Supported Systems

- Avid HDX, HD Native and HD Accel PCI cards
- Pro Tools versions 8.5 and above (including 10.3)
- Supported Mac OS as per Avid Compatibility requirements

**IMPORTANT - THIS VERSION SUPPORTS 2 INTERFACES PER PCI CARD PORT.** Additional interfaces must be connected to another Avid PCI card port.

New Features

1. X-HD equipped X-Series and Rosetta Series interfaces now appear as a Digital HD I/O in Pro Tools software.
2. Avid HDX and HD Native PCIe cards now officially supported with X-Series and Rosetta Series interfaces (up to two interfaces per port).

Update X-HD Firmware

Please CAREFULLY follow these instructions to update your X-HD card. Skipping a step often results in a failed update!

**Items Required**

- MIDI interface + any drivers required for the interface.
- X-HD v3_00 Firmware Updater

1. Completely disconnect the Apogee interface (AC, PCIe connection, word clock) and remove the top cover.
2. Connect a standard MIDI cable from your MIDI interface to the X-HD card. Be sure to connect to the X-HD card’s MIDI port, and not the host interface’s MIDI port.
3. Reset the X-Series interface by holding the DOWN button while powering on the unit; reset the Rosetta-series interface by holding down the SAMPLE RATE button while powering on the unit.
4. Open the X-HD v3_00 Firmware Updater.
5. Set **MIDI Output Port** to the port on your MIDI interface connected to the X-HD MIDI port.
6. Choose the desired version of X-HD firmware:
   - 3.00 - HD I/O emulation
   - 2.07 - 192 emulation - the version shipping since 2007.
7. Click **Start Update** - after a few moments, a red and green LED should flash on the X-HD card.
8. A progress bar indicates progress of the update - when the bar disappears, the update is done.
9. After the update is finished, QUIT the updater app and power-cycle the interface.
10. Repeat these steps for each interface to be updated.
11. Once all interfaces are updated, re-connect them to your Avid PCIe cards. Launch Pro Tools, choose Setup > Hardware Setup and verify that all interfaces appear and are detected as a Digital HD I/O.
Adjusting for Pro Tools Delay Compensation

As with the previous version of X-HD firmware, adjustments of Apogee interface converter latency to match the Pro Tools Delay Compensation must be done manually in the Setup > I/O > H/W Insert Delay. Note that entries must be modified for each sample rate. See the chart below for millisecond values to enter in the H/W Insert Delay fields.

<table>
<thead>
<tr>
<th>Sample Rate</th>
<th>AD/DA16X Standard Routing</th>
<th>AD/DAX Advanced Routing - Analog channels</th>
<th>AD/DAX Advanced Routing - Digital channels</th>
<th>Rosetta 800/200</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.1kHz</td>
<td>1.33 ms</td>
<td>1.31 ms</td>
<td>0.11 ms</td>
<td>1.30 ms</td>
</tr>
<tr>
<td>48kHz</td>
<td>1.22 ms</td>
<td>1.20 ms</td>
<td>0.10 ms</td>
<td>1.19 ms</td>
</tr>
<tr>
<td>88.2kHz</td>
<td>0.42 ms</td>
<td>0.40 ms</td>
<td>0.08 ms</td>
<td>1.14 ms</td>
</tr>
<tr>
<td>96kHz</td>
<td>0.38 ms</td>
<td>0.36 ms</td>
<td>0.07 ms</td>
<td>1.05 ms</td>
</tr>
<tr>
<td>176.2kHz</td>
<td>0.13 ms</td>
<td>0.10 ms</td>
<td>0.05 ms</td>
<td>1.02 ms</td>
</tr>
<tr>
<td>192kHz</td>
<td>0.12 ms</td>
<td>0.10 ms</td>
<td>0.04 ms</td>
<td>0.94 ms</td>
</tr>
</tbody>
</table>