



Professional High-Performance Dual-Drive Storage System



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Safety & General Use

· Safety

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Safety Precautions

G-RAID's warranty may be void as a result of the failure to respect the precautions listed here. If you detect a problem with your drive, please contact our Technical Support department.

If the product is returned with damage caused by improper handling, the warranty will be void and liability will rest with the user. Please read our Limited Warranty.

- **Servicing:** Your drive contains no user-serviceable parts. If it appears to be malfunctioning, have it inspected by a qualified Technical Support representative.
- **Moisture:** Place the device away from moisture or liquids. To reduce the risk of damage, do not expose this drive to rain or moisture. Do not use it in damp or wet conditions. Never place objects containing liquids on the drive as they may spill into its openings.
- Ventilation: Place the device in a vented area. The drive should never be placed near or over a radiator or heat source.
- **Temperature:** Do not expose this drive to temperatures outside the range of 5°C to 35°C (41°F to 95°F); or to operational humidity beyond 5-80%, non-condensing, or non-operating humidity beyond 10-90%, non-condensing. Avoid placing your drive near a source of heat, or exposing it to sunlight (even through a window), or in an environment that is too cold or humid.
- **Physical Damage:** Do not place heavy objects on the drive. Never use excessive force on your drive.

Backup Your Data

The disk drive contained in your G-RAID device is a delicate electronic instrument and is susceptible to damage due to excessive physical shock. Under no circumstances will G-Technology be held liable for the recovery or restoration of lost data. Any loss, corruption or destruction of data while using a G-Technology drive is the sole responsibility of the user.

Make Two Backups

To help prevent the loss of your data, we highly recommend that you keep TWO copies of your data in separate storage locations. Keep one copy on your G-Technology drive. Keep a second copy on your internal hard drive, another G-Technology drive, or a form of removable storage media.



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GRAID

Introduction

G-Technology®

Thank you for purchasing the G-RAID from G-Technology. G-RAID hard drives are a high speed, low-cost RAID which makes the ideal storage solutions for content creation professionals. With its unique industrial design and all aluminum housing, G-RAID is the de facto standard for many post-production facilities worldwide.

G-RAID features USB 3.0 and FireWire 800 interfaces. It is USB 2.0 compatible and FireWire 400 compatible with the included cables. When connected via USB 3.0, G-RAID provides data transfers rates up to 250 MB/second to support the most demanding professional content creation applications like Final Cut Pro[®], Avid and Adobe Premiere[®].

A soft on/off electronic power switch on the rear panel and a quiet thermo-regulated 'smart' fan inside round out G-RAID's professional feature set.



What's in the Box

The following items are included in the box:

- G-RAID hard drive
- (1) USB cable (3.0; backwards compatible with USB 2.0)
- (2) FireWire cables (800; 800 to 400)
- External DC Power Supply

If any items are missing, please contact G-Technology at support@g-technology.com or call (888) 426-5214.



System Requirements

G-RAID supports the following Operating Systems. The drive is set up at the factory for use with Mac OS[®] systems, and formatted as 'HFS+ with Journaling'.

- Mac OS 10.5 or higher
- Windows Vista or Windows 7



NOTE: G-RAID models greater than 2TB are not supported by Windows XP or older 32-bit operating systems. These OS's limit maximum volume size to 2.2TB.

Overview of the Drive

This diagram shows the helpful features of your G-RAID. There is a Power & Activity LED on the front of the unit and a Heat Sink beneath it. The activity light will glow when power is applied via the USB or FireWire ports and it will flash brighter as data is transferred to or from the hard drive.

On the rear of the unit is a Kensington[™] security slot, a high speed USB 3.0 port, two FireWire 800 ports, DC Power In and Soft-touch On/Off switch.





USB 3.0 port FireWire DC In On/Off 800 ports DC In switch



Using Your Drive on Mac

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GRAID

Easy Installation for Mac

G-RAID attaches to your computer via a high speed USB 3.0 or one of two FireWire 800 ports. FireWire 400 connectivity is handled by a 9 to 6 pin cable (included). Choose the connection appropriate for your system and connect G-RAID with the matching supplied cable.

Connect the power cord to the unit and plug the other end into a surge protector or wall outlet-Press and hold the power button until the unit turns on. The drive will automatically mount on the desktop if you are running Mac OS.



Optimize Performance

G-RAID can be connected to any Mac or Windows machine equipped with a USB 3.0, USB 2.0, FireWire 800 or FireWire 400 port.

For maximum performance, we recommend connecting G-RAID via the USB 3.0 port.

Using Your Drive on Mac

Disconnect the Drive

A great feature of G-RAID is its ability to connect and disconnect while your computer is running. To prevent failures and/or data loss, it is important to follow the steps below when disconnecting or 'unmounting' the drive from your computer.

- Before powering down and disconnecting the drive, unmount the system by simply dragging the G-RAID icon to the trash located in the dock.
 Keyboard shortcut: Select the drive icon and hit Command+E.
- 2. It is safe to remove the drive from your system when the drive icon is no longer present on your desktop.
- 3. To power off G-RAID, press and hold the On/Off power button until the unit shuts down.

Helpful links

- To use G-RAID on Windows, go to Windows Use.
- To use G-RAID on Mac and Windows together, go to Cross Platform Use.

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Maintenance for Your Drive

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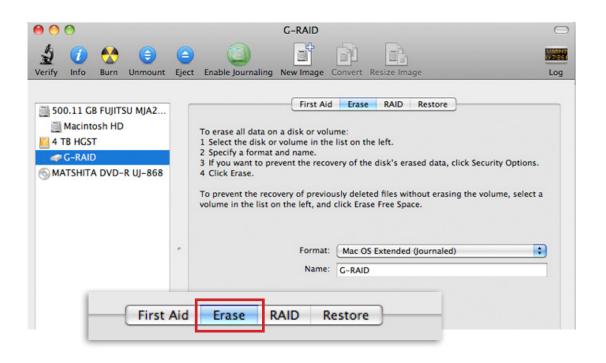


GRAID

Initialize Drive for Mac

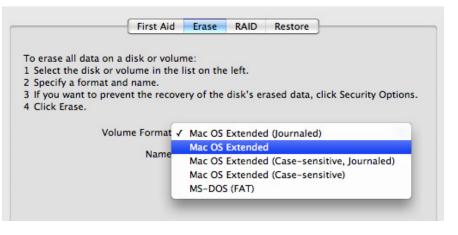
G-RAID was factory-formatted for use or 'initialized' for Mac OS. You can reinitialize if you would like to quickly erase the contents of the drive. Here are the steps.

- 1. First, open the Disk Utility program. This application is located on your hard drive under Applications/Utilities/Disk Utility. The window below will appear. Your G-RAID will be displayed in the left-hand column.
- 2. Select the G-RAID by clicking its drive icon in the left-side column. Information about the drive will be displayed at the bottom of the window.
- 3. Select the Erase tab to view the formatting options. By default, the Format pop-up menu is set to the Mac OS Extended (Journaled) option.

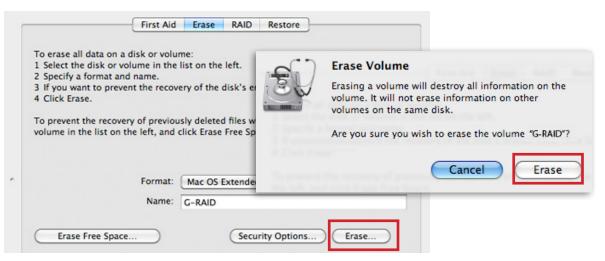


4. Choose the Format option that you prefer.

- Mac OS Extended (Journaled): Use this format if you intend to use the drive for Time Machine or to create a separate bootable installation of OS.
- Mac OS Extended: Use this format for best performance and media storage. To select, click the Format pop-up and its option to Mac OS Extended.

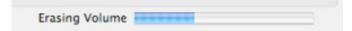


5. Click the Erase button in the lower right corner of the window. A dialog box will appear asking if you want to erase the G-RAID partition.

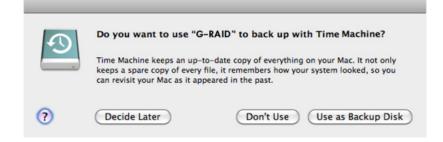


WARNING: THIS NEXT STEP WILL ERASE ALL DATA ON YOUR DRIVE.

6. Click on the Erase button to continue. A progress bar in the lower right corner of the window will show the progress of the disk's reformatting.



- 7. After the drive is reinitialized, you should automatically see the Time Machine dialog box.
 - Click the Use as Backup Disk button if you want to use the drive with Time Machine.
 - Click the Don't Use or Decide Later button if you do not want to use Time Machine at this point.



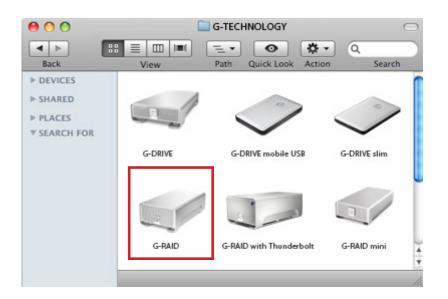
8. Quit the Disk Utility program. After reinitializing the drive, the custom icon for G-RAID has been erased. You can optionally restore this icon with the steps on the **next page**.

Restore the Drive Icon

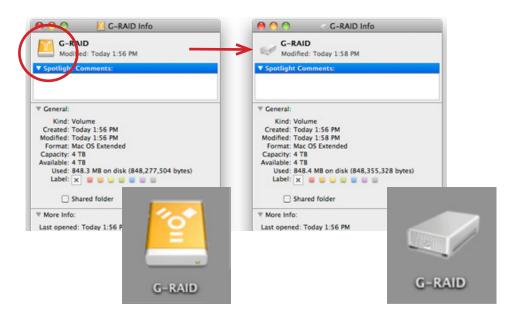
If the G-RAID drive icon was erased during the reinitializing process (see the **previous section**), you can restore the icon with the following easy steps.

NOTE: This process is not required for the operation of the G-RAID. However, it will make your drive's appearance on the computer desktop look nicer and more accurate.

- 1. To get the G-Technology icon package, go to **g-technology.com/support** and navigate to your product. There will be a link to download the icons.
- 2. Once downloaded, it should automatically open the G-Technology Icons folder as shown below. If not, double-click the Zip file to open. Next, double-click the DMG file to open the G-Technology Icons package.
- 3. Click to select the drive icon for G-RAID in the package window. Press Command+C to copy the icon. (*below*)



- 4. Select the default G-RAID drive icon on your desktop and press Command+I. This opens its Get Info window. (*below left*)
- 5. Select the default icon in the Get Info window. (below left)
- 6. Press Command+V to paste the custom G-RAID icon into the Get Info window. (*below right*)



The icon for your G-RAID has been restored and you can close the Get Info window. Your drive is now fully ready for use!

Reformat with Partitions

'Partitioning' a hard drive is the process of dividing a hard drive into separate, discrete sections called 'volumes'. Each volume works like a separate disk. You can create up to 16 different partitions on a hard drive in OS X and each partition can be a different size and format.

With hard drives getting bigger, it is useful to partition your hard drive so sections of its space can be used for different purposes. For instance, segment user data from backup data, set up a multi-boot environment with different Operating Systems or create a dedicated capture scratch disk for programs like Final Cut Pro.

The following steps will guide you through this simple process of partitioning your drive. *In this example, we will partition a 4TB G-RAID connected via USB 3.0. The steps will be identical for your drive, only the name may be different.*

 First, open the Disk Utility program. This application is located on your hard drive under Applications/Utilities/Disk Utility. The window below will appear. Your G-Technology drive will be displayed in the left-hand column.

| 00 | HCST | |
|--|--|--|
| Verify Info Burn Mount | Eject Enable Journaling New Image Convert Resize Image | |
| 500.11 GB FUJITSU MJA2 | First Aid Erase Partition RAID Restore | |
| Macintosh HD 4 TB HGST G-RAID MATSHITA DVD-R UJ-868 | To erase all data on a disk or volume: 1 Select the disk or volume in the list on the left. 2 Specify a format and name. 3 If you want to prevent the recovery of the disk's erased data, click Security Options. 4 Click Erase. | |
| | To prevent the recovery of previously deleted files without erasing the volume, select a volume in the list on the left, and click Erase Free Space. | |
| | Format: Mac OS Extended (Journaled) | |
| | Name: G-RAID | |

GRAID

- 2. Select the USB or FireWire icon not the G-Technology drive icon by clicking it in the left-side column.
- 3. Click on the Partition button in the main window.

| First Aid | Erase | Partition | RAID | Restore |
|-----------|-------|-----------|------|---------|
| FILST AID | Erase | Partition | RAID | Restore |

| 500.11 GB FUJITSU MJA2 |
|------------------------|
| Macintosh HD |
| 🚰 4 TB HGST |
| J G-RAID |
| MATSHITA DVD-R UJ-868 |
| |
| |

4. Select the number of partitions you would like from the Volume Scheme menu. Below, we have selected '2 Partitions' to create two partitions.

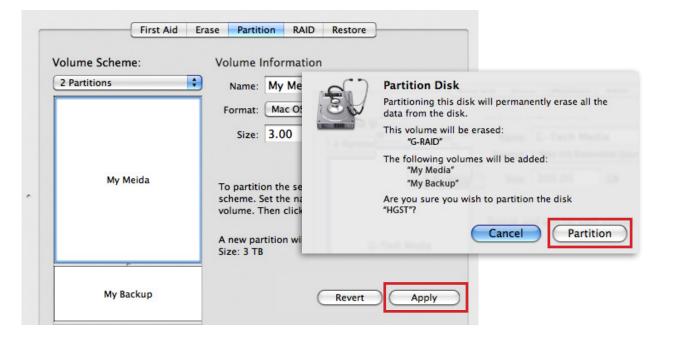
| et Enable Journaling New Image | | |
|---|--|---|
| | Convert Resize Image | .0g |
| Volume Scheme: | Ase Partition RAID Restore Volume Information Name: G-RAID | |
| 2 Partitions 3 Partitions 4 Partitions 5 Partitions 6 Partitions 7 Partitions 8 Partitions | Format: Mac OS Extended \$ Size: 4.00 TB To erase and partition the selected disk, choose a scheme from the Volume Scheme pon-un menu. set | |
| 9 Partitions 10 Partitions 11 Partitions 12 Partitions 13 Partitions 14 Partitions 15 Partitions 16 Partitions | options for each volume, and click Apply. To resize the volumes on the selected disk, drag the dividers between them and click Apply. This partition can not be modified. Size: 4 TB | |
| | Volume Scheme: ✓ Current 1 Partition 2 Partitions 4 Partitions 5 Partitions 6 Partitions 7 Partitions 8 Partitions 9 Partitions 10 Partitions 11 Partitions 12 Partitions 13 Partitions 14 Partitions 15 Partitions | Volume Scheme: Volume Information ✓ Current Partition 1 Partition Name: G-RAID ✓ Partitions Format: Mac OS Extended ✓ Partitions Size: 4.00 ✓ Partitions Size: 4.00 ✓ Partitions To erase and partition the selected disk, choose a scheme from the Volume Scheme pop-up menu, set options for each volume, and click Apply. 10 Partitions To resize the volumes on the selected disk, drag the dividers between them and click Apply. 12 Partitions This partition can not be modified. 13 Partitions Size: 4 TB |

- 5. Click on the first partition in the Volume Scheme area. Your partition will be highlighted by a blue bounding box.
 - In the Name field, type a name for the partition.
 - From the Format menu, choose your desired disk format. If you will use your drive primarily on Mac OS, it is recommended to use Mac OS Extended or Mac OS Extended (Journaled). For info about formats, go here.
 - In the Size field, type in a size for the partition. Alternately, you can drag the bar in between each partition to quickly change the size.

6. Repeat this process for each partition you have created.

7. Click the Apply button in the lower right corner of the window. A dialog box will appear asking if you want to erase the G-Technology drive partition.

WARNING: THIS NEXT STEP WILL ERASE ALL DATA ON YOUR DRIVE.



Maintenance for Your Drive

8. Click on the Partition button to continue. A progress bar in the lower right corner of the window will show you the progress of the disk's reformatting.



- 9. When partitioning is complete, the multiple partitions will be displayed in the left-hand panel of Disk Utility.
- 10. Quit the Disk Utility program. After reinitializing the drive, the custom icon for the G-Technology drive has been erased. You can optionally restore this icon to each partition with the steps on this page.

| 500.11 GB FUJITSU MJA2 | | | | |
|------------------------|--|--|--|--|
| Macintosh HD | | | | |
| 🚰 4 TB HGST | | | | |
| 🔟 My Media | | | | |
| My Backup | | | | |
| MATSHITA DVD-R UJ-868 | | | | |

11. The multiple partitions of the G-Technology drive will be displayed on the desktop. Your drive is now setup with two or more partitions and ready for use.



GRAID[°] **Using Your Drive on Windows** . Windows Use p.24 ·Cross Platform Use p.25



GRAID

Windows Use

G-RAID is set up at the factory for use with Mac OS systems. A simple initialization will prepare your drive for use with Windows Vista and Windows 7 systems.

For helpful information on configuring and using your drive with Windows, please visit **g-technology.com/windows**

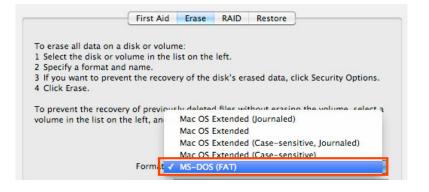
Cross Platform Use

You can set up G-RAID for use on both Windows and Mac system by formatting the drive as 'FAT32'. To do this, use the Disk Utility application and format the drive to MS-DOS (FAT), also known as FAT32.

- 1. First, open the Disk Utility program. This application is located on your hard drive under Applications/Utilities/Disk Utility. The window below will appear. Your G-RAID will be displayed in the left-hand column.
- 2. Select the G-RAID by clicking on its drive icon in the left-side column. Information about the drive will be displayed at the bottom of the window.
- 3. Select the Erase tab to view the formatting options.

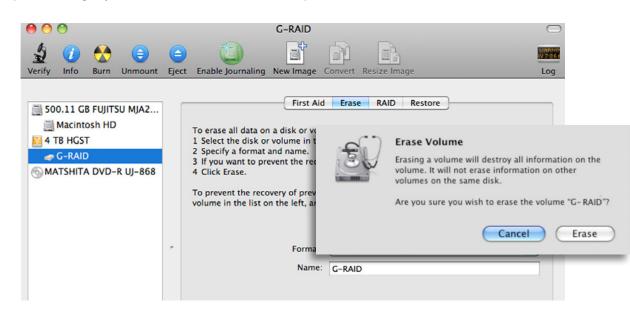
| 0 | 0 | | | | | G-RAID | |) |
|--------|-----------------------------|--------|---------------------|-------|---|---|---|---|
| Verify | Info | Burn | (=) Unmount | Eject | Enable Journaling | New Image | e Convert Resize Image | |
| | Macinto B HGST G-RAID | osh HD | iu MJA2 R UJ-868 | | To erase all data on 1 Select the disk or 2 Specify a format a 3 If you want to pre 4 Click Erase. To prevent the reco | First Aid r a disk or volume in the and name. event the reco every of previce n the left, and Format: | Aid Erase RAID Restore rolume: the list on the left. ecovery of the disk's erased data, click Security Options. viously deleted files without erasing the volume, select a ind click Erase Free Space. | |
| | ŀ | Fi | rst Aid | E | rase RAID | Rest | itore | |

4. Select MS-DOS File System from the Format pop-up menu. This will format to FAT32. NOTE: You may need to rename the drive because FAT32 does not support more than 11 letters in the drive name.



WARNING: THIS NEXT STEP WILL ERASE ALL DATA ON YOUR DRIVE.

5. Click the Erase button in the lower right corner of the window. A dialog box will appear asking if you want to erase the G-RAID partition.



5. Click the Erase button. A progress bar in the lower right corner of the window will show the progress of the disk's reformatting. Your drive will be formatted to its full capacity as FAT32.

Erasing Volume

- 6. Quit the Disk Utility program. You are finished!
- 7. After reinitializing, the custom icon for the G-RAID will be erased. No icons are available for FAT32.

With this format, you will be able to read/write on Windows Vista, and Windows 7 and on Mac OS machines.

Limitations with FAT32

There are some limitations when using FAT32.

The 'MS-DOS File System' cannot write files over 4 GB. If you are working with files over 4 GB, you may want to choose a software option like MacDrive, <u>www.macdrive.com</u>. MacDrive is Windows software that enables you to mount Mac formatted drives on your Windows computer.

NOTE: You could format your drive on a Windows machine FAT32. However, Windows currently limits FAT32 partitions to only 32GB in size.

GRAID[°]

Support & Warranty

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GRAID

Technical Support

Thank you for purchasing G-RAID. If you have any comments or questions about this manual or the product, please let us know!

G-Technology appreciates and values its customers, striving to give you the finest service and support. If you encounter any difficulties while installing or using G-RAID, please contact G-Technology Technical Support at g-technology.com/support

Helpful information for support

When contacting Technical Support, it's best to be in front of your computer and have the following information available:

- Your G-RAID serial number (on bottom of unit)
- Operating System and version
- Computer brand and model
- List of other devices attached to your computer



Limited Warranty

HGST, a Western Digital Company ("HGST") Including G-Technology for External Hard Disk Drives

What does this limited warranty cover?

This Limited Warranty applies to new HGST products purchased from an authorized HGST dealer by the original purchaser for normal use and not for resale. HGST warrants that a covered product is free from defects in materials and workmanship, with the exceptions stated below.

How long does limited warranty coverage last?

This limited warranty lasts for 1 year, 2 years, 3 years or 5 years, or a fixed period from date of purchase, depending on when and where it was originally purchased. To determine the warranty specifically for your product, visit www.g-technology.com. A valid proof of purchase may be required to prove eligibility. If you do not have a valid proof of purchase, the limited warranty period will be measured from the date of sale from HGST to the authorized distributor.

What does this limited warranty not cover?

The limited warranty does not cover damage resulting from commercial use, misuse, accident, modification or alteration to hardware or software, tampering, unsuitable physical or operating environment beyond product specifications, improper maintenance, or failure caused by a product for which HGST is not responsible.

There is no warranty of uninterrupted or error-free operation. There is no warranty for loss of data—you must regularly back up the data stored on your product to a separate storage product. There is no warranty for product with removed or altered identification labels.

HGST DOES NOT PROVIDE ANY OTHER WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PAR-TICULAR PURPOSE. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF IMPLIED WARRAN-TIES, SO THIS LIMITATION MAY NOT APPLY TO YOU. HGST is not responsible for returning to you product which is not covered by this limited warranty.

What must you do?

If you are having trouble with a product, before seeking limited warranty service, first follow the troubleshooting procedures that HGST or your reseller provides.

To obtain limited warranty service, you must first obtain a Return Materials Authorization (RMA) and ship-to address by contacting G-Technology at http://www.g-technology.com/support. Please follow the instructions found on the website. You must return the covered hard disk drive using approved packaging to our logistics center. You must pay any associated transportation charges, duties and insurance in shipping the drive to our logistics center. You should remove all personal information from the product prior to its return.

What will HGST do?

HGST will replace the drive with a functionally equivalent replacement product, transportation prepaid. HGST may replace your product with a product that was previously used, repaired and tested to meet HGST specifications. You receive tile to the replaced product at delivery to carrier at HGST shipping point. You are responsible for importation of the replaced product, if applicable. HGST will not return the original drive to consumers; therefore, the consumer is responsible for moving data to another media before returning. Data Recovery is not covered under this warranty and is not part of the warranty returns process. HGST warrants that the replaced products are covered for the remainder of the original product warranty or 90 days, whichever is greater.

How is our liability limited?

HGST AND ITS AFFILIATES, SUPPLIERS, DISTRIBUTORS, AND RESELLERS ARE NOT LIABLE FOR ANY OF THE FOLLOWING: 1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES (OTHER THAN BODILY INJURY INCLUDING DEATH AND TANGIBLE PERSONAL PROPERTY; 2) LOSS OF, OR DAMAGE TO, YOUR DATA; OR 3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF INFORMED OF THE POSSIBILITY. SOME JURISDIC-TIONS DO NOT ALLOW LIMITATION OF LIABILITY, INCIDENTAL DAMAGES, OR CONSEQUENTIAL DAM-AGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

How do local laws apply?

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.



CAPACITY DEFINITION AND DISCLAIMER

For G-Technology products 1TB or greater: "One gigabyte (GB) is equal to one billion bytes and one terabyte (TB) equals 1,000 GB (one trillion bytes). Accessible capacity will vary from the stated capacity due to formatting and partitioning of the hard drive, the computer's operating system, and other factors"

For G-Technology products less than 1TB: "One gigabyte (GB) is equal to one billion bytes when referring to hard drive capacity. Accessible capacity will vary depending on the operating environment and formatting."

Copyright

One gigabyte (GB) is equal to one billion bytes when referring to hard drive capacity. Accessible capacity will vary depending on the operating environment and formatting.

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