TEMPO™ HD
ATA/133 Host Controller Card

Quick Start Guide for Tempo HD

You Should Have

The following items should be included in your product package:

• Tempo HD PCI card
• Four hard drive mounting screws
• Software CD

The following tool may be required for installation of Tempo HD:

• Medium Phillips screwdriver

The following additional tools may be required for installation of a 2.5" Ultra ATA/IDE hard drive:

• Small flat blade screwdriver
• Needle nose pliers

Along with one or more available drive bays, the following items, which are sold separately, may be required for installation of additional hard drives:

• Ultra ATA cable
• Drive mounting brackets/carriers or drive mounting sleds
• Hard drive mounting screws
• One or more power cable Y-adapters

Tempo HD shown with 2.5" hard drive attached; hard drive not included (sold separately)

System Requirements

Tempo HD requires the following in order to operate in your system:

• One available PCI slot
• Mac OS® X Version 10.3 or later, or Windows® Vista, or Windows XP SP2

Support Notes: We recommend that you make a backup of important information on your system's current hard drive(s) prior to installing new hardware or software.

When handling computer products, you must take care to prevent components from being damaged by static electricity. Before opening your computer or removing parts from their packages, always ground yourself first by touching a metal part of the computer, such as a port access cover, and work in an area free of static electricity; avoid carpeted areas. Handle all electric components only by their edges, and avoid touching connector traces and component pins.

Quick Start Guide for Tempo HD

Installation Preparation

Prior to installing the Tempo HD into your system, you should read the section in your computer's user manual that address PCI card installation.

Support Note: If you are a Windows user, install the software after installing the Tempo HD card and hard drive(s).

Software Installation Steps - Mac Users

If you are a Mac user, you must install the included software prior to installing the Tempo HD card into your computer.

1. Turn on your computer, and then insert the included CD into the computer's optical drive.

2. Double-click the SonnetTHD-M.pkg file to launch the installer; when the *Welcome to the Sonnet THD-M Installer* window appears, click Continue.

3. When the *Important Information* window appears, click Continue.

4. When the *Software License Agreement* window appears, read the license, click Continue, and then click Agree.

5. When the *Select a Destination* window appears, accept the default destination or choose a new destination, and then click Continue.

6. When the *Easy Install* window appears, click Continue, enter your name and password, and then click OK.

7. While the driver is installed, a progress bar appears. When the *Software was successfully installed* screen appears, click Close; you may now install the Tempo card into your system.

Quick Start Guide for Tempo HD

Support Note: Technical knowledge may be required to gain access to the expansion bays in certain computer models. We recommend you first consult your computer's user manual. If you feel you are unable to install the computer hardware, contact a qualified technician.

2.5" Hard Drive Installation Preparation

If you intend to install a 2.5" Ultra ATA/IDE hard drive onto the Tempo HD card, you may need to prepare the drive by installing, moving or removing jumpers. If you do not intend to install a 2.5" hard drive onto the Tempo HD card, skip to Tempo HD Card Installation Steps on the next page.

1. Remove your 2.5" hard drive from its packaging (if necessary).

2. Locate the jumper block on your hard drive. **Figure 1** shows the most common jumper block location.

2.5" Hard Drive Installation Steps

This section covers the configuration, and the installation a 2.5" Ultra ATA/IDE hard drive onto your Tempo HD card.

Support Note: Refer to the hard drive user's manual for jumper setting information specific to your drive. Alternately, you may find jumper setting information printed on your hard drive's labels. Make sure the drive is oriented the same way as the illustration before moving jumpers.

1. Configure the hard drive's jumper(s) for use as a master drive.

2. Remove the Tempo HD card from its packaging, and lay it on a flat surface with the surface-mounted connector face up.

3. Lay the 2.5" hard drive on the card within the rectangle imprinted on it, and align the hard drive's pins with the Tempo HD card's surface-mounted connector **(Figure 2)**. Push the hard drive's pin's into the Tempo HD's connector until the drive is completely seated.

4. Holding the drive against the card, flip the assembly over. Using the 4 screws provided, secure the hard drive to the Tempo HD; **be sure to use the correct holes**, **and do not overtighten the screws (Figure 3)**.

Tempo HD Card Installation Steps

This section covers the installation of the Tempo HD adapter card into your system. For more information on attaching additional hard drives, see page 4.

1. Shut down and open your computer to access its expansion card area (PCI slots); refer to your computer's user manual for specific information.

2. Remove the Tempo HD card from its packaging.

3. Locate an available PCI slot inside your computer and, if present, remove its access cover.

4. Install the Tempo card into the PCI slot; **make sure the card is firmly seated and secured**.

5. If you are not connecting additional ATA drives to the Tempo HD card, close your computer and then skip to Drive Formatting on page 5. Otherwise, go to page 4.

jumper block

Figure 1

hard drive's pins

surface-mounted connector

2.5 inch hard drive

Figure 2

Tempo HD

screw   screw

screw   screw
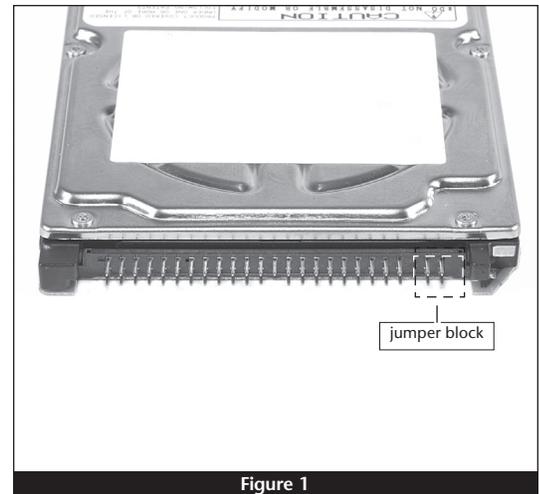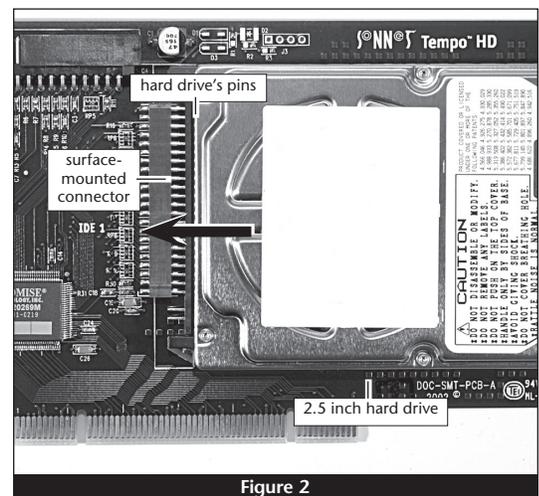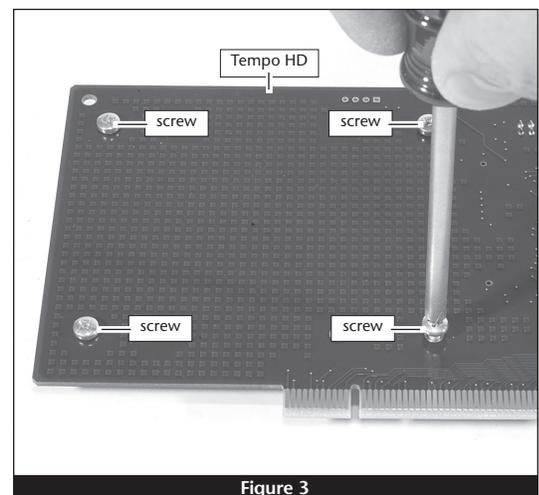
Figure 3

Quick Start Guide for Tempo HD

Standard (3.5") Hard Drive Installation Preparation

Before installing additional hard drives into your system, familiarize yourself with the parts to be installed. We also strongly recommend that you read the section in your computer's user manual that addresses hard drive installation.

1. Identify the connectors on an Ultra ATA cable (sold separately) as shown in **Figure 4**; the host connector plugs into the Tempo HD controller card, while the master and slave connectors plug into the hard drives.

2. Remove the hard drive from its packaging.

40-pin/80-wire Ultra ATA cable

connects to
Tempo HD

master
connector
(black)

slave
connector
(gray)

host
connector
(blue)
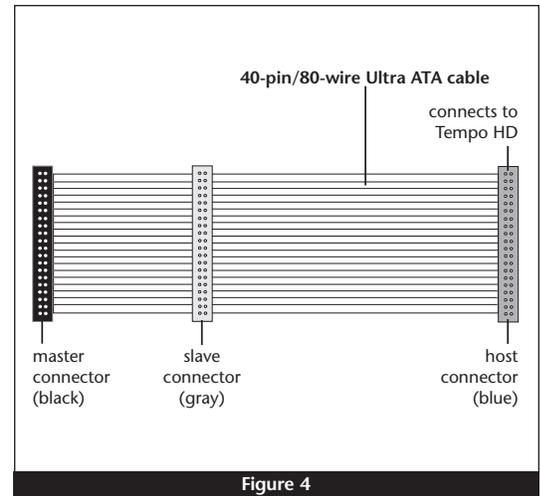
Figure 4

> **Support Note:** Most hard drives are factory preset for use as a single or master drive. To change the setting, you will need to reconfigure the hard drives' jumpers. Be sure the jumpers are configured properly, otherwise, your computer may not boot, or your new drives may not be recognized.

3. Locate the jumper block on the hard drive. **Figure 5** shows the two most common jumper block locations.

Standard (3.5")Hard Drive Installation Steps

This section covers the installation and configuration one or two standard (3.5") hard drives into your system.

1. Shut down your computer, if it is not already off.

2. Open your computer to access the expansion card area (PCI slots) and drive bay(s); refer to your computer's user manual for specific information.

jumper block

jumper block

Figure 5

> **Support Note:** Refer to the hard drive user's manual for jumper setting information specific to your drives. Alternately, you may find jumper setting information printed on your hard drives' labels. Make sure the drives are oriented the same way as the illustration before moving jumpers.

3. Configure the hard drives' jumpers as follows:

   • When installing **one drive**, you must set its jumpers to the single setting when available, or the master setting when not.

   • When connecting **two drives**, you must set the jumpers on one drive to the master setting, and to the slave setting on the other.

4. Install the hard drives into your computer's expansion bays. (Depending on your computer model, drive mounting brackets/carriers or drive mounting sleds may be required to install your hard drives. Refer to your computer's user manual.)
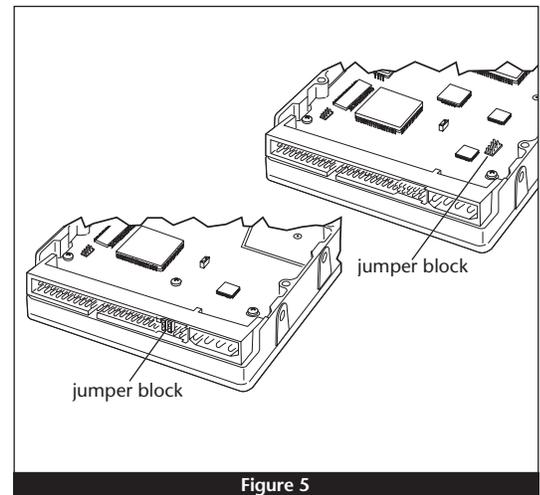
Quick Start Guide for Tempo HD

5. Connect the drive(s) to an Ultra ATA cable (sold separately) as follows:

- When connecting **one drive**, plug in the Ultra ATA cable's master (black) connector to it. **Verify the connector is plugged in securely (Figure 6)**.

- When connecting **two drives**, connect the Ultra ATA cable's master (black) connector to the drive with jumpers set in the master setting; connect the slave (gray) connector to the drive with jumpers configured in the slave setting. **Verify the connectors are plugged in securely (Figure 6)**.

6. Locate the 4-pin power connector plugged into your computer's existing hard drive. You should find at least one extra power connector near the existing drive; if you have installed only one drive, plug the extra power connector into it. If you have installed two drives, or there are no additional power connectors, you must use a power cable Y-adapter (sold separately). **Verify the connectors are plugged in securely**.

7. Route the Ultra ATA cable to the Tempo HD card; avoid the processor's heat sink and make sure it will not get crushed or pinched by any part of the case when you reassemble your computer.

8. Attach the Ultra ATA cable's host (blue) connector to the Tempo HD card. **Verify the connector is plugged in securely (Figure 6)**.

9. Check the cable connections; **make sure the cable is properly connected to the Tempo HD and the hard drives**.

10. Close your computer and carefully replace its cover; be very careful not to crimp the cables.

Drive Formatting - Mac Users

This section covers the basics of formatting hard drives under Mac OS X. **If you are a Windows user, you must first install driver software before formatting the drives; skip to the next page for information.**

⚠️ **WARNING:** Hard drives attached to the Tempo HD will not mount (appear on the desktop) until they have been formatted; this includes drives with data on them, previously used in other computers. Please be aware that **formatting a drive erases any data present**.

1. Turn on your computer.

2. During the boot process, one or more *Disk Insertion* windows will appear stating that there is an unreadable volume; click Initialize, and then Disk Utility will open. Use Disk Utility to set up drives connected to the Tempo HD card; refer to Disk Utility help (Help > Disk Utility Help) for more information. Once the drives are formatted, they are ready for use; your installation is complete.

Tempo HD Card
IDE2
Ultra ATA cable
slave
○ - jumpers
single (or master*)

*jumpers *must* be set to the master setting when two drives connected
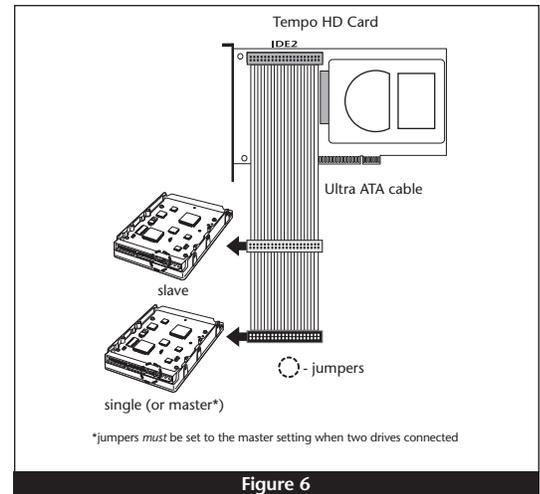
Figure 6

Quick Start Guide for Tempo HD

Software Installation Steps - Windows Vista Users
Install the software after installing the Tempo HD card and hard drive(s).

1. Log in. During startup, a *Found New Hardware* window will appear.

2. Select the "Locate and install driver software (recommended)" option. If you have not disabled User Account Control (UAC), a UAC window will appear; click Continue.

3. A window stating that software is being installed will appear briefly. When the *Found New Hardware - Mass Storage Controller* window appears, insert the included software CD into your computer's optical drive.

4. After you insert the CD, the computer will search the disc and automatically install the proper drivers for the Tempo HD.

5. When the message stating the software has been installed successfully, click close; you may now format drives connected to the Tempo card.

Software Installation Steps - Windows XP Users
Install the software after installing the Tempo HD card and hard drive(s).

1. Log in. During startup, when the *Welcome to the Found New Hardware Wizard* window appears, select "No, not at this time" under "Can Windows connect to Windows Update to search for Software?", and then click Next.

2. When the next window appears, select "Install from a list or specific location", and then click Next.

3. When the next window appears, insert the included software CD into your computer's optical drive, select the "Search for the best driver in these locations" and "Search removable media" options, and then click Next.

4. When a warning appears stating that the software you are about to install has not passed Windows logo testing, click Continue Anyway; the proper drivers for the Tempo HD will be installed automatically.

5. When the next window appears stating the wizard has finished installing the software, click close; you may now format drives connected to the Tempo card.

WARNING: Hard drives attached to the Tempo HD will not mount (appear on the desktop) until they have been formatted; this includes drives with data on them, previously used in other computers. Please be aware that **formatting a drive erases any data present**.

Windows Drive Formatting
If you intend to format drives connected to the Tempo HD using Windows drive formatting tools, you may locate additional information by using "format volume" as the search item in Windows Help.

1. Start Windows, click the Start button, type "disk management" in the Start Search field, and then click the disk management link to launch the Disk Management application.

2. If an *Initialize Disk* window appears, select a partition style for the attached drive(s), and then click OK; the drive will be initialized. Repeat as necessary with other drives attached to the Tempo card.

3. Right-click the name field of one of the attached drives and select the formatting type you wish to use for it. Repeat as necessary with other drives attached to the Tempo card.

4. Depending on the formatting type you chose, a Wizard may appear; follow the onscreen instructions to complete formatting of the drive(s). Once the drives are finished being formatted, they are ready to use.