



# **2.5/3 TB Hard Drives SATA Host Bus Adapter**

Quick Install Guide

## Driver Installation

- Upon the first system start after the installation of the hardware the operating system will find the HBA and hard drive and install the required software automatically.
- Windows 7 and Windows Vista 32-bit operating systems do not support booting from SATA devices that are greater than 2.19 TB, so usage is limited to secondary storage only.
- Windows 7 and Windows Vista 64-bit operating systems support both primary and secondary storage capabilities. Be sure to enable the UEFI support in the System BIOS settings to provide booting capabilities.
- If this start is an operating system installation and you are installing the 64 bit version, this drive can be selected to contain the operating system files required for booting the system.
- Follow the normal steps to partition and format the drive for use.

## Regulatory Compliance

- Federal Communication Commission:** Verified to comply with FCC Rules for Radiated and Conducted Emission, Part 15, Subpart B, for Class B Equipment.
- Underwriters Laboratories:** Bi-National UL Standard CAN/CSA-C22.2 No. 60950/UL 60950-1. Standard for Safety of Information Technology Equipment, including Electrical Business Equipment (File E101559).
- TUV NORD CERT GmbH:** IEC-950 (EN60950) Standard for Safety of Information Technology Equipment, including Electrical Business Equipment. EN60065. Standard of Safety for Audio, Video, and Similar Electronic Apparatus.
- CE Compliance for Europe:** Verified to comply with EN55022:2006 for RF Emissions and EN55024:1998, A1:2001 + A2:2003, EN61000-3-2:2000, EN61000-3-3:1995 + A1:2001 for Generic Immunity as applicable.
- C-Tick Compliance for Australia:** Verified to comply with AS/NZ3548 for RF Emissions as required by the Australian Communications Authority.
- Korean KCC Mark:** Registered as a Class-B product with the South Korean Ministry of Information and Communication.
- Taiwan BSMI EMI Certification:** Certified as a Class-B product with the Bureau of Standards Metrology and Inspection (BSMI).

## Environmental Compliance (China)

### SATA HBA

Part Item 部件名称	Lead (Pb) 铅	Mercury (Hg) 汞	Cadmium (Cd) 镉	Hexavalent Chromium (Cr (VI)) 六价铬	Polybrominated Biphenyls (PBB) 多溴联苯	Polybrominated Diphenyl Ethers (PBDE) 多溴二苯醚
PCBA 电路板组合 / 板卡	○	○	○	○	○	○

O: 代表此种部件所用的均质材料中所含的该种有毒有害物质均低于 SJ/T 11363-2006 规定的限量。

X: 代表此种部件所用的均质材料中所含的该种有毒有害物质均高于 SJ/T 11363-2006 规定的限量。

### WD SATA Hard Drive

WD HDD 产品						
部件名称	有毒或危险物质和成分					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr VI)	聚溴联苯 (PBB)	聚溴联苯醚 (PBDE)
硬盘组件 (HDA)	○	○	○	○	○	○
磁头臂组件 (HSA)	○	○	○	○	○	○
基座与马达组件 (MBA)	○	○	○	○	○	○
印刷电路组件 (PCA)*	X	○	○	○	○	○

\* 印制电路组件包括所有印制电路板 (PCB) 及其各自的分立组件、集成电路和连接器的总体。

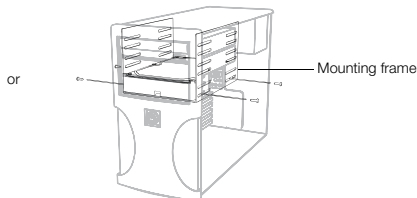
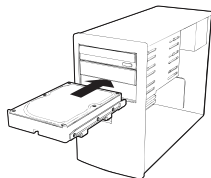
“○” 指示部件的（处于同质材料级别上）危险和有毒物质含量低于由 MCV 标准所定义的阈值。

“X” 指示部件的（处于同质材料级别上）危险和有毒物质含量高于由 MCV 标准所定义的阈值。

在显示 “X” 的所有情况下，WD 都使用一个允许的免除。

### 3 Hard Drive Installation

1. Install rails on the side of the hard drive and slide it into an available 3.5-inch drive bay, or secure the drive with four mounting screws (two on each side). For proper grounding, install the screws in the hole positions.

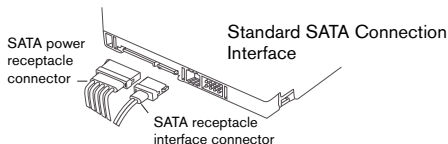


2. Attach one end of the SATA cable to the SATA interface on the installed WD drive. SATA connectors are keyed to ensure proper insertion.
3. Connect the SATA power cable to the SATA interface on the drive.

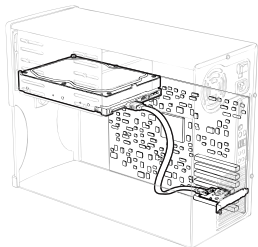


SATA device plug  
power connector

SATA device plug  
interface connector



4. Connect the SATA cable to the SATA connector on the host bus adapter.



5. Verify all cable connections. Replace and secure the system cover. Reconnect the power cord and power on the computer.

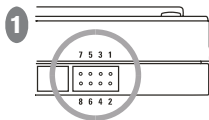
**PM2 Enabled Mode:** To enable power-up in standby (power management 2 or PM2) mode, place a jumper on pins 3–4. This mode enables controlled spinup by spinup command in accordance with ATA standard and is mainly for server/workstation environments operating in multiple-drive configurations.

*Note:* The PM2 feature is not available on all WD SATA drives.

**Important:** PM2 mode requires a compatible BIOS that supports this feature. If PM2 is enabled and not supported by BIOS, the drive does not spin up and therefore is not detected by the system.

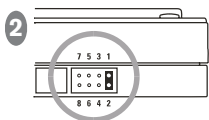
**OPT1:** 1.5 Gb/s data transfer speed enabled or disabled. Default setting is disabled. To enable 1.5 Gb/s data transfer speed, place a jumper on pins 5–6.

**OPT2:** Reserved for factory use (pins 7–8).



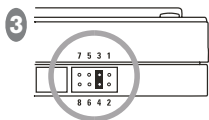
**Default**

Standard configuration (no jumper added).  
Spread spectrum clocking disabled.



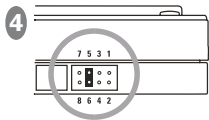
**SSC Enabled**

Spread spectrum clocking enabled (jumper on pins 1-2).



**PM2 Enabled**

PM2 enabled (jumper on pins 3-4). Controlled spinup via spinup command (ATA standard).



**OPT1 Enabled**

1.5 Gb/s data transfer speed enabled (jumper on pins 5-6).

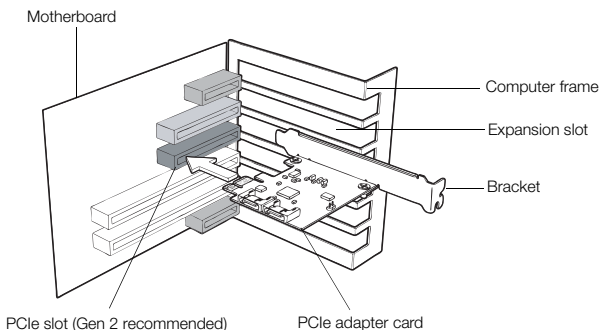
*Note:* Jumper shunt not included.

- Handle the hard drive by its sides only. Avoid touching the circuit board components on the bottom of the hard drive.
- Do not drop, shake, or knock down the hard drive.
- Do not stack hard drives or stand your WD hard drive on its edge.

## 1 Host Bus Adapter (HBA) Installation

*Note:* Make sure the system is powered off with the power cable removed before installing the host bus adapter.

1. Open the system chassis and locate an unused PCI-Express 2.0 or 1.0 (x1, x4, x8, or x16) slot.
2. Remove the PCI slot/bracket cover.
3. Gently insert the HBA into the PCI-Express slot, and secure the bracket to the system chassis.



## 2 Hard Drive Jumper Settings

**Important:** DO NOT change the default setting if you intend to use the drive in a desktop computer. Change the jumper settings **ONLY** if you intend to use the drive in an enterprise storage environment. For more information on these advanced settings, visit <http://support.wdc.com>.

It is not necessary to add a jumper shunt on the drive for workstation/desktop use. For enterprise storage environments, use the following advanced settings:

**SSC Mode:** Spread spectrum clocking feature enabled or disabled. Default setting is disabled or no jumper shunt placed on pins 1–2. Adding the jumper to pins 1–2 enables the spread spectrum clocking feature.

## Important

SATA hard drives are now capable of storing up to 3 TB of data on a single hard drive. WD is leading the way in the industry, providing you with solutions for implementing 2.19 TB and larger drives.

Before you attempt to install this drive in your computer, you will need to understand if your system supports a hard drive larger than 2.19 TB. Visit <http://products.wdc.com/largecapacitydrives> for more information on the 2.19 TB capacity barrier.

## Compatibility

- Windows® 7
- Windows Vista®
- Mac OS X® Leopard®
- Mac OS X Snow Leopard™
- Linux

ENG

*Note:* Compatibility may vary depending on your hardware configuration and operating system.

## Kit Contents

- WD SATA hard drive
- SATA host bus adapter
- Quick install guide

## System Requirements

- 3.5-inch internal drive bay
- AHCI-compliant platform with an available PCI-Express slot

## Tools and Materials Needed

- WD SATA hard drive
- SATA host bus adapter
- Computer system manual
- SATA cable (not included)
- Phillips and flat-blade screwdrivers.

## Unpacking & Drive Handling

WD hard drives are precision instruments and should be handled with care during unpacking and installation. Hard drives can be damaged by rough handling, shock and vibration, or electrostatic discharge (ESD). Be aware of the following precautions:

- This product contains no user-serviceable parts; refer servicing to WD-authorized personnel only.
- Do not unpack your hard drive until you are ready to install it. Your hard drive is packaged in an anti-static bag.
- To avoid ESD problems, ground yourself by touching the metal chassis of the computer before handling the hard drive. Articles of clothing generate static electricity. Do not allow clothing to come in direct contact with the hard drive or circuit board components.

## WD® Service and Support

Should you encounter any problem, please give us an opportunity to address it before returning this product. Most technical support questions can be answered through our knowledge base or e-mail support service at <http://support.wdc.com>. If the answer is not available or, if you prefer, please contact WD at the best telephone number shown below.

Your product includes 30 days of free telephone support during the warranty period. This 30-day period starts on the date of your first telephone contact with WD technical support. E-mail support is free for the entire warranty period and our extensive knowledge base is available 24/7. To help us keep you informed of new features and services, remember to register your product online at <http://register.wdc.com>.

### Accessing Online Support

Visit our product support website at <http://support.wdc.com> and choose from these topics:

- **Downloads** – Download drivers, software, and updates for your WD product.
- **Registration** – Register your WD product to get the latest updates and special offers.
- **Warranty & RMA Services** – Get Warranty, Product Replacement (RMA), RMA Status, and Data Recovery Information.
- **Knowledge Base** – Search by keyword, phrase, or answer ID.
- **Installation** – Get online installation help for your WD product or software.

### Contacting WD Technical Support

When contacting WD for support, have your WD product serial number, system hardware, and system software versions available

#### North America

English	800.ASK.4WDC (800.275.4932)
Spanish	800.832.4778

<b>Europe (toll free)*</b>	00800 ASK4 WDEU (00800 27549338)
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<b>Europe</b>	+31 880062100
<b>Middle East</b>	+31 880062100
<b>Africa</b>	+31 880062100

#### Asia Pacific

Australia	1 800 42 9861
China	800 820 6682/+65 62430496
Hong Kong	+800 6008 6008
India	1 800 11 9393 (MNTL)/1 800 200 5789 (Reliance) 011 26384700 (Pilot Line)
Indonesia	+803 852 9439
Japan	00 531 650442
Korea	02 703 6550
Malaysia	+800 6008 6008/1 800 88 1908/+65 62430496
Philippines	1 800 1441 0159
Singapore	+800 6008 6008/+800 608 6008/+65 62430496
Taiwan	+800 6008 6008/+65 62430496

\* Toll free number available in the following countries: Austria, Belgium, Denmark, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland, United Kingdom.

# Warranty Policy and Limitations

No limited warranty is provided by WD unless your WD Product (Product) was purchased from an authorized distributor or authorized reseller. Distributors may sell Products to resellers who then sell Products to end users. See below for warranty information or obtaining service. No warranty service is provided unless the Product is returned to an authorized return center in the region (Americas, Europe-Middle East-Africa, or Asia Pacific) where the Product was first shipped by WD.

## Obtaining Service

WD values your business and always attempts to provide you the very best of service. If this Product requires maintenance, either contact the dealer from whom you originally purchased the Product or visit our product support Web site at <http://support.wdc.com> for information on how to obtain service or a Return Material Authorization (RMA). If it is determined that the Product may be defective, you will be given an RMA number and instructions for Product return. An unauthorized return (i.e., one for which an RMA number has not been issued) will be returned to you at your expense. Authorized returns must be shipped in an approved shipping container, prepaid and insured, to the address provided on your return paperwork. Your original box and packaging materials should be kept for storing or shipping your WD product. To conclusively establish the period of warranty, check the warranty expiration (serial number required) via <http://support.wdc.com>. WD shall have no liability for lost data regardless of the cause, recovery of lost data, or data contained in any Product placed in its possession.

## Limited Warranty

WD warrants that the Product, in the course of its normal use, will be free from defects in material and workmanship for a period of three (3) years, unless otherwise required by law, and will conform to WD's specification therefor. This limited warranty period shall commence on the purchase date appearing on your purchase receipt. WD shall have no liability for any Product returned if WD determines that the Product was stolen from WD or that the asserted defect a) is not present, b) cannot reasonably be rectified because of damage occurring before WD receives the Product, or c) is attributable to misuse, improper installation, alteration (including removing or obliterating labels and opening or removing external enclosures, unless the product is on the list of limited user-serviceable products and the specific alteration is within the scope of the applicable instructions, as found at <http://support.wdc.com>), accident or mishandling while in the possession of someone other than WD. Subject to the limitations specified above, your sole and exclusive warranty shall be, during the period of warranty specified above and at WD's option, the repair or replacement of the Product. The foregoing warranty of WD shall extend to repaired or replaced Products for the balance of the applicable period of the original warranty or ninety (90) days from the date of shipment of a repaired or replaced Product, whichever is longer.

The foregoing limited warranty is WD's sole warranty and is applicable only to products sold as new. The remedies provided herein are in lieu of a) any and all other remedies and warranties, whether expressed, implied or statutory, including but not limited to, any implied warranty of merchantability or fitness for a particular purpose, and b) any and all obligations and liabilities of WD for damages including, but not limited to accidental, consequential, or special damages, or any financial loss, lost profits or expenses, or lost data arising out of or in connection with the purchase, use, or performance of the Product, even if WD has been advised of the possibility of such damages. In the United States, some states do not allow exclusion or limitations of incidental or consequential damages, so the limitations above may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Visit <http://support.wdc.com> for additional terms and conditions.

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