

## AV Drives are not suitable for Desktop Use

### AV Optimizations

The Western Digital AV-GP is optimized for audio-visual applications, for use in DVRs, PVRs and CCTV systems. Hence, this hard disk drive has certain AV-specific features that are not found in desktop hard disk drives :

- Field-programmable command completion times of less than 100 ms
- Full support of ATA streaming commands
- Optimized for multi-stream audio and video applications
- Firmware optimized for write-intensive operations
- Ships in quiet seek mode for lower noise and power consumption
- Lowest self-induced vibration
- Capable of operating at up to 75 °C

New

The WD AV-GP drive is physically identical to the **WD Caviar Green**, but these features turn it into a completely different drive - one that's optimized for multiple, large and continuous sequential write operations. This is mostly due to its support of the ATA/ATAPI-7 standard's Streaming Command Set, which includes features like :

- Streaming Performance Log (to describe normal drive performance)
- Error Recovery Time Limits (to prevent long delays for error recovery)
- Continuous Read/Write Controls (to return/use partially correct data)
- Streaming Error Logs (to reduce time delays for system error processing)
- Configure Stream Command (to allow optimum drive buffer management)

These features are great if you are looking for a hard disk drive to use in DVR/PVR or CCTV setup. However, you should never use this hard disk drive in a desktop or server.

### Not For Desktop Use

Unlike desktop hard disk drives, the AV-GP is designed to skip error correction in favour of completing commands on time. This prevents a disruption of the video or audio stream due to time-consuming error correction routines at the expense of some bad data. This is great for CE-type applications like recording video and audio streams off cable or CCTV feeds. A few off-colour pixels are far less noticeable than a few missing frames.



However, no one can accept bad data in a desktop or server environment. When we copy a document to a hard disk drive, we expect its content to be 100% identical to the original. If a bit is determined to be bad, we expect the hard disk drive to correct the error before writing it. It would not do if the drive simply ignores the error and writes the bad bit in order to ensure it completes the operation on time.

Some unscrupulous or misinformed dealers are promoting such AV-optimized hard disk drives as "superior" versions of their desktop cousins with appropriately higher price tags. Nothing could be further from the truth. These AV-optimized hard disk drives are neither superior nor inferior to their desktop equivalents. They are designed to be used in very specific applications, and are not meant for use in desktop or server environments.

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