**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

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