MIOS Studio was started by Wilba in November 2003, and later taken over by Adam King.

It is a java-based, platform-independent MIDI processing environment, which not only provides upload and debug functions for MIOS, but also advanced features like MIDI Port Routing, Filtering and a virtual Keyboard. It's written in a modular way and will be published under GPL later so that other programmers can make their contributions.

Adam hasn't finished all of his plans yet, therefore only a precompiled binary package is available. It can be downloaded from: http://69.56.171.55/~midibox/mios_studio/MIOSStudio_beta4.jar

He is interested in your inputs - how is it working, are there any problems, does the user interface need improvements, which features could be useful?

Installing MIOS Studio

To run MIOS Studio you will need the Java Runtime, at least version 1.5 installed. If you do not have it, you will need to go to the Sun site http://java.sun.com/j2se/1.5.0/download.jsp first, download the JRE 5.0 setup file and install it according to your platform's instructions.

Once Java is installed, all you will need to do is download MIOS Studio and save it to your PC. In Windows, you should be able to just double click on the .jar file to open the program. To start from a command line (or setup a shortcut), you can use the command

```
java -jar //path_to_jar_file///MIOSStudio_beta4.jar
```

to open MIOS Studio.

As an added utility, a cutdown version with just a keyboard controller, MIDI routing/filtering and keyboard zone mapping is available. This can be started with the command

```
java -cp //path_to_jar_file///MIOSStudio_beta4.jar
org.midibox.apps.virtualkeyboard.~VirtualKeyboard
```

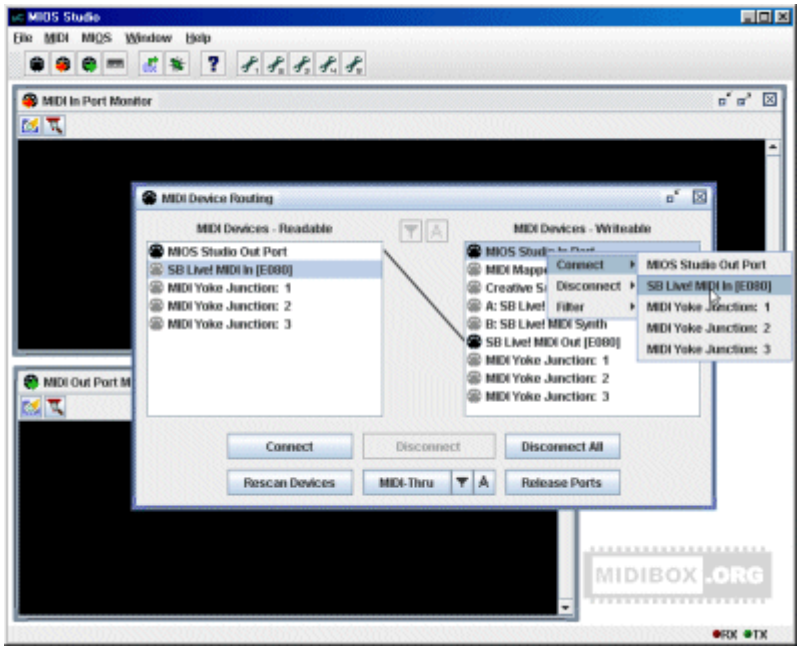
So far the program has been tested with Windows 98, 2000 and XP. In theory, it should also run on Linux and Mac but the old saying proves true, “write once, debug everywhere”. Linux MIDI support is supposed to be working, but I have had many problems - possibly due to an older kernel and ALSA drivers. If anyone can test on a newer version of Linux (with Java 1.5 installed) it would be greatly appreciated. At the moment, Java 1.5 is not officially available for the Mac, but if there are any Java/Mac developers in the community, please test it and report you findings.

Using MIOS Studio

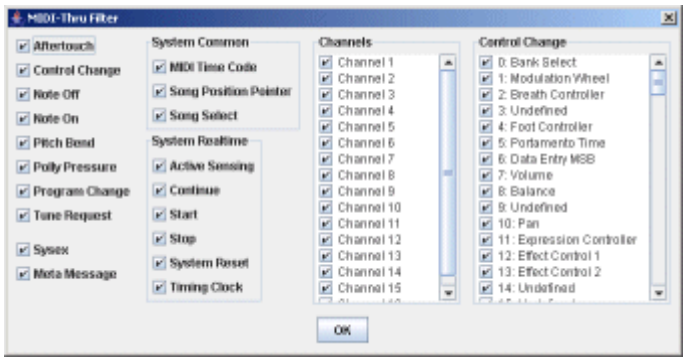
Below are examples of some of the main features of MIOS Studio. For further details, click on the links to go to the relevent section of the MIOS Studio Help File.

MIDI Device Routing: it allows you to forward and filter MIDI streams to any MIDI port. At the top of the list you will always find the MIOS Studio In and Out port. This is the port to which MIDI data has to be routed when you want to upload code, monitor it, send debug commands, etc…

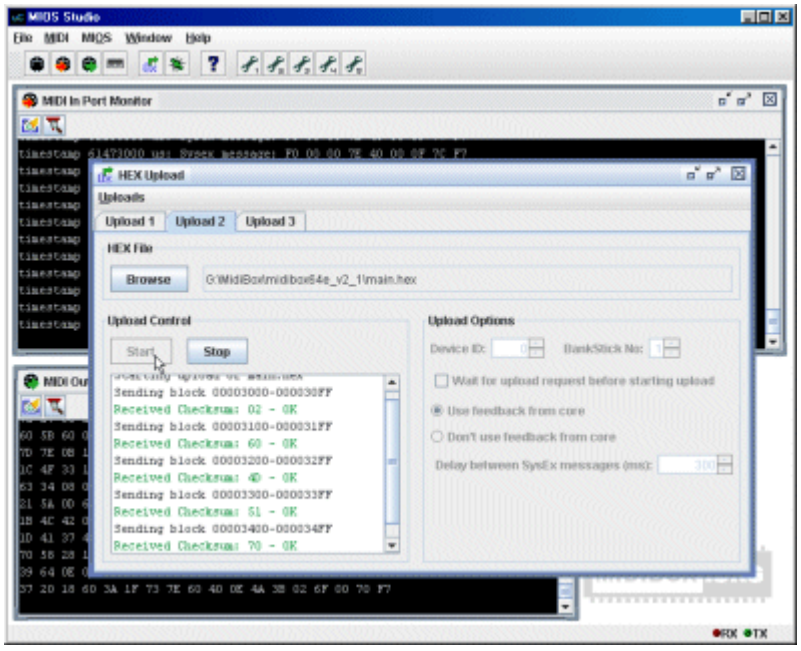
The readable port (MIDI IN of your interface) has to be routed to the MIOS Studio In Port, and the writable port (MIDI OUT of your interface) has to be routed to the MIOS Studio OUT Port:



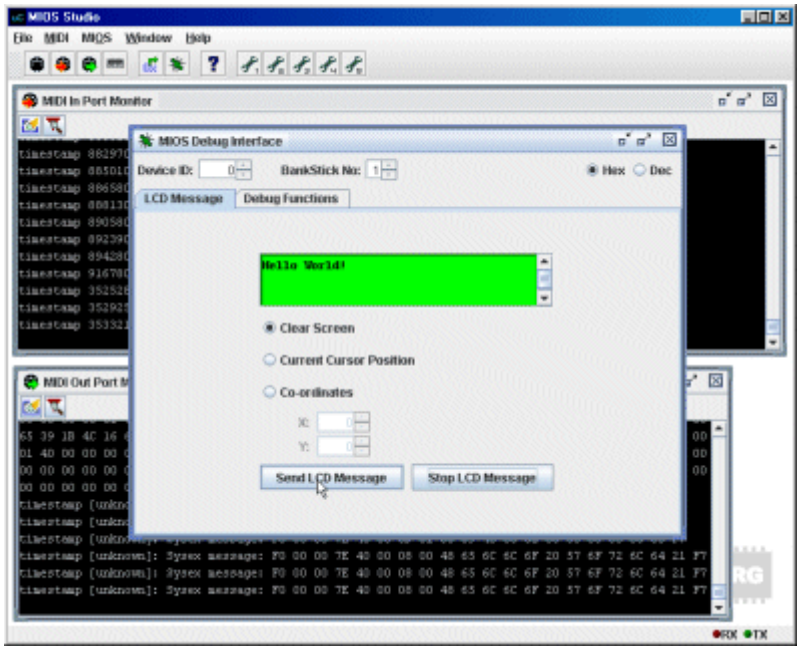
MIDI Filter: It's possible to filter MIDI events:



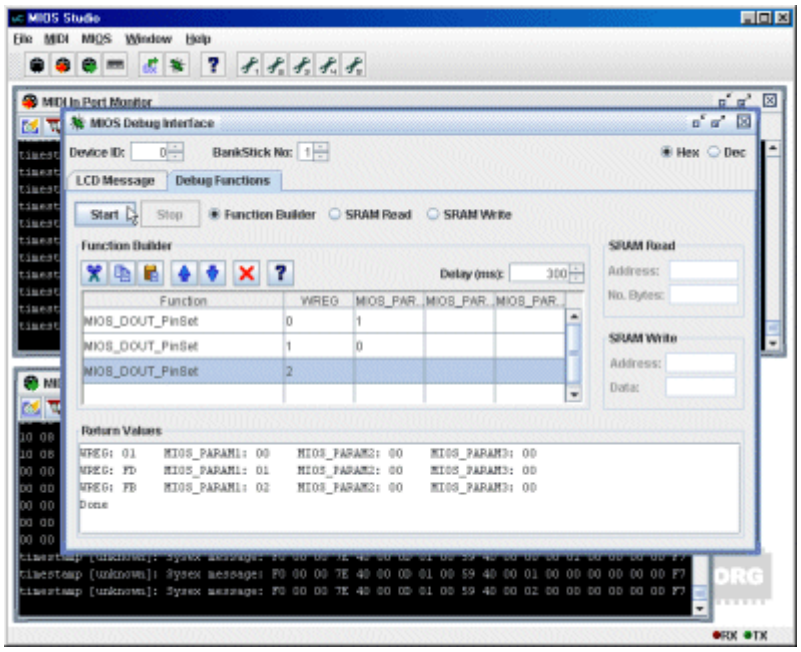
Hex Upload: The MIOS code upload is very comfortable - you don't need to generate a .syx anymore, HEX files can be uploaded directly:



MIOS Debug LCD: LCD messages can be generated:

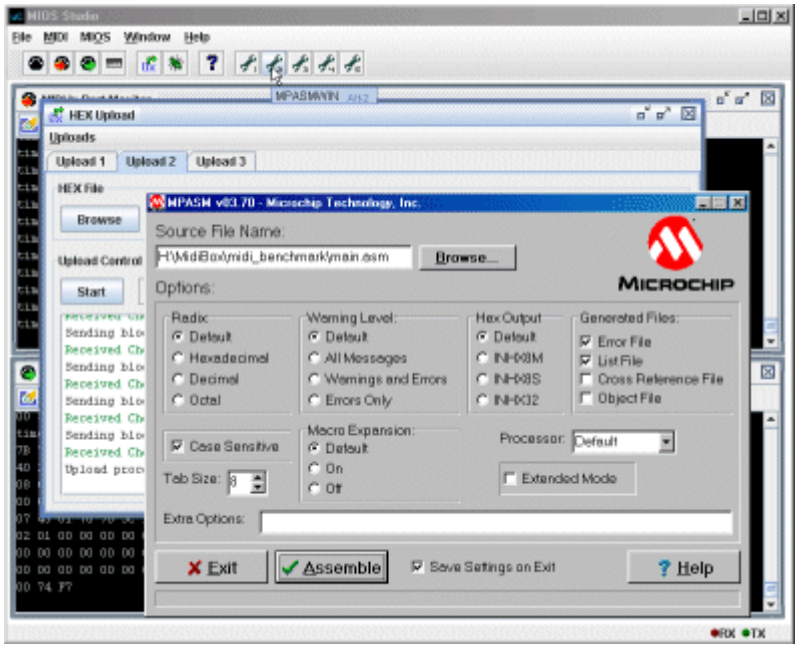


MIOS Debug Functions: The MIOS debug window allows to execute MIOS functions via remote:

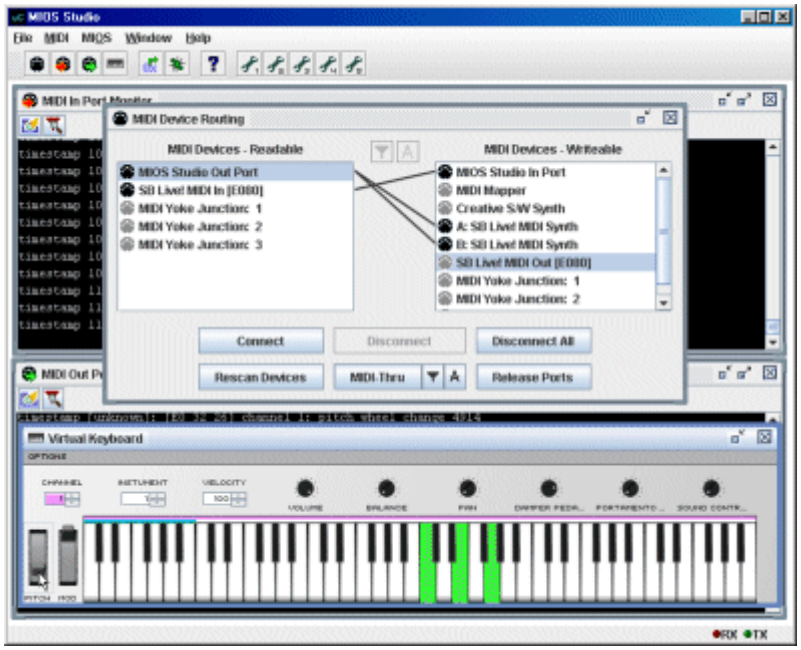


It's also possible to read and write the memory.

Run External Commands: Buttons on the toolbar can be customised to run external commands:



MIDI Keyboard Controller: A virtual keyboard controller is also available:



Virtual Keyboard: A smaller standalone program is also available with just the features of the keyboard controller and MIDI Routing/Mapping: