

# **SMAF Sound Decorator Contents Authoring Guideline < MA-2 edition >**

**Ver.1.2.0**

**2004/09/02**

**Yamaha Corporation**

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## Revision History

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Ver.	Date	Description
1.0.0	2004/01/22	First Release
1.2.0	2004/08/31	<p>3 Objective MIDI Event Text and Copyright Information was added into the list of used MIDI event.</p> <p>3.1 Channel Reserve Valid range of Number of channels to reserve (ss) was corrected “1 to 15”. Description about this case that Number of channels to reserve is “0” was deleted.</p> <p>3.3 Bank Select A table for Bank Select was updated.</p> <p>3.12.2 Text Items were newly added.</p> <p>3.12.3 Display the Copyright Items were newly added.</p> <p>7.1 XF Information Header (by language) Items were newly added.</p>

# 1. Outline of this Document

This document specifies a guideline for authoring SMF (Standard Midi File) that makes the maximum data of MA-2, in order to create contents for mobile phones equipped with MA-2, YAMAHA's synthesizer LSI for mobile phone, using the SMAF Sound Decorator (SSD) application.

SSD reads a SMF in accordance with this document and converts it into SMAF (Synthetic music Mobile Application Format), as well as playback check. Operations are not guaranteed when reading SMF other than that described in this document. Although MIDI sequencer application software for authoring SMF in accordance with this document is not designated, requirements include the capability of entry of events are described here.

[Note] About the numerical notations

In this book, hexadecimal numbers or decimal numbers express data values.

In the case of hexadecimal numbers, a letter "H" (Hexadecimal) follows the numerical value.

Moreover, "n" means arbitrary integers.

Please refer to the following table 1 when you input value of data.

**Table 1 Supporting Table of Decimal and Hexadecimal Numbers**

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

## **2. Notes on Authoring SMF**

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### **2.1. SMF Format**

Be sure to use the Standard MIDI File Format 0 or Format 1.

### **2.2. MIDI Channel**

1 to 16 of MIDI channels can be used.

### **2.3. Number of Voice Generation**

A maximum of 16 notes can be sounded. Only FM 2-operator voices are used in MA-2 of SSD.

### **2.4. Tempo**

Tempo, designated by the SMF, is reflected.

Tempo cannot be changed once the data is converted into the ringing melody contents for MA-2. When tempo is not designated, SSD treats quarter notes as 120. It supports a tempo change in music.

### 3. Applicable MIDI Events

MIDI events other than the following cannot be used. A warning will be issued if this is done.  
Some events must be designated.

The following table shows usable MIDI events.

**Table 2 Use MIDI Event List**

Names of MIDI events	Forms
Channel Reserve	BnH 37H ssH
Bank Select	BnH 00H mmH(MSB) BnH 20H llH(LSB)
Program Change	CnH ppH
Channel Volume	BnH 07H vvH
Modulation (Vibrato)	BnH 01H vvH
Channel Pan	BnH 0AH vvH
Note Off	8nH kkH vvH
Note On	9nH kkH vvH
Data Entry	BnH 06H mmH (MSB) BnH 26H llH (LSB)
RPN	BnH 64H aaH(LSB) BnH 65H bbH(MSB)
Pitch Bend	EnH llH mmH
Tempo	FFH 51H 03H aaH bbH ccH
Text	FFH 01H llH ddH...ddH
Copyright	FFH 02H llH ddH
Cue Point	FFH 07H 05H 53H 54H 41H 52H 54H(START) FFH 07H 04H 53H 54H 4FH 50H(STOP)

### 3.1. Channel Reserve

---

**BnH 37H ssH**

---

n: Channel number 0 to 15 (0H to FH)

ss: Number of channels to reserve 1 to 15 (01H to 0FH)

Use control change 55.

This is a control message specific to the SSD.

Location for insertion: Insert at the beginning (1:1:0) of each MIDI channel.

A warning will be issued if this message is not present for a MIDI channel that is used.

Its significance differs between a normal channel (Bank Select MSB=122) and a drum channel (Bank Select MSB=123).

In the case of a normal channel, this specifies the number of MA2 channels to be allocated. In most cases, this value will be the maximum number of the notes simultaneously played on that MIDI channel.

When a number over the maximum number of the notes simultaneously played on that channel is set, voices with long release can be used.

Use this function when sustaining a release for long time. This function is disabled when voices with short release is used.

If <number of channels to reserve> is set to 1, it will operate in monophonic mode. Thus, slurs are possible. If this is set to 2 or higher, it will operate in polyphonic mode, and slurs will not be possible.

If <number of channels to reserve> is set to 0, this MIDI channel is ignored.

(Example) To allocate 4 channels on MIDI channel 1, the command would be B0H 37H 04H.

In the case of a drum channel, this will be the number of voices used on that channel; i.e., this indicates the type of note.

(Example) If you wish to use the four types of voices, Bass Drum L (Note#33), Snare H (Note#40), Hi-Hat Closed (Note#42), and Hi-Hat Open (Note#46) on a certain drum channel, you would set this to ss=4.

Designate 4 even if these voices will not be played simultaneously.

### 3.2. Bank Select

<b>BnH</b>	<b>00H</b>	<b>aaH (MSB)</b>
<b>BnH</b>	<b>20H</b>	<b>bbH (LSB)</b>
n:	Channel number 0 to 15 (0H to FH)	
mm:	MSB value of bank number	
	when using normal voice	122 (7AH)
	when using drum voice	123 (7BH)
ll:	LSB value of bank number 0 (00H)	

The bank number to which the voice belongs is designated to “mm” and “ll”.

BankSelectMSB and BankSelectLSB are used as a pair, and after them you must also designate the Program Change described below.

The Bank of normal voice is Bank Select MSB = 122 (7AH), Bank Select LSB = 0 (00H).

The Bank of drum voice is Bank Select MSB = 123 (7BH), Bank Select LSB = 0 (00H).



### 3.3. Program Change

#### **CnH   ppH**

n: Channel number 0 to 15 (0H to FH)

pp: Program number

when using normal voice 0 to 127 (00H to 7FH)

when using drum voice 0 (00H)

Program Change must be inserted after Bank Select MSB and Bank Select LSB at the beginning of each channel.

Program Change messages during the music are not accepted while that channel is sounding, so make sure that the sound has ended before inserting them.

Program changes during a song are prohibited for a MIDI channel that uses Bank Select MSB=123 (i.e., Drum kit)

Table 3 shows bank selects that is handled by the SSD.

**Table 3 Bank select correspondence table**

MSB	LSB											
	0	1	2	3	4	5	6	7	8	9	10	11~127, Unspecification
0~121, 126, 127 Unspecification	Except 10 ch, it is replaced as MSB: 122, LSB: 0 In 10ch, it is replaced as MSB: 123, LSB: 0, program change: 0											
122, 124 (Normal)	It is replaced as LSB: 0.											
123, 125 (Drum)	It is replaced as LSB: 0, program change: 0											

[Note] As for SSD, when MSB is 124, it is replaced with 122, or when MSB is 125, it is replaced with 123, so that SMF made for MA-3 or MA-5 can be used even though the output format is for MA-2.

About the voice that can be set by Bank select and program change, please refer to “8 Voice List.”

### 3.4. Channel Volume

#### **CnH   ppH**

n: Channel number 0 to 15 (0H to FH)  
 vv: Control value 0 to 127 (00H to 7FH)

Control Change 7 (07H) is used.

This specifies the volume for each channel.

You can designate a value of 0 to 127, but there are ranges in which the volume does not change.

For example the volume does not change for vv = 0 to 3.

Refer to the following table when designating the value.

vv	Volume (dB)	vv	Volume (dB)
0~3	- $\infty$	64~67	- 11.11
4~7	- 47.95	68~71	- 10.10
8~11	- 42.49	72~75	- 9.14
12~14	- 37.10	76~79	- 8.25
16~19	- 33.00	80~83	- 7.38
20~23	- 29.67	84~87	- 6.56
24~27	- 26.91	88~91	- 5.79
28~31	- 24.49	92~95	- 5.04
32~35	- 22.38	96~99	- 4.34 (default)
36~39	- 20.51	100~103	- 3.63
40~43	- 18.82	104~107	- 2.98
44~47	- 17.27	108~111	- 2.34
48~51	- 15.84	112~115	- 1.71
52~55	- 14.53	116~119	- 1.13
56~59	- 13.31	120~123	- 0.56
60~63	- 12.19	124~127	0

[Note] When multiple channel volumes exist before the first note message, a channel volume value of an event just before the first note message is reflected to the each channel “SMF” column of the SSD mixer.

### 3.5. Vibrato

---

#### **BnH 01H wH**

---

n: Channel number 0 to 15 (0H to FH)

vv: Depth of vibrato 0 to 127 (00H to 7FH)

Control Change 1 is used.

This designates the vibrato depth for each channel.

You can designate a value of 0~127, but the MA2 of SSD internally recognizes only five levels.

**Table 4 Relationships between Vibrato Value and Depth**

vv	Vibrato depth
0	Turn vibrato off for all operators.
1~31	Vibrato will be as designated by the sound.
32~63	Add +1 to the Vibrated value of the sound.
64~95	Add +2 to the Vibrated value of the sound.
96~127	Add +3 to the Vibrated value of the sound.

\* Vibrato DVB value is a value that means the depth of Vibrato of voice parameter

If adding to the Vibrato DVB value would cause DVB to exceed +3, the result will be +3.

Vibrato is effective on some voices and is not effective on the other voices.

Pay attention that no effect appears, even if a modulation is specified to the voice against which a vibrato is not effective.

### 3.6. Channel Pan

**BnH 0AH wH**


---

n: Channel number 0 to 15 (0H to FH)  
 vv: Control value 0 to 127 (00H to 7FH)

Control Change 10 is used.

This designates the pan for each channel.

It can be used in music. Moreover, it can be used also during Note On.

Center is 64 (40H).

vv	Pan Lch (dB)	Pan Rch (dB)	vv	Pan Lch (dB)	Pan Rch (dB)
0	0	-∞	58~70	-3.0	-3.0
1	0	-∞	71	-4.5	-3.0
2	0	-37.5	72~80	-4.5	-1.5
3	0	-31.5	81~88	-6.0	-1.5
4	0	-28.5	89~94	-7.5	-1.5
5	0	-25.5	95	-7.5	0
6	0	-24.0	96~100	-9.0	0
7	0	-22.5	101~104	-10.5	0
8	0	-21.0	105~108	-12.0	0
9~10	0	-19.5	109~111	-13.5	0
11~12	0	-18	112~113	-15.0	0
13~14	0	-16.5	114~115	-16.5	0
15~16	0	-15.0	116~117	-18.0	0
17~19	0	-13.5	118~119	-19.5	0
20~23	0	-12.0	120	-21.0	0
24~27	0	-10.5	121	-22.5	0
28~32	0	-9.0	122	-24.0	0
33	0	-7.5	123	-25.5	0
34~39	-1.5	-7.5	124	-28.5	0
40~47	-1.5	-6.0	125	-31.5	0
48~56	-1.5	-4.5	126	-37.5	0
57	-3.0	-4.5	127	-∞	0

### 3.7. Note Off

**BnH 0AH wH**


---

n: Channel number 0 to 15 (0H to FH)

kk: Note number

when using normal voice 13 to 108 (0DH to 6CH)  
 when using drum voice 24 to 84 (18H to 54H)

vv: Key velocity is ignored.

### 3.8. Note On

#### 9nH kkH wH

n: Channel number 0 to 15 (0H to FH)

kk: Note number

when using normal voice 13 to 108 (0DH to 6CH)

when using drum voice 24 to 84 (18H to 54H)

vv: Key velocity value:

Note On velocity 1 to 127 (01H to 7FH)

Note Off 0 (00H)

Velocity values 1~127 are converted into Expression of MA-2 control messages, and inserted in front of the note message.

If you vary the velocity for each note, a large amount of Expression data will be generated, increasing the file size. Be aware of this when creating data.

Velocity 0 is interpreted as Note Off.

Velocity is converted into Expression messages that indicate the Volume (dB) as shown in the following table. If there is no change in the converted volume values, expression messages will not be generated.

For example, vv=1~3 will not change the Volume.

vv	Volume (dB)	vv	Volume (dB)
1 ~ 3	- ∞	64~67	- 11.11
4 ~ 7	- 47.95	68~71	- 10.10
8 ~ 11	- 42.49	72~75	- 9.14
12 ~ 15	- 37.10	76~79	- 8.25
16 ~ 19	- 33.00	80~83	- 7.38
20 ~ 23	- 29.67	84~87	- 6.56
24 ~ 27	- 26.91	88~91	- 5.79
28 ~ 31	- 24.49	92~95	- 5.04
32 ~ 35	- 22.38	96~99	- 4.34
36 ~ 39	- 20.51	100~103	- 3.63
40 ~ 43	- 18.82	104~107	- 2.98
44 ~ 47	- 17.27	108~111	- 2.34
48 ~ 51	- 15.84	112~115	- 1.71
52 ~ 55	- 14.53	116~119	- 1.13
56 ~ 59	- 13.31	120~123	- 0.56
60 ~ 63	- 12.19	124~127	0

[Note] When the Velocity value of note on at the beginning of music is small, a sound like click may be attached to the attack section. This occurs because it takes long time for the volume to change from default Expression value of MA-2, 127, to smaller Expression. To prevent this, make Velocity larger. When making Velocity smaller and then designating larger Velocity, the tone of attack section of the sound may be changed. This also occurs because the volume change takes long time. Avoid changing the volume of Velocity rapidly.

### 3.9. Data Entry

<b>BnH</b>	<b>06H</b>	<b>mmH (MSB)</b>
<b>BnH</b>	<b>26H</b>	<b>llH (LSB)</b>
n:	Channel number 0 to 15 (0H to FH)	
mm:	Data value MSB 0 to 24 (00H to 18H)	
ll:	Data value LSB 0 to 127 (00H to 7FH)	
Initial setting value:		2 / 0 (02H / 00H)
Only RPN (0:0) bend sensitivity is supported.		
The data value MSB designates the maximum (absolute value) of bend change.		
This data vale LSB is ignored.		

### 3.10.RPN (Registry Parameter Number)

<b>BnH</b>	<b>64H</b>	<b>llH (LSB)</b>
<b>BnH</b>	<b>65H</b>	<b>mmH (MSB)</b>
n:	Channel number 0 to 15 (0H to FH)	
ll:	Parameter number LSB 0 (00H)	
mm:	Parameter number MSB 0 (00H)	
Only RPN (0:0) pitch bend sensitivity is supported.		
Designate this message by the set (RPN MSB and RPN LSB) before using Data Entry.		

### 3.11.Pitch Bend

<b>EnH</b>	<b>llH</b>	<b>mmH</b>
n:	Channel number 0 to 15 (0H to FH)	
ll:	Bend value LSB 0 to 127 (00H to 7FH)	
mm:	Bend value MSB 0 to 127 (00H to 7FH)	

The change width of pitch bend is designated by DataEntry(MSB).  
 Pay attention that using this message significantly increases the size of the data generated by Pitch Bend.  
 Especially if Channel Reserve is set to 2 or larger, pitch bend data for the channels that don't require pitch bend will also be inserted; and thus the data size becomes far larger than expected.

## 3.12. Meta Event

### 3.12.1 Tempo

---

**FFH 51H 03H ttH ttH ttH**

tt tt tt: length of quarter notes ( $\mu$  sec)

SSD allows the tempo change in the music.

### 3.12.2 Text

---

**FFH 01H llH ddH...ddH**

ll: Byte number of text data (Variable format)

dd: Text data

By describing the XF Information header (see “Appendix”) in this Meta event, Song Title, Lyrics, Lyric Writer, Arranger, Player, and Singer can be input.

In SSD, this event is converted to each information of Contents Info Chunk.

**Regularly, control symbols (“(“、“[“、“/”) defined in XF information header are not interpreted in mobile phones. If these symbols are included in the contents, SSD outputs it as characters.**

### 3.12.3 Copyright Display

---

**FFH 02H llH ddH**

ll: Byte number of text data (Variable format)

dd: Text data

By describing the copyright information, a copyright can be input.

In SSD, this event is converted into Copyright of Contents Info Chunk in SMAF/MA-2.

## 3.12.4 Cue Point

<b>FFH</b>	<b>07H</b>	<b>05H</b>	<b>53H</b>	<b>54H</b>	<b>41H</b>	<b>52H</b>	<b>54H (START)</b>
<b>FFH</b>	<b>07H</b>	<b>04H</b>	<b>53H</b>	<b>54H</b>	<b>4FH</b>	<b>50H</b>	<b>(STOP)</b>

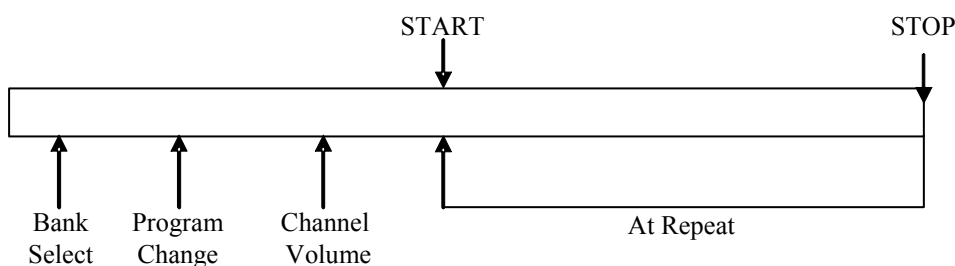
A playing start and stop positions as Cue Point of meta-event are specified.

4<sup>th</sup> to 8<sup>th</sup> bytes of START (53H 54H 41H 52H 54H) means “START” (capital letters) in ASCII.

4<sup>th</sup> to 7<sup>th</sup> bytes of STOP (53H 54H 4FH 50H) means “STOP” (capital letters) in ASCII.

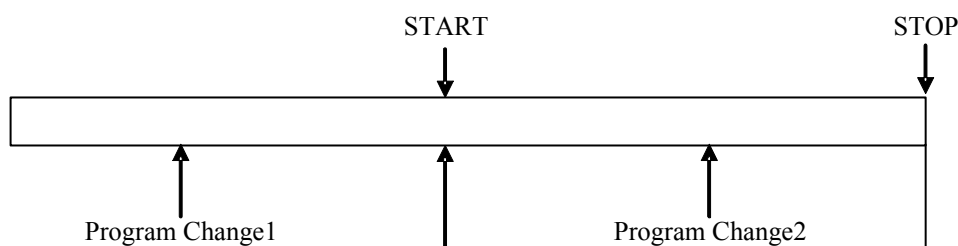
START is to be inserted into the position of the first Note On or before it, and STOP is to be inserted after the last Note Off.

START and STOP are to be inserted into music as a pair.



As described above, the play returns from STOP point to START point when repeating. Therefore, control data such as Program Change, Channel Volume or Pan is inserted before the START point is not executed. The state at repeating can be made the same as that of the initial replay by setting a control message after START or by setting these control data before STOP.

For example, when Program Change 2 is executed during a play as shown below, the voice changes to the one corresponding to Program Change 2. However, the voice of Program Change 2 is used for replaying when the play returns to START point due to a repeat. But, the voice of Program Change 1 has to be used in the period from START point to Program Change 2. In this case, insert Program Change 1 immediately before STOP point.



When finishing up music, input a message so that the first replay becomes completely the same as the second replay by performing repeat replay.



## 4. Other Note

---

### 4.1. TimeBase

Time Base can be changed in SMAF. However, it is fixed to 4ms in SSD.

### 4.2. GateTime

The interval between Note On and Note Off is called Gate Time. Gate Time is expressed by a value in the range of 1~16511. The actual Gate Time will be this time multiplied by the Time Base value. With the time base value of 4 ms, a maximum of 66.044 seconds can be expressed.

### 4.3. LED Synchronization and Vibration Synchronization

In MA-2 of SSD, one SMF channel which synchronizes with LED / Vibration can be set up by “LED” and “VIB” column of Mixer respectively.

When Channel Reserve value is set as 2 or more in the SMF channel which synchronizes with LED / Vibration, note data in a channel of SMF will be distributed to SMAF.MA-2 channels of the same number as the Channel Reserve value. At this time, LED / Vibration synchronization is set only to the specific note of an SMF channel.

When Channel Reserve value is set as 1 in the SMF channel which synchronizes with LED / Vibration, all the notes of an SMF channel is set to synchronize with them.

About Channel Reserve, refer to “3.1Channel Reserve”.

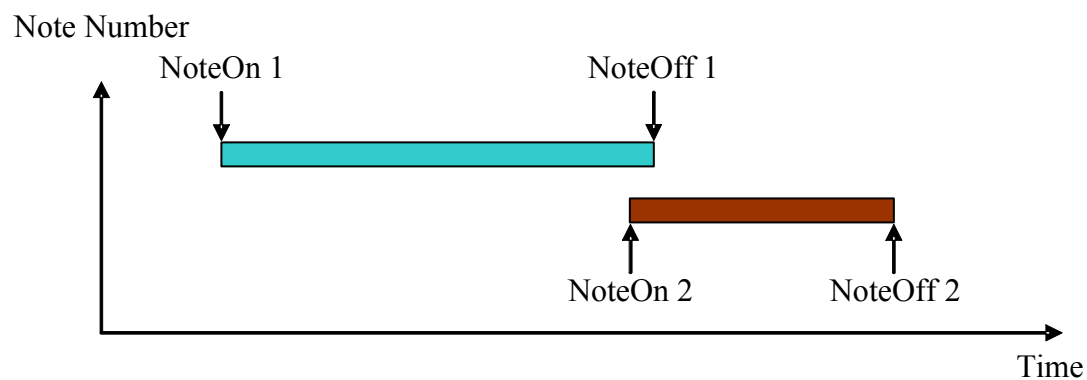
## 5. Musical Expression on the MA-2

### 5.1. Slur

This is possible only in monophonic mode. Monophonic mode is selected by setting Channel Reserve as 1. It designates a Note On for a different note before designating Note Off for the previous note.

The overlap time is a length corresponding to at least 1 Gate Time. Refer to appendix 7.2.

For a drum channel slur cannot be expressed because changing the notes means changing the voices on a drum channel.



## 6. Caution

---

### 6.1. Caution at a Program Change

If the release of a previously-silenced note still remains when a program change occurs, unintended sound may be heard. In this case, insert the program change after the release has decayed.

### 6.2. Consecutive Similar Events

Inserting messages such as channel volume, pan, modulation and program change consecutively into the same MIDI channel that is not generating tone not only takes no effect but also causes increase of data. Therefore, avoid inserting these events consecutively.

### 6.3. Caution of LED Synchronization

There are the two following synchronous modes in MA2. The blink frequency of LED can be selected by the playback synchronous mode 2 especially. The setting mode changes with mobile phone. Please be sure to confirm the synchronous mode of the target mobile phone and **check its actual playback operation**.

Playback synchronous mode 1

LED lights up when a synchronous channel pronounces (during Gate Time).

Playback synchronous mode 2

LED blinks on the designated frequency when a synchronous channel pronounces (during Gate Time).

The frequency to set up can be selected from 4, 8, 12, 16, and 18Hz.

**(Cautions on creation)**

**When there is no note for a long time, LED does not light in the meantime. Be sure to choose the channel in which the note exists constantly as the whole music.**

**When the note, which uses Pitch Bend in the synchronous channel, exists, LED does not light and not blink to that note. We recommend not using the Pitch Bend in the synchronous channel.**

## 7. Appendix

---

### 7.1. XF Information Header (by language)

The information items are divided by an 8 bit colon, “:”, and listed.

No data is placed in the information items that are not described.

New items are to be added after the last item. When no text exists, the processing system places blanks in the following information items even when an 8 bit colon is not found.

1) and 2) of information items and various control codes are described with ASCII.

The following sections describe XF Information Header -- Language Specific that uses Japanese.

#### 7.1.1 Information Items

##### 7.1.1.1 XF Information Header – Language Specific—ID (XF Information Header (by Language) ID)

XF Information Header -- ID indicating Language Specific (characters)      "XFIn"

##### 7.1.1.2 Language

Information that designate the code system of characters that are used for XF information header (by language).

It does not designate the character code system that is used for words. The character code system for words is designated with XF words header. It does not show the place of composition.

The Authoring Tool only the following languages.

Symbol	Character code	Applicable languages
L1	Latin 1(ASCII(7bit) + ISO 8859-1)	English, French, German, Italian, Spanish, Portuguese, etc.
JP	Shift-JIS	Japanese
KR	EUC-KR	Korean

#### 7.1.1.3 Song Name

Expression of title by language

When using two or more lines to express a title, place an 8 bit slush, "/", in the place a linefeed is to be made.

#### 7.1.1.4 Composer

Name of composer of original music

Divide the family name and given name with an 8 bit space, " ".

When two or more composers are written, divide them with an 8 bit slush, "/".

#### 7.1.1.5 Lyricist

Name of writer when words are given to the original music.

The format is the same as the one for the composer.

#### 7.1.1.6 Arranger

Name of a person who arranged original music or music data.

The format is the same as the one for the composer.

#### 7.1.1.7 Performer

Name of a person or a group of persons who plays or sings original music.

The format is the same as the one for the composer.

#### 7.1.1.8 Programmer

Name of a person who authored music data.

The format is the same as the one for the composer.

## 7.2. Number of Ticks in 1 Time Base

The number of ticks in 1 Time Base is shown below.

These values depend on the Time Base value and the Tempo value.

TimeBase	Tempo	Tick	TimeBase	Tempo	Tick
4	20	1	4	120	4
4	30	1	4	130	5
4	40	2	4	140	5
4	50	2	4	150	5
4	60	2	4	160	6
4	70	3	4	170	6
4	80	3	4	180	6
4	90	3	4	190	7
4	100	4	4	200	7
4	110	4			

## 8. Voice List

### 8.1. Normal Voice MAP (FM 2 Operator Voice)

Bank MSB	122				
Bank LSB	0				
VOICE-SET	BASIC	LUMINOUS	ACID	MICROCOMPUTER	DIGITAL
Pch#	VoiceName	VoiceName	VoiceName	VoiceName	VoiceName
1	Ba-GrandPno	Lu-GrandPno	Ac-GrandPno	Mi-GrandPno	Di-GrandPno
2	Ba-BritePno	Lu-BritePno	Ac-BritePno	Mi-BritePno	Di-BritePno
3	Ba-E.GrandP	Lu-E.GrandP	Ac-E.GrandP	Mi-E.GrandP	Di-E.GrandP
4	Ba-HnkyTonk	Lu-HnkyTonk	Ac-HnkyTonk	Mi-HnkyTonk	Di-HnkyTonk
5	Ba-E.Piano1	Lu-E.Piano1	Ac-E.Piano1	Mi-E.Piano1	Di-E.Piano1
6	Ba-E.Piano2	Lu-E.Piano2	Ac-E.Piano2	Mi-E.Piano2	Di-E.Piano2
7	Ba-Harpsi	Lu-Harpsi	Ac-Harpsi	Mi-Harpsi	Di-Harpsi
8	Ba-Clavi	Lu-Clavi	Ac-Clavi	Mi-Clavi	Di-Clavi
9	Ba-Celesta	Lu-Celesta	Ac-Celesta	Mi-Celesta	Di-Celesta
10	Ba-Glocken	Lu-Glocken	Ac-Glocken	Mi-Glocken	Di-Glocken
11	Ba-MusicBox	Lu-MusicBox	Ac-MusicBox	Mi-MusicBox	Di-MusicBox
12	Ba-Vibes	Lu-Vibes	Ac-Vibes	Mi-Vibes	Di-Vibes
13	Ba-Marimba	Lu-Marimba	Ac-Marimba	Mi-Marimba	Di-Marimba
14	Ba-Xylophon	Lu-Xylophon	Ac-Xylophon	Mi-Xylophon	Di-Xylophon
15	Ba-TubulBel	Lu-TubulBel	Ac-TubulBel	Mi-TubulBel	Di-TubulBel
16	Ba-Dulcimer	Lu-Dulcimer	Ac-Dulcimer	Mi-Dulcimer	Di-Dulcimer
17	Ba-DrawOrgn	Lu-DrawOrgn	Ac-DrawOrgn	Mi-DrawOrgn	Di-DrawOrgn
18	Ba-PercOrgn	Lu-PercOrgn	Ac-PercOrgn	Mi-PercOrgn	Di-PercOrgn
19	Ba-RockOrgn	Lu-RockOrgn	Ac-RockOrgn	Mi-RockOrgn	Di-RockOrgn
20	Ba-ChrchOrg	Lu-ChrchOrg	Ac-ChrchOrg	Mi-ChrchOrg	Di-ChrchOrg
21	Ba-ReedOrgn	Lu-ReedOrgn	Ac-ReedOrgn	Mi-ReedOrgn	Di-ReedOrgn
22	Ba-Acordion	Lu-Acordion	Ac-Acordion	Mi-Acordion	Di-Acordion
23	Ba-Harmnica	Lu-Harmnica	Ac-Harmnica	Mi-Harmnica	Di-Harmnica
24	Ba-TangoAcd	Lu-TangoAcd	Ac-TangoAcd	Mi-TangoAcd	Di-TangoAcd
25	Ba-NylonGtr	Lu-NylonGtr	Ac-NylonGtr	Mi-NylonGtr	Di-NylonGtr
26	Ba-SteelGtr	Lu-SteelGtr	Ac-SteelGtr	Mi-SteelGtr	Di-SteelGtr
27	Ba-Jazz Gtr	Lu-Jazz Gtr	Ac-Jazz Gtr	Mi-Jazz Gtr	Di-Jazz Gtr
28	Ba-CleanGtr	Lu-CleanGtr	Ac-CleanGtr	Mi-CleanGtr	Di-CleanGtr
29	Ba-Mute.Gtr	Lu-Mute.Gtr	Ac-Mute.Gtr	Mi-Mute.Gtr	Di-Mute.Gtr
30	Ba-Ovrdrive	Lu-Ovrdrive	Ac-Ovrdrive	Mi-Ovrdrive	Di-Ovrdrive
31	Ba-Dist.Gtr	Lu-Dist.Gtr	Ac-Dist.Gtr	Mi-Dist.Gtr	Di-Dist.Gtr
32	Ba-GtrHarmo	Lu-GtrHarmo	Ac-GtrHarmo	Mi-GtrHarmo	Di-GtrHarmo
33	Ba-Aco.Bass	Lu-Aco.Bass	Ac-Aco.Bass	Mi-Aco.Bass	Di-Aco.Bass
34	Ba-FngrBass	Lu-FngrBass	Ac-FngrBass	Mi-FngrBass	Di-FngrBass
35	Ba-PickBass	Lu-PickBass	Ac-PickBass	Mi-PickBass	Di-PickBass
36	Ba-Fretless	Lu-Fretless	Ac-Fretless	Mi-Fretless	Di-Fretless
37	Ba-SlapBas1	Lu-SlapBas1	Ac-SlapBas1	Mi-SlapBas1	Di-SlapBas1
38	Ba-SlapBas2	Lu-SlapBas2	Ac-SlapBas2	Mi-SlapBas2	Di-SlapBas2
39	Ba-SynBass1	Lu-SynBass1	Ac-SynBass1	Mi-SynBass1	Di-SynBass1
40	Ba-SynBass2	Lu-SynBass2	Ac-SynBass2	Mi-SynBass2	Di-SynBass2

Bank MSB	122				
Bank LSB	0				
VOICE-SET	BASIC	LUMINOUS	ACID	MICROCOMPUTER	DIGITAL
Pch#	VoiceName	VoiceName	VoiceName	VoiceName	VoiceName
41	Ba-Violin	Lu-Violin	Ac-Violin	Mi-Violin	Di-Violin
42	Ba-Viola	Lu-Viola	Ac-Viola	Mi-Viola	Di-Viola
43	Ba-Cello	Lu-Cello	Ac-Cello	Mi-Cello	Di-Cello
44	Ba-Contrabs	Lu-Contrabs	Ac-Contrabs	Mi-Contrabs	Di-Contrabs
45	Ba-Trem.Str	Lu-Trem.Str	Ac-Trem.Str	Mi-Trem.Str	Di-Trem.Str
46	Ba-Pizz.Str	Lu-Pizz.Str	Ac-Pizz.Str	Mi-Pizz.Str	Di-Pizz.Str
47	Ba-Harp	Lu-Harp	Ac-Harp	Mi-Harp	Di-Harp
48	Ba-Timpani	Lu-Timpani	Ac-Timpani	Mi-Timpani	Di-Timpani
49	Ba-Strings1	Lu-Strings1	Ac-Strings1	Mi-Strings1	Di-Strings1
50	Ba-Strings2	Lu-Strings2	Ac-Strings2	Mi-Strings2	Di-Strings2
51	Ba-Syn.Str1	Lu-Syn.Str1	Ac-Syn.Str1	Mi-Syn.Str1	Di-Syn.Str1
52	Ba-Syn.Str2	Lu-Syn.Str2	Ac-Syn.Str2	Mi-Syn.Str2	Di-Syn.Str2
53	Ba-ChoirAah	Lu-ChoirAah	Ac-ChoirAah	Mi-ChoirAah	Di-ChoirAah
54	Ba-VoiceOoh	Lu-VoiceOoh	Ac-VoiceOoh	Mi-VoiceOoh	Di-VoiceOoh
55	Ba-SynVoice	Lu-SynVoice	Ac-SynVoice	Mi-SynVoice	Di-SynVoice
56	Ba-Orch.Hit	Lu-Orch.Hit	Ac-Orch.Hit	Mi-Orch.Hit	Di-Orch.Hit
57	Ba-Trumpet	Lu-Trumpet	Ac-Trumpet	Mi-Trumpet	Di-Trumpet
58	Ba-Trombone	Lu-Trombone	Ac-Trombone	Mi-Trombone	Di-Trombone
59	Ba-Tuba	Lu-Tuba	Ac-Tuba	Mi-Tuba	Di-Tuba
60	Ba-Mute.Trp	Lu-Mute.Trp	Ac-Mute.Trp	Mi-Mute.Trp	Di-Mute.Trp
61	Ba-Fr.Horn	Lu-Fr.Horn	Ac-Fr.Horn	Mi-Fr.Horn	Di-Fr.Horn
62	Ba-BrasSect	Lu-BrasSect	Ac-BrasSect	Mi-BrasSect	Di-BrasSect
63	Ba-SynBras1	Lu-SynBras1	Ac-SynBras1	Mi-SynBras1	Di-SynBras1
64	Ba-SynBras2	Lu-SynBras2	Ac-SynBras2	Mi-SynBras2	Di-SynBras2
65	Ba-SprnoSax	Lu-SprnoSax	Ac-SprnoSax	Mi-SprnoSax	Di-SprnoSax
66	Ba-AltoSax	Lu-AltoSax	Ac-AltoSax	Mi-AltoSax	Di-AltoSax
67	Ba-TenorSax	Lu-TenorSax	Ac-TenorSax	Mi-TenorSax	Di-TenorSax
68	Ba-Bari.Sax	Lu-Bari.Sax	Ac-Bari.Sax	Mi-Bari.Sax	Di-Bari.Sax
69	Ba-Oboe	Lu-Oboe	Ac-Oboe	Mi-Oboe	Di-Oboe
70	Ba-Eng.Horn	Lu-Eng.Horn	Ac-Eng.Horn	Mi-Eng.Horn	Di-Eng.Horn
71	Ba-Bassoon	Lu-Bassoon	Ac-Bassoon	Mi-Bassoon	Di-Bassoon
72	Ba-Clarinet	Lu-Clarinet	Ac-Clarinet	Mi-Clarinet	Di-Clarinet
73	Ba-Piccolo	Lu-Piccolo	Ac-Piccolo	Mi-Piccolo	Di-Piccolo
74	Ba-Flute	Lu-Flute	Ac-Flute	Mi-Flute	Di-Flute
75	Ba-Recorder	Lu-Recorder	Ac-Recorder	Mi-Recorder	Di-Recorder
76	Ba-PanFlute	Lu-PanFlute	Ac-PanFlute	Mi-PanFlute	Di-PanFlute
77	Ba-Bottle	Lu-Bottle	Ac-Bottle	Mi-Bottle	Di-Bottle
78	Ba-Shakhchi	Lu-Shakhchi	Ac-Shakhchi	Mi-Shakhchi	Di-Shakhchi
79	Ba-Whistle	Lu-Whistle	Ac-Whistle	Mi-Whistle	Di-Whistle
80	Ba-Ocarina	Lu-Ocarina	Ac-Ocarina	Mi-Ocarina	Di-Ocarina
81	Ba-SquareLd	Lu-SquareLd	Ac-SquareLd	Mi-SquareLd	Di-SquareLd
82	Ba-Saw.Lead	Lu-Saw.Lead	Ac-Saw.Lead	Mi-Saw.Lead	Di-Saw.Lead
83	Ba-CaliopLd	Lu-CaliopLd	Ac-CaliopLd	Mi-CaliopLd	Di-CaliopLd
84	Ba-ChiffLd	Lu-ChiffLd	Ac-ChiffLd	Mi-ChiffLd	Di-ChiffLd
85	Ba-CharanLd	Lu-CharanLd	Ac-CharanLd	Mi-CharanLd	Di-CharanLd
86	Ba-VoiceLd	Lu-VoiceLd	Ac-VoiceLd	Mi-VoiceLd	Di-VoiceLd



Bank MSB	122				
Bank LSB	0				
VOICE-SET	BASIC	LUMINOUS	ACID	MICROCOMPUTER	DIGITAL
Pch#	VoiceName	VoiceName	VoiceName	VoiceName	VoiceName
87	Ba-FifthLd	Lu-FifthLd	Ac-FifthLd	Mi-FifthLd	Di-FifthLd
88	Ba-Bass&Ld	Lu-Bass&Ld	Ac-Bass&Ld	Mi-Bass&Ld	Di-Bass&Ld
89	Ba-NewAgePd	Lu-NewAgePd	Ac-NewAgePd	Mi-NewAgePd	Di-NewAgePd
90	Ba-WarmPad	Lu-WarmPad	Ac-WarmPad	Mi-WarmPad	Di-WarmPad
91	Ba-PolySyPd	Lu-PolySyPd	Ac-PolySyPd	Mi-PolySyPd	Di-PolySyPd
92	Ba-ChoirPad	Lu-ChoirPad	Ac-ChoirPad	Mi-ChoirPad	Di-ChoirPad
93	Ba-BowedPad	Lu-BowedPad	Ac-BowedPad	Mi-BowedPad	Di-BowedPad
94	Ba-MetalPad	Lu-MetalPad	Ac-MetalPad	Mi-MetalPad	Di-MetalPad
95	Ba-HaloPad	Lu-HaloPad	Ac-HaloPad	Mi-HaloPad	Di-HaloPad
96	Ba-SweepPad	Lu-SweepPad	Ac-SweepPad	Mi-SweepPad	Di-SweepPad
97	Ba-Rain	Lu-Rain	Ac-Rain	Mi-Rain	Di-Rain
98	Ba-SoundTrk	Lu-SoundTrk	Ac-SoundTrk	Mi-SoundTrk	Di-SoundTrk
99	Ba-Crystal	Lu-Crystal	Ac-Crystal	Mi-Crystal	Di-Crystal
100	Ba-Atmosphr	Lu-Atmosphr	Ac-Atmosphr	Mi-Atmosphr	Di-Atmosphr
101	Ba-Bright	Lu-Bright	Ac-Bright	Mi-Bright	Di-Bright
102	Ba-Goblins	Lu-Goblins	Ac-Goblins	Mi-Goblins	Di-Goblins
103	Ba-Echoes	Lu-Echoes	Ac-Echoes	Mi-Echoes	Di-Echoes
104	Ba-Sci-Fi	Lu-Sci-Fi	Ac-Sci-Fi	Mi-Sci-Fi	Di-Sci-Fi
105	Ba-Sitar	Lu-Sitar	Ac-Sitar	Mi-Sitar	Di-Sitar
106	Ba-Banjo	Lu-Banjo	Ac-Banjo	Mi-Banjo	Di-Banjo
107	Ba-Shamisen	Lu-Shamisen	Ac-Shamisen	Mi-Shamisen	Di-Shamisen
108	Ba-Koto	Lu-Koto	Ac-Koto	Mi-Koto	Di-Koto
109	Ba-Kalimba	Lu-Kalimba	Ac-Kalimba	Mi-Kalimba	Di-Kalimba
110	Ba-Bagpipe	Lu-Bagpipe	Ac-Bagpipe	Mi-Bagpipe	Di-Bagpipe
111	Ba-Fiddle	Lu-Fiddle	Ac-Fiddle	Mi-Fiddle	Di-Fiddle
112	Ba-Shanai	Lu-Shanai	Ac-Shanai	Mi-Shanai	Di-Shanai
113	Ba-TnklBell	Lu-TnklBell	Ac-TnklBell	Mi-TnklBell	Di-TnklBell
114	Ba-Agogo	Lu-Agogo	Ac-Agogo	Mi-Agogo	Di-Agogo
115	Ba-SteelDrm	Lu-SteelDrm	Ac-SteelDrm	Mi-SteelDrm	Di-SteelDrm
116	Ba-WoodBlok	Lu-WoodBlok	Ac-WoodBlok	Mi-WoodBlok	Di-WoodBlok
117	Ba-TaikoDrm	Lu-TaikoDrm	Ac-TaikoDrm	Mi-TaikoDrm	Di-TaikoDrm
118	Ba-MelodTom	Lu-MelodTom	Ac-MelodTom	Mi-MelodTom	Di-MelodTom
119	Ba-Syn.Drum	Lu-Syn.Drum	Ac-Syn.Drum	Mi-Syn.Drum	Di-Syn.Drum
120	Ba-RevCymb	Lu-RevCymb	Ac-RevCymb	Mi-RevCymb	Di-RevCymb
121	Ba-FretNoiz	Lu-FretNoiz	Ac-FretNoiz	Mi-FretNoiz	Di-FretNoiz
122	Ba-BrthNoiz	Lu-BrthNoiz	Ac-BrthNoiz	Mi-BrthNoiz	Di-BrthNoiz
123	Ba-Seashore	Lu-Seashore	Ac-Seashore	Mi-Seashore	Di-Seashore
124	Ba-Tweet	Lu-Tweet	Ac-Tweet	Mi-Tweet	Di-Tweet
125	Ba-Telphone	Lu-Telphone	Ac-Telphone	Mi-Telphone	Di-Telphone
126	Ba-Helicptr	Lu-Helicptr	Ac-Helicptr	Mi-Helicptr	Di-Helicptr
127	Ba-Applause	Lu-Applause	Ac-Applause	Mi-Applause	Di-Applause
128	Ba-Gunshot	Lu-Gunshot	Ac-Gunshot	Mi-Gunshot	Di-Gunshot

## 8.2. Drum Voice Map

Bank MSB	123				
Pch#	1				
VOICE-SET	BASIC	LUMINOUS	ACID	MICROCOMPUTER	DIGITAL
Note#	VoiceName	VoiceName	VoiceName	VoiceName	VoiceName
24	Ba-SeqClick H	Lu-SeqClick H	Ac-SeqClick H	Mi-SeqClick H	Di-SeqClick H
25	Ba-Brush Tap	Lu-Brush Tap	Ac-Brush Tap	Mi-Brush Tap	Di-Brush Tap
26	Ba-Brush Swirl L	Lu-Brush Swirl L	Ac-Brush Swirl L	Mi-Brush Swirl L	Di-Brush Swirl L
27	Ba-Brush Slap	Lu-Brush Slap	Ac-Brush Slap	Mi-Brush Slap	Di-Brush Slap
28	Ba-Brush Swirl H	Lu-Brush Swirl H	Ac-Brush Swirl H	Mi-Brush Swirl H	Di-Brush Swirl H
29	Ba-Snare Roll	Lu-Snare Roll	Ac-Snare Roll	Mi-Snare Roll	Di-Snare Roll
30	Ba-Castanet	Lu-Castanet	Ac-Castanet	Mi-Castanet	Di-Castanet
31	Ba-Snare L	Lu-Snare L	Ac-Snare L	Mi-Snare L	Di-Snare L
32	Ba-Sticks	Lu-Sticks	Ac-Sticks	Mi-Sticks	Di-Sticks
33	Ba-Bass Drum L	Lu-Bass Drum L	Ac-Bass Drum L	Mi-Bass Drum L	Di-Bass Drum L
34	Ba-Open Rim Shot	Lu-Open Rim Shot	Ac-Open Rim Shot	Mi-Open Rim Shot	Di-Open Rim Shot
35	Ba-Bass Drum M	Lu-Bass Drum M	Ac-Bass Drum M	Mi-Bass Drum M	Di-Bass Drum M
36	Ba-Bass Drum H	Lu-Bass Drum H	Ac-Bass Drum H	Mi-Bass Drum H	Di-Bass Drum H
37	Ba-ClosedRimShot	Lu-ClosedRimShot	Ac-ClosedRimShot	Mi-ClosedRimShot	Di-ClosedRimShot
38	Ba-Snare M	Lu-Snare M	Ac-Snare M	Mi-Snare M	Di-Snare M
39	Ba-Hand Clap	Lu-Hand Clap	Ac-Hand Clap	Mi-Hand Clap	Di-Hand Clap
40	Ba-Snare H	Lu-Snare H	Ac-Snare H	Mi-Snare H	Di-Snare H
41	Ba-Floor Tom L	Lu-Floor Tom L	Ac-Floor Tom L	Mi-Floor Tom L	Di-Floor Tom L
42	Ba-Hi-Hat Closed	Lu-Hi-Hat Closed	Ac-Hat Closed	Mi-Hi-Hat Closed	Di-Hi-Hat Closed
43	Ba-Floor Tom H	Lu-Floor Tom H	Ac-Floor Tom H	Mi-Floor Tom H	Di-Floor Tom H
44	Ba-Hi-Hat Pedal	Lu-Hi-Hat Pedal	Ac-Hi-Hat Pedal	Mi-Hi-Hat Pedal	Di-Hi-Hat Pedal
45	Ba-Low Tom	Lu-Low Tom	Ac-Low Tom	Mi-Low Tom	Di-Low Tom
46	Ba-Hi-Hat Open	Lu-Hi-Hat Open	Ac-Hi-Hat Open	Mi-Hi-Hat Open	Di-Hi-Hat Open
47	Ba-Mid Tom L	Lu-Mid Tom L	Ac-Mid Tom L	Mi-Mid Tom L	Di-Mid Tom L
48	Ba-Mid Tom H	Lu-Mid Tom H	Ac-Mid Tom H	Mi-Mid Tom H	Di-Mid Tom H
49	Ba-CrashCymbal 1	Lu-CrashCymbal 1	Ac-CrashCymbal 1	Mi-CrashCymbal 1	Di-CrashCymbal 1
50	Ba-High Tom	Lu-High Tom	Ac-High Tom	Mi-High Tom	Di-High Tom
51	Ba-Ride Cymbal 1	Lu-Ride Cymbal 1	Ac-Ride Cymbal 1	Mi-Ride Cymbal 1	Di-Ride Cymbal 1
52	Ba-ChineseCymbal	Lu-ChineseCymbal	Ac-ChineseCymbal	Mi-ChineseCymbal	Di-ChineseCymbal
53	Ba-RideCymbalCup	Lu-RideCymbalCup	Ac-RideCymbalCup	Mi-RideCymbalCup	Di-RideCymbalCup
54	Ba-Tambourine	Lu-Tambourine	Ac-Tambourine	Mi-Tambourine	Di-Tambourine
55	Ba-Splash Cymbal	Lu-Splash Cymbal	Ac-Splash Cymbal	Mi-Splash Cymbal	Di-Splash Cymbal
56	Ba-Cowbell	Lu-Cowbell	Ac-Cowbell	Mi-Cowbell	Di-Cowbell
57	Ba-CrashCymbal 2	Lu-CrashCymbal 2	Ac-CrashCymbal 2	Mi-CrashCymbal 2	Di-CrashCymbal 2
58	Ba-Vibraslap	Lu-Vibraslap	Ac-Vibraslap	Mi-Vibraslap	Di-Vibraslap
59	Ba-Ride Cymbal 2	Lu-Ride Cymbal 2	Ac-Ride Cymbal 2	Mi-Ride Cymbal 2	Di-Ride Cymbal 2
60	Ba-Bongo H	Lu-Bongo H	Ac-Bongo H	Mi-Bongo H	Di-Bongo H
61	Ba-Bongo L	Lu-Bongo L	Ac-Bongo L	Mi-Bongo L	Di-Bongo L
62	Ba-Conga H Mute	Lu-Conga H Mute	Ac-Conga H Mute	Mi-Conga H Mute	Di-Conga H Mute
63	Ba-Conga H Open	Lu-Conga H Open	Ac-Conga H Open	Mi-Conga H Open	Di-Conga H Open
64	Ba-Conga L	Lu-Conga L	Ac-Conga L	Mi-Conga L	Di-Conga L
65	Ba-Timbale H	Lu-Timbale H	Ac-Timbale H	Mi-Timbale H	Di-Timbale H
66	Ba-Timbale L	Lu-Timbale L	Ac-Timbale L	Mi-Timbale L	Di-Timbale L
67	Ba-Agogo H	Lu-Agogo H	Ac-Agogo H	Mi-Agogo H	Di-Agogo H
68	Ba-Agogo L	Lu-Agogo L	Ac-Agogo L	Mi-Agogo L	Di-Agogo L
69	Ba-Cabasa	Lu-Cabasa	Ac-Cabasa	Mi-Cabasa	Di-Cabasa
70	Ba-Maracas	Lu-Maracas	Ac-Maracas	Mi-Maracas	Di-Maracas
71	Ba-SambaWhistleH	Lu-SambaWhistleH	Ac-SambaWhistleH	Mi-SambaWhistleH	Di-SambaWhistleH
72	Ba-SambaWhistleL	Lu-SambaWhistleL	Ac-SambaWhistleL	Mi-SambaWhistleL	Di-SambaWhistleL
73	Ba-Guiro Short	Lu-Guiro Short	Ac-Guiro Short	Mi-Guiro Short	Di-Guiro Short

Bank MSB	123				
Pch#	1				
VOICE-SET	BASIC	LUMINOUS	ACID	MICROCOMPUTER	DIGITAL
Note#	VoiceName	VoiceName	VoiceName	VoiceName	VoiceName
74	Ba-Guiro Long	Lu-Guiro Long	Ac-Guiro Long	Mi-Guiro Long	Di-Guiro Long
75	Ba-Claves	Lu-Claves	Ac-Claves	Mi-Claves	Di-Claves
76	Ba-Wood Block H	Lu-Wood Block H	Ac-Wood Block H	Mi-Wood Block H	Di-Wood Block H
77	Ba-Wood Block L	Lu-Wood Block L	Ac-Wood Block L	Mi-Wood Block L	Di-Wood Block L
78	Ba-Cuica Mute	Lu-Cuica Mute	Ac-Cuica Mute	Mi-Cuica Mute	Di-Cuica Mute
79	Ba-Cuica Open	Lu-Cuica Open	Ac-Cuica Open	Mi-Cuica Open	Di-Cuica Open
80	Ba-Triangle Mute	Lu-Triangle Mute	Ac-Triangle Mute	Mi-Triangle Mute	Di-Triangle Mute
81	Ba-Triangle Open	Lu-Triangle Open	Ac-Triangle Open	Mi-Triangle Open	Di-Triangle Open
82	Ba-Shaker	Lu-Shaker	Ac-Shaker	Mi-Shaker	Di-Shaker
83	Ba-Jingle Bell	Lu-Jingle Bell	Ac-Jingle Bell	Mi-Jingle Bell	Di-Jingle Bell
84	Ba-Bell Tree	Lu-Bell Tree	Ac-Bell Tree	Mi-Bell Tree	Di-Bell Tree