MAC - 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 Monitor**, a MIDI testing utility software, available from this site:

  http://www.snoize.com/MIDIMonitor/

As the name implies, **MIDI Monitor** displays data received and sent by the active MIDI ports.

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 Monitor**

The first thing to do is to check, under **Sources,** that ports **1 & 2** of the 16/12 FW are enumerated and active (checked):

- Open **Audio/MIDI Setup** (Application > Utilities). Under **MIDI**, you should find **Hercules 16/12 FW**

- Click Test Setup

- Using your mouse, click on ▼ for port **2** (right)

What we just did is to create a loop, allowing us to test both the cable and ports. By clicking ▼, MIDI data is sent to **MIDI OUT 2**, through the cable and back to **MIDI In 2**. If everything is working correctly, you should obtain the following result in **Audio/MIDI Setup**:

MIDI Monitor should also display the incoming data:

Time	Source	Message	Chan	Data	
*** ZERO ***	To MIDI Port 2	Note Off	16	B5	0
*** ZERO ***	To MIDI Port 2	Note Off	16	C#2	0
*** ZERO ***	To MIDI Port 2	Note Off	16	A#3	0
08:42:55.622	From MIDI Port 2	Note On	8	G#5	127
08:42:55.623	From MIDI Port 2	Note On	8	G4	127
08:42:55.625	From MIDI Port 2	Note On	8	A6	127

Remember up to 1000 events   Clear

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 Monitor**
- Test using **MIDI 1 Out** and **MIDI 2 In** (or vice-versa)

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 the source in **MIDI Monitor** accordingly

- Pressing a key or button on the external should display the incoming data on **MIDI Monitor.**

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**

- In **Audio/MIDI Setup,** click ▼ for the appropriate port

- Your synthesizer should normally reproduce the notes being played.

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.