#### Copyrights

Copyright © 2007 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 to 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 to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and 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 into 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 hard drive 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). Inversely, 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 or use excessive force on it.

Never use excessive force on your 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 it's finest with this product. Be sure to not 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.



Copyright \*2007 Newer Technology Inc. All Rights Reserved. Newer Technology's 2 year Limited Warranty is not transferable and subject to limitations

# Guardian MAXimus®



Newer Technology Guardian MAXimus Dual Drive RAID-1 FireWire 800/400 & USB 2.0 **Assembly Instructions** 

#### **Table of Contents**

1. Assembling your new NewerTech Guardian MAXimus	2
2. Initializing your new NewerTech Guardian MAXimus	8
3. Identifying the Guardian MAXimus front status lights	11
4. Troubleshooting	12
5. Tips	13
6. Contacting Customer Service	14
Important Notes Back G	Cover
Warnings Back G	Cover

#### Contacting Customer Service Chapter 6

#### **Before contacting Customer Service:**

Read the manuals and review Chapter 4: Troubleshooting
Try and confirm the problem is with the hard drive. If you have a second Macintosh computer, move the drive to that system and verify that the drive does not function with that machine.
Visit our tech center for more support suggestions.
http://helpcenter.newertech.com/
Also visit our FAQ section, to see what other customers have asked about and how they solved their problem. This is also available in our tech center.

#### If you still need support:

Have the serial number of the hard drive
Your invoice number (if possible)
What operating system you are using
Which kind of computer you are using all available to you to speed your support contact.

#### Tech Support Hours (Central Standard Time)

8AM-8PM Monday - Friday 9AM - 4PM Saturday & Sunday Phone (815) 308-7001

**Or, you can email:** Submit your trouble ticket at: http://helpcenter.newertech.com/

# Tips Chapter 5

#### To disconnect or unhook your NewerTech Guardian MAXimus hard drive, follow these important steps to properly dismount your drive.

If you wish to disconnect your NewerTech Guardian MAXimus drive without shutting down your computer, simply drag the NewerTech Guardian MAXimus drive icon to the trash can on the desktop (or, in the dock using Mac OS X). Your drive is now safe to power off and unhook. Do not disconnect, or power off the NewerTech Guardian MAXimus until you have completed this step.

# Share your Mac formatted drive with your PC using MacDrive (optional purchase)

After installing MacDrive, your HFS+ Macintosh volume will mount as if the drive were formatted in a native Windows format. MacDrive allows you to use your NewerTech Guardian MAXimus hard drive on either platform without having to reformat or re-initialize the volume. We highly recommend this software for anyone that is sharing data in a cross platform environment.

#### **Cloning drives (exact copies)**

If you want to make an exact duplicate of a hard drive, we highly recommend Mike Bombich's donationware "Carbon Copy Cloner". It's a great tool! You can find it on his website at: http://www.bombich.com/ccc.html

#### **Custom Drive Icons:**

Now that you have your Newer Technology Guardian MAXimus configured to your needs, dress it up! Change the icon of the hard drive! We have created disk icons for your new drive and they are available for download here:

http://newertech.com/support

#### Assembling a NewerTech Guardian MAXimus Chapter 1



Begin by opening your NewerTech Guardian MAXimus box.



Set the contents out in front of you and familiarize yourself with your new drive enclosure and it's components.

- Drive Enclosure • USB 2.0 Cable
- FW800 Cable
   Power Transformer
- FW400 Cable
- Power Cord

- Software Bundle
- Screw Package (not pictured)



Turn the drive enclosure onto it's side as shown and remove the Phillips screws that are inserted into the bottom of the drive enclosure. This will release the internal drive carrier. Slide the drive carrier out of the external housing, pushing it to the front.

#### Do not unplug any of the cables inside!



Do not unplug any of the cables on the logic board of the NewerTech Guardian MAXimus drive enclosure.

The NewerTech Guardian MAXimus comes preconfigured as a RAID-1 Mirror storage enclosure, and no additional configuration or jumper changes are necessary or possible.

#### Removal of any cables will void your warranty.

#### Troubleshooting Chapter 4

If your NewerTech Guardian MAXimus is not functioning properly, begin by checking some basic possibilities, such as:

• Are all cables tightly attached to the computer and drive?

• Is the power supply plugged in firmly, and is the LED lit on the power supply brick?

If the above solutions are not working, a full reset of your system may be in order.

• Performing a set of open firmware reset routines can result in the memory being properly recognized again. To do this, you will need to boot your machine into Open firmware.

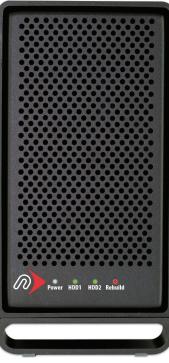
To boot into Open Firmware, shut down your Mac, then start it up while holding down the Command, Option, O and F keys. At the Open Firmware screen prompt, enter the following commands (you may want to write them down on a piece of paper before beginning this process), pressing the return key after each:

reset-nvram (press return) set-defaults (press return) reset-all (press return, your machine will reboot)

For further troubleshooting tips, visit our FAQ section online at: http://eshop.macsales.com/tech\_center/FAQ/index.cfm

If you are still experiencing problems with your drive, please continue on to Chapter 6: Contacting Customer Service.

# Identifying the Guardian MAXimus front status lights- Chapter 3



The NewerTech Guardian MAXimus has 4 LED status lights on the front of the case to visually display what it is doing and to warn you of any errors. • The leftmost LED is a green power light. This will illuminate normally when the case is powered on. • The middle two LEDs (HDD1 and HDD2) are green and will illuminate when hard drive #1 and hard drive #2 are being written to. They will not illuminate if the drive is not being accessed, they will turn off. • If a hard drive fails, one of the mid-

dle two lights (HDD1 or HDD2) will turn red, indicating which drive has failed. Upon replacement of the failed drive mechanism, the failed mechanism indicator light will flash from

red to orange, as it is being accessed to write data onto the drive, rebuilding the mirrored RAID.

• The rightmost LED is the Rebuild indicator. If a drive has failed, and the Guardian MAXimus is rebuilding the LED will illuminate green. If the rebuild fails, it will illuminate red. If the LED illuminates red, please contact our support department for further assistance.

In the event of a drive failure, rebuilding can take several hours to overnight. You may continue to use your Newer Technology Guardian MAXimus as you normally would during the rebuild process.



Important note: You must use identical size and model hard drives in this enclosure - you may NOT use 2 different size, or model mechanisms.

Place your first hard drive into the case, attaching one of the red SATA cables to the drive, and one of the red & yellow power cables as well. It's a tight fit so don't put excess pressure on any of the connections while performing this step.

# DO NOT REMOVE SATA CABLES FROM BRIDGE CARD!

•	
. 2	

Turn the Newer Technology Guardian MAXimus drive enclosure on it's side so you can access the bottom screws as shown. Install 4 Phillips screws into the hard drive through the drive case and tighten securely.



Turn the hard drive enclosure back over and insert the top identical model hard drive. Insert the power and SATA cables into it, as you did with the bottom drive.

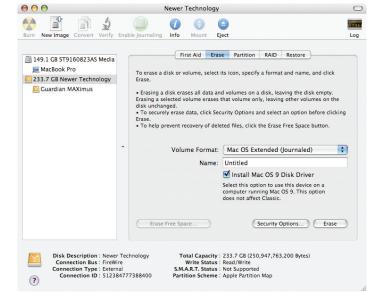
#### DO NOT REMOVE SATA CABLES FROM BRIDGE CARD!



Insert 4 Phillips screws into the top hard drive, fully securign it into the NewerTech Guardian MAXimus drive enclosure. There are 2 screws on each side of the enclosure. Make sure to tightend them securely.



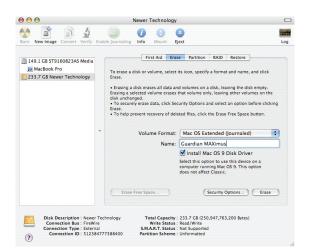
Confirm that you want to erase the disk.



After a few moments, the erase command will complete, and the Newer Technology Guardian MAXimus volume will mount on your desktop. You can quit Disk Utility, and you're all set!

First Aid Erase Partition	
To repair a disk or volume, select its icon in the Disk. To repair disk permission problems on a disk o installed, select its icon and click Repair Disk Per Click the Verify buttons to test the disk or perm	r volume that has Mac OS X missions. hissions without changing anything.
Verify Disk Permissions Repair Disk Permissions	Verify Disk Repair Disk
	• To repair disk permission problems on a disk of installed, select is ison and cick Repair Disk Per • Click the Verify buttons to test the disk or per the Verify buttons to test the disk or per then choose Udities>Disk Udity     (Verify Disk Permissions)

Once you've selected the NewerTech Guardian MAXimus drive, you'll notice the above change in the Disk Utility program. Click on the "Erase" tab, next to the highlighted blue "First Aid" tab in this picture.



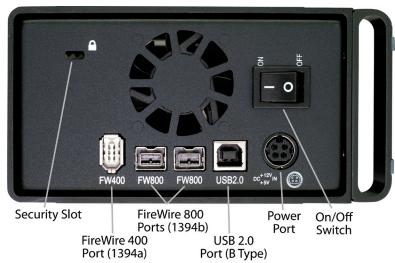
Once on the Erase tab, you need to name the volume you want to format, and erase it. Name the volume as you want, choose the Volume format type, (Mac OS Extended (Journaled) is default), and click the Erase button.



Slide the drive enclosure back into the outer shell, port end first into the case with the logo on the outer shell facing you, as shown in the picture.



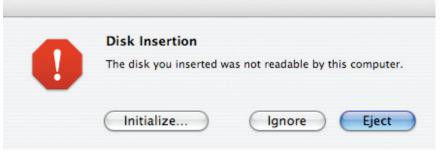
Turn the unit on it's side and insert the 4 Phillips screws to secure the enclosure to the outer shell.



Turn the drive so you can see the rear ports. Connect the power cable to the back of the drive, and either the FireWire 400 or 800 cable to the drive, or the USB 2.0 cable (whichever you plan on using to connect to your computer). Plug the power brick into the AC power cable (not shown), and power the unit on. You should hear the drives spin up, and click a couple of times. After 10 or so seconds, the following dialog box should appear on your screen (see next page - Chapter 2).

# Initializing the NewerTech Guardian MAXimus Chapter 2

The instructions that follow are for initializing the Guardian MAXimus with a Macintosh system running Mac OS X. If you wish to view initialization instructions for other operating systems, please visit our support website at: http://newertech.com/support Thank you



#### Click on the "Initialize" button.

		Disk Utility			C
🕈 🖹 🕯		0	0	0	MARN W778
Burn New Image Convert Veri	fy Enable Journaling	Info	Mount	Eject	Log
📑 149.1 GB ST9160823AS					
MacBook Pro					
233.7 GB Newer Techno					
			Select	a disk, volume, or image	
(?)					

Select the device with no volumes attached to it; in this picture, that would be the 233.7GB Newer Technology device. Click once on the picture of the drive icon next to the text.