

Oakley TM3030 MIDI Configuration Guide

The MIDI Interface PIC for the TM3030 has a number of configuration settings that can be changed by System Exclusive message, and are held in non-volatile EEPROM memory.

The settings are:

Setting Name	SysEx Setting Number	Description
MIDI Receive Channel	0x00	The MIDI channel number on which the synthesizer section will respond to incoming notes. Default value is 1. Value in sysex string should be one less than the actual channel number.
MIDI Note Offset	0x01	This option specifies the MIDI note number that will trigger the lowest note in the synth's range. The TM3030 internal CV generation circuitry has 6 bit resolution, giving a theoretical range of 64 notes. However the lowest part of this range is not used as it becomes non-linear. The available range is 53 notes - just over 4 octaves. Default value is 36. Value in sysex string should be in the range 0 to 75 (0 to 0x4B). Values over 75 will be clipped.
Accent Threshold	0x02	This specifies the velocity value above which incoming notes will be treated as being accented. Default value is 100. Value in the sysex string should be in the range 1 to 126 (1 to 0x7E)

The format of the sysex message is as follows:

F0 - Sysex header
00, 20, 5F - Sequentix manufacturer ID
54, 4D, 33 - Device identification ("TM3")
cc - Setting number
vv - Value
F7 - Sysex terminator

SysEx Examples

To set the MIDI Note Offset to 60 decimal (0x3C hex), the command would be:

F0, 00, 20, 5F, 54, 4D, 33, **01, 3C**, F7

To set the unit to receive on MIDI channel 4, the command would be:

F0, 00, 20, 5F, 54, 4D, 33, 00, 03, F7

Note the value of **03** means MIDI channel **4**

MIDI Continuous Controllers

The TM3030 also responds to three different MIDI CC messages.

These are:

Name	MIDI CC Number	Description
accent over-ride (expression)	11 (0xB)	<p>There are three modes for the TM3030 accent behaviour.</p> <p>auto mode - accent is enabled only for notes above the accent velocity threshold.</p> <p>off mode - accent is never active.</p> <p>on mode- accent is always active.</p> <p>Send cc 11 with a value of 0 for auto (default) Send cc 11 with a value of 64 for off Send cc 11 with a value of 127 for on</p>
slide over-ride (portamento)	65 (0x41)	<p>There are three modes for the TM3030 slide behaviour.</p> <p>auto mode - slide is enabled for notes played before a previous note is released.</p> <p>off mode - slide is never active.</p> <p>on mode- slide is always active.</p> <p>Send cc 65 with a value of 0 for auto (default) Send cc 65 with a value of 64 for off Send cc 65 with a value of 127 for on</p>
all notes off	123 (0x7B)	<p>This controller clears any held notes.</p> <p>N.B. all notes off also resets accent over-ride and slide over-ride to their default auto settings.</p>

CC Examples

For a TM3030 set to receive on default channel 1:

To force accent on all notes, send controller message: B0 , 0B , 7F

To disable accent on all notes, send controller message: B0 , 0B , 00

To enable accent notes over the velocity threshold,
send controller message: B0 , 0B , 40