DYSLEXIA SOFTWARE LTD
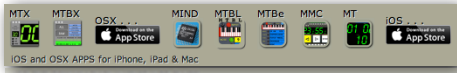
writing MIDI software since MIDI began

MTB

MIDI TEST BOX

APP for iOS iPhone
compatible with CoreMIDI wireless and hardware MIDI interfaces

USER MANUAL

CONTENTS

MAIN SCREEN

iPhone

LEDS

INPUT

This **LED** lights to show any activity detected by the Core MIDI system from a NETWORK or HARDWARE INTERFACE

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.
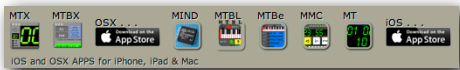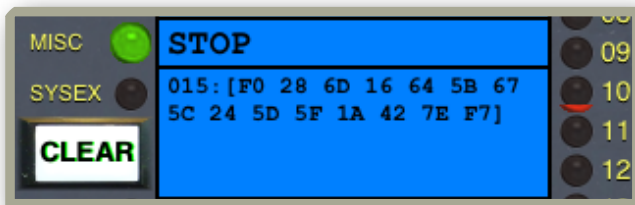
MISC

The **GREEN** 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.

> **NB:** 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.

CHANNEL LEDS

Down the right side, these 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 **LED** will flash once for a NOTE ON and again for a NOTE OFF

TIMECODE

MTC

The LED lights when a correct SYSTEM EXCLUSIVE, MIDI TIMECODE message is detected. The decoded TimeCode is shown in the **LCD** area. The FRAME

RATE is shown in that area also.

QF

If QUARTER FRAME TimeCode messages are being sent this **BLUE** LED lights. The decoded TimeCode is shown in the **LCD** area. Also decodes FRAME RATE.

Displays TimeCode messages (QUARTER FRAME and LONG FORMAT)

PING, THRU, PANIC

PING sends the tune request message out and times to delay to recieve the message back, this will only work if you plug the OUT to IN but is useful as a simple latency check.

HARDWARE INTERFACES

Hardware interfaces

MTB works with CoreMIDI and compatible MIDI interfaces. Various hardware interfaces have been tested, all CoreMidi compatible interfaces should work, here is the list of confirmed devices:

IOS:

- iRig MIDI

- iRig KEYS

- LINE 6 MIDI Mobilizer™ II

- YAMAHA i-MX1

- SAMSON M25 (+ CCK)

    NOTE:

    USB camera connector kit (CCK)

    if you get "This is not supported" as soon as you plug in the CCK" it

    indicates the CCK is not seated properly or that the CCK is faulty

OSX TESTED:

- MIDIMan USB Sport

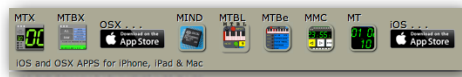- MOTU MIDI Express XT

- Nord USB Keyboards

NOT TESTED:

- iConnectivity

Just plug in and play

Make sure the **MTB** has WiFi off (always a button on the front panel).

If you have connected the MIDI cables you should be running.
The most common mistake is having the **IN** and **OUT** the wrong way around (no harm done) just swop **IN** and **OUT** on the device.
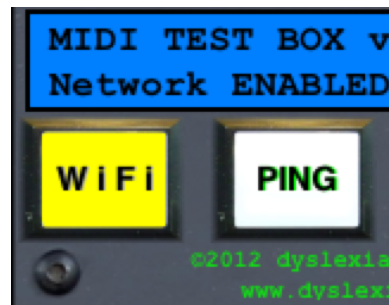
WIRELESS NETWORK

MTB use CoreMIDI have a WiFI button to enable connecting to a Wireless Network (it is normally the default first time the APP is run.

When enabled the APP will listen to any MIDI that is sent to the Network.

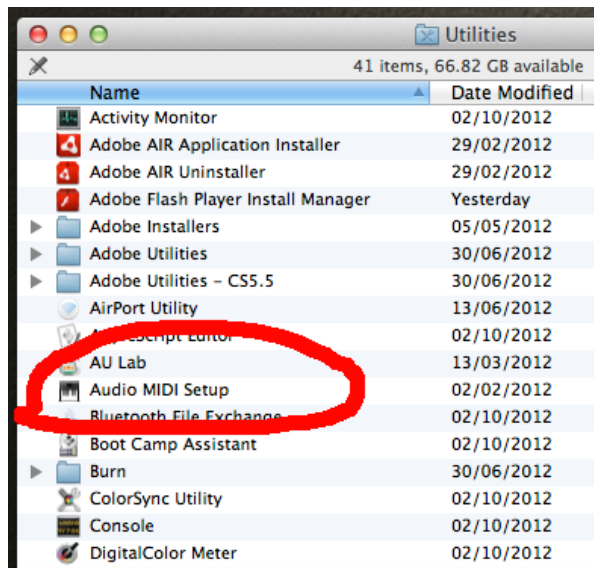First you need to have setup the Network on your Computer...

SETUP

CoreMIDI Network session on a WiFi enabled OSX Computer

All devices need to be connected to the same WiFi network

Audio MIDI Setup

You access the Network settings through OS X "**Audio MIDI Setup**" which should be in the Applications / Utility folder. From the menu bar select **Window > Show MIDI Window**
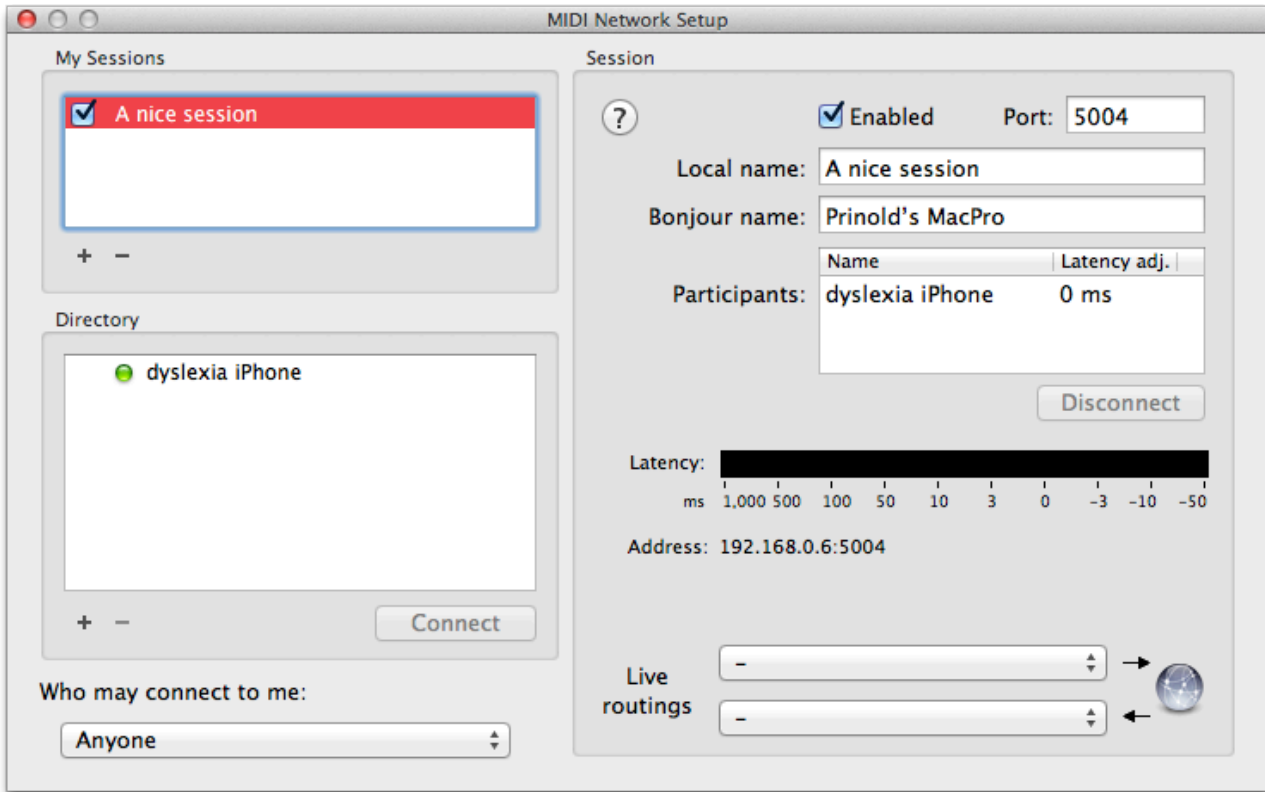
MIDI Window

Double-click on the **Network** icon, which will open the **MIDI Network Setup** window

MIDI Network Setup - THE HARD(er) WAY

You should see the name of your device in the **Directory** panel.

Select your device **dyslexia iPhone** (in the example)
and press **Connect**.

Your device should now appear on the **Participants** list and is now ready to send and receive MIDI messages.

More than one MIDI devices can be connected to the same CoreMIDI network session

Now you can select the **Network Session** as a MIDI **IN** and **OUT** in any OS X application, if it supports CoreMIDI

THE EASY WAY

if you have enabled, in **MIDI Network Setup** screen on your Mac...
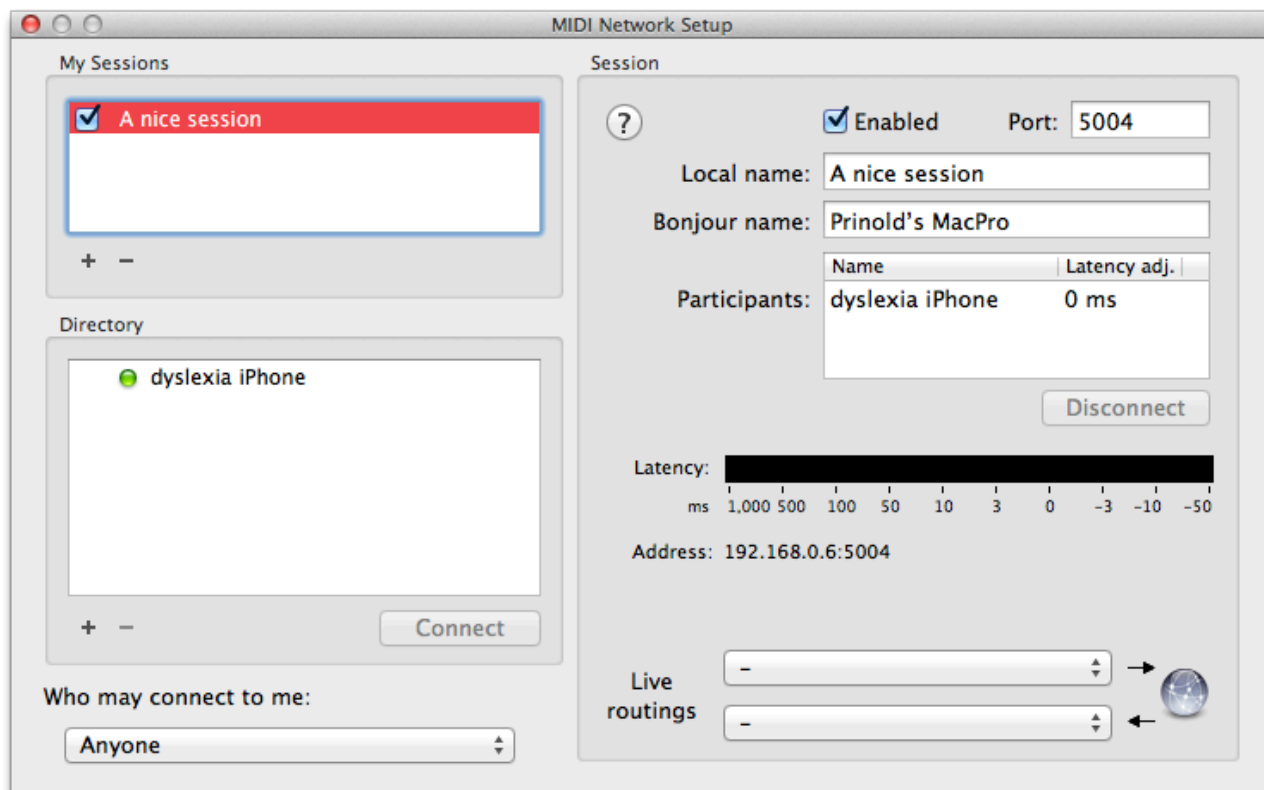
... **Who may connect to me** = **Anyone**
        (This only allows MIDI protocol devices, so is very safe)

Then your iOS device (via the MIDI CONNECTIONS page), can select or deselect the Network Host
a lot easier.

SPECIFICATIONS

Apple iOS 7.0 compatible APP

- iPhone
- iPad - in iPhone mode
- iTouch

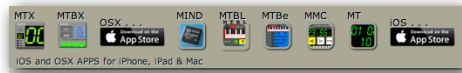## CoreMIDI compliant

MIDI RECEIVES:

- **Everything**

MIDI TRANSMITS

- NOTE ON
- NOTE OFF
- PITCH WHEEL
- TUNE REQUEST - for PING loopback test
- NOTE OFF and ALL NOTES OFF - for PANIC

last page of MTB manual