

FAQ Sheet

How to Partition and Format a WD Drive on Windows and macOS

Answer ID 8200

External hard drives and external solid state drives come pre-formatted and ready for use. Internal HDD and internal SSD drives do not ship pre-formatted and will need to be Partitioned and formatted before being used.

Please note the instructions do not differ when formatting different capacity sizes, this is not capacity specific.



Critical: The instructions in the article below are designed to help repartition and format a hard drive. This process is Data Destructive and cannot be undone. Once the process begins, ***ALL THE DATA ON THE DRIVE WILL BE LOST!***



Critical: Western Digital recommends that when formatting a drive that it be the only drive present on the system to limit occurrences of accidental data loss.



Important: Please note if this is the first time connecting an external device to a macOS, there is a Reformatting Required for Mac OS Compatibility, please see [Answer ID 3879: Reformatting Required for Mac OS Compatibility](#).

Western Digital does not recommend multiple partitions due to potential corruption of the Partition table. The partition table is used to display each partition within the Operating System and if this becomes corrupted it will lead to data loss. Please contact Microsoft or Apple for more support.

WD external drive is not seen by Windows or Mac and data on the drive is inaccessible

Answer ID 21239



Important: Always connect the drive directly to the computer prior to testing. Do not use a USB or FireWire Hub.

Windows OS

Issue:

A drive letter that used to appear under **My Computer** no longer does, and the data on the drive can no longer be accessed.

Cause:

There could be a few reasons why the drive is not showing up under Computer. The drive itself could have failed, the partition on the drive may be damaged, the data cable may no longer be good, or the drive may no longer be getting enough power to fully spin up.

Solution:

It's always best to start with the most simple possible causes when troubleshooting. Follow the steps below in order to eliminate the common simple issues:



Note:

If after doing this the drive does not spin up at all, then either the drive or the power adapter has failed. The power adapter will need to be replaced to proceed with the troubleshooting. If after replacing the power adapter, the drive still doesn't spin up, then the drive needs to be replaced. Links for data recovery and warranty replacement below.

1. If the drive is not being recognized, disconnect the power adapter from the surge protector/UPS and plug directly into the wall. Sometimes, surge protectors diminish the power being supplied as more devices are added to them.
2. If the drive is connected to a laptop docking station. The laptop docking station may not be supplying enough power to the drive. Try connecting the drive directly to the USB port on the laptop.
3. Try connecting the drive to a different computer
4. If the alternate computer can see and access the drive, the primary or other computers USB port may not provide enough power for the external drive
5. Power from USB ports can vary. The use of a Power Booster cable may be needed to provide enough power to the USB drive. A Power Booster cable is a Y-shaped cable with an extra connector that allows for connecting a USB device to two USB ports on a computer
6. For (My Book) connect the power adapter directly in to a wall socket if available
7. If the drive is spinning but not recognized in My Computer, then change out the data cable with one that is a known good cable. Cables get old and the wires inside can break, or pull loose from the connectors.
8. If that doesn't work, connect the external drive to another USB port. The USB port could be malfunctioning.
9. If the drive still isn't being recognized, turn the PC off, disconnect the data cable, restart the computer, and once the operating system is fully up and running, reconnect the data cable. Give it a minute or two to recognize then access **Disk Management** to see if the drive shows up there. If it does show up in Disk Management then, check if it is seen with partition and format information or RAW. If there is partition and format information, but no drive letter assigned, it may be possible to manually assign a drive letter. If there is no partition information or listed as RAW, there may be a corrupted or damaged partition and will require re-partition and reformat the drive for it to be recognized on the PC. See Links and note below.
 - For help with reformatting the drive in Windows, see [Answer ID 8200: How to Partition and Format a WD Drive on Windows and macOS](#).
 - For help with accessing Disk Management, see [Answer ID 18075: How to access Disk Management in Windows](#)
 - Perform a low-level format with **Data Lifeguard Diagnostics for Windows** from the **Erase** test option; particularly if the drive was initially used with a RAID controller to clean all previous partitioning information from the drive. Please see [Answer ID 6226: Testing a drive for problems using Data Lifeguard Diagnostics for Windows](#) for more information



Critical: If there is data on the drive that is needed, do not reformat the drive. Data recovery will need to be performed on the drive, before reformatting the drive. With a damaged partition, there is data recovery software that may restore the data. Various programs can be found by searching online.

10. If the drive doesn't show up in Disk Management, then the last option is to connect the drive to another PC. If it works, then there's an issue with either the hardware or drivers on the primary PC. Troubleshooting will need to be performed on that computer and operating system. For help

with the operating system, please contact [Microsoft Support](#). For help with the computer hardware, please contact the computer manufacturer.

11. If the external drive does not show up on another PC, then the drive has failed. Data recovery will be needed in order to recover the data stored on the drive. If the drive is under warranty, it can be replaced through us. Follow the links below.
 - For Data Recovery please see our [Data Recovery Partner Companies](#).
 - For Warranty Replacement: [Answer ID 10336: How to Get an RMA to Replace a Defective Product, Obtain a Power Supply, or USB Cable for a WD Product](#).



Note:

If the computer does detect the drive, test the drive to make sure that there won't be any ongoing issues by using our [Windows Data Lifeguard Diagnostics](#). For more information on how to use the software to test the drive, please see [Answer ID 6226: Testing a drive for problems using Data Lifeguard Diagnostics for Windows](#).

If the software reports any errors for the drive, please see [Answer ID 7519: Data Lifeguard Diagnostics Error Code List](#) for a list of error codes and what they mean.



Critical: To avoid corrupting or losing the data on your external hard drive, always shut down the drive correctly before disconnecting the data cable from the drive or computer, or the power connection from the drive or the wall outlet.

Windows or macOS Cannot Find My Drive

Answer ID 12455



Important: There are many reasons an *Operating System (OS)* does not recognize a WD drive. The instructions below are designed to assist in troubleshooting issues related to drives and devices not being recognized by a computer. Please try one solution at a time and test for resolution before continuing with the next item.

How to Format a WD hard drive to exFAT or FAT32 File System

Answer ID 20821

A Western Digital external hard drive can be used on both Windows and macOS. This is useful if a drive is being used under both *Operating System (OS)* to move files between the two environments. Most WD Drives come formatted in the *NTFS (Windows)* or *HFS+ (macOS)* format.

For a hard drive to be able to be read from and written to on both a Windows and macOS computer, it must be formatted to *ExFAT* or *FAT32* file format. FAT32 has several limitations, including a 4 GB per-file limit. This is a file system limitation that affects both macOS's and Windows's, and the only workaround is to format the drive to exFAT. For more information about what these limitations are please see [Answer ID 20778: File and partition size limitations using the FAT32 file system \(Windows and Mac\)](#).

The easiest way to format the drive to *FAT32* or *ExFAT* is by using macOS's built-in **Disk Utility** for **FAT32**, or both macOS and Windows' built-in tools, **Disk Utility** or **Disk Management** respectively for exFAT.



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Critical: Western Digital recommends that when formatting a drive that it be the only drive present on the system to limit occurrences of accidental data loss.



Critical: Never attempt to connect any external drive to multiple computers at the same time. This could quickly damage the drive's partition and corrupt the data on the drive.

Testing a drive for problems using Data Lifeguard Diagnostics for Windows

Answer ID 6226



Important: Non Windows Users: This utility is NOT compatible with MacOS. The drive will need to be connected to a **Windows Operating System (OS)**, in order to run this utility. Please see [Answer ID 14800: How to test a drive for defects or problems on a Mac](#) for information about testing a drive on macOS.

Downloads

Software for Windows

[Data Lifeguard Diagnostic for DOS](#)

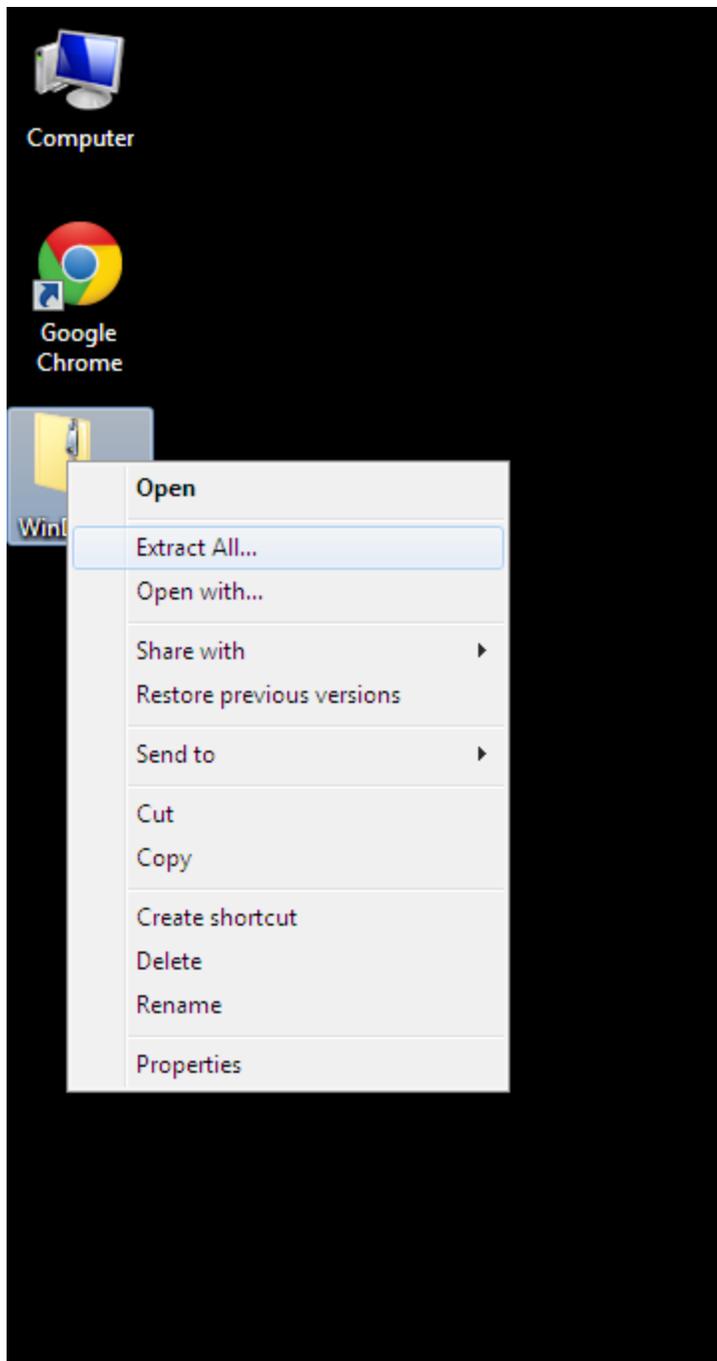
[Data Lifeguard Diagnostic for Windows](#)

[Acronis True Image WD Edition Software](#)

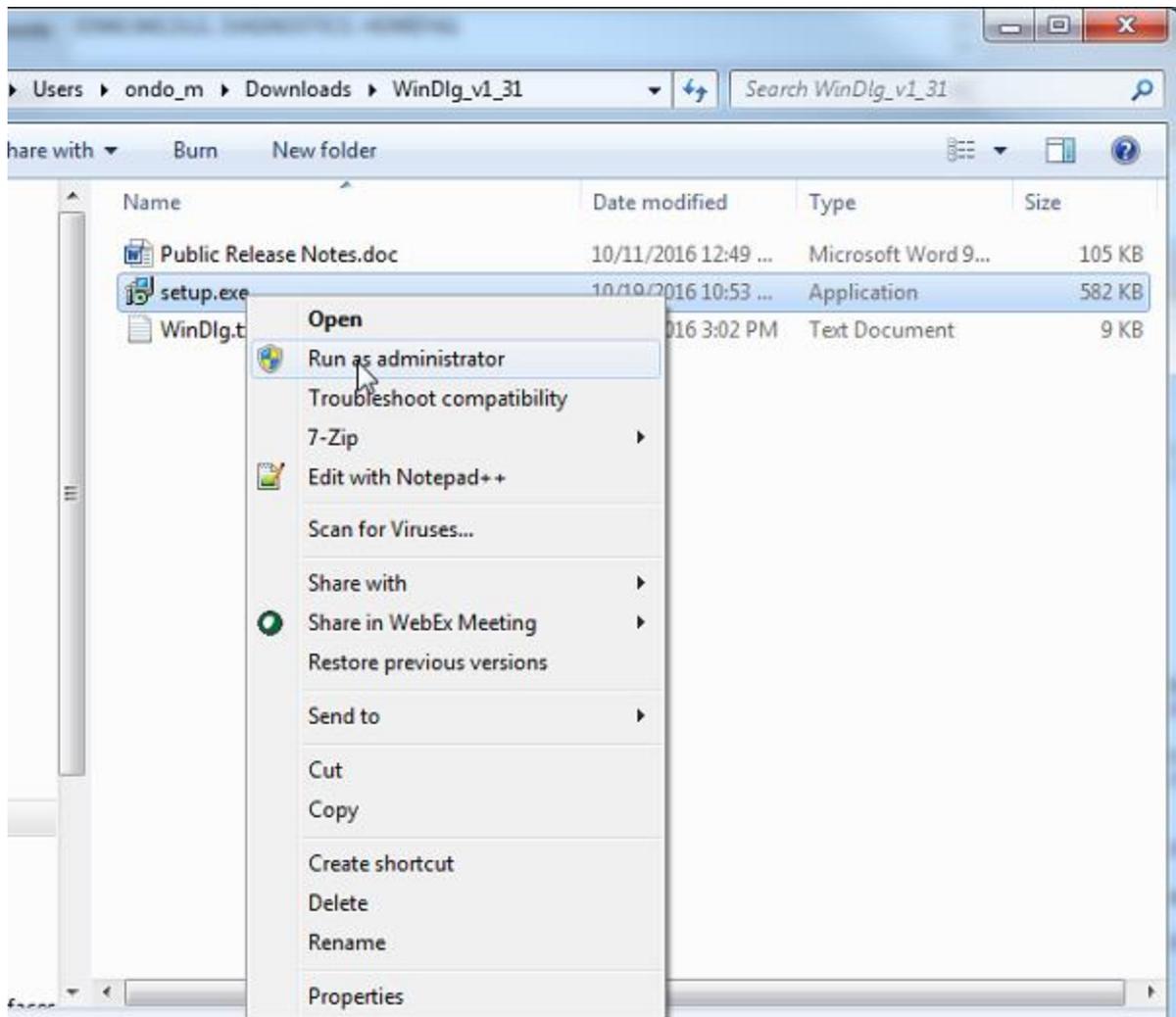
The Windows version of the Data Lifeguard Diagnostics utility can perform drive identification, diagnostics, and repairs on a Western Digital FireWire, EIDE, Serial ATA, or USB drive. In addition, it can provide the drive's serial and model numbers.

To use the utility:

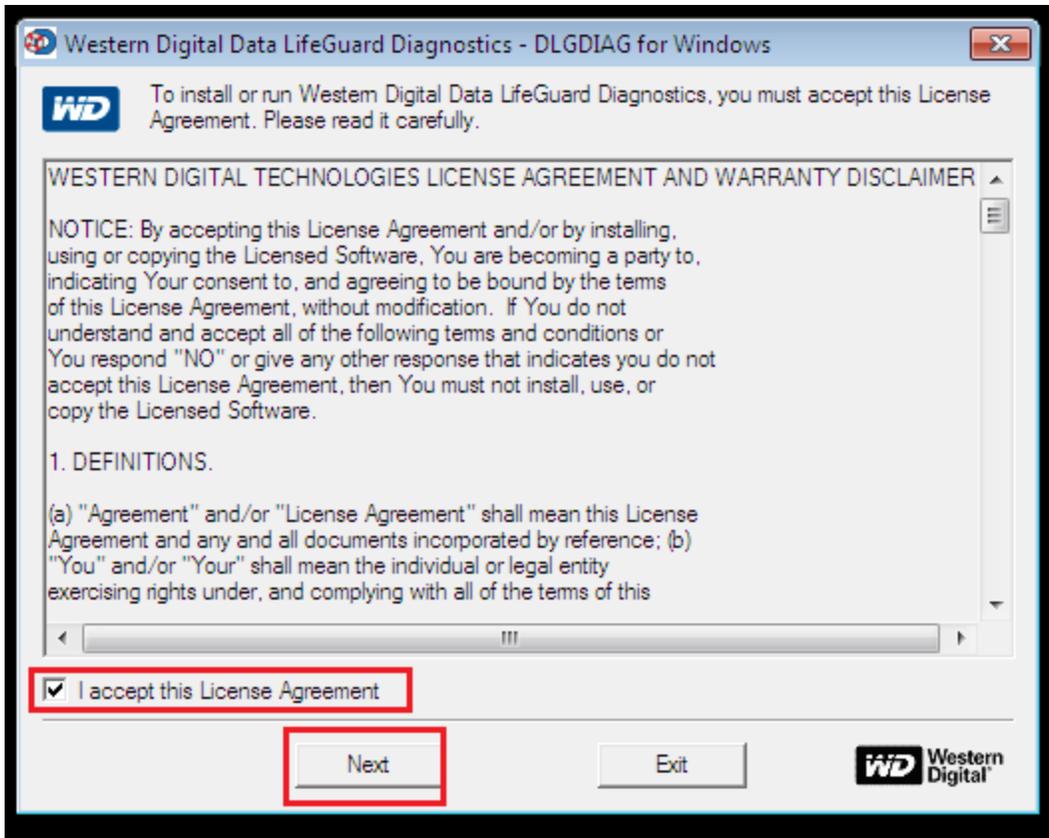
1. Download and extract [Windows Data Lifeguard Diagnostics](#).



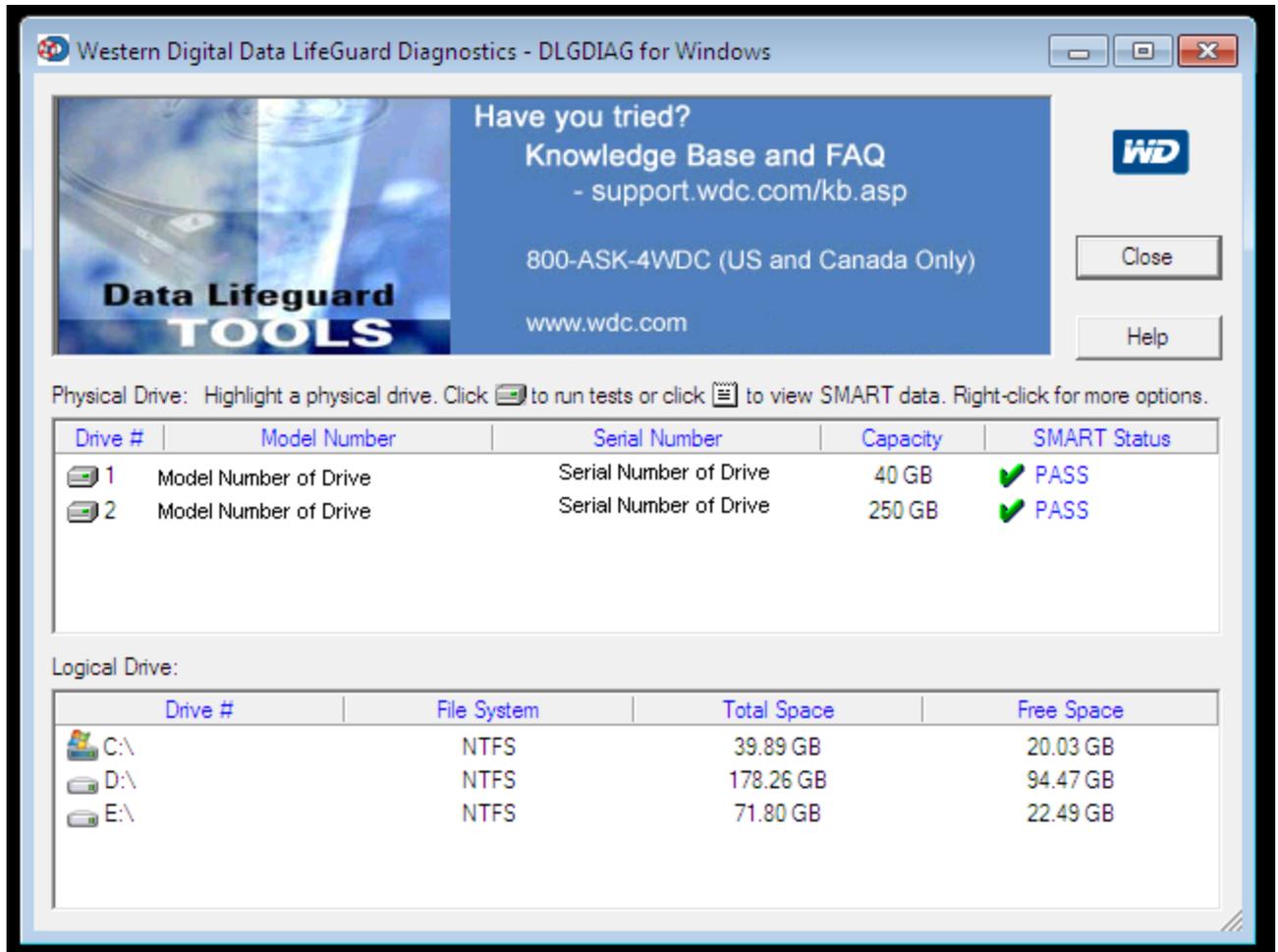
2. Run the **setup.exe** application. If the computer is running Windows 10, 8, 7, or Vista, right-click on **setup.exe** and select **Run As Administrator**. Accept the default location and complete the installation process.



3. Read and accept the license agreement to continue.



4. There are 2 panes on the main program window. The top pane lists the mounted drives that are available for testing. The **Model Number**, **Serial Number**, **Capacity**, and **SMART Status** of each drive will be displayed. The bottom pane provides the partition information for the selected drive such as **Drive Letter**, **File System**, **Total Space**, and **Free Space**.



5. Double-click the drive to be tested in the top pane to view the test options. Or click to highlight the drive, then click the *run tests* icon above this pane.
6. The **DLGDIAG - Select an Option** pop-up window appears.
7. The following options are available:

QUICK TEST - Performs SMART drive quick self-test to gather and verify the Data Lifeguard information contained on the drive.

EXTENDED TEST - Performs a Full Media Scan to detect bad sectors; and attempt to repair them, or mark the damaged sector for not to be written to. This test may take several hours to complete depending on the size of the drive. The average test time takes about 1 hour per Terabyte.

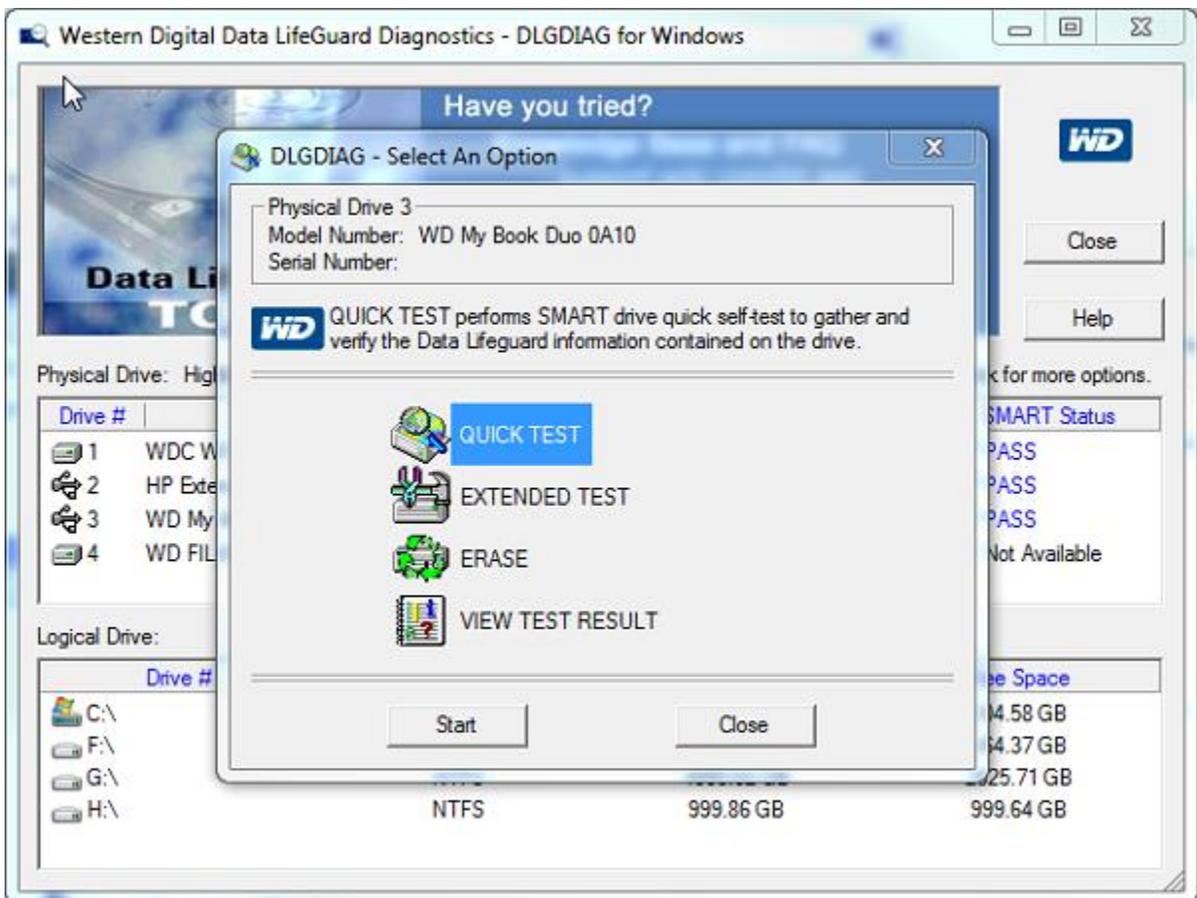
ERASE - Erase will low-level format the drive with options of Full Erase and Quick Erase. File system and partition table will be permanently erased.



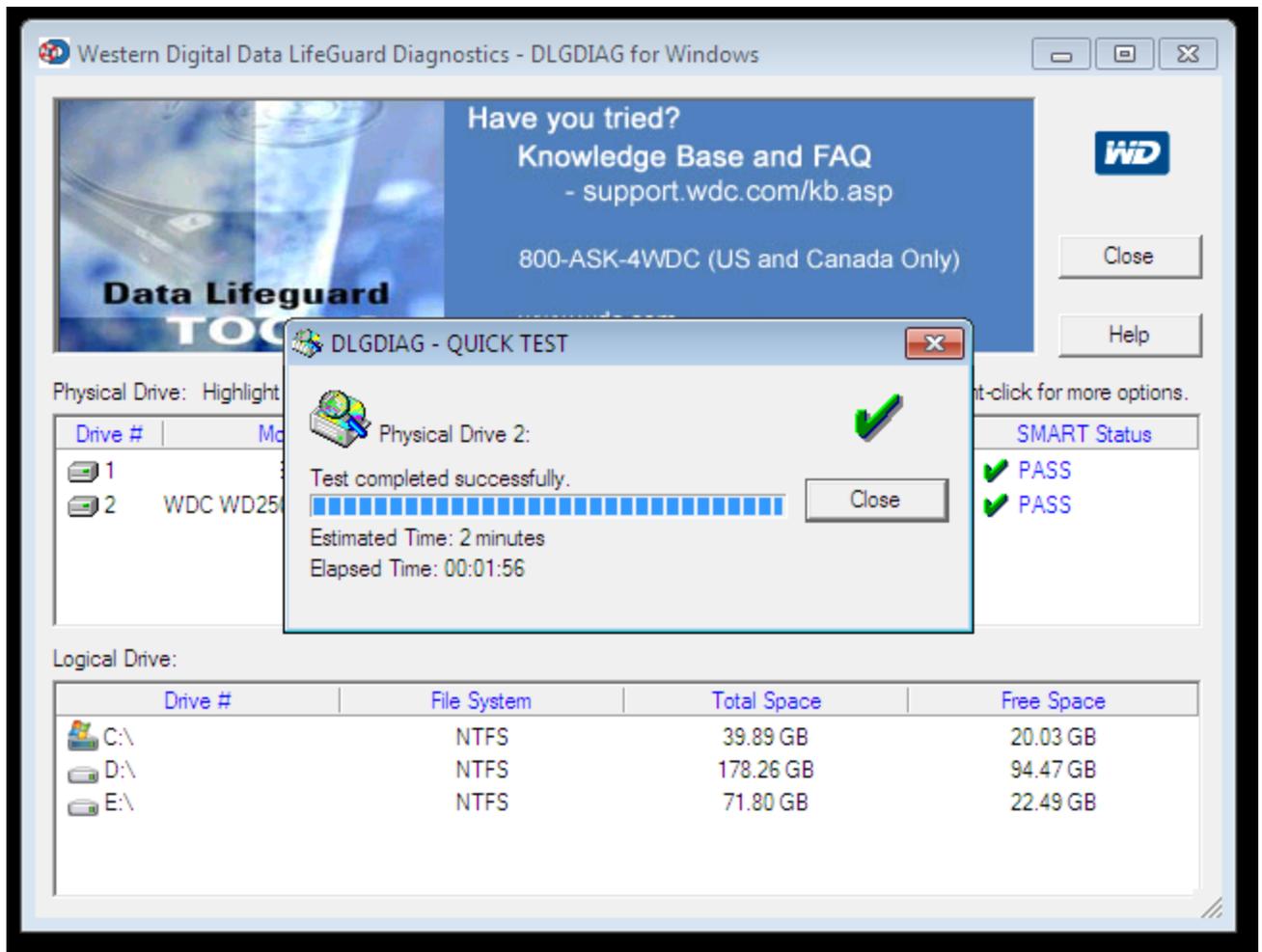
Important: This test is data destructive. Be sure data stored on the drive has been backed up, or is not needed before running this test. The drive will need to be reformatted in order to prepare it for use again. Please see \$EN_ANSWER_10336200 for help formatting a drive.

VIEW TEST RESULT - displays the latest test results.

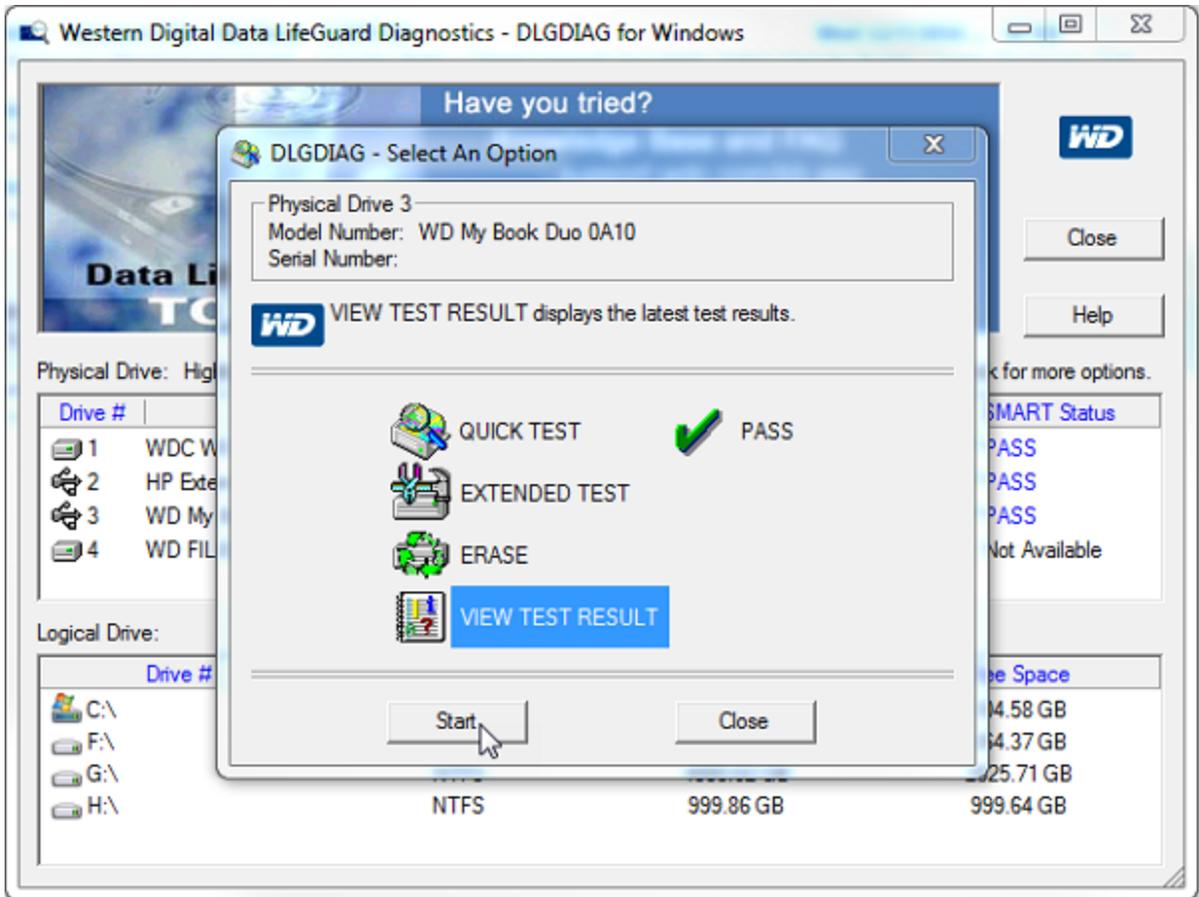
8. Select the test that will be performed and click the **Start** button.

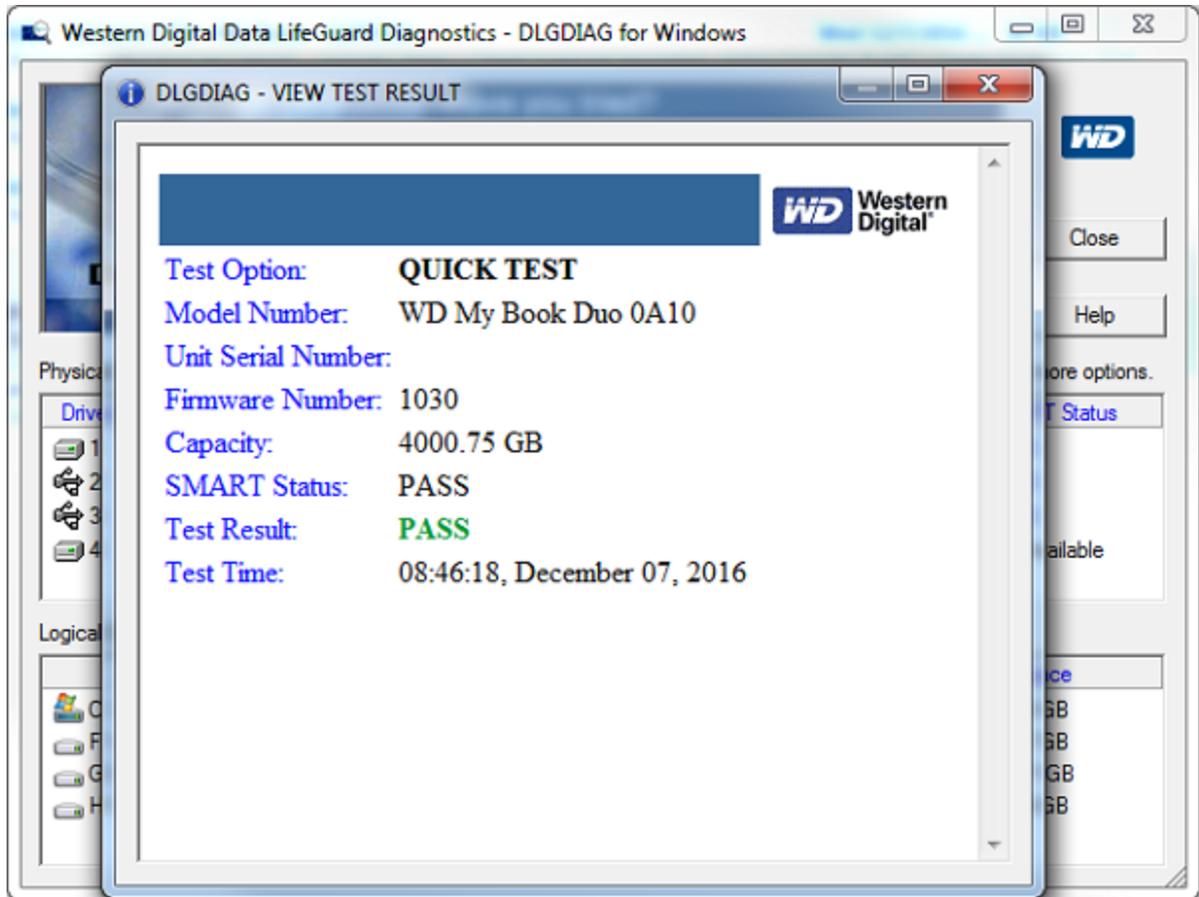


9. When the test completes, you will be notified. Click the **Close** button.



10. The pop-up window will display the test results for the drive.





Important:

- The diagnostics will not read SMART data from the drives. Windows Data Lifeguard Diagnostics will test internal hard drives contained within a WD My Book Premium II and WD My Book Pro Edition II storage system. The RAID Array on these units does not need to be broken in order to test the internal drives. The only feature that will not be available with the diagnostics is the SMART data. Please see: [Answer ID 7519: Data Lifeguard Diagnostics Error Code List](#) for a list of error codes this utility provides.
- If any of the tests fail, including the Quick Test, replacement of the drive may be necessary. Please see [Answer ID 10336: How to Get an RMA to Replace a Defective Product, Obtain a Power Supply, or USB Cable for a WD Product](#) for help creating a **Return Merchandise Authorization (RMA)**.

Drive is not recognized by Data Lifeguard Diagnostics for Windows:

If the drive is not recognized by Data Lifeguard Diagnostics, follow the instructions below to troubleshooting this issue:

1. Make sure that the drive is properly connected to the PC. If it is an internal drive make sure the SATA or PATA (EIDE) cable is securely attached to both the drive, and the controller card. If it is an external try replacing the USB, FireWire, or eSata cable and rebooting the system.
2. Make sure the drive is getting power. For internal drives, make sure that the power cable is properly connected to the drive, and that both a MOLEX (4-pin) and SATA-type power cables are not connected to your drive simultaneously. For external Desktop drives, try plugging the power directly into a wall outlet (instead of a Universal Power Supply or power-strip). For portable external drives, try using a **Power Booster Cable** to supply extra power to the drive.
3. Right-click on the program and select **Run as Administrator**.
4. Try reinstalling the Data Lifeguard Diagnostics for Windows utility. It is possible that the installation has become corrupted.
5. If the drive is internal, make sure that the jumper settings are correct based on the diagram on the drives label.
6. Test the drive on another system. If the drive is not recognized on another system, something is likely wrong with either the power supply, data cable, or the drive.
7. If the drive is recognized on another system, it's likely a problem with the data port (or BUS), drivers, or a malware software concern on the affected system. It's best to consult a computer technician or vendor for further system testing.
8. If the drive still is not recognized, than it is most likely damaged and needs to be replaced. Please see [Answer ID 10336: How to Get an RMA to Replace a Defective Product, Obtain a Power Supply, or USB Cable for a WD Product](#) for assistance with this process

Compatibility

- Formatted exFAT for out-of-the-box compatibility with Windows and Mac
- **Operating System:**
 - Windows® 10, Windows 8.1
 - macOS 10.13+.
 - May require reformatting for other operating systems
- **Note:** Compatibility may vary depending on user's hardware configuration and operating system and requires reformatting for Time Machine