

Therevox ET-5 MIDI System Exclusive (SYSEX) Messages

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This guide shows how all of the sysex messages that the ET-5 is capable of receiving, how they should be formatted and how the ET-5 will respond.

FORMAT

0xF0 - sysex start
0x00 - MMA ID
0x00 - MMA ID
0x22 - MMA ID
0x69 - THEREVOX
0x05 - ET-5
0x?? - Command
DATA.. (see GUIDE for details)
0xF7 - sysex end

COMMANDS

0x10 - CONFIGURATION CHANGE: adjusts config variables.
0x15 - CONFIGURATION DUMP REQUEST: responds with config variables.
0x20 - CALIBRATION CHANGE: adjusts calibration variables.
0x25 - CALIBRATION DUMP REQUEST: responds with calib variables.
0x50 - READ INDIVIDUAL EEPROM ADDRESS
0x52 - WRITE INDIVIDUAL EEPROM ADDRESS
0x56 - FULL EEPROM ERASE/RESET

GUIDE

0x10 - CONFIGURATION CHANGE

0x?? - 0-2: Debug Mode. 0=off 1=messages 2=rawadc [0=default]

0x?? - 0-127: Tuner Frequency. (64=default) [A440 in cents]

0x?? - 0: Tuner Mode. (0=default)

0x?? - 0-127: MIDI delay. (53=default) [larger is more delay]

0x?? - 12,24: MIDI bend range. (24 = default)

0x?? - 1-16: MIDI Channel A (1=default)

0x?? - 1-16: MIDI Channel B (2=default)

0x?? - 0-127: Intensity Key 1 CC# on Channel A (11=default)

0x?? - 0-127: Intensity Key 1 CC# on Channel B (0=default)

0x?? - 0-127: Intensity Key 2 CC# on Channel A (0=default)

0x?? - 0-127: Intensity Key 2 CC# on Channel B (11=default)

0x?? - 0-127: Hold 1 CC# on Channel A (1=default)

0x?? - 0-127: Hold 1 CC# on Channel B (0=default)

0x?? - 0-127: Hold 2 CC# on Channel A (0=default)

0x?? - 0-127: Hold 2 CC# on Channel B (1=default)

0x?? - 0-127: Expression Pedal CC# on channel A (4=default)

0x?? - 0-127: Expression Pedal CC# on channel B (4=default)

0x?? - 0-1: Channel Pressure on channel A? (1=default)

0x?? - 0-1: Channel Pressure on channel B? (1=default)

0x?? - 0-1: Pitch Bend commands when notes off? (0=default)

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x15 - CONFIGURATION DUMP REQUEST

Returns a 0x16 Command and then all configuration data in same order as 0x10 command. Can be made by sending [F0 00 00 22 69 05 15 F7]

0x20 - CALIBRATION CHANGE

0x?? - 0-127: DAC Correction. (64 is zero correction)

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x?? - null: reserved

0x25 - CALIB DUMP REQUEST

Returns a 0x26 and then all calibration data in same order as 0x20 command. Can be made by sending [F0 00 00 22 69 05 25 F7]

0x50 - READ INDIVIDUAL EEPROM ADDRESS

0x?? - 0-127: address to read.

Returns 0x51 followed by address requested and then contents.

[F0 00 00 22 69 05 50 ?? F7]

0x52 - WRITE INDIVIDUAL EEPROM ADDRESS

0x?? - 0-127: address to write.

0x?? - 0-127: value to write.

Returns 0x53 followed by address and contents written.

[F0 00 00 22 69 05 52 ?? ?? F7]

0x56 - FULL EEPROM ERASE/RESET

Wipes entire EEPROM contents including factory calibration data. Requires ET-5 reset afterwards where default Configuration variables will be written.

[F0 00 00 22 69 05 56 F7]

MIDI IDENTITY REQUEST

The Therevox ET-5 responds to sysex identity request in the following format:

0xF0 - sysex start
0x7E - non-realtime message
0x7F - disregard channel
0x06 - general information
0x02 - identity request
0x00 - MMA ID
0x00 - MMA ID
0x22 - MMA ID
0x69 - MMA ID (THEREVOX)
0x?? - family code 1 (0x05 = ET-5)
0x?? - family code 2 (not used)
0x?? - product code 1 (not used)
0x?? - product code 2 (not used)
0x?? - version 1 (firmware major version number)
0x?? - version 2 (firmware minor version number)
0x?? - version 3 (not used)
0x?? - version 4 (not used)
0xF7 - sysex end

A MIDI identity request can be made by sending:

[F0 7E 7F 06 01 F7]