M9 - NDAS

External Storage Enclosure for
3.5" IDE Hard Drives

User Manual

(English)

v1.4

EN

Table of Contents

Chapter 1 - Introduction

Icon Key

Throughout this manual you will see icons on the left margin that denote either Notes or Special Remarks as outlined below:

General Notes and Tips

Remarks for PC users and Microsoft Windows OS

Remarks for Mac users and Apple Macintosh OS

The M9-NDAS

The 'M9-NDAS' delivers high performance using NDAS technology for you to share your disk on the local network, whilst keeping it as simple as a standard Plug and Play device. Extending your storage space has not only just become easier but faster too. M9-NDAS features smart fan technology, passive cooling, stackable design and high-speed USB 2.0 connection.

Product Dimensions: 16.5cm x 16.5 cm x 3.8 cm
                        6.50" x 6.50" x 1.50"

Package Contents

Package content may vary, depending on vendor & version.

- M9-NDAS Enclosure
- External Power Adapter;
  Input 100-240V, Output 12V/1.5A, 5V/1.5A
- Power cord, USB cable, Ethernet cable, Manual
- NDAS Driver CD (required for all Operating Systems)

System Requirements

PC Requirements

- Minimum Intel Processor II 350MHz, 64MB RAM
- USB 1.1 equipped PC; WinME, Win2000, WinXP
- USB 2.0 equipped PC; WinME, Win2000, WinXP
- 100 Mbps or 10/100Mbps Fast Ethernet card, or a USB-to-Ethernet converter equipped PC;
  Win98SE, WinME, Win2000, WinXP

Mac Requirements

- Minimum Apple G3 processor, PowerPC, 64MB RAM
- USB 1.1 equipped Mac; Mac OS 9.2 or above
- USB 2.0 equipped Mac; Mac OS 10.2, 10.3 or above
- 100Mbps or 10/100Mbps Fast Ethernet card, or a USB-to-Ethernet converter equipped Mac; OS 10.3 or above

Detailed Information

Front LED status lights:
Red = HDD Access & Power
Amber = Network Status (LINK)
Green = 100Mb/s Connection

1. Power Switch ON/OFF
2. Power Receptacle
3. Fan Speed settings (Auto/Low/High)
4. 100Base-TX port (RJ-45)
5. USB 2.0 High Speed port
6. Security slot

Make sure not to lose the ID number and write it down for later use.

Fan speed settings:
A = Auto
M = Manual
H = High Speed
L = Low Speed

Chapter 2 - Installing the HDD

1. Lift the top cover off the body.
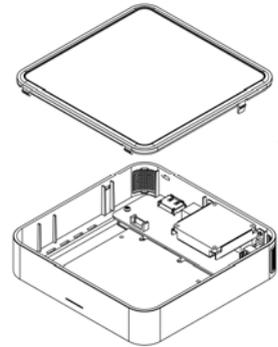
2. Install the hard drive and connect the cables to your drive.
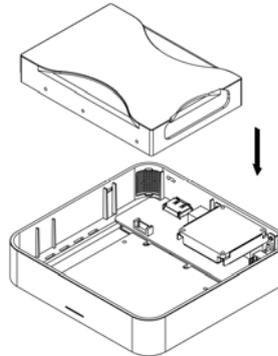
3. Turn the enclosure around and fasten the four screws.
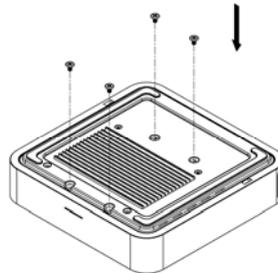
4. Attach the thermal probe with the tape provided to the top of the drive, somewhere near the spindle motor.
5. Align the top cover with the body and push lightly into place.
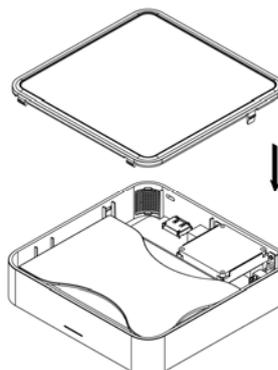
Chapter 3 - System Set Up

The 'M9-NDAS' can only be accessed from the internal LAN. It is not possible to connect remotely.

Do not connect the USB and Ethernet cables simultaneously!

To assure the best performance on the network, only use network switches and routers.

In NDAS mode, the 'M9-NDAS' is directly attached to a 100MB/s full duplex Ethernet switch. Each user on the network can use the NDAS disk as if it were a local drive.
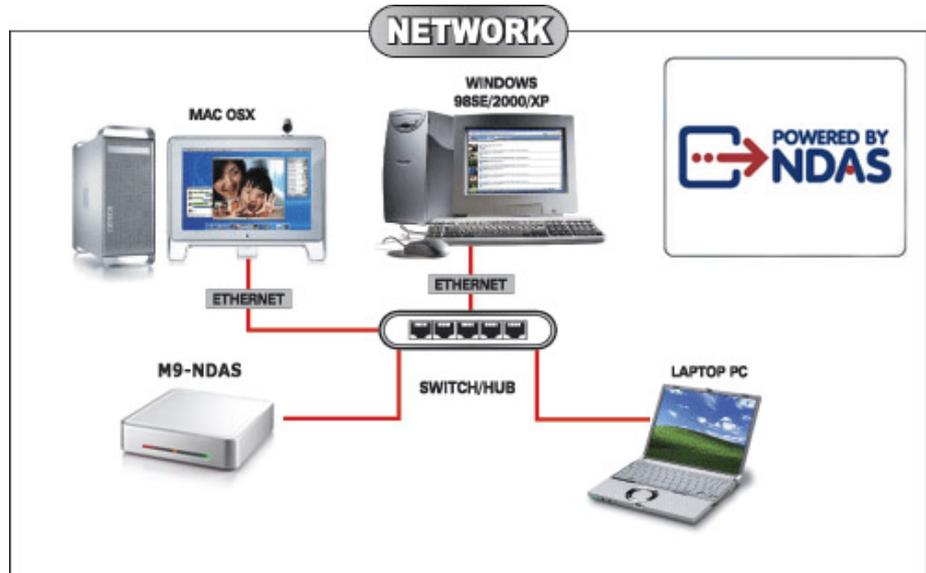
In USB 2.0 High Speed mode, the 'M9-NDAS' is directly attached to a single computer using the USB port.

A few tips on how to connect your M9-NDAS:
- Make sure all computers sharing the disk are using the same driver revision.
- Do not cover the Enclosure and leave enough room around it for ventilation.
- Do not expose the product to water or humid conditions.
- Always check for visible damage and defects of power and interface cables before using it.
- We recommend using the cables supplied with your product.

Installation on a PC using USB 2.0

To connect the device via USB 2.0 High Speed to a single computer, see following instructions:

- Turn on your Computer and start Windows.
- Make sure the Ethernet cable is disconnected.
- Connect the M9-NDAS via USB 2.0 and turn it on.
- Let Windows search for and install the driver automatically.
- Open "My Computer" to see your external hard drive.

For factory new drives and more info about formatting, see chapter 5.

Unplug Procedure
For the safe removal of your drive and to assure that no data is lost, always follow the correct unplug procedure. Otherwise, an error message will appear.

- Click on the taskbar icon for external hardware.
- Choose your external hard drive and confirm to remove it.

Installation on a Mac using USB 2.0

To connect the device via USB 2.0 High Speed to a single computer, see following instructions:

- Turn on your computer and start Mac OS.
- Make sure the Ethernet cable is disconnected.
- Connect the M9-NDAS and turn it on.
- No driver installation required.
- The external drive will mount and show up on your desktop.

For factory new drives and more info about formatting, see chapter 5.

Unplug Procedure

For the safe removal of your drive and to assure that no data is lost, always follow the correct unplug procedure. Otherwise, an error message will appear.

- Drag the external hard drive icon into the trash bin.
- Turn off your device.

Chapter 4 - NDAS Setup

Driver installation on a PC
- Insert the driver CD and select your Operating System.
- If installation does not start automatically, browse and double-click on the 'NDASSetup' file.
- Follow the installation wizard and install the driver.
- Accept any warning of missing signature or logo testing.
- Restart your system when prompted to do so.

Driver installation on a Mac
- Insert the driver CD.
- Browse for the 'NDAS Install' package and execute it.
- Follow the installation wizard and install the driver.
- After finishing the installation, restart your computer.

Registering a new device on a PC
- Click on the NDAS Device Management icon on the taskbar.
- Select 'Register a New Device'.
- Depending on your setup under Options/Advanced/Menu, you can use the registration wizard or do it manually.
- Enter a name for your NDAS disk or use the default name.
- Add your NDAS device ID and if you also want to write to the disk, enter the Write Key (last 5 digits).

Without the Write Key, the NDAS disk can only be accessed with 'Read Only' permit.

If for some reason, you can not find your ID number, write down the serial number and contact your vendor.

The device ID and Write Key do not contain the letter O. Please use the number 0 for all 0's.

After adding a new device, the Found New Hardware Wizard may appear. Let is search for and install the drivers automatically.

Register a new NDAS Device

NDAS Device Name

NDAS Device 1

NDAS Device ID

| T0PSC | RR93E | CEBMG | 3PRCE |

Write Key

●●●●●

Write Key must be entered if you want to use the device as Read/Write Mode

☑ Activate this device after registration

[Register] [Cancel]

Without the Write Key, the NDAS disk can only be accessed with 'Read Only' rights.

Write down your ID number and do not lose it. If for some reason, you can not find it anymore, write down the serial number and contact your vendor.

Registering a new device on a Mac

- Locate the 'NDAS Utility' found inside your Applications folder under Utilities and open it.
- Under Management, select 'Register a New Device'.
- Enter a name for your NDAS disk or use the default name.
- Add your NDAS device ID and if you also want to be able to write to the disk, enter the Write Key (last 5 digits).
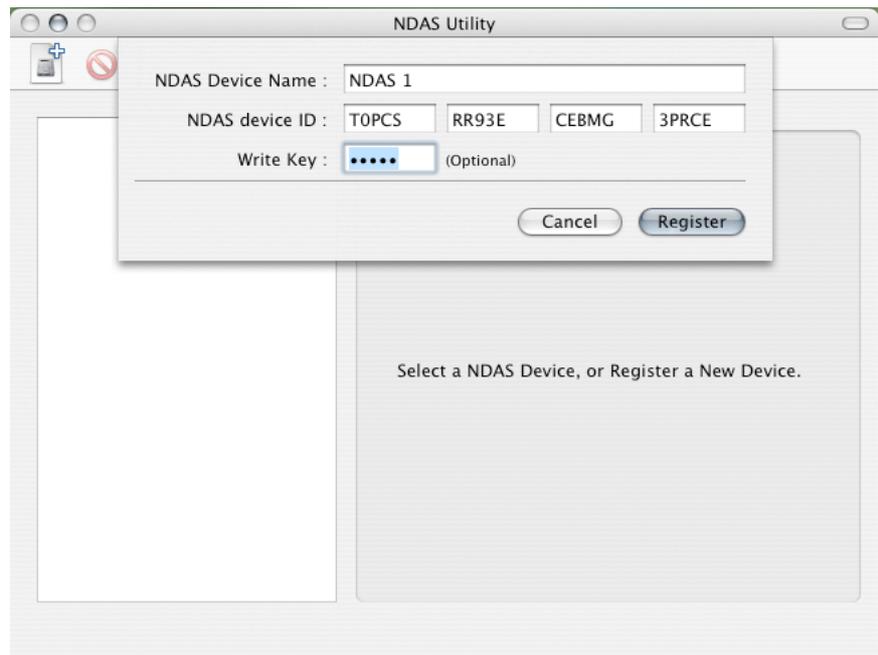
Note: The device ID and Write Key do not contain the letter O. Please use the number 0 for all 0's.

Read & Write mode will be disabled if the Write Key was no entered during the registration process.

If a Mac is connected using the Read & Write mode, other computers can only connect using the Read Only mode.

If a PC is connected using the Read & Write mode, the Mac can only connect using the Read Only mode.

If this is a brand new hard drive, see 'Formatting the HDD'.

Mounting and using your NDAS disk

Mounting the NDAS disk on a PC
- Click on the NDAS Device Management icon on the taskbar.
- Select your new NDAS device, which should now be listed.
- Mount the drive using either Read Only or Read & Write.
- The drive is now available under My Computer.
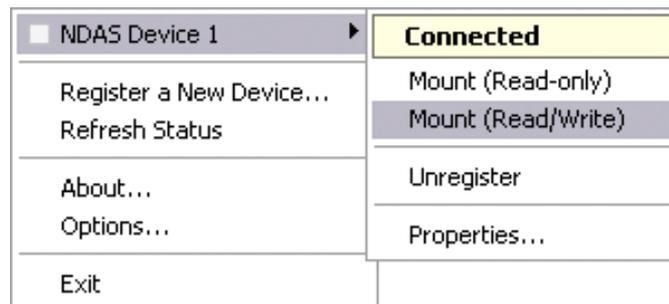
Mounting the NDAS disk on a Mac
- Open the NDAS Utility and select your new NDAS device.
- Under 'Configuration', mount the drive using either the Read Only or Read & Write mode.
- The drive will now appear on your desktop.
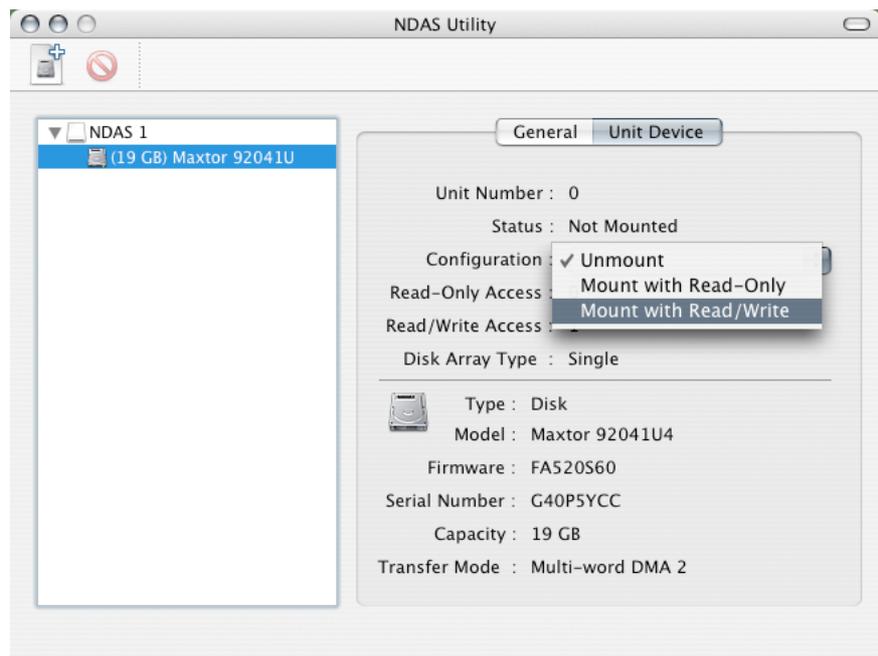
If the disk is connected directly to the computer using USB, full access is granted, regardless of the driver setup used on the network.

If a Mac is connected using the Read & Write mode, other computers can only connect using the Read Only mode.

If a PC is connected using the Read & Write mode, the Mac can only connect using the Read Only mode.

Using and sharing the NDAS disk on the network

Now that you have successfully installed the NDAS disk, you can use it like any other hard drive on your system. It will behave very similarly to a standard USB disk in comparison.

You may drag and drop files into the NDAS disk, you can create new folders, copy, paste, move or delete files or use it as your backup device. To share and access the drive, you have the following options to limit or allow the access.

Read Only:
Users can only read from the disk.
Read & Write:
Users can read and write to the disk and can also delete any files created by someone else.
No ID number:
Without driver and without an ID number, the device can neither be found nor accessed on the network.
No Write Key:
Without the Write Key, the disk can only be mounted using the Read Only mode.

Unmount:
To eject the disk, close all open folders and files, then select Unmount to eject it. The device will still be registered and you can mount it again anytime you need it.
Changing Modes:
To change from Read & Write mode to Read Only as an example, first Unmount the device, then mount it again using the new mode.

Tip: For best performance, use only network switches and routers but no hubs. When you write to the disk, limit the access for as few users as possible, to speed up the transfer rate.

NDAS Device Management on a PC

Click on the NDAS Device Management icon located on the taskbar. All registered NDAS devices will be displayed on the menu.

If you want to use suspend or hibernation mode with a connected NDAS device, enable it first under Options and Advanced.

To change a device name or remove the Write Key, select your NDAS device and go to Properties for further commands.

To deactivate your device or reset the connection, select your NDAS device, go to Properties and select the Advanced tab for further commands.

Register a New Device:
Registers a new NDAS device to your computer.

Refresh Status:
Updates status of your NDAS devices.

About:
Displays NDAS software version information.

Options:
Advanced options for language settings, error messages, menu dialogs and support for suspend and hibernation.

Device Functions:
To view the present status and function of a certain device, place the cursor on your NDAS disk. You will be able to see the current state such as Disconnected, Connected, Mounted (RW), Mounted (RO) or Deactivated.

Mounted (RW) stands for Read & Write mode, Mounted (RO) stands for Read Only mode.

To uninstall the entire Device Management tool, first eject and remove all NDAS devices, then use the Add or Remove Programs utility in your Control Panel to remove the NDAS Software.

Device Status Modes

Color	Icon	Disk Icon	Mode / Meaning
Green			**Read Only [Mounted (RO)]** Users can only read from disk
Blue			**Read & Write [Mounted (RW)]** Users can read and write to disk
White			**Connected** Disk is ready to be mounted
Black			**Disconnected** Device is registered but not connected or mounted
Red	⊘		**Deactivated** Device is registered but no attempts will be made to communicate with your device
Yellow			**Bound Non-Primary** Used for bound NDAS devices except the primary device

NDAS Utility on a Mac

Locate the 'NDAS Utility' found inside your Applications folder under Utilities and open it. All registered NDAS devices will be listed here.

To access the Configuration and mount a device, select the hard disk itself, as shown in this screenshot.
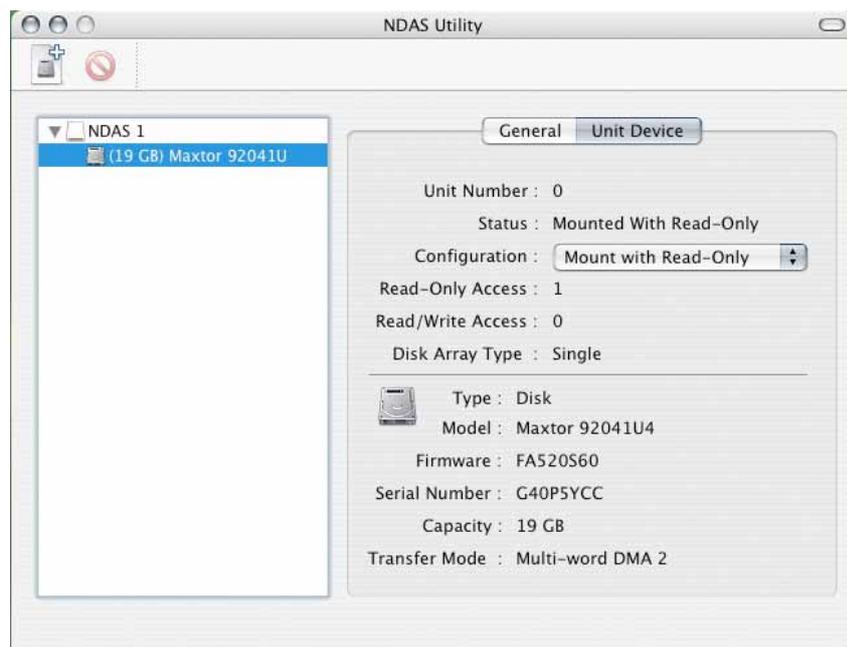
To uninstall the NDAS Utility, first eject all devices and remove them, then insert the driver CD, open the corresponding folder for your OS and start the 'NDAS Uninstaller'.

To remove the Write Key, select the NDAS device itself, as shown in this screenshot.

Without the Write Key, the Read & Write mode will be disabled.

Configuration:
Selection to Mount and Unmount the device using either Read Only or Read & Write mode.

+ Sign:
Register a New Device.

Management:
Both the above can be done using the Management menu on top of your screen.
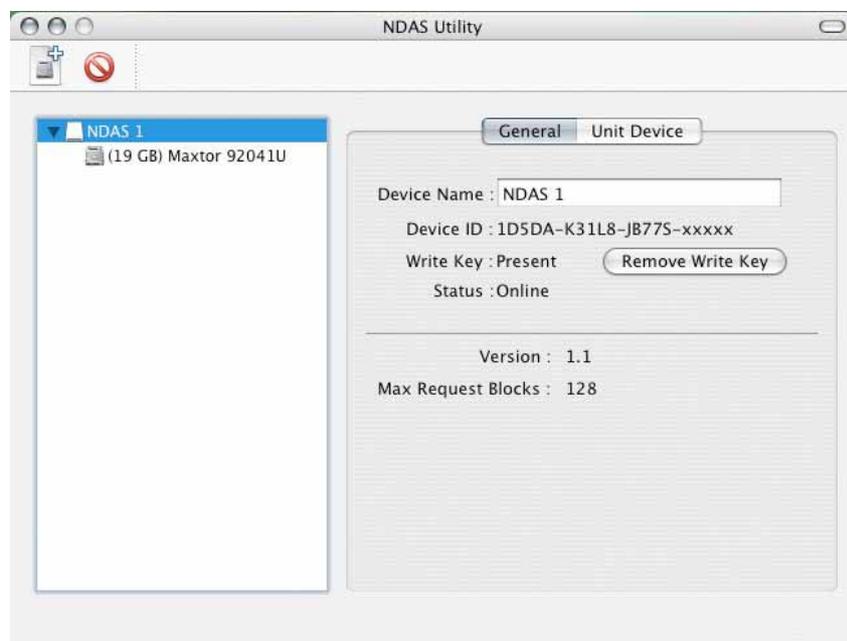
Device Name:
NDAS device name

Remove Write Key:
If there is an existing Write Key, it can be removed by clicking this button. The device can then only be mounted using the Read Only mode.

Driver Upgrade

It is recommended that all users use the same driver revision. Before upgrading the driver, please follow these guidelines:

- If possible, first backup all your data.
- Disable all NDAS devices.
- Uninstall the present driver.
- Install the new driver.
- Register the NDAS devices again.
- Mount the NDAS devices.
- You should now be able to use the NDAS devices again.

PC Command Line Utility

For advanced users on a PC, there is an option to run the NDAS software from a command line interface.

- Open the command line and type following:
  cd C:\Program Files\NDAS\System
  (Folder may vary depending on driver being used)
- Type ndascmd.exe, which will load the command line interface for the NDAS software

The Syntax for the interface should be as follows:
ndascmd <command> [parameters]

The supported commands are following:
- register <name> <device id without dash> [write key]
- unregister <device number>
- list devices
- list logicaldevices
- mount <logical device number> [ro|rw]
- unplug <logical device number>
- unmount <logical device number>
- activate <device number>
- deactivate <device number>

Chapter 5 - Formatting the HDD

Be aware that this will destroy all your existing data on the drive!

PC running Win98SE or WinME
MS-DOS command "fdisk" (press Enter to confirm)
- Type "fdisk" and press Enter
- Select "Y" and press Enter
- Enter "5" to change the drive
- Select the drive you want to format
- Choose "1" and follow the onscreen instructions

DO NOT format the drive when other computers have the NDAS device mounted.

For best compatibility between different Operating Systems, use the FAT32 file system. FAT32 can be accessed on most systems but the file size for a single file is limited to 4GB only.

It is recommended to format the hard drive using the interface you will most likely be accessing the drive with.

For Win2000 and WinXP, we recommend using the NTFS file format.

If the NTFS file system is used, the drive will only be recognised on Win2000 and WinXP.

Mac OS X can see the drive and read data from it but can not write to it.

Formatting on Win2000/XP using FAT32, the biggest single partition you can create will be 32GB. To create larger partitions, use the DOS command under WinME or use 3rd party software.

PC running Win2000 or WinXP

Disk Management Program
- Right click on "My Computer" and choose "Manage"
- Select "Disk Management"
- Choose the drive you want to format and right click on it for further commands (Choose New Partition)
- Follow the Partition Wizard to setup your disk
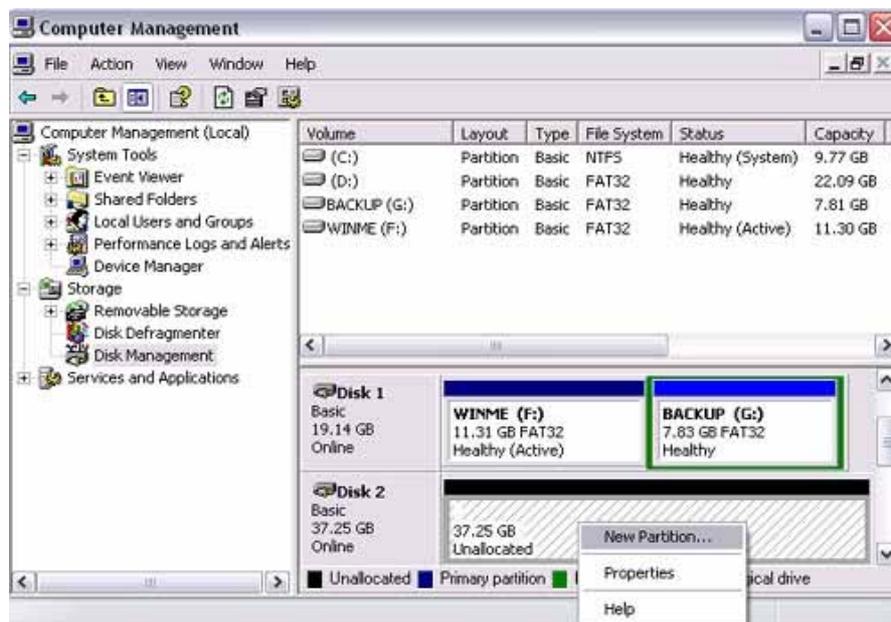
It is recommended to format the hard drive using the interface you will most likely be accessing the drive with.

Note: DO NOT perform disk operations (format, partition, chkdsk) when other computers have the NDAS mounted.

It is important that your NDAS device is listed as a Basic Disk and not a Dynamic Disk.

- 16 -

If native Mac file system is used, the drive will only be recognised on Mac systems.

To access the drive on both PC and Mac, format the drive using MS-DOS (FAT32)

If you can not see the drive, make sure the jumper settings of your hard drive are correct, there are no extension conflicts and the power is turned on!

Mac OS

Mac OS9.2 does not support creating multiple partitions on an external drive. To do that, you would need to purchase additional 3rd party software, connect the drive to the internal IDE bus or upgrade to OS X.

For Mac OS X, use the Disk Utility to format and create partitions on your external disk.

- Select "Disk Utility" in the utilities folder
- Choose your external drive and setup your disk
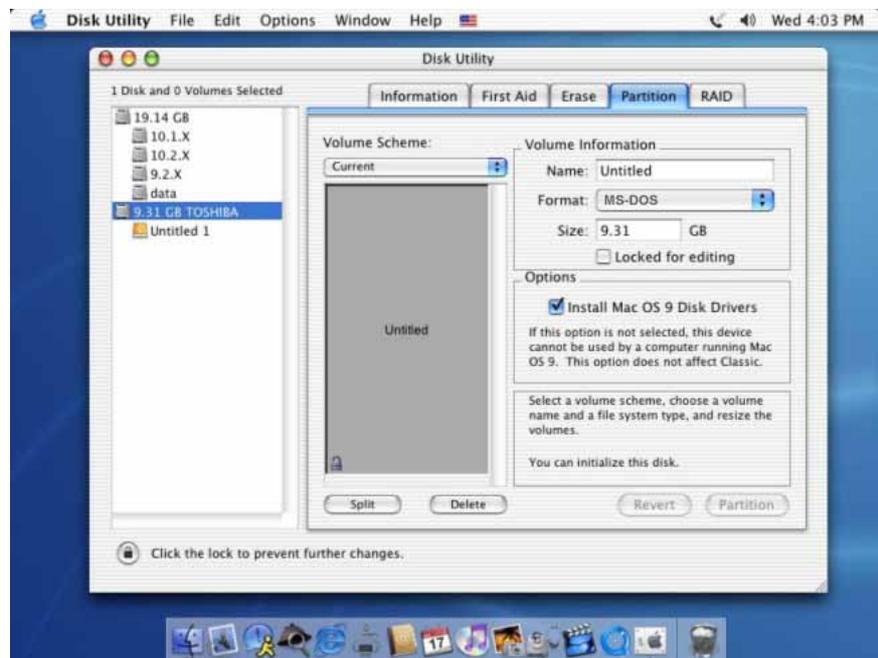
It is recommended to format the hard drive using the interface you will most likely be accessing the drive with.

Note: DO NOT perform disk operations (format, partition, erase) when other computers have the NDAS mounted.

Chapter 6 - Appendix

Technical Questions

For RMA and other questions, please contact your vendor or check out their online support area!

If you lose your device ID number, please write down the serial number and contact your vendor.

For NDAS mode, the drivers need to be loaded on each computer that wants access to the NDAS device. However, if you are using Windows Sharing, only one computer needs the software installed. The other computers will not need it.

To disconnect the NDAS disk, we always recommend using the option in your Device Management (Device Utility for Mac) if connected via Ethernet. You can use the 'Unplug or Eject Hardware" icon in your taskbar (Eject for Mac) to stop the disk before disconnecting it from the Device Management. Close all windows that may be accessing the NDAS device.

Fan Setting

There are 3 modes available for you to select the desired cooling. Automatic (Auto), Manual Low (M/L), Manual High (M/H).

We recommend you leave your unit on the Auto setting. When this mode is selected, the M9-NDAS automatically adjusts the fan speed up and down as necessary to keep the HDD cool.

Please read your warranty carefully, as this may vary between different vendors!

About this Manual

This manual covers all versions of the M9-NDAS. Images and descriptions may therefore slightly vary between this manual and the actual product you have. When you upgrade the driver, be sure to check if there is a new manual available for download.