

## 1. TRANSMITTED DATA

## 1-1 CHANNEL MESSAGES [H]:Hex, [D]:Decimal

| Status | Second  | Third   | Description                                      | ENA |
|--------|---------|---------|--|-----|
| [Hex]  | [H] [D] | [H] [D] | (Transmitted by )                                |     |
| 8n     | kk (kk) | vv (vv) | Note Off (Key off)                               | N   |
| 9n     | kk (kk) | vv (vv) | Note On (Key on)                                 | N   |
| Bn     | cc (cc) | vv (vv) | Control Change(cc= 01-5F(95)) (P.C,A.P/S,E.P) *1 | C   |
| Cn     | pp (pp) | -- (--) | Program Change (Program select)                  | P   |

n : MIDI Channel 00(0) <= n <= 0F(15)

kk : note number 24(36)<=kk<=60(96)

vv : Value

P.C: Panel Control

A.P/S: Assignable Pedal/Switch

E.P: Expression Pedal

ENA = N : Enabled if note message is enabled in Global parameter.

C : Enabled if control change is enabled in Global parameter.

P : Enabled if program change is enabled in Global parameter.

\*1 Assignable controller value for MIDI transmit  
Panel controller

| Panel controller | vv [HEX]   |
|------------------|--|
| Drawbar1         | 00,10,20,30,40,50,60,70,7F                           |
| Drawbar2         | 00,10,20,30,40,50,60,70,7F                           |
| Rotary ON        | 00,7F  |
| Rotary FAST      | 00,7F  |
| Rotary STOP      | 00,7F  |
| V/C Select       | "V1":00, "C1":1A, "V2":33, "C2":4C, "V3":65, "C3":7F |
| V/C Upper        | 00,7F  |
| V/C Lower        | 00,7F  |
| Percussion ON    | 00,7F  |
| Percussion Soft  | 00,7F  |
| Percussion Fast  | 00,7F  |

|                      |                             |
|----------------------|-----------------------------|
| Percussion 3rd       | 00,7F                       |
| Upper Drawbar Select | "Preset":00, "1":40, "2":7F |
| Lower Drawbar Select | 00,40,7F                    |
| Expression           | 00-7F                       |

-----+  
DRAWBAR "0":00, "1":10, "2":20, "3":30, "4":40, "5":50, "6":60, "7":70, "8":7F  
ON/OFF "OFF":00,"ON":7F

Pedal assignalbe function

| Function     | vv [HEX] |
|--------------|----------|
| Hold         | 00,7F    |
| Wheel Brake  | 00,7F    |
| AMP Gain     | 00-7F    |
| Reverb Level | 00-7F    |

ON/OFF "OFF":00,"ON":7F

1-2 UNIVERSAL SYSTEM EXCLUSIVE MESSAGES (DEVICE INQUIRY REPLY)

| Byte[H] | Description                          |
|---------|--------------------------------------|
| F0      | Exclusive Status                     |
| 7E      | Non Realtime Message                 |
| 0g      | MIDI Global Channel (DEVICE ID)      |
| 06      | INQUIRY MESSAGE                      |
| 02      | IDENTITY REPLY                       |
| 42      | KORG ID ( MANUFACTURERS ID )         |
| 5B      | CX/BX Series ID ( FAMILY CODE (LSB)) |
| 00      | ( FAMILY CODE (MSB))                 |
| 00      | CX-3 ( MEMBER CODE (LSB))            |
| 00      | ( MEMBER CODE (MSB))                 |
| xx      | ( Minor Ver. (LSB))                  |
| xx      | ( Minor Ver. (MSB))                  |
| xx      | ( Major Ver. (LSB))                  |
| xx      | ( Major Ver. (MSB))                  |
| F7      | END OF EXCLUSIVE                     |

1-3 SYSTEM EXCLUSIVE MESSAGES

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| Function ID<br>[Hex] | Description/Function             | *2   |
|----------------------|----------------------------------|------|
| 40                   | □@PROGRAM PARAMETER DUMP         | R, D |
| 4C                   | □@ALL PROGRAM PARAMETER DUMP     | R, D |
| 50                   | □@ALL DATA (GLOBAL PROGRAM) DUMP | R, D |
| 51                   | □@GLOBAL DUMP                    | R, D |
| 21                   | □@WRITE COMPLETE                 | R    |
| 22                   | □@WRITE ERROR                    | R    |
| 23                   | □@DATA LOAD COMPLETE (ACK)       | E    |
| 24                   | □@DATA LOAD ERROR                | E    |

\*2 : Transmitted when

- R : Request message is received.
- D : Data dump is done by Global function.
- E : Exclusive message is received.

## 2.RECOGNIZED RECEIVE DATA

2-1 CHANNEL MESSAGES [H]:Hex, [D]:Decimal

| Status<br>[Hex] | Second<br>[H] [D] | Third<br>[H] [D] | Description<br>(Used....)                        | ENA  |
|-----------------|-------------------|------------------|--|------|
| 8n              | kk (kk)           | vv (vv)          | Note Off (as Note off)                           | A    |
| 9n              | kk (kk)           | vv (vv)          | Note On (as Note on)                             | A    |
| Bn              | cc (cc)           | vv (vv)          | Control Change (cc= 01-5F(95))                   | *3 C |
| Bn              | 78 (120)          | 00 (00)          | All Sound Off (as All Sound Off)                 | A    |
| Bn              | 79 (121)          | 00 (00)          | Reset All Controllers (as Reset All Controllers) | A    |
| Bn              | 7A (123)          | 00 (00)          | Local Control Off (as Local Control Off)         | A    |
| Bn              | 7A (123)          | 7F (127)         | Local Control On (as Local Control On)           | A    |
| Bn              | 7B (123)          | 00 (00)          | All Note Off (as All Note Off)                   | A    |
| Cn              | pp (pp)           | -- --            | Program Change (for Program change)              | P    |
| En              | bb (bb)           | bb (bb)          | Pitch Bender Change                              | A    |

n : MIDI Channel 0(0) <= n <= F(15)

vv : Value

kk : Note number 24(36) <=kk<=60(96)

ENA = A : Always Enable

C : Enabled if control change is enabled in Global Parameter.

P : Enabled if program change is enabled in Global Parameter.

\*3 Assignable controller value for MIDI received

Panel controller

| Panle Switch         | vv [HEX]   |
|----------------------|--|
| Drawbar1             | 00,01-10,11-20,21-30,31-40,41-50,51-60,61-70,71-7F                       |
| Drawbar2             | 00,01-10,11-20,21-30,31-40,41-50,51-60,61-70,71-7F                       |
| Rotary ON            | 00-3F,40-7F  |
| Rotary FAST          | 00-3F,40-7F  |
| Rotary STOP          | 00-3F,40-7F  |
| V/C Select           | "V1":00-15, "C1":16-2A, "V2":2B-3F<br>"C2":40-54, "V3":55-69, "C3":6A-7F |
| V/C Upper            | 00-3F,40-7F  |
| V/C Lower            | 00-3F,40-7F  |
| Percussion ON        | 00-3F,40-7F  |
| Percussion Soft      | 00-3F,40-7F  |
| Percussion Fast      | 00-3F,40-7F  |
| Percussion 3rd       | 00-3F,40-7F  |
| Upper Drawbar Select | "Preset":00-2B, "1":2C-57, "2":58-7F                                     |
| Lower Drawbar Select | "Preset":00-2B, "1":2C-57, "2":58-7F                                     |
| Expression           | 00-7F  |

Drawbar "0":00,"1":01-10,"2":11-20,"3":21-30,"4":31-40,  
"5":41-50,"6":51-60,"7":61-70,"8":71-7F  
ON/OFF "OFF":00-3F,"ON":40-7F

Pedal assignalbe function

| Function     | vv [HEX]    |
|--------------|-------------|
| Hold         | 00-3F,40-7F |
| Wheel Brake  | 00-3F,40-7F |
| AMP Gain     | 00-7F       |
| Reverb Level | 00-7F       |

ON/OFF "OFF":00-3F "ON":40-7F

2-2 UNIVERSAL SYSTEM EXCLUSIVE MESSAGE ( NON REALTIME )

DEVICE INQUIRY MESSAGE REQUEST

+-----+

| Byte[H] | Description                     |
|---------|---------------------------------|
| F0      | Exclusive Status                |
| 7E      | Non Realtime Message            |
| nn      | MIDI Global Channel (Device ID) |
| 06      | General Information             |
| 01      | Identity Request                |
| F7      | EOX                             |

nn : MIDI Channel 0 <=nn<= 0F : Receive if Global Channel  
nn = 7F : receive any Channel

### 2-3 UNIVERSAL SYSTEM EXCLUSIVE MESSAGES ( REALTIME )

#### MASTER VOLUME

| Byte[H] | Description                |
|---------|----------------------------|
| F0      | Exclusive Status           |
| 7F      | Realtime Message           |
| 0g      | DEVICE ID (Global Channel) |
| 04      | Device Control             |
| 01      | Master Volume              |
| vv      | Value (LSB)                |
| vv      | Value (MSB)                |
| F7      | EOX                        |

### 2-4 SYSTEM EXCLUSIVE MESSAGES

| Function ID | Description/Function                   | No. |
|-------------|--|-----|
| [Hex]       |  |     |
| 0E          | GLOBAL DUMP REQUEST                    | 51  |
| □@ 0F       | ALL DATA (GLOBAL PROGRAM) DUMP REQUEST | 50  |
| □@ 11       | PROGRAM WRITE REQUEST                  | 21  |
| 10          | PROGRAM PARAMETER DUMP REQUEST         | 40  |
| □@ 1C       | ALL PROGRAM PARAMETER DUMP REQUEST     | 4C  |
| 40          | □@PROGRAM PARAMETER DUMP               | 23  |
| 4C          | □@ALL PROGRAM PARAMETER DUMP           | 23  |

|    |                                 |    |
|----|---------------------------------|----|
| 50 | @ALL DATA (GLOBAL PROGRAM) DUMP | 23 |
| 51 | @GLOBAL DUMP                    | 23 |

+-----+

Recognized when Global MIDI Rx SysEx Parameter is Enabled  
 No.:MIDI Out function number (Transmitted when the message has been received.)

### 3.MIDI EXCLUSIVE FORMAT (R:Receive, T:Transmit)

Program Parameter Dump Request R

| Byte        | Description                    |
|-------------|--------------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER               |
| 10          | Program Parameter Dump Request |
| F7          | EOX                            |

After receiving this message,transmit Function 40(Program Parameter Dump) or 24(Data Load Error).

Program Parameter Dump R/T

| Byte        | Description            |
|-------------|------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER       |
| 40          | Program Parameter Dump |
| dd          | data *4                |
| :           | :                      |
| F7          | EOX                    |

After receiving this message and data,transmit Function 23(Data Load Complete) or 24(Data Load Error).

All Program Parameter Dump Request R

| Byte        | Description                        |
|-------------|------------------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER                   |
| 1C          | All Program Parameter Dump Request |
| 00          |                                    |
| F7          | EOX                                |

After receiving this message,transmit Function 4C(All Program Parameter Dump) or 24(Data Load Error).

All Program Parameter Dump R

| Byte        | Description                |
|-------------|----------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER           |
| 4C          | All Program Parameter Dump |
| 00          |                            |
| dd          | data *4                    |
| :           | :                          |
| F7          | EOX                        |

After receiving this message and data, transmit Function 23(Data Load Complete) or 24(Data Load Error).

Global Dump Request R

| Byte        | Description              |
|-------------|--------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER         |
| 0E          | Global Dump Request @@@@ |
| 00          |                          |
| F7          | EOX                      |

After receiving this message, transmit Function 51(Global Dump) or 24(Data Load Error).

Global Dump R/T

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |
| 51          | Global Dump      |
| 00          |                  |
| dd          | data *4          |
| :           | :                |
| F7          | EOX              |

After receiving this message, transmit Function 23(Data Load Complete) or 24(Data Load Error).

All Data(Global+Program)Dump Request R

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |

```

|0000| 0F          |All Data(Global+Program)Dump Request|
|0000| 00          |                                     |
|0000| F7          | EOX                                 |
|00  +-----+-----+

```

After receiving this message, transmit Function 50 (All Data Dump) or 24 (Data Load Error).

```

All Data(Global Program)Dump                                R/T
|0000+-----+-----+
|0000|  Byte      | Description                            |
|0000+-----+-----+
|0000| F0 42 3g 5B | EXCLUSIVE HEADER                       |
|0000| 50         | All Data(Global Program)Dump          |
|0000| 00         |                                         |
|0000| dd         | data *4                                |
|0000|00:        | :                                       |
|0000| F7         | EOX                                    |
|0000+-----+-----+

```

After receiving this message, transmit Function 23 (Data Load Complete) or 24 (Data Load Error).

```

Program Write Request                                       R
|0000+-----+-----+
|0000|  Byte      | Description                            |
|0000+-----+-----+
|0000| F0 42 3g 5B | EXCLUSIVE HEADER                       |
|0000| 00 11      | Program Write Request                  |
|0000| 00         |                                         |
|0000| pp         | PROGRAM No.                           |
|0000| F7         | EOX                                    |
|0000+-----+-----+

```

After receiving this message, transmit Function 21 (Write Complete) or 22 (Write Error).

```

Write Complete                                             T
|0000+-----+-----+
|0000|  Byte      | Description                            |
|0000+-----+-----+
|0000| F0 42 3g 5B | EXCLUSIVE HEADER                       |
|0000| 21         | Write Complete                         |
|0000| F7         | EOX                                    |
|0000+-----+-----+

```

Transmit this message when writing via "Program Write Request" is completed.

```

Write Error                                               T

```



| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |
| 22          | Write Error      |
| F7          | EOX              |

Transmit this message when writing via "Program Write Request" is not completed.

Data Load Complete T

| Byte        | Description        |
|-------------|--------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER   |
| 23          | Data Load Complete |
| F7          | EOX                |

Transmit this message when data loading is completed.

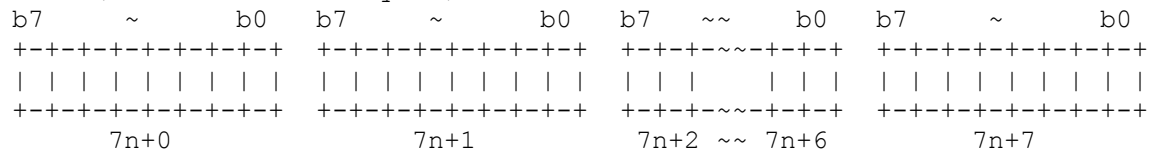
Data Load Error T

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |
| 24          | DATA LOAD ERROR  |
| F7          | EOX              |

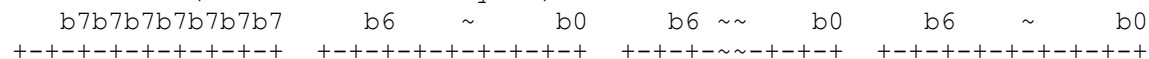
Transmit this message when data loading is not completed.

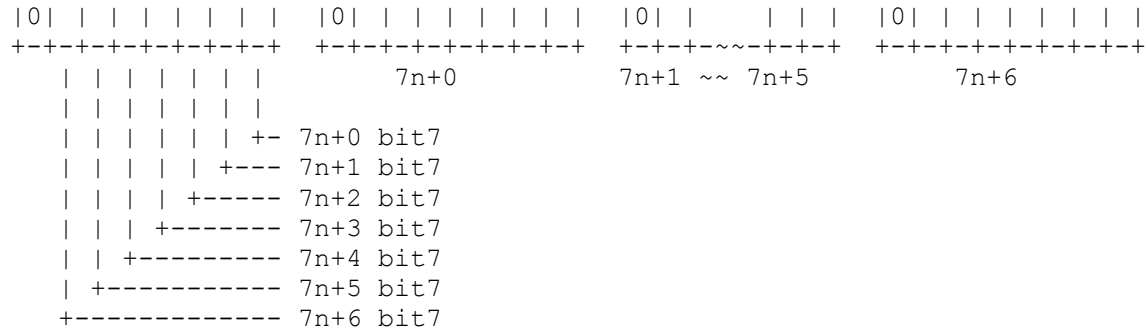
#### \*4 Dump data 8bit -> 7bit conversion

DATA ( 1set = 8bit x 7Byte )



MIDI DATA ( 1set = 7bit x 8Byte )





KORG BX-3 MIDI Implementation (2002. 3. 6 ver.1)

### 1. TRANSMITTED DATA

1-1 CHANNEL MESSAGES [H]:Hex, [D]:Decimal

| Status | Second  | Third   | Description                                      | ENA |
|--------|---------|---------|--|-----|
| [Hex]  | [H] [D] | [H] [D] | (Transmitted by )                                |     |
| 8n     | kk (kk) | vv (vv) | Note Off (Key off)                               | N   |
| 9n     | kk (kk) | vv (vv) | Note On (Key on)                                 | N   |
| Bn     | 01 (01) | vv (vv) | Modulation (Modulation wheel)                    | C   |
| Bn     | cc (cc) | vv (vv) | Control Change(cc= 01-5F(95)) (P.C,A.P/S,E.P) *1 | C   |
| Cn     | pp (pp) | -- (--) | Program Change (Program select)                  | P   |
| En     | bb (bb) | bb (bb) | Pitch Bender Change (Pitch Bender)               | A   |

n : MIDI Channel 00(0) <= n <= 0F(15)  
kk : note number 24(36) <=kk<=60(96)  
vv : Value

P.C: Panel Control  
A.P/S: Assignable Pedal/Switch  
E.P: Expression Pedal

ENA = A : Always enabled  
N : Enabled if note message is enabled in Global parameter.  
C : Enabled if control change is enabled in Global parameter.  
P : Enabled if program change is enabled in Global parameter.

\*1 Assignable controller value for MIDI transmit  
Panel controller

| Panel controller     | vv [HEX]   |
|----------------------|--|
| Drawbar1             | 00,10,20,30,40,50,60,70,7F   |
| Drawbar2             | 00,10,20,30,40,50,60,70,7F   |
| Rotary ON            | 00,7F  |
| Rotary FAST          | 00,7F  |
| Rotary STOP          | 00,7F  |
| V/C Select           | "V1":00, "C1":1A, "V2":33, "C2":4C, "V3":65, "C3":7F                   |
| V/C Upper            | 00,7F  |
| V/C Lower            | 00,7F  |
| Percussion ON        | 00,7F  |
| Percussion Soft      | 00,7F  |
| Percussion Fast      | 00,7F  |
| Percussion 3rd       | 00,7F  |
| Upper Drawbar Select | "Preset":00, "1":40, "2":7F  |
| Lower Drawbar Select | 00,40,7F   |
| Expression           | 00-7F  |
| -----                |  |
| DRAWBAR              | "0":00, "1":10, "2":20, "3":30, "4":40, "5":50, "6":60, "7":70, "8":7F |
| ON/OFF               | "OFF":00,"ON":7F   |

Pedal assignalbe function

| Function     | vv [HEX]         |
|--------------|------------------|
| Hold         | 00,7F            |
| Wheel Brake  | 00,7F            |
| AMP Gain     | 00-7F            |
| Reverb Level | 00-7F            |
| -----        |                  |
| ON/OFF       | "OFF":00,"ON":7F |

1-2 UNIVERSAL SYSTEM EXCLUSIVE MESSAGES (DEVICE INQUIRY REPLY)

| Byte[H] | Description          |
|---------|----------------------|
| F0      | Exclusive Status     |
| 7E      | Non Realtime Message |

|    |                     |                      |
|----|---------------------|----------------------|
| 0g | MIDI Global Channel | (DEVICE ID)          |
| 06 | INQUIRY MESSAGE     |                      |
| 02 | IDENTITY REPLY      |                      |
| 42 | KORG ID             | ( MANUFACTURERS ID ) |
| 5B | CX/BX Series ID     | ( FAMILY CODE (LSB)) |
| 00 |                     | ( FAMILY CODE (MSB)) |
| 01 | BX-3                | ( MEMBER CODE (LSB)) |
| 00 |                     | ( MEMBER CODE (MSB)) |
| xx |                     | ( Minor Ver. (LSB))  |
| xx |                     | ( Minor Ver. (MSB))  |
| xx |                     | ( Major Ver. (LSB))  |
| xx |                     | ( Major Ver. (MSB))  |
| F7 | END OF EXCLUSIVE    |                      |

1-3 SYSTEM EXCLUSIVE MESSAGES

| Function ID<br>[Hex] | Description/Function             | *2   |
|----------------------|----------------------------------|------|
| 40                   | □@PROGRAM PARAMETER DUMP         | R, D |
| 4C                   | □@ALL PROGRAM PARAMETER DUMP     | R, D |
| 50                   | □@ALL DATA (GLOBAL PROGRAM) DUMP | R, D |
| 51                   | □@GLOBAL DUMP                    | R, D |
| 21                   | □@WRITE COMPLETE                 | R    |
| 22                   | □@WRITE ERROR                    | R    |
| 23                   | □@DATA LOAD COMPLETE (ACK)       | E    |
| 24                   | □@DATA LOAD ERROR                | E    |

\*2 : Transmitted when

- R : Request message is received.
- D : Data dump is done by Global function.
- E : Exclusive message is received.

2.RECOGNIZED RECEIVE DATA

2-1 CHANNEL MESSAGES [H]:Hex, [D]:Decimal

| Status<br>[Hex] | Second<br>[H] [D] | Third<br>[H] [D] | Description<br>(Used....) | ENA |
|-----------------|-------------------|------------------|---------------------------|-----|
|                 |                   |                  |                           |     |



"5":41-50,"6":51-60,"7":61-70,"8":71-7F  
 ON/OFF "OFF":00-3F,"ON":40-7F

Pedal assignalbe function

| Function     | vv [HEX]    |
|--------------|-------------|
| Hold         | 00-3F,40-7F |
| Wheel Brake  | 00-3F,40-7F |
| AMP Gain     | 00-7F       |
| Reverb Level | 00-7F       |

ON/OFF "OFF":00-3F "ON":40-7F

2-2 UNIVERSAL SYSTEM EXCLUSIVE MESSAGE ( NON REALTIME )

DEVICE INQUIRY MESSAGE REQUEST

| Byte[H] | Description                     |
|---------|---------------------------------|
| F0      | Exclusive Status                |
| 7E      | Non Realtime Message            |
| nn      | MIDI Global Channel (Device ID) |
| 06      | General Information             |
| 01      | Identity Request                |
| F7      | EOX                             |

nn : MIDI Channel 0 <=nn<= 0F : Receive if Global Channel  
 nn = 7F : receive any Channel

2-3 UNIVERSAL SYSTEM EXCLUSIVE MESSAGES ( REALTIME )

MASTER VOLUME

| Byte[H] | Description                |
|---------|----------------------------|
| F0      | Exclusive Status           |
| 7F      | Realtime Message           |
| 0g      | DEVICE ID (Global Channel) |
| 04      | Device Control             |
| 01      | Master Volume              |
| vv      | Value (LSB)                |

|    |             |
|----|-------------|
| vv | Value (MSB) |
| F7 | EOX         |

## 2-4 SYSTEM EXCLUSIVE MESSAGES

| Function ID<br>[Hex] | Description/Function                   | No. |
|----------------------|--|-----|
| 0E                   | GLOBAL DUMP REQUEST                    | 51  |
| 0F                   | ALL DATA (GLOBAL PROGRAM) DUMP REQUEST | 50  |
| 11                   | PROGRAM WRITE REQUEST                  | 21  |
| 10                   | PROGRAM PARAMETER DUMP REQUEST         | 40  |
| 1C                   | ALL PROGRAM PARAMETER DUMP REQUEST     | 4C  |
| 40                   | PROGRAM PARAMETER DUMP                 | 23  |
| 4C                   | ALL PROGRAM PARAMETER DUMP             | 23  |
| 50                   | ALL DATA (GLOBAL PROGRAM) DUMP         | 23  |
| 51                   | GLOBAL DUMP                            | 23  |

Recognized when Global MIDI Rx SysEx Parameter is Enabled  
 No.:MIDI Out function number (Transmitted when the message has been received.)

## 3.MIDI EXCLUSIVE FORMAT (R:Receive, T:Transmit)

Program Parameter Dump Request R

| Byte        | Description                    |
|-------------|--------------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER               |
| 10          | Program Parameter Dump Request |
| F7          | EOX                            |

After receiving this message,transmit Function 40(Program Parameter Dump) or 24(Data Load Error).

Program Parameter Dump R/T

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |

|                           |    |  |                        |  |
|---------------------------|----|--|------------------------|--|
| □@□@                      | 40 |  | Program Parameter Dump |  |
| □@□@                      | dd |  | data *4                |  |
| □@□@                      | :  |  | :                      |  |
| □@□@                      | F7 |  | EOX                    |  |
| +-----+-----+-----+-----+ |    |  |                        |  |

After receiving this message and data, transmit Function 23(Data Load Complete) or 24(Data Load Error).

All Program Parameter Dump Request R

|      |                           |  |                                    |  |
|------|---------------------------|--|------------------------------------|--|
| □@□@ | +-----+-----+-----+-----+ |  |                                    |  |
| □@□@ | Byte                      |  | Description                        |  |
| □@□@ | +-----+-----+-----+-----+ |  |                                    |  |
| □@□@ | F0 42 3g 5B               |  | EXCLUSIVE HEADER                   |  |
| □@□@ | 1C                        |  | All Program Parameter Dump Request |  |
| □@□@ | 00                        |  |                                    |  |
| □@□@ | F7                        |  | EOX                                |  |
| □@□@ | +-----+-----+-----+-----+ |  |                                    |  |

After receiving this message, transmit Function 4C(All Program Parameter Dump) or 24(Data Load Error).

All Program Parameter Dump R

|      |                           |  |                            |  |
|------|---------------------------|--|----------------------------|--|
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |
| □@□@ | Byte                      |  | Description                |  |
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |
| □@□@ | F0 42 3g 5B               |  | EXCLUSIVE HEADER           |  |
| □@□@ | 4C                        |  | All Program Parameter Dump |  |
| □@□@ | 00                        |  |                            |  |
| □@□@ | dd                        |  | data *4                    |  |
| □@□@ | :                         |  | :                          |  |
| □@□@ | F7                        |  | EOX                        |  |
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |

After receiving this message and data, transmit Function 23(Data Load Complete) or 24(Data Load Error).

Global Dump Request R

|      |                           |  |                            |  |
|------|---------------------------|--|----------------------------|--|
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |
| □@□@ | Byte                      |  | Description                |  |
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |
| □@□@ | F0 42 3g 5B               |  | EXCLUSIVE HEADER           |  |
| □@□@ | 0E                        |  | Global Dump Request □@□@□@ |  |
|      | 00                        |  |                            |  |
| □@□@ | F7                        |  | EOX                        |  |
| □@□@ | +-----+-----+-----+-----+ |  |                            |  |

After receiving this message, transmit Function 51(Global Dump) or 24(Data Load Error).



Global Dump R/T

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |
| 51          | Global Dump      |
| 00          |                  |
| dd          | data *4          |
| :           | :                |
| F7          | EOX              |

After receiving this message, transmit Function 23(Data Load Complete) or 24(Data Load Error).

All Data(Global+Program)Dump Request R

| Byte        | Description                          |
|-------------|--------------------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER                     |
| 0F          | All Data(Global+Program)Dump Request |
| 00          |                                      |
| F7          | EOX                                  |

After receiving this message, transmit Function 50(All Data Dump) or 24(Data Load Error).

All Data(Global Program)Dump R/T

| Byte        | Description                  |
|-------------|------------------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER             |
| 50          | All Data(Global Program)Dump |
| 00          |                              |
| dd          | data *4                      |
| ␣:          | :                            |
| F7          | EOX                          |

After receiving this message, transmit Function 23(Data Load Complete) or 24(Data Load Error).

Program Write Request R

| Byte        | Description      |
|-------------|------------------|
| F0 42 3g 5B | EXCLUSIVE HEADER |

|    |    |                       |
|----|----|-----------------------|
| 00 | 11 | Program Write Request |
| 00 |    |                       |
| 00 | pp | PROGRAM No.           |
| 00 | F7 | EOX                   |

After receiving this message, transmit Function 21(Write Complete) or 22(Write Error).

Write Complete T

|    |             |                  |
|----|-------------|------------------|
| 00 | Byte        | Description      |
| 00 | F0 42 3g 5B | EXCLUSIVE HEADER |
| 00 | 21          | Write Complete   |
| 00 | F7          | EOX              |

Transmit this message when writing via "Program Write Request" is completed.

Write Error T

|    |             |                  |
|----|-------------|------------------|
| 00 | Byte        | Description      |
| 00 | F0 42 3g 5B | EXCLUSIVE HEADER |
| 00 | 22          | Write Error      |
| 00 | F7          | EOX              |

Transmit this message when writing via "Program Write Request" is not completed.

Data Load Complete T

|    |             |                    |
|----|-------------|--------------------|
| 00 | Byte        | Description        |
| 00 | F0 42 3g 5B | EXCLUSIVE HEADER   |
| 00 | 23          | Data Load Complete |
| 00 | F7          | EOX                |

Transmit this message when data loading is completed.

Data Load Error T

|    |             |                  |
|----|-------------|------------------|
| 00 | Byte        | Description      |
| 00 | F0 42 3g 5B | EXCLUSIVE HEADER |



|         |                         |                      |    |  |  |  |
|---------|-------------------------|----------------------|----|--|--|--|
| 00      | PROGRAM NAME (Head)     | 20 - 7E : ' ' - '~'  |    |  |  |  |
| :       | :                       |                      |    |  |  |  |
| :       | :                       |                      |    |  |  |  |
| 11      | PROGRAM NAME (Tail)     |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
|         | BASIC                   |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 12      | EX MODE FLAG            | 00: Normal 01: EX    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 13      | OUTPUT LEVEL            | 00 - 7F : 00 - 127   |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 14      | WHEEL TYPE              | 00:Vintage 01:Clean  |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 15      | OVERTONE LEVEL          | 00 - 63 : 00 - 99    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 16      | LEAKAGE LEVEL           | 00 - 63 : 00 - 99    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 17      | ON CLICK LEVEL          | 00 - 63 : 00 - 99    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 18      | OFF CLICK LEVEL         | 00 - 63 : 00 - 99    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
|         | DRAWBAR                 |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 19      | UPPER DRAWBAR 1         |                      | *1 |  |  |  |
| :       | :                       |                      |    |  |  |  |
| :       | :                       |                      |    |  |  |  |
| 27      | UPPER DRAWBAR 9         |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 28      | LOWER DRAWBAR 1         |                      | *1 |  |  |  |
| :       | :                       |                      |    |  |  |  |
| :       | :                       |                      |    |  |  |  |
| 36      | LOWER DRAWBAR 9         |                      |    |  |  |  |
|         |                         |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 37      | DB PRESET PERCUSSION    | 00:DISABLE 01:ENABLE |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 38      | EX DRAWBAR TYPE         | 00 - 03 : 1 - 4      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
|         | PERCUSSION              |                      |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |
| 39      | PERCUSSION NORMAL LEVEL | 00 - 63 : 00 - 99    |    |  |  |  |
| +-----+ |                         |                      |    |  |  |  |

|        |                        |         |             |  |
|--------|------------------------|---------|-------------|--|
| 40     | PERCUSSION SOFT OFFSET | 9D - 00 | : -99 - 00  |  |
| 41     | NORMAL LEVEL DB ATT    | 00 - 63 | : 00 - 99   |  |
| 42     | PERCUSSION FAST DECAY  | 00 - 63 | : 00 - 99   |  |
| 43     | PERCUSSION SLOW OFFSET | 00 - 63 | : 00 - 99   |  |
| AMP    |                        |         |             |  |
| 44     | AMP TYPE               | 00      | : Type 1    |  |
|        |                        | 01      | : Type 2    |  |
|        |                        | 02      | : Pre Amp   |  |
| 45     | AMP GAIN               | 00 - 63 | : 00 - 99   |  |
| 46     | TONE TREBLE            | 00 - 14 | : -10 - +10 |  |
| 47     | TONE MIDDLE            | 00 - 14 | : -10 - +10 |  |
| 48     | TONE BASS              | 00 - 14 | : -10 - +10 |  |
| REVERB |                        |         |             |  |
| 49     | REVERB TYPE            |         | *2          |  |
| 50     | REVERB TIME            |         | *3          |  |
| 51     | REVERB LEVEL           | 00 - 63 | : 00 - 99   |  |
| 52     | REVERB ROUTING         | 00      | : Rot->Rev  |  |
|        |                        | 01      | : Rev->Rot  |  |
| ROTARY |                        |         |             |  |
| 53     | HORN ROTOR BALANCE     | 00 - 64 | : 00 - 100  |  |
| 54     | HORN SLOW SPEED        | 00 - 63 | : 00 - 99   |  |
| 55     | HORN FAST SPEED        | 00 - 63 | : 00 - 99   |  |
| 56     | ROTOR SLOW SPEED       | 00 - 63 | : 00 - 99   |  |

|    |                        |         |   |         |  |    |   |   |
|----|------------------------|---------|---|---------|--|----|---|---|
| 57 | ROTOR FAST SPEED       | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 58 | HORN UP TRANSITION     | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 59 | HORN DOWN TRANSITION   | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 60 | HORN STOP TRANSITION   | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 61 | HORN START TRANSITION  | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 62 | ROTOR UP TRANSITION    | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 63 | ROTOR DOWN TRANSITION  | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 64 | ROTOR STOP TRANSITION  | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 65 | ROTOR START TRANSITION | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 66 | HORN MIC DISTANCE      | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 67 | HORN MIC SPREAD        | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 68 | ROTOR MIC DISTANCE     | 00 - 63 | : | 00 - 99 |  |    |   |   |
| 69 | ROTOR MIC SPREAD       | 00 - 63 | : | 00 - 99 |  |    |   |   |
|    | SPLIT                  |         |   |         |  |    |   |   |
| 70 | SPLIT POINT            | 00 - 3D | : | 00 - 61 |  |    | X |   |
| 71 | SPLIT UPPER OCTAVE     | FD - 00 | : | -2 - 0  |  |    | X |   |
| 72 | SPLIT LOWER OCTAVE     | 00 - 02 | : | 0 - 2   |  |    | X |   |
|    | CONTROLLER             |         |   |         |  |    |   |   |
| 73 | HOLD UPPER CONTROL     |         |   |         |  | *4 |   |   |
| 74 | HOLD LOWER CONTROL     |         |   |         |  | *4 |   |   |
| 75 | SPLIT SWITCH CONTROL   |         |   |         |  | *4 |   | X |

|                 |                        |           |   |         |  |  |   |  |
|-----------------|------------------------|-----------|---|---------|--|--|---|--|
| 76              | WHEEL BRAKE CONTROL    |           |   | *4      |  |  |   |  |
| 77              | ROTARY FAST SW CONTROL |           |   | *4      |  |  |   |  |
| 78              | ROTARY STOP SW CONTROL |           |   | *4      |  |  |   |  |
| 79              | AMP GAIN CONTROL       |           |   | *4      |  |  |   |  |
| 80              | AMP GAIN MINIMUM       | 00 - 63   | : | 00 - 99 |  |  |   |  |
| 81              | AMP GAIN MAXIMUM       | 00 - 63   | : | 00 - 99 |  |  |   |  |
| 82              | REVERB MIX CONTROL     |           |   | *4      |  |  |   |  |
| 83              | REVERB MIX MINIMUM     | 00 - 63   | : | 00 - 99 |  |  |   |  |
| 84              | REVERB MIX MAXIMUM     | 00 - 63   | : | 00 - 99 |  |  |   |  |
| PANEL PARAMETER |                        |           |   |         |  |  |   |  |
| 85              | PERCUSSION "ON"        | 00:OFF    |   | 01:ON   |  |  |   |  |
| 86              | PERCUSSION "SOFT"      | 00:NORMAL |   | 01:SOFT |  |  |   |  |
| 87              | PERCUSSION "FAST"      | 00:SLOW   |   | 01:FAST |  |  |   |  |
| 88              | PERCUSSION "3rd"       | 00:2nd    |   | 01:3rd  |  |  |   |  |
| 89              | V/C SELECT             |           |   | *5      |  |  |   |  |
| 90              | V/C "UPPER"            | 00:OFF    |   | 01:ON   |  |  |   |  |
| 91              | V/C "LOWER"            | 00:OFF    |   | 01:ON   |  |  |   |  |
| 92              | SPLIT SWITCH           | 00:OFF    |   | 01:ON   |  |  | X |  |
| 93              | ROTARY "ON"            | 00:OFF    |   | 01:ON   |  |  |   |  |
| 94              | ROTARY "STOP"          | 00:OFF    |   | 01:ON   |  |  |   |  |
| 95              | ROTARY "FAST"          | 00:SLOW   |   | 01:FAST |  |  |   |  |

|     |                         |           |   |           |   |   |   |
|-----|-------------------------|-----------|---|-----------|---|---|---|
| 96  | RESERVED                |           |   | /         | / | / |   |
| :   |                         |           |   |           |   |   |   |
| 99  |                         |           |   |           |   |   |   |
|     | EXTENSION               |           |   |           |   |   |   |
| 100 | MODULATION WHEEL ASSIGN |           |   | *6        | X |   | X |
| 101 | MODULATION WHEEL RANGE  | 9D - 63   | : | -99 - +99 | X |   | X |
| 102 | EX LOWER DRAWBAR 1      |           |   | *1        | X |   |   |
| 103 | EX LOWER DRAWBAR 2      |           |   | *1        | X |   |   |
| 104 | EX LOWER DRAWBAR 3      |           |   | *1        | X |   |   |
| 105 | NOISE LEVEL             | 00 - 63   | : | 00 - 99   | X |   |   |
| 106 | DRAWBAR LEVEL CURVE     | 00:BRIGHT |   | 01:MELLOW | X |   |   |
| 107 | ROTARY FAST PEDAL MODE  | 00:ALTER  |   | 01:MOMENT | X |   |   |
| 108 | ROTARY STOP PEDAL MODE  | 00:ALTER  |   | 01:MOMENT | X |   |   |
| 109 | WHEEL BRAKE PEDAL MODE  | 00:ALTER  |   | 01:MOMENT | X |   |   |
| 110 | RESERVED                |           |   | /         | / | / |   |
| :   |                         |           |   |           |   |   |   |
| :   |                         |           |   |           |   |   |   |
| 125 |                         |           |   |           |   |   |   |
| 126 | SPEAKER SIMULATOR       | 00:ON     |   | 01:OFF    | X |   |   |
| 127 | RESERVED                |           |   | /         | / | / |   |

CX-3/BX-3 GLOBAL PARAMETER

CX = CX-3



BX = BX-3  
 CXV2 = CX-3 version2  
 "X" : unavailable  
 "/" : reserved

| No.          | PARAMETERS             | DATA (Hex) : VALUE | CX | BX | CXV2 |
|--------------|------------------------|--------------------|----|----|------|
| BASIC        |                        |                    |    |    |      |
| 00           | MASTER TUNE            |                    |    |    |      |
| 01           | TRANSPOSE              |                    |    |    |      |
| 02           | EXPRESSION MIN LEVEL   | 00 - 1E : 00 - 30  |    |    |      |
| 03           | EXPRESSION CONTROL     | *7                 |    |    |      |
| 04           | PROGRAM UP CONTROL     | *4                 |    |    |      |
| 05           | PROGRAM DOWN CONTROL   | *4                 |    |    |      |
| 06           | PEDAL1 SWITCH POLARITY | 00:- 01:+          |    |    |      |
| 07           | PEDAL2 SWITCH POLARITY | 00:- 01:+          |    |    |      |
| 08           | PROGRAM CHANGE MODE    | 00:ALL 01:INT.     |    |    |      |
| MIDI CHANNEL |                        |                    |    |    |      |
| 09           | MIDI GLOBAL CHANNEL    | 00 - 0F : 1 - 16   |    |    |      |
| 10           | MIDI UPPER RX CHANNEL  | 00 - 0F : 1 - 16   |    |    |      |
| 11           | MIDI UPPER TX CHANNEL  | 00 - 10 : 1-16,OFF |    |    |      |
| 12           | MIDI UPPER 2nd CHANNEL | 00 - 10 : 1-16,OFF |    |    |      |
| 13           | MIDI LOWER RX CHANNEL  | 00 - 0F : 1 - 16   |    |    |      |
| 14           | MIDI LOWER TX CHANNEL  | 00 - 10 : 1-16,OFF |    |    |      |
| 15           | MIDI LOWER 2nd CHANNEL | 00 - 10 : 1-16,OFF |    |    |      |

| MIDI PARAMETERS     |                          |           |            |         |  |  |
|---------------------|--------------------------|-----------|------------|---------|--|--|
| 16                  | MIDI FIXED VELOCITY      | 01 - 7F   | :          | 1 - 127 |  |  |
| 17                  | PITCH BENDER RANGE       | F9 - 07   | :          | -7 - +7 |  |  |
| 18                  | MIDI RX PROGRAM CHANGE   | 00:ENABLE | 01:DISABLE |         |  |  |
| 19                  | MIDI RX SYSTEM EXCLUSIVE | 00:ENABLE | 01:DISABLE |         |  |  |
| 20                  | MIDI RX CONTROL CHANGE   | 00:ENABLE | 01:DISABLE |         |  |  |
| 21                  | MIDI TX CONTROL CHANGE   | 00:ENABLE | 01:DISABLE |         |  |  |
| 22                  | LOCAL CONTROL            | 00:ON     | 01:OFF     |         |  |  |
| MIDI CONTROL NUMBER |                          |           |            |         |  |  |
| 23                  | CC# UPPER DB SELECT      |           |            | *8      |  |  |
| 24                  | CC# LOWER DB SELECT      |           |            | *8      |  |  |
| 25                  | CC# DRAWBAR1 - 1         |           |            | *8      |  |  |
| 26                  | CC# DRAWBAR1 - 2         |           |            | *8      |  |  |
| 27                  | CC# DRAWBAR1 - 3         |           |            | *8      |  |  |
| 28                  | CC# DRAWBAR1 - 4         |           |            | *8      |  |  |
| 29                  | CC# DRAWBAR1 - 5         |           |            | *8      |  |  |
| 30                  | CC# DRAWBAR1 - 6         |           |            | *8      |  |  |
| 31                  | CC# DRAWBAR1 - 7         |           |            | *8      |  |  |
| 32                  | CC# DRAWBAR1 - 8         |           |            | *8      |  |  |
| 33                  | CC# DRAWBAR1 - 9         |           |            | *8      |  |  |
| 34                  | CC# DRAWBAR2 - 1         |           |            | *8      |  |  |

|    |                       |    |  |  |  |  |
|----|-----------------------|----|--|--|--|--|
| 35 | CC# DRAWBAR2 - 2      | *8 |  |  |  |  |
| 36 | CC# DRAWBAR2 - 3      | *8 |  |  |  |  |
| 37 | CC# DRAWBAR2 - 4      | *8 |  |  |  |  |
| 38 | CC# DRAWBAR2 - 5      | *8 |  |  |  |  |
| 39 | CC# DRAWBAR2 - 6      | *8 |  |  |  |  |
| 40 | CC# DRAWBAR2 - 7      | *8 |  |  |  |  |
| 41 | CC# DRAWBAR2 - 8      | *8 |  |  |  |  |
| 42 | CC# DRAWBAR2 - 9      | *8 |  |  |  |  |
| 43 | CC# EXPRESSION        | *8 |  |  |  |  |
| 44 | CC# ROTARY "ON"       | *8 |  |  |  |  |
| 45 | CC# ROTARY "FAST"     | *8 |  |  |  |  |
| 46 | CC# ROTARY "STOP"     | *8 |  |  |  |  |
| 47 | CC# V/C SELECT        | *8 |  |  |  |  |
| 48 | CC# V/C "UPPER"       | *8 |  |  |  |  |
| 49 | CC# V/C "LOWER"       | *8 |  |  |  |  |
| 50 | CC# PERCUSSION "ON"   | *8 |  |  |  |  |
| 51 | CC# PERCUSSION "SOFT" | *8 |  |  |  |  |
| 52 | CC# PERCUSSION "FAST" | *8 |  |  |  |  |
| 53 | CC# PERCUSSION "3rd"  | *8 |  |  |  |  |
| 54 | CC# HOLD              | *8 |  |  |  |  |
| 55 | CC# WHEEL BRAKE       | *8 |  |  |  |  |

|     |                        |          |         |         |   |   |   |
|-----|------------------------|----------|---------|---------|---|---|---|
| 56  | CC# AMP GAIN           |          | *8      |         |   |   |   |
| 57  | CC# REVERB LEVEL       |          | *8      |         |   |   |   |
|     | DEFAULT                |          |         |         |   |   |   |
| 58  | DEFAULT DRAWBAR SELECT |          |         |         |   |   |   |
| 59  | PROGRAM MAPPER (A-1)   | 00 - 7F  | :       | 0 - 127 |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 122 | PROGRAM MAPPER (H-8)   |          |         |         |   |   |   |
| 123 | PROGRAM MAPPER (EA-1)  | 00 - 7F  | :       | 0 - 127 |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 186 | PROGRAM MAPPER (EH-8)  |          |         |         |   |   |   |
| 187 | EX DRAWBAR TYPE 1 - 1  |          | *9      |         |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 190 | EX DRAWBAR TYPE 1 - 4  |          |         |         |   |   |   |
| 191 | EX DRAWBAR TYPE 2 - 1  |          | *9      |         |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 194 | EX DRAWBAR TYPE 2 - 4  |          |         |         |   |   |   |
| 195 | EX DRAWBAR TYPE 3 - 1  |          | *9      |         |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 198 | EX DRAWBAR TYPE 3 - 4  |          |         |         |   |   |   |
| 199 | EX DRAWBAR TYPE 4 - 1  |          | *9      |         |   |   |   |
| :   | :                      |          |         |         |   |   |   |
| 202 | EX DRAWBAR TYPE 4 - 4  |          |         |         |   |   |   |
| 203 | MERGE LOWER MIDI MSG   | 00 : OFF | 01 : ON |         | X |   |   |
| 204 | RESERVED               |          |         | /       | / | / | / |
| 205 |                        |          |         |         |   |   |   |
| 206 |                        |          |         |         |   |   |   |
| 207 | EXPRESSION PEDAL TYPE  |          |         |         |   |   |   |
|     | EXTENSION              |          |         |         |   |   |   |

|     |                        |                      |   |   |   |
|-----|------------------------|----------------------|---|---|---|
| 208 | KEYBOARD TRIGGER MODE  | 00:SHALLOW 01:DEEP   | X |   |   |
| 209 | EXPRESSION PEDAL MAX   | 00 - 7F              |   | X | X |
| 210 | EXPRESSION PEDAL MIN   | 00 - 7F              |   | X | X |
| 211 | EXPRESSION PEDAL WIDTH | 00 - 7F              |   | X | X |
| 212 | WHEEL BRAKE SPEED      | 00:FAST 01:SLOW      | X |   |   |
| 213 | PROGRAM MAPPER ENABLE  | 00:ENABLE 01:DISABLE | X |   |   |
| 214 | EXP PEDAL MAX (LSB)    | 0000 - 00FF          | X |   |   |
| 215 | (MSB)                  |                      |   |   |   |
| 216 | EXP PEDAL MIN (LSB)    | 0000 - 00FF          | X |   |   |
| 217 | (MSB)                  |                      |   |   |   |
| 218 | EXP PEDAL WIDTH (MSB)  | 0000 - 00FF          | X |   |   |
| 219 | (LSB)                  |                      |   |   |   |

\*1 DRAWBAR LEVEL 00 : 0  
10 : 1  
20 : 2  
30 : 3  
40 : 4  
50 : 5  
60 : 6  
70 : 7  
7F : 8

\*2 REVERB TYPE CX-3 BX-3/CX-3 V2  
00 : ROOM ROOM  
01 : HALL HALL  
02 : PLATE PLATE  
03 : -- DARK

| *3 REVERB TIME | ROOM | HALL | PLATE | DARK |
|----------------|------|------|-------|------|
| 00 :           | 0.40 | 1.00 | 0.74  | 0.74 |
| 01 :           | 0.46 | 1.20 | 0.82  | 0.82 |
| 02 :           | 0.52 | 1.40 | 0.90  | 0.90 |
| 03 :           | 0.58 | 1.60 | 1.00  | 1.00 |
| 04 :           | 0.66 | 1.80 | 1.20  | 1.20 |
| 05 :           | 0.74 | 2.20 | 1.40  | 1.40 |
| 06 :           | 0.82 | 2.60 | 1.60  | 1.60 |
| 07 :           | 0.90 | 3.00 | 1.80  | 1.80 |
| 08 :           | 1.00 | 3.40 | 2.20  | 2.20 |
| 09 :           | 1.20 | 4.00 | 2.60  | 2.60 |
| 0A :           | 1.40 | 4.60 | 3.00  | 3.00 |
| 0B :           | 1.60 | 5.20 | 3.40  | 3.40 |
| 0C :           | 1.80 | 5.80 | 4.00  | 4.00 |
| 0D :           | 2.20 | 6.60 | 4.60  | 4.60 |
| 0E :           | 2.60 | 7.40 | 5.20  | 5.20 |
| 0F :           | 3.00 | 8.20 | 5.80  | 5.80 |

\*4 PEDAL ASSIGN 00 : OFF  
01 : PEDAL 1  
02 : PEDAL 2

\*5 V/C SELECT 00 : V1  
01 : C1  
02 : V2  
03 : C2  
04 : V3  
05 : C3

\*6 MODULATION WHEEL ASSIGN 00 : NO ASSIGN  
01 : CLICK LEVEL  
02 : PERCUSSION LEVEL  
03 : PERCUSSION DECAY  
04 : ROTARY "FAST"  
05 : EX LOWER MANUAL LEVEL  
06 : ROTARY SPEED  
07 : WHEEL BRAKE

\*7 EXPRESSION CONTROL CX-3 BX-3/CX-3 V2  
00 : BOTH INDIVIDUAL BOTH INDIVIDUAL  
01 : KNOB ONLY KNOB ONLY  
02 : PEDAL ONLY PEDAL ONLY

03 : ---- BOTH MULTIPLY

\*8 CC# 01 - 1F, 21 - 5F, FF : 1 - 31, 33 - 95, OFF

\*9 EX DRAWBAR TYPE VALUE CX-3 BX-3/CX-3 V2  
00 - 1D : G4 - C7 -5 - +24