

# **YAMAHA**

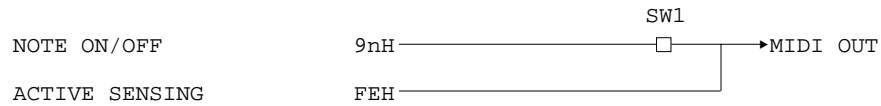
**MUSIC SEQUENCER**

**QY20**

**MIDI DATA FORMAT**

# Tone Generator Section

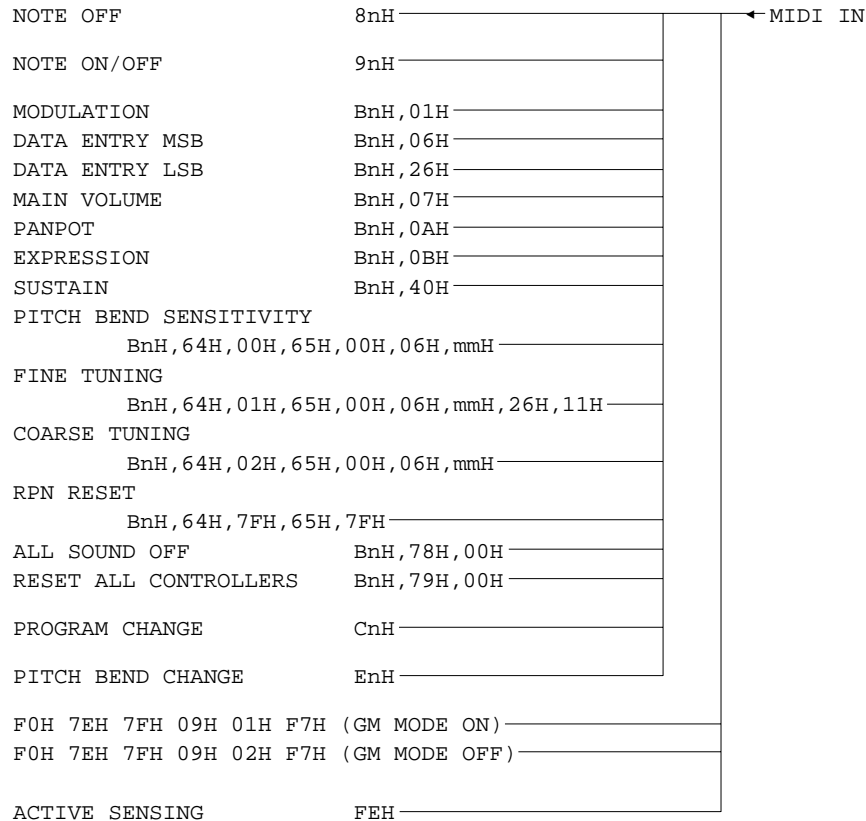
## (1) TRANSMIT FLOW



SW1  MIDI Transmit Channel

The MIDI transmit channels are fixed for each track: tracks 1 ... 4, C1, C2, and Bass transmit on MIDI channels 1 through 7, respectively, while the Drum track transmits on channel 10.

## (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 is ignored	

Receive only.

\* Reception is always "omni on" in the record mode.

#### (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	
	0000000	(v=0) NOTE OFF	

\* Reception is always "omni on" in the record mode.

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

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

\* Reception is always "omni on" in the record mode.

\* Transmitted control numbers are ignored.

\* Only n = 0 ... 6 and 9 are shown on the display.

\* Receive Control Numbers

c=1	MODULATION	; v=0-127	
c=6	DATA ENTRY MSB	; v=0-127	*1
c=38	DATA ENTRY LSB	; v=0-127	*1
c=7	MAIN VOLUME	; v=0-127	
c=10	PANPOT	; v=0-127	
c=11	EXPRESSION	; v=0-127	
c=64	SUSTAIN SWITCH	; v=0~63:OFF, 64~127:ON	

\*1 Only used when setting the specified RPN parameter.

### (3-1-4) PROGRAM CHANGE

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

Only data relating to voice changes is received.

- \* Only n = 0 ... 6 and 9 are shown on the display.
- \* Reception is always "omni on" in the record mode.

#### (Reception)

\* When the Utility mode PGC MODE parameter is set to NORMAL.

When n ≠ 9 in the play mode or when the record track is not set to Dr in the record mode.

The voice is changed when p = 0 ... 107.  
 The voice is turned off when p = 108 ... 127.

When n = 9 in the play mode or when the record track is set to Dr in the record mode.

p = 0 ... 99 ignored.  
 The voice is changed when p = 100 ... 107.  
 The voice is turned off when p = 108 ... 127.

\* When the Utility mode PGC MODE parameter is set to GM.

When n ≠ 9 in the play mode or when the record track is not set to Dr in the record mode.

The voice is changed when p = 0 ... 127.

The received data is assumed to be GM-format data, and appropriate voices are selected.  
 If no appropriate voice is available, the voice is turned off.

QY20 VOICE No.	receive PC No.
1, 2, 3, 4, 6, 8, 22, 9	; p = 0 - 7
12, 10, 11, 12, 13, 13, 98, 22	; p = 8 - 15
15, 16, 17, 14, 18, 18, 19, 18	; p = 16 - 23
20, 21, 23, 24, 28, 30, 31, 34	; p = 24 - 31
35, 36, 38, 39, 40, 40, 44, 42	; p = 32 - 39
46, 46, 46, 46, 47, 48, 91, OFF	; p = 40 - 47
50, 51, 52, 52, 53, 54, 55, 56	; p = 48 - 55
57, 58, 58, 59, 58, 60, 63, 64	; p = 56 - 63
65, 65, 66, 67, 68, 68, 68, 68	; p = 64 - 71
69, 69, 71, 70, 70, 70, 71, 71	; p = 72 - 79
72, 73, 74, 72, 75, 76, 77, 78	; p = 80 - 87
82, 83, 84, 85, 86, 87, 87, 88	; p = 88 - 95
64, 89, 90, 91, 92, 52, 93, 94	; p = 96 - 103
22, 95, 28, 20, 96, 32, 97, 65	; p = 104 - 111
98, OFF, 99, OFF, OFF, OFF, OFF, 100	; p = 112 - 119
OFF, OFF, OFF, OFF, OFF, OFF, OFF, OFF	; p = 120 - 127

When n = 9 in the play mode or when the record track is set to Dr in the record mode.

Dr1 ; p = 0 - 15  
 Dr4 ; p = 16 - 23  
 Dr6 ; p = 24  
 Dr5 ; p = 25  
 Dr6 ; p = 26 - 31  
 Dr7 ; p = 32 - 39  
 Dr8 ; p = 40 - 47  
 Dr1 ; p = 48 - 127

### (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 is 14 bits.

\* Reception is always "omni on" in the record mode.

MSB	
00000000B (00H)	Minimum
01000000B (40H)	Center
01111111B (7FH)	Maximum

### (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

All notes playing on the specified channel are turned off. However, note on, hold on, and other channel messages maintain their current status.

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

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

The following controllers are reset to the values shown.

PITCH BEND CHANGE 0 (Center)  
 MODULATION 0 (Off)  
 EXPRESSION 127 (Maximum)  
 SUSTAIN SWITCH 0 (Off)  
 RPN Unspecified status - internal data not affected.

### (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 semitones)  
 DATA ENTRY LSB --- don't care

\* Set to 2 semitones at power-on.

#### (3-3-2) MASTER FINE TUNE

RPN MSB           00H  
 RPN LSB           01H  
 DATA ENTRY MSB mmH  
 DATA ENTRY LSB 11H

(mmH, 11H) = (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 MSB mmH  
 DATA ENTRY LSB --- don't care

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

#### (3-3-4) RPN RESET

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

The RPN number is set to unspecified status. The internal data is not affected.

### (3-4) SYSTEM REAL TIME MESSAGES

#### (3-2-1) ACTIVE SENSING

STATUS           11111110 (FEH)

Transmitted once approximately every 175 milliseconds.

Sensing is initiated the first time this code is received. If no status or data code is received for more than about 350 milliseconds, the MIDI receive buffer is cleared and all current notes and the sustain switch are forced off. Also, all control values are reset.

### (3-5) SYSTEM EXCLUSIVE MESSAGE

#### (3-5-1) GENERAL MIDI MODE ON

Sets the Utility mode PGC MODE parameter to GM.

The following controllers are reset to the values shown.

PITCH BEND CHANGE   0 (Center)  
 MODULATION           0 (Off)  
 EXPRESSION           127 (Maximum)  
 SUSTAIN SWITCH       0 (Off)  
 RPN                   Unspecified status - internal data not affected.  
 VOLUME               100

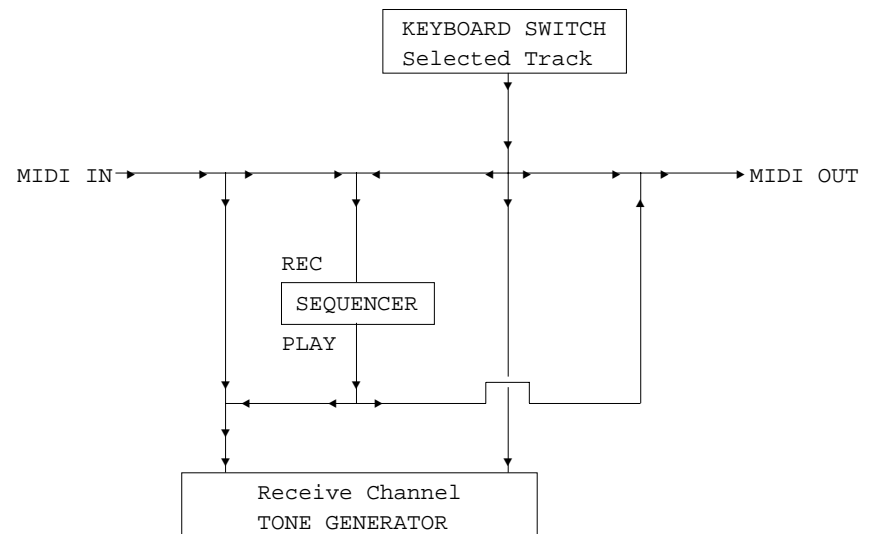
#### (3-5-2) GENERAL MIDI MODE OFF

Sets the Utility mode PGC MODE parameter to NORMAL.

The following controllers are reset to the values shown.

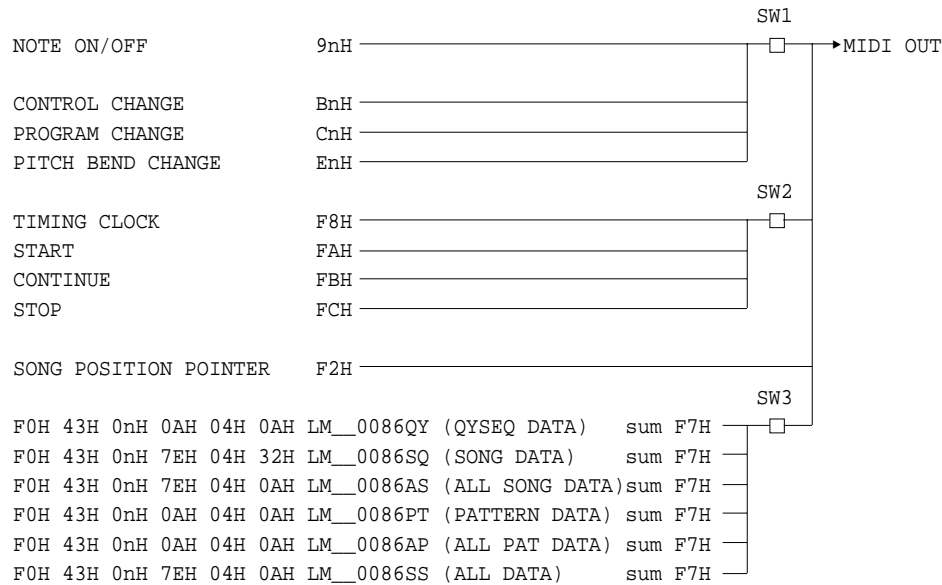
PITCH BEND CHANGE   0 (Center)  
 MODULATION           0 (Off)  
 EXPRESSION           127 (Maximum)  
 SUSTAIN SWITCH       0 (Off)  
 RPN                   Unspecified status - internal data not affected.  
 VOLUME               100

### (4) KEYBOARD SWITCH, SEQUENCER, AND TONE GENERATOR CONFIGURATION.



# Sequencer Section

## (1) TRANSMIT FLOW



SW1  MIDI Transmit Channel

The MIDI transmit channel is fixed for each track (1 ... 7, 10)

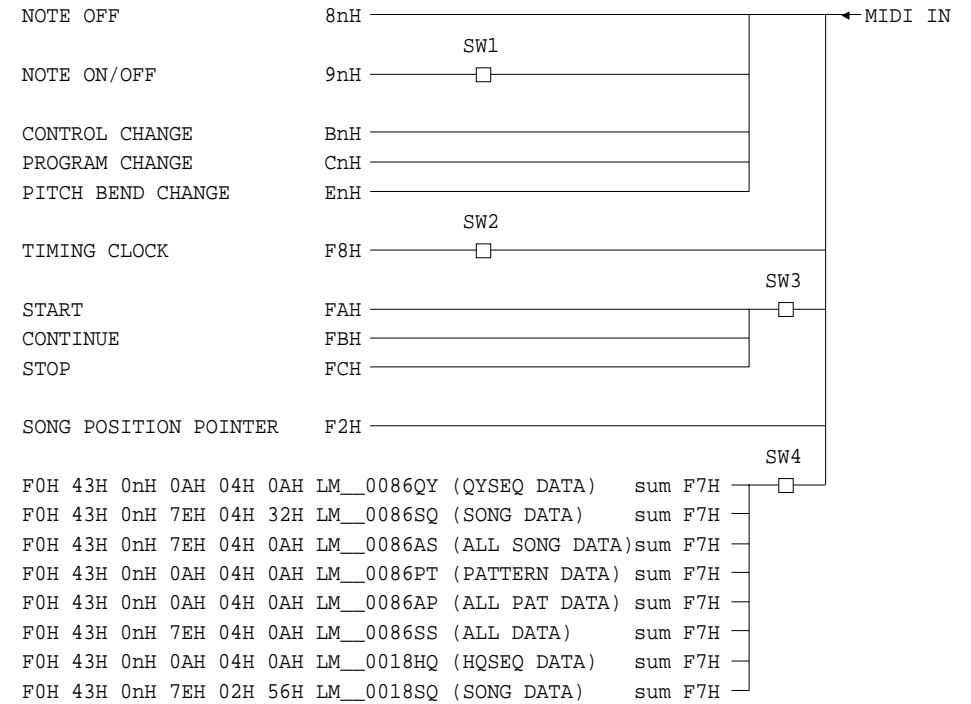
SW2  MIDI Control

Turns transmission on or off.

SW3  System Exclusive Message Transmit Channel

Turns system exclusive message transmission on or off, and allows device number selection.

## (2) RECEIVE FLOW



SW1  Velocity Filter

Turns step recording and editing of velocity data on or off.

SW2  Clock Condition Set

Determines whether the internal clock or an external MIDI clock signal is used as the timing clock.

SW3  MIDI Control

Turns reception on or off.

SW4  System Exclusive Message Device Number

Turns system exclusive message reception on or off, and allows device number selection.

## (3) TRANSMIT/RECEIVE DATA

### (3-1) CHANNEL VOICE MESSAGE

Transmission occurs only during playback or recording. The transmit channels are fixed for each track (1 ... 7, 10).

Reception occurs only during recording. Reception always occurs on all channels.

### (3-1-1) NOTE OFF

STATUS 1000nnnn (8nH) n=0~6, 9 VOICE CHANNEL NUMBER  
 NOTE NUMBER 0kkkkkkk k=0 (C-2)~127 (G8)  
 VELOCITY 0vvvvvvv v is ignored.

Reception only.  
 Converted to 9nH kkH 00H for transmission.

\* Reception is always "omni on" in the record mode.

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

STATUS 1001nnnn (9nH) n=0~6, 9 VOICE CHANNEL NUMBER  
 NOTE NUMBER 0kkkkkkk k = 0 (C-2)~127 (G8)  
 VELOCITY 0vvvvvvv (v≠0) NOTE ON  
 00000000 (v=0) NOTE OFF

Turns step record and edit input of velocity data on or off when received.

\* Reception is always "omni on" in the record mode.

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

STATUS 1011nnnn (BnH) n=0~6, 9 VOICE CHANNEL NUMBER  
 CONTROL NUMBER 0ccccccc  
 CONTROL VALUE 0vvvvvvv

\* Reception is always "omni on" in the record mode.

\* Transmit/receive control numbers.

\* Receive control numbers.

c = 1 MODULATION ; v = 0 - 127  
 c = 6 DATA ENTRY MSB ; v = 0 - 127  
 c = 38 DATA ENTRY LSB ; v = 0 - 127  
 c = 7 MAIN 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  
 c =100 RPN LSB  
 c =101 RPN MSB

### (3-1-4) PROGRAM CHANGE

STATUS 1100nnnn (CnH) n=0~6, 9 VOICE CHANNEL NUMBER  
 PROGRAM NUMBER 0ppppppp p=0~127

\* Reception is always "omni on" in the record mode.

### (3-2) CHANNEL MODE MESSAGE

Not transmitted or received.

### (3-3) SYSTEM COMMON MESSAGE

#### (3-3-1) SONG POSITION POINTER

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

Received and transmitted in the song play mode.

### (3-4) SYSTEM REAL TIME MESSAGE

#### (3-4-1) TIMING CLOCK

STATUS 11111000 (F8H)

Determines whether the internal clock or an external MIDI clock signal is used as the timing clock.  
 Transmit on/off and receive on/off can be set as required.

#### (3-4-2) START

STATUS 11111010 (FAH)

Transmit and receive on/off can be set as required.

#### (3-4-3) CONTINUE

STATUS 11111011 (FBH)

Transmit and receive on/off can be set as required.

#### (3-4-4) STOP

STATUS 11111100 (FCH)

Transmit and receive on/off can be set as required.

### (3-5) SYSTEM EXCLUSIVE MESSAGE

Only received when the initial PLAY, VOICE, and PATTERN mode displays are showing.  
 Exclusive Message reception does not occur in the DEMO mode.

#### (3-5-1) BULK DUMP

STATUS	11110000	(F0H)	
IDENTIFICATION	01000011	(43H)	
SUB STATUS	0000nnnn	(0nH)	n=DEVICE NUMBER
FORMAT NUMBER	0fffffff		
BYTE COUNT(MSB)	0bbbbbbb		
BYTE COUNT(LSB)	0bbbbbbb		
CLASSIFICATION	01001100	(4CH)	ASCII'L
NAME	01001101	(4DH)	ASCII'M
	00100000	(20H)	ASCII'_'
	00100000	(20H)	ASCII'_'
DATA FORMAT	00110000	(30H)	ASCII'0
NAME	00110000	(30H)	ASCII'0
	00110001	(38H)	ASCII'8
	00111000	(36H)	ASCII'6
	0mmmmmmm		ASCII
	0mmmmmmm		ASCII
DATA	0ddddddd		data bytes
	0ddddddd		
CHECK SUM	0eeeeeee		2's complement of 7 bits sum of all data bytes
EOX	11110111	(F7H)	

Type	Format No.	b	m	Refer to
QYSEQ DATA	0AH	04H 0AH	QY	
SONG DATA	7EH	00H 32H	SQ	Chart 2
ALL SONG DATA	7EH	04H 0AH	AS	Chart 2
PATTERN DATA	0AH	04H 0AH	PT	
ALL PATTERN DATA	0AH	04H 0AH	AP	
ALL DATA	7EH	04H 0AH	SS	Chart 1

#### (i) QYSEQ DATA

Transmits the sequencer and backing track data of the specified song. No transmission occurs if all tracks are empty.  
The TRACK DATA portion of the QSEQ data begins with F0H ddH (dd = song number x 5 + track number).

Received only when the initial song mode display is showing.  
Received to the currently selected number.  
No reception occurs if the current number already contains data.

#### (ii) SONG DATA

Transmits the song data from the specified song (see chart 2).  
No transmission occurs if all tracks are empty.

Received only when the initial song mode display is showing.  
Received to the currently selected number.  
No reception occurs if the current number already contains data.

#### (iii) ALL SONG DATA

Transmits the data from all songs that contain data (1 ... 20 — see chart 2).  
The data is transmitted in sequence using the same format as (i) QYSEQ DATA.  
No transmission occurs if no song contains data.

Received only when the initial song mode display is showing.  
The data is received whether previous data exists or not.

#### (iv) PATTERN DATA

Transmits the pattern data from the specified pattern. No transmission occurs if the pattern is empty.  
Received only when the initial pattern mode display is showing.  
Received to the currently selected number.  
No reception occurs if the current number already contains data.

#### (v) ALL PATTERN DATA

Transmits the pattern data from all user patterns which contain data (101 ... 200). No transmission occurs if no pattern data exists. Data corresponding to the pattern number is transmitted prior to the actual pattern data for each pattern.

Received only when the initial pattern mode display is showing.  
The data is received whether previous data exists or not.

#### (vi) ALL DATA

All song data is transmitted using the same format as (iii) ALL SONG DATA, and all pattern data is transmitted using the same format as (v) ALL PATTERN DATA. The SEQUENCER SETUP DATA (see chart 1) is also transmitted. No transmission occurs if no song or pattern data exists.

Received only when the initial song, voice or pattern mode display is showing.  
The data is received whether previous data exists or not.

Bulk data reception and transmission of the data types described in (i) through (vi), above, can be carried out. The device number can be specified in the utility mode.

No reception occurs during playback or recording.

Transmission occurs when the Utility mode Bulk Transmit function is executed. The chart below indicates which data types are transmitted when the various Bulk Transmit menu selections are made.

(1) 1 SONG OUT	(i) SONG DATA, (ii) QYSEQ DATA
(2) ALL SONG OUT	(iii) ALL SONG DATA
(3) 1 PATTERN OUT	(iv) PATTERN DATA
(4) ALL PATTERN OUT	(v) ALL PATTERN DATA
(5) QYALL OUT	(vi) ALL DATA

#### (vii) QY10 SONG DATA

QY10-format 1-song bulk data can be received by the QY20 (receive only). Only the Tr1 ... Tr4 sequencer track data and backing track chord data are received. Chords not recognized by the QY20 are converted as follows:

11 -> 7sus4

6.9 -> 6

Refer to the QY10 specifications for details.

### [Chart 1] SEQUENCER SETUP DATA

No. function	value	note
0 system status	121	fixed data
1 dummy byte	don't care	"0" is transmitted.
2 MIDI sync	0~1	0:Internal, 1:External
3 MIDI control	0~1	0:Off, 1:On
4 device number	0~17	Off, 1~16, All
5 master tune	0~127	-64~63
6 metronome	0~3	0:Off, 1:Record, 2:Play, 3:Always
7 program change table	0~1	0:Normal 1:GM
8 transpose	0~24	-12~12
9 ABC zone low	24~127	C0~G8
10 ABC zone high	24~127	C0~G8
11 song number	0~19	01~20
12 pattern type	0~1	0:preset, 1:user
13 pattern number	0~99	001~100
14 section number	0~5	intro, normal, vari., fill1, fill2, ending
15 reserve	don't care	"0" is transmitted.
16 record type	0~1	0:real, 1:step
17 reserve	don't care	"0" is transmitted.
18 reserve	don't care	"0" is transmitted.
19 step time (step record)	0~8	1/32 - 1/2
20 velocity (step record)	0~3	p, mf, f, ext
21 gatetimeratio(step record)	0~2	stac, norm, slur
22 ABC	0~1	0:Off, 1:On

**[Chart 2] SONG DATA**

No. function	value	note
0 song number	0-19	
1 song name 1	20-127	ascii code
2 song name 2	20-127	ascii code
3 song name 3	20-127	ascii code
4 song name 4	20-127	ascii code
5 song name 5	20-127	ascii code
6 song name 6	20-127	ascii code
7 song name 7	20-127	ascii code
8 song name 8	20-127	ascii code
9 track 1 voice number	0-108	0- 99 normal voice
10 track 2 voice number	0-108	100-107 drum voice
11 track 3 voice number	0-108	108 off voice
12 track 4 voice number	0-108	
13 chord 1 track voice number	0-108	
14 chord 2 track voice number	0-108	
15 bass track voice number	0-108	
16 drum track voice number	100-108	
17 track 1 volume	0-127	
18 track 2 volume	0-127	
19 track 3 volume	0-127	
20 track 4 volume	0-127	
21 chord 1 track volume	0-127	
22 chord 2 track volume	0-127	
23 bass track volume	0-127	
24 drum track volume	0-127	
25 track 1 pan	0-14	
26 track 2 pan	0-14	
27 track 3 pan	0-14	
28 track 4 pan	0-14	
29 chord 1 track pan	0-14	
30 chord 2 track pan	0-14	
31 bass track pan	0-14	
32 reserved	don't care	
33 song tempo 1	20-127	Values 30 through 250 are
34 song tempo 2	20-127	transmitted as 2-byte ASCII code.
35 pattern type	0-1	0:preset, 1:user
36 pattern number	0-99	001 - 100
37 section number	0-5	intro, normal, vari., fill1, fill2, ending
38 reserve	don't care	"0" is transmitted.
39 reserve	don't care	"0" is transmitted.

**[Chart 4] QYSEQ DATA FORMAT**

The QYSEQ data for 1 song begins with F0H mnH (m = song number, n = track number) and consists of multiple track data ending with F2H. Empty tracks are not included.

The data appearing between F0H mnH and F2H is listed below.

hex	description
F0	top of track #1 (song 1)
00	
--	
--	time/event/control data
F2	end of record
--	
--	track #2-#4 data
--	
F0	top of track #5
04	
--	
--	time/event/control data
--	
F2	end of record

(Notes) QYSEQ time/event/control data format (binary)

short time	100ttttt	(96th note/bit)
long time	101ttttt0ttttttt	(MS -> LS byte in order)
short note	1100dddd0kkkkkkk0vvvvvvv	
middle note	1101dddd0ddddd0kkkkkkk0vvvvvvv	
long note	1110dddd0ddddd0ddddd0kkkkkkk0vvvvvvv	(MS -> LS byte in order)
	ddd = duration	(96th note/bit)
	kkk = MIDI note number	(SUS ON/OFF only)
	vvv = MIDI velocity	
base offset	111101010nnnnnnn	
no operation	11111000	(No action)
pattern play	111110010nnnnnnn	(n: pattern number )
chord	111110100000rrrr0000cccc	(r: root note, c: chord)
velocity offset	111111010nnnnnnn0nnnnnnn	(n: offset value)
pitch bend	111111100vvvvvvv	(MSB only)

(The remaining data is the same as the non-MS byte MIDI format)

control change	111110110cccccc0vvvvvvv	(SUS ON/OFF only)
program change	111111000ppppppp	



Function ...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 7, 10 1 - 7, 10 *2	1 - 16 *1 x	memorized
Mode Default Messages Altered	3 x *****	1, 3 x x	memorized
Note Number   True voice	0 - 127 *****	0 - 127 0 - 127	
Velocity Note ON Note OFF	o 9nH,v=1-127 x 9nH,v=0	o v=1-127 x	
After Key's Touch Ch's	x x	x x	
Pitch Bender	x	o 0-24 semi	7 bit resolution
Control 1 6,38 7	x x x	o o o	Modulation Wheel Data Entry Volume
Change 10 11 64 100,101 120 121	x x x x x x	o o o o o o	Panpot Expression Sustain RPN LSB,MSB All Sound Off Reset All Cntrls
Prog Change : True #	x *****	o 0 - 127 *3	
System Exclusive	x	o	GM Mode On/Off
System : Song Pos. : Song Sel. Common : Tune	x x x	x x x	
System :Clock Real Time :Commands	x x	x x	
Aux :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	x x o x	x x o x	
Notes: *1 = if REC mode, receive all channels. *2 = selected by current track. *3 = 0-99:voice 100-107:Drum, 108-127:voice off			
Mode 1 : OMNI ON, POLY	Mode 2 : OMNI ON, MONO	Mode 3 : OMNI OFF, POLY	Mode 4 : OMNI OFF, MONO
			o : Yes x : No

Function ...	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 7, 10 x	1 - 16 x	memorized
Mode Default Messages Altered	x x *****	x x x	
Note Number : True voice	0 - 127 *****	0 - 127 *****	
Velocity Note ON Note OFF	o 9nH, v=1-127 x 9nH, v=0	o v=1-127 *1 x	
After Touch Key's Ch's	x x	x x	
Pitch Bender	o	o 0-24 semi	7 bit resolution
Control 1 6, 38 7	o o o	o o o	Modulation Wheel Data Entry Volume
Change 10 11 64 100,101 120 121	o o o o o o o	o o o o o o o	Panpot Expression Sustain RPN LSB,MSB All Sound Off Reset All Cntrls
Prog Change : True #	o 0 - 127 *****	o 0 - 127 *****	
System Exclusive	o *2	o *2	song data etc.
System : Song Pos. : Song Sel. Common : Tune	o x x	o x x	
System :Clock Real Time :Commands	o *3 o *3	o *4 o *3	
Aux :Local ON/OFF :All Notes OFF Mes- :Active Sense sages:Reset	x x o x	x x x x	

Notes: \*1 = receive if velocity parameter is 'ext' in step REC mode.  
 if parameter is not 'ext', velocity is fixed.  
 \*2 = transmit/receive if device No. is not off.  
 \*3 = if MIDI control switch is on.  
 \*4 = receive clock at MIDI sync mode.

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**