MIDI Data Format

1. General

1.1 Scope

The specifications described herein apply to transmission and reception of MIDI data by a DTX-PRO drum trigger module.

1.2 Compliance

The specifications described herein comply with the MIDI 1.0 standard.

1.3 Legend

The following symbol has a special meaning herein.

• $: Placed in front of hexadecimal numbers.

2. Channel Messages

2.1 Key On & Key Off

Key On and Key Off messages are transmitted and received.

Range of notes received: 0 (C-2) to 127 (G8)

Velocity range: 1 to 127 (i.e., Note On only)

2.2 Control Change

2.2.1 Bank Select MSB (0), LSB (32)

Bank Select MSB and LSB messages are transmitted and received.

MSB=125, LSB=0: Preset Kit

MSB=125, LSB=1: User Kit (1 to 100)

MSB=125, LSB=2: User Kit (101 to 200)

MIDI Ch 10 only.

2.2.2 Foot Controller (4)

Foot Controller messages are transmitted and received.

MIDI Ch 10 only.

2.2.3 General Controller (16)

General Controller messages are transmitted and received. Corresponds to the location of the strike on the Snare.

MIDI Ch 10 only.

2.2.4 General Controller (17)

General Controller messages are transmitted and received. Corresponds to the location of the strike on the Ride.

MIDI Ch 10 only.

2.2.5 General Controller (80)

General Controller messages are received. Corresponds to the AMBIENCE knob value.

MIDI Ch 10 only.

2.2.6 General Controller (81)

General Controller messages are received. Corresponds to the COMP knob value.

MIDI Ch 10 only.

2.2.7 General Controller (82)

General Controller messages are received. Corresponds to the EFFECT knob value.

MIDI Ch 10 only.

2.2.8 Message Type (1 to 95)

When the MENU/Kit Edit/Voice/MessageType parameter setting is CC01 to CC95, control change messages set here are sent whenever the pad is hit.

2.2.9 Pad Function (1 to 95)

When CC01 to CC95 is selected in the MENU/Utility/Pad/PadFunction, control change messages set here are sent whenever the pad is hit.

2.3 Channel Mode

Channel Mode messages are neither transmitted nor received.

2.4 Program Change

Program Change messages are transmitted and received.

MSB=125, LSB=0: Preset Kit (1 to 40)

MSB=125, LSB=1: User Kit (1 to 100)

MSB=125, LSB=2: User Kit (101 to 200)

MIDI Ch 10 only.

2.5 Pitch Bend

Pitch Bend messages are neither transmitted nor received.

2.6 Channel Aftertouch

Channel Aftertouch messages are neither transmitted nor received.

2.7 Polyphonic Aftertouch

Polyphonic Aftertouch messages are transmitted and received.

3. System Exclusive Messages

3.1 Universal Non-Real Time

3.1.1 Identity Request

$F0 $7E $0n $06 $01 $F7

n is ignored.

Identity Request messages are received but not transmitted. Upon receipt of the above message, the DTX-PRO transmits an Identity Reply message.

3.1.2 Identity Reply

$F0 $7E $7F $06 $02 $43 $00 $41 $5D $06 $mm $00 $00 $7F $F7

mm:　version

mm = (version no. - 1.0) \* 10

         e.g.) version 1.05 mm = (1.0 - 1.0) \* 10 = 00

                  version 2.00 mm = (2.0 - 1.0) \* 10 = 0A

Identity Reply messages are transmitted but not received

4. System Common Messages

System Common messages are neither transmitted nor received.

5. System Real Time Messages

5.1 Timing Clock

Timing Clock messages are transmitted.

5.2 Start & Stop

Start and Stop messages are neither transmitted nor received.

5.3 Active Sensing

Reception:

If, following receipt of an Active Sensing message, no subsequent MIDI data is received for approximately 300 milliseconds, the DTX-PRO will mute all voices currently playing.

Transmission:

The DTX-PRO constantly transmits Active Sensing messages at intervals within approximately 300 milliseconds