


# Read Me

## USB & Firmware Troubleshooting Sessions


 Please read this information before using the Pro Tools Troubleshooting Sessions.

---

### Introduction

The Pro Tools® Troubleshooting Sessions provide a quick way to test the audio inputs/outputs and MIDI ports of your Pro Tools audio interface. Depending on your unit, connections tested may include MIDI ports, Optical (ADAT) ports, S/PDIF ports, and Monitor Outputs. If any of these ports appear not to be working, these sessions can quickly help to establish whether the problem is due to hardware failure or user error. Often the problem is due to incorrect cabling or improper routing within Pro Tools. It is rarely hardware failure.

Some slight modifications may be needed for the Troubleshooting Sessions to work properly with your system, as explained below. Once you have configured your cabling correctly and launched the appropriate Pro Tools Troubleshooting Session you can quickly check if your hardware is working correctly.

 Make sure the audio monitors (speakers) connected to the audio outputs of your Pro Tools hardware are either muted or turned down. Some sessions may have a signal routed to the outputs, and could be VERY LOUD depending on how your monitoring level controls are set. If you are using headphones be sure to reduce the headphone volume.

---

### Getting Started

If you are having trouble transmitting a signal via the MIDI ports, ADAT ports, S/PDIF ports, or Monitor Outputs, these sessions are already correctly configured in terms of internal Pro Tools routing. This eliminates the question of incorrect routing being the cause of the problem. After connecting the appropriate cables to the appropriate ports on your interface (details below) the correct Pro Tools Troubleshooting Session must be launched. The session will only transmit a signal if the cables you are using work correctly. Consequently, if the Troubleshooting Session fails to transmit a signal, the fault could be a bad cable. In this case, try another cable in place of the one you are currently using.

There is a Troubleshooting Session specific to each platform for the following Pro Tools interfaces:

- 003®
- 003 Rack
- Digi 002™
- Digi 002 Rack
- Mbox® 2
- Mbox 2 Pro



You can use the Mbox 2 Output session to test the Monitor Outputs on the Mbox 2 Mini.

---

## Cable Connections for 003 and 003 Rack Loop Test

In a Loop Test, an output signal on your unit is sent to its corresponding input such that the signal “loops” back into the session (this is achieved by connecting the outputs to the inputs with a cable). In order to launch the Pro Tools Troubleshooting Session, drag and drop the appropriate session file to your hard drive and double-click it.

### **MIDI Loop Test (003 only):**

- 1 On the 003, connect a MIDI cable from MIDI OUT 1 to MIDI IN.
- 2 Press the “Utility” switch to enter Utility mode. If the Utility switch is not enabled (flashing), press it.
- 3 Press the flashing “Insert” switch that corresponds to the “Test” menu. The LCD will show the first page of utility tests.
- 4 Press the ESC switch to toggle to the second page of Utility tests.
- 5 Start the MIDI test by pressing the flashing Dynamics switch.
- 6 Press the EQ switch to begin testing MIDI Out 1.
- 7 If data is received on the MIDI jack, the LCD shows Pass. If data is not received, the LCD shows Fail.
- 8 Connect a standard 5-pin MIDI cable from the MIDI In port to the MIDI Out 2 and repeat the test to check MIDI Out 2.
- 9 When finished, press the flashing Display switch.

### **MIDI Loop Test (003 Rack only):**

- On the 003 Rack, connect a MIDI cable from MIDI OUT 1 to MIDI IN. This will allow Pro Tools to pass a MIDI signal from the MIDI output port to the MIDI input port. Start playback in Pro Tools to check that signal passes from the MIDI output to the MIDI input.

### **ADAT Loop Test (003 and 003 Rack):**

- On the 003 or 003 Rack, connect an Optical cable from OPTICAL OUT to OPTICAL IN. This will allow Pro Tools to pass an audio signal from the Optical output port to the Optical input port. Start playback in Pro Tools to check that signal passes from the Optical output to the Optical input.

### **S/PDIF Loop Test (003 and 003 Rack):**

- On the 003 or 003 Rack, connect a 75 Ohm digital RCA cable from S/PDIF OUT to S/PDIF IN. This will allow Pro Tools to pass an audio signal from the S/PDIF output port to the S/PDIF input port. Start playback in Pro Tools to check that signal passes from the S/PDIF output to the S/PDIF input.

### **Output Test (003 and 003 Rack):**

- On the 003 or 003 Rack, connect ¼-inch jack cables from MAIN L/R (in the “Monitor” section) to your speakers. Adjust your output volume accordingly. Start playback in Pro Tools to check that signal passes from the audio outputs to your speakers.

---

## Cable Connections for Digi 002 and Digi 002 Rack Loop Test

In a Loop Test, an output signal on your unit is sent to its corresponding input such that the signal “loops” back into the session (this is achieved by connecting the outputs to the inputs with a cable). In order to launch the Pro Tools Troubleshooting Session, drag and drop the appropriate session file to your hard drive and double-click it.

### **MIDI Loop Test (Digi 002 only):**

- 1 On the Digi 002, connect a MIDI cable from MIDI OUT 1 to MIDI IN.
- 2 Press the Standalone Button and select “yes” to enter standalone mode.
- 3 Press the F1/Utility button.
- 4 Press the SEL button beneath “Test” on the third scribble strip.
- 5 Press the SEL button beneath the right-pointing arrow on the eighth scribble strip.
- 6 Press the SEL button beneath “MIDI” on the second scribble strip.
- 7 Press the SEL button beneath “Out 1” on the first scribble strip. If the MIDI cable is good the first scribble strip will read “Pass.”
- 8 Connect the MIDI cable to MIDI Out 2 to repeat the test for the second MIDI output.

### **MIDI Loop Test (Digi 002 Rack Only):**

- On the Digi 002 Rack, connect a MIDI cable from MIDI OUT1 to MIDI IN. This will allow Pro Tools to pass a MIDI signal from the MIDI output port to the MIDI input port. Start playback in Pro Tools to check that signal passes from the MIDI output to the MIDI input.

### **ADAT Loop Test (Digi 002 and Digi 002 Rack):**

- On the Digi 002 or Digi 002 Rack, connect an Optical cable from OPTICAL OUT to OPTICAL IN. This will allow Pro Tools to pass an audio signal from the Optical output port and receive it on the input of the Optical port. Start playback in Pro Tools to check that signal passes from the Optical output to the Optical input.

### **S/PDIF Loop Test (Digi 002 and Digi 002 Rack):**

- On the Digi 002 or Digi 002 Rack, connect a 75 Ohm digital RCA cable from S/PDIF OUT to S/PDIF IN. This will allow Pro Tools to pass an audio signal from the Optical output port to the Optical input port. Start playback in Pro Tools to check that signal passes from the S/PDIF output to the S/PDIF input.

### **Output Test (Digi 002 and Digi 002 Rack):**

- On the Digi 002 or Digi 002 Rack, connect ¼-inch jack cables from MON OUTPUT L/R to your speakers. Adjust your output volume accordingly. Start playback in Pro Tools to check that signal passes from the audio outputs to your speakers.

---

## Cable Connections for Mbox 2 Loop Test

In a Loop Test, an output signal on your unit is sent to its corresponding input such that the signal “loops” back into the session (this is achieved by connecting the outputs to the inputs with a cable). In order to launch the Pro Tools Troubleshooting Session, drag and drop the appropriate session file to your hard drive and double-click it.

### **S/PDIF Loop Test:**

- On the Mbox 2, connect a 75 Ohm digital RCA cable from S/PDIF Out to S/PDIF In. This will allow Pro Tools to pass an audio signal from the S/PDIF output port to the S/PDIF input port. Start playback in Pro Tools to check that signal passes from the S/PDIF output to the S/PDIF input.

### **MIDI Loop Test:**

- On the Mbox 2, connect a MIDI cable from MIDI Out to MIDI In. This will allow Pro Tools to pass a MIDI signal from the MIDI output port to the MIDI input port. Start playback in Pro Tools to check that signal passes from the MIDI output to the MIDI input.

### **Output Test:**

- On the Mbox 2, connect ¼-inch jack cables from Mon Out Left / Right to your speakers. Adjust your output volume accordingly. Start playback in Pro Tools to check that signal passes from the audio outputs to your speakers.

---

## Cable Connections for Mbox 2 Pro Loop Test

In a Loop Test, an output signal on your unit is sent to its corresponding input such that the signal “loops” back into the session (this is achieved by connecting the outputs to the inputs with a cable). In order to launch the Pro Tools Troubleshooting Session, drag and drop the appropriate session file to your hard drive and double-click it.

### **S/PDIF Loop Test:**

- Not available.

### **MIDI Loop Test:**

- On the Mbox 2 Pro, connect a MIDI cable from MIDI Out to MIDI In. This will allow Pro Tools to pass a MIDI signal from the MIDI output port to the MIDI input port. Start playback in Pro Tools to check that signal passes from the MIDI output to the MIDI input.

### **Output Test:**

- On the Mbox 2 Pro, connect ¼-inch jack cables from Mon Out L / R to your speakers. Adjust your output volume accordingly. Start playback in Pro Tools to check that signal passes from the audio outputs to your speakers.