



# **miniSTACK**

*Owner's Guide &  
Assembly Manual*

## **1 INTRODUCTION**

### **1.1 SYSTEM REQUIREMENTS**

- 1.1.1 Mac Requirements
- 1.1.2 PC Requirements
- 1.1.3 Supported Hard Drives

### **1.2 PACKAGE CONTENTS**

### **1.3 USING THE NEWER TECHNOLOGY MINISTACK**

- 1.3.1 Connecting the Newer Technology miniStack
- 1.3.2 Powering on the Newer Technology miniStack
- 1.3.3 LED Indicator

## **2 ASSEMBLY**

### **2.1 ASSEMBLY OF THE NEWER TECHNOLOGY MINISTACK**

## **3 FORMATTING**

### **3.1 MACINTOSH FORMATTING**

### **3.2 REMOVING AN EXISTING GUID PARTITION**

### **3.3 WINDOWS FORMATTING**

## **4 TROUBLESHOOTING & TIPS**

### **4.1 TROUBLESHOOTING**

### **4.2 USAGE TIPS**

## **5 APPENDIX**

### **5.1 FAQ**

### **5.2 ABOUT DATA PROTECTION**

## **6 TECHNICAL SUPPORT**

### **6.1 BEFORE CONTACTING TECHNICAL SUPPORT**

### **6.2 TECHNICAL SUPPORT HOURS OF OPERATION**

## 1 INTRODUCTION

Firmware, images, and descriptions may vary between this manual and the unit shipped. Functions and features may change depending on the firmware version. Visit the product webpage for the most recent specifications.

### 1.1 System Requirements

#### 1.1.1 Mac Requirements

- Minimum PowerPC G4 CPU, 128MB RAM
- eSATA interface - Mac OS X 10.3 or later
- FireWire® interface - Mac OS X 10.2 or later
- USB 2.0 interface - Mac OS X 10.2 or later
- USB 3.0 interface - see your interface card manufacturer for specifications

#### 1.1.2 PC Requirements

- Minimum 500MHz Intel Pentium III CPU, 128MB RAM
- eSATA interface - Windows XP / Vista / Windows 7
- FireWire interface - Windows 2000 / XP / Vista / Windows 7
- USB 2.0 or USB 3.0 interface - Windows 2000 / XP / Vista / Windows 7

#### 1.1.3 Supported Hard Drives

- Any 3.5" SATA hard drive
- Any 3.5" SATA Solid State Drive (SSD) or 2.5" SSD with an adapter like the NewerTech AdaptaDrive

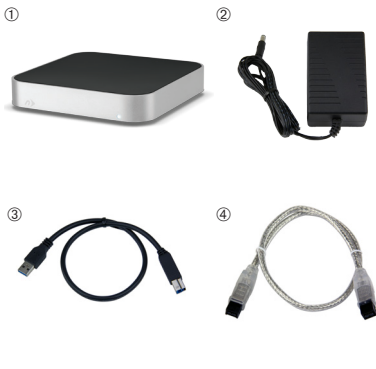
### 1.2 Package Contents

#### Item

- ① Newer Technology miniStack
- ② DC Power Transformer
- ③ USB 3.0 Cable
- ④ FireWire 800 Cable
- ⑤ Software CD Bundle *(not all models)*
- ⑥ Owner's Manual

*(Not pictured)*

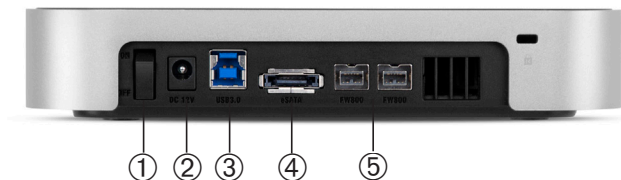
Screw Package (inside enclosure)



## 1.3 Using the Newer Technology miniStack

NOTE: You will need to assemble your drive into your miniStack, and format it before using.

### 1.3.1 Connecting the Newer Technology miniStack



#### **Cable Connections:**

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

- ① **On/Off Switch** - Turn the Newer Technology miniStack on and off here.
- ② **DC IN port** - Plug the included DC power transformer here.
- ③ **USB 3.0 Port** - Connect one of your computer's USB 2.0 or 3.0 ports to the Newer Technology miniStack here using the included cable.
- ④ **eSATA Port** - Use with your eSATA interface for high speed connection.  
**NOTE:** Cable not included.
- ⑤ **FireWire 800 Ports** - Connect one FireWire 800 port to your computer using the included cable and use the other FireWire 800 port to connect additional peripherals.

### 1.3.2 Powering on the Newer Technology miniStack

To use the Newer Technology miniStack, connect your preferred interface cable to the drive and the computer. Turn the power switch to the ON position, and verify the LED on the front of the drive is illuminated. Your drive should mount on your computer's desktop.

### 1.3.3 LED Indicator

The Newer Technology miniStack has a single LED at the front of the hard drive enclosure. It will illuminate when powered on, and flash during drive activity (both reading and writing).

## 2 SYSTEM SETUP

This guide will get you up and running quickly, demonstrating how to install your own drive into the Newer Technology miniStack enclosure.



Your computer is a static-sensitive device. It is susceptible to invisible damage if not protected during installation.

We recommend proper grounding by using a grounding strap. Make sure to work in a clean and static-free area, and avoid wearing clothing that retains static charges.

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

**Got tools?** If you don't have the tools necessary to complete this installation, Newer Technology has a fantastic toolkit with everything you need included to perform this installation, and most common computer hardware installations.



It's available at:

<http://www.newertech.com/products/11pctoolset.php>

## 2.1 Hard Drive Assembly & Installation

①



Remove the Newer Technology miniStack from the box. You will notice that there is a clear protective plastic sheet attached to the top of the enclosure.

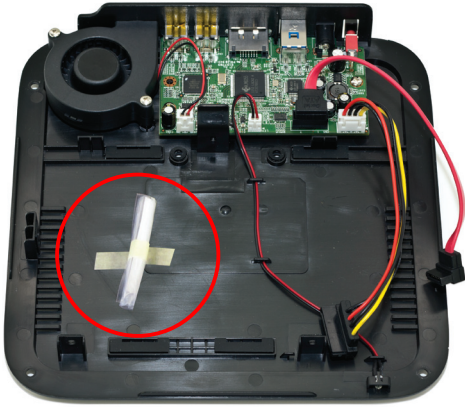
②



Turn the Newer Technology miniStack over placing the top on a soft work surface, such as a towel.

Remove the 4 Phillips screws at the corners of the miniStack.

③



Turn the miniStack over and place the bottom on the work surface. Lift the top cover off of the miniStack, exposing the internal chassis.

Untape the plastic bag with assembly screws from the inner chassis.

④



Make sure that the hard drive you wish to install (sold separately) is handy and remove the screws from the bag.

⑤



Place your drive into the chassis of the miniStack. There are 2 rubber coated mounting tabs with screwholes on the side closest to you in this photograph, and a tab with a plastic detent on it that will lock the drive into the chassis on the center of the drive on the opposite side. You will need to set the drive into this detent in the tab to insert the drive.

Insert 2 of the Phillips screws from the plastic bag into the drive enclosure securing the hard drive through the screwholes.

⑥



Turn the enclosure so that the side of the hard drive with the connecting ports are visible. Insert the SATA and power cables into the hard drive. They are keyed to only go in one direction.

Place the top cover back onto the miniStack.



7



Turn the enclosure over onto its top again on a soft work surface.

Use the remaining 2 Phillips screws from the plastic bag and insert them into the center of the drive enclosure above the Newer Technology label, securing the hard drive into the chassis.

Replace the 4 Phillips screws that you removed initially to secure the top cover to the chassis.

8



The assembly of your miniStack is complete. Remove the clear plastic overlay from the top cover.

Continue on to format your new storage solution.

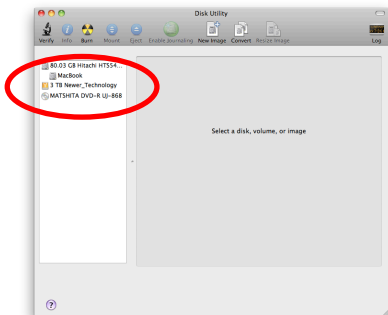
## 3 FORMATTING

### 3.1 Formatting your Newer Technology miniStack on a Macintosh with OS X (For a new drive, or to reformat an old drive)



If you have installed a new drive into your Newer Technology miniStack, the first time you turn it on you will see the following dialog box appear. Click on "Initialize" to continue.

①

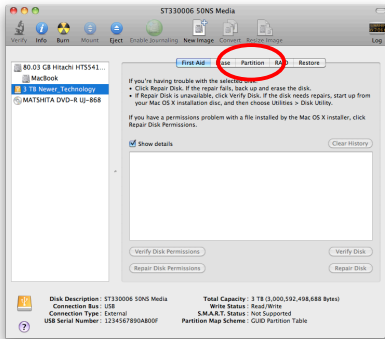


If you are not formatting a brand new hard drive, you will have to manually Open Disk Utility, which is found in your /Applications/Utilities folder.

Select the device with no volumes attached to it; in this picture, that would be the 3 TB Newer Technology device. Click on the drive icon next to the text. If your miniStack was previously formatted, there will be a volume already attached to the device in the red circle above.

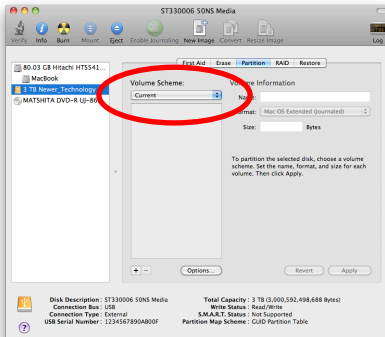
**You will destroy all data on that drive by reformatting!**

②



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.

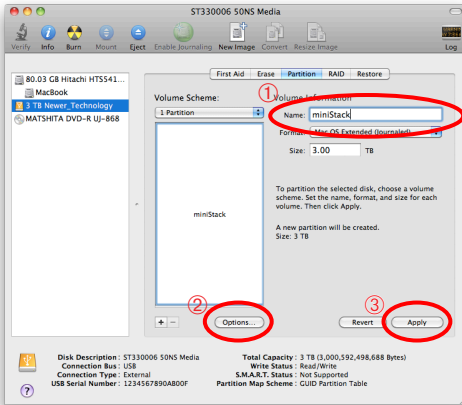
③



You then need to choose how many partitions you wish your Newer Technology miniStack 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.

④



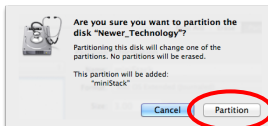
① Choose a name for the volume. You will need to repeat this step for each volume if you selected multiple partitions.

② Click on the Customization button and the following dialog box will appear:



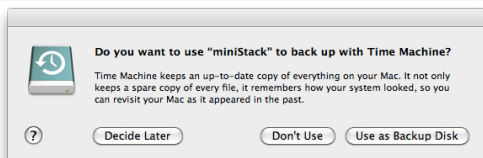
Choose the partition scheme appropriate for your computer; most will choose GUID Partition Table. Click "OK".

③ Click on the Apply button and the following dialog box will appear:



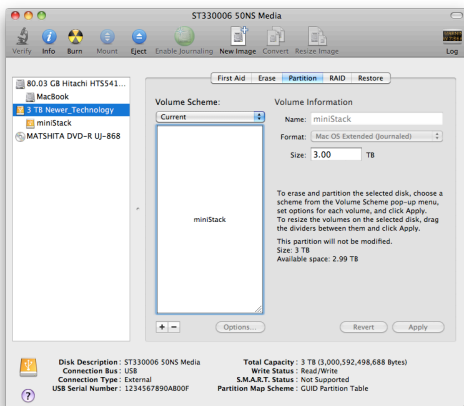
Click "Partition" to complete the formatting process and partition the drive. This will take a few moments to complete.

⑤



Once the formatting process has completed, you will have a popup box appear asking if you wish to use the new device as a Time Machine volume. This is up to you to decide; if you don't want to make that decision right now, you can click "Decide Later" and use the Time Machine preference pane to select your Newer Technology miniStack at a later time.

⑥



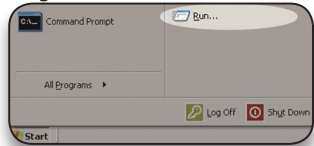
Formatting is complete, you're all set! You can quit Disk Utility.

## 2.2 Removing the GUID Partition Scheme

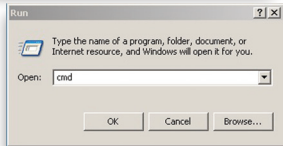
Only for XP, 2000, ME and earlier. (XP 64-BIT, Vista & Windows 7 can continue to the next section)

If you are not installing a brand-new hard drive into your enclosure, it may have a GUID drive partition already installed on it, especially if it was originally used with a Macintosh. Unfortunately, this is not readable by older versions of 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.

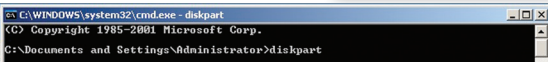
① Go to the DOS command prompt by selecting "Run" from the Start Menu.



② Type **cmd** into the text box, and click the "OK" button.



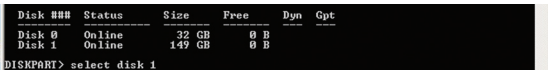
③ Type **diskpart** and hit enter.



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 proceeding.

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.**

## 2.3 Formatting your Newer Technology miniStack on Windows 2000 and later

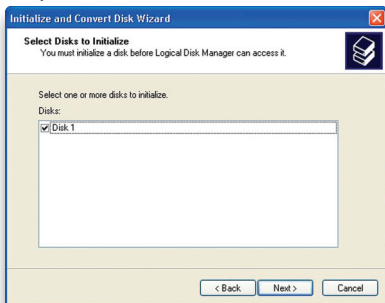
Instructions for other operating systems can be found at <http://www.newertech.com/format>.

**IMPORTANT NOTE:** This procedure will erase all data on your hard disk drive in the Newer Technology miniStack. Back up any important data before proceeding!

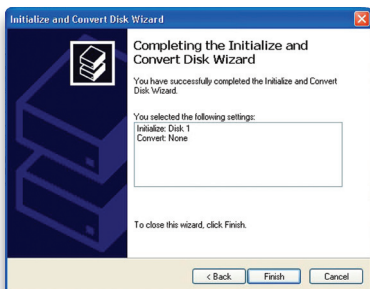
① With the miniStack connected to the computer and powered on, right-click on the "My Computer" ("Computer" if running Vista or Windows 7) icon and select "Manage" from the menu. The "Initialize and Convert Disk Wizard" window should appear.



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.

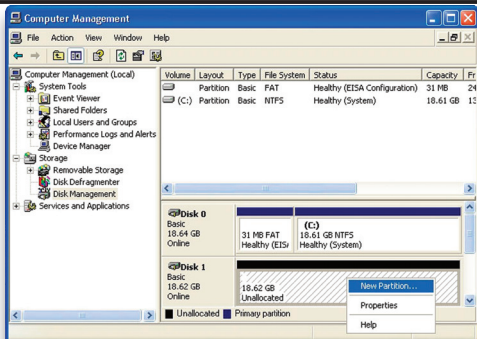


② In the next window, there should be only one drive listed. That will be the drive that you connected via eSATA, FireWire or USB. Make sure the box next to the drive name is checked and click "Next."

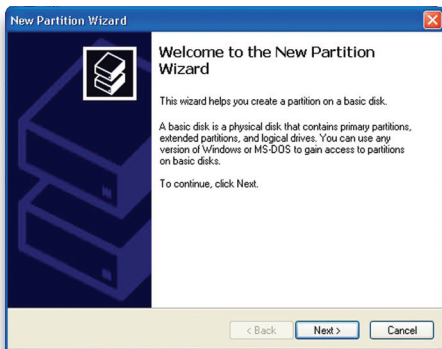


③ The Wizard will perform its tasks, and you will see the following screen. You may click "Finish."

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:

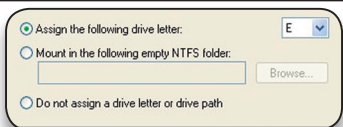
- Primary partition
- Extended partition
- Logical drive

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”

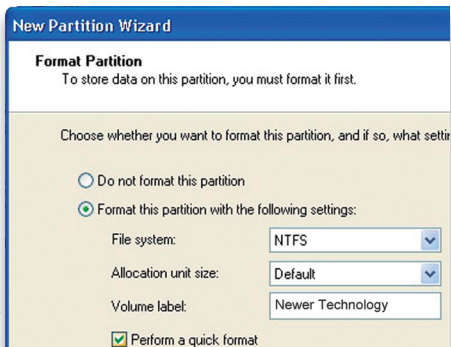
Maximum disk space in megabytes (MB): 19069  
 Minimum disk space in MB: 8  
 Partition size in MB:



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

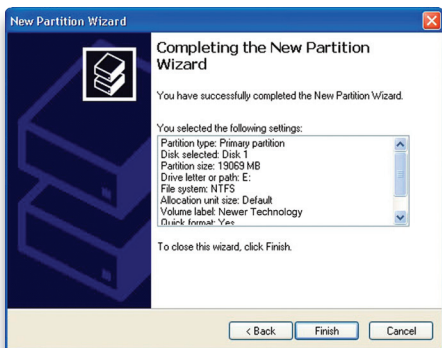


⑨ Before you can use the drive, it must be formatted. On most systems running Windows 2000 or later, it is advisable to specify the file system as NTFS. Leave the Allocation unit size as “Default,” and feel free to give the drive whatever name you prefer. Be sure to check the box “Perform a quick format.”

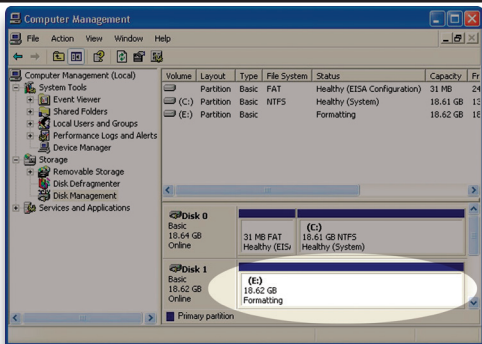


If you do not, it will likely take several hours for your drive to format. Click “Next.”

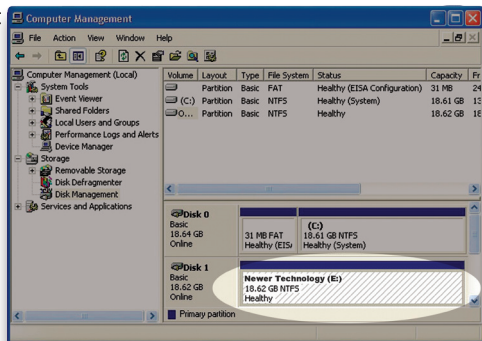
⑩ At the end of the Wizard, you will see a summary of the information that you specified during the previous steps. Click “Finish.”



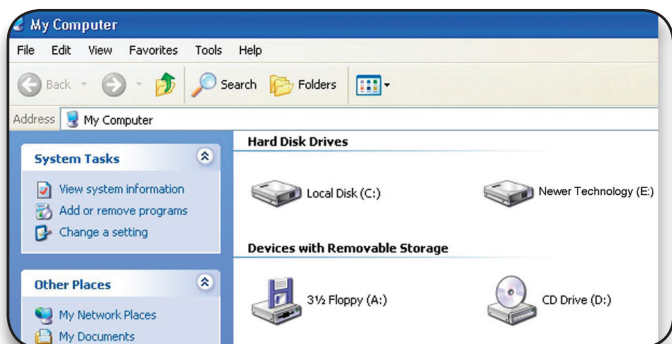
⑪ Once you have finished with the formatting wizard, you will see that your new drive (represented as “Disk E” in this case) will display a message of “Formatting.” This should only take a couple of minutes if you chose the quick format option.



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.”



## 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.

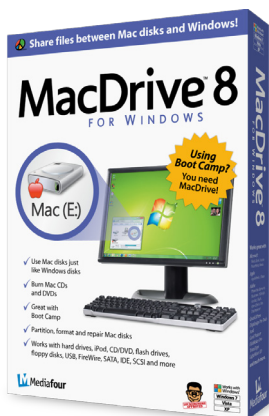
Once installed MacDrive will automatically give you access to any Mac disk you pop into your computer. MacDrive even puts an “apple” icon on the Mac disk, just to keep things clear.

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 at:**

<http://www.macsales.com/macdrive>



## 4 TROUBLESHOOTING & TIPS

### 4.1 Troubleshooting

Some of the most simple problems can be traced to power or connectivity issues. 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 to see if the device works properly. If these suggestions do not work, try connecting the NewerTech miniStack to a different computer, if available to you.

If the power light is on the front of the Newer Technology miniStack is not turning on, try a different interface.

### 4.2 Tips

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

#### • For Macintosh systems:

There are a few methods to unmount disks with Macintosh systems. Either drag the icon for the hard disk you wish to unmount to the trash can, or click the eject icon next to the hard disk name under the "DEVICES" tab in the sidebar in any finder window, or right click and choose eject from the popup menu that will appear.

#### • 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 disconnect the Newer Technology miniStack.

## 5 APPENDIX

### 5.1 FAQ

**Q:** How do I format my storage solution?

**A:** OWC 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/7 : NTFS
- For cross-platform compatibility, FAT32 will work, but limits single file sizes to 4GB. Other options using 3rd party software exist but are not covered here. Additionally, FAT32 only works with hard drives that have a capacity of 2.2TB or less.

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

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

### 5.2 About Data Protection

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, 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 loss or corruption of data while using the Newer Technology miniStack 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.

## 6 TECHNICAL SUPPORT

### 6.1 Before Contacting Technical Support

- Review Chapter 4: Troubleshooting & Tips.
- Try to confirm the problem is with the solution. If you have a second computer, move the miniStack solution 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://eshop.macsales.com/Search/FAQ2.cfm>

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

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

All of this will help speed your support contact along.

### 6.2 Technical Support Hours Of Operation

**8AM - 8PM CT Monday - Friday**

**9AM - 4PM CT Saturday**

***By Telephone - (800) 275-4576 (North America only)***

***International customers please call (815) 338-8685***

***Live Chat is available during normal business hours as well.*** Visit:

<http://www.newertech.com/support> for more information.

***Or, you can email.*** Submit your email at

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



## Copyrights:

Copyright © 2005-2012 Newer Technology, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written consent of Newer Technology.

## Changes:

The material in this document is for information only and subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, Newer Technology assumes no liability resulting from errors or omissions in this document, or from the use of the information contained herein. Newer Technology reserves the right to make changes or revisions in the product design or the product manual without reservation and without obligation to notify any person of such revisions and changes.

## 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 Newer Technology 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.
- Newer Technology 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 ventilation outlets or heat sinks. These help to keep your drive cool during operation. Blocking ventilation outlets or heat sinks may cause damage to your drive and cause an increased risk of short-circuiting or fire.



R1 6/26/12 JD

NWTMANMSTKAM