



WD Hard Drive

Compatibility Guide

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Not sure which drive is right for your computer? This guide helps you determine the right type of drive and interface using these three questions:

- Which internal drive is the right choice: SATA or EIDE?
- Which internal drive is compatible with my operating system: SATA or EIDE?
- Which external drive is the right choice: USB or FireWire®?

Which internal drive is the right choice: SATA or EIDE?

First, look at the connections on your computer.



SATA

Serial ATA (SATA) hard drives are quickly becoming the new standard in hard drive technology. Motherboard manufacturers now include SATA inputs on their boards. SATA hard drives result in less clutter and increased airflow in the computer system, because SATA cables are 400 percent narrower than EIDE cables. Some older computer system motherboards don't have SATA ports, but a PCI SATA controller card can be installed to add support for SATA drives. If you don't know whether your computer has SATA ports on the motherboard, refer to your computer or motherboard documentation or contact the motherboard manufacturer.

EIDE

Enhanced integrated drive electronics (EIDE), also called Parallel ATA (PATA), hard drives have been the standard in the home computer industry for more than 10 years. Some newer computer system motherboards don't have EIDE ports, but a PCI EIDE controller card can be installed to add support for EIDE drives. If you don't know whether your computer has EIDE ports on the motherboard, refer to your computer or motherboard documentation or contact the motherboard manufacturer.

Feature	WD SATA Hard Drives	WD EIDE Hard Drives
Maximum data transfer rate	150 MB/s or 300 MB/s	100 MB/s
Devices per cable	One	Two
Jumper block	8-pin (no Master/Slave settings)	10-pin (single, Master, Slave, and cable select (CSEL) settings)

Which internal drive is compatible with my operating system: SATA or EIDE?

Your operating system, as well as your hardware, must support the hard drive you choose:

Operating System	WD SATA Hard Drive Compatibility	WD EIDE Hard Drive Compatibility
Windows® 2000 or XP	Yes	Yes
Windows 98SE	No	Yes
Windows 98	No	Yes
Mac® OS X	No	Yes
Mac OS 9.x	No	Yes

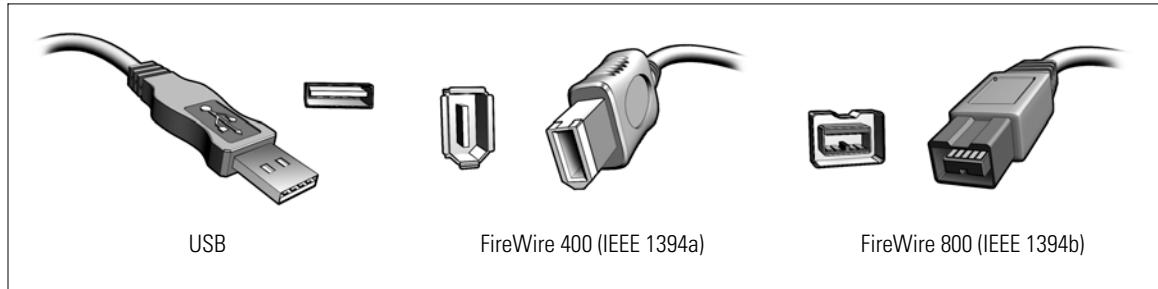
Note: Compatibility may vary depending on user's hardware configuration and operating system.

Other helpful information is available in the WD Knowledge Base at support.wdc.com:

- What issues should I be concerned about when using a drive larger than 137 GB? (Answer ID 533)
- Are EIDE hard drives larger than 137 GB supported in Mac systems? (Answer ID 927)

Which external drive interface is the right choice: USB or FireWire?

Each interface has its strengths, which are explained in detail below. The right choice depends on compatibility with your computer and how you want to use your drive. First, look at the connections on your computer.



USB

USB 2.0 is the industry standard peripheral connection for most Windows-based computers. This connection transfers data at a maximum rate of 480 Mb/s. Sustained data transfer rates, usually from 10 to 30 MB/s, vary depending on many factors including the type of device, data being transferred, and computer system speed. If your USB port is an earlier version, USB 1.0 or 1.1, you can use a USB 2.0 hard drive, but transfer rates are slower. If you don't know the version of your computer's USB ports, refer to your computer documentation or contact the manufacturer.

FireWire

FireWire, also called IEEE 1394, is a high-performance connection standard for personal computers and consumer electronics. This interface uses a peer-to-peer architecture in which peripherals negotiate bus conflicts to determine which device can best control a data transfer. FireWire has two configurations:

- FireWire 400, also called IEEE 1394a, transfers large amounts of data between computers and peripheral devices at rates up to 400 Mb/s. With higher bandwidth, longer distances, and a higher-powered bus, this interface is suitable for hard drives, digital video, professional audio, high-end digital still cameras, and home entertainment devices.
- FireWire 800, also called IEEE 1394b, provides the high-speed connection and bandwidth required for multiple-stream, uncompressed digital video and noise-free, high-resolution digital audio. It offers maximum flexibility with long-distance cabling and configuration options not available with USB.

USB 2.0	FireWire 400	FireWire 800
Hot-swappable (attach a device without rebooting the system)	Hot-swappable (attach a device without rebooting the system)	Hot-swappable (attach a device without rebooting the system)
480 Mb/s maximum burst transfer rate	400 Mb/s maximum sustained transfer rate	800 Mb/s maximum sustained transfer rate; twice as fast as FireWire 400
Best for connecting to different systems quickly and easily	Best for transferring large amounts of data frequently or for audio/video programs	Best for multiple-stream digital video and high-resolution digital audio
More popular for PCs	More popular for Macintosh® computers	More popular for Macintosh computers

Note: For convenience and flexibility, choose a WD hard drive with both USB and FireWire interfaces, available in dual and triple interface configurations.

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