

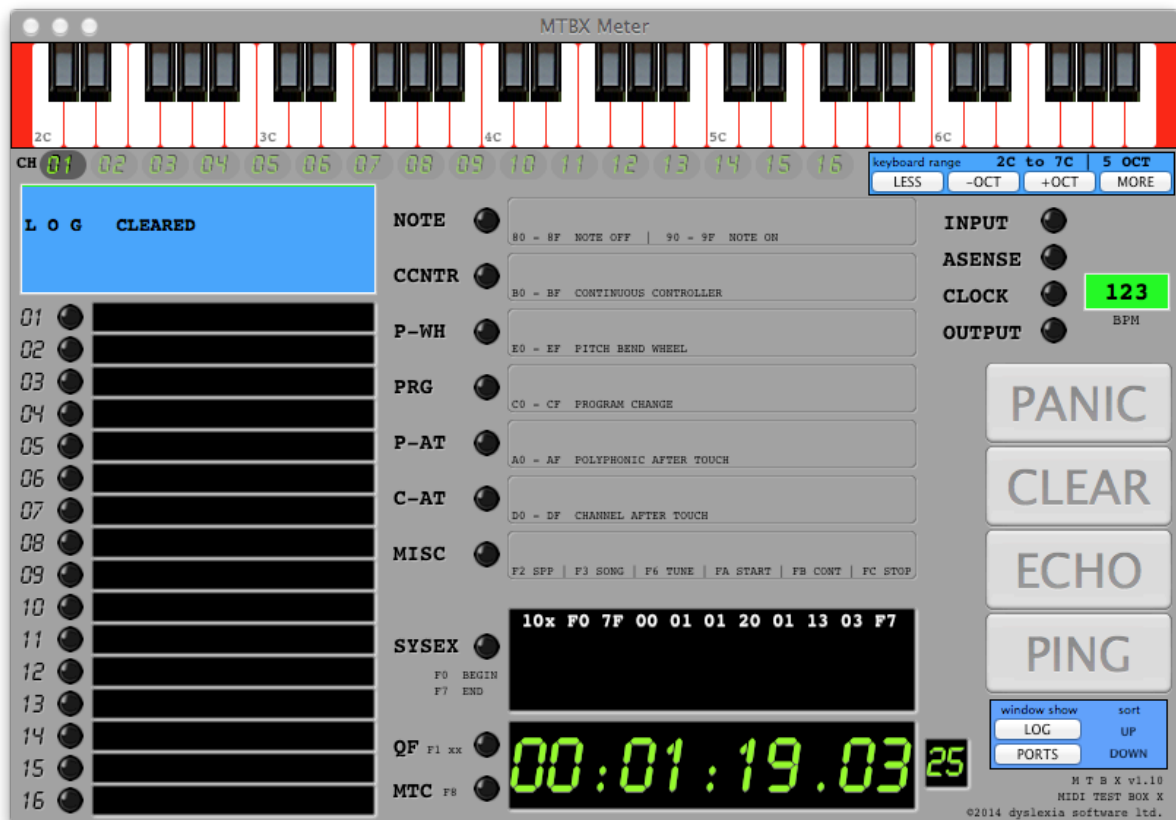
MTBX

MIDI TEST BOX for osX

APP for OSX

CoreMIDI wireless, virtual and hardware MIDI interfaces

USER MANUAL





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METER WINDOW

your main window for real time information, this window is **NOT** resizable

KEYBOARD:
 shows **RED** for input (from any channel)
 shows **GREEN** for output, when pressed

KEYBOARD RANGE:
 setting buttons

INPUT:
 any input activates LED

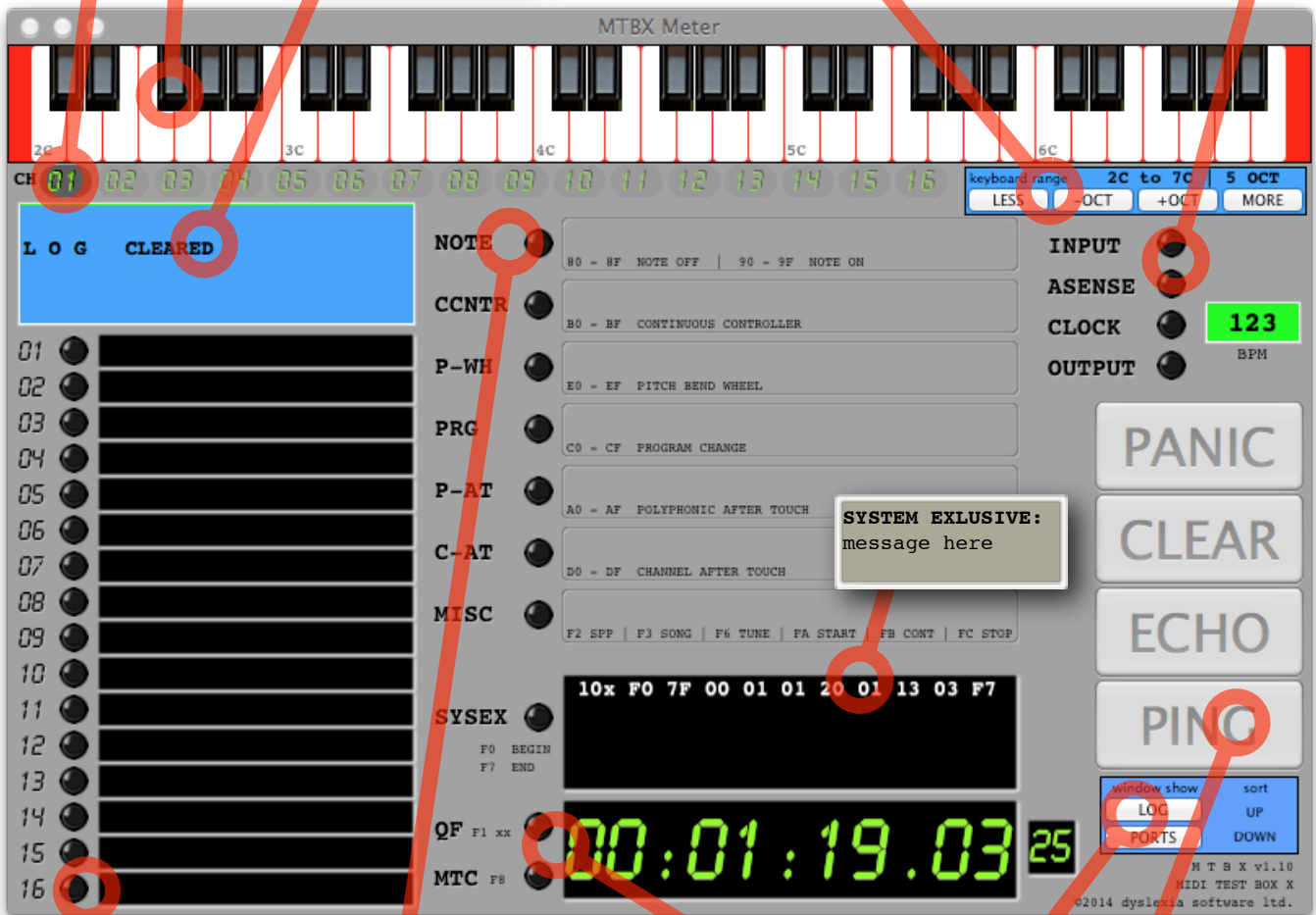
ASENSE:
 Active Sensing message detected

CLOCK:
 Tempo based clock detected

OUTPUT:
 any output activates LED

MIDI CHANNEL OUTPUT:
 select output channel
 for keyboard

LCD:
 information,
 action messages
 to let you know
 what is happening



CHANNEL LED / MESSAGES:
 specific channel messages
 show here, in addition to
 the message specific meters

MESSAGE LED / METERS:
 specific message types
 show here, in addition,
 level parameters are shown

TIMECODE:
 quarter/full
 frame message
 are shown
 here...
 and frame rate

WINDOW:
 show/hide
 and
 arrange

PING:
 sends tune request
 message out and
 times the loop back
 delay, this will
 only work if you
 plug the OUT to IN

PORTS WINDOW

select IN and OUT ports to connected to, this window is **NOT** resizable but can be hidden

PORT NAME:
This is the automatic name given by the port driver

AVAILABLE PORTS:
enable this to show the OSX history of previously connected devices, that are NOT currently on-line (switched off or not connected). these are greyed out

IN:
INPUTS routed to the meter and log. the LED flashes when inputs are detected

ALL IN:
Toggles IN(s) on or off

PORT TYPES:

NETWORK
HARDWARE
VIRTUAL
offline

OUT:
any and all OUT can be selected. Any send (from KEYBOARD etc) will go to all selected OUTPUTS in parallel

ALL OUT:
Toggles OUT(s) on or off

The screenshot shows the 'MIDI Ports 15 [3 are OFF line]' window. At the top, there is a button 'press to ONLY show the AVAILABLE ports'. Below it, the window lists various MIDI ports, some of which are greyed out. To the right of the list are columns for 'ALL IN', 'ALL OUT', and individual 'IN' and 'OUT' toggle buttons for each port. A legend at the bottom indicates port types: Network (green), Hardware (blue), Virtual (red), and offline (grey).



LEDS

INPUT

This **LED** lights to show any MIDI message to the METERS from INPUT Ports

OUTPUT

This **LED** lights to show any MIDI message is sent from MTBX to OUTPUT Ports

A-SEN

The **LED** lights when an ACTIVE SENSING ($F'E$) message is seen. This message has no action, other than to show that the transmitting device is active, common in older MIDI Keyboard and controllers. The DX7 sends this out at quite a high rate !

CLK

The **LED** lights when a TIMING CLOCK ($F'8$) is detected. This is a single byte message that used to provide a tempo division. They come very quick so the **LED** will stay solid most of the time when they are being sent.

BPM

Calculates the TEMPO of TIMING CLOCKS ($F'8$). This is displayed in BPM - calculated using an average over time. Based on 24 clocks per crotchet (quarter note). If there is no CLOCK then the last calculated BPM will be continue to be displayed.

NOTE

LED lights when a NOTE ON ($90-9F$) or NOTE OFF ($80-8F$) message is present, the latest message is then shown on the corresponding **BLUE** LCD panel. Showing channel, note and velocity information. The appropriate channel **LED** will also light (on the right of the screen).

CCNTR

CONTROL CHANGE messages ($B0-BF$) light this **LED**, the last control change message is shown in the **BLUE** LCD panel. Shows channel, controller and value. The appropriate channel **LED** will also show.

P-WH

PITCH WHEEL ($E0-EF$) movements are show **GREEN** here, the latest pitch change is shown in the P-WH **BLUE** LCD panel. Shown as channel and 14 bit signed value. The appropriate channel **LED** will also show.

PRG

PROGRAM CHANGE ($C0-CF$) values get shown here on the **GREEN** LED, the channel and number is shown on the LCD panel. Channel **LED** flashes.



P-AT

LED lights when a POLYPHONIC AFTER TOUCH (A0–AF) message is found, the last message is then shown in the corresponding **BLUE** LCD panel. Showing channel, note and after touch value. The appropriate channel **LED** will also light (on the right of the screen).

C-AT

The CHANNEL AFTER TOUCH (D0–DF) message lights this **GREEN** LED and the details are shown on the LCD. Shows channel and after touch value. The channel **LED** also light.

MISC

The LED lights when the STOP (FE), START (FE), CONTINUE (FE), SONG NUMBER (FE) or SONG POSITION (FE) messages are seen. The name of the message is shown in the **BLUE** area. No channel LED lights for these.

SYSEX

The LED lights when a completed SYSTEM EXCLUSIVE (F0) message is found. The message and hexadecimal bytes are shown in the scrollable **BLUE** area. The number of bytes making up the message is shown before the message (that is enclosed in square brackets). No channel LED are associated with SYSEX messages. However further interpretation may produce MIDI TIME CODE messages that are shown in the TIMECODE LCD field.

~~Touching any of the labels to the left of the **LED** clears the **BLUE** LCD area – allowing for a new message to be more easily seen.~~ **not available in v1.00**

CHANNEL LEDS

Down the right side light when a channel message is seen for that channel:
example:

- NOTE ON Channel 15 = 0x9E, note, velocity
- NOTE OFF Channel 2 = 0x81, note, velocity

The LEDs will flash once for a NOTE ON and again for a NOTE OFF