PC- How can I check that the MIDI ports of the 16/12 FW are working correctly?

More often than not, MIDI problems are related to a bad cable or an inactive port. As MIDI configuration can get complicated, is it often a good idea to test your basic configuration and devices to make sure everything is working correctly.

This tutorial will show you how to verify your MIDI cables and the 16/12 FW MIDI ports.

NOTE: Before performing these tests, Please refer to this FAQ to make sure your 16/12 FW is correctly installed.

To perform these tests, you will need the following:

- A MIDI cable
- **MIDI-OX**, a MIDI testing utility software, available from this site:

www.midiox.com

Software configuration

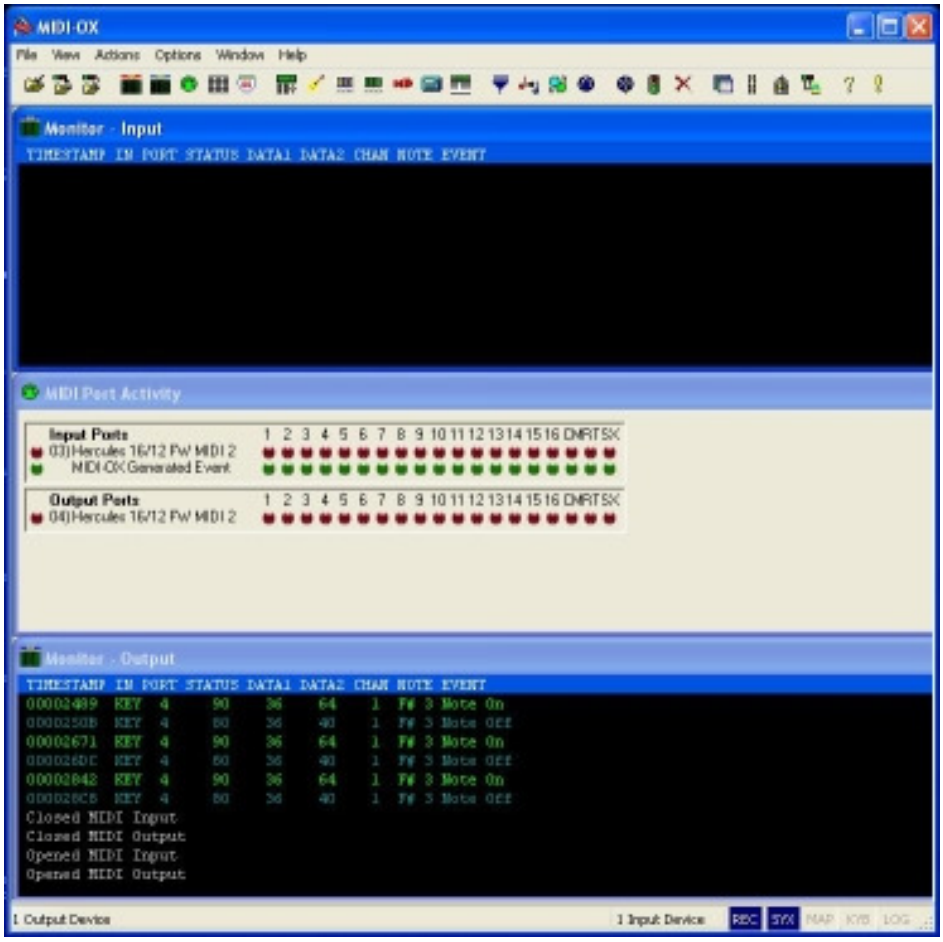
Before going any further, it's important to configure **MIDI-OX** and understand how it will help us.

When launching MIDI-OX for the first time, **Monitor-Output** will already be open. We will also need other windows to be displayed:

From the **View** menu, open the following:

- **Input Monitor**
- **Port Status**

From the **Windows** menu, select **Tile Horizontally.** You should obtain something that looks like this:

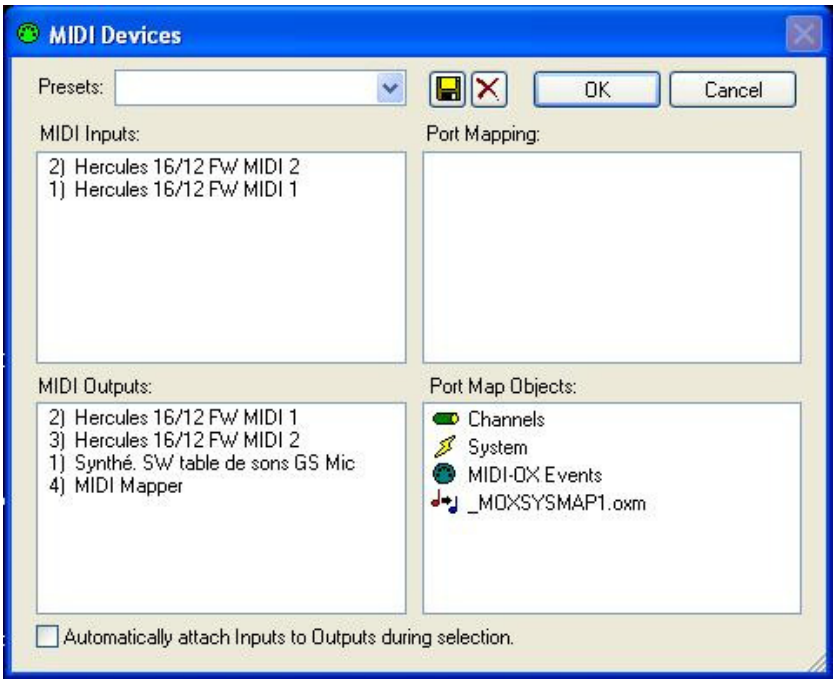


Monitor –Input: This window will display data received by the active **MIDI In** port.

Monitor –Output: This window will display data sent by the active **MIDI Out** port.

MIDI port Activity: Displays, in real time, the activity on all active MIDI port and channels.

Next, Under **Options**, open **MIDI Devices**:



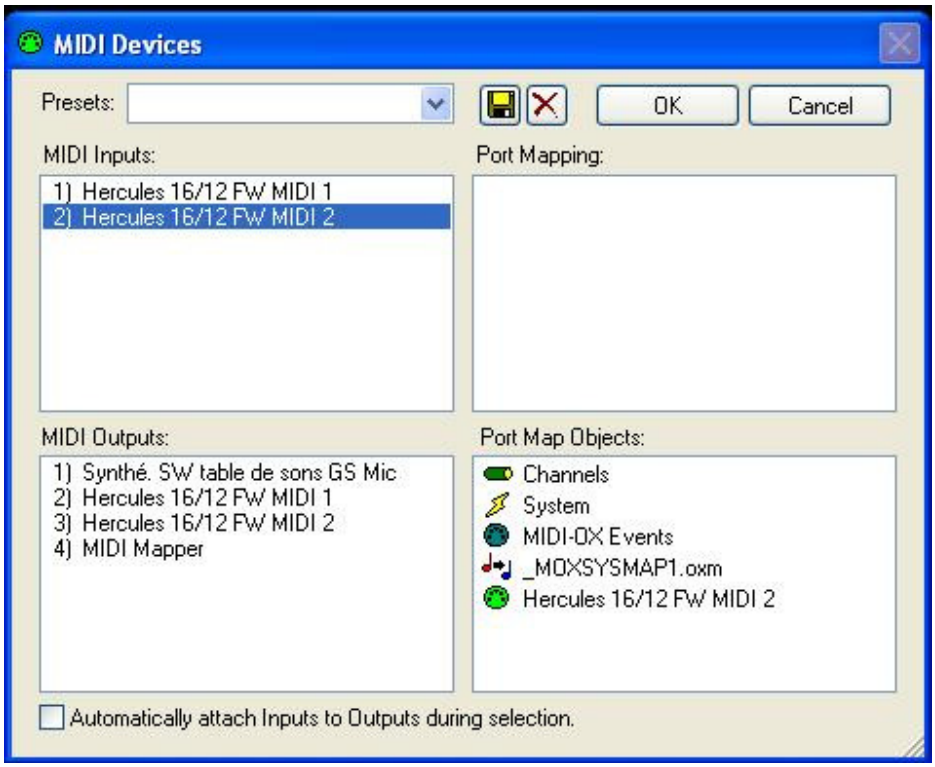
This window allows you to select which of all the available MIDI ports you want to use as Input and Output. This is obviously the most important configuration needed to use MIDI-OX correctly.

Another element that we will use is **MIDIBar**, a simple MIDI file player. It can be found under **Action/ Play MIDI…:**

Testing the MIDI Ports and cables

- Start by connecting both ends of a MIDI cable to the **MIDI 2 In** and **Out** port on the front of the 16/12 FW.

- Launch **MIDI-OX**, open **MIDI Devices** and configure it as follow:

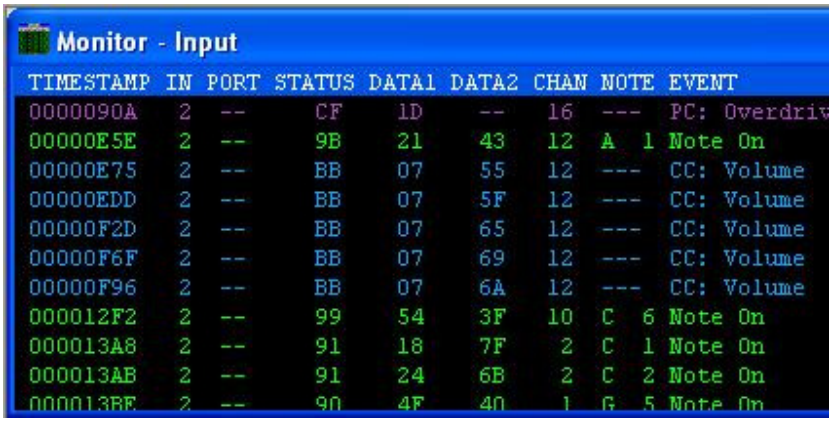


- Next, Open **MIDIBar**. Press  . This will open a dialog box, where you need to select **Hercules 16/12FW MIDI 2**.

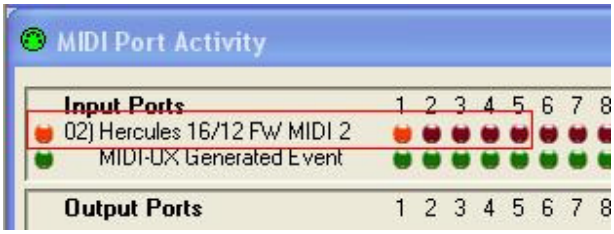
- Press  to load a MIDI file. If you don't MIDI files at hand, you can use one that is already included with Windows (in **C:\Windows\Media**).

- Press **Play** (**>**)

What we just did is to create a loop, allowing us to test both the cable and ports. By pressing "**>**" (Play) on **MIDIBar**, the data is sent to **MIDI OUT 2**, through the cable and back to **MIDI In 2**. If everything is working correctly, **Monitor Input** should display the incoming data:



You should also notice the activity on the ports and channels:



You can repeat the operation with other MIDI cables, and obviously with **MIDI 1** of the rear of the 16/12 FW.

If however the test fails:

- Use another MIDI cable
- Verify the configuration in MIDI-OX
- Test using **MIDI 1 Out** and **MIDI 2 In** (configure MIDIBar accordingly).

If there seems to be a physical problem with the MIDI ports, please refer to our technical support.

Testing External controllers or synthesizer

The same method applies for testing external controllers (keyboard, control surfaces):

- Connect the controller's **MIDI Out** to the 16/12 FW **MIDI In** of your choice
- Configure **MIDI Devices** accordingly
- Pressing a key or button on the external should display the incoming data on **Monitor Input** and **MIDI port Activity.**

NOTE: Some keyboards including a synthesizer may require some additional configuration. Please refer to the user manual for more details.

For external synthesizers:

- Connect the 16/12 FW **MIDI Out** to the synth **MIDI In**
- Configure **MIDIBar** accordingly, and play a MIDI file.
- Your synthesizer should normally reproduce the MIDI file.

Knowing that the hardware, be it the 16/12 FW, the cables or your external devices, are all in working order will save you a lot of time when trying to troubleshoot the source of a MIDI problem.