YAMAHA

GENERAL MIDI INSTRUMENT

TONE GENERATOR

TG300

SOUND LIST & MIDI DATA

GM-A Mode Voice List

Group	Pgm #	Bank 0	Bank 1	Bank 2	Bank 8	Bank 16	Bank 24	Bank 32
		MSB = 0 LSB = 0	MSB = 0 LSB = 1	MSB = 0 LSB = 2	MSB = 0 LSB = 8	MSB = 0 LSB = 16	MSB = 0 LSB = 24	MSB = 0 LSB = 32
Piano	1	GrandPno			GrndPnoK	GrndPnoM		
	2	BritePno			BritPnoK			
	3	E.Grand			ElGrPnoK			
	4	HnkyTonk			HnkyTnkK			
	5	E.Piano1			E.Pno1CH	E.Pno1VS	E.P1 60s	E.Pno1 K
	6	E.Piano2			E.Pno2CH	E.Pno2VS		E.Pno2 K
	7	Harpsi.			Harpsi.O	Harpsi.K	Harpsi.R	
	8	Clavi.			Clavi. K			
Chromatic Percussion	9	Celesta						
	10	Glocken						
	11	MusicBox						
	12	Vibes			Vibes K			
	13	Marimba			MarimbaK			
	14	Xylophon						
	15	TubulBel			ChrchBel			
	16	Dulcimer						
Organ	17	DrawOrgn			DrwOrgCH	DrOrg60s		DrawOrg2
	18	PercOrgn			PerOrgCH			PercOrg2
	19	RockOrgn						
	20	ChrchOrg			ChrcOrg2	ChrcOrg3		
	21	ReedOrgn						
	22	Acordion			Acrdion2			
	23	Harmnica						
	24	TangoAcd						
Guitar	25	NylonGtr			Ukulele	NylonGtR		NylonGtB
	26	SteelGtr			12StrGtr	Mandolin		
	27	Jazz Gtr			Hawaiian			
	28	CleanGtr			ClnGtrCH			
	29	Mute.Gtr			FunkGtr1	FunkGtr2		
	30	Ovrdrive						
	31	Dist.Gtr			FeedbkGt			
	32	GtrHarmo			GtFeedbk			
Bass	33	Aco.Bass						
	34	FngrBass						
	35	PickBass						
	36	Fretless						
	37	SlapBas1						
	38	SlapBas2						
	39	SynBass1	SynBass5		SynBass3			
	40	SynBass2			SynBass4	RubberBs		
Strings	41	Violin			ViolinSA			
	42	Viola						
	43	Cello						
	44	Contrabs						
	45	Trem.Str						
	46	Pizz.Str						
	47	Harp						
	48	Timpani						

Group	Pgm #	Bank 0	Bank 1	Bank 2	Bank 8	Bank 16	Bank 24	Bank 32
		MSB = 0 LSB = 0	MSB = 0 LSB = 1	MSB = 0 LSB = 2	MSB = 0 LSB = 8	MSB = 0 LSB = 16	MSB = 0 LSB = 24	MSB = 0 LSB = 32
Ensemble	49	Strings1			OrchEns.			
	50	Strings2						
	51	Syn.Str1			Syn.Str3			
	52	Syn.Str2						
	53	ChoirAah						ChoirAh2
	54	VoiceOoh						
	55	SynVoice						
	56	Orch.Hit	Orch.Ht2					
Brass	57	Trumpet						
	58	Trombone	Trmbone2					
	59	Tuba						
	60	Mute.Trp						
	61	Fr.Horn	FrHorn2					
	62	BrasSect			BrasSct2			
	63	SynBras1			SynBras3	AnaBras1		
	64	SynBras2			SynBras4	AnaBras2		
Reed	65	SprnoSax						
	66	Alto Sax						
	67	TenorSax						
	68	Bari.Sax						
	69	Oboe						
	70	Eng.Horn						
	71	Bassoon						
	72	Clarinet						
Pipe	73	Piccolo						
	74	Flute						
	75	Recorder						
	76	PanFlute						
	77	Bottle						
	78	Shakhchi						
	79	Whistle						
	80	Ocarina						
Synth Lead	81	SquareLd	Square 2		Sine Ld			
	82	Saw.Lead	Saw 2		Lead Dr.			
	83	CaliopLd						
	84	Chiff Ld						
	85	CharanLd						
	86	Voice Ld						
	87	Fifth Ld						
	88	Bass &Ld						
Synth Pad	89	NewAgePd						
	90	Warm Pad						
	91	PolySyPd						
	92	ChoirPad						
	93	BowedPad						
	94	MetalPad						
	95	Halo Pad						
	96	SweepPad						

Group	Pgm #	Bank 0	Bank 1	Bank 2	Bank 8	Bank 16	Bank 24	Bank 32
		MSB = 0 LSB = 0	MSB = 0 LSB = 1	MSB = 0 LSB = 2	MSB = 0 LSB = 8	MSB = 0 LSB = 16	MSB = 0 LSB = 24	MSB = 0 LSB = 32
Synth Effects	97	Rain						
	98	SoundTrk						
	99	Crystal	SyMallet					
	100	Atmosphr						
	101	Bright						
	102	Goblins						
	103	Echoes	Echoes 2	Echoes 3				
	104	Sci-Fi						
Ethnic	105	Sitar	Sitar 2					
	106	Banjo						
	107	Shamisen						
	108	Koto			TaishoKt			
	109	Kalimba						
	110	Bagpipe						
	111	Fiddle						
	112	Shanai						
Percussive	113	TnklBell						
	114	Agogo						
	115	SteelDrm						
	116	WoodBlok			Castanet			
	117	TaikoDrm			GranCasa			
	118	MelodTom			MeloTom2			
	119	Syn.Drum			AnalgTom			
	120	RevCymbl						
Sound Effects	121	FretNoiz						
	122	BrthNoiz						
	123	Seashore						
	124	Tweet						
	125	Telphone						
	126	Helicptr						
	127	Applause						
	128	Gunshot						

: :same as Bank0

GM-B Mode Voice List

Group	Pgm #	Bank 0 MSB = 0 LSB = 0	Bank 1 MSB = 1 LSB = 0	Bank 2 MSB = 2 LSB = 0	Bank 3 MSB = 3 LSB = 0	Bank 4 MSB = 4 LSB = 0	Bank 5 MSB = 5 LSB = 0	Bank 6 MSB = 6 LSB = 0
Piano	1	GrandPno						
	2	BritePno						
	3	E.Grand						
	4	HnkyTonk						
	5	E.Piano1						
	6	E.Piano2						
	7	Harpsi.						
	8	Clavi.						
Chromatic Percussion	9	Celesta						
	10	Glocken						
	11	MusicBox						
	12	Vibes						
	13	Marimba						
	14	Xylophon						
	15	TubulBel						
	16	Dulcimer						
Organ	17	DrawOrgn						
	18	PercOrgn						
	19	RockOrgn						
	20	ChrchOrg						
	21	ReedOrgn						
	22	Acordion						
	23	Harmnica						
	24	TangoAcd						
Guitar	25	NylonGtr						
	26	SteelGtr						
	27	Jazz Gtr						
	28	CleanGtr						
	29	Mute.Gtr						
	30	Ovrdrive						
	31	Dist.Gtr						
	32	GtrHarmo						
Bass	33	Aco.Bass						
	34	FngrBass						
	35	PickBass						
	36	Fretless						
	37	SlapBas1						
	38	SlapBas2						
	39	SynBass1	SynBass5					
	40	SynBass2						
Strings	41	Violin						
	42	Viola						
	43	Cello						
	44	Contrabs						
	45	Trem.Str						
	46	Pizz.Str						
	47	Harp						
	48	Timpani						

Bank 7	Bank 8	Bank 9	Bank 16	Bank 24	Bank 32	Bank Pre	Bank 126	Bank 127
MSB = 7 LSB = 0	MSB = 8 LSB = 0	MSB = 9 LSB = 0	MSB = 16 LSB = 0	MSB = 24 LSB = 0	MSB = 32 LSB = 0	MSB = 80 LSB = 0	MSB = 126 LSB = 0	MSB = 127 LSB = 0
	GrndPnoK		GrndPnoM			VeloGrnd	A-Piano1	a.piano1
	BritPnoK					AeroPian	A-Piano2	a.piano2
	ElGrPnoK					EP&Piano	A-Piano3	a.piano3
	HnkyTnkK					EP Pad	A-Piano4	e.piano1
	E.Pno1CH		E.Pno1VS	E.P1 60s	E.Pno1 K	Rock Org	A-Piano5	e.piano2
	E.Pno2CH		E.Pno2VS		E.Pno2 K	JimmyOrg	A-Piano6	e.piano3
	Harpsi.O		Harpsi.K	Harpsi.R		KillClav	A-Piano7	e.piano4
	Clavi. K					FunkyPlk	E-Piano1	hnkytnk
						12String	E-Piano2	e.organ1
						Snapper	E-Piano3	e.organ2
						Dstrtion	A-Guitr1	e.organ3
	Vibes K					PadBass	A-Guitr2	e.organ4
	MarimbaK					SQUBAs	A-Guitr3	pipeorg1
						Nu-Age	E-Guitr1	pipeorg2
	ChrchBel	Carillon				Fat Saw	E-Guitr2	pipeorg3
						DigiLead	Slap-1	acordion
	DrwOrgCH		DrOrg60s		DrawOrg2	BluesHrp	Slap-2	harpsi1
	PerOrgCH				PercOrg2	Worrior	Slap-3	harpsi2
						VeloPad	Slap-4	harpsi3
	ChrcOrg2		ChrcOrg3			BrassPad	Slap-5	clavi1
						StrngPad	Slap-6	clavi2
	Acrdion2					ChoirPad	Slap-7	clavi3
						OBRSweep	Slap-8	celesta1
						HornStr.	Finger-1	celesta2
	Ukulele		NylonGtR		NylonGtB	St.Johns	Finger-2	synbras1
	12StrGtr		Mandolin			MAJESTIC	Picked-1	synbras2
	Hawaiian					RzSweep	Picked-2	synbras3
	ClnGtrCH					Electron	FretlsBs	synbras4
	FunkGtr1		FunkGtr2			JAVA	A-Bass	synbass1
						MALI	Choir-1	synbass2
	FeedbkGt					StarTrec	Choir-2	synbass3
	GtFeedbk					IceCream	Choir-3	synbass4
							Choir-4	newagepd
							Strngs-1	synharmo
							Strngs-2	choir pd
							Strngs-3	bowed pd
							Strngs-4	soundtrk
							E-Organ1	atmosphr
	SynBass3						E-Organ2	syn warm
	SynBass4		RubberBs				E-Organ3	synfunny
	ViolinSA						E-Organ4	synecho1
							E-Organ5	rain
							E-Organ6	synoboe
							E-Organ7	synecho2
							E-Organ8	synsolo
							E-Organ9	synrdorg
							SoftTP-1	synbell
							SoftTP-2	squareld

Group	Pgm #	Bank 0 MSB = 0 LSB = 0	Bank 1 MSB = 1 LSB = 0	Bank 2 MSB = 2 LSB = 0	Bank 3 MSB = 3 LSB = 0	Bank 4 MSB = 4 LSB = 0	Bank 5 MSB = 5 LSB = 0	Bank 6 MSB = 6 LSB = 0
Ensemble	49	Strings1						
	50	Strings2						
	51	Syn.Str1						
	52	Syn.Str2						
	53	ChoirAah						
	54	VoiceOoh						
	55	SynVoice						
	56	Orch.Hit	Orch.Ht2					
Brass	57	Trumpet						
	58	Trombone	Trmbone2					
	59	Tuba						
	60	Mute.Trp						
	61	Fr.Horn	FrHorn2					
	62	BrasSect						
	63	SynBras1						
	64	SynBras2						
Reed	65	SprnoSax						
	66	Alto Sax						
	67	TenorSax						
	68	Bari.Sax						
	69	Oboe						
	70	Eng.Horn						
	71	Bassoon						
	72	Clarinet						
Pipe	73	Piccolo						
	74	Flute						
	75	Recorder						
	76	PanFlute						
	77	Bottle						
	78	Shakhchi						
	79	Whistle						
	80	Ocarina						
Synth Lead	81	SquareLd	Square 2					
	82	Saw.Lead	Saw 2					
	83	CaliopLd						
	84	Chiff Ld						
	85	CharanLd						
	86	Voice Ld						
	87	Fifth Ld						
	88	Bass &Ld						
Synth Pad	89	NewAgePd						
	90	Warm Pad						
	91	PolySyPd						
	92	ChoirPad						
	93	BowedPad						
	94	MetalPad						
	95	Halo Pad						
	96	SweepPad						

Bank 7	Bank 8	Bank 9	Bank 16	Bank 24	Bank 32	Bank Pre	Bank 126	Bank 127
MSB = 7 LSB = 0	MSB = 8 LSB = 0	MSB = 9 LSB = 0	MSB = 16 LSB = 0	MSB = 24 LSB = 0	MSB = 32 LSB = 0	MSB = 80 LSB = 0	MSB = 126 LSB = 0	MSB = 127 LSB = 0
	OrchEns.						TP/TRB-1	strsect1
							TP/TRB-2	strsect2
	Syn.Str3						TP/TRB-3	strsect3
							TP/TRB-4	pizz.str
					ChoirAh2		TP/TRB-5	violin 1
							TP/TRB-6	violin 2
							Sax-1	cello 1
							Sax-2	cello 2
							Sax-3	contrabs
							Sax-4	harp 1
							Brass-1	harp 2
							Brass-2	guitar 1
							Brass-3	guitar 2
	BrasSct2						Brass-4	elecgtr1
	SynBras3		AnaBras1				Brass-5	elecgtr2
	SynBras4		AnaBras2				Orch-Hit	sitar
							Silence	a.bass 1
							Silence	a.bass 2
							Silence	e.bass 1
							Silence	e.bass 2
							Silence	slapbas1
							Silence	slapbas2
							Silence	fretles1
							Silence	fretles2
							Silence	flute1
							Silence	flute2
							Silence	piccolo1
							Silence	piccolo2
							Silence	recorder
							Silence	panpipes
							Silence	sax1
							Silence	sax2
	Sine Ld						Silence	sax3
	Lead Dr.						Silence	sax4
							Silence	clarint1
							Silence	clarint2
							Silence	oboe
							Silence	eng.horn
							Silence	bassoon
							Silence	harmnica
							Silence	trumpet1
							Silence	trumpet2
							Silence	trmbone1
							Silence	trmbone2
							Silence	fr.horn1
							Silence	fr.horn2
							Silence	tuba
							Silence	brssect1

Group	Pgm #	Bank 0 MSB = 0 LSB = 0	Bank 1 MSB = 1 LSB = 0	Bank 2 MSB = 2 LSB = 0	Bank 3 MSB = 3 LSB = 0	Bank 4 MSB = 4 LSB = 0	Bank 5 MSB = 5 LSB = 0	Bank 6 MSB = 6 LSB = 0
Synth Effects	97	Rain						
	98	SoundTrk						
	99	Crystal	SyMallet					
	100	Atmosphr						
	101	Bright						
	102	Goblins						
	103	Echoes	Echoes 2	Echoes 3				
	104	Sci-Fi						
Ethnic	105	Sitar	Sitar 2					
	106	Banjo						
	107	Shamisen						
	108	Koto						
	109	Kalimba						
	110	Bagpipe						
	111	Fiddle						
	112	Shanai						
Percussive	113	TnklBell						
	114	Agogo						
	115	SteelDrm						
	116	WoodBlok						
	117	TaikoDrm						
	118	MelodTom						
	119	Syn.Drum						
	120	RevCymbl						
Sound Effects	121	FretNoiz	CuttngNz	Str Slap				
	122	BrthNoiz	Fl.KClik					
	123	Seashore	Rain	Thunder	Wind	Stream	Bubble	
	124	Tweet	Dog	Horse	Bird 2	Dinosaur		
	125	Telphone	Tel.Dial	DoorSqek	DoorSlam	Scratch	WindChim	
	126	Helicptr	CarEngin	Car Stop	Car Pass	CarCrash	Siren	Train
	127	Applause	Laghing	Scream	Punch	Heart	FootStep	
	128	Gunshot	MchinGun	LaserGun	Xplosion			

: same as Bank0

Bank 7	Bank 8	Bank 9	Bank 16	Bank 24	Bank 32	Bank Pre	Bank 126	Bank 127
MSB = 7 LSB = 0	MSB = 8 LSB = 0	MSB = 9 LSB = 0	MSB = 16 LSB = 0	MSB = 24 LSB = 0	MSB = 32 LSB = 0	MSB = 80 LSB = 0	MSB = 126 LSB = 0	MSB = 127 LSB = 0
							Silence	brssect2
							Silence	vibe1
							Silence	vibe2
							Silence	symallet
							Silence	maletwin
							Silence	glocken
							Silence	tubulbel
							Silence	xylophon
							Silence	marimba
							Silence	koto
							Silence	sho
	TaishoKt						Silence	shakhchi
							Silence	whistle1
							Silence	whistle2
							Silence	bottle
							Silence	breath
							Silence	timpani
							Silence	melotom
							Silence	deepsnar
	Castanet						Silence	e.perc1
	GranCasa						Silence	e.perc2
	MeloTom2						Silence	taiko
	AnalgTom	Elec Tom					Silence	taikorim
							Silence	cymbal
							Silence	castanet
							Silence	triangle
							Silence	orchehit
							Silence	telphone
							Silence	bird
Jetplain	StarShip	Burst	Coaster				Silence	jam
							Silence	efctwatr
							Silence	efctjngl

C/M Voice Name List

Pgm#	TYPE1 Parts 1~9	TYPE2 Parts 11~16
1	a.piano1	A-Piano1
2	a.piano2	A-Piano2
3	a.piano3	A-Piano3
4	e.piano1	A-Piano4
5	e.piano2	A-Piano5
6	e.piano3	A-Piano6
7	e.piano4	A-Piano7
8	hnkytnk	E-Piano1
9	e.organ1	E-Piano2
10	e.organ2	E-Piano3
11	e.organ3	A-Guitr1
12	e.organ4	A-Guitr2
13	pipeorg1	A-Guitr3
14	pipeorg2	E-Guitr1
15	pipeorg3	E-Guitr2
16	acordion	Slap-1
17	harpsi1	Slap-2
18	harpsi2	Slap-3
19	harpsi3	Slap-4
20	clavi1	Slap-5
21	clavi2	Slap-6
22	clavi3	Slap-7
23	celesta1	Slap-8
24	celesta2	Finger-1
25	synbras1	Finger-2
26	synbras2	Picked-1
27	synbras3	Picked-2
28	synbras4	FretlsBs
29	synbass1	A-Bass
30	synbass2	Choir-1
31	synbass3	Choir-2
32	synbass4	Choir-3
33	newagepd	Choir-4
34	synharmo	Strngs-1
35	choir pd	Strngs-2
36	bowed pd	Strngs-3
37	soundtrk	Strngs-4
38	atmosphr	E-Organ1
39	syn warm	E-Organ2
40	synfunny	E-Organ3
41	synecho1	E-Organ4
42	rain	E-Organ5
43	synoboe	E-Organ6
44	synecho2	E-Organ7
45	synsolo	E-Organ8
46	synrdorg	E-Organ9
47	synbell	SoftTP-1
48	squareld	SoftTP-2
49	strsect1	TP/TRB-1

Pgm#	TYPE1 Parts 1~9	TYPE2 Parts 11~16
65	a.bass 1	Silence
66	a.bass 2	Silence
67	e.bass 1	Silence
68	e.bass 2	Silence
69	slapbas1	Silence
70	slapbas2	Silence
71	fretles1	Silence
72	fretles2	Silence
73	flute1	Silence
74	flute2	Silence
75	piccolo1	Silence
76	piccolo2	Silence
77	recorder	Silence
78	panpipes	Silence
79	sax1	Silence
80	sax2	Silence
81	sax3	Silence
82	sax4	Silence
83	clarint1	Silence
84	clarint2	Silence
85	oboe	Silence
86	eng.horn	Silence
87	bassoon	Silence
88	harmnica	Silence
89	trumpet1	Silence
90	trumpet2	Silence
91	trmbone1	Silence
92	trmbone2	Silence
93	fr.horn1	Silence
94	fr.horn2	Silence
95	tuba	Silence
96	brssect1	Silence
97	brssect2	Silence
98	vibe1	Silence
99	vibe2	Silence
100	symallet	Silence
101	maletwin	Silence
102	glocken	Silence
103	tubulbel	Silence
104	xylophon	Silence
105	marimba	Silence
106	koto	Silence
107	sho	Silence
108	shakhchi	Silence
109	whistle1	Silence
110	whistle2	Silence
111	bottle	Silence
112	breath	Silence
113	timpani	Silence

Pgm#	TYPE1 Parts 1~9	TYPE2 Parts 11~16
50	strsect2	TP/TRB-2
51	strsect3	TP/TRB-3
52	pizz.str	TP/TRB-4
53	violin 1	TP/TRB-5
54	violin 2	TP/TRB-6
55	cello 1	Sax-1
56	cello 2	Sax-2
57	contrabs	Sax-3
58	harp 1	Sax-4
59	harp 2	Brass-1
60	guitar 1	Brass-2
61	guitar 2	Brass-3
62	elecgtr1	Brass-4
63	elecgtr2	Brass-5
64	sitar	Orch-Hit

Pgm#	TYPE1 Parts 1~9	TYPE2 Parts 11~16
114	melotom	Silence
115	deepsnar	Silence
116	e.perc1	Silence
117	e.perc2	Silence
118	taiko	Silence
119	taikorim	Silence
120	cymbal	Silence
121	castanet	Silence
122	triangle	Silence
123	orchehit	Silence
124	telphone	Silence
125	bird	Silence
126	jam	Silence
127	efctwatr	Silence
128	efctjngl	Silence

Single Preset Voice List

Pgm#	Voice Name	Eff#
1	VeloGrnd	P09
2	AeroPian	P09
3	EP&Piano	P04
4	EP Pad	P06
5	Rock Org	P20
6	JimmyOrg	P25
7	KillClav	P19
8	FunkyPlk	P28
9	12String	P06
10	Snapper	P13
11	Dstrtion	P15
12	PadBass	P04
13	SQUBAs	P13
14	Nu-Age	P04
15	Fat Saw	P31
16	DigiLead	P22
17	BluesHrp	P18
18	Warrior	P06
19	VeloPad	P04
20	BrassPad	P05
21	StrngPad	P01
22	ChoirPad	P04
23	OBRSweep	P07
24	HornStr.	P01
25	St.Johns	P07
26	MAJESTIC	P01
27	RzSweep	P31
28	Electron	P22
29	JAVA	P07
30	MALI	P31
31	StarTrec	P27
32	IceCream	P29

Pgm# :Program Number

Single Preset Effect List

Eff#	Description
P01	Hall
P02	Room
P03	Reverse -> Stage
P04	Chorus + Hall
P05	Chorus + Room
P06	Chorus + Reverse + Stage
P07	Symphonic + Hall
P08	Symphonic + Room
P09	EQ -> Hall
P10	EQ -> Room
P11	EQ -> Plate
P12	Reverse + EQ
P13	Gate + EQ
P14	Chorus -> Gate
P15	Dist + Chorus +Hall
P16	Echo + Phaser -> Dist
P17	Chorus + Echo + Plate
P18	Phaser -> Dist -> Room
P19	Flanger + Phaser + Room
P20	EQ -> Stage -> Rotary
P21	EQ + Delay
P22	Delay (Multitaps)
P23	Delay(long)
P24	Echo
P25	Rotary + EQ + Echo
P26	Tremolo + Chorus + Hall
P27	Auto Pan + Hall
P28	Phaser + Reverse
P29	Flanger + Hall
P30	Exciter
P31	Chorus + Echo
P32	Pitch Change + Hall

Eff# :Effect Number

Waveform List

Wave#	Name	Wave#	Name	Wave#	Name	Wave #	Name	Wave#	Name
1	Drum	40	BA_Fingr	79	KY_Acrdn	118	WW_Pcclo	157	SE_Tire
2	DrumAdds	41	BA_Frtls	80	KY_Celes	119	WW_RcSop	158	SE_Train
3	Percussi	42	BA_Pick	81	KY_Clavi	120	WW_SxSop	159	SE_Wind
4	DR_SStic	43	BA_Slap1	82	KY_Harps	121	WW_SxAlt	160	LO_AcPno
5	DR_Snr1	44	BA_Slap2	83	OR_DrwBr	122	WW_SxTen	161	LO_ElPno
6	DR_Snr2	45	BA_Thumb	84	OR_Percu	123	WW_SxBar	162	LO_DXPno
7	DR_Snr3	46	BA_Uprit	85	OR_Rock	124	SE_Appls	163	LO_StEns
8	DR_Snr4	47	BR_Trmpt	86	OR_Pipe	125	SE_Bird1	164	LO_SxSop
9	DR_Snr5	48	BR_MtTrm	87	OR_Reed	126	SE_Bird2	165	LO_SxAlt
10	DR_Snr6	49	BR_Trmbn	88	ST_Violn	127	SE_Breth	166	LO_SxTen
11	DR_SnrBr	50	BR_Tuba	89	ST_Viola	128	SE_BSlap	167	LO_SxBar
12	DR_Tom1	51	BR_FHorn	90	ST_Cello	129	SE_Bubbl	168	LO_OvDrv
13	DR_Tom2	52	BR_ScEns	91	ST_Cntra	130	SE_CarPa	169	LO_Dstrt
14	DR_Tom3	53	CH_Aah	92	ST_ScEns	131	SE_CarCr	170	LO_Pcclo
15	DR_Tom4	54	CH_Ooh	93	ST_ScPiz	132	SE_CarSt	171	LO_Oboe
16	DR_Tom5	55	EP_DX7	94	SY_Squar	133	SE_Dog	172	SA_OvDrv
17	DR_Tom6	56	EP_Grand	95	SY_Saw	134	SE_DrSlm	173	SA_Dstrt
18	DR_Kick1	57	FI_Banjo	96	SY_Trian	135	SE_DSqek	174	SA_Flute
19	DR_Kick2	58	FI_BgPip	97	SY_Bass1	136	SE_FStep	175	SA_Pcclo
20	DR_Kick3	59	FI_Dulci	98	SY_Bass2	137	SE_Galop	176	SA_SxSop
21	DR_Kick4	60	FI_Harmo	99	SY_Brass	138	SE_GtCut	177	SA_SxAlt
22	DR_BDOrc	61	FI_Harp	100	SY_Choir	139	SE_GtFrt	178	SA_SxTen
23	DR_Stick	62	FI_Kalim	101	SY_Strng	140	SE_Gun	179	SA_SxBar
24	DR_Cym1	63	FI_Koto	102	SY_Pad_1	141	SE_Heli	180	RV_Snr1
25	DR_Cym2	64	FI_Ocari	103	SY_Pad_2	142	SE_Heart	181	RV_Snr2
26	DR_Cym3	65	FI_PanFl	104	SY_Malle	143	SE_KyPad	182	RV_Snr3
27	DR_Cym4	66	FI_Shaku	105	TP_Glock	144	SE_Laugh	183	RV_Snr5
28	DR_RCym1	67	FI_Shami	106	TP_Marim	145	SE_McGun	184	RV_Kick1
29	DR_RCym2	68	FI_Shana	107	TP_StDrm	146	SE_MtrCl	185	RV_Kick2
30	DR_RCym3	69	FI_Sho	108	TP_Timpa	147	SE_Noise	186	RV_Kick3
31	DR_RCym4	70	FI_Sitar	109	TP_TnBel	148	SE_OrHit	187	RV_Kick4
32	PC_Agogo	71	GT_Nylon	110	TP_TuBel	149	SE_Punch	188	FL_Breth
33	PC_Casta	72	GT_Steel	111	TP_Vibe	150	SE_Rain	189	FL_TuBel
34	PC_WBloc	73	GT_Jazz	112	TP_Xylo	151	SE_Screm	190	FL_Vibe
35	PC_Taiko	74	GT_Clean	113	WW_Basso	152	SE_Strem	191	FL_Xylo
36	PC_Trian	75	GT_Muted	114	WW_Clari	153	SE_Surf	192	FL_NlGtr
37	AP_Grand	76	GT_OvDrv	115	WW_EHorn	154	SE_TelDl	193	FL_StGtr
38	AP_Brite	77	GT_Dstrt	116	WW_Flute	155	SE_TelRg	194	FL_SnrDr
39	AP_Honky	78	GT_Hrmnc	117	WW_Oboe	156	SE_Thndr	195	FL_Sine

GM-A Drum Map

		Pgm#	1 & 33	9	17	25	26	41
Note #	Note	Alternate Assign	Standard Kit	Room Kit	Rock kit	Electronic Kit	Analog Kit	Brush Kit
24	C0		Click(Square wave)					
25	C#0		Brush Tap					
26	D0		Brush Swirl L					
27	D#0		Brush Slap					
28	E0		Brush Swirl H					
29	F0		Snare Roll					
30	F#0		Castanet					
31	G0		Snare L					
32	G#0		Sticks					
33	A0		Bass Drum L					
34	A#0		Open Rim Shot					
35	B0		Bass Drum M					Jazz BD 1
36	C1		Bass Drum H		BD Power	BD Electro	BD Analog	Jazz BD 2
37	C#1		Closed Rim Shot				Analog Closed Rim	
38	D1		Snare M		SD Power	SD Electro	Analog Snare M	Brush Tap
39	D#1		Hand Clap					Brush Slap
40	E1		Snare H			SD Power		Brush Swirl
41	F1		Floor Tom L	Power Tom1	Power Tom1	E Tom1	Analog Tom1	
42	F#1	1	Hi-Hat Closed				Analog HH Closed H	
43	G1		Floor Tom H	Power Tom2	Power Tom2	E Tom2	Analog Tom2	
44	G#1	1	Hi-Hat Pedal				Analog HH Closed L	
45	A1		Low Tom	Power Tom3	Power Tom3	E Tom3	Analog Tom3	
46	A#1	1	Hi-Hat Open				Analog HH Open	
47	B1		Mid Tom L	Power Tom4	Power Tom4	E Tom4	Analog Tom4	
48	C2		Mid Tom H	Power Tom5	Power Tom5	E Tom5	Analog Tom5	
49	C#2		Crash Cymbal 1				Analog Cymbal	
50	D2		High Tom	Power Tom6	Power Tom6	E Tom6	Analog Tom6	
51	D#2		Ride Cymbal 1					
52	E2		Chinese Cymbal			Reverse Cymbal		
53	F2		Ride Cymbal Cup					
54	F#2		Tambourine					
55	G2		Splash Cymbal					
56	G#2		Cowbell				Analog Cowbell	
57	A2		Crash Cymbal 2					
58	A#2		Vibraslap					
59	B2		Ride Cymbal 2					
60	C3		Bongo H					
61	C#3		Bongo L					
62	D3		Conga H Mute				Analog Conga H	
63	D#3		Conga H Open				Analog Conga M	
64	E3		Conga L				Analog Conga L	
65	F3		Timbale H					
66	F#3		Timbale L					
67	G3		Agogo H					
68	G#3		Agogo L					
69	A3		Cabasa					
70	A#3		Maracas				Analog Maracas	
71	B3		Samba Whistle H					

		Pgm#	1 & 33	9	17	25	26	41
Note #	Note	Alternate Assign	Standard Kit	Room Kit	Rock kit	Electronic Kit	Analog Kit	Brush Kit
72	C4		Samba Whistle L					
73	C#4		Guiro Short					
74	D4		Guiro Long					
75	D#4		Claves				Analog Claves	
76	E4		Wood Block H					
77	F4		Wood Block L					
78	F#4		Cuica Mute					
79	G4		Cuica Open					
80	G#4	2	Triangle Mute					
81	A4	2	Triangle Open					
82	A#4		Shaker					
83	B4		Jingle Bell					
84	C5		Bell Tree					

: No Alternation : Same as Standard Kit

GM-B Drum Map

		Pgm#	1 & 33	9	17	25	26
Note #	Note	Alternate Assign	Standard Kit	Room Kit	Power Kit	Electronic Kit	Analog Kit
26	D0		Finger Snap				
27	D#0		High-Q				
28	E0		Slap				
29	F0		Scratch Push				
30	F#0		Scratch Pull				
31	G0		Sticks				
32	G#0		Square Click				
33	A0		Metronome Click				
34	A#0		Metronome Bell				
35	B0		Bass Drum M				
36	C1		Bass Drum H		BD Power	BD Electro	BD Analog
37	C#1		Closed Rim Shot				Analog Closed Rim
38	D1		Snare M		SD Power	SD Electro	Analog Snare M
39	D#1		Hand Clap				
40	E1		Snare H			SD Power	
41	F1		Floor Tom L	Power Tom1	Power Tom1	E Tom1	Analog Tom1
42	F#1	1	Hi-Hat Closed				Analog HH Closed H
43	G1		Floor Tom H	Power Tom2	Power Tom2	E Tom2	Analog Tom2
44	G#1	1	Hi-Hat Pedal				Analog HH Closed L
45	A1		Low Tom	Power Tom3	Power Tom3	E Tom3	Analog Tom3
46	A#1	1	Hi-Hat Open				Analog HH Open
47	B1		Mid Tom L	Power Tom4	Power Tom4	E Tom4	Analog Tom4
48	C2		Mid Tom H	Power Tom5	Power Tom5	E Tom5	Analog Tom5
49	C#2		Crash Cymbal 1				Analog Cymbal
50	D2		High Tom	Power Tom6	Power Tom6	E Tom6	Analog Tom6
51	D#2		Ride Cymbal 1				
52	E2		Chinese Cymbal			Reverse Cymbal	
53	F2		Ride Cymbal Cup				
54	F#2		Tambourine				
55	G2		Splash Cymbal				
56	G#2		Cowbell				Analog Cowbell
57	A2		Crash Cymbal 2				
58	A#2		Vibraslap				
59	B2		Ride Cymbal 2				
60	C3		Bongo H				
61	C#3		Bongo L				
62	D3		Conga H Mute				Analog Conga H
63	D#3		Conga H Open				Analog Conga M
64	E3		Conga L				Analog Conga L
65	F3		Timbale H				
66	F#3		Timbale L				
67	G3		Agogo H				
68	G#3		Agogo L				
69	A3		Cabasa				
70	A#3		Maracas				Analog Maracas
71	B3	2	Samba Whistle H				
72	C4	2	Samba Whistle L				
73	C#4	3	Guiro Short				

41 Brush Kit	49 Orchestra Kit	57 SFX Set	128 C/M Kit
	Hi-Hat Closed		
	Hi-Hat Pedal		
	Hi-Hat Open		
	Ride Cymbal 3		
Jazz BD 1	Gran Casa M		
Jazz BD 2	Gran Casa H		
Brush Tap	Marching Sn M		
Brush Slap	Castanets	High-Q	
Brush Swirl	Marching Sn H	Slap	SD Electro
	Timpani F	Scratch Push	
	Timpani F#	Scratch Pull	
	Timpani G	Sticks	
	Timpani G#	Square Click	Hi-Hat Open 1
	Timpani A	Metronome Click	
	Timpani A#	Metronome Bell	Hi-Hat Open 2
	Timpani B	Guitar Fret Noise	
	Timpani C	Guitar Cutting Down	
	Timpani C#	Guitar Cutting Up	
	Timpani D	Ac Bass Slap	
	Timpani D#	FL.Key Click	
	Timpani E	Laughing	
	Timpani F	Screaming	
		Punch	
		Heartbeat	
		Footsteps 1	
	Concert Cymbal L	Footsteps 2	
		Applause	
	Concert Cymbal H	Door Creaking	
		Door Slam	
		Scratch	
		Windchime	
		Engine Start	
		Tire Screech	
		Car Passing	
		Crash	
		Siren	
		Train	
		Jetplain	
		Helicopter	
		Starship	
		Gunshot	
		Machine Gun	Vibraslap

		Pgm#	1 & 33	9	17	25	26
Note#	Note	Alternate Assign	Standard Kit	Room Kit	Power Kit	Electronic Kit	Analog Kit
74	D4	3	Guiro Long				
75	D#4		Claves				Analog Claves
76	E4		Wood Block H				
77	F4		Wood Block L				
78	F#4	4	Cuica Mute				
79	G4	4	Cuica Open				
80	G#4	5	Triangle Mute				
81	A4	5	Triangle Open				
82	A#4		Shaker				
83	B4		Jingle Bell				
84	C5		Bell Tree				
85	C#5		Castanets				
86	D5	6	Surdo Mute				
87	D#5	6	Surdo Open				
88	E5						
89	F5						
90	F#5						
91	G5						
92	G#5						
93	A5						
94	A#5						
95	B5						
96	C6						
97	C#6						
98	D6						
99	D#6						
100	E6						
101	F6						
102	F#6						
103	G6						
104	G#6						
105	A6						
106	A#6						
107	B6						
108	C7						

: No Alternatiom

: Same as Standard Kit (in C/M Kit, Drum Setting(Level, Pan, etc.) may be different.)

: No Sound

41 Brush Kit	49 Orchestra Kit	57 SFX Set	128 C/M Kit
		Laser Gun	
		Explosion	
		Dog	Laughing
		Horse Gallop	Screaming
		Bird Tweet	Punch
		Rain	Heartbeat
		Thunder	Footsteps 1
		Wind	Footsteps 2
		Seashore	Applause
		Stream	Door Creaking
		Bubble	Door Slam
			Scratch
			Windchime
			Engine Start
	Applause		Tire Screech
			Car Passing
			Crash
			Siren
			Train
			Jetplane
			Helicopter
			Starship
			Gunshot
			Machine Gun
			Laser Gun
			Explosion
			Dog
			Horse Gallop
			Bird Tweet
			Rain
			Thunder
			Wind
			Seashore
			Stream
			Bubble

C/M Drum Map

Note#	Note	Alternate Assign	C/M Kit
35	B0		Bass Drum M
36	C1		Bass Drum H
37	C#1		Closed Rim Shot
38	D1		Snare M
39	D#1		Hand Clap
40	E1		SD Electro
41	F1		Floor Tom L
42	F#1	1	Hi-Hat Closed
43	G1		Floor Tom H
44	G#1	1	Hi-Hat Open 1
45	A1		Low Tom
46	A#1	1	Hi-Hat Open 2
47	B1		Mid Tom L
48	C2		Mid Tom H
49	C#2		Crash Cymbal 1
50	D2		High Tom
51	D#2		Ride Cymbal 1
52	E2		
53	F2		
54	F#2		Tambourine
55	G2		
56	G#2		Cowbell
57	A2		
58	A#2		
59	B2		
60	C3		Bongo H
61	C#3		Bongo L
62	D3		Conga H Mute
63	D#3		Conga H Open
64	E3		Conga L
65	F3		Timbale H
66	F#3		Timbale L
67	G3		Agogo H
68	G#3		Agogo L
69	A3		Cabasa
70	A#3		Maracas
71	B3	2	Samba Whistle H

Note#	Note	Alternate Assign	C/M Kit
72	C4	2	Samba Whistle L
73	C#4		Vibraslap
74	D4		
75	D#4		Claves
76	E4		Laughing
77	F4		Screaming
78	F#4		Punch
79	G4		Heartbeat
80	G#4		Footsteps 1
81	A4		Footsteps 2
82	A#4		Applause
83	B4		Door Creaking
84	C5		Door Slam
85	C#5		Scratch
86	D5		Windchime
87	D#5		Engine Start
88	E5		Tire Screech
89	F5		Car Passing
90	F#5		Crash
91	G5		Siren
92	G#5		Train
93	A5		Jetplane
94	A#5		Helicopter
95	B5		Starship
96	C6		Gunshot
97	C#6		Machine Gun
98	D6		Laser Gun
99	D#6		Explosion
100	E6		Dog
101	F6		Horse Gallop
102	F#6		Bird Tweet
103	G6		Rain
104	G#6		Thunder
105	A6		Wind
106	A#6		Seashore
107	B6		Stream
108	C7		Bubble

: No Alternation

: No Sound

MIDI Data Format

1. General

1.1 Application

This following MIDI information applies to the TG300.

1.2 Applicable Standards

MIDI 1.0 Standard.

2. Channel Message

2.1 Send

2.1.1 Control Change

These messages are sent when the MIDI Slider is used.

2.1.1.1 Modulation

Control No.	Parameter	Range
1	Modulation	0~127

Modulation is sent only when the MIDI Slider is used.

2.1.1.2 Portamento Time

Control No.	Parameter	Range
5	Portamento Time	0~127

Portamento Time is sent only when the MIDI Slider is used.

2.1.1.3 Volume

Control No.	Parameter	Range
7	Volume	0~127

Volume is sent only when the MIDI Slider is used.

2.1.1.4 Pan

Control No.	Parameter	Range
10	Pan	0~127

0: left, 127: right

Pan is sent only when the MIDI Slider is used.

2.1.1.5 Expression

Control No.	Parameter	Range
11	Expression	0~127

Expression is sent only when the MIDI Slider is used.

2.1.1.6 Harmonic Content

Control No.	Parameter	Range
71	Harmonic Content	0~127

Resonance is sent only when the MIDI Slider is used.

2.1.1.7 Release Time

Control No.	Parameter	Range
72	Release Time	0~127

EG Release Time is sent only when the MIDI Slider is used.

2.1.1.8 Attack Time

Control No.	Parameter	Range
73	Attack Time	0~127 (0:–64, 64:+0, 127:+63)

EG Attack Time is sent only when the MIDI Slider is used.

2.1.1.9 Brightness

Control No.	Parameter	Range
74	Brightness	0~127 (0:–64, 64:+0, 127:+63)

Brightness is sent only when the MIDI Slider is used.

2.1.1.10 Effect1 Depth (Reverb Send Level)

Control No.	Parameter	Range
91	Effect1 Depth	0~127

Reverb Send is sent only when the MIDI Slider is used.

2.1.1.11 Effect3 Depth (Chorus Send Level)

Control No.	Parameter	Range
93	Effect3 Depth	0~127

Chorus Send is sent only when the MIDI Slider is used

2.1.1.12 Variation Effect Send Level

Control No.	Parameter	Range
89 (default)	Variation Effect Send Level	0~127

Variation Send is sent only when the MIDI Slider is used.

2.1.2 Channel Mode Message

Channel messages are not sent.

When HOST SELECT switch is not set to MIDI, HOST IN and MIDI IN data is echoed as follows:

HOST IN –> MIDI OUT

MIDI IN –> HOST OUT

2.2 Receive

2.2.1 Note On/Off

Received note range: C–2 ~ G8

Velocity range: 1 ~ 127 (Note On only)

When Rcv NOTE MESSAGE=OFF, not received.

For drum part, Note Off will be received when Rcv NOTE OFF=ON

for each instrument. Note Off will not be received when Rcv NOTE ON=OFF

2.2.2 Control Change

When a part's Rcv CONTROL CHANGE=OFF, that part will not receive Control Change messages.

2.2.2.1 Bank Select

Control No.	Parameter	Range
0	Bank Select MSB	0~127
32	Bank Select LSB	0~127

A Bank Select message will be held until the Program Change message is received. When the sound module mode is C/M, Bank Select is ignored.

2.2.2.2 Modulation

Control No.	Parameter	Range
1	Modulation	0~127

When a part's Rcv MODULATION=OFF, that part will not receive Modulation Control Change.

2.2.2.3 Portamento Time

Control No.	Parameter	Range
5	Portamento Time	0~127

When Portamento=ON, pitch change time is adjusted.

0: shortest portamento time, 127: longest portamento time.

2.2.2.4 Data Entry

Control No.	Parameter	Range
6	Data Entry MSB	0~127
38	Data Entry LSB	0~127

Used to set the value of the parameter selected by 2.2.8 RPN and 2.2.9 NRPN.

2.2.2.5 Main Volume

Control No.	Parameter	Range
7	Main Volume	0~127

When a part's Rcv VOLUME=OFF, that part will not receive Volume Control Change.

2.2.2.6 Pan

Control No.	Parameter	Range
10	Pan	0~127

0: left, 127: right

When a part's Rcv PAN=OFF, that part will not receive Pan Control Change.

2.2.2.7 Expression

Control No.	Parameter	Range
11	Expression	0~127

When a part's Rcv EXPRESSION=OFF, that part will not receive Expression Control Change.

2.2.2.8 Hold1

Control No.	Parameter	Range
64	Hold1	0~127 (0~63:off, 64~127:on)

When a part's Rcv HOLD1=OFF, that part will not receive Hold1 Control Change.

2.2.2.9 Portamento

Control No.	Parameter	Range
65	Portamento	0~127 (0~63:off, 64~127:on)

When a part's Rcv PORTAMENTO=OFF, that part will not receive Portamento Control Change.

2.2.2.10 Sostenuto

Control No.	Parameter	Range
66	Sostenuto	0~127 (0~63:off, 64~127:on)

When a part's Rcv SOSTENUTO=OFF, that part will not receive Sostenuto Control Change.

2.2.2.11 Soft Pedal

Control No.	Parameter	Range
67	Soft Pedal	0~127 (0~63:off, 64~127:on)

When a part's Rcv SOFT PEDAL=OFF, that part will not receive Soft Pedal Control Change.

2.2.2.12 Harmonic Content

Control No.	Parameter	Range
71	Harmonic Content	0~127 (0:–64, 64:+0, 127:+63)

This controls a voice's resonance. It works relatively, so specify increases and decreases relative to 64. If set to a large value, the voice may sound peculiar. For some voices, the effective range is less than the variable range.

2.2.2.13 Release Time

Control No.	Parameter	Range
72	Release Time	0~127 (0:–64, 64:+0, 127:+63)

This controls a voice's enevelope release time. It works relatively, so specify increases and decreases relative to 64.

2.2.2.14 Attack Time

Control No.	Parameter	Range
73	Attack Time	0~127 (0:–64, 64:+0, 127:+63)

This controls a voice's enevelope attack time. It works relatively, so specify increases and decreases relative to 64.

2.2.2.15 Brightness

Control No.	Parameter	Range
74	Brightness	0~127 (0:–64, 64:+0, 127:+63)

This controls a voice's cutoff frequency. It works relatively, so specify increases and decreases relative to 64. Lower values make the sound darker. For some voices, the effective range is less than the variable range.

2.2.2.16 Portamento Control

Control No.	Parameter	Range
84	Portamento Control	0~127

For portamento control, specify the note that is currently sounding, then send. The portamento source key can be from 0~127. When portamento control is received, the portamento time is set for sweep from the source key to the next Note On received on the same MIDI Channel. Even when Rcv PORTAMENTO=OFF, it is still received.

2.2.2.17 Variation Effect Send Level

Control No.	Parameter	Range
89 (default)	Variation Effect Send Level	0~127

This sets the send level for the variation effect.

2.2.2.18 Dry Level

Control No.	Parameter	Range
90	Dry Level	0~127

This sets the dry output level for the effects. For a setting of 0, effects output is 100%.

2.2.2.19 Effect1 Depth (Reverb Depth)

Control No.	Parameter	Range
91	Effect1 Depth	0~127

This sets the send level for the reverb effect.

2.2.2.20 Effect2 Depth (Tremolo Depth)

Control No.	Parameter	Range
92	Effect2 Depth	0~127

This is effective only when the rotary speaker type effect is assigned to the chorus effect. It sets the send level for the chorus effect.

2.2.2.21 Effect3 Depth (Chorus Depth)

Control No.	Parameter	Range
93	Effect3 Depth	0~127

This is not effective when the rotary speaker, symphonic, or phaser type effects are assigned to the chorus effect. It sets the send level for the chorus effect.

2.2.2.22 Effect4 Depth (Celeste Depth)

Control No.	Parameter	Range
94	Effect4 Depth	0~127

This is effective only when the symphonic type effect is assigned to the chorus effect. It sets the send level for the chorus effect.

2.2.2.23 Effect5 Depth (Phaser Depth)

Control No.	Parameter	Range
95	Effect5 Depth	0~127

This is effective only when the phaser type effect is assigned to the chorus effect. It sets the send level for the chorus effect.

2.2.3 Program Change

When the System parameter Rcv PROGRAM CHANGE=OFF, Program Change messages are not received.

When a part's Rcv PROGRAM CHANGE=OFF, that part will not receive Program Change messages.

When the sound module mode is C/M, the drum part ignores Program Change messages.

2.2.4 Pitch Bend

The Pitch Bend receive resolution is 14 bits (–8192 ~ +8191).

When a part's Rcv PITCH BEND CHANGE=OFF, that part will not receive Pitch Bend.

2.2.5 Channel After Touch

The default setting is vibrato.

When a part's Rcv CHANNEL AFTER TOUCH=OFF, that part will not receive Channel After Touch.

2.2.6 Polyphonic After Touch

There is no default setting.

When a part's Rcv POLYPHONIC AFTER TOUCH=OFF, that part will not receive Polyphonic After Touch.

Only notes within the range 36~97 are effective.

2.2.7 Channel Mode Message

The following Channel Mode Messages can be received.

2nd Byte	3rd Byte	
120	0	All Sound Off
121	0	Reset All Controllers
123	0	All Note Off
124	0	Omni Off
125	0	Omni On
126	0~16	Mono
127	0	Poly

2.2.7.1 All Sound Off

This will stop all sound being produced by the part on the specified MIDI Channel. However, Channel messages such as Note On/Off are maintained.

2.2.7.2 Reset All Controllers

This will reset the following Controllers:

Controller	Reset Value
Pitch Bend Change	±0 (center)
Channel Pressure	0 (off)
Modulation	0 (off)
Expression	127 (max)
Hold	10 (off)
Portamento	0 (off)
Sostenuto	0 (off)
Soft Pedal	0 (off)
RPN	No number selected. No internal data changed.
NRPN	No number selected. No internal data changed.

2.2.7.3 All Note Off

This will turn off all Notes on the specified MIDI Channel. However, if Hold1 or Sostenuto in ON, they will continue until they are switched OFF.

2.2.7.4 Omni Off

Processing is the same as that for All Note Off.

2.2.7.5 Omni On

Processing is the same as that for All Note Off. Omni On is not switched on.

2.2.7.6 Mono

Processing is the same as that for All Note Off. If the 3rd byte (mono value) is between 0 and 16, the respective part is set to Mode 4(m=1).

2.2.7.7 Poly

Processing is the same as that for All Note Off. The respective part is set to Mode 3.

2.2.8 RPN (Registered Parameter Number)

RPN MSB and LSB are used to select a parameter, then the value is set using Data Entry.

The following RPNs can be used:

RPN MSB LSB	Data Entry MSB LSB	
$ 00 $00	$ mm ---	Pitch Bend Sensitivity mm: $00-$18 (0~24 semitone) ---:don't care 2 octaves in semitone steps Set to 2 semitones when powered on
$ 00 $01	$ mm $ 11	Master Fine tuning (mm,11) : ($00,$00) - ($40, $ 00) - ($ 7F, $7F) (–8192*100/8192 - 0 - +8191*100/9192 set)
$ 00 $02	$ mm ---	Master Coarse tuning mm:$ 28-$ 40- $ 58 (-24 - 0- +24 semitone) ---:don't care
$ 01 $08	$ mm ---	LFO Rate (relative variation) mm: $ 00- $ 40-7F (–64 - 0 - +63) ---:don't care
$ 01 $09	$ mm ---	LFO Depth (relative variation) mm: $ 00- $ 40-7F (–64 - 0 - +63) ---:don't care
$ 01 $0A	$ mm ---	LFO Delay (relative variation) mm: $ 00- $ 40-7F (–64 - 0 - +63) ---:don't care
$ 01 $21	$ mm ---	Filter Resonance (relative variation) mm: $ 00- $ 40-7F (–64 - 0 - +63) ---:don't care
$ 7F $7F	$ --- ---	RPN Reset ---: don't care Used to reset all RPN and NRPN to parameter assignments. Parameter values do not change.

When a part's Rcv RPN=OFF, that part will not receive RPN messages.

The value set using RPN is not reset when a Program Change message is received.

The range of adjustment depends on the sound, so the actual range may be less.

2.2.9 NRPN (Non-Registered Parameter Number)

NRPN MSB and LSB are used to select a parameter, then the value is set using Data Entry.

The following NRPN can be received:

NRPN MSB LSB	Data Entry MSB LSB	
$ 1D $ rr	$ mm ---	Drum instrument reverb send level mm: $00-$7F (0~127) ---:don't care rr: drum instrument note number

When a part's Rcv NRPN=OFF, that part will not receive NRPN messages.

3. System Exclusive Message

3.1 Parameter Change

The following Parameter changes are used.

[UNIVERSAL REALTIME MESSAGE]

1) Master Volume

2) Master Balance

[UNIVERSAL NON REALTIME MESSAGE]

3) General MIDI Mode On

[TG300 NATIVE]

1) System Data parameter change

2) Multi Effect Data parameter change

3) Multi Part Data parameter change

4) Drums Setup Data parameter change

5) Internal Voice Memory parameter change

6) User Effect Data parameter change

7) System Information

8) All Parameters Reset

When Rcv SYSTEM EXCLUSIVE=OFF, these messages are not received.

3.2 Universal Real-Time Message

3.2.1 Master Volume

```
11110000    F0        = Exclusive status
01111111    7F        = Universal Real Time
01111111    7F        = ID of target device
00000100    04        = Sub-ID #1=Device Control Message
00000001    01        = Sub-ID #2=Master Volume
0sssssss *  SS        = Volume LSB
0ttttttt    TT        = Volume MSB
11110111    F7        = End of exclusive

11110000    F0        = Exclusive status
01111111    7F        = Universal Real Time
0xxxnnnn    XN        = Device Number, xxx = don't care
00000100    04        = Sub-ID #1=Device Control Message
00000001    01        = Sub-ID #2=Master Volume
0sssssss    SS        = Volume LSB
0ttttttt    TT        = Volume MSB
11110111    F7        = End of exclusive
```

When received, the Volume MSB will affect the MASTER VOLUME System parameter.

* 0sssssss: hexadecimal

3.2.2 Master Balance

```
11110000    F0        = Exclusive status
01111111    7F        = Universal Real Time
01111111    7F        = ID of target device
00000100    04        = Sub-ID #1=Device Control Message
00000010    02        = Sub-ID #2=Master Balance
0sssssss    SS        = Balance LSB
0ttttttt    TT        = Balance MSB
11110111    F7        = End of exclusive

11110000    F0        = Exclusive status
01111111    7F        = Universal Real Time
0xxxnnnn    XN        = Device Number, xxx = don't care
00000100    04        = Sub-ID #1=Device Control Message
00000010    02        = Sub-ID #2=Master Balance
0sssssss    SS        = Balance LSB
0ttttttt    TT        = Balance MSB
11110111    F7        = End of exclusive
```

When received, the Balance MSB will affect the MASTER PAN System parameter. 0: left, 127: right.

3.3 Universal Non-Real-Time Message

3.3.1 General MIDI Mode On

```
11110000    F0        = Exclusive status
01111110    7E        = Universal Non-Real Time
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

11110000    F0        = Exclusive status
01111110    7E        = Universal Non-Real Time
0xxxnnnn    XN        = Device Number, xxx = don't care
00001001    09        = Sub-ID #1=General MIDI Message
00000001    01        = Sub-ID #2=General MIDI On
11110111    F7        = End of exclusive
```

When the On message is received, the SOUND MODULE MODE will be set to GM-A (GM-B). When C/M is selected, this message is ignored.

When Rcv GM EXCLUSIVE =OFF, this message is not received. Since it takes about 50 ms to process this message, allow a sufficient interval before sending the next message.

3.4 TG300 Native Parameter Change

The Parameter change format messages used by the TG300 are as follows:

```
11110000   F0        = Exclusive status
01000011   43        = YAMAHA ID
0001nnnn   1N        = Device Number
00101011   2B        = Model ID
0aaaaaaa   aaaaaaa   = Start Address b20 - b14
0aaaaaaa   aaaaaaa   = Start Address b13 - b7
0aaaaaaa   aaaaaaa   = Start Address b6 - b0
0ddddddd   ddddddd   = Data
    |         |
    |         |
0ccccccc   ccccccc   = Check-sum
11110111   F7        = End of exclusive
```

When the Dump request receive Address corresponds to the Start Address, and the Dump Request Byte Count is correct, the data will be processed.

Refer to the tables at the end of this section for details about the Start Address and Byte Count.

The sending device must add the corresponding header to the parameter data. If, for example, you don't add the corresponding headers to non-continuous data such as System and Multi Effect, the data will not be received correctly.

The following parameters must be split into packets.

- System
- Multi Effect
- Multi Part
- Internal Voice Memory Common
- Internal Voice Memory Element
- Drums Setup
- User Effect
- All parameters reset

Do not send more than 513 bytes at a time. For Dump requests larger than 513 bytes, split the data into 512 byte packets, and send them at intervals greater than 120 ms.

After adding the Start Address, Data, and Check-sum, the check sum's 7th bit value will be zero.

3.4.1 System Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (SYSTEM)" on page 28.

3.4.2 Multi Effect Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (MULTI EFFECT)" on page 28.

3.4.3 Multi Part Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (MULTI PART)" on page 29.

3.4.4 Drums Setup Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (DRUM SETUP" on page 31.

3.4.5 Internal Voice Memory Parameter Change

Refer to "Parameter Base Map" on page 27 and ")MIDI Parameter Change table (VOICE MEMORY)" on page 32.

3.4.6 User Effect Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (USER EFFECT)" on page 33.

3.4.7 System Information Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (System Information)" on page 35.

3.4.8 All Parameters Reset

```
11110000   F0        = Exclusive status
01000011   43        = YAMAHA ID
0001nnnn   1N        = Device Number
00101011   2B        = Model ID
00000000   00        = Start Address b20 - b14
00000000   00        = Start Address b13 - b7
01111111   7F        = Start Address b6 - b0
00000000   00        = Data
00000001   01        = Check-sum
11110111   F7        = End of exclusive
```

This is used to reset all parameters to their initial values.

Since it takes about 120 ms to process this message, allow a sufficient interval before sending the next message.

3.5 Dump Request

The TG300 uses the following Dump requests:

1) System Data

2) Multi Effect Data

3) Multi Part Data

4) Drums Setup Data

5) Internal Voice Memory

6) User Effect Data

Dump request send/receive cannot be set by MIDI switch, only by Exclusive=off.

The TG300 cannot make Dump requests.

The TG300 uses the following Dump request formats:

```
11110000   F0        = Exclusive status
01000011   43        = YAMAHA ID
0011nnnn   3n        = Device Number
00101011   2B        = Model ID
0aaaaaaa   aaaaaaa   = Start Address b20 - b14
0aaaaaaa   aaaaaaa   = Start Address b13 - b7
0aaaaaaa   aaaaaaa   = Start Address b6 - b0
0sssssss   sssssss   = Byte Count b20 - b14
0sssssss   sssssss   = Byte Count b13 - b7
0sssssss   sssssss   = Byte Count b6 - b0
0ccccccc   ccccccc   = Check-sum
11110111   F7        = End of exclusive
```

When the Dump request receive Address corresponds to the Start Address, and the Dump Request Byte Count is correct, the data will be processed.

Refer to the tables at the end of this section for details about the Start Address and Byte Count.

After adding the Start Address, Byte Count, and Check-sum, the check sum's 7th bit value will be zero.

The sending device must add the corresponding parameter header. If, for example, System and Multi Effect parameters are requested using only one Dump request header, the receiving device will receive only the System parmaeters.

- System
- Multi Effect
- Multi part
- Internal voice
- Drums part
- User Effect
- All parameters reset

3.5.1 System Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (SYSTEM)" on page 28.

3.5.2 Multi Effect Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (MULTI EFFECT)" on page 28.

3.5.3 Multi Part Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (MULTI PART)" on page 29.

3.5.4 Drum Setup Data Parameter Change

When a different drum kit is selected, the Drum Setup parameters are initialized.

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (DRUM SETUP" on page 31.

3.5.5 Internal Voice Memory Parameter Change

Refer to "Parameter Base Map" on page 27 and ")MIDI Parameter Change table (VOICE MEMORY)" on page 32.

3.5.6 User Effect Data Parameter Change

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (USER EFFECT)" on page 33.

3.5.7 System Information Parameter Change

When Dump request is received, data can be sent, but not received.

Refer to "Parameter Base Map" on page 27 and "MIDI Parameter Change table (System Information)" on page 35.

4. Status FE (Active Sensing)

a) Transmission

Not sent.

b) Receive

If, after receiving an FE message, no data is received within 300 ms, ALL SOUND OFF, ALL NOTE OFF, and RESET ALL CONTROLLERS will be executed, just as if no FE message had been received.

1.1 Parameter Base Map

Parameter change	
Start Address (H)	**Description**
00 00 00	System
00 00 7F	All System parameters
01 00 00	Multi Effect
02 00 00	Multi part 10
02 01 00	Multi part 1
:	:
02 09 00	Multi part 9
02 0A 00	Multi part 11
:	:
02 0F 00	Multi part 16
03 00 00	System Information
04 00 00	Voice1 common
:	:
04 7F 00	Voice128 common
05 00 00	Voice1 element1
:	:
05 7F 00	Voice128 element1
06 00 00	Voice1 element2
:	:
06 7F 00	Voice128 element2
07 00 00	Display letter
07 01 00	Display bimap
10 1B 00	Drum setup part10
11 1B 00	Drum setup part1
:	:
19 1B 00	Drum setup part9
1A 1B 00	Drum setup part11
:	:
1F 1B 00	Drum setup part6
20 00 00	User Effect 1
:	:
20 0F 00	User Effect 16

Drum setup part10	
10 1B 00	note number27
10 1C 00	note number28
10 58 00	note number88

1.2 MIDI Parameter Change table (SYSTEM)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
00 00 00	04	0000 - 07FF	MASTER TUNE	-102.4 - +102.3[cent]	00 04 00 00
00 00 01				1st bit3-0→bit15-12 (0400)	
00 00 02				2nd bit3-0→bit11-8	
00 00 03				3rd bit3-0 →bit7-4	
				4th bit3-0→bit3-0	
00 00 04	01	00 - 7F	MASTER VOLUME	0 - 127	7F
00 00 05	01	28 - 58	TRANSPOSE	-24 ~ +24 [semitones]	40
00 00 06	01	01 - 7F	MASTER PAN	1(left) - 127(right)	40
00 00 07	01	00 - 7F	MASTER CUTOFF	-64 - +63	40
00 00 08	01	00 - 7F	MASTER PITCH MODULATION DEPTH	-64- +63	40
00 00 09	01	00 - 5F	VARIATION EFFECT SEND CONTROL CHANGE NUMBER	0-95	59
TOTAL SIZE	0A				

1.3 MIDI Parameter Change table (MULTI EFFECT)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
01 00 00	01	00 - 07	CHORUS TYPE	00:Thru	01
				01:CHORUS	
				02:FLANGER	
				03:SYMPHONIC	
				04:ROTARY SPEAKER	
				05:TREMOLO	
				06:AUTO PAN	
				07:PHASER	
01 00 01	01	00 - 19	VARIATION TYPE	00:Thru	10
				01:CHORUS	
				02:FLANGER	
				03:SYMPHONIC	
				04:ROTARY SPEAKER	
				05:TREMOLO	
				06:AUTO PAN	
				07:PHASER	
				08:PITCH CHANGE	
				09:AUTO WAH	
				0A:EXCITER	
				0B:COMPRESSOR	
				0C:EARLY REF1	
				0D:EARLY REF2	
				0E:GATE REVERB	
				0F:REVERSE GATE	
				10:DELAY L,C,R	
				11:ECHO	
				12:CROSS DELAY	
				13:REV2 HALL	
				14:REV2 ROOM1	
				15:REV2 ROOM2	
				16:REV2 ROOM3	
				17:REV2 STAGE1	
				18:REV2 STAGE2	
				19:REV2 PLATE	
01 00 02	01	00 - 04	Pre-VARIATION TYPE	00:Thru	02
				01:DISTORTION	
				02:3BAND EQ	
				03:CHORUS	
				04:FLANGER	
01 00 03	01	00 - 05	Pre-REVERB TYPE	00:Thru	02
				01:DISTORTION	
				02:3BAND EQ	
				03:CHORUS	
				04:FLANGER	
				05:DELAY	
01 00 04	01	00 - 0B	REVERB TYPE	00:Thru	01
				01:REV HALL	
				02:REV ROOM1	
				03:REV ROOM2	
				04:REV ROOM3	
				05:REV STAGE1	
				06:REV STAGE2	
				07:REV PLATE	
				08:WHITE ROOM	
				09:REV TUNNEL	
				0A:REV CANYON	
				0B:REV BASEMENT	
01 00 05	01	00 - 7F	REVERB Input	00 - 127	40
01 00 06	01	00 - 7F	CHORUS Input	00 - 127	40
01 00 07	01	00 - 7F	VARIATION Input	00 - 127	40
01 00 08	01	00 - 7F	DRY Level	00 - 127	7F
01 00 09	01	00 - 7F	REVERB Return	00 - 127	69
01 00 0A	01	00 - 7F	CHORUS Return	00 - 127	69
01 00 0B	01	00 - 7F	VARIATION Return	00 - 127	69
01 00 0C	01	00 - 7F	Send VARIATION to CHORUS	00 - 127	00
01 00 0D	01	00 - 7F	Send VARIATION to REVERB	00 - 127	00
01 00 0E	01	00 - 7F	Send CHORUS to REVERB	00 - 127	00
01 00 0F	01	00 - 7F	CHORUS Param 1		
01 00 10	01	00 - 7F	CHORUS Param 2		
01 00 11	01	00 - 7F	CHORUS Param 3		
01 00 12	01	00 - 7F	CHORUS Param 4		
01 00 13	01	00 - 7F	CHORUS Param 5		
01 00 14	01	00 - 7F	CHORUS Param 6		
01 00 15	01	00 - 7F	CHORUS Param 7		
01 00 16	01	00 - 7F	CHORUS Param 8		
01 00 17	01	00 - 7F	CHORUS Param 9		
01 00 18	01	00 - 7F	CHORUS Param 10		
Data Range depends on Chorus Type					
01 00 19	01	00 - 7F	VARIATION Param 1 MSB		
01 00 1A	01	00 - 7F	VARIATION Param 1 LSB		
01 00 1B	01	00 - 7F	VARIATION Param 2 MSB		
01 00 1C	01	00 - 7F	VARIATION Param 2 LSB		
01 00 1D	01	00 - 7F	VARIATION Param 3 MSB		

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
01 00 1E	01	00 - 7F	VARIATION Param 3 LSB		
01 00 1F	01	00 - 7F	VARIATION Param 4 MSB		
01 00 20	01	00 - 7F	VARIATION Param 4 LSB		
01 00 21	01	00 - 7F	VARIATION Param 5 MSB		
01 00 22	01	00 - 7F	VARIATION Param 5 LSB		
01 00 23	01	00 - 7F	VARIATION Param 6		
01 00 24	01	00 - 7F	VARIATION Param 7		
01 00 25	01	00 - 7F	VARIATION Param 8		
01 00 26	01	00 - 7F	VARIATION Param 9		
01 00 27	01	00 - 7F	VARIATION Param 10		
Data Range depends on Variation Type					
01 00 28	01	00 - 7F	Pre-VARIATION Param 1		
01 00 29	01	00 - 7F	PrE-VARIATION Param 2		
01 00 2A	01	00 - 7F	Pre-VARIATION Param 3		
01 00 2B	01	00 - 7F	Pre-VARIATION Param 4		
01 00 2C	01	00 - 7F	Pre-VARIATION Param 5		
01 00 2D	01	00 - 7F	Pre-VARIATION Param 6		
01 00 2E	01	00 - 7F	Pre-VARIATION Param 7		
01 00 2F	01	00 - 7F	Pre-VARIATION Param 8		
01 00 30	01	-	(not used)		
01 00 31	01	-	(not used)		
Data Range depends on Pre-VariationType					
01 00 32	01	00 - 7F	Pre-REVERB Param 1		
01 00 33	01	00 - 7F	Pre-REVERB Param 2		
01 00 34	01	00 - 7F	Pre-REVERB Param 3		
01 00 35	01	00 - 7F	Pre-REVERB Param 4		
01 00 36	01	00 - 7F	Pre-REVERB Param 5		
01 00 37	01	00 - 7F	Pre-REVERB Param 6		
01 00 38	01	00 - 7F	Pre-REVERB Param 7		
01 00 39	01	00 - 7F	Pre-REVERB Param 8		
01 00 3A	01	-	(not used)		
01 00 3B	01	-	(not used)		
Data Range depends on Pre-Reverb Type					
01 00 3C	01	00 - 7F	REVERB Param 1		
01 00 3D	01	00 - 7F	REVERB Param 2		
01 00 3E	01	00 - 7F	REVERB Param 3		
01 00 3F	01	00 - 7F	REVERB Param 4		
01 00 40	01	00 - 7F	REVERB Param 5		
01 00 41	01	00 - 7F	REVERB Param 6		
01 00 42	01	00 - 7F	REVERB Param 7		
01 00 43	01	00 - 7F	REVERB Param 8		
01 00 44	01	00 - 7F	REVERB Param 9		
01 00 45	01	00 - 7F	REVERB Param 10		
Data Range depends on Reverb Type					
TOTAL SIZE	46				

1.4 MIDI Parameter Change table (MULTI PART)

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 0n 00	01	00 - 20	ELEMENT RESERVE	0 - 32	02 (Part 2-10) 06 (Part 1) 00 (Part11-16)
02 0n 01	01	00 - 7F	BANK SELECT MSB	0 - 127	00
02 0n 02	01	00 - 7F	BANK SELECT LSB	0 - 127	00
02 0n 03	01	00 - 7F	PROGRAM NUMBER	1 - 128	00
02 0n 04	01	00 - 10	Rcv CHANNEL	1 - 16	Part No. OFF
02 0n 05	01	00 - 01	Rcv PITCH BEND	OFF/ON	01
02 0n 06	01	00 - 01	Rcv CH AFTER TOUCH(CAT)	OFF/ON	01
02 0n 07	01	00 - 01	Rcv PROGRAM CHANGE	OFF/ON	01
02 0n 08	01	00 - 01	Rcv CONTROL CHANGE	OFF/ON	01
02 0n 09	01	00 - 01	Rcv POLY AFTER TOUCH(PAT)	OFF/ON	01
02 0n 0A	01	00 - 01	Rcv NOTE MESSAGE	OFF/ON	01
02 0n 0B	01	00 - 01	Rcv RPN	OFF/ON	01
02 0n 0C	01	00 - 01	Rcv NRPN	OFF/ON	01
02 0n 0D	01	00 - 01	Rcv MODULATION	OFF/ON	01
02 0n 0E	01	00 - 01	Rcv VOLUME	OFF/ON	01
02 0n 0F	01	00 - 01	Rcv PAN	OFF/ON	01
02 0n 10	01	00 - 01	Rcv EXPRESSION	OFF/ON	01
02 0n 11	01	00 - 01	Rcv HOLD1	OFF/ON	01
02 0n 12	01	00 - 01	Rcv PORTAMENTO	OFF/ON	01
02 0n 13	01	00 - 01	Rcv SOSTENUTO	OFF/ON	01
02 0n 14	01	00 - 01	Rcv SOFT PEDAL	OFF/ON	01
02 0n 15	01	00 - 01	MONO/POLY MODE	0:MONO 1:POLY	01
02 0n 16	01	00 - 02	SAME NOTE NUMBER	0:SINGLE	01
			KEY ON ASSIGN	1:MULTI 2:INST	

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 0n 17	01	00 - 01	PART MODE	0:NORMAL 1:DRUM	00 (other parts) 01(Part 10)
02 0n 18	01	28 - 58	NOTE SHIFT	-24 - +24[semitones]	40
02 0n 19 1A	02	00 - FF	DETUNE	-12.8 - +12.7[Hz] 1st bit3-0→bit7-4 2nd bit3-0→bit3-0	08 00 (80)
02 0n 1B	01	00 - 7F	VOLUME	0 - 127	64
02 0n 1C	01	00 - 7F	VELOCITY SENSE DEPTH	0 - 127	40
02 0n 1D	01	00 - 7F	VELOCITY SENSE OFFSET	0 - 127	40
02 0n 1E	01	00 - 7F	PAN	0:random 1:L63 : 64:C(center) : 127:R63	40
02 0n 1F	01	00 - 7F	NOTE LIMIT LOW	C-2 - G8	00
02 0n 20	01	00 - 7F	NOTE LIMIT HIGH	C-2 - G8	7F
02 0n 21	01	00 - 5F	AC1 CONTROLLER NUMBER	0 - 95	10
02 0n 22	01	00 - 5F	AC2 CONTROLLER NUMBER	0 - 95	11
02 0n 23	01	00 - 7F	DRY LEVEL	0 - 127	7F
02 0n 24	01	00 - 7F	CHORUS SEND	0 - 127	00
02 0n 25	01	00 - 7F	REVERB SEND	0 - 127	40
02 0n 26	01	00 - 7F	VARIATION SEND	0 -127	00
02 0n 27	01	00 - 7F	VIBRATO RATE	-64 - +63	40
02 0n 28	01	00 - 7F	VIBRATO DEPTH	-64 - +63	40
02 0n 29	01	00 - 7F	FILTER CUTOFF FREQUENCY	-64 - +63	40
02 0n 2A	01	00 - 7F	FILTER RESONANCE	-64 - +63	40
02 0n 2B	01	00 - 7F	EG ATTACK TIME	-64 - +63	40
02 0n 2C	01	00 - 7F	EG DECAY TIME	-64 - +63	40
02 0n 2D	01	00 - 7F	EG RELEASE TIME	-64 - +63	40
02 0n 2E	01	00 - 7F	VIBRATO DELAY	-64 - +63	40
02 0n 2F	01	00 - 7F	SCALE TUNING C	-64 - +63[cent]	40
02 0n 30	01	00 - 7F	SCALE TUNING C#	-64 - +63[cent]	40
02 0n 31	01	00 - 7F	SCALE TUNING D	-64 - +63[cent]	40
02 0n 32	01	00 - 7F	SCALE TUNING D#	-64 - +63[cent]	40
02 0n 33	01	00 - 7F	SCALE TUNING E	-64 - +63[cent]	40
02 0n 34	01	00 - 7F	SCALE TUNING F	-64 - +63[cent]	40
02 0n 35	01	00 - 7F	SCALE TUNING F#	-64 - +63[cent]	40
02 0n 36	01	00 - 7F	SCALE TUNING G	-64 - +63[cent]	40
02 0n 37	01	00 - 7F	SCALE TUNING G#	-64 - +63[cent]	40
02 0n 38	01	00 - 7F	SCALE TUNING A	-64 - +63[cent]	40
02 0n 39	01	00 - 7F	SCALE TUNING A#	-64 - +63[cent]	40

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 0n 3A	01	00 - 7F	SCALE TUNING B	-64 - +63[cent]	40
02 0n 3B	01	28 - 58	MW PITCH CONTROL	-24 - +24[semitones]	40
02 0n 3C	01	00 - 7F	MW FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 3D	01	00 - 7F	MW AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 3E	01	00 - 7F	MW LFO PMOD DEPTH	0 - 127	0A
02 0n 3F	01	00 - 7F	MW LFO FMOD DEPTH	0 - 127	00
02 0n 40	01		(not used)		
02 0n 41	01	28 - 58	BEND PITCH CONTROL	-24 - +24[semitones]	42
02 0n 42	01	00 - 7F	BEND FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 43	01	00 - 7F	BEND AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 44	01	00 - 7F	BEND LFO PMOD DEPTH	0 - 127	00
02 0n 45	01	00 - 7F	BEND LFO FMOD DEPTH	0 - 127	00
02 0n 46	01		(not used)		
02 0n 47	01	28 - 58	CAT PITCH CONTROL	-24 - +24[semitones]	40
02 0n 48	01	00 - 7F	CAT FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 49	01	00 - 7F	CAT AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 4A	01	00 - 7F	CAT LFO PMOD DEPTH	0 - 127	0A
02 0n 4B	01	00 - 7F	CAT LFO FMOD DEPTH	0 - 127	00
02 0n 4C	01		(not used)		
02 0n 4D	01	28 - 58	PAT PITCH CONTROL	-24 - +24[semitones]	40
02 0n 4E	01	00 - 7F	PAT FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 4F	01	00 - 7F	PAT AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 50	01	00 - 7F	PAT LFO PMOD DEPTH	0 - 127	00
02 0n 51	01	00 - 7F	PAT LFO FMOD DEPTH	0 - 127	00
02 0n 52	01		(not used)		
02 0n 53	01	28 - 58	AC1 PITCH CONTROL	-24 - +24[semitones]	40
02 0n 54	01	00 - 7F	AC1 FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 55	01	00 - 7F	AC1 AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 56	01	00 - 7F	AC1 LFO PMOD DEPTH	0 - 127	00
02 0n 57	01	00 - 7F	AC1 LFO FMOD DEPTH	0 - 127	00
02 0n 58	01		(not used)		
02 0n 59	01	28 - 58	AC2 PITCH CONTROL	-24 - +24[semitones]	40

Address (H)	Size (H)	Data (H)	Parameter	Description	Default value (H)
02 0n 5A	01	00 - 7F	AC2 FILTER CONTROL	-9600 - +9450[cent]	40
02 0n 5B	01	00 - 7F	AC2 AMPLITUDE CONTROL	-100 - +100[%]	40
02 0n 5C	01	00 - 7F	AC2 LFO PMOD DEPTH	0 - 127	00
02 0n 5D	01	00 - 7F	AC2 LFO FMOD DEPTH	0 - 127	00
02 0n 5E	01		(not used)		
02 0n 5F	01	00 - 01	PORTAMENTO SWITCH	OFF/ON	00
02 0n 60	01	00 - 7F	PORTAMENTO TIME	0 - 127	00
TOTAL SIZE	61				

Remarks:

n:block number(0 - F) Part1

Part9 n=9

Part10 n=0

Part11 n=A

: :

Part16 n=F

Since the LFO is also used with voice parameters, the desired result may not be achived when the LFO is changed.

The following parameters do not apply to drum parts:

- Bank Select
- Portamento
- Soft Pedal
- Mono/Poly
- Scale tuning
- Poly After touch

1.5 MIDI Parameter Change table (DRUM SETUP

Address (H)	Size (H)	Data (H)	Parameter	Description
1n rr 00	01	00 - 7F	PITCH COARSE	0 - 127
1n rr 01	01	00 - 7F	PITCH FINE	-64 - +63[cent]
1n rr 02	01	00 - 7F	LEVEL	0 - 127
1n rr 03	01	00 - 7F	ALTERNATE GROUP	0:OFF
				1 - 127
1n rr 04	01	00 - 7F	PAN	0:random
				1:L63
				:
				64:C(center)
				:
				127:R63
1n rr 05	01	00 - 7F	REVERB SEND	0 - 127
1n rr 06	01	00 - 7F	CHORUS SEND	0 - 127
1n rr 07	01	00 - 01	KEY ASSIGN	0:SINGLE
				1:MULTI
1n rr 08	01	00 - 01	Rcv NOTE OFF	OFF/ON
1n rr 09	01	00 - 01	Rcv NOTE ON	OFF/ON
1n rr 0A	01	00 - 7F	FILTER CUTOFF FREQUENCY	0 - 127
1n rr 0B	01	00 - 7F	FILTER RESONANCE	0 - 127
1n rr 0C	01	00 - 7F	EG ATTACK	0 - 127
1n rr 0D	01	00 - 7F	EG DECAY2	0 - 127
1n rr 0E	01	00 - 7F	EG DECAY1	0 - 127
1n rr 0F	01	00 - 7F	VARIATION SEND	0 - 127
TOTAL SIZE	10			

Remarks:

When a different drum kit is selected, all DRUM SETUP PARAMETERS are initialized.

n:block number(0 - F)

Part1 n=1

: :

Part9 n=9

Part10 n=0

Part11 n=A

: :

Part16 n=F

rr:note number(1B - 58)

1.6)MIDI Parameter Change table (VOICE MEMORY)

Address (H)	Size (H)	Data (H)	Parameter	Description
04 vv 00 %	01	00 - 2F	EFFECT NUMBER	1 - 32:P1 - 32 33 - 48: I1 - 16
04 vv 01	01	00 - 01	VOICE MODE	0:1element 1:2element
04 vv 02	01	00 - 7F	VOICE LEVEL	0 - 127
04 vv 03	08	20 - 7F	VOICE NAME	ASCII character
TOTAL SIZE	0B			

Remarks:

Parameters with the % symbol are active only in Single mode.

vv:voice number(00 - 7F)

(2) Element Parameter

Address (H)	Size (H)	Data (H)	Parameter	Description
0m vv 00	02	01 - C3	WAVEFORM	1 - 195
0m vv 01				1st bit0 →bit7
				2nd bit6-0 →bit6-0
0m vv 02	01	00 - 7F	NOTE LIMIT LOW	C-2 - G8
0m vv 03	01	00 - 7F	NOTE LIMIT HIGH	C-2 - G8
0m vv 04	01	01 - 7F	VELOCITY LIMIT LOW	1 - 127
0m vv 05	01	01 - 7F	VELOCITY LIMIT HIGH	1 - 127
0m vv 06	01	00 - 01	LFO FUNCTION	0:AMPLITUDE
			EXCEPT PITCH	1:FILTER
0m vv 07	01	00 - 06	LFO WAVE SELECT	0:SAW(+phase)
				1:TRIANGLE(+phase)
				2:SQUARE(+phase)
				3:SAW(-phase)
				4:TRIANGLE (-phase)
				5:SQARE(-phase)
				6:SAMPLE&HOLD
0m vv 08	01	00 - 01	LFO PHASE INITIALIZE	0:OFF(key on without LFO reset) 1:ON(key on with LFO reset)
0m vv 09	01	00 - 3F	LFO SPEED	0(slow) - 63(fast)
0m vv 0A	01	00 - 7F	LFO DELAY	0(short) - 127(long)
0m vv 0B	01	00 - 7F	LFO FADE TIME	0(short) - 127(long)
0m vv 0C	01	00 - 0F	LFO PITCH DEPTH	0 - 15
0m vv 0D	01	00 - 0F	LFO FILTER DEPTH	0 - 15
0m vv 0E	01	00 - 0F	LFO AMPLITUDE DEPTH	0 - 15
0m vv 0F	01	20 - 60	NOTE SHIFT	-32 - +32[semitones]
0m vv 10	01	0E - 72	DETUNE	-50 - +50[cent]
0m vv 11	01	00 - 05	PITCH SCALING	0:100% 1:50% 2:20% 3:10% 4:5% 5:0%

Address (H)	Size (H)	Data (H)	Parameter	Description
0m vv 12	01	00 - 7F	PITCH SCALING CENTER NOTE	C-2 - G8
0m vv 13	01	00 - 03	PEG DEPTH	0:0.5[oct] 1:1[oct] 2:2[oct] 3:4[oct]
0m vv 14	01	39 - 47	VELOCITY PEG LEVEL SENSITIVITY	-7 - +7
0m vv 15	01	39 - 47	VELOCITY PEG RATE SENSITIVITY	-7 - +7
0m vv 16	01	39 - 47	PEG RATE SCALING	-7 - +7
0m vv 17	01	00 - 7F	PEG RATE SCALING CENTER NOTE	C-2 - G8
0m vv 18	01	00 - 3F	PEG RATE1	0(slow) - 63(fast)
0m vv 19	01	00 - 3F	PEG RATE2	0(slow) - 63(fast)
0m vv 1A	01	00 - 3F	PEG RATE3	0(slow) - 63(fast)
0m vv 1B	01	00 - 3F	PEG RATE4(RELEASE)	0(slow) - 63(fast)
0m vv 1C	01	00 - 7F	PEG LEVEL0	-64 - +63
0m vv 1D	01	00 - 7F	PEG LEVEL1	-64 - +63
0m vv 1E	01	00 - 7F	PEG LEVEL2	-64 - +63
0m vv 1F	01	00 - 7F	PEG LEVEL3	-64 - +63
0m vv 20	01	00 - 7F	PEG LEVEL4(RELEASE)	-64 - +63
0m vv 21	01	00 - 3F	FILTER RESONANCE	0 - 63(emphasize)
0m vv 22	01		(not used)	
0m vv 23	01	00 - 7F	FILTER CUTOFF FREQUENCY	0(low) - 127(high)
0m vv 24	01	00 - 7F	CUTOFF SCALING BP1	C-2 - G8
0m vv 25	01	00 - 7F	CUTOFF SCALING BP2	C-2 - G8
0m vv 26	01	00 - 7F	CUTOFF SCALING BP3	C-2 - G8
0m vv 27	01	00 - 7F	CUTOFF SCALING BP4	C-2 - G8
0m vv 28	01	00 - 7F	CUTOFF SCALING OFFSET1	-64 - +63
0m vv 29	01	00 - 7F	CUTOFF SCALING OFFSET2	-64 - +63
0m vv 2A	01	00 - 7F	CUTOFF SCALING OFFSET3	-64 - +63
0m vv 2B	01	00 - 7F	CUTOFF SCALING OFFSET4	-64 - +63
0m vv 2C	01	39 - 47	VELOCITY FEG LEVEL SENSITIVITY	-7 - +7
0m vv 2D	01	39 - 47	VELOCITY FEG RATE SENSITIVITY	-7 - +7
0m vv 2E	01	39 - 47	FEG RATE SCALING	-7 - +7
0m vv 2F	01	00 - 7F	FEG RATE SCALING CENTER NOTE	C-2 - G8
0m vv 30	01	00 - 3F	FEG RATE1	0(slow) - 63(fast)
0m vv 31	01	00 - 3F	FEG RATE2	0(slow) - 63(fast)
0m vv 32	01	00 - 3F	FEG RATE3	0(slow) - 63(fast)

Address (H)	Size (H)	Data (H)	Parameter	Description
0m vv 33	01	00 - 3F	FEG RATE4 (RELEASE)	0(slow) - 63(fast)
0m vv 34	01	00 - 7F	FEG LEVEL0	-64 - +63
0m vv 35	01	00 - 7F	FEG LEVEL1	-64 - +63
0m vv 36	01	00 - 7F	FEG LEVEL2	-64 - +63
0m vv 37	01	00 - 7F	FEG LEVEL3	-64 - +63
0m vv 38	01	00 - 7F	FEG LEVEL4(RELEASE)	-64 - +63
0m vv 39	01	00 - 7F	ELEMENT LEVEL	0 - 127
0m vv 3A	01	00 - 7F	LEVEL SCALING BP1	C-2 - G8
0m vv 3B	01	00 - 7F	LEVEL SCALING BP2	C-2 - G8
0m vv 3C	01	00 - 7F	LEVEL SCALING BP3	C-2 - G8
0m vv 3D	01	00 - 7F	LEVEL SCALING BP4	C-2 - G8
0m vv 3E	01	00 - 7F	LEVEL SCALING OFFSET1	-64 - +63
0m vv 3F	01	00 - 7F	LEVEL SCALING OFFSET2	-64 - +63
0m vv 40	01	00 - 7F	LEVEL SCALING OFFSET3	-64 - +63
0m vv 41	01	00 - 7F	LEVEL SCALING OFFSET4	-64 - +63
0m vv 42	01	00 - 06	VELOCITY CURVE	0 - 6
0m vv 43	01	00 - 0F	PAN	0(left) - 14(right) 15:scaling
0m vv 44	01	39 - 47	AEG RATE SCALING	-7 - +7
0m vv 45	01	00 - 7F	AEG RATE SCALING CENTER NOTE	C-2 - G8
0m vv 46	01	00 - 0F	AEG KEY ON DELAY	0(short) - 15(long)
0m vv 47	01	00 - 3F	AEG ATTACK RATE	0(slow) - 63(fast)
0m vv 48	01	00 - 3F	AEG DECAY1 RATE	0(slow) - 63(fast)
0m vv 49	01	00 - 3F	AEG DECAY2 RATE	0(slow) - 63(fast)
0m vv 4A	01	00 - 3F	AEG RELEASE RATE	0(slow) - 63(fast)
0m vv 4B	01	00 - 7F	AEG DECAY1 LEVEL	0 - 127
0m vv 4C	01	00 - 7F	AEG DECAY2 LEVEL	0 - 127
0m vv 4D	03		(not used)	
TOTAL SIZE	50			

Remarks:

m:element number(5 - 6)

Element1 m=5

Element2 m=6

vv:voice number(0 - 7F)

1.7 MIDI Parameter Change table (USER EFFECT)

Address (H)	Size (H)	Data (H)	Parameter	Description
20 0n 00	01	00 - 07	CHORUS TYPE	00:Thru
				01:CHORUS
				02:FLANGER
				03:SYMPHONIC
				04:ROTARY SPEAKER
				05:TREMOLO
				06:AUTO PAN
				07:PHASER
20 0n 01	01	00 - 19	VARIATION TYPE	00:Thru
				01:CHORUS
				02:FLANGER
				03:SYMPHONIC
				04:ROTARY SPEAKER
				05:TREMOLO
				06:AUTO PAN
				07:PHASER
				08:PITCH CHANGE
				09:AUTO WAH
				0A:EXCITER
				0B:COMPRESSOR
				0C:EARLY REF1
				0D:EARLY REF2
				0E:GATE REVERB
				0F:REVERSE GATE
				10:DELAY L,C,R
				11:ECHO
				12:CROSS DELAY
				13:REV2 HALL
				14:REV2 ROOM1
				15:REV2 ROOM2
				16:REV2 ROOM3
				17:REV2 STAGE1
				18:REV2 STAGE2
				19:REV2 PLATE
20 0n 02	01	00 - 04	Pre-VARIATION TYPE	00:Thru
				01:DISTORTION
				02:3BAND EQ
				03:CHORUS
				04:FLANGER
20 0n 03	01	00 - 05	Pre-REVERB TYPE	00:Thru
				01:DISTORTION
				02:3BAND EQ
				03:CHORUS
				04:FLANGER
				05:DELAY
20 0n 04	01	00 - 0B	REVERB TYPE	00:Thru
				01:REV HALL
				02:REV ROOM1
				03:REV ROOM2
				04:REV ROOM3
				05:REV STAGE1
				06:REV STAGE2
				07:REV PLATE
				08:WHITE ROOM
				09:REV TUNNEL
				0A:REV CANYON
				0B:REV BASEMENT
20 0n 05	01	00 - 7F	REVERB Input	00 - 127

Address (H)	Size (H)	Data (H)	Parameter	Description
20 0n 06	01	00 - 7F	CHORUS Input	00 - 127
20 0n 07	01	00 - 7F	VARIATION Input	00 - 127
20 0n 08	01	00 - 7F	DRY Level	00 - 127
20 0n 09	01	00 - 7F	REVERB Return	00 - 127
20 0n 0A	01	00 - 7F	CHORUS Return	00 - 127
20 0n 0B	01	00 - 7F	VARIATION Return	00 - 127
20 0n 0C	01	00 - 7F	Send VARIATION to CHORUS	00 - 127
20 0n 0D	01	00 - 7F	Send VARIATION to REVERB	00 - 127
20 0n 0E	01	00 - 7F	Send CHORUS to REVERB	00 - 127
20 0n 0F	01	00 - 7F	CHORUS Param 1	
20 0n 10	01	00 - 7F	CHORUS Param 2	
20 0n 11	01	00 - 7F	CHORUS Param 3	
20 0n 12	01	00 - 7F	CHORUS Param 4	
20 0n 13	01	00 - 7F	CHORUS Param 5	
20 0n 14	01	00 - 7F	CHORUS Param 6	
20 0n 15	01	00 - 7F	CHORUS Param 7	
20 0n 16	01	00 - 7F	CHORUS Param 8	
20 0n 17	01	00 - 7F	CHORUS Param 9	
20 0n 18	01	00 - 7F	CHORUS Param 10	
Data Range and Default Value change when Effect Number selected				
20 0n 19	01	00 - 7F	VARIATION Param 1 MSB	
20 0n 1A	01	00 - 7F	VARIATION Param 1 LSB	
20 0n 1B	01	00 - 7F	VARIATION Param 2 MSB	
20 0n 1C	01	00 - 7F	VARIATION Param 2 LSB	
20 0n 1D	01	00 - 7F	VARIATION Param 3 MSB	
20 0n 1E	01	00 - 7F	VARIATION Param 3 LSB	
20 0n 1F	01	00 - 7F	VARIATION Param 4 MSB	
20 0n 20	01	00 - 7F	VARIATION Param 4 LSB	
20 0n 21	01	00 - 7F	VARIATION Param 5 MSB	
20 0n 22	01	00 - 7F	VARIATION Param 5 LSB	
20 0n 23	01	00 - 7F	VARIATION Param 6	
20 0n 24	01	00 - 7F	VARIATION Param 7	
20 0n 25	01	00 - 7F	VARIATION Param 8	
20 0n 26	01	00 - 7F	VARIATION Param 9	
20 0n 27	01	00 - 7F	VARIATION Param 10	
Data Range and Default Value change when Effect Number selected				
20 0n 28	01	00 - 7F	Pre-VARIATION Param 1	
20 0n 29	01	00 - 7F	Pre-VARIATION Param 2	
20 0n 2A	01	00 - 7F	Pre-VARIATION Param 3	
20 0n 2B	01	00 - 7F	Pre-VARIATION Param 4	

Address (H)	Size (H)	Data (H)	Parameter	Description
20 0n 2C	01	00 - 7F	Pre-VARIATION Param 5	
20 0n 2D	01	00 - 7F	Pre-VARIATION Param 6	
20 0n 2E	01	00 - 7F	Pre-VARIATION Param 7	
20 0n 2F	01	00 - 7F	Pre-VARIATION Param 8	
20 0n 30	01	-	(not used)	
20 0n 31	01	-	(not used)	
Data Range and Default Value change when Effect Number selected				
20 0n 32	01	00 - 7F	Pre-REVERB Param 1	
20 0n 33	01	00 - 7F	Pre-REVERB Param 2	
20 0n 34	01	00 - 7F	Pre-REVERB Param 3	
20 0n 35	01	00 - 7F	Pre-REVERB Param 4	
20 0n 36	01	00 - 7F	Pre-REVERB Param 5	
20 0n 37	01	00 - 7F	Pre-REVERB Param 6	
20 0n 38	01	00 - 7F	Pre-REVERB Param 7	
20 0n 39	01	00 - 7F	Pre-REVERB Param 8	
20 0n 3A	01	-	(not used)	
20 0n 3B	01	-	(not used)	
Data Range and Default Value change when Effect Number selected				
20 0n 3C	01	00 - 7F	REVERB Param 1	
20 0n 3D	01	00 - 7F	REVERB Param 2	
20 0n 3E	01	00 - 7F	REVERB Param 3	
20 0n 3F	01	00 - 7F	REVERB Param 4	
20 0n 40	01	00 - 7F	REVERB Param 5	
20 0n 41	01	00 - 7F	REVERB Param 6	
20 0n 42	01	00 - 7F	REVERB Param 7	
20 0n 43	01	00 - 7F	REVERB Param 8	
20 0n 44	01	00 - 7F	REVERB Param 9	
20 0n 45	01	00 - 7F	REVERB Param 10	
Data Range and Default Value change when Effect Number selected				
TOTAL SIZE	46			

Remarks:

n:effect number(Internal 01 - 16) 101 n=0

102 n=1

103 n=2

: :

115 n=E

116 n=F

1.8 MIDI Parameter Change table (System Information)

Address (H)	Size (H)	Data (H)	Parameter	Description
03 00 00	10	23	STRING	ASCII '#'
03 00 01		30	STRING	ASCII '0'
03 00 02		30	STRING	ASCII '0'
03 00 03		36	STRING	ASCII '6'
03 00 04		39	STRING	ASCII '9'
03 00 05		20	STRING	ASCII ' '
03 00 06		20	STRING	ASCII ' '
03 00 07		56	STRING	ASCII 'V'
03 00 08		45	STRING	ASCII 'E'
03 00 09		52	STRING	ASCII 'R'
03 00 0A		3D	STRING	ASCII '='
03 00 0B		31	STRING	ASCII '1'
03 00 0C		2E	STRING	ASCII '.'
03 00 0D		30	STRING	ASCII '0'
03 00 0E		30	STRING	ASCII '0'
03 00 0F		20	STRING	ASCII ' '
TOTAL SIZE	10			

1.9 MIDI Parameter Change table (Display Data)

Address (H)	Size (H)	Data (H)	Parameter	Description
07 00 00	20	20 - 7F	MESSAGE WINDOW	32-127(ASCII)
:				
07 00 1F				
07 01 00	30	00 - 7F	BITMAP WINDOW Data0	0 - 127
07 01 01			Data1	
:			:	
07 01 2F			Data47	

The relationship between data and screen display:

Think of a 7 x 4 dot cluster on the screen as one dot, one pixel. Seven horizontal pixels correspond to one byte. That is, one pixel corresponds to one bit. When a pixel is displayed, the corresponding bit is 1. When a pixel is off, it is 0.

Screen data organization:

	b6 b5 b4 b3 b2 b1 b0		b6 b5 b4 b3 b2 b1 b0		b6 b5 b4 b3 b2 b1 b0
Data0	* * * * * * *	Data16	* * * * * * *	Data32	* * _ _ _ _ _
Data1		Data17		Data33	
Data2		Data18		Data34	
Data3		Data19		Data35	
Data4		Data20		Data36	
Data5		Data21		Data37	
Data6		Data22		Data38	
Data7		Data23		Data39	
Data8		Data24		Data40	
Data9		Data25		Data41	
Data10		Data26		Data42	
Data11		Data27		Data43	
Data12		Data28		Data44	
Data13		Data29		Data45	
Data14		Data30		Data46	
Data15		Data31		Data47	

Only bit6 and bit5 is used for data32 to data 47.

* bit is abreviated as b.

You only need to send the bitmap data that you want to display, other pixels will remain unchanged. However,
[Data0,Data1],[Data2,Data3], etc., must be sent in 2byte pairs. For example, [Data1,Data2] cannot be displayed.

MIDI Implementation Chart

YAMAHA [Tone Generator] Date:05-OCT-1993
Model TG300 MIDI Implementation Chart Version : 1.0

Function ...	Transmitted	Recognized	Remarks
Basic Default	x	1 - 16	memorized
Channel Changed	x	1 - 16	
Mode Default	x	3	
Messages	x	3,4(m = 1) *2	
altered	**********	x	
Note	x	0 - 127	
Number : True voice	**********	0 - 127	
Velocity Note ON	x	o 9nH,v=1-127	
Note OFF	x	x	
After Key's	x	o	*1
Touch Ch's	x	o	*1
Pitch Bender	x	o 0-24 semi	*1

	1,5,7,10-11	o	o	*1	
	71-74	o	o		Sound Controller
	91,93	o	o		Effect Depth
Control	0,32	x	o		Bank Select
	6,38	x	o		Data Entry
Change	64-67	x	o	*1	
	84	x	o		Portamento Cntrl
	90	x	o		
	98-99	x	o	*1	NRPN LSB,MSB
	100-101	x	o	*1	RPN LSB,MSB
	120	x	o		All Sound Off
	121	x	o		Reset All Cntrls
Prog Change	True #	x **********	o 0-127	*1	
System Exclusive		o *3	o	*3	
common	Song Pos.	x	x		
	Song Sel.	x	x		
	Tune	x	x		
System Real Time	Clock	x	x		
	Commands	x	x		
Aux Mes- sages	Local ON/OFF	x	x		
	All Notes OFF	x	o(123-127)		
	Active Sense	x	o		
	Reset	x	x		

Notes: *1 ; receive if switch is on.
*2 ; m is always treated as "1" regardless of its value
*3 ; transmit/receive if exclusive switch is on.

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

YAMAHA

YAMAHA CORPORATION

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