Read Me

Pro Tools HD OMNI Troubleshooting Sessions

⚠ *Please read this information thoroughly before using the Pro Tools HD OMNI Troubleshooting Sessions.*

Introduction

The Pro Tools® HD Troubleshooting Sessions provide a quick way to test the audio inputs and outputs of your Pro Tools HD OMNI audio interface. Connections tested include: Optical (ADAT) ports, Optical S/MUX ports, S/PDIF ports, and Analog 1–2/TRS 1–2 Monitor Outputs. If any of these ports appear to not work, these sessions can quickly help to establish whether your HD OMNI audio interface hardware and the cables you are using are functioning correctly.

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 HD Troubleshooting Session, you can quickly check if your HD OMNI audio interface 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.*

While performing the following tests, you will be directed to import "I/O Settings" files that may be different than the settings you commonly use. Before you begin, you may want to export your existing "I/O Settings" so that you have a backup copy to restore the settings after you have finished testing.

To export I/O Settings for back up:

1 Launch Pro Tools

2 Choose Setup > I/O.

3 Click the Export Settings button.

4 In the resulting dialog, type a name for your I/O Settings and click Save. (You can import this file to restore your I/O Settings after you complete any testing.)

📄 *For more information on exporting and importing I/O Settings files, see the Pro Tools Reference Guide.*

Getting Started

To get started, first copy the folder called "Pro Tools HD OMNI Troubleshooting Sessions" to an easy to find place on your hard drive. Please do *not* yet open any of the sessions.

When using any of the included troubleshooting sessions, it is imperative that you follow the instructions in order to achieve the desired results.

To test HD OMNI using the included Pro Tools HD OMNI Troubleshooting Sessions:

1 Make necessary cable connections.

2 Launch Pro Tools and configure Hardware Setup and I/O Setup.

3 Open corresponding Test session and observe the results.

In the "Pro Tools HD OMNI Troubleshooting Sessions" folder you will find a total of five Pro Tools Session folders labeled "Test A" through "Test E." The letter designation is for each test is as follows:

Test A Optical (ADAT) 44.1 kHz/48 kHz Loop Test

Test B Optical (S/MUX) 88.2 kHz/96 kHz Loop Test

Test C Optical (S/MUX) 176.4 kHz/192 kHz Loop Test

Test D Coaxial (S/PDIF) 44.1 kHz–192 kHz Loop Test

Test E Analog 1–2/TRS 1–2 Monitor Output Test

Test A – Optical (ADAT) 44.1 kHz/48 kHz Loop Test

Cable Connections for Pro Tools HD OMNI Audio Interface

Make the following cable connections for Optical (ADAT) 44.1 kHz/48 kHz Loop (Test A).

To perform this test, you will need to connect only one Optical cable:

■ Connect an Optical cable from the left 1–8 OPTICAL OUT to 1–8 OPTICAL IN (when looking at the back panel, use in/out ports on the left side of the two pair).

When the Troubleshooting session is open, this lets Pro Tools pass an audio signal from the Optical output port and receive it back on the Optical input port.

Figure 1. Optical loop back connections

Launch Pro Tools and Configure Hardware Setup and I/O Setup

Configure Hardware Setup for Optical (ADAT) 44.1 kHz/48 kHz Loop (Test A):

1 Launch Pro Tools.

2 If the Quick Start dialog appears, click Cancel.

3 Choose Setup > Hardware.

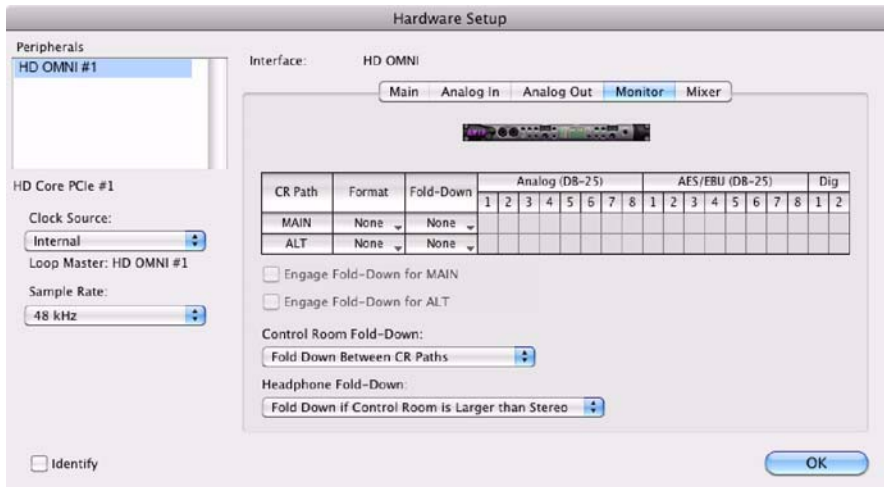**4** Click the Monitor tab.

Figure 2. Hardware Setup, Monitor page

5 For the MAIN CR Path, select None from the Format selector.

6 For the ALT CR Path, select None from the Format selector.
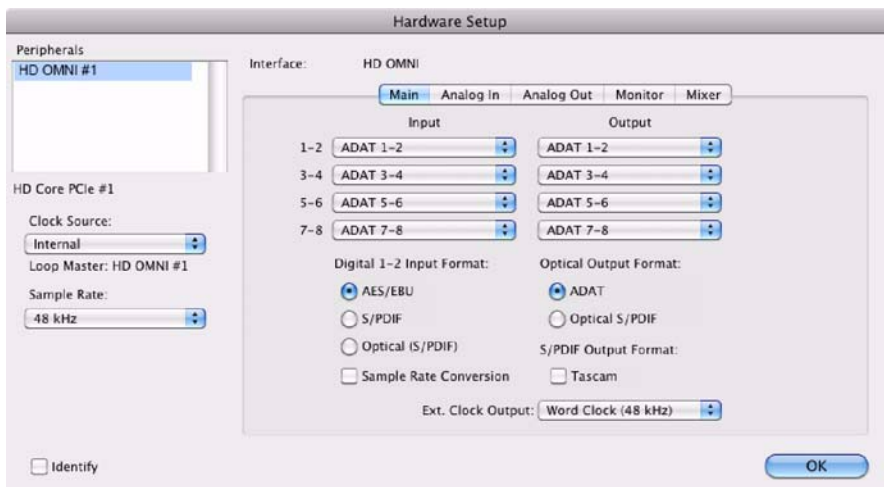
7 Click the Main tab.

Figure 3. Hardware Setup, Main page

8 Ensure that the Sample Rate is set to 48 kHz.

9 Ensure that Optical Output Format is set to ADAT.

10 Set the Inputs and Outputs as follows:

- 1–2 to ADAT 1–2
- 3–4 to ADAT 3–4
- 5–6 to ADAT 5–6
- 7–8 to ADAT 7–8

11 Click OK to close the Hardware Setup dialog.

12 Choose Setup > I/O.

13 Click the Input tab.

14 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

15 Select the file "Test A.pio" in the Test A session folder and click Open.

16 Click Yes when you are prompted to delete any existing unused paths.

17 Click the Output tab.

18 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

19 Select the file "Test A.pio" in the Test A session folder and click Open.

20 Click Yes when you are prompted to delete any existing unused paths.

21 Click OK to close the I/O Setup.

Open the "Test A" Session and Observe the Results

Do the following:

1 Choose File > Open Session.

2 Navigate to the location where you saved the "Test A" troubleshooting session, select it, and click Open.

You should be able to see the meters on all tracks registering a signal of around –20db (you should not hear anything). This indicates the equipment has passed the test and is functioning properly.

Test B – Optical (S/MUX) 88.2 kHz/96 kHz Loop Test

Cable Connections for Pro Tools HD OMNI Audio Interface

Make the following cable connections for Optical (S/MUX) 88.2 kHz/96 kHz Loop (Test B).

To perform this test, you will need to connect a total of (2) Optical cables:

1 Connect the first Optical cable from the left "1–4" OPTICAL OUT to "1–4" OPTICAL IN.

2 Connect the second Optical cable from the right "5–8" OPTICAL OUT to "5–8" OPTICAL IN.

Figure 4. Optical loop back connections

When the Troubleshooting session is open, this lets Pro Tools pass an audio signal from the Optical output ports and receive it back on the Optical input ports.

Launch Pro Tools and Configure Hardware Setup and I/O Setup

Configure Hardware Setup for Optical (S/MUX) 88.2 kHz/96 kHz Loop (Test B):

1 Launch Pro Tools.

2 If the Quick Start dialog appears, click Cancel.

3 Choose Setup > Hardware.
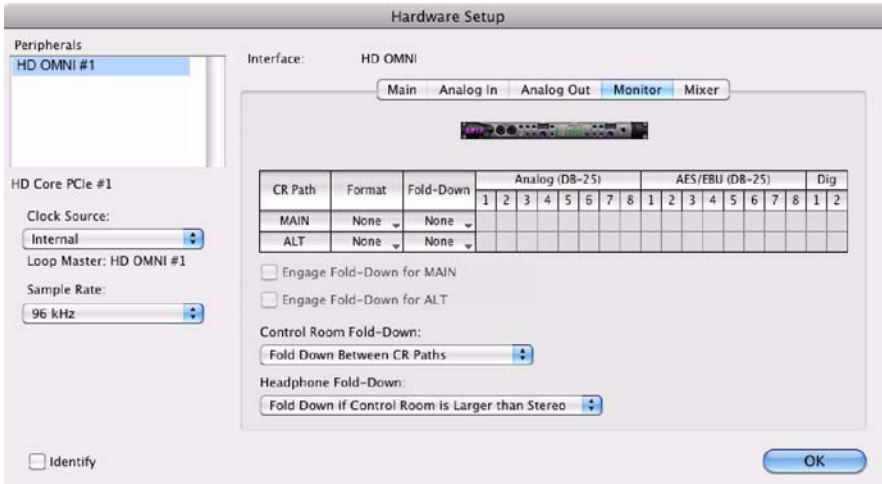
4 Click the Monitor tab.

Figure 5. Hardware Setup, Monitor page

5 For the MAIN CR Path, select None from the Format selector.

6 For the ALT CR Path, select None from the Format selector.
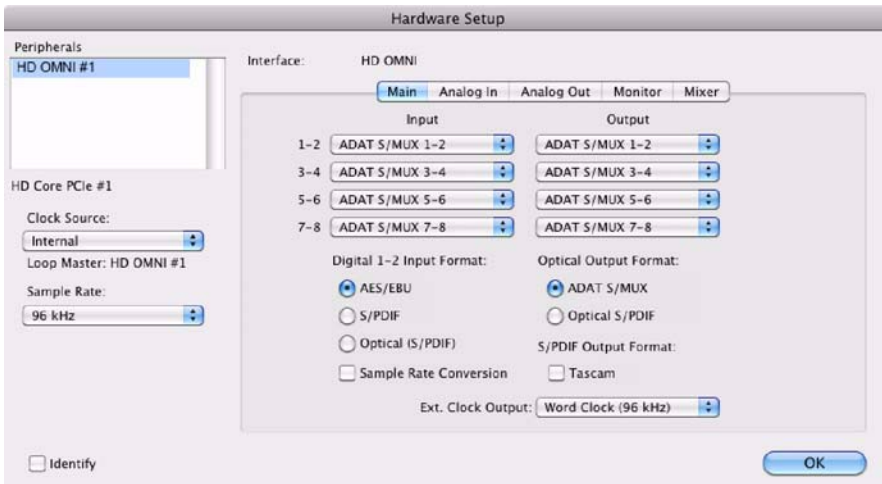
7 Click the Main tab.

Figure 6. Hardware Setup, Main page

8 Ensure that the Sample Rate is set to 96 kHz.

9 Ensure that Optical Output Format is set to ADAT S/MUX.

10 Set the Inputs and Outputs as follows:

- 1–2 to ADAT S/MUX 1–2
- 3–4 to ADAT S/MUX 3–4
- 5–6 to ADAT S/MUX 5–6
- 7–8 to ADAT S/MUX 7–8

11 Click OK to close the Hardware Setup dialog.

12 Choose Setup > I/O.

13 Click the Input tab.

14 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

15 Select the file "Test B.pio" in the Test B session folder and click Open.

16 Click Yes when you are prompted to delete any existing unused paths.

17 Click the Output tab.

18 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

19 Select the file "Test B.pio" in the Test B session folder and click Open.

20 Click Yes when you are prompted to delete any existing unused paths.

21 Click OK to close the I/O Setup.

Open the "Test B" Session and Observe the Results

Do the following:

1 Choose File > Open Session.

2 Navigate to the location where you saved the "Test B" troubleshooting session, select it, and click Open.

You should be able to see the meters on all tracks registering a signal of around –20db (you should not hear anything). This indicates the equipment has passed the test and is functioning properly.

Test C – Optical (S/MUX) 176.4 kHz/192 kHz Loop Test

Cable Connections for Pro Tools HD OMNI Audio Interface

Make the following cable connections for Optical (S/MUX) 176.4 kHz/192 kHz Loop (Test C).

To perform this test, you will need to connect a total of (2) Optical cables:

1 Connect the first Optical cable from the left "1–2" OPTICAL OUT to "1–2" OPTICAL IN.

2 Connect the second Optical cable from the right "3–4" OPTICAL OUT to "3–4" OPTICAL IN.

Figure 7. Optical loop back connections

When the Troubleshooting session is open, this lets Pro Tools pass an audio signal from the Optical output ports and receive it back on the Optical input ports.

Launch Pro Tools and Configure Hardware Setup and I/O Setup

Configure Hardware Setup for Optical (S/MUX) 176.4 kHz/192 kHz Loop (Test C):

1 Launch Pro Tools.

2 If the Quick Start dialog appears, click Cancel.

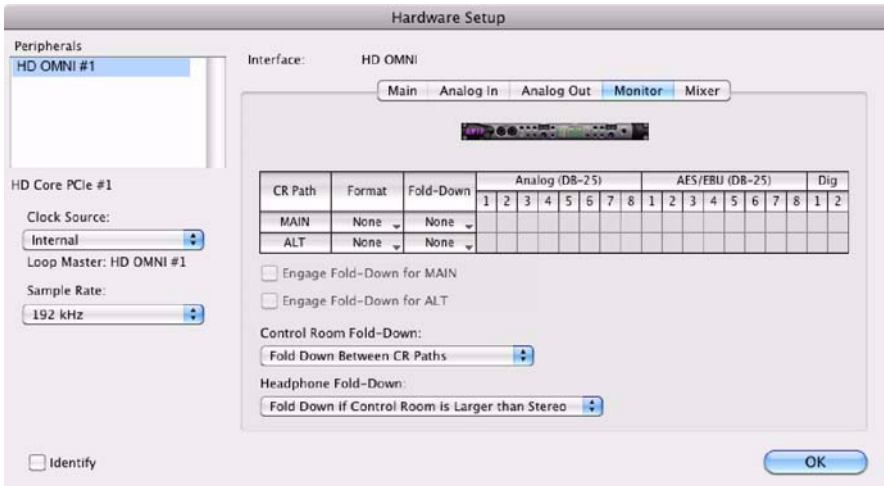**3** Choose Setup > Hardware.

4 Click the Monitor tab.

Figure 8. Hardware Setup, Monitor page

5 For the MAIN CR Path, select None from the Format selector.

6 For the ALT CR Path, select None from the Format selector.
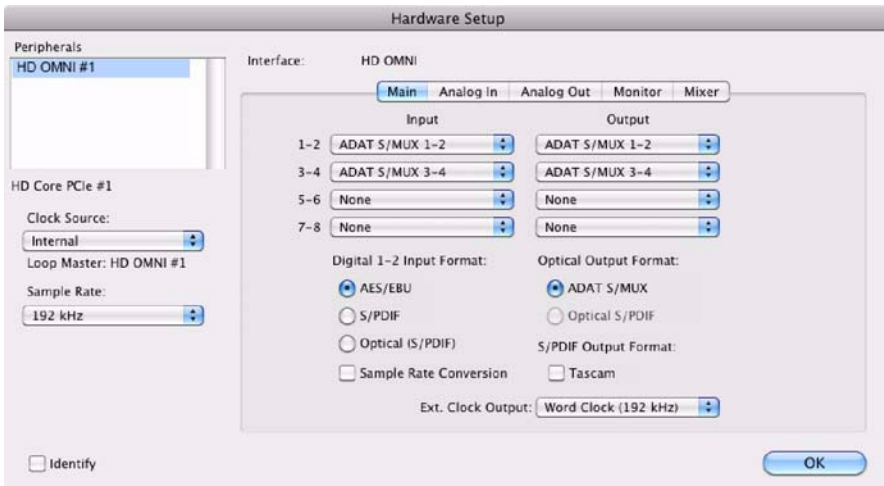
7 Click the Main tab.

Figure 9. Hardware Setup, Main page

8 Ensure that the Sample Rate is set to 192 kHz.

9 Ensure that Optical Output Format is set to ADAT S/MUX.

10 Set the Inputs and Outputs as follows:

- 1–2 to ADAT S/MUX 1–2
- 3–4 to ADAT S/MUX 3–4
- 5–6 to None
- 7–8 to None

11 Click OK to close the Hardware Setup dialog.

12 Choose Setup > I/O.

13 Click the Input tab.

14 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

15 Select the file "Test C.pio" in the Test C session folder and click Open.

16 Click Yes when you are prompted to delete any existing unused paths.

17 Click the Output tab.

18 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

19 Select the file "Test C.pio" in the Test C session folder and click Open.

20 Click Yes when you are prompted to delete any existing unused paths.

21 Click OK to close the I/O Setup.

Open the "Test C" Session and Observe the Results

Do the following:

1 Choose File > Open Session.

2 Navigate to the location where you saved the "Test C" troubleshooting session, select it, and click Open.

You should be able to see the meters on all tracks registering a signal of around −20db (you should not hear anything). This indicates the equipment has passed the test and is functioning properly.

Test D – Coaxial (S/PDIF) 44.1 kHz–192 kHz Loop Test

Cable Connections for Pro Tools HD OMNI Audio Interface

Make the following cable connections for Coaxial (S/PDIF) 44.1 kHz–192 kHz Loop (Test D).

To perform this test, you will need to connect only (1) 75 Ohm digital RCA cable:

■ Connect a 75 Ohm digital RCA cable from S/PDIF OUT (red) to S/PDIF IN (white). When the Troubleshooting session is open, this lets Pro Tools pass an audio signal from the S/PDIF output port to the S/PDIF input port.

Figure 10. Coaxial (S/PDIF) loop back connections

Launch Pro Tools and Configure Hardware Setup and I/O Setup

Configure Hardware Setup for Coaxial (S/PDIF) 44.1–192 kHz Loop (Test D):

1 Launch Pro Tools.

2 If the Quick Start dialog appears, click Cancel.

3 Choose Setup > Hardware.
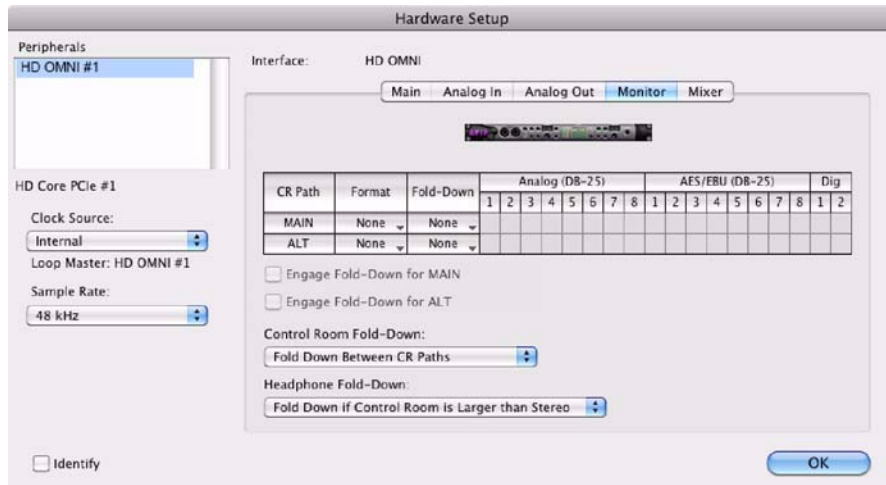
4 Click the Monitor tab.

Figure 11. Hardware Setup, Monitor page

5 For the MAIN CR Path, select None from the Format selector.

6 For the ALT CR Path, select None from the Format selector.
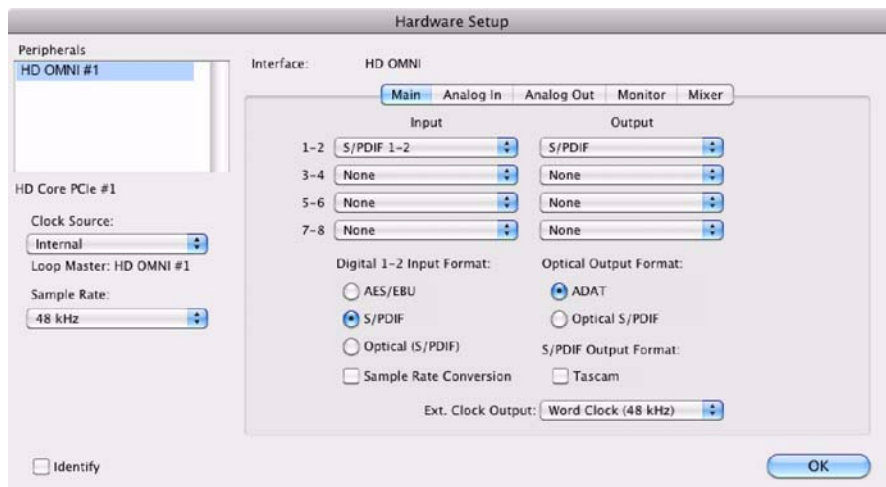
7 Click the Main tab.

Figure 12. Hardware Setup, Main page

8 Ensure that the Sample Rate is set to 48 kHz.

9 Ensure that Optical Output Format is set to ADAT.

10 Make sure Digital 1–2 Input Format is set to S/PDIF.

11 Set the Inputs and Outputs as follows:

- 1–2 to S/PDIF 1–2
- 3–4 to None
- 5–6 to None
- 7–8 to None

12 Click OK to close the Hardware Setup dialog.

13 Choose Setup > I/O.

14 Click the Input tab.

15 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

16 Select the file "Test D.pio" in the Test D session folder and click Open.

17 Click Yes when you are prompted to delete any existing unused paths.

18 Click the Output tab.

19 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

20 Select the file "Test D.pio" in the Test D session folder and click Open.

21 Click Yes when you are prompted to delete any existing unused paths.

22 Click OK to close the I/O Setup.

Open the "Test D" Session and Observe the Results

Do the following:

1 Choose File > Open Session.

2 Navigate to the location where you saved the "Test D" troubleshooting session, select it, and click Open.

You should be able to see the meters on all tracks registering a signal of around –20db (you should not hear anything). This indicates the equipment has passed the test and is functioning properly.

Test E – Analog 1–2/TRS 1–2 Monitor Output Test

Cable Connections for Pro Tools HD OMNI Audio Interface

Make the following cable connections for the Analog 1–2/TRS 1–2 Monitor Output Test (Test E).

⚠ *Before opening Test Session E, make sure the audio monitors (speakers) connected to the audio outputs of your HD OMNI audio interface are either muted or turned down.*

To perform this test, make one of the following cable connections:

- Connect (2) TRS cables to audio monitors (speakers) or another listening device.

  – or –

- Connect a DB-25 snake, channels 1 and 2 to audio monitors (speakers) or another listening device.

Launch Pro Tools and Configure Hardware Setup and I/O Setup
"Hardware Setup" Configuration for Analog 1-2 / TRS 1-2 Monitor Output (Test E):

Configure Hardware Setup for Analog 1–2/TRS 1–2 Monitor Output (Test E):

1 Launch Pro Tools.

2 If the Quick Start dialog appears, click Cancel.

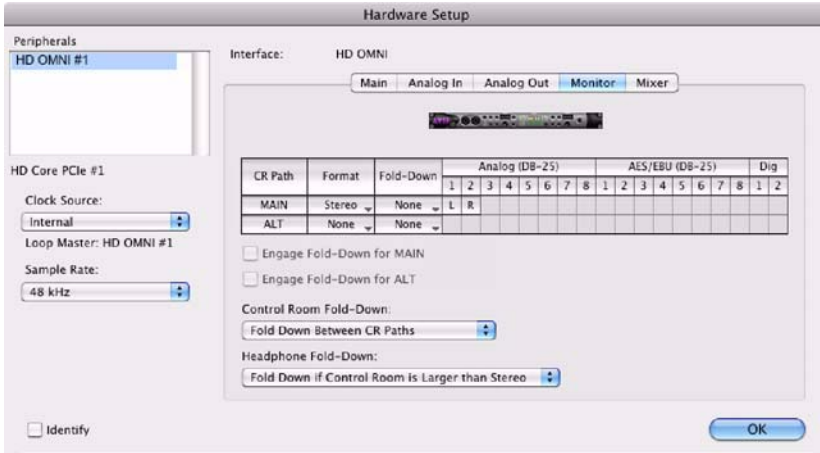**3** Choose Setup > Hardware.

4 Click the Monitor tab.

Figure 13. Hardware Setup, Monitor page

5 For the MAIN CR Path, select Stereo from the Format selector.

6 For the MAIN CR Path Analog (DB-25) 1 and 2, click to assign "L" and "R" monitor output paths.

7 For the ALT CR Path, select None from the Format selector.

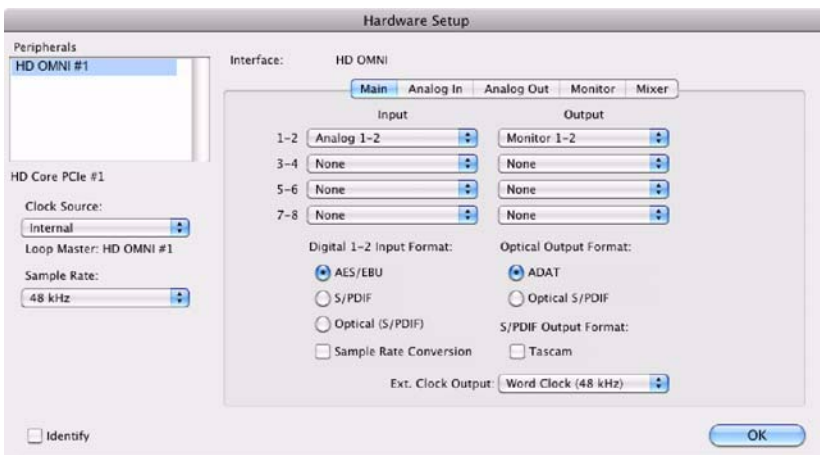**8** Click the Main tab.

Figure 14. Hardware Setup, Main page

9 Ensure that the Sample Rate is set to 48 kHz.

10 Set the Inputs as follows:

- 1–2 to Analog 1–2
- 3–4 to None
- 5–6 to None
- 7–8 to None

11 Set the Outputs as follows:

- 1–2 to Monitor 1–2
- 3–4 to None
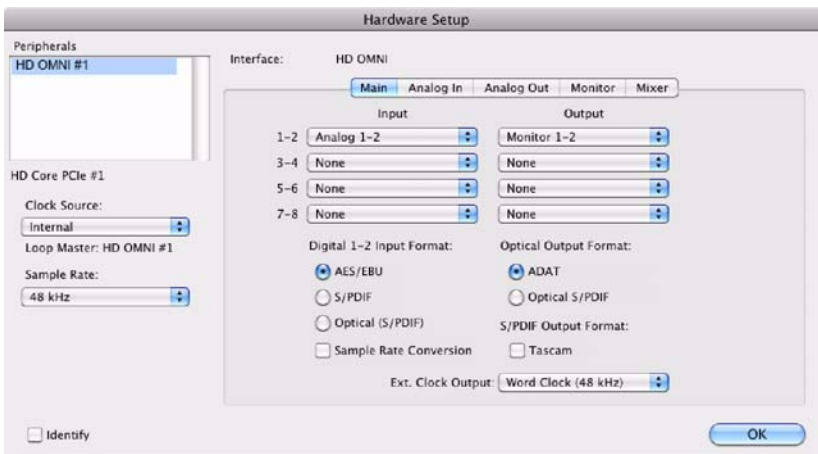- 5–6 to None
- 7–8 to None

12 Click the Main tab.

Figure 15. Hardware Setup, Main page
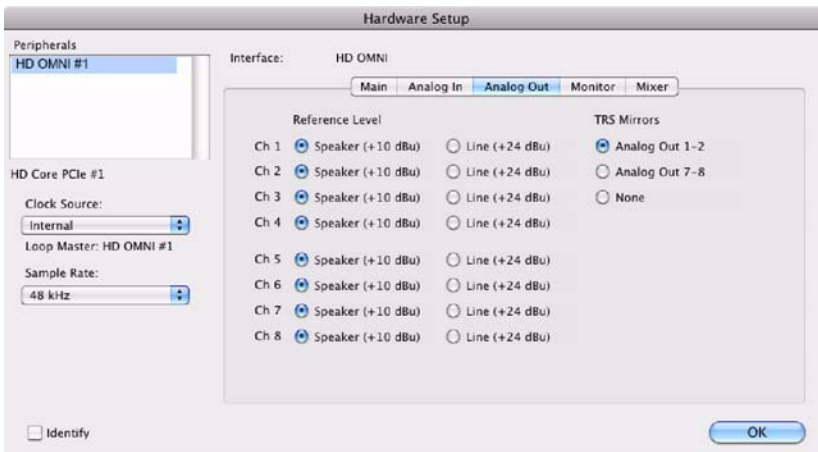
13 Click the Analog Out tab.

Figure 16. Hardware Setup, Analog Out page

14 Ensure that TRS Mirrors is set to Analog Out 1–2.

15 Click OK to close the Hardware Setup dialog.

16 Choose Setup > I/O.

17 Click the Output tab.

18 Click Import Settings and browse to where you saved a copy of this troubleshooting session.

19 Select the file "Test E.pio" in the Test E session folder and click Open.

20 Click Yes when you are prompted to delete any existing unused paths.

21 Click OK to close the I/O Setup.

Open the "Test E" Session and Observe the Results

Do the following:

1 Choose File > Open Session.

2 Navigate to the location where you saved the "Test E" troubleshooting session, select it, and click Open.

With the volume turned down, un-mute your audio monitors (speakers) and slowly start bringing up the volume level. You should hear a 1 kHz Sine wave (test tone). This indicates the equipment has passed the test and is functioning properly.