Western Digital
Special Edition EIDE Hard Drives

WD Caviar Special Edition hard drives are designed to maximize desktop computer performance for activities requiring high-performance storage such as computer gaming, digital video editing, and file server applications. Offering capacities as large as 200 GB and equipped with an 8 MB buffer—the largest buffer available today in a desktop EIDE hard drive—the WD Caviar Special Edition family delivers data to users faster than any hard drive in its class.

SUPERIOR PERFORMANCE

The Special Edition hard drive provides a higher percentage of cache hits and significantly faster time to data than industry- standard 2 MB versions. Within the complex operations of hard drives, the buffer is used to hold the results of recent reads from the disk, and also to "pre-fetch" information that is likely to be requested in the near future. The use of an increased buffer improves the performance by reducing the number of physical accesses to the disk and allowing data to stream from the disk uninterrupted by mechanical operations.

DATA PROTECTION ENHANCEMENTS

Data Lifeguard™ is an expanded set of data protection tools that includes shock protection, an environmental protection system, and embedded error detection and repair features that automatically find, isolate, and repair problem areas that may develop over the extended use of the hard drive. With these enhanced data reliability features, the drive can perform more accurate monitoring and error repair and deliver exceptional data security.

Data Lifeguard Tools™ is a set of software utilities that work in conjunction with the embedded Data Lifeguard features to make hard drive installation, drive management diagnostics, and repair simple and worry-free.

Shock Guard™ provides outstanding improvements in shock and vibration protection for the newest WD Caviar drives. Shock Guard allows instantaneous data protection at high shock values to achieve leading shock specifications.

IMPORTANT: Use Data Lifeguard Tools 10.0 or later installation software to access the full capacity of your hard drive. Hard drives larger than 137 GB require an Ultra ATA controller card to utilize full drive capacity.

THE WESTERN DIGITAL PROMISE

Western Digital has earned a reputation as a company that understands the importance of the data stored on our hard drives. We are committed to protecting our customers' data with reliable, high-performance storage products and superior customer support and services.

INTERFACE

EIDE

WIDTH/HEIGHT

3.5-inch/1-inch

CAPACITY

40 to 200 GB

PART NUMBERS

WD400JB
WD600JB
WD800JB
WD1000JB
WD1200JB
WD1800JB
WD2000JB

Western Digital

Western Digital
Special Edition EIDE Hard Drives

WD Caviar
Special Edition

WD Caviar Special Edition Specifications

	40 GB	60 GB	80 GB	100 GB	120 GB	180 GB	200 GB
Physical Specifications							
Interface	EIDE	EIDE	EIDE	EIDE	EIDE	EIDE	EIDE
Form Factor	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch	3.5-inch
Formatted Capacity [1]	40,020 MB	60,022 MB	80,026 MB	100,030 MB	120,034 MB	180,045 MB	200,049 MB
Actuator Type	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil	Rotary Voice Coil
Bytes per Sector (STD)	512	512	512	512	512	512	512
User Sectors per Drive	78,165,360	117,231,408	156,301,488	195,371,568	234,441,648	351,651,888	390,721,968
Model Numbers	WD400JB	WD600JB	WD800JB	WD1000JB	WD1200JB	WD1800JB	WD2000JB
Performance Specifications							
Average Latency	4.2 ms	4.2 ms	4.2 ms	4.2 ms	4.2 ms	4.2 ms	4.2 ms
Rotational Speed	7200 RPM	7200 RPM	7200 RPM	7200 RPM	7200 RPM	7200 RPM	7200 RPM
Data Transfer Rate (Buffer to Host)							
- Mode 5 Ultra ATA [2]	100 MB/s	100 MB/s	100 MB/s	100 MB/s	100 MB/s	100 MB/s	100 MB/s
- Mode 4 Ultra ATA [2]	66.6 MB/s	66.6 MB/s	66.6 MB/s	66.6 MB/s	66.6 MB/s	66.6 MB/s	66.6 MB/s
- Mode 2 Ultra ATA [2]	33.3 MB/s	33.3 MB/s	33.3 MB/s	33.3 MB/s	33.3 MB/s	33.3 MB/s	33.3 MB/s
- Mode 2 DMA [2]	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s
- Mode 4 PIO [2]	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s	16.6 MB/s
Buffer	8 MB	8 MB	8 MB	8 MB	8 MB	8 MB	8 MB
Warranty	3 years	3 years	3 years	3 years	3 years	3 years	3 years

Average Read Seek	8.9 ms (average)
Track-to-Track Seek [3]	2.0 ms (average)
Full Stroke Read Seek [3]	21 ms (average)
Read Cache	Adaptive
Write Cache	Yes
Drive Ready Time	7.0 sec average
Start/Stop Cycles	50,000 min
Master/Slave Support	Yes
IORDY Support	Yes
Error Rate (Non-recoverable)	<1 in 10^{14} bits read

[1] *Western Digital defines a megabyte (MB) as 1,000,000 bytes, and a gigabyte (GB) as 1,000,000,000 bytes.*
[2] *Maximum burst rate running the specified PIO, DMA, or Ultra ATA transfer mode.*
[3] *On reads and writes*

Designed for
Microsoft®
Windows® XP
Windows® 2000
Windows® ME

X
Built for Mac OS X

Mac

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Certified
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TESTING LAB

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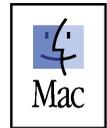
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