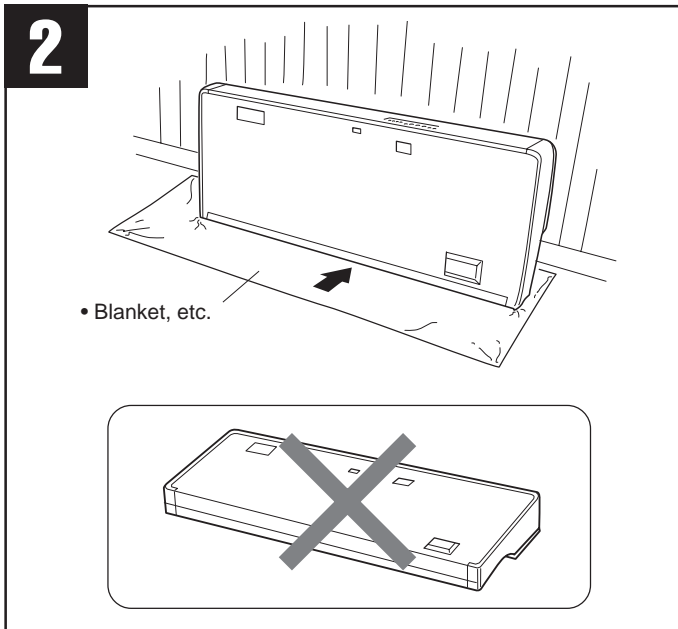
### **1** Open the box and remove all the parts.

Take out the two cardboard packing cushions and place them on the floor. Then take out main unit and place it on top of the packing cushions. Position the cushions so as to protect the phone jacks on the base of the unit.

Remove all parts from the box. Confirm that all parts shown in the illustration above are provided.

### **⚠ CAUTION**

- When you lift the pedal box assembly, make sure that you lift by both legs.



## 2 Carefully lean the main unit against a wall.

To make it easier to install the legs, place a soft blanket or similar material on the floor near a wall, close the Clavinova keyboard cover, place the front panel of the Clavinova (the side with the keyboard) on the blanket and gently lean the unit against the wall — **MAKING SURE THAT IT CAN NOT FALL** — as shown in the illustration.

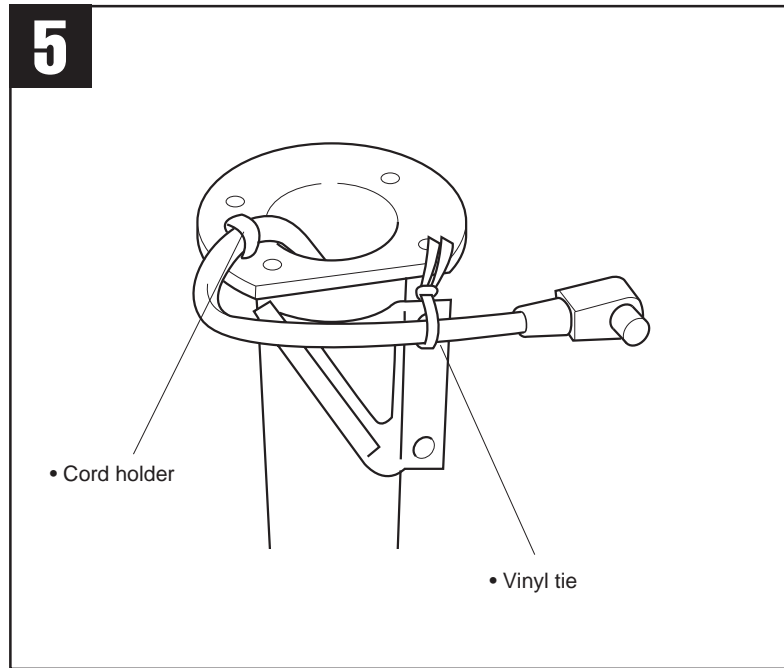
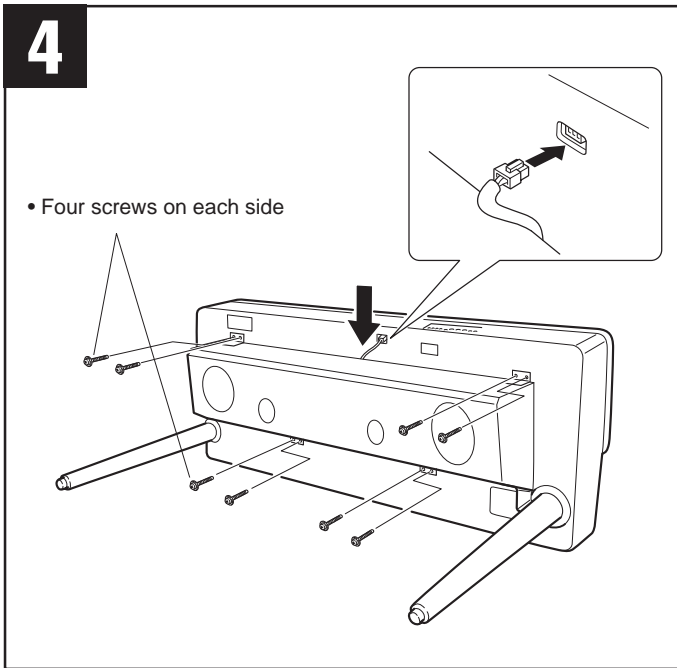
### **CAUTION**

- Do not lay the main unit upside-down on the floor.

## 3 Attach the front legs.

Securely attach the two front legs using three screws for each leg (use a Philips “+” screwdriver) as shown in the illustration. Make sure that the screws are firmly tightened.



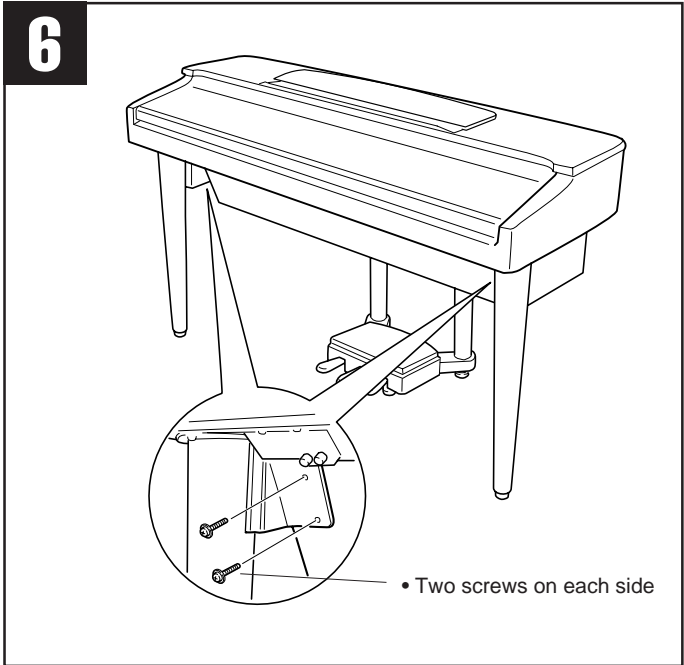
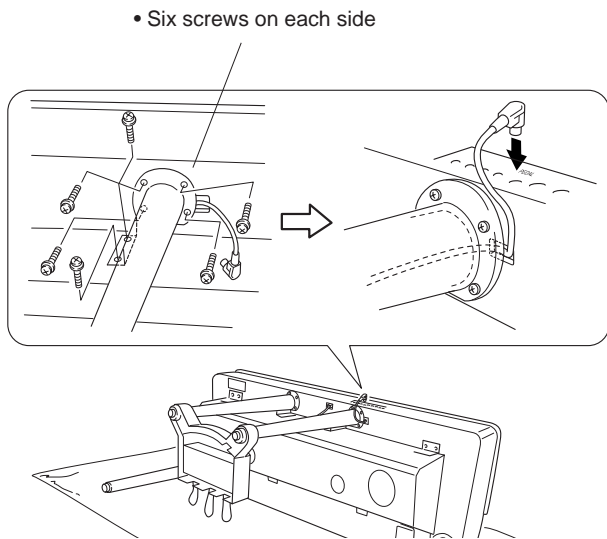


#### **4 Attach the speaker box.**

Gently rest the speaker box onto the corresponding brackets on the front legs. Make sure the speaker cord is extending out from the rear of the speaker box. Loosely secure the speaker box to the main keyboard unit using four screws on both the front and back. (The speaker will be secured in step **5**.) Insert the speaker cord connector into the corresponding socket on the main keyboard unit, making sure that the protruding clip on the connector is facing up.

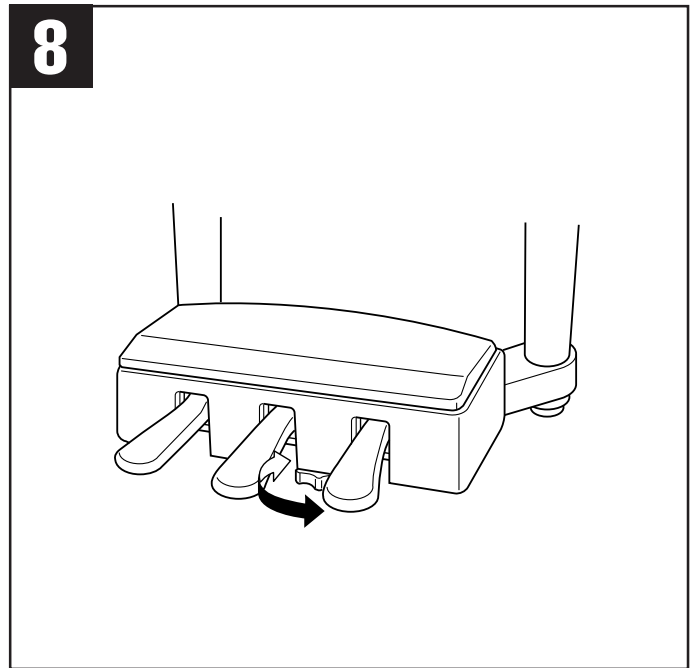
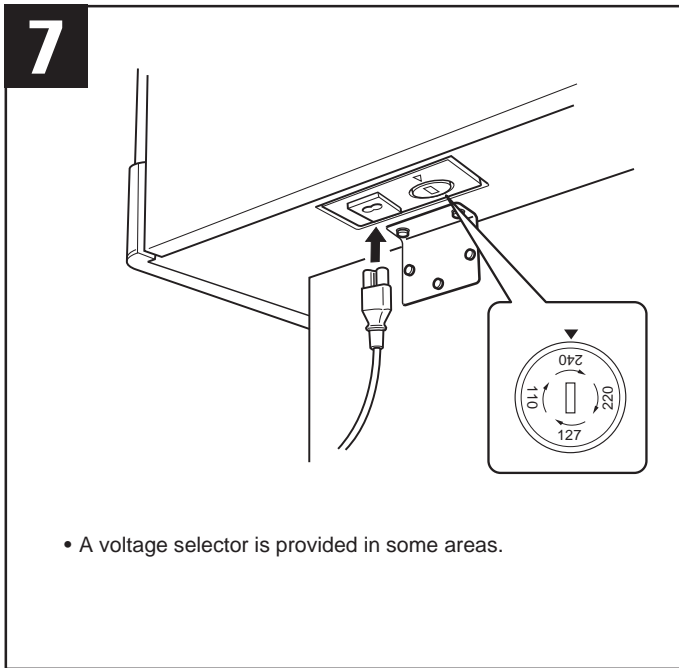
#### **5 Attach the pedal box assembly.**

First, remove the vinyl tie from the left leg. Make sure you don't remove the cord holder on the top of the left leg. Using 6 screws for each leg (four screws per leg and two screws on each leg bracket) loosely secure the rear leg and pedal box assembly making sure that the pedal cord on the left leg protrudes from the cut hole on the underside of the main unit. Once loosely attached, go back and firmly tighten all 12 screws on the rear leg and pedal assembly, and also secure the 8 screws on the speaker box. After the rear leg and pedal assembly is securely attached, insert the pedal cord plug into the PEDAL connector on the rear panel.



**6 Secure the speaker box.**

Stand the main unit on its legs and securely attach the speaker box to the bracket on the front legs using two screws for each bracket. If it is impossible to align the bracket holes with the speaker box holes, slightly loosen the three screws on each of the front legs, align the holes, and secure the speaker box. After the speaker box is firmly attached, retighten the screws on the front legs firmly.



## 7 Voltage Selector

Before connecting the AC power cord, check the setting of the voltage selector which is provided in some areas. To set the selector for 110V, 127V, 220V or 240V main voltages, use a “minus” screwdriver to rotate the selector dial so that the correct voltage for your region appears next to the pointer on the panel. The voltage selector is set at 240V when the unit is initially shipped.

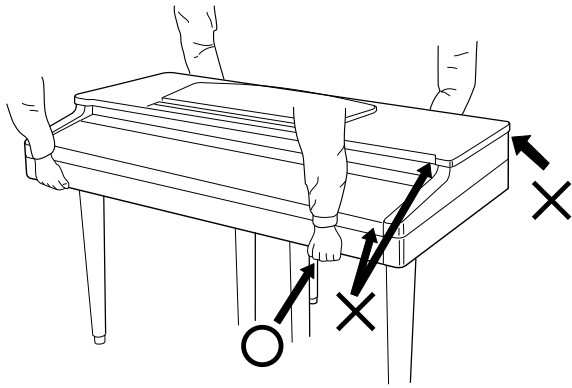
After the proper voltage has been selected, connect the AC power cord to the AC INLET and an AC wall outlet. A plug adaptor may be also provided in some areas to match the pin configuration of the AC wall outlets in your area.

### **CAUTION**

- An improper voltage setting can cause serious damage to the CVP-105 or result in improper operation.

## 8 Set the adjuster.

For stability, an adjuster is provided on the bottom of the pedal box. Rotate the adjuster until it comes in firm contact with the floor surface. The adjuster ensures stable pedal operation and facilitates pedal effect control. If the adjuster is not in firm contact with the floor surface, distorted sound may result.



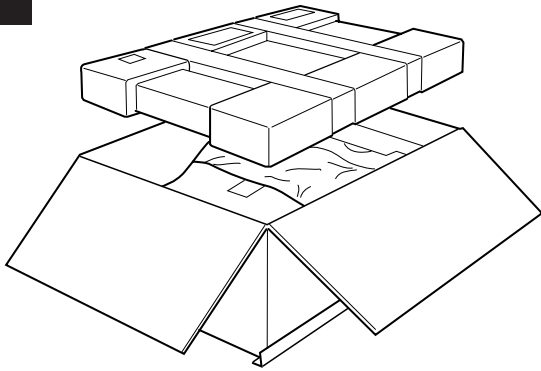
**⚠ CAUTION**

- When moving the instrument after assembly, always hold the lower surface of the main unit, **NEVER** the top portion or keyboard cover. Improper handling can result in damage to the instrument or personal injury.

■ **After completing the assembly, please check the following.**

- Are there any parts left over?
  - ➔ Review the assembly procedure and correct any errors.
- Is the Clavinova clear of doors and other movable fixtures?
  - ➔ Move the Clavinova to an appropriate location.
- Does the Clavinova make a rattling noise when you shake it?
  - ➔ Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?
  - ➔ Turn the adjuster so that it is set firmly against the floor.
- Are the pedal and power cords inserted securely into the sockets?
  - ➔ Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.

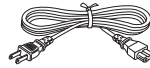
1



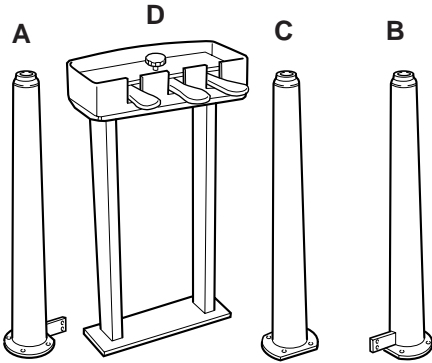
5 x 20 mm long screws x 20



● Cord holders x 2



● AC power cord



- Front leg A
- Front leg B
- Rear leg C
- Pedal box D

## CVP-700: Assembly

### **⚠ CAUTION**

- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble in accordance with the sequence given below.
- Assembly should be carried out by at least two persons. Attempting to assemble alone is dangerous.
- Be sure to use the correct screw size, as indicated above. Use of incorrect screws can cause damage.
- Be sure to tighten up all screws upon completing assembly of each unit.
- The entire package must be turned over during assembly, so select an area that is large enough for the unpacking and assembly operation.

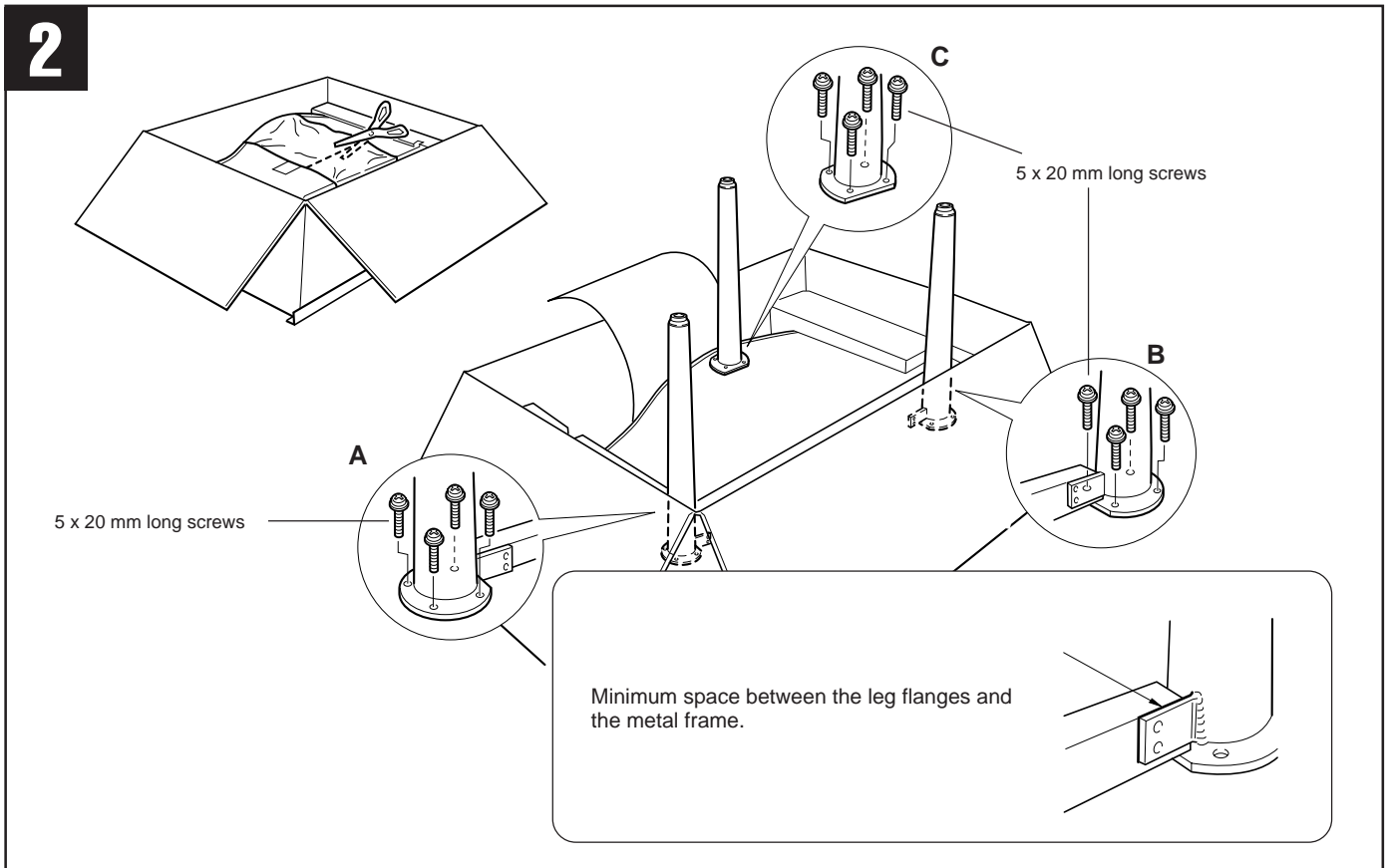
### **1** Open the carton and remove the parts from the upper level.

Referring to the illustration, make sure that you have all the required parts.



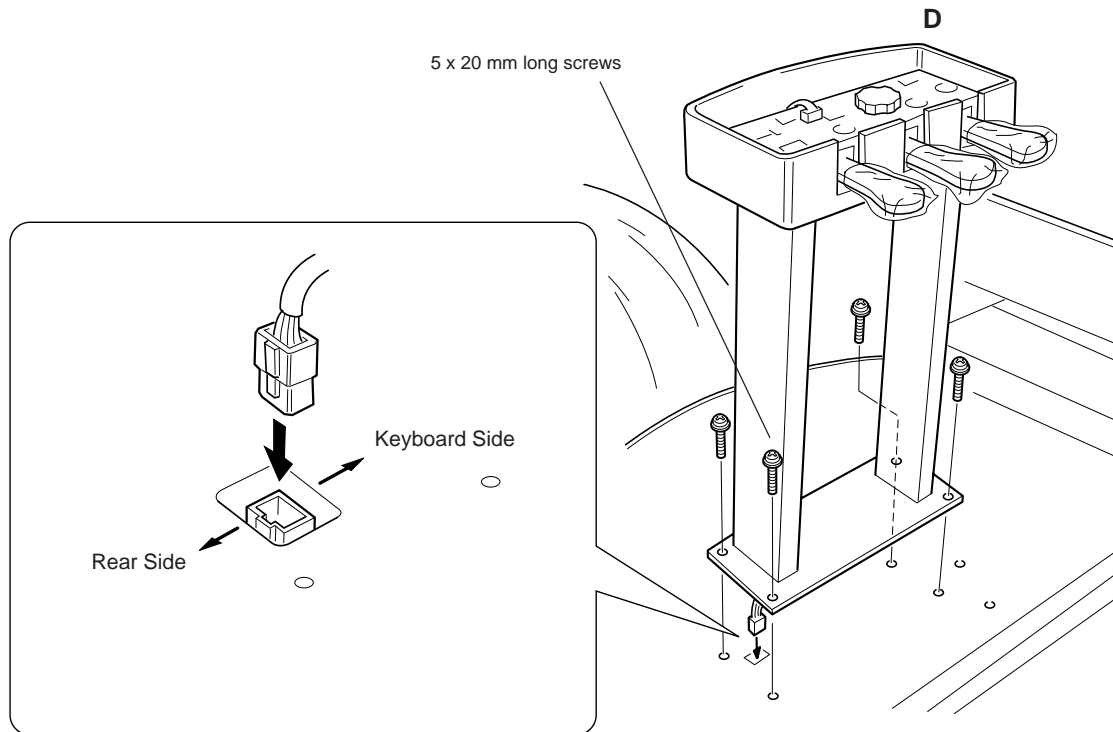
**NOTE**

- A bench may be supplied or optional, depending on the location in which the instrument was purchased.

**2**

## **2 Attach the three legs (A, B, C).**

Use scissors or a cutter to remove the packing material in which the main unit is wrapped. Then attach the legs to the bottom of the main unit using four 5 x 20 mm long screws per leg. Please refer to the illustration carefully when attaching the legs, to ensure that the positions of the (A) and (B) legs are not reversed. Also make sure that there is minimum space between the (A) and (B) leg flanges and the metal frame on the bottom of the main unit (the screws which attach the legs to this frame will be installed later, in step **6**).



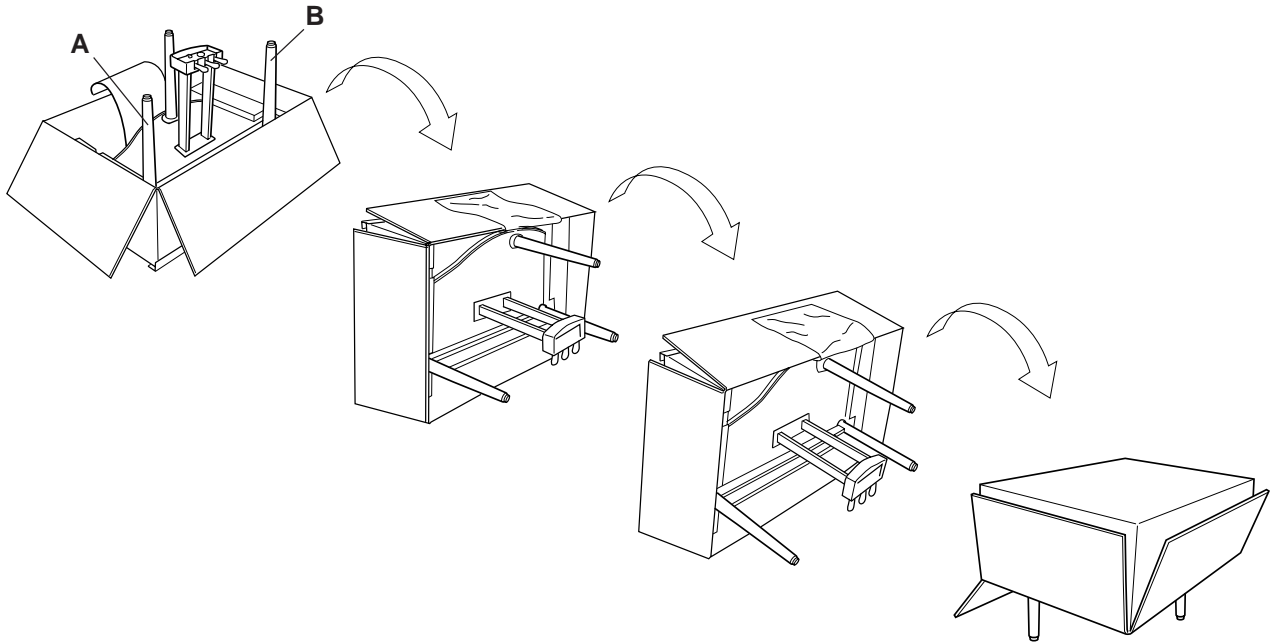
### 3 Attach the pedal box (D).

Before attaching the pedal box, connect the pedal cord. Pull the pedal plug out from the hole in the base plate and plug it into the socket in the bottom of the main unit with the lug on the plug facing the rear of the main unit (refer to the illustration). If the plug won't go in properly, don't force it ... check the plug orientation and try again.

Making sure that the pedal cord doesn't get caught between the base plate and main unit, carefully lower the pedal box assembly onto the bottom of the main unit and line up the screw holes. Finally, attach the pedal box with four 5 x 20 mm long screws.



# 4

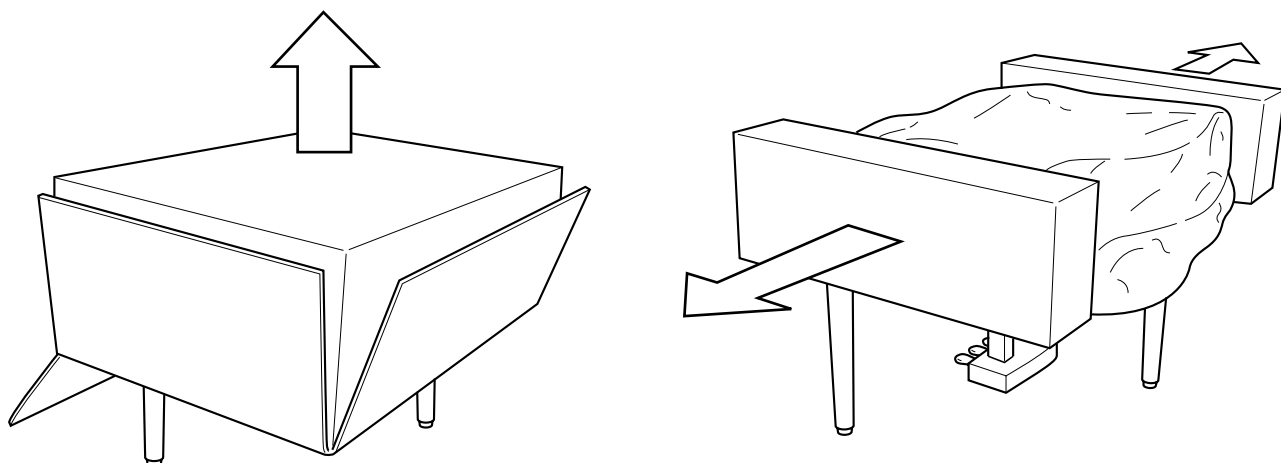


## **4 Turn over the instrument and packing.**

Make sure that the three legs are firmly attached, then using the front legs (A) and (B) for support, turn over the instrument and packing so that the carton is on top of the instrument.

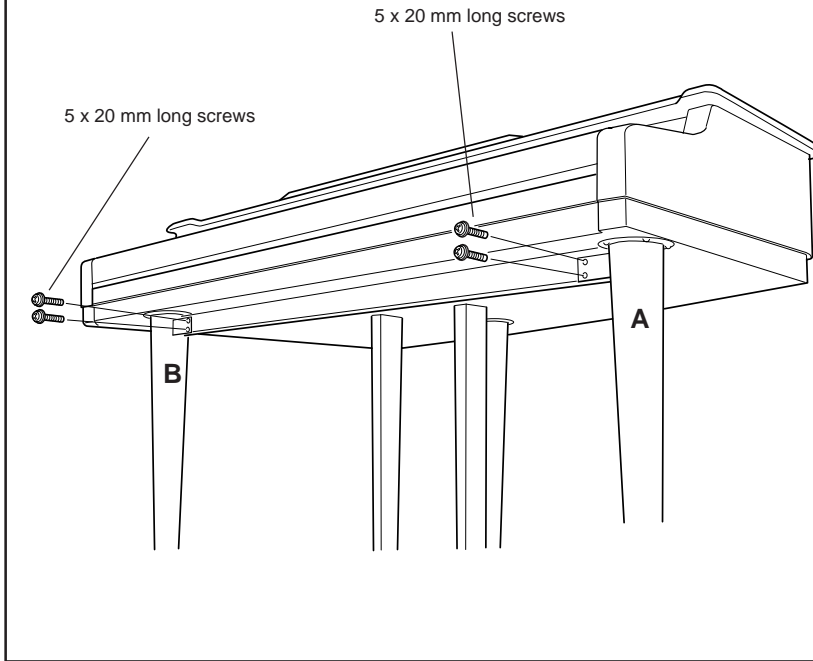
### **CAUTION**

- *Make sure that two persons are used to turn the instrument over. Holding the sides carefully turn over the instrument.*



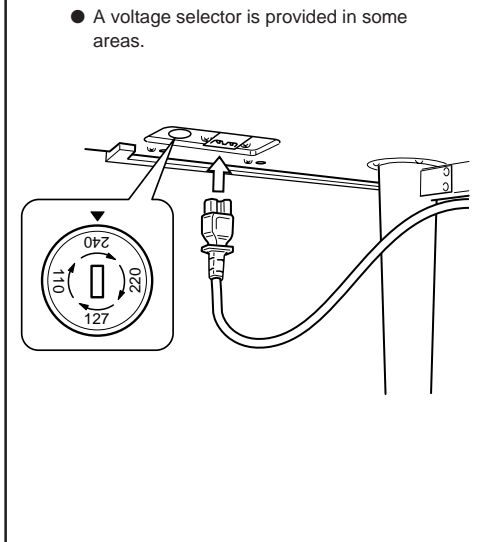
**5 Remove the carton and packing material.**

Lift and remove the carton, then remove the remaining packing material from the main unit.

**6**

### **6** Attach the front leg/frame screws.

Firmly attach the front legs (A) and (B) to the frame on the bottom of the main unit using two 5 x 20 mm long screws for each leg.

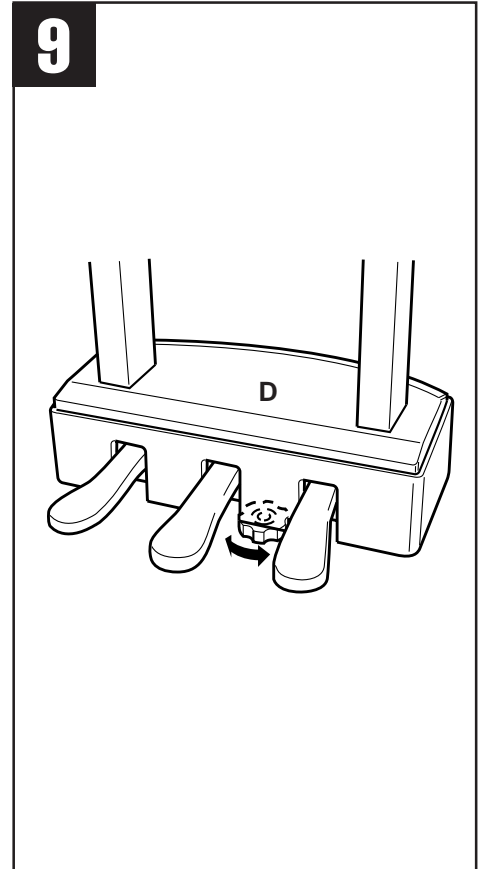
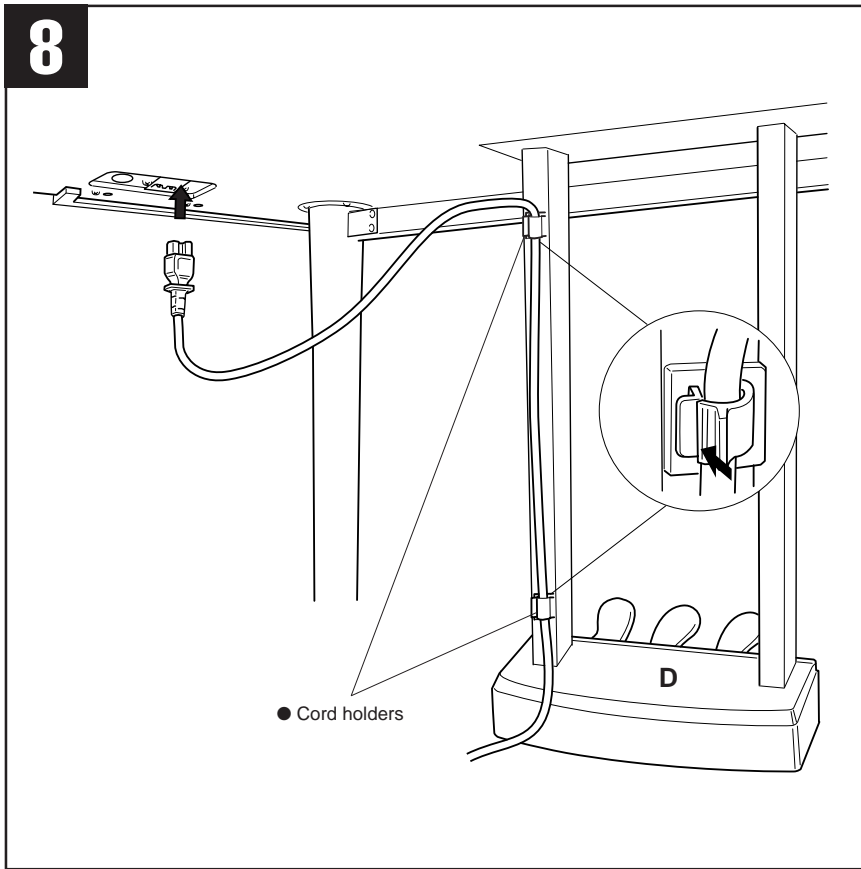
**7**

### **7** Voltage Selector

Check the setting of the voltage selector which is provided in some areas. To set the selector for 110V, 127V, 220V or 240V main voltages, use a “minus” screwdriver to rotate the selector dial so that the correct voltage for your region appears next to the pointer on the panel. The voltage selector is set at 240V when the unit is initially shipped.

#### **⚠ CAUTION**

- An improper voltage setting can cause serious damage to the CVP-700 or result in improper operation.



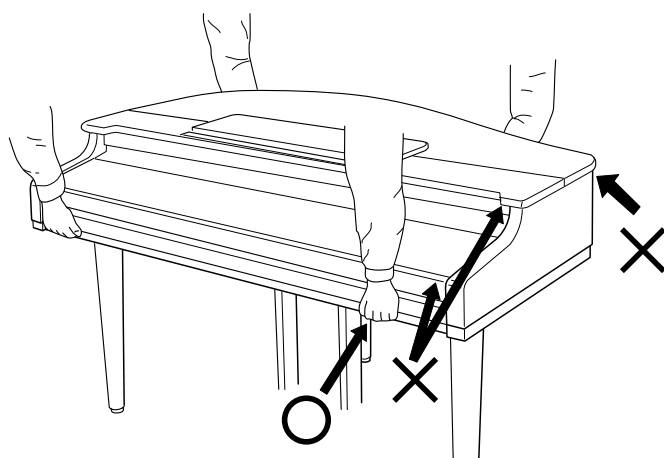
### **8** Attach the cord holders and plug in the AC cord.

Remove the protective backing from the adhesive surface of the cord holders, and attach at approximately the locations shown in the illustration. Plug the main-unit end of the AC cord into the corresponding socket on the bottom of the main unit, then secure the cord with the cord holders.

A plug adaptor may be also provided in some areas to match the pin configuration of the AC wall outlets in your area.

### **9** Set the adjuster.

For stability, an adjuster is provided on the bottom of the pedal box (D). Rotate the adjuster until it comes in firm contact with the floor surface. The adjuster ensures stable pedal operation and facilitates pedal effect control. If the adjuster is not in firm contact with the floor surface, distorted sound may result.



**⚠ CAUTION**

- When moving the instrument after assembly, always hold the lower surface of the main unit, **NEVER** the lid or keyboard cover. Improper handling can result in damage to the instrument or personal injury.

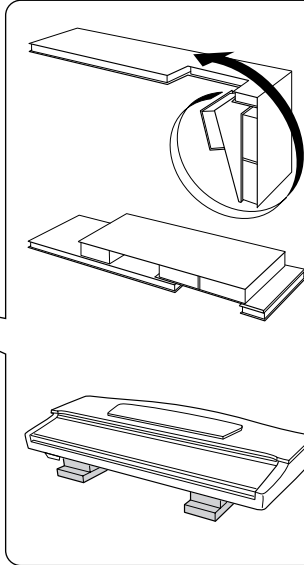
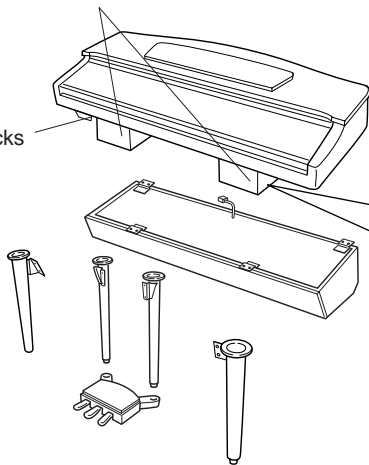
■ **After completing the assembly, please check the following.**

- Are there any parts left over?  
→ Review the assembly procedure and correct any errors.
- Is the Clavinova clear of doors and other movable fixtures?  
→ Move the Clavinova to an appropriate location.
- Does the Clavinova make a rattling noise when you shake it?  
→ Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?  
→ Turn the adjuster so that it is set firmly against the floor.
- Are the pedal and power cords inserted securely into the sockets?  
→ Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.

# 1

• Cardboard packing cushions

• Phone jacks



• Depending upon the unit type, the unit may be packed with the cardboard packing cushions shown in the illustration. In this case, refold the cushions as shown in the illustration. Rest the main unit in a stable manner on the cushions as shown in the illustration.

## CVP109/107: Assembly

### **⚠ CAUTION**

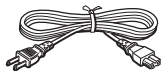
- Be careful not to confuse parts, and be sure to install all parts in the correct direction. Please assemble in accordance with the sequence given below.
- Assembly should be carried out by at least two persons.
- Be sure to use the correct screw size, as indicated above. Use of incorrect screws can cause damage.
- Be sure to tighten up all screws upon completing assembly of each unit.
- To disassemble, reverse the assembly sequence given below.

### **1** Open the box and remove all the parts.

Take out the two cardboard packing cushions and place them on the floor. Then take out main unit and place it on top of the packing cushions. Position the cushions so as to protect the phone jacks on the base of the unit.

Remove all parts from the box. Confirm that all parts shown in the illustration above are provided.

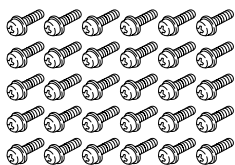
• AC power cord



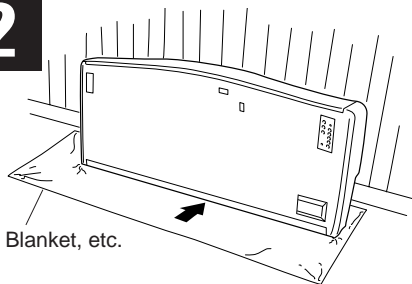
• 4 x 12 mm small screws x 4



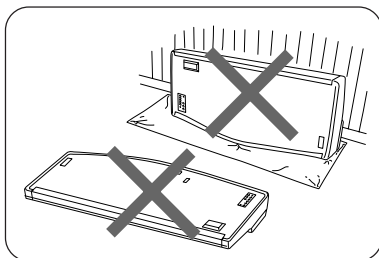
• 5 x 12 mm large screws x 30



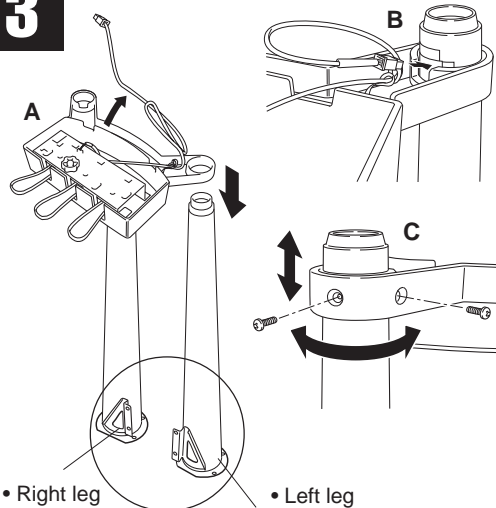
**2**



• Blanket, etc.



**3**



• Right leg

• Left leg

## **2** Carefully lean the main unit against a wall.

To make it easier to install the legs, place a soft blanket or similar material on the floor near a wall, close the Clavinova keyboard cover, place the front panel of the Clavinova (the side with the keyboard) on the blanket and gently lean the unit against the wall — **MAKING SURE THAT IT CAN NOT FALL** — as shown in the illustration.

### **CAUTION**

- Do not lay the main unit upside-down on the floor.

## **3** Pedal assembly.

**A:** Under the pedal box, remove the vinyl tie from the pedal cable (the illustration shows the tie removed). Paying close attention to the direction of the rear legs (take note of the leg brackets in the illustration), slide the pedal box onto the left leg.

**B:** Align the cut hole in the pedal box with the hole in the left leg and insert the cable into the hole on the left leg, pull the cable out of the top of the left leg.

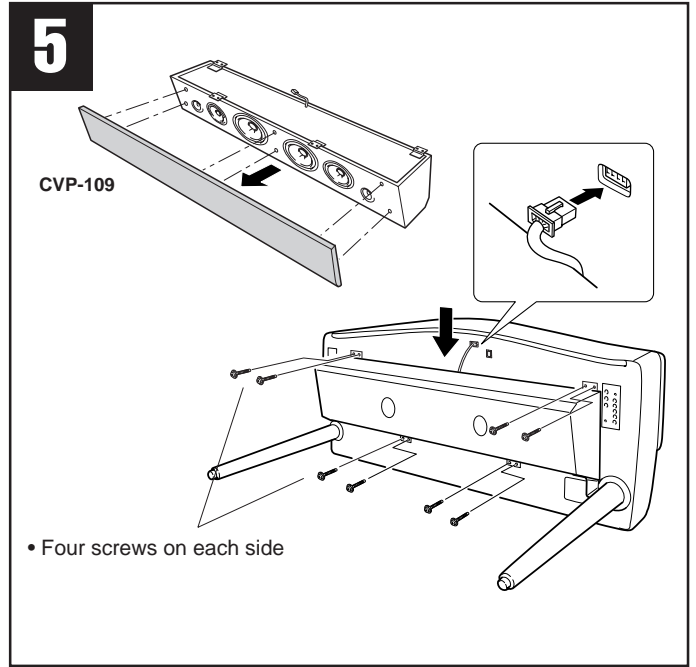
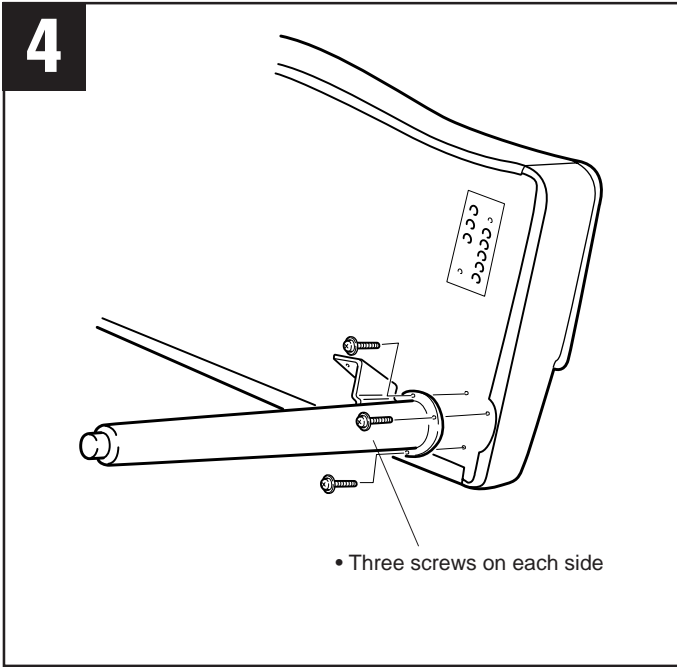
**C:** Align the screw holes, attach the two 4 x 12 millimeter small screws to 2 locations. (First tighten both screws loosely, once the position has been determined tighten firmly.)

Use the same procedure (A, B and C) to attach the right leg. (However, the right leg is not equipped with a pedal cord.)

### **CAUTION**

- When you lift the pedal box assembly, make sure that you lift by both legs.



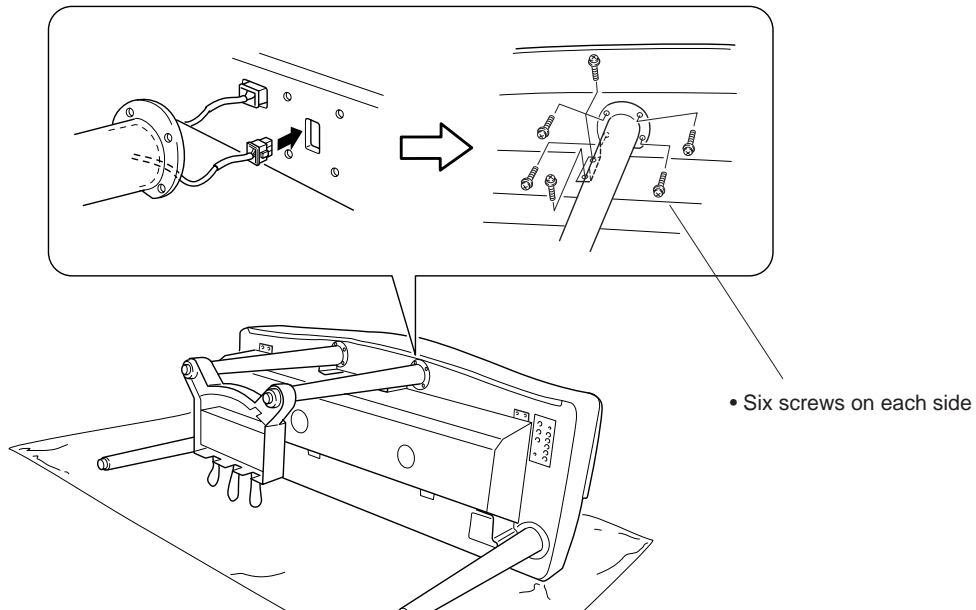


#### **4 Attach the front legs.**

Securely attach the two front legs using three 5 x 12 millimeter large screws for each leg (use a Philips “+” screwdriver) as shown in the illustration. Make sure that the screws are firmly tightened.

#### **5 Attach the speaker box.**

Remove the speaker box cover (attached to the speaker box in 6 places with plastic plugs) from the speaker box. Gently rest the speaker box onto the corresponding brackets on the front legs. (Be careful not to touch the speakers when handling the speaker box. Damage may result.) Make sure the speaker cord is extending out from the rear of the speaker box. Loosely secure the speaker box to the main keyboard unit using four 5 x 12 millimeter large screws on both the front and back. (The speaker will be secured in step **6**.) Insert the speaker cord connector into the corresponding socket on the main keyboard unit, making sure that the protruding clip on the connector is facing up.

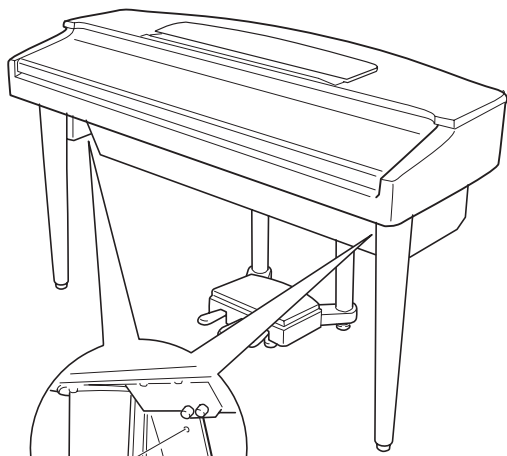


## 6 Attach the pedal box assembly.

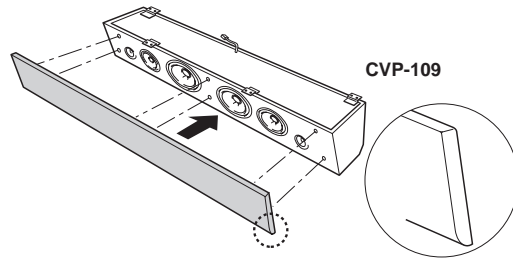
### **⚠ CAUTION**

- When you lift the pedal box assembly, make sure that you lift by both legs.

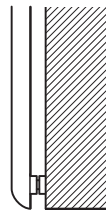
Before attaching the rear leg and pedal box assembly, insert the pedal cord plug extending from the left leg into the corresponding socket in the main unit. Make sure that the protruding clip on the connector is on the right. Put the excess cord into the leg and loosely secure the rear leg and pedal assembly using six 5 x 12 millimeter large screws for each leg (four screws per leg and two screws on each leg bracket). Once the rear leg and pedal assembly has been loosely attached, go back and tighten all 12 of the screws on the rear leg and pedal assembly, and also secure the 8 screws on the speaker box.



• Two screws on each side



CVP-109



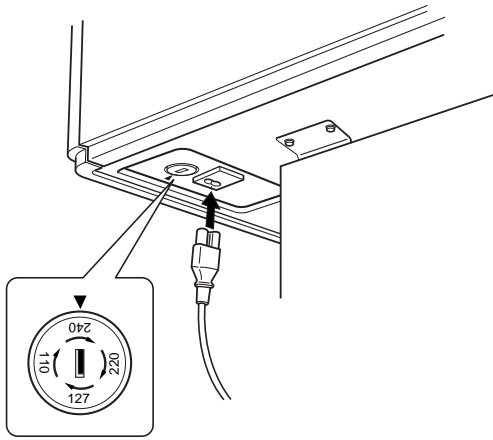
• Make sure the plugs are fully inserted and there is no space left around the plugs and holes.

## 7 Secure the speaker box.

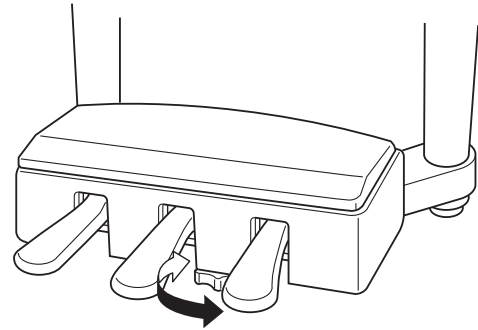
Stand the main unit on its legs and securely attach the speaker box to the bracket on the front legs using two 5 x 12 millimeter large screws for each bracket. If it is impossible to align the bracket holes with the speaker box holes, slightly loosen the three screws on each of the front legs, align the holes, and secure the speaker box. After the speaker box is firmly attached, retighten the screws on the front legs firmly. Put the speaker box cover back in place with the rounded edge of the cover at the bottom, insert the plugs on the cover into their corresponding holes on the speaker box.

### **CAUTION**

- When attaching the cover first, make sure the cover is not upside-down (the plugs will damage the speakers if attached upside-down) and make sure you push where the plugs are. The speaker cover is made of a soft material so pushing in a place where there are no plugs may cause damage.

**8**

- A voltage selector is provided in some areas.

**9**

### **8 Voltage Selector**

Before connecting the AC power cord, check the setting of the voltage selector which is provided in some areas. To set the selector for 110V, 127V, 220V or 240V main voltages, use a “minus” screwdriver to rotate the selector dial so that the correct voltage for your region appears next to the pointer on the panel. The voltage selector is set at 240V when the unit is initially shipped.

After the proper voltage has been selected, connect the AC power cord to the AC INLET and an AC wall outlet.

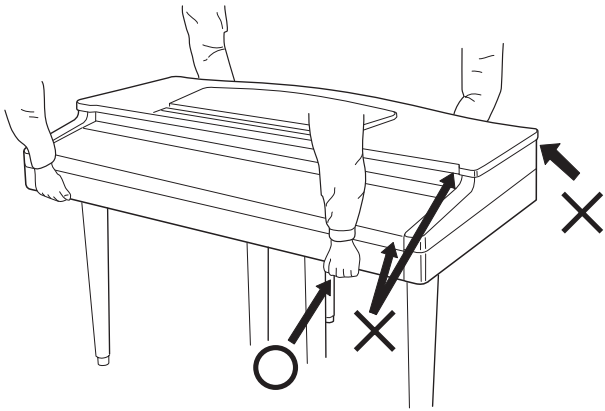
A plug adaptor may be also provided in some areas to match the pin configuration of the AC wall outlets in your area.

#### **⚠ CAUTION**

- *An improper voltage setting can cause serious damage to the CVP-109 /107 or result in improper operation.*

### **9 Set the adjuster.**

For stability, an adjuster is provided on the bottom of the pedal box. Rotate the adjuster until it comes in firm contact with the floor surface. The adjuster ensures stable pedal operation and facilitates pedal effect control. If the adjuster is not in firm contact with the floor surface, distorted sound may result.



**⚠ CAUTION**

- When moving the instrument after assembly, always hold the lower surface of the main unit, NEVER the top portion or keyboard cover. Improper handling can result in damage to the instrument or personal injury.

■ **After completing the assembly, please check the following.**

- Are there any parts left over?
  - Review the assembly procedure and correct any errors.
- Is the Clavinova clear of doors and other movable fixtures?
  - Move the Clavinova to an appropriate location.
- Does the Clavinova make a rattling noise when you shake it?
  - Tighten all screws.
- Does the pedal box rattle or give way when you step on the pedals?
  - Turn the adjuster so that it is set firmly against the floor.
- Is the power cord inserted securely into the socket?
  - Check the connection.
- If the main unit creaks or is otherwise unsteady when you play on the keyboard, refer to the assembly diagrams and retighten all screws.

# Specifications

<b>KEYBOARD</b>	88 keys (A-1 — C7)				
<b>TONE GENERATOR</b>	AWM (Advanced Wave Memory)				
<b>MAXIMUM SIMULTANEOUS POLYPHONY</b>	128 (CVP-109), 64 (CVP-107/700), 64 (CVP-105), 64 (CVP-103)				
<b>VOICES</b>	<b>Clavinova voices:</b> 224 (CVP-109/107/700), 195 (CVP-105/103) <b>Organ Flutes voices:</b> 6 (CVP-109/107/700) <b>XG voices:</b> 480 <b>Drum Kits:</b> 13 sets (CVP-109/107/700), 12 sets (CVP-105/103) <b>Voice Groups:</b> Piano, Electric Piano, Guitar, Synthesizer, Organ, Strings/Choir, Brass, Sax/Flute, Bass, Percussion, Ensemble, XG Dual, Split				
<b>EFFECTS</b>	<b>Natural Reverb:</b> 5 types (CVP-109) <b>Reverb:</b> 12 types <b>Chorus:</b> 9 types <b>Effect:</b> 50 types x 2 (CVP-109/107/700), 45 types (CVP-105/103) <b>Vocal Harmony:</b> 42 types (CVP-109/107/700)				
<b>TONE CONTROLS</b>	Master Equalizer (CVP-109/107/700)				
<b>ACCOMPANIMENT STYLES</b>	<b>Rhythm Styles:</b> 157 (CVP-109), 147 (CVP-107/700), 135 (CVP-105), 125 (CVP-103) <b>Pianist Styles:</b> 35 <b>Custom Styles:</b> 12 (CVP-109/107/105/700), 4 (CVP-103) <b>Style Groups:</b> 8Beat, 16Beat, Ballad, Dance, Rock/R&B, Swing/Jazz, Latin, Country, Ballroom, Trad/Waltz, Pianist, Disk/Custom <b>Controls:</b> Intro, Main A, Main B, Main C, Main D, Auto-fill, Ending, Fade in/out, Synchro, Start/Stop, Tap, Metronome, Tempo +/-				
<b>AUTO ACCOMPANIMENT</b>	<b>Music Database:</b> 564 (CVP-109), 534 (CVP-107/700), 498 (CVP-105), 463 (CVP-103) Single Finger, Multi Finger, Fingered1, Fingered2, Full Keyboard Acmp Assist (CVP-109/107/105/700), Harmony, One Touch Setting, Chord Assist, Synchro Stop, Individual Part Volume Control (Mixer)				
<b>REGISTRATION</b>	Bank A – E x 4 memory locations (20), Freeze, Registration Name (CVP-109/107/105/700)				
<b>SONG PLAY MODE</b>	Song Playback, Repeat, Volume control of individual Parts (Mixer) <b>Controls:</b> Song, Play/Stop, Rewind, Fast forward, Pause <b>Guide Control:</b> Easy Play, Next Note, Sound Repeat Lyric Display, Piano Roll Display, Keyboard Guide Lamps				
<b>SONG RECORD MODE</b>	Quick Recording, Track Recording, Chord Sequence, Step Edit (CVP-109/107/105/700), Song Name, Track Edit, Initial Edit, Setup Memory, Vocal Harmony Memory (CVP-109/107/700)				
<b>LCD/CONTROLS</b>	320 x 240 dot (240 x 64 dot: CVP-103) liquid crystal display, Contrast dial, Beat lamp, Function button, Mixer button, Page ◀ ▶ buttons, Direct Access button, LCD buttons, data dial, +/- buttons, Exit button				
<b>VOLUME CONTROLS</b>	Master volume, Acmp/Song volume				
<b>DEMO/HELP</b>	50 Demo Songs; 5 help languages (English, Japanese, German, French, Spanish)				
<b>DISK DRIVE</b>	3.5-inch micro floppy disk drive				
<b>PEDAL CONTROLS</b>	RIGHT	Damper, Pitch Bend (CVP-109/107/700)			
	CENTER	Sostenuto			
	LEFT	Soft, Damper (CVP-109/107/700), Start/Stop, Harmony, Registration, Registration Freeze, Ending/rit, Break, Break Fill, Bass Hold, Fade In/Out, Effect 1/2 Variation (CVP-109/107/700), Effect Variation (CVP-105/103), Glide			
<b>JACKS AND TERMINALS</b>	PHONES jacks x 2, AUX OUT jacks (L/L+R, R), AUX IN jacks (L/L+R, R), EXP.PEDAL jack (CVP-109/107/700), MIC. jack (CVP-109/107/700), VIDEO OUT jack (CVP-109/107/700), TO HOST terminal, MIDI terminals (IN, OUT, THRU)				
<b>INPUT/OUTPUT SPECIFICATIONS</b>	<b>AUX OUT:</b> Output Impedance: 600 Ω <b>AUX IN:</b> Input Impedance: 10 kΩ; Input Sensitivity: -10 dBm				
	<b>CVP-109</b>	<b>CVP-107</b>	<b>CVP-105</b>	<b>CVP-103</b>	<b>CVP-700</b>
<b>MAIN AMPLIFIERS</b>	240W (60W x 4)	120W (60W x 2)	80W (40W x 2)	80W (40W x 2)	120W (60W x 2)
<b>SPEAKERS</b>	16cm x 2, 13cm x 2, 3cm x 2, 5cm x 2	16cm x 2, 5cm x 2, 3cm x 2	16cm x 2, 5cm x 2	16cm x 2, 5cm x 2	16cm x 2, 5cm x 2, 3cm x 2
<b>DIMENSIONS (W x D x H)</b>	Music stand down				Lid down
	1415mm x 602mm x 887mm (55-3/4" x 23-11/16" x 34-15/16")	1415mm x 602mm x 887mm (55-3/4" x 23-11/16" x 34-15/16")	1402mm x 609mm x 888mm (55-3/16" x 24" x 35")	1394mm x 561mm x 854mm (54-7/8" x 22-1/16" x 33-5/8")	1417mm x 870mm x 908mm (55-3/4" x 34-1/4" x 35-3/4")
	Music stand up				Lid up
	1415mm x 602mm x 1054mm (55-3/4" x 23-11/16" x 41-1/2")	1415mm x 602mm x 1054mm (55-3/4" x 23-11/16" x 41-1/2")	1402mm x 609mm x 1049mm (55-3/16" x 24" x 41-5/16")	1394mm x 561mm x 1020mm (54-7/8" x 22-1/16" x 40-1/8")	1417mm x 870mm x 1253mm (55-3/4" x 34-1/4" x 49-3/8")
<b>WEIGHT</b>	71.3kg (157lbs., 3oz.)	66.3kg (146lbs., 3oz.)	64.1kg (141lbs., 5oz.)	Models with key cover: 56.0kg (123lbs., 7oz.) Models without key cover: 54.0kg (119lbs., 1oz.)	86.5kg (190lbs., 11oz.)

- Specifications and descriptions in this owner's manual are for information purposes only. Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your Yamaha dealer.

