

n® newertechologyTM
miniStack v3



***Users Guide &
Owners Manual***

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1 INTRODUCTION

1.1 System Requirements

1.1.1 Mac Requirements

- Minimum PowerPC G4 Processor, 128MB RAM
- eSATA interface, Mac OS X 10.3 or later (OR)
- FireWire interface, Mac OS X 10.2 or later (OR)
- USB 2.0 interface, Mac OS X 10.2 or later

1.1.2 PC Requirements

- Minimum 500MHz Intel Pentium 3 Processor, 128MB RAM
- eSATA interface, Windows XP / Vista (OR)
- FireWire interface, Windows 2000 / XP / Vista (OR)
- USB 2.0 interface, Windows 2000 / XP / Vista / Windows 7

1.1.3 Supported Hard Drives

- Supports all 3.5" SATA Hard Disk Drives (HDD), Solid State Drives (SSD), or Solid State Hybrid Drives
- Supports up to 64MB Data Buffer (HDD only)
- Supports up to 7200RPM speeds (HDD only)

1.2 Contents

Item	Quantity
① miniStack V3	1
② 1394B FireWire 800 cable	1
③ USB 2.0 (A to B) cable	1
④ Power supply	1
⑤ Power cable	1
⑥ Software CD Bundle	1
⑦ User Guide & Owner's Manual	1



1.3 About This Manual

Firmware, images, and descriptions may vary slightly between this manual and the unit shipped. Functions and features may change depending on the firmware version. Please visit the product web page for the most recent specifications.

1.4 Port View & Interface Connections



The Newer Technology miniStack V3 has multiple interfaces to work with any computer system.

- ① **On/Off Switch** - Used to turn the miniStack v3 on and off. As long as the power switch is in the ON position, the miniStack v3 will power on and off with your computer - no need to shut the enclosure off at the end of the day!
Note: If you have other devices daisy-chain connected to the miniStack v3, they will also disconnect when turned off. This applies to devices using the miniStack v3 as a hub as well.
- ② **Power Receptacle** - Used to power the miniStack. Please note that you are required to power this drive from an outlet, it's not able to be powered off of any of the connections to the computer.
- ③ **USB 2.0 Rear Ports** - Add USB devices to your miniStack v3 here.
- ④ **USB 2.0 NWTMANFWU2MSV3 Uplink Port** - Connect one of your computer's USB ports to the miniStack v3 here using the included cable.
- ⑤ **FireWire 800 (1394B) Ports** - Connect one FireWire 800 port to your computer using the included cable and have an extra FireWire 800 to add peripherals with!
- ⑥ **eSATA Port** - The utmost in speed. If you're trying to make your miniStack v3 the fastest it can be, attach an eSATA cable (not included) to this port.
- ⑦ **Security Slot** - Secure your miniStack v3 to your desk using a Kensington Micro-Saver Security Cable here (not included).
- ⑧ **FireWire 400 (1394A) Side Port** - Easily connect your FireWire 400 devices here.
- ⑨ **USB 2.0 Side Port** - Easily connect USB devices to your miniStack v3 here.

1.5 Cable Connections & Quickstart Guide

Attachment of the cables is simple on any platform.

1. Plug the power input cord into the wall and to the Newer Technology miniStack V3.
2. Connect the eSATA, FireWire 800, FireWire 400, or USB 2.0 cable - appropriate for the interface your computer supports, into the drive and computer. For best performance, use the eSATA connection.
3. Turn the power switch on. The LED on the front of the NewerTech miniStack will illuminate and flash with activity. You're all set!

1.6 Setting up your miniStack v3

Your miniStack v3 external drive enclosure and expansion hub is simple to connect to your computer. Here are a few tips to get the most out of your new external storage and expansion device.

- Do not place anything behind your miniStack v3 that would block airflow.
- Treat your miniStack v3 just like you treat your computer - keep it dry, cool, and out of direct sunlight.
- Always check any peripheral cable that you are going to use with the miniStack v3 for damage before inserting it.
- Do not connect your miniStack v3 to more than one computer at a time.

1.7 Hard Disk Mode

The miniStack v3 has 4 different interfaces for you to hook it up to your computer with. From the ultra-compatible USB 2.0 (1.1 backwards compatible), to the higher bandwidth FireWire 400 and 800 (1394A & B), and even ultra-fast eSATA.

Choose which primary interface you wish to use with your miniStack - for most users, this would be the FireWire connection, and also the USB interface to use the hub features of the miniStack. Connect both of those cables to the miniStack v3 and your computer, insert the power cable and turn the power switch on.

The miniStack v3 will automatically connect to your computer using the fastest possible interface when you have multiple cables plugged into the miniStack v3. The miniStack v3 will connect via eSATA, FireWire 800, FireWire 400, and USB 2.0 (in that order), fastest to slowest connection.

1.8 Hub Feature

To use either the USB 2.0 or FireWire Hub feature, you must have both types of cables connected to your computer and miniStack v3. Once these are connected, and as long as the miniStack is powered on, it will act as both an external hard disk drive and as a powered hub for devices connected to the miniStack v3.

2 FORMATTING

2.1 IMPORTANT INFORMATION IF YOU PLAN ON USING YOUR DRIVE TO BOOT ON A G3, G4, OR G5 SYSTEM

If you purchased a preconfigured Newer Technology MiniStack v3, your new external hard drive has been formatted for the Macintosh as a Mac OS X Extended (Journaled) volume, using the **GUID*** Partition Table scheme. This means that your new drive is ready to use immediately out of the box if you have an Intel based Macintosh computer.

For your new OWC external hard drive to provide boot compatibility (meaning you wish to run the operating system from the external drive) with Power-PC based computers (G3, G4, G5) using Mac OS X, you will need to repartition/format the drive and change the partition mapping from GUID to **APM (Apple Partition Map**)**. If you do not plan to use your new external drive as the start up drive, you do not need to perform this procedure, your new drive will work as formatted for normal external storage use and step by step instructions to do so are covered on the next pages of this manual.

Notes:

***GPT (GUID Partition Table)** - To use the disk as a boot volume on an Intel-based Mac, or to use the disk as a non-boot disk with any Mac with Mac OS X version 10.4 or later.

****APM (Apple Partition Map)** - to use the disk as a boot volume on a Power-PC based Mac, or to use the disk as a non-boot disk with any Mac. If you are using Mac OS X 10.3.9 or earlier, you must repartition and format the hard drive using this method.

Apple also has an article about repartitioning, available at:

<http://support.apple.com/kb/TS1600>

2.2 IMPORTANT INFORMATION IF YOU PLAN ON USING YOUR DRIVE WITH A PC SYSTEM

Please turn to section 2.4 and proceed from there to reformat your drive to use with a PC.

2.3 Formatting your MiniStack v3 on a Macintosh with Mac OS X

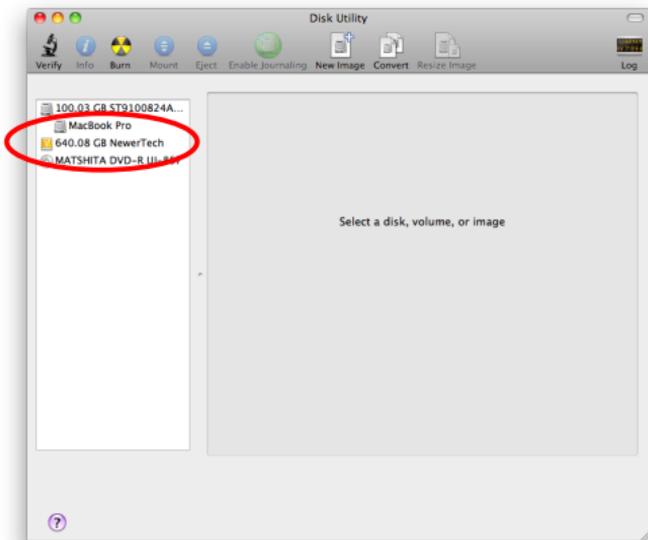
IMPORTANT NOTE: This procedure will erase all data on your hard disk drives in the MiniStack v3. Back up any important data before proceeding!

①



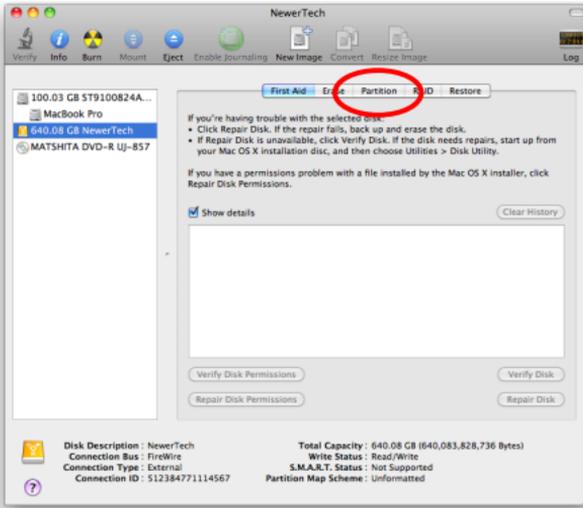
Click on the "Initialize" button.

②



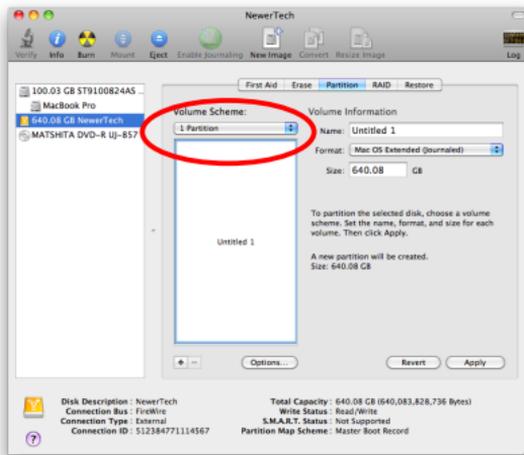
Select the device with no volumes attached to it; in this picture, that would be the 640 GB Newer Technology device. Click on the picture of the drive icon next to the text.

3



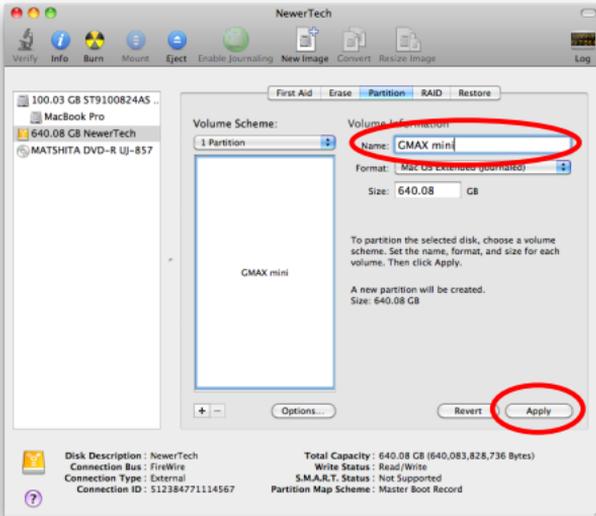
Once you've selected the Newer Technology device, you will notice the above change in the Disk Utility application. Click on the "Partition" tab in this picture.

4



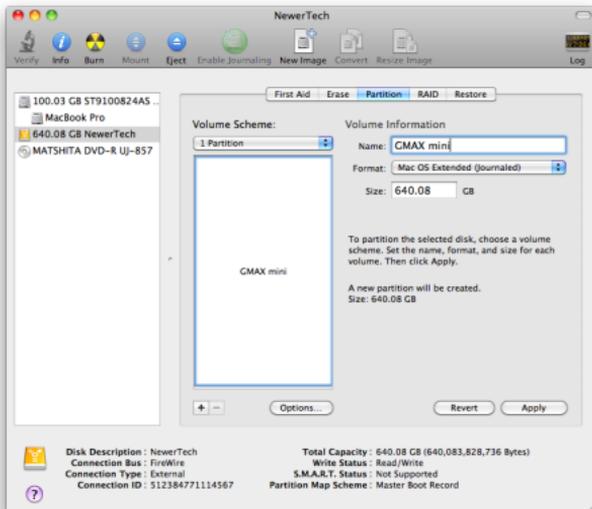
You then need to choose how many partitions you wish your Newer Technology Mini-Stack v3 to have. For ease of use we're selecting one partition here but of course you could select more if you wish to have multiple volumes created. Simply use the pulldown menu under Volume Scheme to create more partitions.

⑤



Choose a name for the volume. You will need to repeat this step for each volume if you selected multiple partitions. Click Apply to finish.

⑥



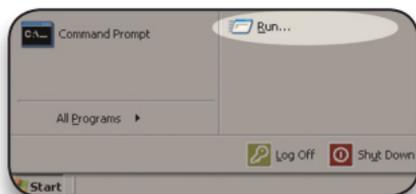
You will be asked to confirm that you wish to format the drive - agree, and then after a few moments, partitioning will complete and the Newer Technology MiniStack v3 volume will mount on your desktop. You can quit Disk Utility, you're all set!

2.4 Removing the GUID Partition Scheme

Only for XP, 2000, ME and earlier. (XP 64-BIT, Vista & Windows 7 can continue to the next section)

Your new NewerTech miniStack v3 is preformatted for use with a Macintosh. Unfortunately, this is not readable by Windows without special software. If you wish to use your storage solution on a computer running Windows, you will need to repartition and reformat using the following instructions.

① Go to the DOS command prompt by selecting "Run" from the Start Menu.



② Type in **cmd** in text box, and hit the "OK" button.



③ Type **diskpart** and hit enter.



④ Type **list disk** and hit enter.



⑤ Type **select disk x** replacing x with the number of the disk you want to reformat. (Typically, you will see an asterisk (*) under "GPT" for the disk requiring formatting.)



WARNING: The **clean** command will destroy ALL data on the disk you run it on!!! Be sure there is **nothing** you need to keep on your drive before running any of these commands.

⑥ Type **clean** and hit enter.



⑦ Type **exit** and hit enter.

⑧ Close the command prompt window.

You may now proceed with formatting the drive.

2.5 Formatting your MiniStack v3 on Windows 2000 and later

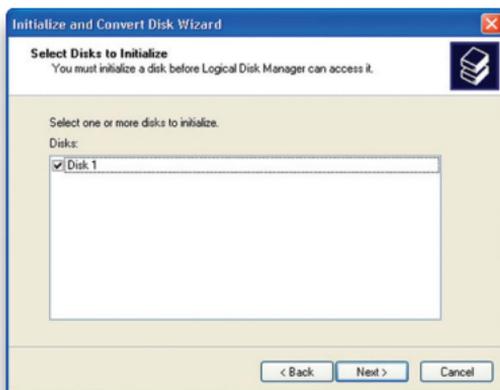
Instructions for other operating systems can be found at <http://www.newertech.com/format>.

① With the drive connected to the computer and powered on, right click on the "My Computer" icon and select "Manage" from the menu. The "Initialize and Convert Disk Wizard" window should appear.

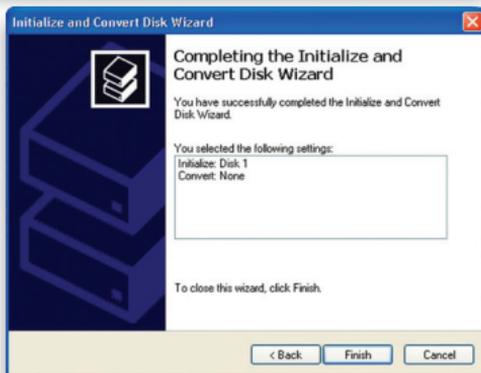


If the Wizard does not appear, expand the Storage menu by clicking on the plus (+) sign. Then, right click next to the disk number of the drive that you have just connected and click Initialize to bring up the Wizard.

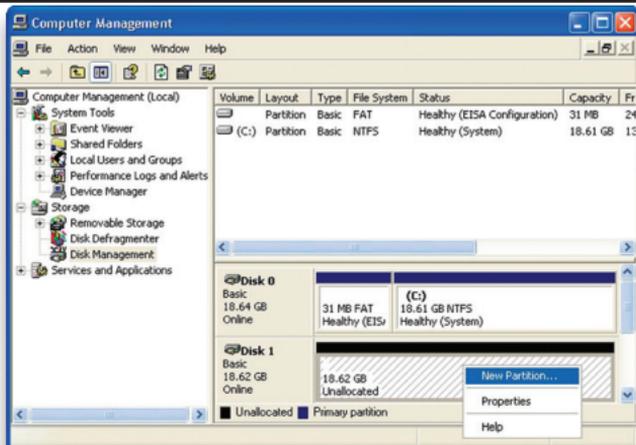
② In the next window, there should be only one drive listed. That will be the drive that you connected via eSATA, FireWire or USB. Make sure the box next to the drive name is checked and click "Next."



③ The Wizard will perform its tasks, and you will get the following screen. You may click "Finish."



④ Your drive will appear similar to how Disk 1 does below. Notice that the space on the lower right reads as “Unallocated.” Right click in this space and choose “New Partition.”



⑤ The “New Partition Wizard” will launch. Click “Next” to continue.



⑥ Specify your partition type as “Primary,” and click “Next.”

Select the partition you want to create:

- Primary partition
- Extended partition
- Logical drive

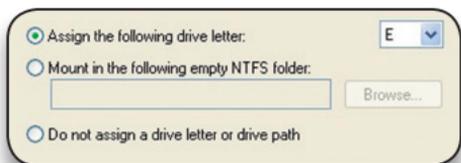
⑦ The wizard will display the maximum partition size for your drive. It is strongly recommended that you **do not** change the default value. Click “Next”

Maximum disk space in megabytes (MB): 19069

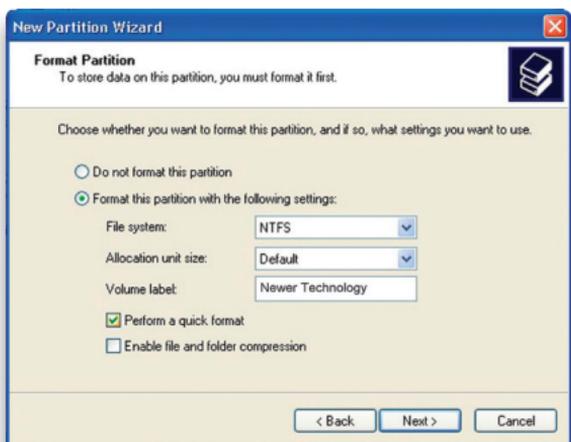
Minimum disk space in MB: 8

Partition size in MB:

⑧ If you like, you can specify the drive letter designation for your new drive. Otherwise, one will automatically be assigned. Click "Next."



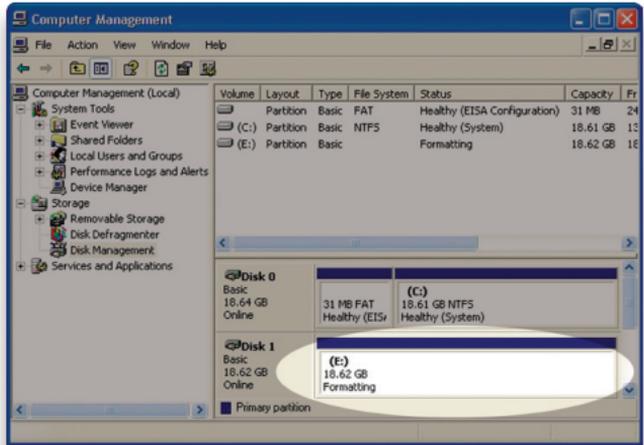
⑨ Before you can use the drive, it must be formatted. On most systems running Windows 2000 or later, it is advisable to specify the file system as NTFS. Leave the Allocation unit size as "Default," and feel free to give the drive whatever name you prefer. Be sure to check the box "Perform a quick format". If you do not, it will likely take several hours for your drive to format. Click "Next."



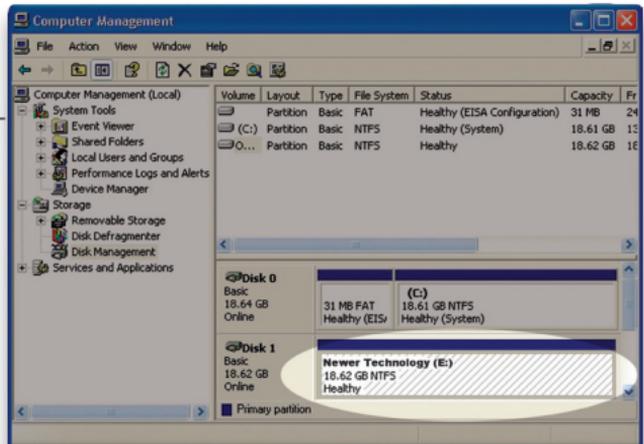
⑩ At the end of the Wizard, you will see a summary of the information that you specified during the previous steps. Click "Finish."



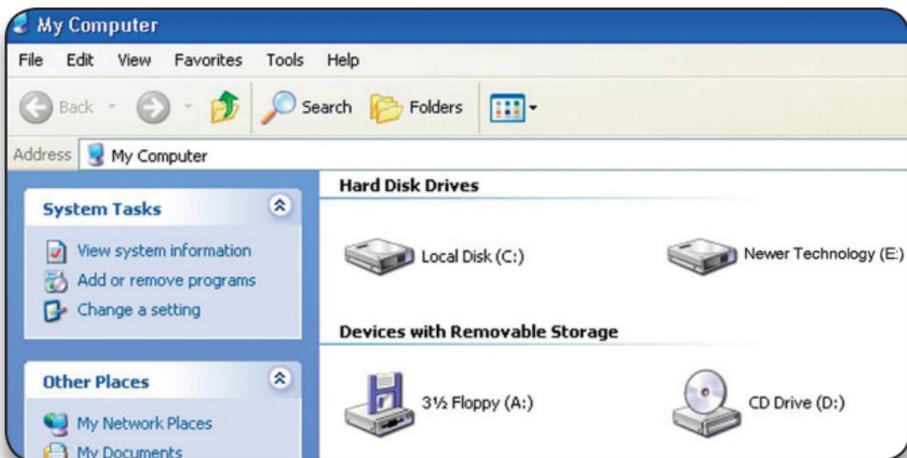
①① Once you have finished with the formatting wizard, you will see that your new drive (represented as “Disk E” in this case) will display a message of “Formatting.” This should only take a couple of minutes if you chose the quick format option.



①② After a moment or two, the drive’s status will change from “Formatting” to “Healthy.”



①③ At this point, you may close the Computer Management window. Your drive is ready to use and can be found in “My Computer.”



2.6 MacDrive 8

Using your new Storage Solution on both Macs and PCs?

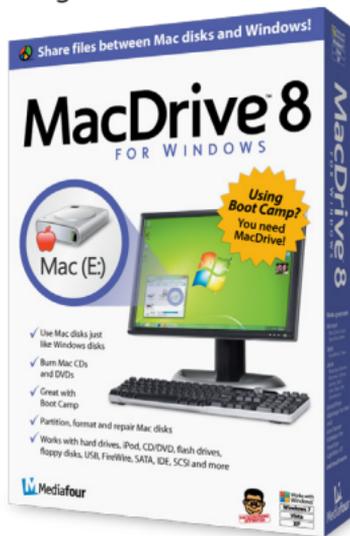
MacDrive takes the guesswork out of sharing files. Whether you are transferring files between home and the office, a class room lab and your dorm room or even on the same computer, MacDrive makes it painless.

In fact, you'll hardly know MacDrive is working. Once installed MacDrive will automatically give you access to any Mac disk you pop into your computer. MacDrive even puts an “apple” icon on the Mac disk, just to keep things clear.

You can access files on the Mac disk just like you would with a Windows formatted disk. Open files from the disk or from within a program. Mac files automatically get the right icons and file name extensions under both Windows and Mac OS. Works great with software from Microsoft, Adobe, Quark, FileMaker, Avid, Digidesign, Corel, NewTek and more.

You can find MacDrive 8 at:

<http://eshop.macsales.com/search/macdrive>



3 TROUBLESHOOTING & TIPS

3.1 Troubleshooting

Some of the most simple problems can be traced to power, or connectivity issues.

Begin your troubleshooting by verifying that power is plugged into the external storage solution, and if connected to a power strip. Make sure that the power is turned on at the switch on the strip.

Then, simply verify that your cables (both ends!) are properly plugged into the computer and storage solution. If they are, and the storage solution is still not working properly, try connecting to another interface such as the USB connection and see if the device works properly.

3.2 Tips

To properly dismount any connected hard drives from your computer, you need to follow a few simple steps.

• For Macintosh systems:

For the safe removal of your drive and to assure that no data is lost, always eject or unmount the drive from your operating system before powering off.

There are two methods to unmount disks with Macintosh systems. Either drag the icon for the hard disk you wish to dismount to the trash can, or click the eject icon next to the hard disk name in under the "DEVICES" tab in the sidebar in any finder window.

• For Windows systems:

1. Go to the System Tray (located in the lower right corner of your screen). Click on the Eject icon (a small green arrow over a hardware image).
2. A message will appear, detailing the devices that the Eject icon controls. i.e. "Safely remove..." Click on this prompt.
3. You will then be given the following message. "Safe to Remove Hardware". It is now safe to unhook the Newer Technology MiniStack v3.

General information:

- Do not expose the product to water or humid conditions.
- Do not cover the enclosure's ventilation holes.
- In order for the computer to access volumes larger than 2TB, both the hardware and Operating System need to support large volumes (e.g.: Windows Vista 32bit/64bit or Mac OS X 10.4 and above).

4 APPENDIX

4.1 FAQ

Q: How do I format my storage solution?

A: Newer Technology has detailed instructions online for most popular operating systems, located at: <http://www.newertech.com/format>

Q: What file system should I choose when formatting my drive?

A: This will depend on how you want to use the drive, but in general, we recommend:

- Mac OS X - HFS + (Mac OS Extended)
- Windows 2000/XP/Vista
- For cross-platform compatibility, FAT32 is compatible, but single file sizes are limited to 4GB. Other options using 3rd party software exist but are not covered here.

Q: Will the hard drives spin down when my computer goes into to sleep or stand-by mode?

A: Yes, they will spin down to save energy. It will take about 30 seconds to access your data after being in sleep or stand-by mode.

4.2 About Data Backup

To ensure that your files are protected and to prevent the loss of your data, we strongly suggest that you keep two copies of your data: One copy on your Newer Technology MiniStack v3 and a second copy on either your internal hard drive or another storage medium, such as an optical backup, or on a second external hard drive. Any data loss or corruption while using the Newer Technology MiniStack v3 is the sole responsibility of the user, and under no circumstances will Newer Technology be held liable for compensation or the recovery of any lost data.

5 CUSTOMER SERVICE

5.1 Before Contacting Customer Service

- Read this manual and review Chapter 3: Troubleshooting & Tips.
- Try to confirm the problem is with the hard drive. If you have a second computer, move the enclosure to that system and verify that the solution does not function with that machine.

• Visit our tech center for more support suggestions, including FAQs.

<http://www.newertech.com/support>

If you still need support, please have the following available to you:

- The serial number of the enclosure
- Your invoice number
- What operating system you are using
- Which kind and model of computer you are using

All of this will help speed your support contact along.

5.2 Customer Service Hours Of Operation

Telephone

(815) 308-7001

8AM - 10PM CST Monday - Friday

9AM - 4PM CST Saturday

Live Chat

Available 24 hours a day, 7 days a week through NewerTech's distributor, OWC.

For more information, visit: <http://www.newertech.com/support>

Email

Submit your email at: <http://www.newertech.com/support>

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FCC Statement:

Warning! Modifications not authorized by the manufacturer may void the user's authority to operate this device.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

Health And Safety Precautions:

- Use proper anti-static precautions while performing the installation of your hard drives into this drive enclosure. Failure to do so can cause damage to your drive mechanisms, and / or the hard drive enclosure.
- Read this User's Guide carefully, and follow the correct procedure when setting up the device.
- Do not open your hard drive or attempt to disassemble or modify it. Never insert any metallic object into the drive to avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions. Your hard drive contains no user-serviceable parts. If it appears to be malfunctioning, have it inspected by a qualified Other World Computing Technical Support representative.
- Never expose your device to rain, or use it near water, or in damp or wet conditions. Never place objects containing liquids on the drive, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.

General Use Precautions:

- Do not expose the enclosure to temperatures outside the range of 5° C to 40° C (41° F to 104° F). Doing so may damage the drive or disfigure its casing. Avoid placing your drive near a source of heat or exposing it to sunlight (even through a window). Conversely, placing your drive in an environment that is too cold or humid may damage the unit.
- Always unplug the hard drive from the electrical outlet if there is a risk of lightning or if it will be unused for an extended period of time. Otherwise, there is an increased risk of electrical shock, short-circuiting or fire.
- Use only the power supply shipped with the device.
- Do not use the hard drive near other electrical appliances such as televisions, radios or speakers. Doing so may cause interference which will adversely affect the operation of the other products.
- Do not place the drive near sources of magnetic interference, such as computer displays, televisions or speakers. Magnetic interference can affect the operation and stability of your hard drive.
- Do not place heavy objects on top of the drive.
- If you detect a problem, consult the Troubleshooting section in this manual.
- Protect your hard drive from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of damage or malfunction.
- Other World Computing recommends the use of normal glass cleaning products to keep the high lustre finish at its finest with this product. Be sure not to get any moisture inside the holes and if you do, allow time to air dry before use.
- Do not block the ventilation outlets on the rear of the drive. These help to keep your drive cool during operation. Blocking the ventilation outlets may cause damage to your drive and cause an increased risk of short-circuiting or fire.



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