



Advanced Format

Technology Brief

What is Advanced Format?

Advanced Format technology enables hard drive companies to read and write more data onto the same available space on the hard drive. Advanced Format technology is being adopted by WD and other drive manufacturers to increase media format efficiency, thus enabling larger drive capacities.



What are the benefits of drives with Advanced Format technology?

Advanced Format technology enables hard drive companies to more efficiently utilize the available space on a hard drive, resulting in the ability to produce larger hard drive capacities.

Advanced Format technology improves data integrity by providing a more efficient Error Correction Code (ECC) scheme, resulting in a 50% improvement in burst error correction.

WD Advanced Format drives are also specifically optimized for Mac® and the latest Windows® operating systems such as Windows Vista® and Windows 7 with a clean install.

Which drives are currently shipping with Advanced Format technology?

WD is currently implementing Advanced Format technology on select WD Caviar® Green™ and WD Scorpio® Blue™ models. Over time, more models and capacities will be added.

WD Caviar Green

Desktop Hard Drives

640 GB	WD6400AARS
800 GB	WD8000AARS
1 TB	WD10EARS
1.5 TB	WD15EARS
2 TB	WD20EARS

WD Scorpio Blue

Mobile Hard Drives

750 GB	WD7500KPVT
1 TB	WD10TPVT



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How do I know if a drive has Advanced Format technology?

WD drives with Advanced Format technology include special installation information on the drive label, so be sure to read the label on your drive before installing it.



Advanced Format Drive. To achieve full performance:

- Windows XP, multi partition and cloning software users- use WD Align software available on www.wdc.com/advformat
- Windows XP, single partition- set jumpers 7-8 prior to installation or use WD Align software
- All other OS software configurations- drive is ready to use as is

WD Align software

Your customer's WD Advanced Format hard drive may require running the WD Align software utility after installing the operating system or partitioning and formatting the drive as a secondary drive. WD Align software is available for download at: www.westerndigital.com/advformat

WD Align software aligns partitions on the Advanced Format drive to ensure it provides full performance for certain configurations. (See table for configuration details)

OS used to create partition	Clean install 1 Partition	Clean install > 1 Partition	Cloning utility 1 Partition or > 1 Partition	USB** 1 Partition	USB** > 1 Partition
Windows XP	Jumper pins 7-8* or run WD Align	Run WD Align	Run WD Align	Run WD Align	Run WD Align
Windows Vista	NA	NA	Run WD Align	NA	NA
Windows 7	NA	NA	Run WD Align	NA	NA
Mac OS	NA	NA	NA	NA	NA

* Jumper settings only apply to 3.5-inch drives. Install jumper prior to drive installation. Do NOT install jumper after formatting drive.

** Disconnect all other USB storage devices prior to running WD Align utility.

NA No additional preparation required. Drive is ready to use as is.

For complete details and a list of FAQs, please visit www.westerndigital.com/advformat

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As used for storage capacity, one megabyte (MB) = one million bytes, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. As used for transfer rate or interface, megabyte per second (MB/s) = one million bytes per second, and gigabit per second (Gb/s) = one billion bits per second.

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