

YAMAHA

Music Sequencer

QY300

VOICE LISTS AND MIDI DATA

Voice List

Program #	Instrument Group	Name	LCD	Layer
1	Piano	Acoustic Grand Piano	GrandPno	1
2		Bright Acoustic Piano	BritePno	1
3		Electric Grand Piano	E.Grand	2
4		Honky-tonk Piano	HnkyTonk	2
5		Electric Piano 1	E.Piano1	2
6		Electric Piano 2	E.Piano2	2
7		Harpichord	Harpsi.	1
8		Clavi	Clavi.	1
9	Chromatic Percussion	Celesta	Celesta	1
10		Glockenspiel	Glocken	1
11		Music Box	MusicBox	2
12		Vibraphone	Vibes	1
13		Marimba	Marimba	1
14		Xylophone	Xylophon	1
15		Tubular Bells	TubulBel	1
16		Dulcimer	Dulcimer	2
17	Organ	Drawbar Organ	DrawOrgn	1
18		Percussive Organ	PercOrgn	1
19		Rock Organ	RockOrgn	1
20		Church Organ	ChrchOrg	2
21		Reed Organ	ReedOrgn	1
22		Accordion	Accordion	2
23		Hamonica	Harmnica	1
24	Tango Accordion	TangoAcid	2	
25	Guitar	Acoustic Guitar (nylon)	NylonGtr	1
26		Acoustic Guitar (steel)	SteelGtr	1
27		Electric Guitar (jazz)	Jazz Gtr	1
28		Electric Guitar (clean)	CleanGtr	2
29		Electric Guitar (muted)	Mute.Gtr	1
30		Overdriven Guitar	Ovrdrive	1
31		Distortion Guitar	Dist.Gtr	1
32		Guitar Harmonics	GtrHarmo	1
33	Bass	Acoustic Bass	Aco.Bass	1
34		Electric Bass (finger)	FngrBass	1
35		Electric Bass (pick)	PickBass	1
36		Fretless Bass	Fretless	1
37		Slap Bass 1	SlapBas1	1
38		Slap Bass 2	SlapBas2	1
39		Synth Bass 1	SynBass1	1
40	Synth Bass 2	SynBass2	1	
41	Strings	Violin	Violin	1
42		Viola	Viola	1
43		Cello	Cello	1
44		Contrabass	ContraBs	1
45		Tremolo Strings	Trem.Str	1
46		Pizzicato Strings	Pizz.Str	2
47		Orchestral Harp	Harp	1
48		Timpani	Timpani	1
49	Ensemble	String Ensemble 1	Strings1	1
50		String Ensemble 2	Strings2	1
51		Synth Strings 1	Syn.Str1	2
52		Synth Strings 2	Syn.Str2	2
53		Choir Aahs	ChoirAah	1
54		Voice Oohs	VoiceOoh	1
55		Synth Voice	SynVoice	1
56		Orchestra Hit	Orch.Hit	1
57	Brass	Trumpet	Trumpet	1
58		Trombone	Trombone	1
59		Tuba	Tuba	1
60		Muted Trumpet	Mute.Trp	1
61		French Horn	Fr.Horn	1
62		Brass Section	BrasSect	1
63		Synth Brass 1	SynBras1	2
64		Synth Brass 2	SynBras2	2

Program #	Instrument Group	Name	LCD	Layer	
65	Reed	Soprano Sax	SprnoSax	1	
66		Alto Sax	Alto Sax	1	
67		Tenor Sax	TenorSax	1	
68		Baritone Sax	Bari.Sax	1	
69		Oboe	Oboe	1	
70		English Horn	Eng.Horn	1	
71		Bassoon	Bassoon	1	
72		Clarinet	Clarinet	1	
73		Pipe	Piccolo	Piccolo	1
74			Flute	Flute	1
75	Recorder		Recorder	1	
76	Pan Flute		PanFlute	1	
77	Blown Bottle		Bottle	2	
78	Shakuhachi		Shakhchi	2	
79	Whistle		Whistle	1	
80	Ocarina		Ocarina	1	
81	Synth Lead		Lead 1 (square)	SquareLd	2
82			Lead 2 (sawtooth)	Saw.Lead	2
83		Lead 3 (calliope)	CaliopLd	2	
84		Lead 4 (chiff)	Chiff Ld	2	
85		Lead 5 (charang)	CharanLd	2	
86		Lead 6 (voice)	Voice Ld	2	
87		Lead 7 (fifths)	Fifth Ld	2	
88		Lead 8 (bass+lead)	Bass &Ld	2	
89	Synth Pad	Pad 1 (new age)	NewAgePd	2	
90		Pad 2 (warm)	Warm Pad	2	
91		Pad 3 (polysynth)	PolySyPd	2	
92		Pad 4 (choir)	ChoirPad	2	
93		Pad 5 (bowed)	BowedPad	2	
94		Pad 6 (metallic)	MetalPad	2	
95		Pad 7 (halo)	Halo Pad	2	
96		Pad 8 (sweep)	SweepPad	2	
97	Synth Effects	FX 1 (rain)	Rain	2	
98		FX 2 (soundtrack)	SoundTrk	2	
99		FX 3 (crystal)	Crystal	2	
100		FX 4 (atmosphere)	Atmosphr	2	
101		FX 5 (brightness)	Bright	2	
102		FX 6 (goblins)	Goblins	2	
103		FX 7 (echoes)	Echoes	2	
104		FX 8 (sci-fi)	SF	2	
105	Ethnic	Sitar	Sitar	1	
106		Banjo	Banjo	1	
107		Shamisen	Shamisen	1	
108		Koto	Koto	1	
109		Kalimba	Kalimba	1	
110		Bagpipe	Bagpipe	2	
111		Fiddle	Fiddle	1	
112		Shanai	Shanai	1	
113	Percussive	Tinkle Bell	TnklBell	2	
114		Agogo	Agogo	1	
115		Steel Drums	SteelDrm	2	
116		Woodblock	WoodBlok	1	
117		Taiko Drum	TaikoDrm	1	
118		Melodic Tom	MelodTom	1	
119		Synth Drum	Syn.Drum	1	
120		Reverse Cymbal	RevCymb1	1	
121	Sound Effects	Guitar Fret Noise	FretNoiz	1	
122		Breath Noise	BrthNoiz	1	
123		Seashore	Seashore	2	
124		Bird Tweet	Tweet	2	
125		Telephone Ring	Telephone	1	
126		Helicopter	Helicptr	2	
127		Applause	Applause	2	
128		Gunshot	Gunshot	1	

Drum List

	pgm#	Key Off	Alternate	1	9	17	25	26	33	41	49
Note#	Note			Standard Kit	Room Kit	Rock Kit	Electro Kit	Analog Kit	Jazz Kit	Brush Kit	Classic Kit
23	B			Click L							
24	C			Click H							
25	C#			Brush Tap							
26	D	O		Brush Swirl L							
27	D#			Brush Slap							
28	E	O		Brush Swirl H			Reverse Cymbal	Reverse Cymbal			
29	F	O		Snare Roll							
30	F#			Castanet			Hi Q	Hi Q			
31	G			Snare L		SD Power M	Snare M	SD Power H		Brush Slap L	
32	G#			Sticks							
33	A			Bass Drum L		Bass Drum M	Bass Drum H	Bass Drum M			
34	A#			Open Rim Shot							
35	B			Bass Drum M		Bass Drum H	BD Power	BD Analog L			
36	C	1		Bass Drum H		BD Power	BD Gate	BD Analog H			Gran Casa
37	C#	1		Side Stick				Analog Side Stick			
38	D	1		Snare M		SD Rock	SD Power L	Analog Snare L		Brush Slap	
39	D#	1		Hand Clap							
40	E	1		Snare H		SD Power Rim	SD Power H	Analog Snare H		Brush Tap	
41	F	1		Floor Tom L	Room Tom 1	Power Tom 1	E Tom 1	Analog Tom 1	Jazz Tom 1	Brush Tom 1	Jazz Tom 1
42	F#	1	1	Closed Hi Hat				Analog HH Closed 1			
43	G	1		Floor Tom H	Room Tom 2	Power Tom 2	E Tom 2	Analog Tom 2	Jazz Tom 2	Brush Tom 2	Jazz Tom 2
44	G#	1	1	Pedal Hi-Hat				Analog HH Closed 2			
45	A	1		Low Tom	Room Tom 3	Power Tom 3	E Tom 3	Analog Tom 3	Jazz Tom 3	Brush Tom 3	Jazz Tom 3
46	A#	1	1	Hi-Hat Open				Analog HH Open			
47	B	1		Mid Tom L	Room Tom 4	Power Tom 4	E Tom 4	Analog Tom 4	Jazz Tom 4	Brush Tom 4	Jazz Tom 4
48	C	2		Mid Tom H	Room Tom 5	Power Tom 5	E Tom 5	Analog Tom 5	Jazz Tom 5	Brush Tom 5	Jazz Tom 5
49	C#	2		Crash Cymbal 1							Hand Cym.Open L
50	D	2		High Tom	Room Tom 6	Power Tom 6	E Tom 6	Analog Tom 6	Jazz Tom 6	Brush Tom 6	Jazz Tom 6
51	D#	2		Ride Cymbal 1							Hand Cym.Closed L
52	E	2		Chinese Cymbal							
53	F	2		Ride Cymbal Cup							
54	F#	2		Tambourine							
55	G	2		Splash Cymbal							
56	G#	2		Cowbell							
57	A	2		Crash Cymbal 2							Hand Cym.Open H
58	A#	2		VibraSlap							
59	B	2		Ride Cymbal 2							Hand Cym.Closed H
60	C	3		Bongo H							
61	C#	3		Bongo L							
62	D	3		Conga H Mute				Analog Conga H			
63	D#	3		Conga H Open				Analog Conga M			
64	E	3		Conga L				Analog Conga L			
65	F	3		Timbale H							
66	F#	3		Timbale L							
67	G	3		High Agogo							
68	G#	3		Low Agogo							
69	A	3		Cabassa							
70	A#	3		Maracas							
71	B	3	O	Samba Whistle H							
72	C	4	O	Samba Whistle L							
73	C#	4		Guiro Short							
74	D	4	O	Guiro Long							
75	D#	4		Claves							
76	E	4		Wood Block H							
77	F	4		Wood Block L							
78	F#	4		Cuica Mute			Scratch Push	Scratch Push			
79	G	4		Cuica Open			Scratch Pull	Scratch Pull			
80	G#	4	2	Triangle Mute							
81	A	4	2	Triangle Open							
82	A#	4		Shaker							
83	B	4		Jingle Bell							
84	C	5		Bell Tree							
85	C#	5		Hi Q							

: Same as Standard Kit

Phrase List

Instrument Category	Beat	Type	Num.	Sum of each category
Drums (DR)	8 beat	Main	83	865
		Fill Loop	87	
		Fill Cross	89	
		Intro	42	
		Ending	43	
		Specific	20	
		General	86	
		16 beat	Main	
	Fill Loop		50	
	Fill Cross		49	
	Intro		23	
	Ending		25	
	Specific		83	
	General		35	
	3/4 beat		Main	
		Fill Loop	22	
		Fill Cross	23	
		Intro	12	
		Ending	12	
		Specific	-	
		General	7	
Percussion (PC)		8 beat	Main	19
	Fill Loop		21	
	Fill Cross		22	
	Intro		8	
	Ending		12	
	Specific		7	
	General		17	
	16 beat		Main	29
		Fill Loop	33	
		Fill Cross	29	
		Intro	13	
		Ending	18	
		Specific	42	
		General	12	
		3/4 beat	Main	4
	Fill Loop		2	
	Fill Cross		1	
	Intro		1	
	Ending		-	
	Specific		-	
	General		-	
Bass (BA)	8 beat		Main	65
		Fill Loop	67	
		Fill Cross	75	
		Intro	26	
		Ending	36	
		Specific	3	
		General	8	
		16 beat	Main	45
	Fill Loop		40	
	Fill Cross		45	
	Intro		19	
	Ending		27	
	Specific		47	
	General		2	
	3/4 beat		Main	19
		Fill Loop	19	
		Fill Cross	16	
		Intro	11	
		Ending	12	
		Specific	-	
		General	-	
Guitar chord (GC)		8 beat	Main	62
	Fill Loop		54	
	Fill Cross		61	
	Intro		22	
	Ending		36	
	Specific		5	
	General		7	
	16 beat		Main	30
		Fill Loop	30	
		Fill Cross	29	
			Intro	10

Instrument Category	Beat	Type	Num.	Sum of each category
Guitar chord (GC)		Ending	19	412
		Specific	15	
		General	-	
	3/4 beat	Main	11	
		Fill Loop	7	
		Fill Cross	7	
		Intro	3	
		Ending	4	
		Specific	-	
		General	-	
Guitar riff (GR)	8 beat	Main	21	117
		Fill Loop	14	
		Fill Cross	16	
		Intro	6	
		Ending	10	
		Specific	11	
		General	-	
		16 beat	Main	
	Fill Loop		6	
	Fill Cross		4	
	Intro		2	
	Ending		2	
	Specific		14	
	General		-	
	3/4 beat		Main	
		Fill Loop	-	
		Fill Cross	-	
		Intro	1	
		Ending	-	
		Specific	-	
		General	-	
Kbd chord (KC)		8 beat	Main	82
	Fill Loop		75	
	Fill Cross		76	
	Intro		22	
	Ending		39	
	Specific		5	
	General		68	
	16 beat		Main	49
		Fill Loop	47	
		Fill Cross	35	
		Intro	11	
		Ending	26	
		Specific	25	
		General	-	
		3/4 beat	Main	28
	Fill Loop		21	
	Fill Cross		22	
	Intro		10	
	Ending		14	
	Specific		-	
	General		-	
Kbd Riff (KR)	8 beat		Main	12
		Fill Loop	12	
		Fill Cross	16	
		Intro	2	
		Ending	9	
		Specific	6	
		General	-	
		16 beat	Main	19
	Fill Loop		17	
	Fill Cross		18	
	Intro		5	
	Ending		7	
	Specific		31	
	General		-	
	3/4 beat		Main	3
		Fill Loop	3	
		Fill Cross	5	
		Intro	4	
		Ending	3	
		Specific	-	
		General	-	
			Total Phrase	

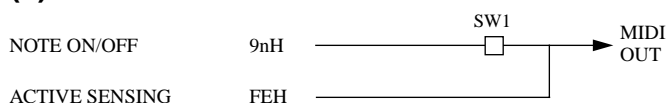
ABC Fingering Chart

Chord Type	3-note Chord	4-note Chord	5-note Chord	Comments (for C chords)
7(#5)	3+♯5+♭7			
		1+3+♯5+♭7		
7(♭5)		1+3+♭5+♭7		
7(#9)	3+♭7+♯9			
		1+3+♭7+♯9		
		3+5+♭7+♯9		
			1+3+5+♭7+♯9	
7(♭9)		1+3+♭7+♭9		
			1+3+5+♭7+♭9	
7(♭13)		3+5+♭7+♭13		
			1+3+5+♭7+♭13	
			1+3+♭7+♭9+♭13	
			1+3+♭7+9+♭13	
			1+3+♭7+♯9+♭13	
7(13)		1+3+♭7+13		
		3+5+♭7+13		
		3+♭7+9+13		
			1+3+5+♭7+13	
			1+3+♭7+♭9+13	
			1+3+♭7+9+13	
7sus4	1+4+♭7			Fsus4 when lowest note is not C.
		1+4+5+♭7		Gm7(11) when G or B♭ is the lowest note.
sus4	1+4+5			G7sus4 when G is the lowest note.
m7(11)		1+♭3+♭7+11		F7sus4 when F or B♭ is the lowest note.
			1+♭3+5+♭7+11	
7(#11)		1+3+♭7+♯11		F♯7(#11) when F♯ or E is the lowest note.
			1+3+5+♭7+♯11	
add9		1+3+5+9		
M	1+3+5			
M7(9)			1+3+5+7+9	
M7	1+3+7			Amadd9 when E is the lowest note.
	1+5+7			
		1+3+5+7		
6(9)			1+3+5+6+9	
6	3+5+6			
		1+3+5+6		Am7 when lowest note is not C.
	3+5+9			Em7 when E is the lowest note.
7(9)			1+3+5+♭7+9	
7	1+3+♭7			
		1+3+5+♭7		
madd9		1+♭3+5+9		
	♭3+5+9			E♭Maj7 when E♭ or D is the lowest note.
m	1+♭3+5			
m7(9)			1+♭3+5+♭7+9	
m7	1+♭3+♭7			A♭add9 when E♭ or B♭ is the lowest note.
		1+♭3+5+♭7		E♭6 when E♭ is the lowest note.
mM7	1+♭3+7			
		1+♭3+5+7		
m6		1+♭3+5+6		F9 when E♭ is the lowest note, Am7(♭5) when G or A is the lowest note.
	1+♭3+6			
dim		1+♭3+♭5+6		Only C (root) accepted as lowest note.
m7(♭5)		1+♭3+♭5+♭7		E♭m6 when E♭ is the lowest note. A♭9 when B♭ is the lowest note.
---				through
aug	1+3+♯5			Only C (root) accepted as lowest note.

For example: 1: root of the chord
3: 3rd note above the root
5: 5th note above the root

Tone Generator

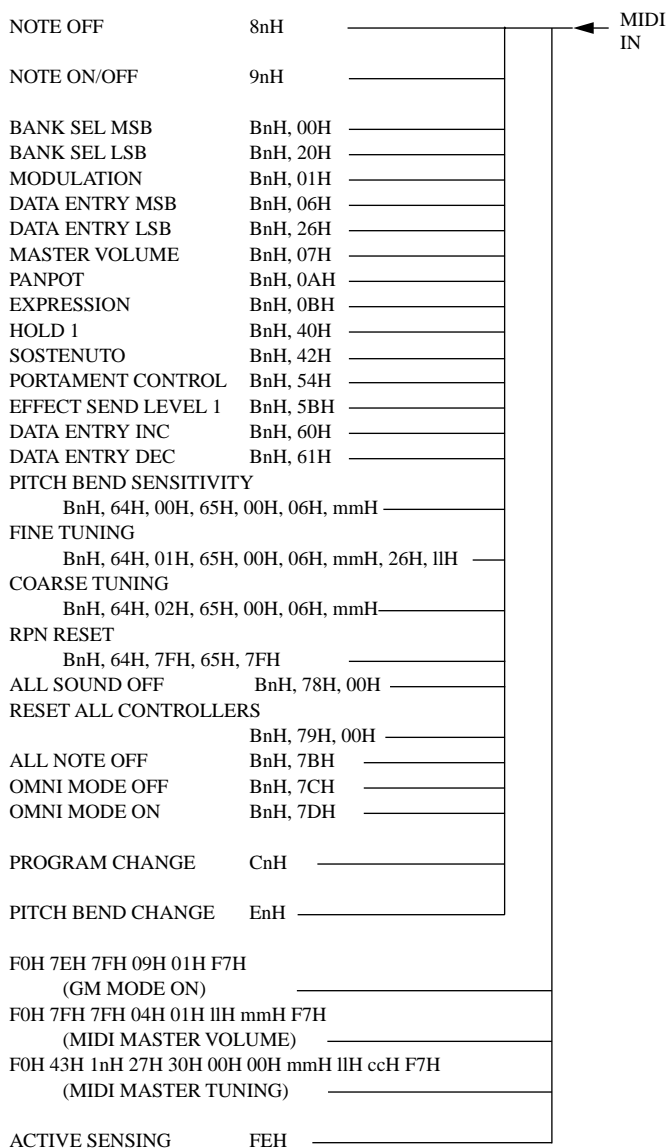
(1) TRANSMIT FLOW



SW1 MIDI Transmit Channel

Output MIDI CH selects the MIDI Transmit Channel.

(2) RECEIVE FLOW



(3) TRANSMIT/RECEIVE DATA

(3-1) CHANNEL VOICE MESSAGES

(3-1-1) NOTE OFF

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

Receive-only

(3-1-2) NOTE 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
 00000000 (v=0) NOTE OFF

(3-1-3) CONTROL CHANGE

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

* CONTROL NUMBER's are not transmitted.

* Received CONTROL NUMBER's are as follows.

- c = 0 BANK SEL MSB: v = 0:GM select, 127:RHYTHM select *2
- c = 32 BANK SEL LSB: Always ignored
- c = 1 MODULATION: v = 0 - 127 *2
- c = 6 DATA ENTRY MSB: v = 0 - 127 *1
- c = 38 DATA ENTRY LSB: v = 0 - 127 *1
- c = 7 MASTER VOLUME: v = 0 - 127
- c = 10 PANPOT: v = 0 - 127
- c = 11 EXPRESSION: v = 0 - 127
- c = 64 SUSTAIN SWITCH: v = 0 ~ 63 : OFF, 64 ~ 127 : ON *2
- c = 66 SOSTENUTO: v = 0 ~ 63 : OFF, 64 ~ 127 : ON *2
- c = 84 PORTAMENT CONTROL: v = 0 - 127 *2
- c = 91 EFFECT SEND LEVEL 1: v = 0 - 127
- c = 96 DATA ENTRY INC: v = 127 *1
- c = 97 DATA ENTRY DEC: v = 127 *1

*1 Used only when setting parameter designated by RPN.

*2 Not effective for rhythm voice.

MODULATION controls vibrato depth.

For both melody and rhythm voices, PANPOT change is relative to the voice's pre-set value.

PORTAMENT CONTROL portamento time is fixed at 0.

BANK SELECT MSB v=0 selects GM melody voice, v=127 selects GM rhythm voice. All other bank selections set the voice OFF.

BANK SELECT LSB is always ignored.

Channel 10 is fixed for rhythm voice; bank select is ineffective.

EFFECT SEND LEVEL 1 controls reverb depth.

(3-1-4) PROGRAM CHANGE

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

(Receive)

If receive channel is other than 10, and BANK SELECT MSB = 00, then GM melody voice is selected.

If receive channel is channel 10 and BANK SELECT MSB = 127, then GM rhythm voice is selected.

- Dr1 (Standard Kit): p = 0
- Dr2 (Room Kit): p = 8
- Dr3 (Rock Kit): p = 16
- Dr4 (Electronic Kit): p = 24
- Dr5 (analog Kit): p = 25
- Dr6 (Jazz Kit): p = 32
- Dr7 (Brush Kit): p = 40
- Dr8 (Classic Kit): p = 48

Values other than those listed above are ignored.

(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

Resolution: 14 bits

MIDI Data Format

MSB	
0000000B (00H)	Minimum value
0100000B (40H)	Middle value
0111111B (7FH)	Maximum value

(3-2) CHANNEL MODE MESSAGES

(3-2-1) ALL SOUND OFF

STATUS 1011nnnn (BnH)n = 0 ~ 15 VOICE CHANNEL NUMBER
 CONTROL NUMBER 01111000
 CONTROL VALUE 00000000

Immediately shuts off the sound coming in over the designated channel, and deletes any channel-message conditions (NOTE ON, HOLD ON, etc.).

(3-2-2) RESET ALL CONTROLLERS

STATUS 1011nnnn (BnH)n = 0 ~ 15 VOICE CHANNEL NUMBER
 CONTROL NUMBER 01111001
 CONTROL VALUE 00000000

Resets controller values as follows.

PITCH BEND CHANGE 0 (center)
 MODULATION 0 (off)
 EXPRESSION 127 (Max)
 SUSTAIN SWITCH 0 (off)
 SOSTENUTO SWITCH 0 (off)
 RPN Unset condition: internal data does not change
 PORTAMENT CONTROL Reset

The following data do not change.

PROGRAM CHANGE, BANK SELECT MSA/LSB, VOLUME,
 PAN, EFFECT SEND LEVEL 1, PITCH BEND SENSITIVITY, FINE TUNING,
 COARSE TUNING

(3-2-3) ALL NOTE OFF

All ON notes on the relevant channel go OFF. But if HOLD 1 or Sustain is ON, sound continues until the HOLD 1 or Sustain switches OFF.

(3-2-4) OMNI MODE OFF

Same processing as for ALL NOTES OFF.

(3-2-5) OMNI MODE ON

Same processing as for ALL NOTES OFF. Note that OMNI does not go ON.

(3-3) REGISTERED PARAMETER NUMBER

(3-3-1) PITCH BEND SENSITIVITY

RPN MSB 00H
 RPN LSB 00H
 DATA ENTRY MSB mmH mmH = 00H - 18H (0 - 24 semitone)
 DATA ENTRY LSB --- don't care

* Initial value is 2 semitones.

(3-3-2) MASTER FINE TUNE

RPN MSB 00H
 RPN LSB 01H
 DATA ENTRY MSB mmH
 DATA ENTRY LSB llH

(mmH, llH) = (00H, 00H) - (40H, 00H) - (7FH, 7FH)
 (-8192*100/8192) - 0 - (+8192*100/8192)

(3-3-3) MASTER COARSE TUNE

RPN MSB 00H
 RPN LSB 02H
 DATA ENTRY MS mmH
 DATA ENTRY LSB --- don't care

mmH = 28H - 40H - 58H (-24 - 0 - +24 semitone)

(3-3-4) RPN RESET

RPN MSB 7FH
 RPN LSB 7FH
 DATA ENTRY MSB --- don't care
 DATA ENTRY LSB --- don't care

RPN number becomes "unset".
 Internal setting does not change.

(3-4) SYSTEM REALTIME MESSAGES

(3-4-1) ACTIVE SENSING

STATUS 11111110 (FEH)

Transmitted approximately once every 180ms.
 Not transmitted while disk read or disk write is in progress.

Receipt of this code causes the system to begin sensing. If status or data fail to arrive within about 500msec, the system clears the MIDI Receive buffer, forces off the current sound and the sustain switch, and resets control values.

(3-5) SYSTEM EXCLUSIVE MESSAGE

(3-5-1) GENERAL MIDI MODE ON

F0H 7EH 7FH 09H 01H F7H

The controller settings are reset to the following values:

VOLUME 100
 PAN Center
 PROGRAM CHANGE 1 (Grandpno)
 BANK SELECT MSB 0
 REVERB DEPTH 4
 PITCH BEND CHANGE 0 (center)
 MODULATION 0 (off)
 EXPRESSION 127 (Max)
 SUSTAIN SWITCH 0 (off)
 SOSTENUTO SWITCH 0 (off)
 RPN Unset condition: internal data does not change
 PORTAMENT CONTROL Reset
 MIDI MASTER VOLUME 127 (Max)
 PITCH BEND SENSITIVITY 02 (2 semitones)
 FINE TUNING 0
 COARSE TUNING 0

(3-5-2) MIDI MASTER VOLUME

F0H 7FH 7FH 04H 01H llH mmH F7H

Changes the MASTER VOLUME value to "mm". (The "ll" value is ignored.)

(3-5-3) MIDI MASTER TUNING

F0H 43H 1nH 27H 30H 00H 00H mmH llH ccH F7H

Changes the MASTER TUNE value in accordance with "mm" and "ll". ("n" and "cc" values are ignored.)

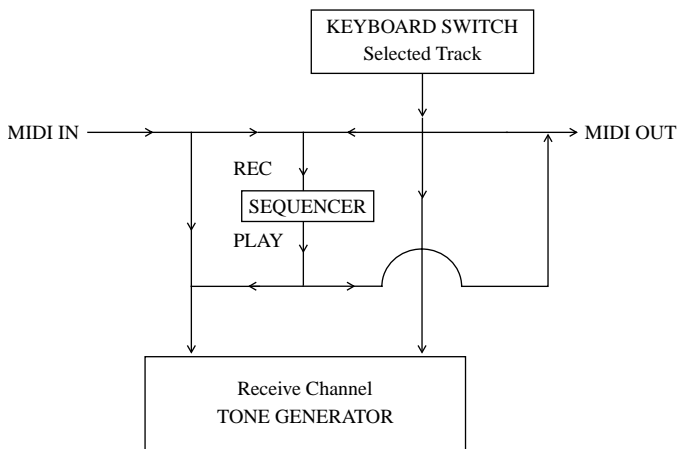
T = M*200/256-100

where

T: Actual tuning value (-99 - +99)

M: Single byte value, formed by "mm" bits 0 -3 followed by "ll" bits 0 -3.

(4) Interrelation of Keyboard Switch, Sequencer, and Tone Generator



The system distinguishes between note data received via MIDI and that generated by the internal sequencer (which includes data from the local keyboard). Hold 1, Sustainuto, and other controllers do not make this distinction, however, and affect all notes from both sources.

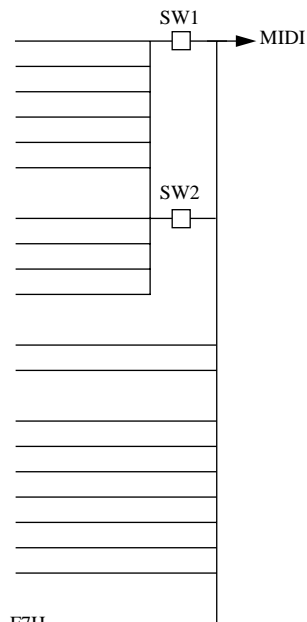
ALL SOUND OFF makes no distinction between MIDI and local data; it terminates all sound over the relevant channel, regardless of source.

An ALL NOTES OFF message received via MIDI terminates only the MIDI-driven notes on the relevant channel. The sequencer does not record the message.

Sequencer

(1) TRANSMIT FLOW

NOTE ON/OFF	9nH
POLYPHONIC KEY PRESSURE	AnH
CONTROL CHANGE	BnH
PROGRAM CHANGE	CnH
CHANNEL PRESSURE	DnH
PITCH BEND CHANGE	EnH
TIMING CLOCK	F8H
START	FAH
CONTINUE	FBH
STOP	FCH
SONG POSITION POINTER	F2H
SONG SELECT	F3H
ALL SOUND OFF	BnH 78H
RESET ALL CONTROLLERS	BnH 79H
LOCAL CONTROL	BnH 7AH
OMNI MODE OFF	BnH 7CH
OMNI MODE ON	BnH 7DH
MONO MODE ON	BnH 7EH
POLY MODE ON	BnH 7FH



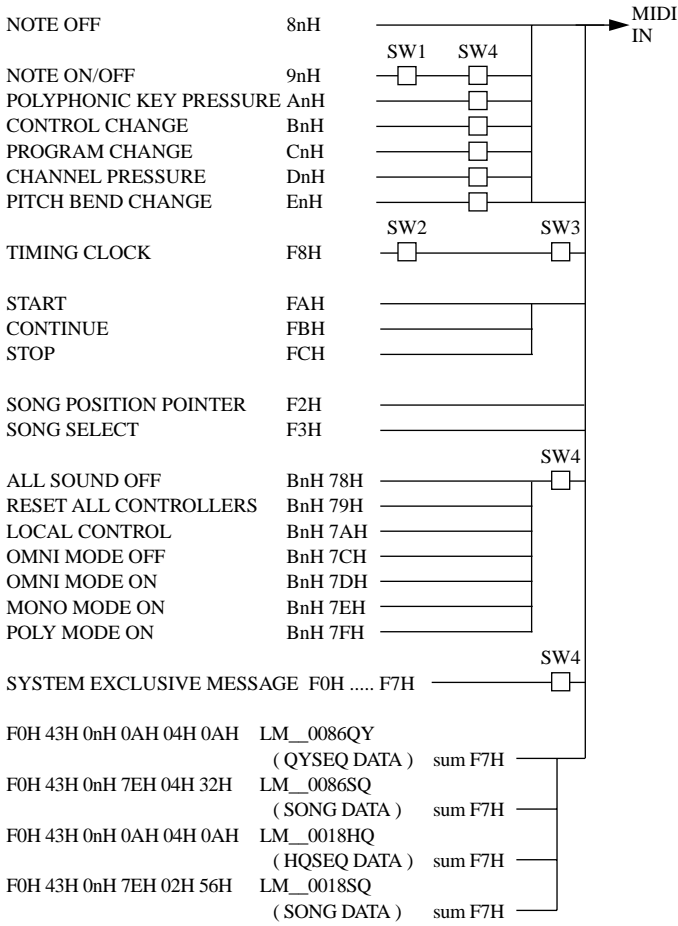
SYSTEM EXCLUSIVE MESSAGE F0H F7H

SW 1 MIDI Transmit Channel
 Transmit channel settings and transmit ON/OFF can be set for each track of the channel.

SW 2 MIDI Control
 Transmission can be set ON or OFF.

MIDI Data Format

(2) RECEIVE FLOW



- SW 1 Velocity Filter
Sets velocity step recording and edit input ON/OFF.
- SW 2 Clock Condition Select
Determines whether the system uses the internal clock or the clock received over MIDI IN.
- SW 3 MIDI Control
Sets reception ON or OFF.
- SW 4 INPUT FILTER
INPUT FILTER settings determine whether reception is enabled or disabled.

(3) TRANSMIT/RECEIVE DATA

(3-1) CHANNEL VOICE MESSAGE

Transmission occurs only during recording or playback. Transmit channel and transmit ON/OFF can be set for each track.

Reception occurs only during recording. The system always receives over all channels.
For multitrack recording, tracks 0 -15 respectively record MIDI CH 0 -15 data.

* During RECORD MODE, recording is normally set to "omni on."
During multitrack recording, however, "omni" is set "off" and data is divided according to MIDI channel (CH 0 -15).

(3-1-1) NOTE OFF

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

Recording only.
During playback, converted to 9nH kkH 00H.

(3-1-2) NOTE ON/OFF

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

During recording, can set velocity step recording and edit input ON/OFF.

(3-1-3) POLYPHONIC KEY PRESSURE

STATUS	1010nnnn	(AnH)	n = 0~15 TRACK CHANNEL NUMBER
NOTE NUMBER	0kkkkkkk		k = 0 (C-2) ~ 127 (G8)
VALUE	0vvvvvvv		v = 0 ~ 127

(3-1-4) CONTROL CHANGE

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

All control-change data can be recorded and replayed.

Bank Select MSB and LSB are recorded in combination with received Program Change data; you cannot record Bank Select data independently. During playback, the system transmits Bank Select data followed by the corresponding Program Change data; it is not possible to transmit unaccompanied Bank Select data.

(3-1-5) PROGRAM CHANGE

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

When the system receives Program Change data, it records it in combination with the most recently received Bank Select data. If the system has not received any Bank Select data, it records the Bank Select value as 0 (MSB=0, LSB=0).
During transmission, the system always includes Bank Select data together with Program Change data.
It is not possible to transmit unaccompanied Program Change data.

(3-1-6) CHANNEL PRESSURE

STATUS	1101nnnn	(DnH)	n = 0~15 TRACK CHANNEL NUMBER
VALUE	0vvvvvvv		v = 0 ~ 127

(3-1-7) PITCH BEND CHANGE

STATUS	1110nnnn	(EnH)	n = 0~15 TRACK CHANNEL NUMBER
LSB	0vvvvvvv		PITCH BEND LSB 0 ~ 127
MSB	0vvvvvvv		PITCH BEND MSB 0 ~ 127

(3-2) CHANNEL MODE MESSAGE

The system can record and replay the following messages.

RESET ALL CONTROLLERS	BnH 78H
LOCAL CONTROL	BnH 7AH
OMNI MODE OFF	BnH 7CH
OMNI MODE ON	BnH 7DH
MONO MODE ON	BnH 7EH
POLY MODE ON	BnH 7FH

(3-3) SYSTEM COMMON MESSAGE

The system supports both transmission and reception of these messages. These messages provide function control data.
They cannot be recorded as sequencer data.

(3-3-1) SONG POSITION POINTER

STATUS	11110010	(F2H)
LSB	0vvvvvvv	SONG POSITION LSB
MSB	0vvvvvvv	SONG POSITION MSB

Transmitted when song position is changed during SONG PLAY MODE.
Received in SONG PLAY MODE during standby.

(3-3-2) SONG SELECT

STATUS	11110011	(F3H)
SONG NO	0vvvvvvv	v = 0 - 9

Transmitted when a song is selected during SONG PLAY MODE.
Received in SONG PLAY MODE during standby.

(3-4) SYSTEM REAL TIME MESSAGE

Cannot be recorded as sequencer data.

(3-4-1) TIMING CLOCK

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

Determines whether the system uses the internal clock or the clock received over MIDI IN.

Transmit and Receive can be independently enabled or disabled.

(3-4-2) START

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

Transmission and reception can be enabled or disabled.

(3-4-3) CONTINUE

STATUS	11111011	(FBH)
--------	----------	-------

Transmission and reception can be enabled or disabled.

(3-4-4) STOP

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

Transmission and reception can be enabled or disabled.

(3-5) SYSTEM EXCLUSIVE MESSAGE

The system records and replay all system-exclusive messages.

F0 to F7 are recorded using the same timing, regardless of time disparities in data reception. For replay, interval time is set every 1K bytes.

However, when the initial SONG MODE screen is displayed for the bulk data for 1-song in the QY20 or QY10, the sequence data is handled locally as bulk data for the QY300, when in RECORD MODE, it is recorded as data. While replaying, the sequence data is transmitted via MIDI, but is not handled locally as bulk data for the QY300.

QY300 receives Tracks 1 to 4 of SEQ data and Chord Tr data from within QY10, 20 1-song bulk data.

If QY300 includes QY10 code track code data, the data are quantized into quarter-note units for reception.

QY10 11th code is received as 7th.Sus4 code.

For information about QY20 and QY10 bulk data. refer to the relevant model's specifications.

Function ...	Transmitted	Recognized	Remarks
:Basic Default	: 1 - 16	: 1 - 16	*1 : memorized
:Channel Changed	: 1 - 16	*2 : x	:
:Mode Default	: 3	: 3	:
:Messages	: x	: x	:
:Altered	: *****	: x	:
:Note Number : True voice	: 0 - 127 *****	: 0 - 127	*3 :
:Velocity Note ON	: o 9nH,v=1-127	: o v=1-127	:
:Note OFF	: x 9nH,v=0	: x	:
:After Key's	: x	: x	:
:Touch Ch's	: x	: x	:
:Pitch Bender	: x	: o 0-24 semi	*3 :12bit resolution:
:Control	0,32 : x	: o MSB only	*3 :Bank Select
:Change	1 : x	: o	*3 :Modulation Wheel:
	6,38 : x	: o	*3 :Data Entry
	7 : x	: o	*3 :Volume
	10 : x	: o	*3 :Panpot
	11 : x	: o	*3 :Expression
	64 : x	: o	*3 :Hold 1
	66 : x	: o	*3 :Sostenuto
	84 : x	: o	*3 :Portamento Cont.:
	91 : x	: o	*3 :Effect Depth
	96,97 : x	: o	*3 :Data INC,DEC
	100,101 : x	: o	*3 :RPN LSB,MSB
	120 : x	: o	*3 :All Sound Off
	121 : x	: o	*3 :Reset All Cont.:
:Prog Change : True #	: x *****	: o 0 - 127	*3 :
:System Exclusive	: x	: o	*3 :
:System : Song Pos	: x	: x	:
: : Song Sel	: x	: x	:
:Common : Tune	: x	: x	:
:System :Clock	: x	: x	:
:Real Time :Commands	: x	: x	:
:Aux :Local ON/OFF	: x	: x	:
: :All Notes OFF	: x	: o	:
:Mes- :Active Sense	: o	: o	:
:sages:Reset	: x	: x	:
:Notes: *1 = if REC mode, receive all channels.			
: *2 = selected by current track.			
: *3 = receive if input filter switch is off.			
:			
Mode 1 : OMNI ON, POLY	Mode 2 : OMNI ON, MONO	o : Yes	
Mode 3 : OMNI OFF, POLY	Mode 4 : OMNI OFF, MONO	x : No	

Function ...	Transmitted	Recognized	Remarks
Basic Default	: 1 - 16	: 1 - 16	: memorized
Channel Changed	: x	: x	:
Mode Default	: x	: x	:
Mode Messages	: x	: x	:
Mode Altered	: *****	: x	:
Note Number : True voice	: 0 - 127 : *****	: 0 - 127 : 0 - 127	: *2
Velocity Note ON	: o 9nH,v=1-127	: o v=1-127	:
Velocity Note OFF	: x 9nH,v=0	: x	:
After Touch Key's	: o	: o	: *2
After Touch Ch's	: o	: o	: *2
Pitch Bender	: o	: o	: *2
Control Change	: o 0-121	: o	: *2
Prog Change : True #	: o 0 - 127 : *****	: o 0 - 127	: *2
System Exclusive	: o	: o	: *2 *5
System : Song Pos	: o *3	: o	: *3
System : Song Sel	: o *3	: o	: *3
Common : Tune	: x	: x	:
System :Clock	: o *3	: o	: *4
Real Time :Commands	: o *3	: o	: *3
Aux :Local ON/OFF	: o	: o	: *2
Aux :All Notes OFF	: x	: x	:
Mes- :Active Sense	: o	: x	:
sages:Reset	: x	: x	:
Notes: *1 = receive if velocity parameter is 'ext' in step REC mode. if parameter is not 'ext',velocity is fixed to 1 - 127. *2 = receive if input filter switch is off. *3 = if MIDI control switch is on. *4 = receive clock at MIDI sync mode. *5 = Record Data in Rec, Receive QY10,20 SONG data in Song Top			
Mode 1	: OMNI ON, POLY	Mode 2	: OMNI ON, MONO
Mode 3	: OMNI OFF, POLY	Mode 4	: OMNI OFF, MONO
			o : Yes
			x : No

YAMAHA