MTBX MANUAL

MIDI TEST BoX for OSX   v1.00
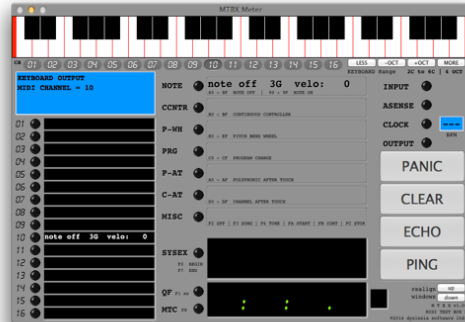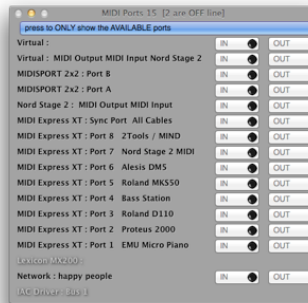
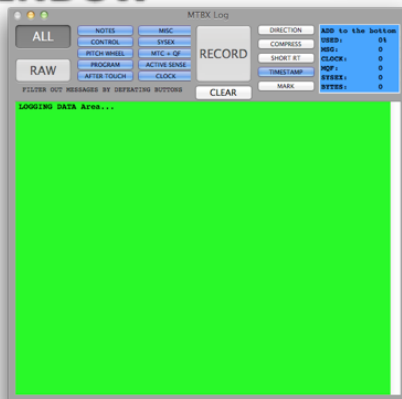# 2 METER WINDOW

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

KEYBOARD:
shows current keys from INPUT
and sends to OUTPUTS
[80] NOTE OFF   [90] NOTE ON
lowercase note off is a note on message
with 00 velocity

MESSAGES:
shows last message, of type,
is shown in box
[80] NOTE OFF
[90] NOTE ON
[B0] CONTROL CHANGE
[E0] PITCH WHEEL
[C0] PROGRAM CHANGE
[A0] POLY AFTER TOUCH
[D0] CHANNEL AFTER T
[F0] SYSTEM EXCLUSIVE

INPUT: shows any
activity detected

CLOCK: [F8]
TEMPO shown in BPM

ACTIVE SENSING:
message seen [FE]

CHANNEL SELECTOR:
from keyboard

KEYBOARD Range:
more or less octaves
shift octaves up and down

PANIC:
transmits
all notes
OFF on all
channels

ECHO: sends Output
message to the INPUT
MESSAGE system
WHY?: to see what
your sending

CLEAR: removes
all message
information, so
you can see any
new messages

TIMECODE:
QUARTER FRAME [F1] and
MIDI TIMECODE
shows frame rate and any
dropouts detected

CHANNEL MESSAGES:
light channel LED
[80] NOTE OFF
[90] NOTE ON
[B0] CONTROL CHANGE
[E0] PITCH WHEEL
[C0] PROGRAM CHANGE
[A0] POLY AFTER TOUCH
[D0] CHANNEL AFTER TOUCH

**PING:** transmits
TUNE REQUEST [F6] and
checks the time taken to
get an echo back (PING)

This is a loop back test
to find out what latency
of the system is, the time
displayed is the length to
see the returned message,
therefore 2 x the expected
latency

3   PORTS WINDOW

select IN and OUTs connected to, this window is **NOT** resizable

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:
only one INPUT at a time (v1.00) can be routed to the meter and log.
the LED flashs when inputs are detected

PORT NAME:
This is the automatic name given by the port driver
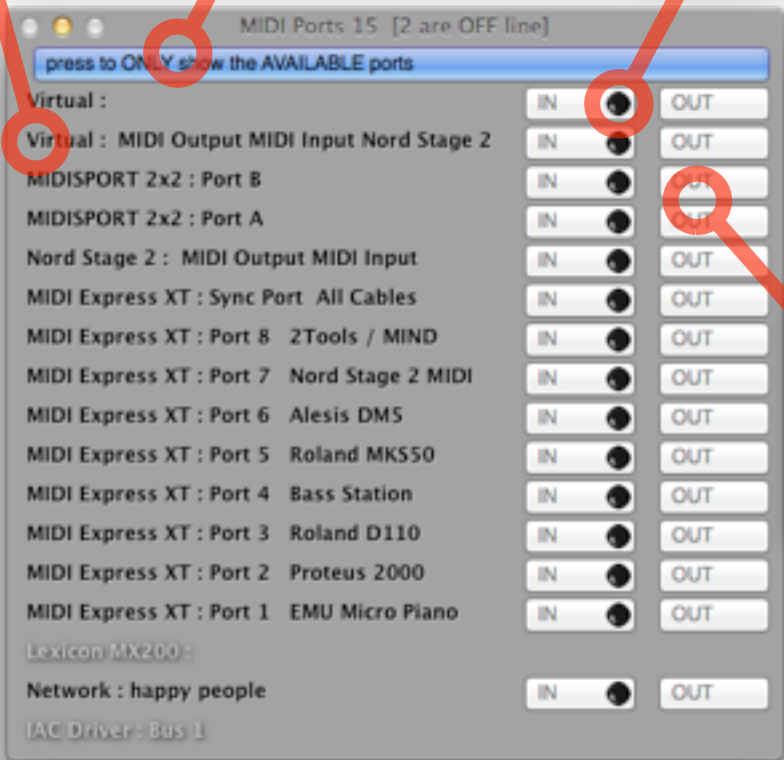
OUT:
any and all OUT can be selected. Any send (from KEYBOARD etc) will go to all selected OUTPUTS in parallel

MIDI Ports 15 [2 are OFF line]

press to ONLY show the AVAILABLE ports

Port	IN	OUT
Virtual :	IN	OUT
Virtual : MIDI Output MIDI Input Nord Stage 2	IN	OUT
MIDISPORT 2x2 : Port B	IN	OUT
MIDISPORT 2x2 : Port A	IN	OUT
Nord Stage 2 : MIDI Output MIDI Input	IN	OUT
MIDI Express XT : Sync Port All Cables	IN	OUT
MIDI Express XT : Port 8 2Tools / MIND	IN	OUT
MIDI Express XT : Port 7 Nord Stage 2 MIDI	IN	OUT
MIDI Express XT : Port 6 Alesis DM5	IN	OUT
MIDI Express XT : Port 5 Roland MKS50	IN	OUT
MIDI Express XT : Port 4 Bass Station	IN	OUT
MIDI Express XT : Port 3 Roland D110	IN	OUT
MIDI Express XT : Port 2 Proteus 2000	IN	OUT
MIDI Express XT : Port 1 EMU Micro Piano	IN	OUT
Lexicon MX200 :		
Network : happy people	IN	OUT
IAC Driver : Bus 1		

4   LOG WINDOW

allows for recording of all or any messages in varied ways, window **IS** resizable

ALL FILTERS:
ON or OFF

FILTERS:
lets messages through
when enabled (ON)

START / STOP RECORDING
starts and stops the
log recording - Doh

STATISTICS:
realtime info
of number of message
types as they arrive

RAW:
toggles pure HEX data,
you need to be a real
geek to want this, but
I thought it was very
sophisticated in 1985

FORMAT DISPLAY:
changes the way
the data is shown

MARK:
put a text mark
into the log window

TIMESTAMP:
enables a timestamp
for each message

5   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 `(FE)` 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 `(F8)` 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 `(F8)`. 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