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secure your future

AMPHIBIOUS

AMPHIBIOUS X5

User Manual

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IMPORTANT NOTICES

Safety Notices

- The warranty is void if an unauthorized person attempts and/or repairs the hard disk drive.
- Read all Manuals and instructions carefully before using the device.
- Do not spill any liquid or insert any object into the device.
- Use the device within the specifications indicated, including but not limited to: power requirements, temperature, humidity, sunlight and magnetism from other devices such as computers and televisions.
- Please visit the Rocstor website, www.rocstor.com for further information concerning specifications and use of the device.

General Notices

- Consistently make multiple backup copies of your data for your protection. Hard disk drives are subject to failure at any time.
- Rocstorage, Inc. shall not be held liable for loss of data or the restoration or recovery of data on the device. Please view complete Limited Warranty Information in this manual or on the Rocstor website (www.rocstor.com) for further details.
- Rocstor Amphibious X5 has been designed to be compliant with the SATA hard drive operating specifications as well as USB 1.1/2.0 and FireWire 400/800 operating specifications. Rocstor accepts no liability for any loss of data or the inability of X5 to work with equipment that are not compatible with the operating specifications.

Capacity Disclaimer

Actual accessible hard drive capacity will indicate up to 10% lower than stated under different Operating Systems and formatting.

The storage volume is measured in total bytes before formatting. References to round numbers of gigabytes or terabytes are an approximation only. For example, a disk drive labeled as having 500GB (gigabytes) has space for approximately 500,000,000,000 bytes before formatting. After formatting, the drive capacity is reduced by about 5% to 10% depending on the operating system and formatting used.

Care and Handling

The following instructions concern the proper care and handling of Amphibious X5 Drives. Please take a moment to review these instructions.

- As with any storage solution, it is recommended that all data be backed up regularly.
- Ensure that you follow the proper removal procedure to disconnect the Amphibious drive.
- Do not move or disconnect this device from your computer while it is reading or writing data. This may cause damage to the Amphibious drive.
- Do not place this device near a heat source or expose it to direct flame.

- Do not place the device near any equipment generating strong electromagnetic fields. Exposure to strong electromagnetic fields may cause the device to malfunction or data to be corrupted.
- Do not drop or cause shock to your Amphibious drive.
- Do not spill any liquid or insert any object into the device.

- Do not attempt to disassemble and service the Amphibious drive during the warranty period.
- Please read the Safety Notices and Limited Warranty information in this Manual and on the Rocstor website (www.rocstor.com) for further details.

GENERAL

Introduction

AMPHIBIOUS X5 Secure – Encrypted Ruggedized Mobile Drive
FireWire 800 (400) and USB 2.0

Amphibious X5 is the simplest and technologically advanced single-factor authentication real-time hardware encrypted ruggedized external drive in the market today; securing your Data-AT-Rest (DAR).

Designed and engineered to satisfy the requirements of demanding security concerned professionals, Amphibious support a fast solid-state (SSD) or a hard disk drive (HHD). Amphibious is designed to be both bootable and bus-powered, and it is compatible with MS Windows and Macintosh environments without any software installations.

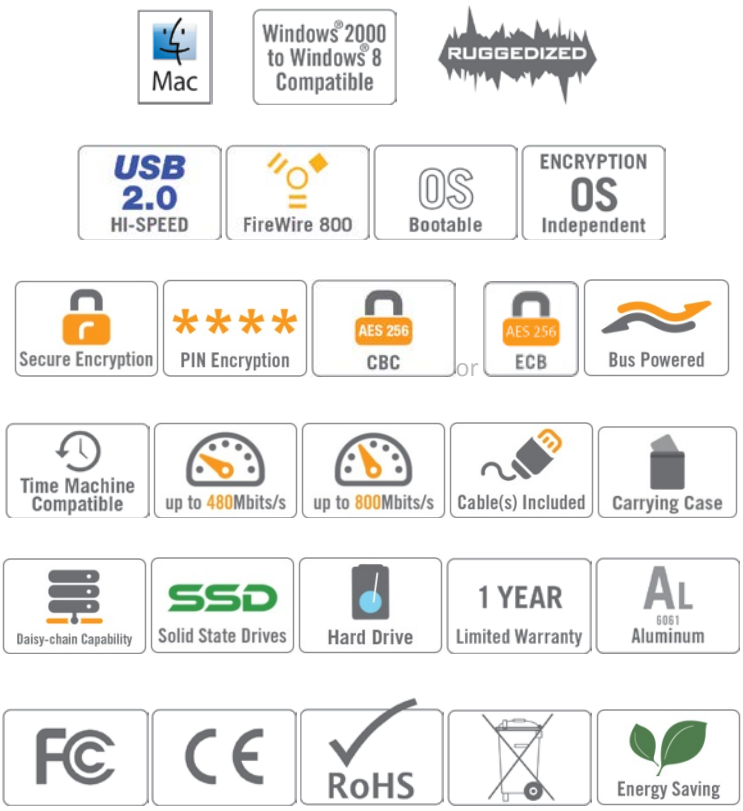
By encrypting every single byte and sector, X5 is operating system independent and does not require any software drivers. X5 contains a built-in encryption key (protected by a user password) and encrypts all temporary files, as well as areas that would normally be missed and left “in the clear” by software encryption products. Encryption and decryption occurs transparently without any loss in disk performance. Users simply use their computers as usual with the assurance and complete peace of mind that their data is fully protected in the unfortunate event that their hard drives are stolen or lost.

The user is required to authenticate him or herself each time X5 is plugged into the computer. After authentication, the drive presents itself to the operating system and the user is granted normal drive access.

One of the most secure and cutting-edge hardware-based encryption chipsets is integrated into the internal circuitry of the Amphibious. The cryptographic encryption module contains features such as Advanced Encryption Standard Algorithm **AES**-256 bit key strength, and real-time encryption so that there is virtually zero time in encrypting and decrypting the data. While in the CBC or ECB modes, the encryption chipset bears certifications from the **N**ational **I**nstitute of **S**tandards and **T**echnology (**NIST**) and U.S. **F**ederal **I**nformation **P**rocessing **S**tandard **FIPS** Level 2 for a Cryptographic Module. The Amphibious is authenticated by secure password (PIN number), which is typed on the device for authentication, then ready for secure data transfer.

Rocstor's line of encrypted drives offers the technologies you need to keep your data secure and safe.

Choose Rocsecure drives and secure your future.



Box Contents

- External hard disk drive
- USB cable
- 9-pin to 9-pin FireWire 800 (1394b) cable
- Installation user Guide
- Carrying case

Minimum System Requirements

Mac Users:

Hardware: FireWire 800* (0r 400**) or USB 2.0 port(s.)

Mac: PowerPC or Intel processor running Mac OS 10.5, and later

Recommended memory: 512 MB RAM

Window Users:

Hardware: FireWire 800* (0r 400**) or USB 2.0 port(s.)

Operating Systems: Microsoft Windows 2000, Vista, Windows 7 or 8

Recommended memory: 512 MB RAM

**You may also connect Amphibious X5 series to a computer with FireWire 400; in this case you need a special cable or an adaptor (not included) from a 9 pin FireWire 800 connector of the Amphibious to the 6 Pin connector of FireWire 400.

Connectors

- FireWire 800 (IEEE 1394b) port x2
  (You may connect FireWire 800 to a FireWire 400 port via a special cable {also read page 12})
- USB 2.0 port x1

Drive compatibility	• 2.5” SATA 9.5mm height Hard Disk or Solid State Drives
Bus Interface	• USB 2.0 • FireWire 800 (400)
Physical	• USB mini-B connector • FireWire 9-pin connector • Dimensions: 130mm (L) x 78mm (W) x 22mm (H)
Power	• Approx 5V 400mA max (excluding power drawn by the HDD)
Authentication	• Password via built-in keypad
Encryption	• AES-256 hardware based real-time CBC or ECB mode
Key Management	• User-configurable password • Admin password for administrative mode
Certifications and Standards	• NIST[1] certified and FIPS 140-2 certified AES hardware cipher engine • FCC, CE • RoHS compliant
Operating Systems	• Operating System independent

[1] NIST – The National Institute of Standards and Technology of the United States of America

MUST BE READ FIRST

PLEASE READ AND FOLLOW THE INSTRUCTIONS PROVIDED IN THIS GUIDE CAREFULLY AND THOROUGHLY. FAILURE TO DO SO MAY RESULT IN DAMAGE TO AMPHIBIOUS X5 AND ANY OR ALL OF THE CONNECTED DEVICES.

Amphibious X5 uses the most advanced encryption chip. It encrypts and decrypts all the data that is being read and written simultaneously in real-time. It utilizes on board password to authenticate and authorize to access data in the device.

- If you lose/forget your password**s**, you lose your data.
- Rocstor does not keep a note of any codes nor will be able to reset.

Before operating the device, please NOTE the followings:

Please type slowly and do not press hard on the keypad (key pad works with soft touch)

Authentication and accessing the data:

The device has one administration password and three user passwords all password are user defined and is recommended to be changed and remembered)

Administrative password: Manages, allows and sets other password (you lose or forget this admin password you will be limited to allowing and changing users passwords)

User password: three (3) users and/or three (3) passwords can be defined. If the user type in his/her designated password wrong (incorrectly) three (3) time **the device will void that password** (will not authenticate or allow access to the data) only then the Administrator with Admin password can designate another password for the user.

If you lose your administrative password and user passwords you will lose your data

- Amphibious X5 includes (factory setting) Administration Password and Smartcard Passwords. (Factory setting passwords can and should be changed.)

- If you lose any of the password(s), you **CANNOT** access your data. There are no backdoors or other options to access your data.

    - Keep the "**Administrative Password**" in a safe place. DO NOT lose this Administrative Password.
    - Please be sure to remember and/or record your password in a safe place.

- Furthermore, you will be LOCKED-OUT after **3 incorrect** PIN (password) attempts. Your password will be VOIDED automatically.

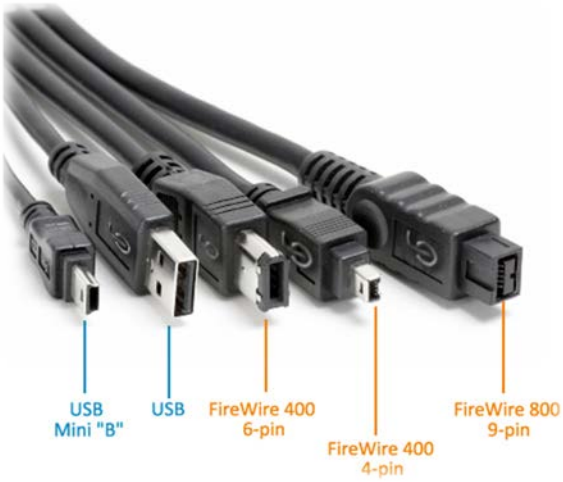
- The keypad works on the principle of touch and users should/need **NOT exert force** on a button to register a key pressed.
    - It is recommended to avoid exerting force on the keypad; doing so over time will cause the buttons to lose their sensitivity.

- For security reasons you MUST type slowly and always wait for the beeping sound before typing (the number or command) again.

- Limited Warranty does not cover nonoperational devices due to failures stated above.

For further inquiries please contact www.ROCSTOR.com or call +1.818.449.2000

Cable Types

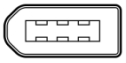


FireWire 400 (IEEE 1394a) 6-Pin FireWire 400 connector

- FireWire 400 can transfer data between devices at 400 Mbits/sec

FireWire 800 (IEEE 1394b) 9-Pin FireWire 800 connector

- FireWire 400 can transfer data between devices at 800 Mbits/sec



USB supports three data transfer rates:

- USB 2.0: A Hi-Speed (USB 2.0) rate of 480 Mbits/s (60 MB/sec)
- USB 1.1: A **Full Speed** rate of 12 Mbits/s (1.5 MB/sec)
- USB 1.0: A **Low Speed** rate of 1.5 Mbits/s (187 KB/sec)

INSTALLATION

How to Connect the Interface Cables - Connecting the Drive

Turn ON your computer and wait until it fully boots up to load all programs.

Connecting X5 to a computer via USB port

To connect X5 to your computer via USB, follow these easy steps:

FIRST, insert the USB connector to your computer's USB port.

Using only one interface cable at a time; insert the USB cable's mini Type B end to X5's USB port. Ensure correct connector orientation to obtain a snug fit.

The unit's ACTIVE, STATUS and ERROR indicators will light up in sequence (refer to page 17 on "**Using the built-in keypad**" to locate the LED indicators). Subsequently, the unit's backlight will turn on to indicate that X5 has powered up.

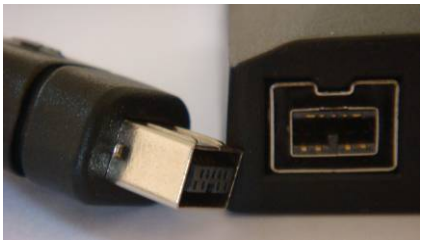
Notes: using USB port:

- Connecting to a non-USB compliant port may cause operation damage or failure.
- To achieve USB 2.0 speeds, always connect X5 **directly** to a USB 2.0 Hi-Speed host (computer) port.

Connecting X5 to a computer via FireWire ports

To connect X5 to your computer via FireWire ports, follow these easy steps:

FIRST, insert the FireWire connector to your computer's FireWire port. If your computer supports FireWire 800 with a 9 pin port available, you will first need a 9-to-9 pin FireWire cable. Simply connect the cable's 9 pin end to your computer's 9 pin FireWire port.



Insert the FireWire cable's 9 pin connector to X5's FireWire port. You may connect to either port. Ensure correct connector orientation to obtain a snug fit.

1. The unit's ACTIVE, STATUS and ERROR indicators will light up in sequence (refer to page 17 on "**Using the built-in keypad**" to locate the LED indicators). Subsequently, the unit's backlight will turn on to indicate that X5 has powered up.

FireWire 400:

If your computer supports FireWire 400 with a 6 pin port available, please ensure that you have a 9-to-6 pin bilingual cable. Connect the 6 pin end of the cable to the computer's FireWire port, and the 9 pin end to X5's FireWire port.

IMPORTANT NOTE:

As long as the drive is ON, it performs as any standard external drive; therefore while the drive is in ON (or operational) all the data which is being read (decrypted) is open to be accessed at all times. Once the drive is tuned OFF the Smartcard must be inserted and password to be retyped for authentication.

Amphibious X5 encrypts all the date that is being written into the drive at all time.

Notes on using USB port:

- Do not attempt to connect Amphibious X5 to a bus-powered USB hub or USB extension cable.
- Amphibious X5 may require 2 full power USB ports. Connecting to a non-USB compliant port may cause operation damage or failure.
- To achieve USB 2.0 speeds, always connect Amphibious X5 to a USB 2.0 Hi-Speed port.

Notes on using FireWire port:

- If you are using FireWire 400, please ensure that you have a 9-to-6 pin bilingual cable and connect the 6 pin end to the computer's FireWire port.

USING THE BUILT-IN KEYPAD

The built-in keypad allows you to enter/change your password (refer to page 18 on Authentication and page 22 on changing password). It works on the principle of capacitive sensing to provide a better user experience and can detect the presence of a touch on the button.

Note:

- **The keypad works on the principle of touch and users should/need NOT exert force on a button to register a key pressed.**
- **It is recommended to avoid exerting force on the keypad; doing so over time will cause the buttons to lose their sensitivity.**

Note:

Amphibious X5 remains in authenticated mode as long as power is supplied. Please ensure that you unplug the AC power adapter when away.

AUTHENTICATION

Amphibious X5 requires users to authenticate themselves via single-factor authentication before they are granted access to the installed drive. In order to do so, users must present PIN (Pin Number = Password - something you know). The authentication process involves typing (slowly) the correct Password (PIN entry) onto Amphibious X5. Upon completion, the connected drive will present itself to the operating system, and can be used like a normal external drive.

ENTERING YOUR PASSWORD

Each X5 unit allows a maximum three (3) users to log in, where the user is identified by **user ID** – **1**, **2** and **3**. The default factory password for each user is **"12345678"**. To log into X5, simply press the user ID together with the password, followed by the **Enter** button.

For example, a user logs in as
112345678 -> **ENTER**
is identified as User ID 1, with a password of 12345678

User ID 2
212345678 -> **ENTER**
Is identified as User ID 2, with a password of 12345678

User ID 3
312345678 -> **ENTER**
Is identified as User ID 3, with a password of 12345678

IMPORTANT NOTES:

- Ensure X5 completes its Power-on Self Tests (which takes about a quick 2 sec) before key entry. The STATUS LED should give a quick blink.
- If an incorrect password is entered, the Error LED will blink continuously. Press the Esc button to restart the authentication process. If you have mistyped your password, press the Esc key at any time to restart the entire authentication process.

SECURITY Note:

- If an incorrect PIN is entered, the Error LED will blink continuously. Press the Esc button to restart Amphibious X5. If you have mistyped your PIN, press the Esc key at any time to restart the entire authentication process.

You will be LOCKED-OUT **after 3 incorrect PIN attempts / entry**. The password for that user will be voided. Please ensure that you have (type) the correct password

After you have successfully authenticated yourself to X5, drive access will be granted. The connected drive will then present itself to the operating system as a removable drive. Please wait for a few seconds for this process to fully complete. The mounting duration depends on your drive and operating system.

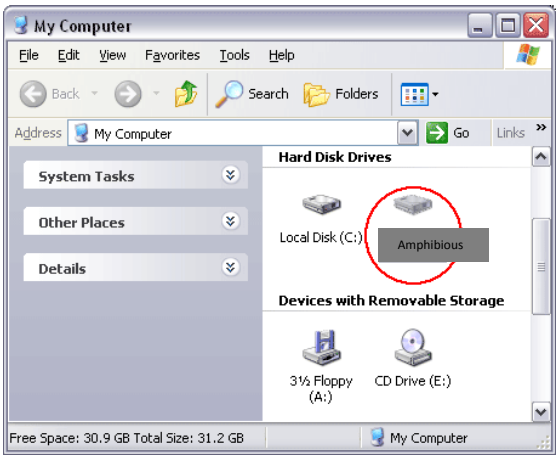
Once the drive appears in your operating system, you may proceed to use it like a normal hard drive.

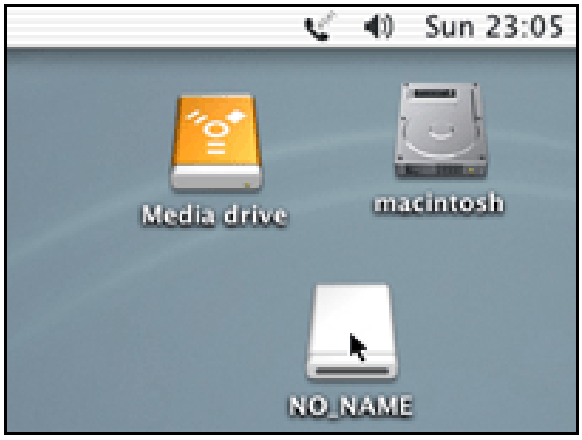
Please note as long as the drive is **Powered ON** or in **Hibernation** the data is **ACCESSIBLE**

For maximum security, do not leave X5 connected in authenticated mode while you are away from your computer.

Setting up Amphibious X5

After you have successfully authenticated yourself to X5, drive access will be granted. The connected drive will then present itself to the operating system as a removable drive. Please wait for a few seconds for this process to fully complete. The mounting duration depends on your drive and operating system.
Once the drive appears in your operating system, you may proceed to use it like a normal hard drive.





Setting up a new drive

To set up a new hard drive, you have to partition and format it. Follow your operating system's instructions on how to do so, or refer to **Partitioning and formatting** your hard drive in the manual.

Setting up an existing drive

No additional steps are required to set up a previously formatted hard drive. The drive will be recognized by the operating system and may be accessed as per normal.

Note:

- When using an existing drive, ensure that the drive's file system is compatible with your Operating System.
- Amphibious X5 provides Data-At-Rest (DAR) protection. After successful authentication, data in the drive can be access as per normal usage. For maximum security, do not leave Amphibious X5 connected in authenticated mode while you are away from your computer.

Please ensure that you make regular backups of your data to protect against possible data loss.

DISCONNECTING X5

CAUTION: To prevent data loss, ensure that all active applications are closed before shutting down X5.

To disconnect X5, follow your operating system's proper device removal process.

Windows XP

1. Double click on the **Safely Remove Hardware Icon** in your system tray.
2. Select **USB Mass Storage Device** from the list, and select the device you would like to remove.
3. Click **Stop**.
4. Click **OK** to confirm drive disconnection.
5. Click **Close**.
6. Windows will inform you that it is safe to disconnect the device.
7. You may now safely disconnect the USB cable from your computer.

Mac

1. Locate the **Removable Disk Icon** associated with X5.
2. Drag the icon to the **Trash** icon on your desktop and wait for the icon to disappear
3. You may now safely disconnect the USB cable from your computer.

ADMINISTRATIVE FUNCTIONS

You can perform certain administrative functions with X5. These functions are only available when X5 is first powered up.

CAUTION: Please read the following instructions carefully and follow them when performing administrative functions.

Changing your User password

You can change your **user password** with X5. It is recommended that you change the default factory password to another one that only you know. Follow these steps to change your password.

1. Power up X5 by connecting to the host via USB or FireWire. Ensure the STATUS LED blinks once.
2. Press the **Change Pin** button, followed by the **'1'** button.
3. Press **Enter**. The Status LED will blink three times.
4. Enter the **user ID** together with the **current password** and press **Enter**. The Status LED blinks twice to notify that you may press the new password.

   Example – **1**12345678 -> **Enter**

5. Enter the **user ID** together with the **new password** and press **Enter**. The Status LED blinks twice to notify that you may press the confirmed new password.

   Example – **1**87654321 -> **Enter**

6. Enter the **new confirmed password** and press **Enter**.

Upon a successful change, X5 will proceed to connect the drive. At the same time, the Status LED will blink three times and there will be two 'beep' sounds upon a successful password change. If not, the Error LED will blink continuously.

Note:

- **Changing the password of user ID 1 does NOT change the password of user ID 2 and 3. Likewise for all other user IDs.**
- **The user is responsible to remember his/her password. X5 will lock out the user after three (3) incorrect attempts. Only the administrator, who presents the correct admin password, can reset the password of the locked out user.**

- **Pressing the Esc key restarts the entire authentication process.**

CHANGING YOUR ADMINISTRATIVE PASSWORD

The Admin password provides the only means to user password recovery on X5. It is recommended that you change the default factory Admin password to another one that only you know. The default factory Admin password is "**87654321**".

To change your Admin password, follow these steps:

1. Power up X5 by connecting to the host via USB or FireWire. Ensure the STATUS LED blinks once.
2. Press the **Change Pin** button, followed by the **'0'** button.
3. Press **Enter**. The Status LED will blink three times.
4. Enter the **current 8-digit Admin password** and press **Enter**. The Status LED blinks twice to notify that you may press the new Admin password.
5. Enter the **new 8-digit Admin password** and press **Enter**. The Status LED blinks twice to notify that you may press the confirmed new Admin password.
6. Enter the **new confirmed 8-digit Admin password** and press **Enter**.
7. The Status LED will blink three times and there will be two 'beep' sounds if the change is successful.
8. Remove and reconnect the USB cable to exit the Administrative mode.

If you have mistyped your password, press the **Esc** key at any time to restart the entire authentication process.

Note:

- **X5 only accepts 8-digit Admin password. If a shorter or longer password is entered, the Error LED will blink continuously. Press the Esc button to restart the authentication process again. You will need to restart the entire process from step 2.**

- You will NOT be able to connect to the hard disk via the presentation of the Admin password. To do so, remove and reconnect the USB cable to exit the Administrative mode and proceed to enter the user password to authenticate to X5.

RESET THE USER PASSWORD

This mode allows the administrator to reset a locked-out user. The admin password MUST be correctly presented in order for this process to take place. To reset a locked-out user, follow these steps:

1. Power up X5 by connecting to the host via USB or FireWire. Ensure the STATUS LED blinks once.
2. Press the **Admin** button, followed by the **'0'** button.
3. Press **Enter**. The Status LED will blink three times.
4. Enter the **8-digit admin password** and press **Enter**. The Status LED blinks twice to notify that you may reset the user password.
5. Enter the **user ID** together with the **desired user password** and press **Enter**. The Status LED blinks twice to notify that you may press the confirmed new password.

   Example – **1**87654321 -> **Enter**

6. Enter the **new confirmed user password** and press **Enter**.

Upon a successful password reset, the Status LED will blink three times and there will be two 'beep' sounds. If not, the Error LED will blink continuously.

Note:

- **Resetting the password of user ID 1 does NOT reset the password of user ID 2 and 3. Likewise for all other user IDs.**

- **If the Admin password is lost / forgotten, there are no other ways to reset Amphibious X5.**

  You lose / forget your admin (administration) passwords (and/or three user passwords) you lose your data.

The Hard drive is preformatted for Plug-and-Play operation. After a few seconds a Rocstor HD icon will show on the "My Computer" folder under the Windows OS. Under the Mac OS, the Amphibious HD will appear on the "Desktop."

IMPORTANT NOTE:

As long as the drive is ON it performs as any standard external drive; therefore all the data which is being read (decrypted) is open to be accessed at all times, while the drive is in ON and operational. Once the drive is tuned OFF the password must be retyped for authentication.

Amphibious X5 encrypts all the date that is being written to the drive at all time.

Helpful Information

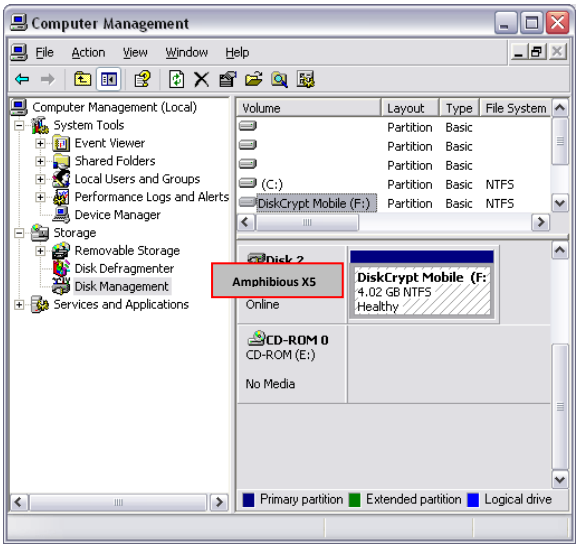
Partitioning and formatting your hard drive

In order to use a new hard drive with Amphibious X5, you will have to partition and format the drive. Follow these steps to do so:

CAUTION: Performing partition and format operations will erase all data in the drive.

Windows XP

1. Connect and authenticate into Amphibious X5.
2. Right click on **My Computer** and Select **Manage**.
3. From the **Computer Management** window, select **Disk Management**.
4. Right click on the drive and choose **Initialize**.
5. Right click on the drive and select **New Partition**.
6. Follow the New Partition Wizard to create as many partitions as desired.
7. Right click on each partition and select **Format** to format the drive in either FAT32 or NTFS.
8. The drive is ready to be used once formatting completes.



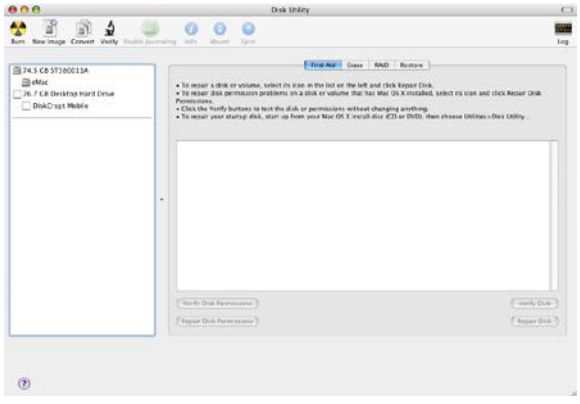
Note:

- You must have Administrator privileges to use the Disk Management utility.

For drives larger than 137GB, you will need Windows SP3 for Windows 2000 and SP1 for Windows XP.

Mac

1. Connect and authenticate into Amphibious X5.
2. Enter the **Applications** folder, followed by the **Utilities** folder
3. Run **Disk Utility**.
4. Select Amphibious X5 on the left hand column and click on the **Partition** tab.
5. Choose the number, size and names of the desired partitions.
6. Mac OS will then format the drives automatically.
7. The drive is ready to be used once formatting completes.



Care and Handling

The following are some important information on the proper care and handling of Amphibious X5. Please take a moment to review these instructions.

- As with any storage solution, it is recommended that the data of the connected drive be backed up regularly.
- Ensure that you follow the proper removal procedure to disconnect Amphibious X5.
- Do not move or disconnect this device from your computer while it is reading or writing data. This may cause damage to Amphibious X5and it is possible that the data that is read from or written to the device becomes corrupted.
- Do not place this device near a heat source or expose to direct flame or heat.
- Do not place the device near to equipment generating strong electromagnetic fields. Exposure to strong electromagnetic fields may cause the device to malfunction or data to be corrupted.
- Do not drop or cause shock to your Amphibious X5.
- Do not expose Amphibious X5's internals to water.
- Do not attempt to disassemble and service Amphibious X5yourself.

INSTALLING YOUR DRIVE

All Rocstor hard drives are formatted as blank FAT32 (32-bit file allocation table) volumes {unless otherwise stated on the box} that are compatible with most modern Windows and Macintosh operating systems. To begin using your Rocstor drive, simply connect a data cable and power cord. There's no need to shut down your computer because your Rocstor drive is hot-pluggable. Just plug it in and it's ready to use.

The first choice you have to make is which of the provided data cables to use. The drive can connect directly to any available FireWire or USB port on your computer, or it can be Daisy-Chained to your computer through another compatible device with an available FireWire port. The ability to Daisy-Chain allows you to have multiple drives connected simultaneously, greatly increasing your available storage capacity. Daisy-Chain is only available through FireWire ports.

If you intend to use the drive for additional storage only—not as a startup device (bootable) use the cable that provides the maximum throughput rate for the buses available on your computer: Up to 800 Mbits/sec via FireWire 800, up to 480 Mbits/sec via USB 2.0, up to 400 Mbits/sec via FireWire 400, or 12 Mbits/sec via USB 1.1. To avoid damaging your hardware and losing data, never simultaneously connect the drive to the computer using more than one data cable.

Amphibious as a bootable device

If you intend to use the drive as a startup device, check the documentation that came with your computer to confirm compatibility with the various interfaces. PowerPC-based Macs require FireWire connections for startup disks, whereas Intel-based Macs can use either FireWire or USB connections.

Furthermore, using the drive as a startup device requires installing an authorized copy of the Windows or Mac operating system (available separately from Microsoft and Apple, respectively). To install the Mac OS 9 or OS X, you must reformat the drive as a Mac OS Extended volume with Disk Utility. An Intel-based Mac cannot start from a device formatted on a PowerPC-based Mac or vice versa.

Disconnecting Your Drive

Never disconnect or turn off an external drive when its activity light is ON. External drives must be properly unmounted (or disconnected) to avoid data loss and possible damage to the hard disk drive or computer.

PC

The easiest ways to safely unmount an external hard drive on your PC is to right-click the device removal icon next to the clock in the system tray. Then choose Safely Remove Hardware. Choose the external device you want to remove, and then click Stop. An alert will notify you if

the drive is in use by an application. If in use close any open documents or applications on the drive and try again. Windows will display an alert when you can safely disconnect or turn off the drive.

Mac

The easiest way to safely unmount an external hard drive is to drag its Finder icon to the Trash. An alert will notify you if the drive is in use by an application. Close any open documents or applications on the drive and try again. When the drive's icon no longer appears on the Finder's Desktop and the drive's activity light is green, you can safely disconnect or turn off the drive.

Reformatting Your Drive

As mentioned previously, all Rocstor hard drives are formatted as blank FAT32 volumes (otherwise noted on the retail packaging) that are compatible with most modern Windows and Macintosh operating systems. However, you can use your normal disk management tools to erase or reformat the drive if needed. For example, Windows users may want to reformat the drive as an NTFS (new technology file system) volume, or Mac OS X users may wish to reformat the drive as a Mac OS Extended (Journal) or UFS (Unix file system) volume.

Please note that all of your data will be lost if the volume (Hard Drive) is formatted or reformatted.

Reformatting via PC (Window based computers)

Right-click the Amphibious drive in the "My Computer" folder, then choose Format. In the dialog window that appears, choose the desired capacity, file system and allocation unit size and then click Start.

Reformatting via Mac

Open Disk Utility (/Applications/Utilities). Select the drive in the list at the left, and then click the Erase tab. Choose the desired volume format, specify a name, and then click Erase.

Important Note

Any cable (FireWire or USB) inserted before the drive is powered on has priority over the other cables and will be the primary connection method, e.g. if the drive is connected via FireWire 800 before powering on the drive, data will be transferred via FireWire 800.
The drive should only be connected to a computer via **one** interface at a time. Connection of the drive to a computer via two or more interfaces is not recommended and may potentially damage your Amphibious drive and data.

PARTITIONING AND FORMATTING THE AMPHIBIOUS DRIVE ON A MAC OS

All Rocstor drives are factory formatted with FAT32, unless otherwise stated on the retail box.

WARNING: Formatting and Partitioning the Amphibious Drive will destroy all of its data. To protect your data, back it up before formatting or partitioning this device.

IMPORTANT NOTES:

1. All programs should be closed before beginning.
2. Connect the Rocstor hard disk drive to your computer using the appropriate cables.
3. Turn ON the Rocstor hard disk drive. Some Rocstor HDs are bus-powered and turn ON automatically. Look for a Blue or Green light.
4. “Click” means left click. “Right Click” will be so labeled.
5. Some computers are set so a single “click” will perform the task, such as opening a window. Depending on your mouse setting, you may have to double click to get to the next window. If a single click does not open the next window, please double click.

INSTRUCTIONS FOR PARTITIONING AND FORMATTING FROM FAT32 to HFS+:

1. Connect the Rocstor drive to the computer via a port.
2. The drive will appear as an icon on the Desktop on the middle right side (figure 1.0 below) the icon will represent the method of connection (USB or FireWire).

Figure 1.0

USB Connection
Figure 1.1

FireWire Connection
Figure 1.2

Note: If the Hard Drive is connected via USB port, the desktop would indicate the **USB** (figure 1.1) if it is connected via **FireWire** port, it would then indicate **FireWire** as (figure 1.2) on the "**Macintosh HD**" icon. The same procedures would also apply to the following steps.

3. Once the icon appears on the "**Desktop**" click on the "**Macintosh HD**" icon (figure 2.0)

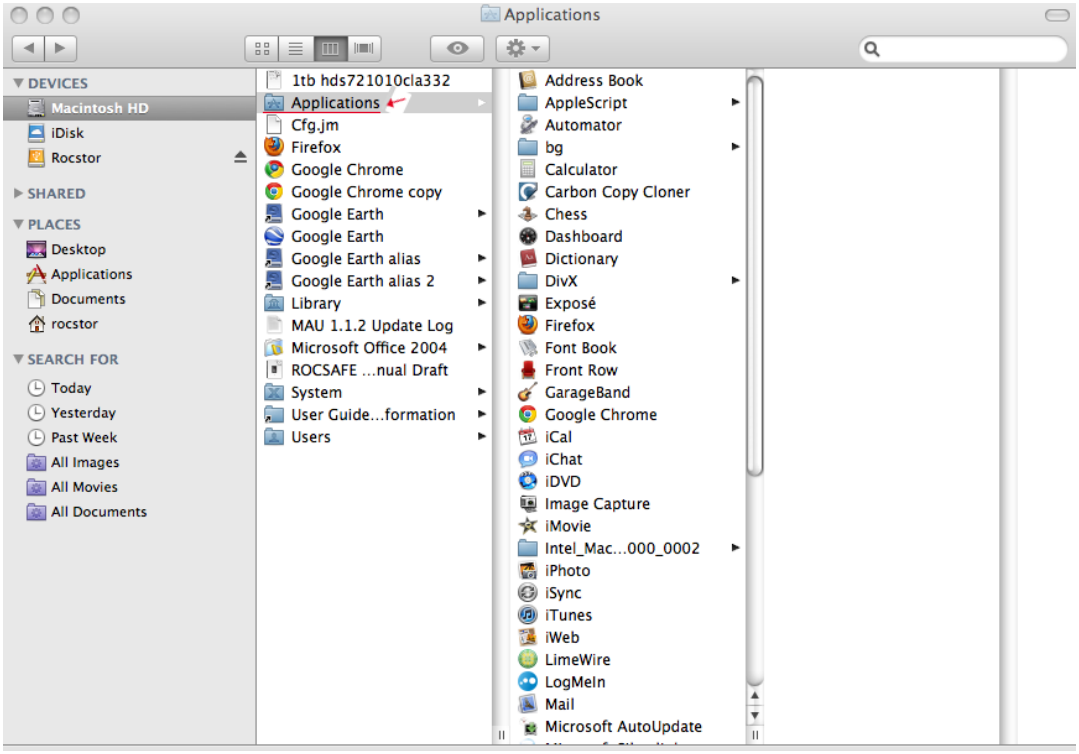


Figure 2.0

4. In the “**Macintosh HD**” menu, click on the “**Applications**” icon.
5. In the “**Applications**” menu, click on the “**Utilities**” icon (figure 3.0.)

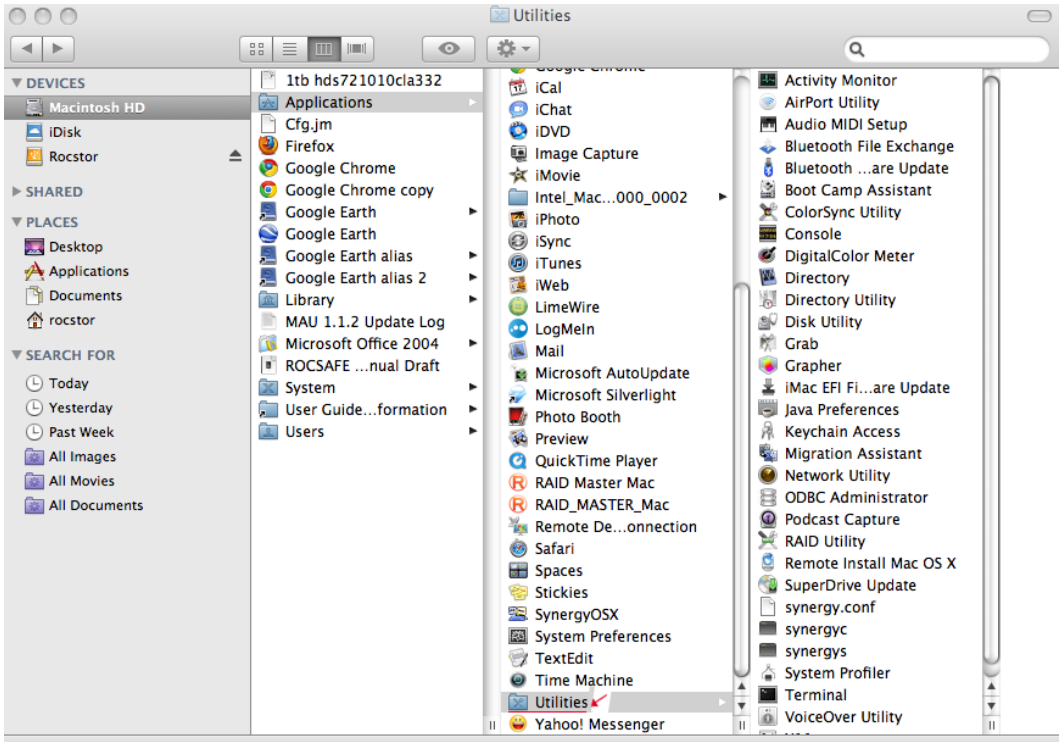


Figure 3.0

6. In the “Utilities” menu, click on the “**Disk Utility**” icon (figure 4.0.)

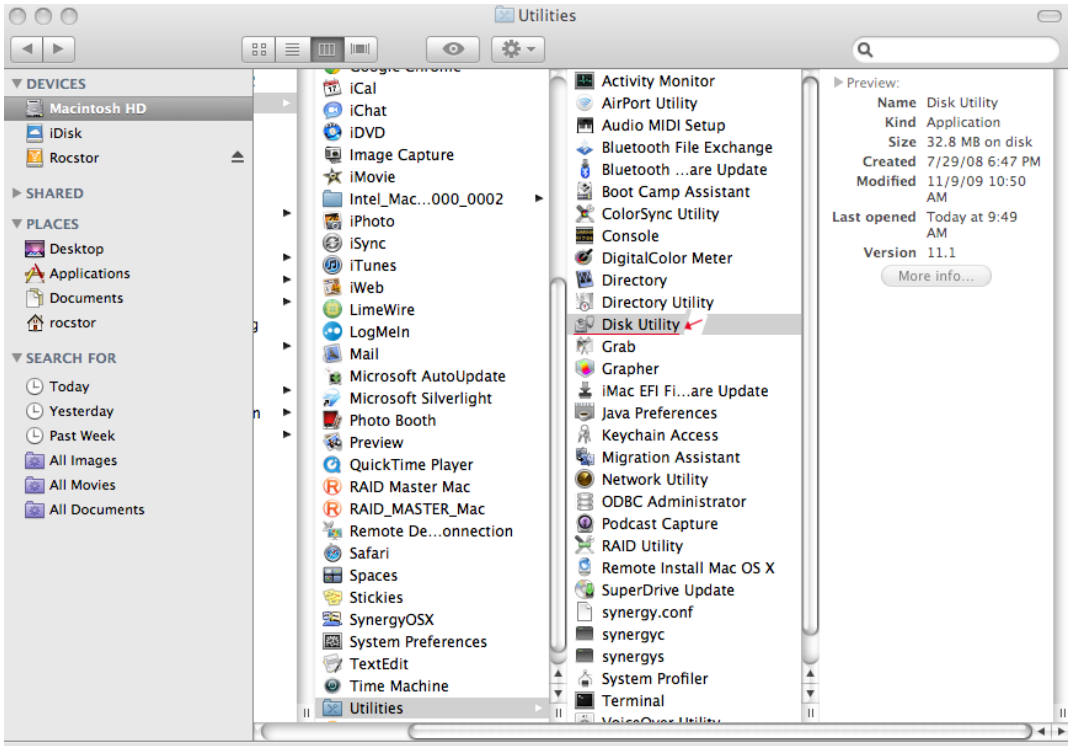


Figure 4.0

7. On the left side of the "**Disk Utility**" menu is a list of available drives (figure 5.0.) One will show as Rocstor drive. Click on the icon showing the disk capacity (figure 5.1.)

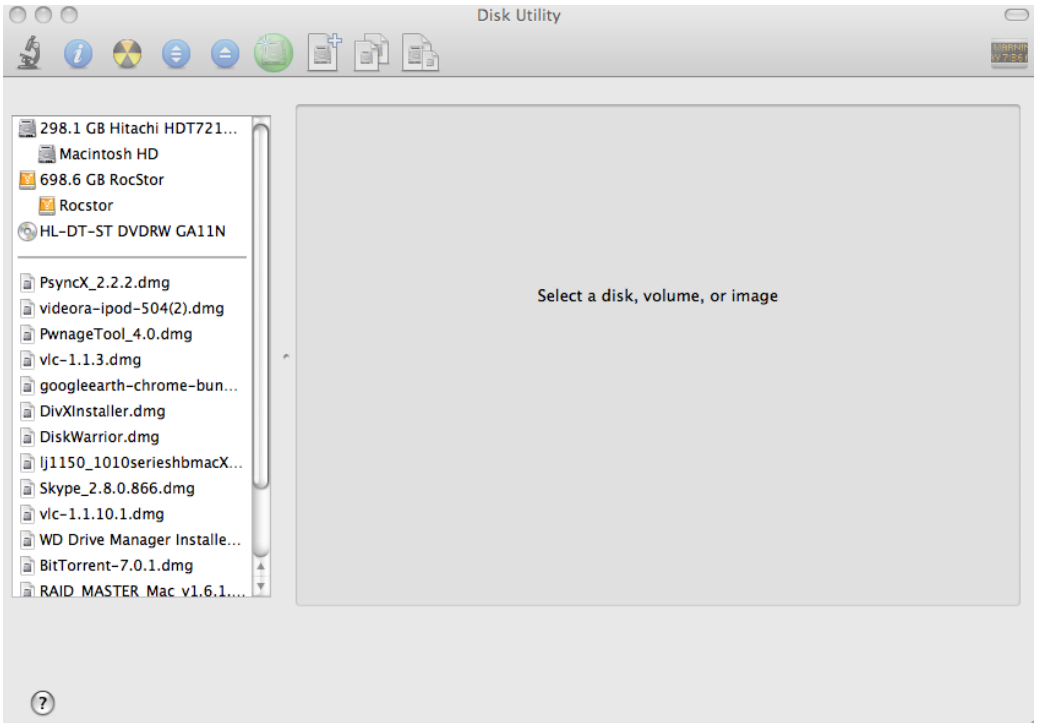


Figure 5.0

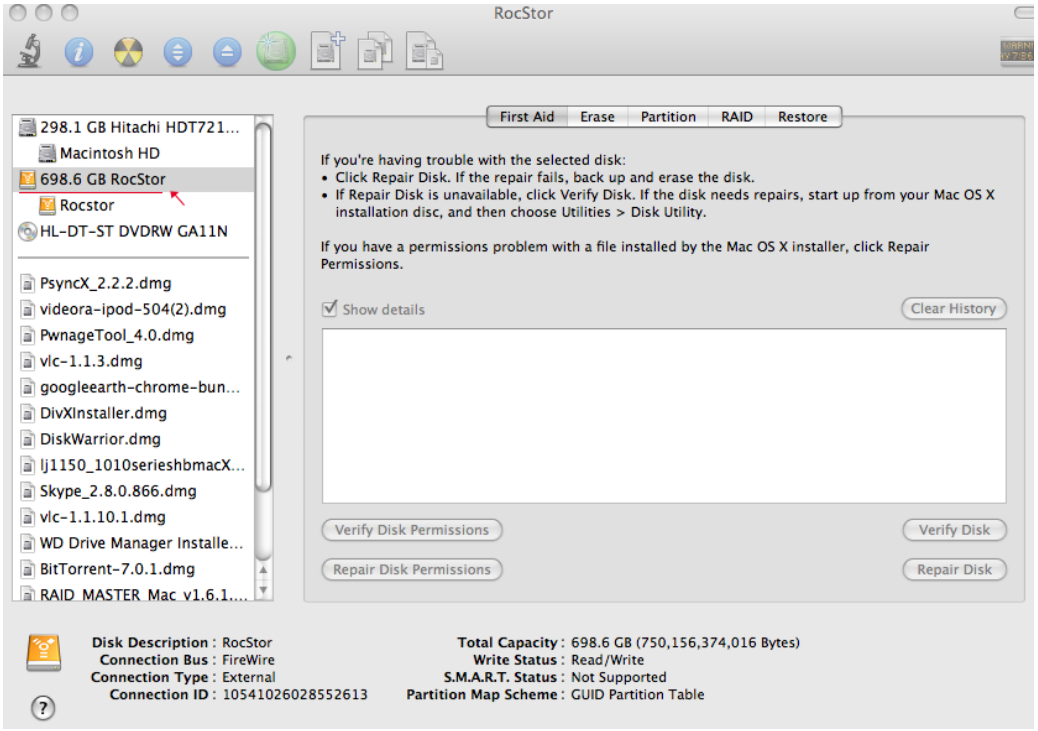


Figure 5.1

8. You are now in the Rocstor menu. Click on the "**Partition**" tab and then click the "Current" tab under "Volume Scheme." A drop down "**Partition**" menu will appear.
9. In the "**Partition**" menu, you may select any number of partitions available under "Volume Scheme."
10. If you are using Panther proceed to #13 below.
11. If you are using Tiger, Leopard, Snow Leopard or Lion click on Options on the lower center of the window. Select the Partition Scheme for your Rocstor drive. Suggest you select "**Apple Partition Map**" for Tiger, Leopard, Snow Leopard and GUID partition table for Lion, (figure 6.0) and then click OK.

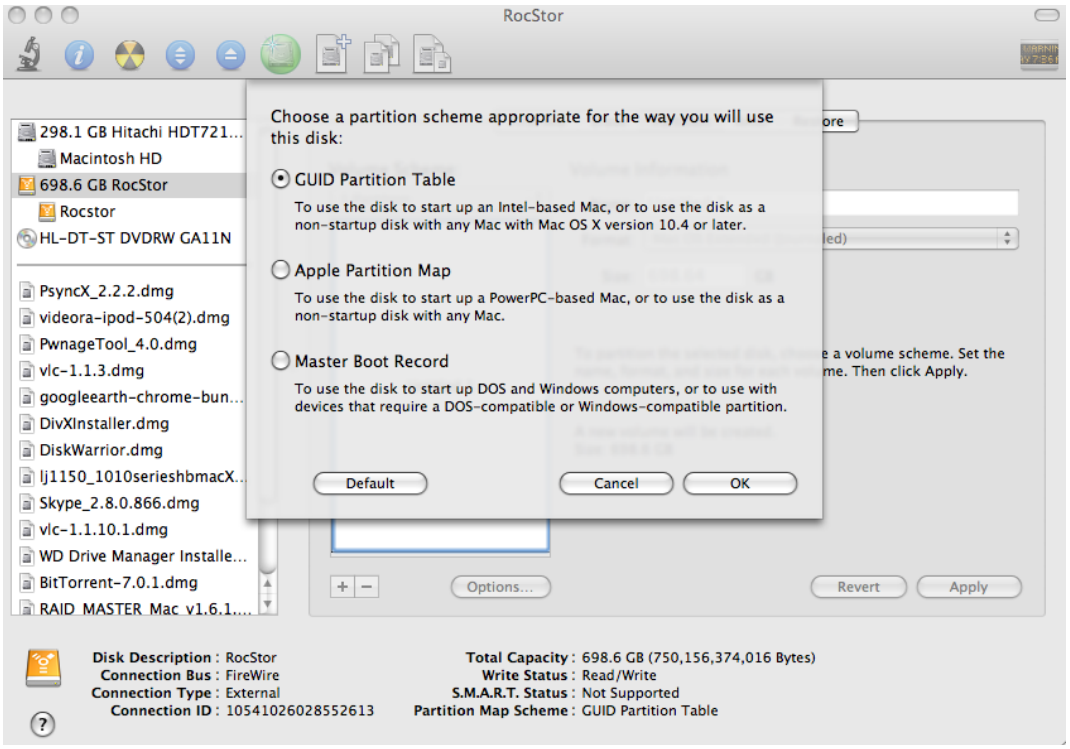


Figure 6.0

12. Volume Information: select a name for your drive (figure 7.0.)

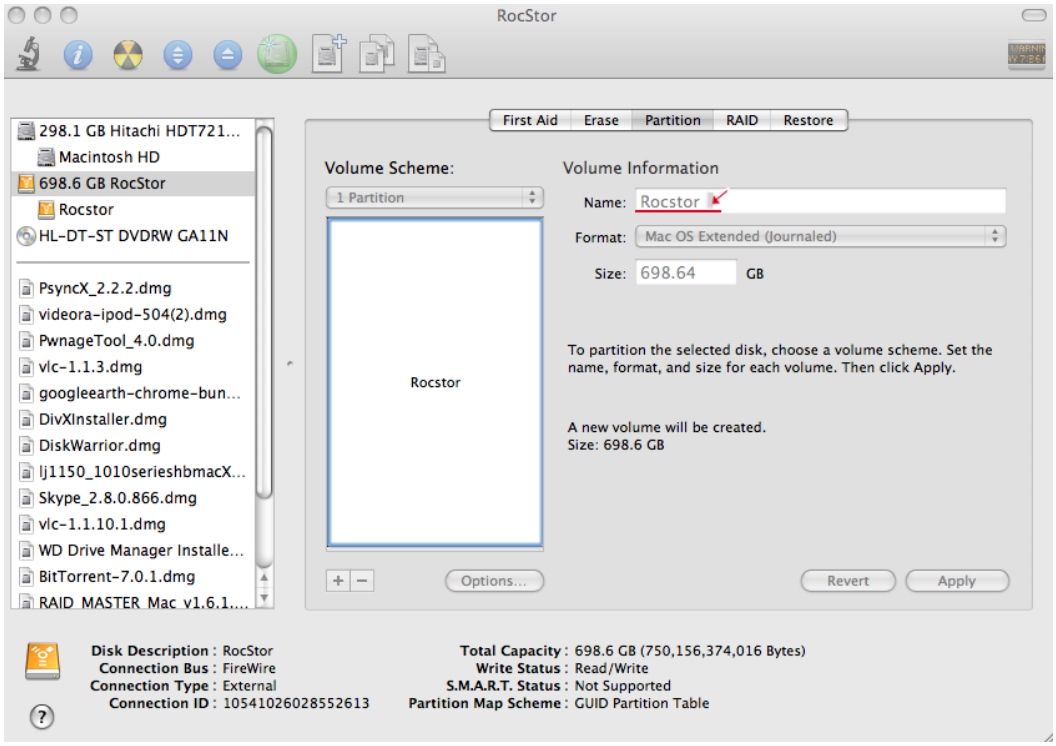


Figure 7.0

13. Format: Click on either the "**Format**" area or the Blue up/down arrows. Select **Mac OS extended (journal)**.

14. After selecting the type of format, click the "**Apply**" tab in the lower right of the screen, (figure 7.1.) On the next screen, Partition Disk, click "**Partition**" (figure 8.0)

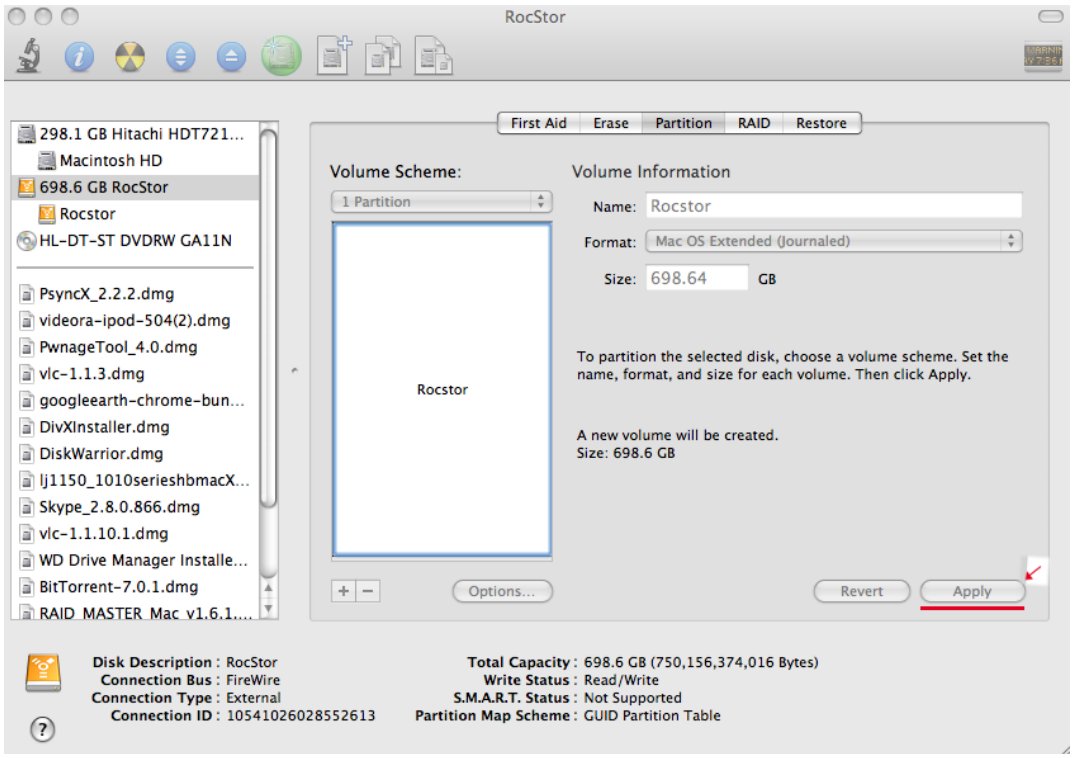


Figure 7.1

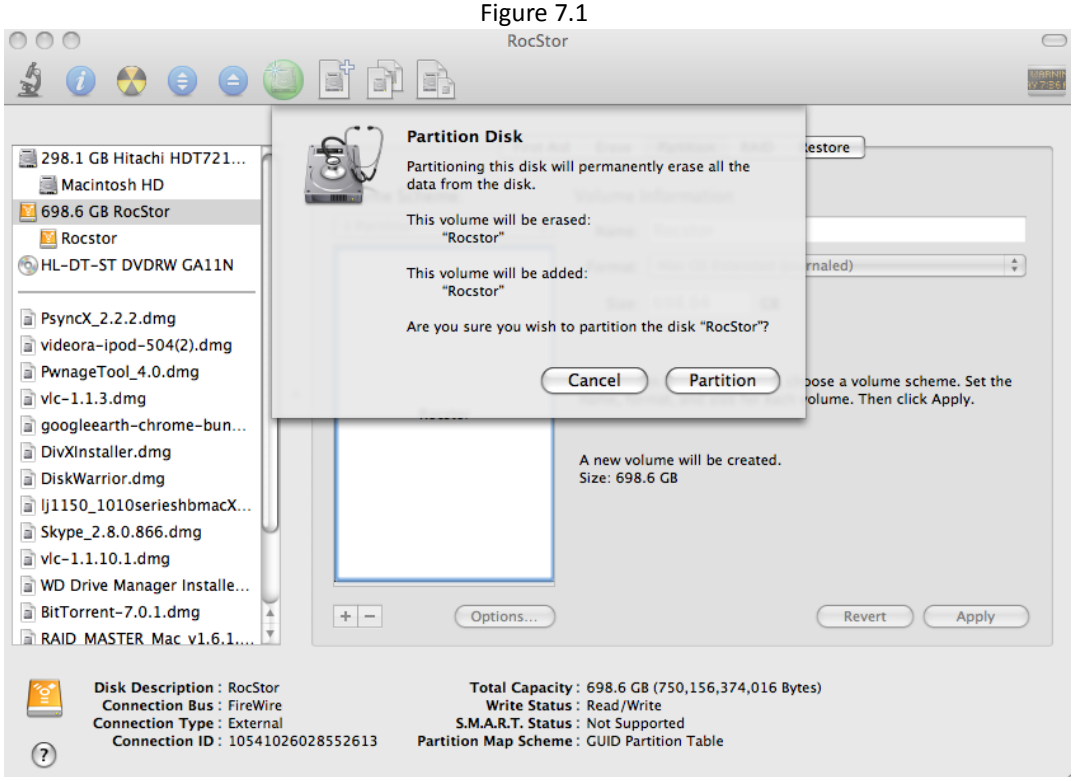


Figure 8.0

15. The drive will begin to format (figure 8.1) and upon completion; the same icon that first appeared on the Desktop will reappear with your designed name on the Desktop (figure 9.0)

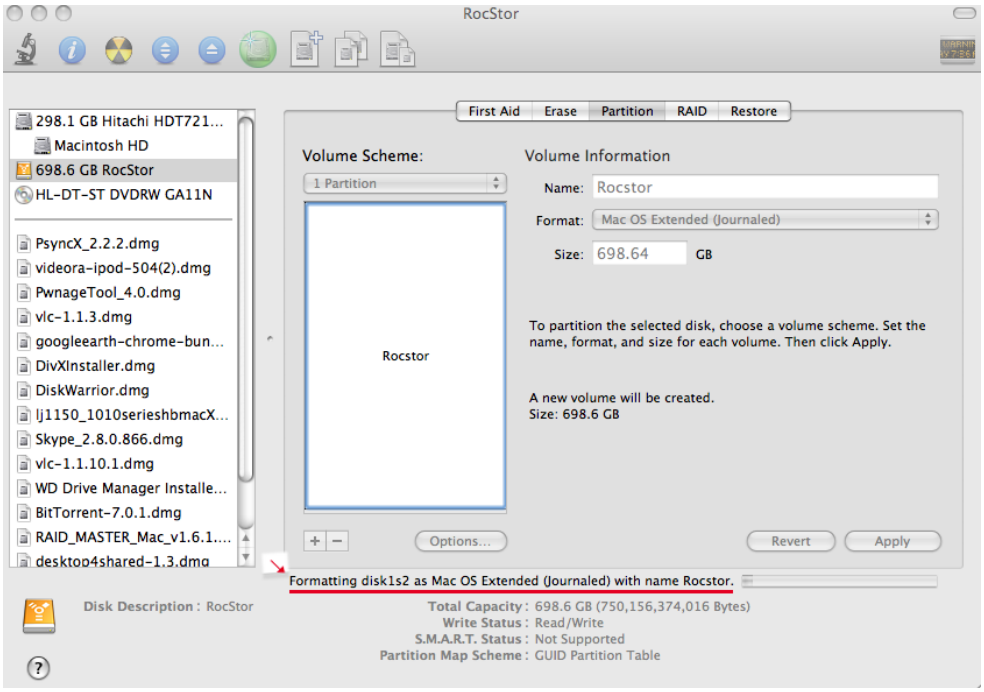


Figure 8.1

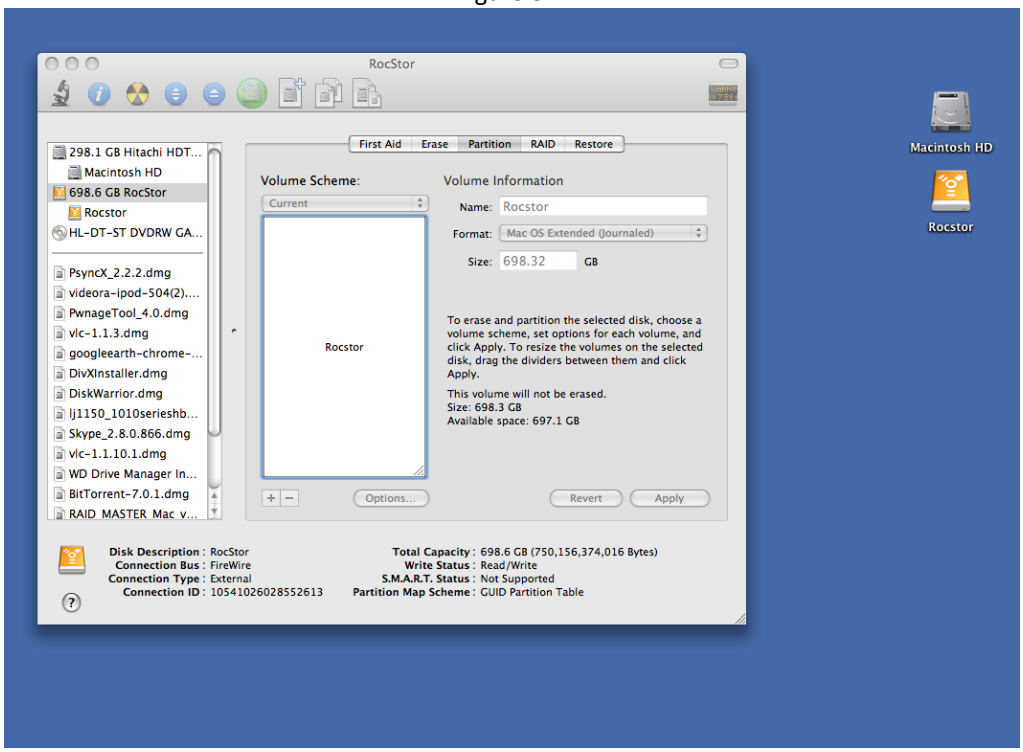


Figure 9.0

16. You can now Exit or close to return to the desktop.

PARTITIONING AND FORMATTING THE AMPHIBIOUS DRIVE ON WINDOWS 2000, XP AND VISTA and Windows 7 and 8

All Rocstor drives are factory formatted with FAT32, unless otherwise stated on the retail box.

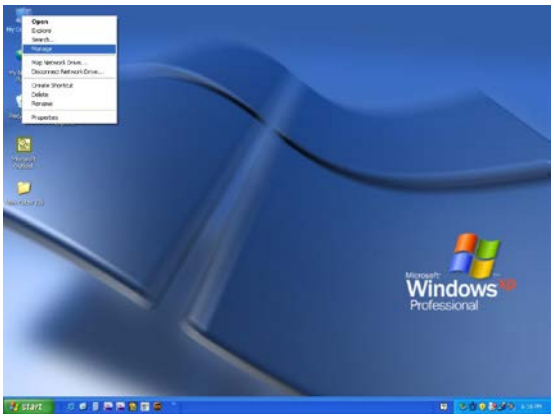
WARNING: Formatting and Partitioning the Amphibious Drive will destroy all of its data. To protect your data, back it up before formatting or partitioning this device.

IMPORTANT NOTES:

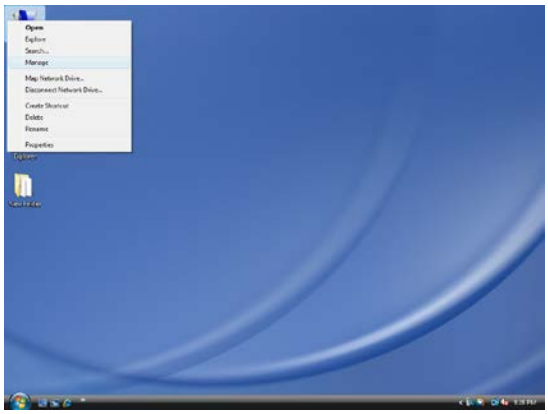
1. All programs should be closed before beginning.
2. Connect the Rocstor hard disk drive to your computer using the appropriate cables.
3. Turn ON the Rocstor hard disk drive.
4. The initial goal is to reach the Control Panel. If you know how to get there, skip this section and go directly to Instruction 1 (Instructions for Partitioning and Formatting from FAT 32 to NTFS.) A fast way of reaching "Disk Management" is to right click "My Computer" icon and left click on "Manage" in the drop down menu. The next window is "Computer Management."
   In the left menu, click "Disk Management."
5. The ultimate goal is to reach Disk Management. If you know how to get there, skip this section and go directly to Instruction 4 (Instructions for Partitioning and Formatting from FAT 32 to NTFS).
6. Due to different views that are possible on Windows operating systems (2000, XP, Vista, Windows 7), we will provide various ways of reaching the Control Panel.
7. "Click" means left click. "Right Click" will be so labeled.
8. Some computers are set so a single "click" will perform the task, such as opening a window. Depending on your mouse setting, you may have to double click to get to the next window. If a single click does not open the next window, please double click.

DIFFERENT WAYS TO GET TO THE CONTROL PANEL:
(You may use any one of the following methods)

1. If the icon “My Computer” shows on your desktop, click or double click on the icon. Under “Other Places” click on “Control Panel.”

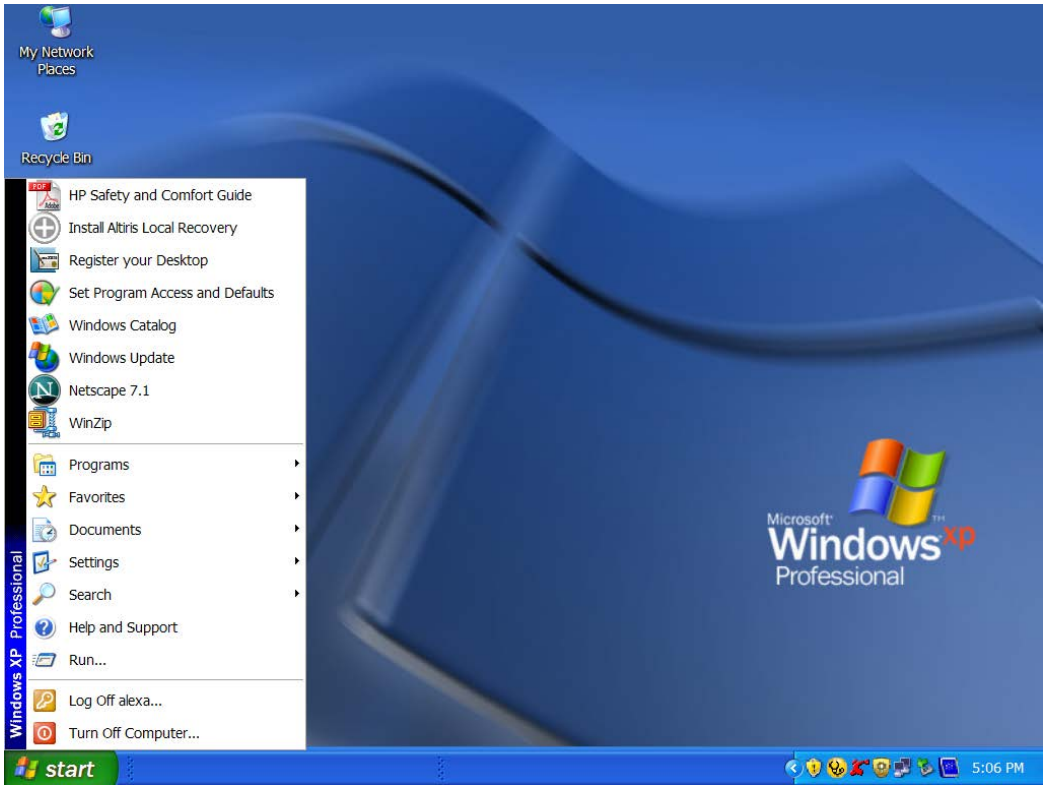


Under Windows XP



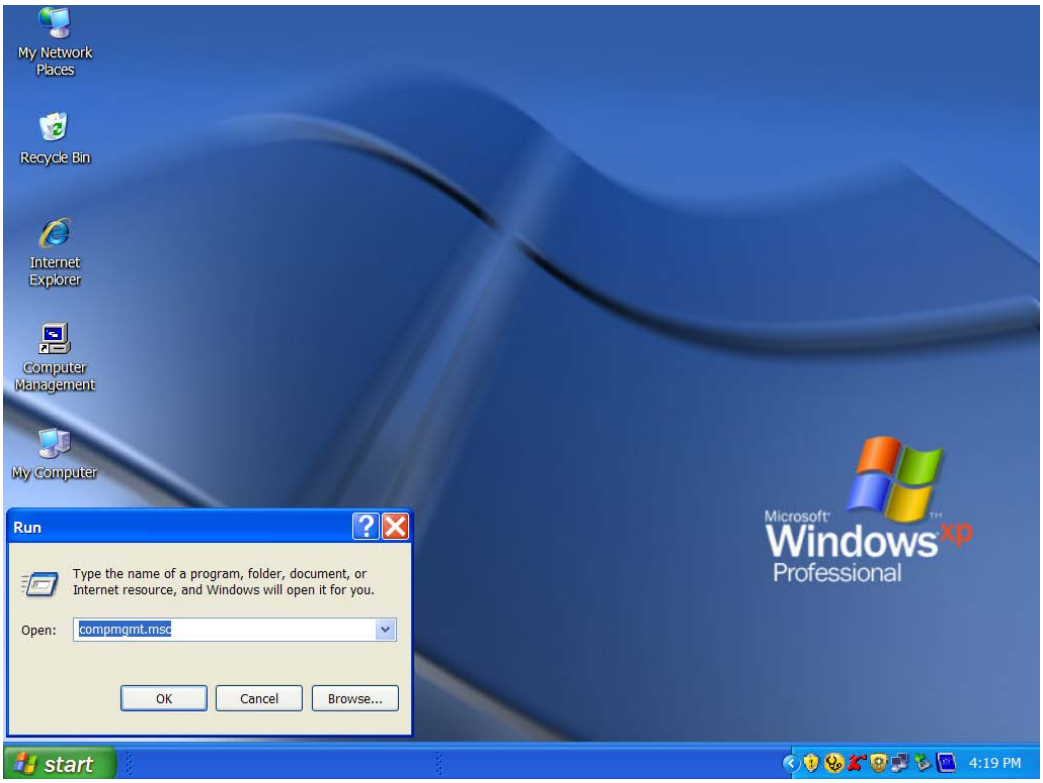
under Vista/Windows 7 OS

2. If the icon “My Computer” does not show on your desktop, click on the Start icon on the lower left of your screen. If the Control Panel link **is** displayed, click on the Control Panel link.



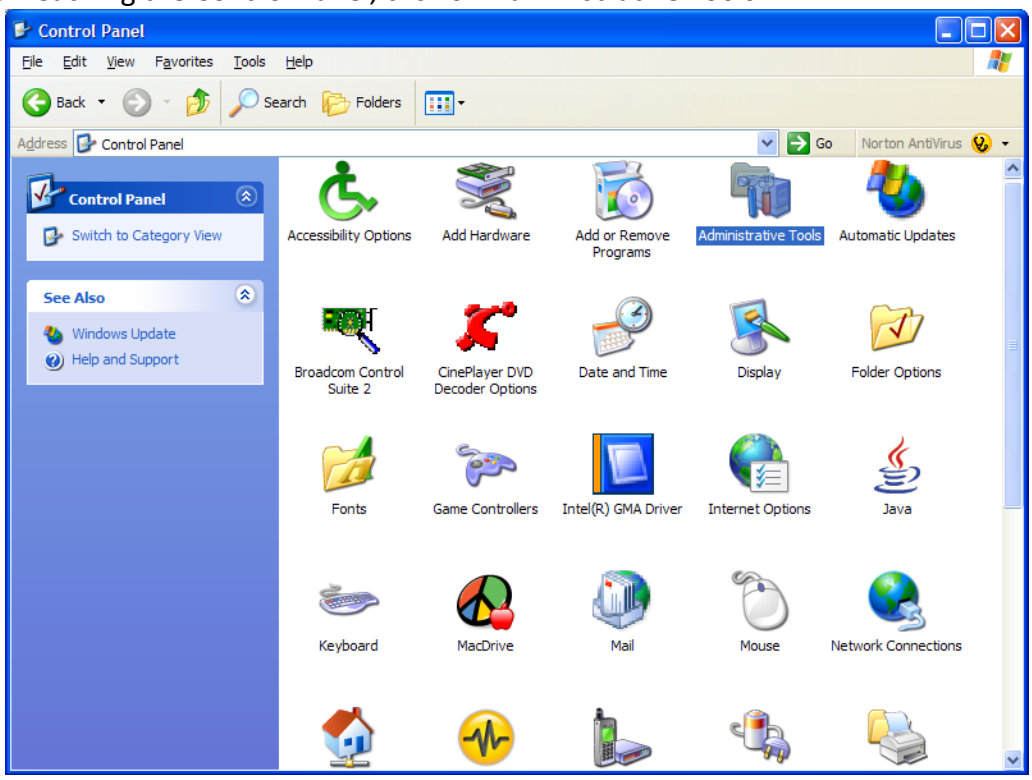
3. If the icon “My Computer” does not show on your desktop, click on the Start icon on the lower left of your screen. If the Control Panel link **is not** displayed, click on the Settings link and then click on the Control Panel link.

4. Click on the Start icon on the lower left of your screen. Click on Run. Delete anything listed in the Open window. Type the following: compmgmt.msc and then click OK. Skip to INSTRUCTION # 4 (Instructions for Partitioning and Formatting from FAT 32 to NTFS {page 24}).



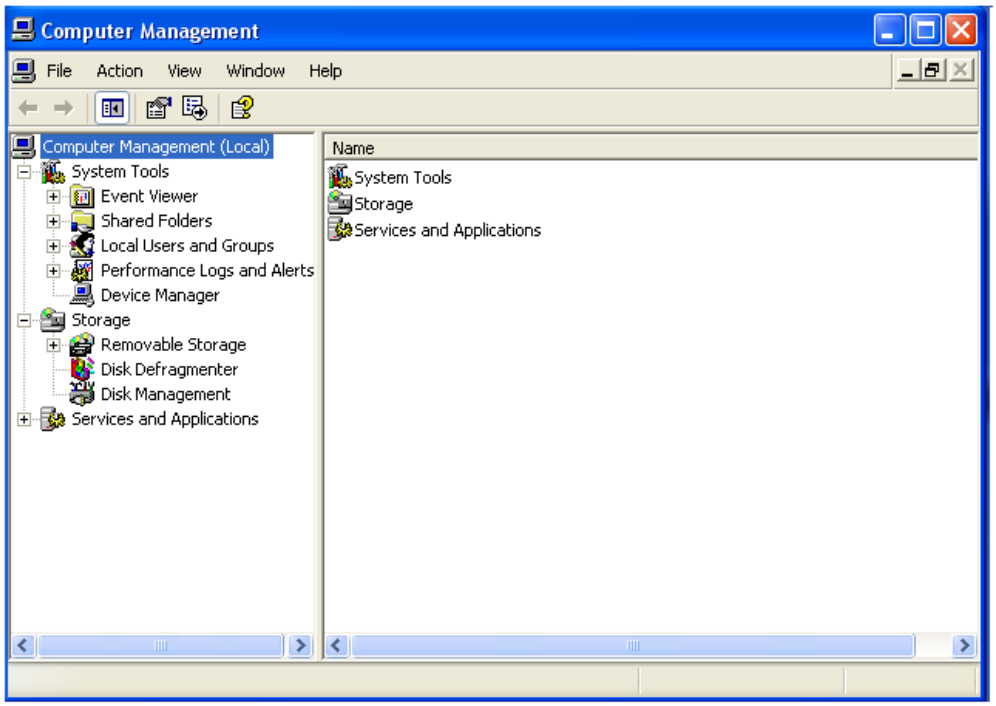
INSTRUCTIONS UPON REACHING CONTROL PANEL

a. After reaching the Control Panel, click on Administrative Tools.



b. After reaching Administrative Tools, click on Computer Management.

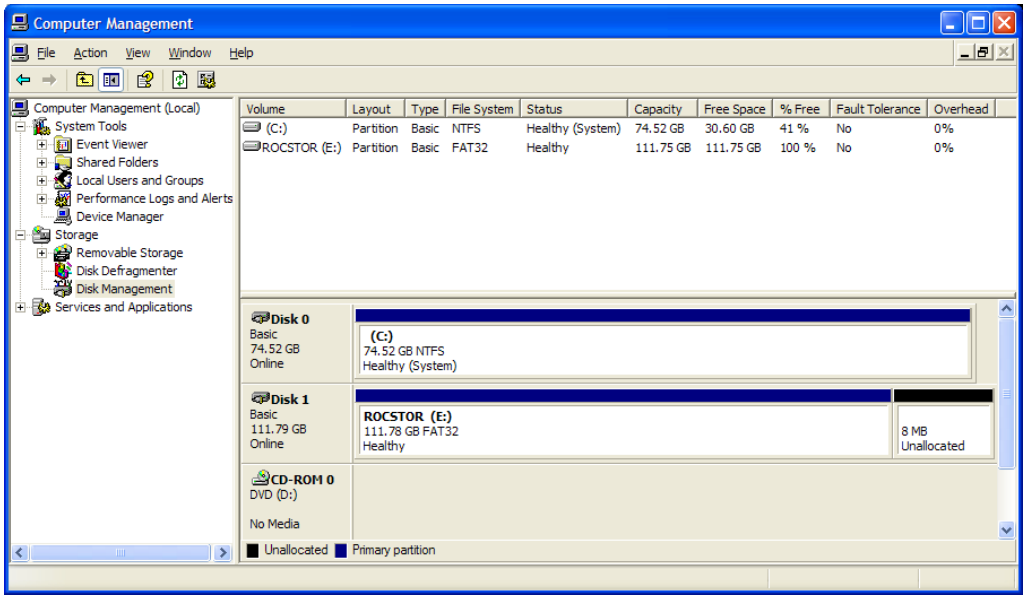
c. After reaching Computer Management, click on Disk Management.



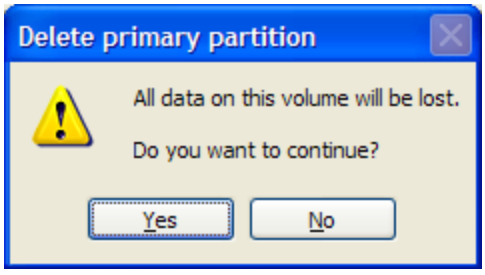
INSTRUCTIONS FOR PARTITIONING AND FORMATTING FROM FAT32 to NTFS

1. In the “Disk Management” window, right click the Rocstor drive in the upper portion of the menu to highlight it. In the drop down menu, select “Delete Partition.”

WARNING: Formatting and Partitioning the Amphibious Drive will destroy all of its data. To protect your data, back it up before formatting or partitioning this device.

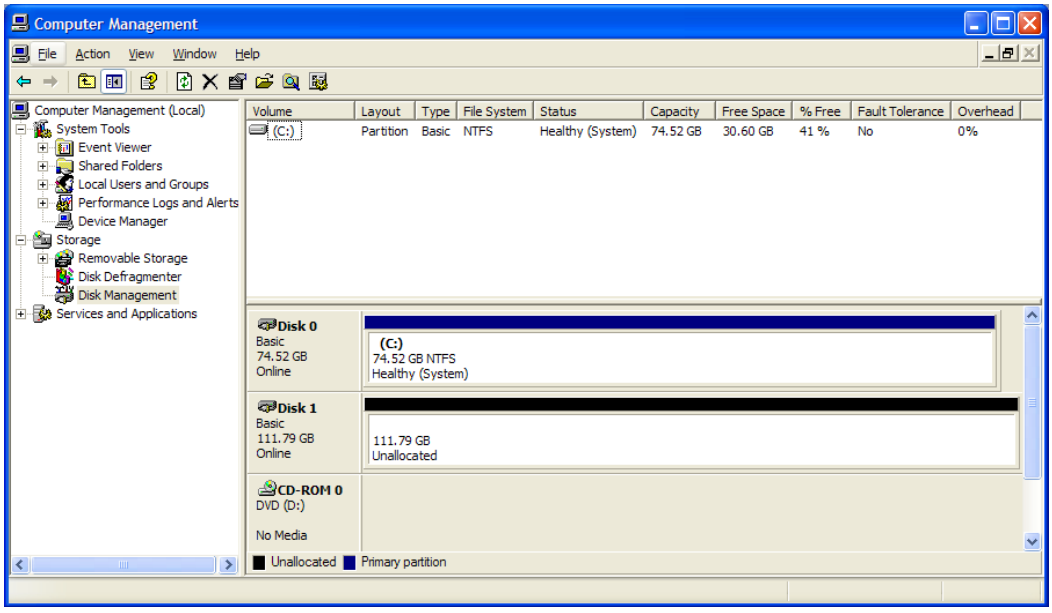


2. The next window is “Delete primary partition.” Click on Yes.

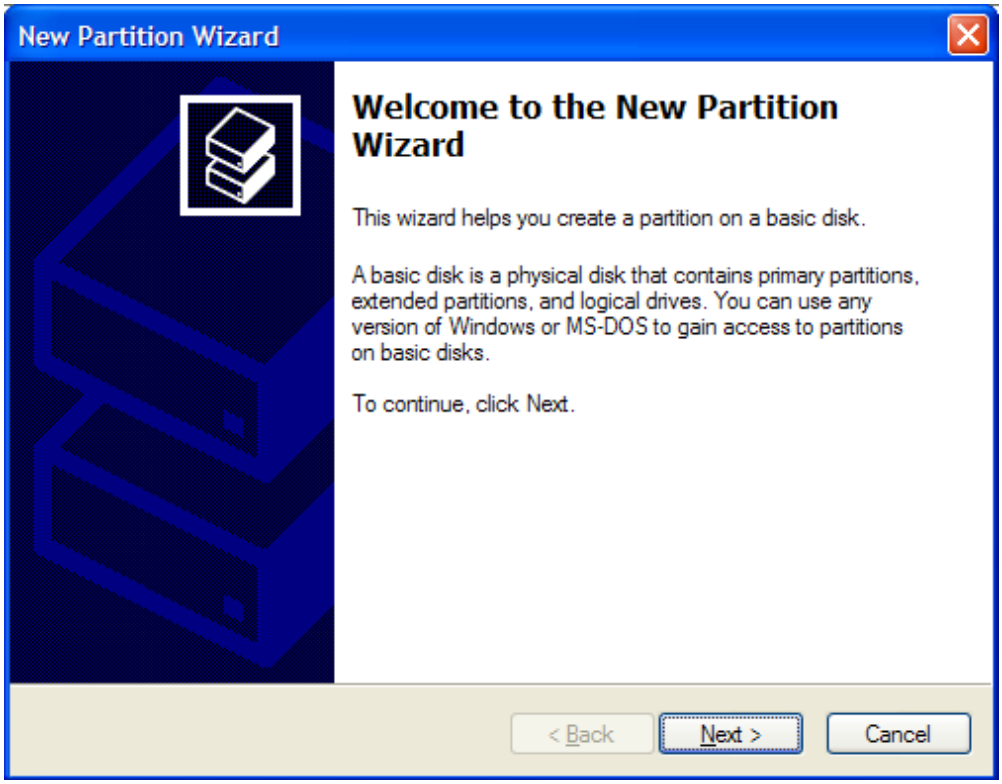


3. At this point the Rocstor drive will not show up on the “Disk Management Volume” window in the upper menu.

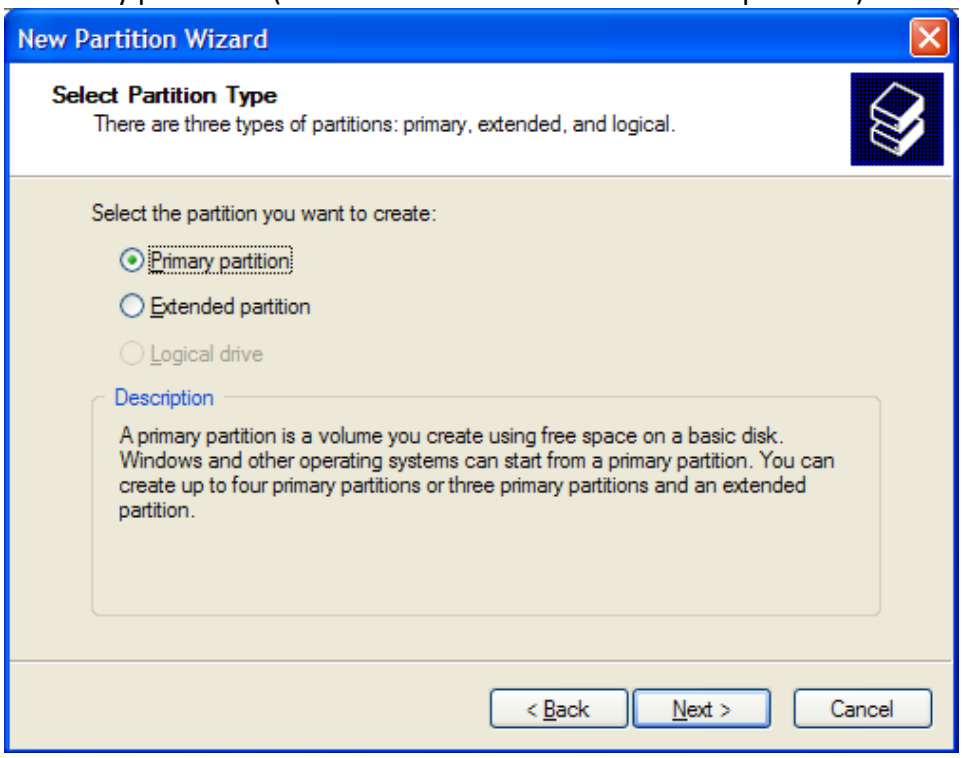
4. The Rocstor drive will show up in the lower menu as an “Unallocated” disk.



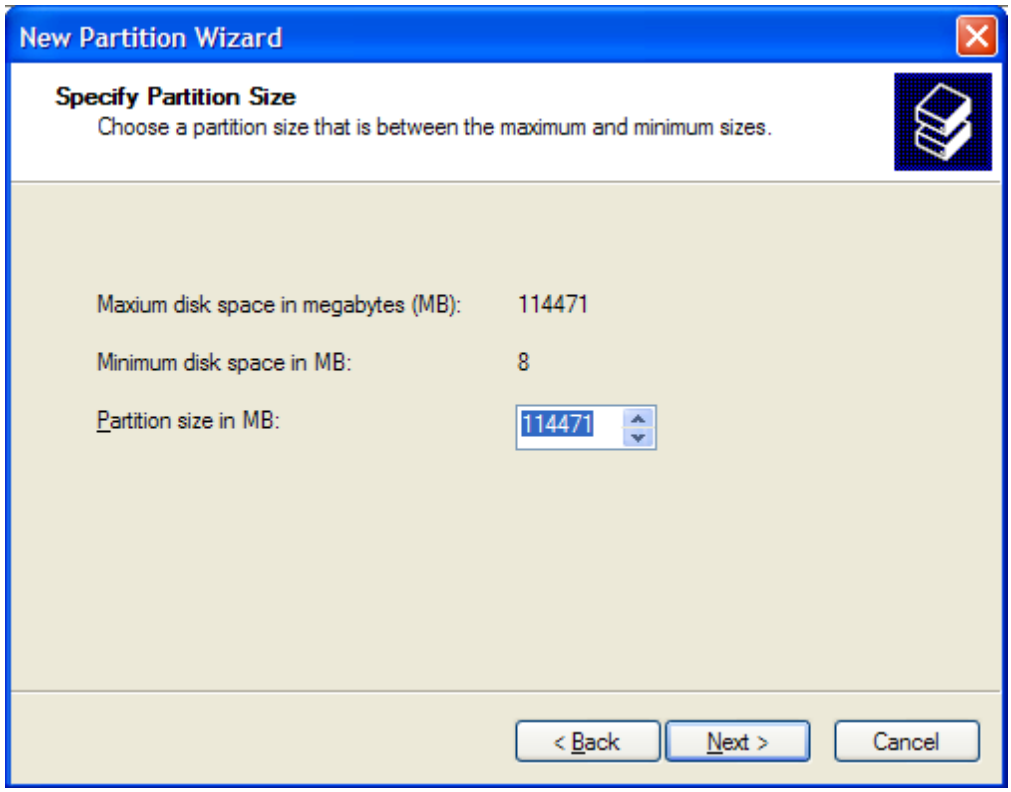
5. Right click anywhere in the “Unallocated” disk area in the lower menu.
6. Click on “New Partition.”
7. You are taken to “Welcome to the New Partition Wizard.” Click “Next”.



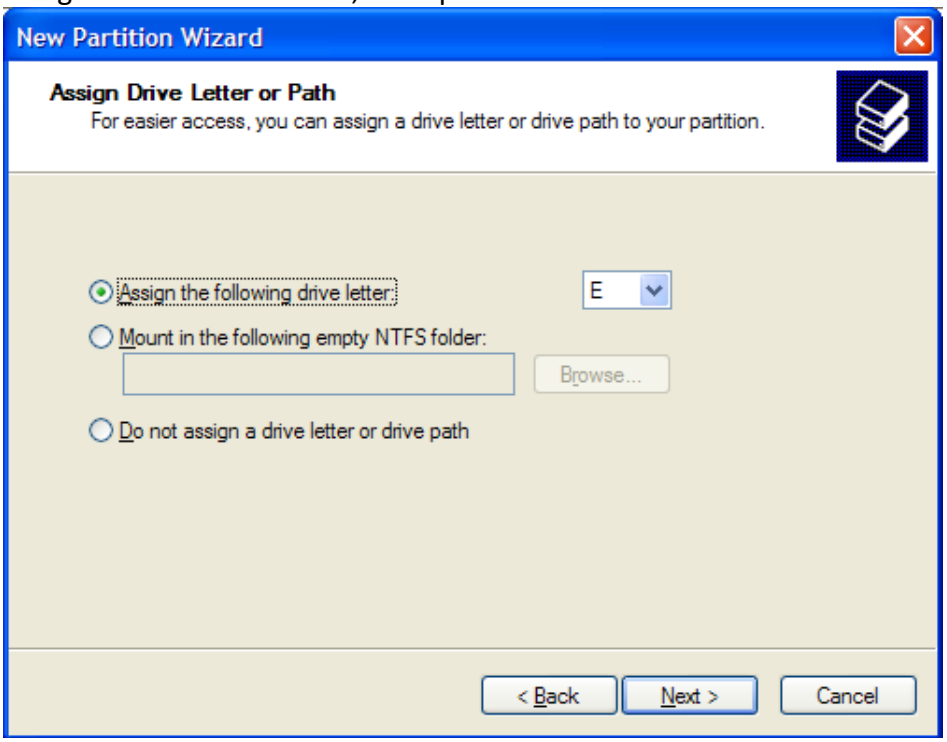
8. Click on “Primary partition” (it should be selected as the default partition). Click “Next”.



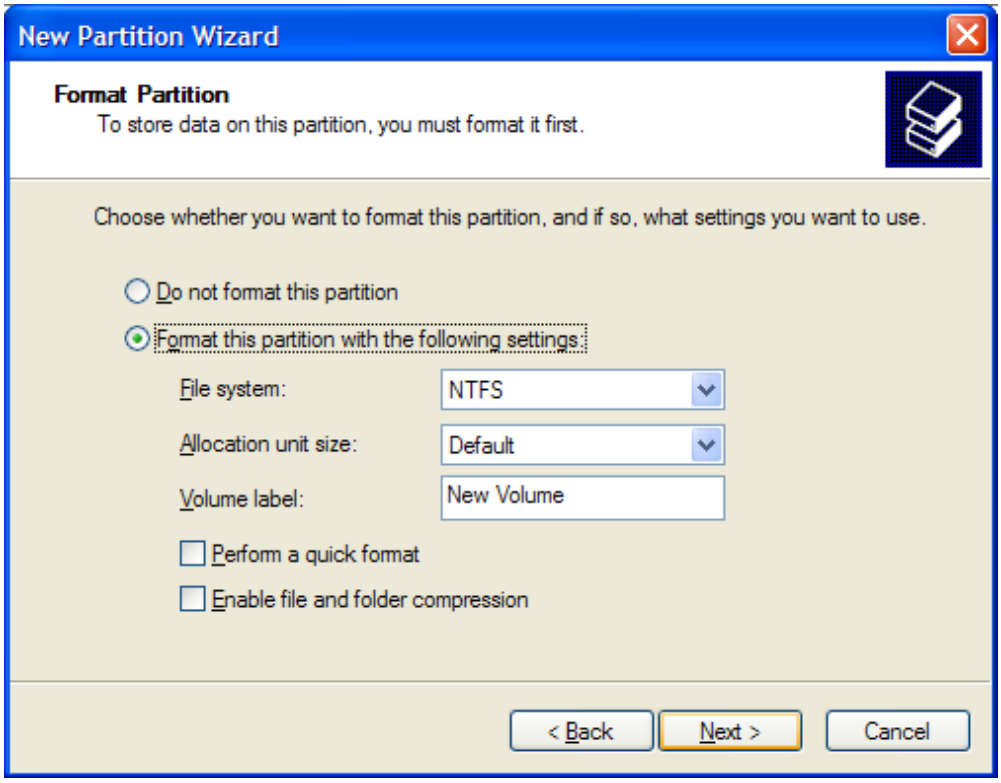
9. Under “Specific Partition Size,” click Next to accept the default setting, which is the maximum size allowed.



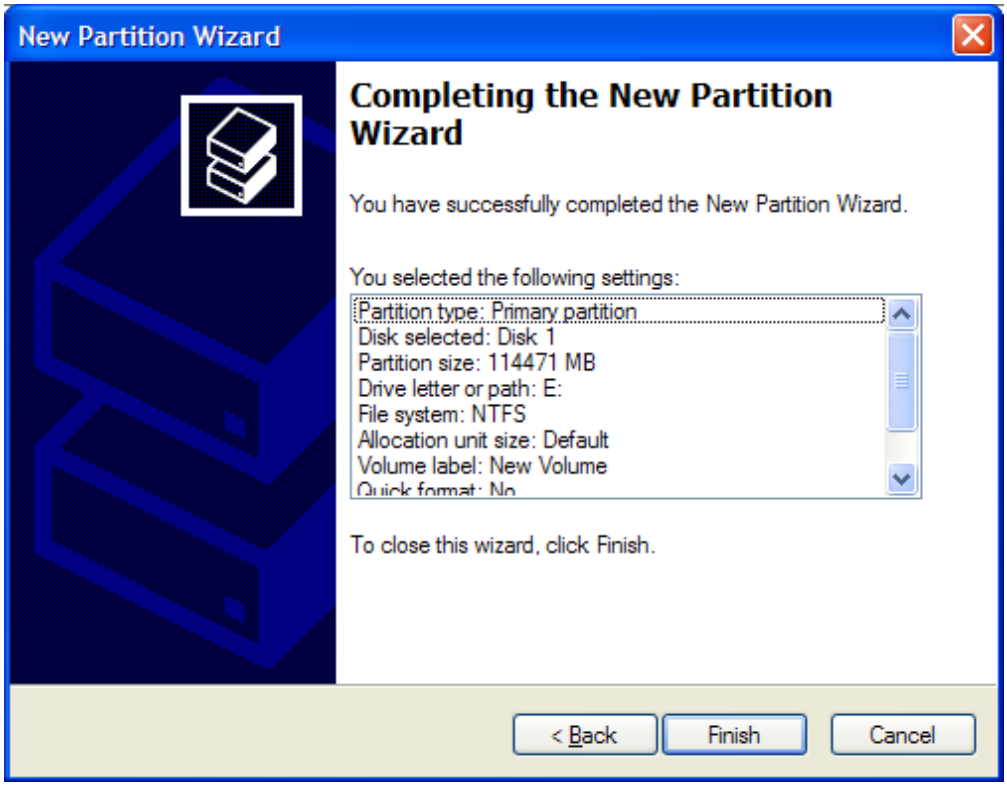
10. Under “Assign Drive Letter or Path,” accept the default letter and click “Next”.

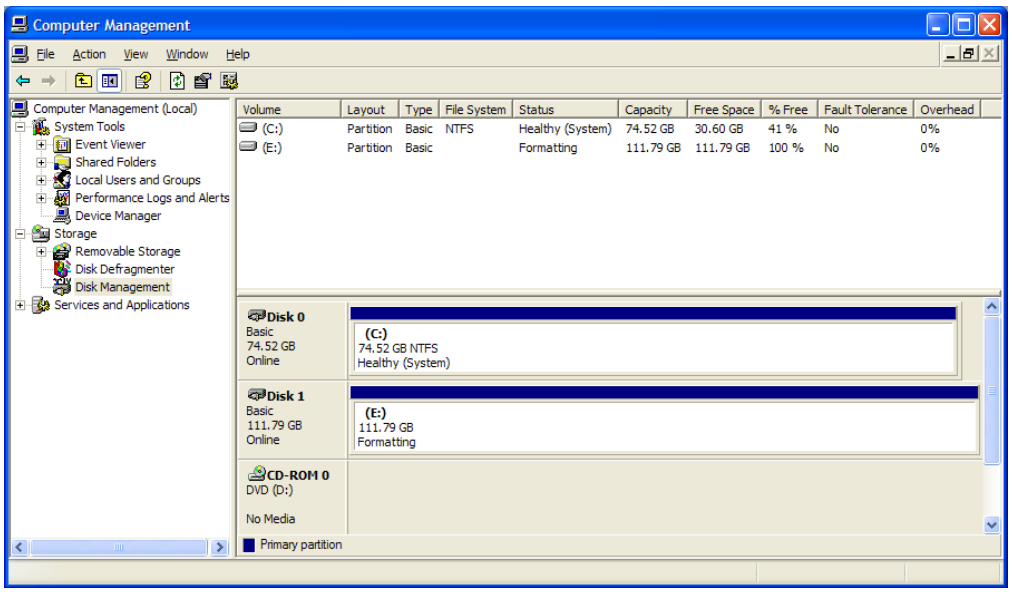


11. In the “Format Partition,” accept the default setting.

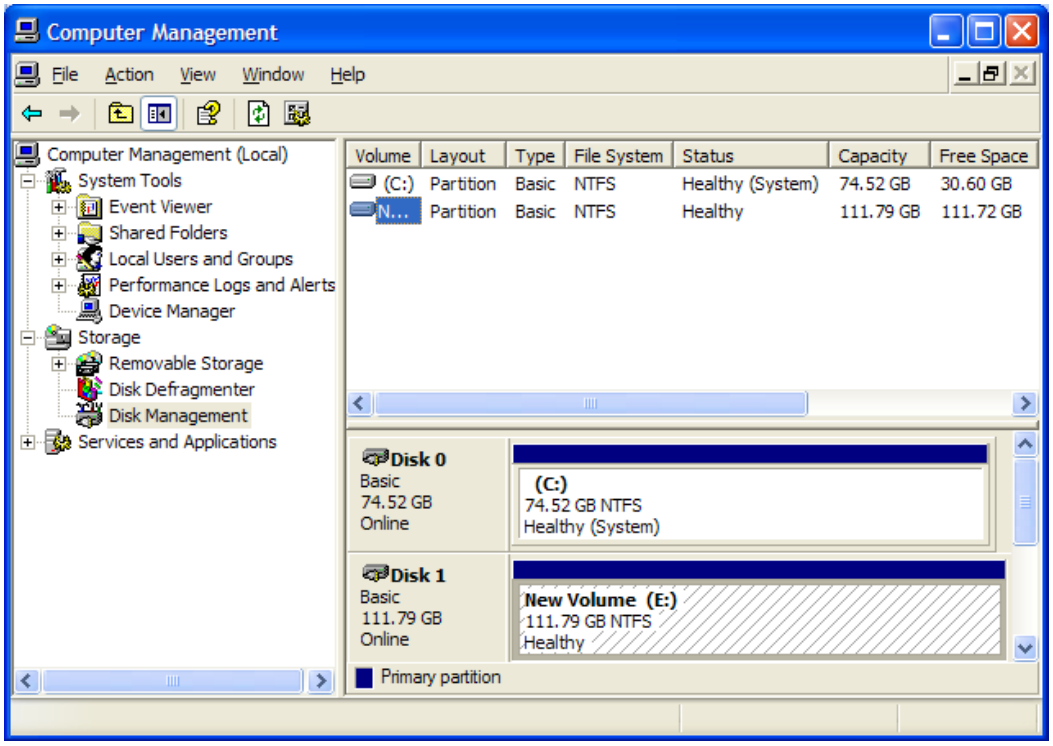


12. The “Volume label” can be changed to any name up to 11 characters.
13. Suggest that “Quick Format” be selected and then click “Next”.
14. You now reached the “Completing the New Partition Wizard” screen. It displays the various settings you previously selected. If you are satisfied with your selections, click “Finish” to complete the new formatting. At this time the Rocstor disk drive is being formatted, which may take a few minutes.





15. You will return automatically to the “Disk Management” window and will see the newly formatted Rocstor disk on the screen with the name you selected. If no new name was entered in the “Volume label,” the Rocstor drive will show up as “New Volume.” To rename the volume at this time, right click “New Volume” and click “Properties.” You can now change the volume name up to 11 characters. Click OK.



16. You can also change the name at any time in the future by reaching the “Properties” menu of the Rocstor drive.
17. You can now Exit or close to return to the desktop.

Troubleshooting

Rocstor data storage products are subjected to several quality control tests before leaving our factory. However, from time to time, the product may not work after shipment or would experience intermittent problems under certain criteria and/or situations. Should you experience a problem with your Amphibious X5, please review the Manual and read the possible solutions that fit your problem. (The User Manual is updated regularly so check the Rocstor website for an updated Manual). Please contact Rocstor technical support listed under contact information at the end of this Manual.

Troubleshooting

In the event that your Amphibious X5 does not function properly, please refer to the following checklist to find out what the problem is. If further technical support is required, please contact your Amphibious X5 *Mobile* reseller or ROCSTOR-ROCSECURE Technical Support at

ROCSTOR-ROCSECURE Technical Support
Hotline Number: +1.818.449.2000
Email: support@Rocstor.com

Problem	Query	Possible reason and remedy
The keypad is inactive	*Is the unit's backlight on?*	Ensure that the USB connector is firmly connected to your computer's USB port. If you are using FireWire, ensure that the FireWire connector is firmly connected to the computer's FireWire port.
Authentication fails	*Is the Error LED blinking?*	A wrong password has been entered. Press the Esc button to restart the authentication process.
The drive is not recognized.	*Does the Status LED stay on all the time?*	Ensure that the USB connector is firmly connected to your computer's USB port. If you are using FireWire, ensure that the FireWire connector is firmly connected to the computer's FireWire port.
	Does the drive's icon appear on the computer?	Check for the drive icon in your operating system. Ensure that the Amphibious X5 is not connected to a bus-powered USB hub or a USB extension cable. If this still doesn't work, an extra power adaptor might be needed.
	Is the hard drive new?	A new drive that has not been previously partitioned and formatted will need to be done so. Refer to Partitioning and formatting your hard drive for more information.

Problem	Query	Possible reason and remedy
The drive is not recognized.	*Is the file system supported by the operating system?*	When using an existing drive in a new operating system, ensure that the file system used by the drive is compatible with the new operating system.
	Is your Amphibious X5 connected to a USB port?	Ensure that the AMPHIBIOUS X5 is plugged into a USB port directly rather than an extension cable or hub. If the drive isn't recognized when plugged into the front USB ports, try the rear USB ports.
	Are you using the included Amphibious X5 Mobile USB cable?	Only use the included Amphibious X5 *Mobile* USB2.0 certified Y-cable. Other USB cables may be of inferior quality.
	Do you hear clicking sounds from your drive?	The drive might be experiencing trouble spinning up due to insufficient power from the USB port(s). Connect both USB connectors directly into your PC's USB ports. Do not connect them to extension cables or hubs. If this still doesn't work, an extra power adaptor is needed.
The drive is performing very slowly	*Is your Amphibious X5 connected to a USB 2.0 port?*	To get USB 2.0 Hi-Speed performance, ensure that your Amphibious X5 is connected to a USB 2.0 port.
	Are you using the included Amphibious X5 Mobile USB cable?	Only use the included *Amphibious X5 Mobile* USB2.0 certified Y-cable. Other USB cables may be of inferior quality.
	Is Amphibious X5 plugged into a USB hub?	Connect the Amphibious X5 directly to two USB 2.0 ports on your computer
	Are other USB devices connected to the same port?	Disconnect any other USB devices and see if performance improves.

Troubleshooting for MACINTOSH computers

Problem: The computer does not recognize the drive
Solutions:

- Is the Amphibious light ON and is the cable connected from the HD device to the computer. Amphibious HD icon should appear on the desktop. Continue to review this guide to find the solution.

- Your computer's Minimum requirements may not meet the minimum system requirements as indicated in this Manual. Page 9

- Please review this Manual's installation procedure for the operating system and interface you are using.

- Read the Manual's installation procedure to ensure it was properly followed.

- Please check the cable connections as the cables must be properly and securely attached to the computer and hard drive. Ensure that there is a firm connection. It is suggested that the cables be detached and reattached, and that the computer be shut off for 20 seconds and then restarted.

- Ensure that the Amphibious drive has been properly reformatted by reviewing the User Manual.

- Have you checked to confirm that the computer's operating system works with the file system?

- Review the manual that came with your computer to ensure that the file system is compatible with the operating system.

Problem: The Amphibious drive is not working fast enough.
Solution:

- You may have too many devices connected to your computer (such as Laptop computers.) Disconnect some devices and observe if there is an improvement in performance.

Problem: There is a decrease in performance when the Amphibious drive is connected via the USB cable to a USB 2.0 port.
Solution:

- Ensure that the USB 2.0 drivers for the host bus and device have been properly and securely installed. You may reinstall to assure proper installation.

Notes:

- When connecting the device to USB 2.0 port in your computer, please be sure that the connection at the host computer is Supper Speed USB 2.0 and drivers (if required) are installed; otherwise you may experience slower transfer speed between the host computer and the Amphibious device.

Notes - Mac OS 10x:

- Amphibious drives are designed to save electricity and subsequently the wear and tear of the internal hard drive by having the hard drive stop spinning when the Amphibious is not accessed for a certain amount of time (sleeping mode). Under Mac OS 10 you it might cause an error please ignore the error message as it might take few seconds to start spinning at the designated speed (wake up.)

- You may require upgrading to a higher version of Mac OS if your host computer does not recognize the Amphibious device when connected via FireWire.

- You must avoid particular characters similar to ^!?\< when coping to FAT 32 volume section.

Troubleshooting for PC WINDOWS based computers

Problem: The computer does not appear to recognize the drive.
Solutions:

- A window should appear, notifying you that a device is connected and/or the Amphibious HD icon should appear on the "My Computer" folder.

- Your computer's Minimum requirements may not meet the minimum system requirements as indicated in this Manual. Page 9

- Please review the Manual's installation procedure in reference to Formatting, Operating Systems and Interfaces you are using to ensure they were properly followed.

- Please check the cable connections as the cables must be properly and securely attached to the computer and hard drive. Ensure that there is a firm connection. It is suggested that the cables be detached and reattached, and that the computer be shut off for 20 seconds and then restarted.

- If a conflict with drivers or extensions exists, contact Rocstor for assistance; email tech support at support@rocstor.com or call technical support department at 888.877.7716.

Problem: The FireWire ports would not mount (work) with Windows 2000
Solution:

- You may require installing Windows 2000 Service pack 4. You may download the Service Pack 4 update for free from the Microsoft website. http://www.microsoft.com/Downloads/details.aspx?familyid=1001AAF1-749F-49F4-8010-297BD6CA33A0&displaylang=en

Problem: The Amphibious drive is not working fast enough
Solution:

- You may have too many devices connected to your computer (in particular in case of Laptops.) Disconnect some devices and observe if there is an improvement in performance.

Problem: The performance and/or transfer speeds are slow when the Amphibious drive is connected to my USB port.
Solution:

- USB ports come in different speeds from 12Mbits/s (USB 1.0), 480Mbits/s (USB.2) to up to 5,000Mbits/s (USB 3.0). If the Amphibious HD is connected to a USB 1.1 port (low speed) or hub, the drive will work slower than if connected to a USB 2.0 port or hub.

Simply: if the USB 2.0 cable is connected (from Amphibious X5) to a USB 1.0 connector in your host computer the transfer speed will be reduced to up to 120 Mbit/s

Problem: There is no increase in performance when the Amphibious drive is connected via the USB cable to a USB 2.0 port.
Solution:

- Ensure that the USB 2.0 drivers for the host bus and device have been properly and securely installed. You may reinstall to assure proper installation.

Problem: The drive is working slow when connected directly to a USB 2.0 port on your computer
Solution:

- Review the minimum system requirements for your computer to ensure it supports Supper Speed USB 2.0.

General Notes:

- When connecting the device to USB 2.0 port in your computer please be sure that the connection at the host computer is High Speed USB 2.0 and drivers (if required) are installed, otherwise you may experience slower transfer speed between the host comport and the Amphibious device.

Front Lights:

Problem: The front Light does not come ON.
Solutions:

- The Amphibious device may not be connected properly.

Frequently Asked Questions

What is Amphibious X5?

Amphibious X5 is a secure portable hard disk for 2.5" SATA hard drives. It provides access control via a built-in keypad and data-at-rest security via hardware-based full disk encryption.

How easy it is to use X5?

It is very simple and straightforward. Connect X5 to your computer and enter the password. No software installation is required at all.

What are the advantages of hardware-based full disk encryption over software encryption solutions?

- Unlike existing software solutions, X5 encrypts every single byte and sector of the hard drive. This means all temporary files, all partitions and even the boot sector is encrypted.
- One major disadvantage of existing software disk encryption products is that they are Operating System (mostly Windows) dependent. X5 is independent of the OS or the host system BIOS and thus supports any OS.
- X5 does not involve any tedious and error-prone software installation and configuration. Just plug X5 in the computer, authenticate yourself and you are ready to go.
- Once installed, X5 does not require any maintenance or patches thus reducing the total cost of ownership of the product.
- There are also no performance overheads due to encryption/decryption of data, unlike software-based solutions.

Is the boot sector also encrypted?

Yes, X5 employs full disk encryption (FDE), meaning every single byte and sector of your hard drive is encrypted.

Does encryption decrease drive performance?

No. The on-the-fly hardware encryption engine in X5 runs so fast and transparently on the SATA interface, such that it does NOT incur any performance overhead, nor require any additional CPU resources.

How strong is the encryption of X5?

X5 offers AES encryption scheme with a key-strength of either 128 bits or 256 bits.

Can the password be changed later without data loss?

Yes, the user password may be easily changed without any data loss.

Can I use X5 with my operating system?

Yes. Because X5 uses hardware for the authentication and encryption processes, it is operating system independent. As long as your choice of operating system supports the USB Mass Storage class specification and/or FireWire 400/800 specification, you may use X5 with it. X5 has been tested under Windows 7, XP, Vista, Mac OS and Linux.

KNOWLEDGE BASE

Amphibious X5 Unique Features

- **Ruggedized**
- **Bootable**
- **Bus-Powered**
- No software to install
- DAR – Data At Rest
- Special epoxy on the Circuit board
- No Licensing fees
- No Maintenance (or extra fees)
- Hardware encryption (not a software imbedded in a chip)
- Real-Time encryption (virtually no delays in encryption and decryption operations)
- Operating System (OS) independent (Mac, Windows, Linux …)
- Low Cost of Ownership (Low cost [$] per Gigabytes)

- Secured by AES-256 CBC or ECB Real-Time Hardware Encryption
- The encryption chipset bears certifications from the **NIST** and **FIPS** for a Cryptographic Module
- Authentication: Password

FIPS Inside

- Carrying case included.

- Includes all necessary cables and software
- Easy plug-and-play installation (pre-formatted Hard Drive)
- Operating System Independent; compatible with Mac, Windows, Linux … OS
- 1 year limited warranty
- 2 year unlimited toll-free telephone tech support

Specifications

- **Dimensions:** ~5.3 x 3.4 x 0.9 inches
  ~132 x 8.30 x 2.6 centimeters
- **Weight:** ~ 8 ounces – 0.25 Kilogram
- **Transfer rates:** FireWire 800 up to 800 MB/s and USB 2.0 up to 480 Mbits/s (or USB 1.1 up to 12 Mbits/s)

Encryption Technology

One of the most secure and cutting-edge hardware-based encryption chipsets is integrated into the internal circuitry of the Amphibious lines. The chipset contains features such as Advanced Encryption Standard Algorithm AES-256 bit key strength, and real-time encryption so that there is virtually zero time in encrypting and decrypting the data. While in either CBC or ECB modes, the encryption chipset bears certifications from the National Institute of Standards and Technology (NIST), and FIPS Level 2 for a Cryptographic Module. The Amphibious is authenticated by a digital key token, which is inserted for authentication, and removed soon after the device is authenticated, and then ready for secure data transfer.

FIPS Inside

How Does Amphibious Encrypted External Hard Drives Protect Your Data?

Q: What security technology does an Amphibious external hard drive adopt?

A: Several security schemes are popularly employed to protect data, including:

- Password security without hardware encryption - This basic OS/software solution blocks unauthorized data access by requiring a password. While this may be adequate for a coffee break, this form of security is very easy to bypass.
- Biometric security without hardware encryption - This form of security requires a combination of a unique physical characteristic, such as a fingerprint, retinal scan, or vocal signature. While more secure than simple password security, it can be circumvented too, leaving unencrypted data at risk. Biometric security also requires a substantial hardware investment and additional administrative burden.
- Hardware security—Hardware security is by far the most thorough, cost-effective, and easily implemented form of advanced security.

Rocsecure—Amphibious external drives use hardware-based security, performed by eNova's X-Wall MX, to provide reliable security for your stored data. Every bit and byte on the hard drive

is strongly encrypted by AES (Advanced Encryption Standard). There is no possibility that clear text will remain on the hard drive.

Q: What is hardware-based encryption?

A: Encryption is a sophisticated mathematical calculation (or algorithm) combining a "secret key" and clear text. The resulting "cipher text" is an unreadable code that can only be decrypted with the original "secret key." The hardware encryption, performed by eNova X-Wall microchip, delivers significant performance improvement over software encryption, works with every operating system found today, and requires no additional training to use. This encryption methodology protects your valuable data with minimum Total Cost of Ownership (TCO).

Q: How does encryption function?

A: X-Wall MX sits between the PCI Bridge and the device on the SATA interface. It intercepts, interprets, translates, and relays real-time commands and data to and from the disk drives, encrypting the data with AES-256 bit key strength. The following illustration best describes how the security chipset functions.

Q: What is the secure key and why use it?

A: The secure key (or digital key or key token) is a physical key that contains the "secret key" necessary for encryption and decryption operations. The hard drive must be partitioned and formatted using the secure key the first time the hard drive is used. When complete, the entire content of the hard drive is associated with the unique secure key. Only a secure key containing the identical "secret key" can be used for authentication and decryption of the hard drive at power up.

Q: Do I need to establish a separate "encrypted folder" under file directory as required by some software solutions?

A: No. Everything you write to the disk drive is automatically strongly encrypted. There is no need to establish a separate "encrypted folder."

Q: Does X-Wall MX increase the original file size after encryption?

A: No. AES is a complicated mathematical algorithm that computes the original data with 128 or 256 bit key length. Regardless of the size of the encryption key, the size of data file after encryption remains unchanged.

Q: Are Amphibious encrypted drives compatible with all disk drive types?
A: Amphibious encrypted hard drives are compatible with Ultra SATA/eSATA compliant disk drives in real-time performance.

Q: Can Amphibious external drives work with any operating system?
A: Amphibious external drives require no device drivers and are independent from all operating systems. A host controller with a USB/SATA mass storage driver typically provided by the OS is required. The only requirement is an Ultra SATA/eSATA compliant disk drive.

Q: How do I know my Amphibious encrypted external drives are really secured?
A: The AES hardware engine utilized by X-Wall MX has been validated by FIPS (US Federal Information Processing Standard) 140-2 Level 3 Cryptographic Engine for Physical Security and certified by the NIST (National Institute of Standards and Technology) of USA and CSE (Communications Security Establishment) of Canada certified hardware AES (Advanced Encryption Standard) algorithm. To review these certificates, visit the following NIST web links: http://www.enovatech.net/resources/aes_no60.htm#a. These hardware algorithms are certified to provide reliable security; at full strength, it is virtually impossible to access the encrypted data by guessing or deriving the right AES key. Because everything on the disk is encrypted, your data is safe even if attackers try to boot from their own disk, or to move your disk to an unprotected machine.

Q: Can I remove the secure key while my PC is on?
A: Yes, you can remove the secure key for safekeeping after your operating system has fully loaded. Remember that the secure key *must* be used again the next time you power up your system. Note: The above X-WALL product information is property of eNova and is provided for informational purposes only; eNova retains copyright and ownership of all provided material regarding the eNova X-WALL MX.

Encryption Algorithm Overview

The *X-Wall MX* family ASIC (Application Specific Integrated Circuit) is the 7th generation of *X-Wall* Technology. It is engineered specifically to encrypt/decrypt entire SATA hard drive including boot sector and operating system in real-time performance. The cryptographic engine of the *X-Wall MX* is **NIST** (**N**ational **I**nstitute of **S**tandards and **T**echnology) of **USA** and **CSE**

(**C**ommunications **S**ecurity **E**stablishment) of Canada certified hardware **AES** (**A**dvanced **E**ncryption **S**tandard) algorithm.

FIPS Inside

How does it work?

X-Wall MX, an SATA to SATA cryptographic bridge chip, sits right in between host SATA and the device SATA hard drive, encrypting entire SATA drive with wire speed performance while providing up to 256-bit AES hardware strength.

System performance with *X-Wall MX* engaged is unaffected. *X-Wall MX* can be operated with SATA1.0a & 2.0 compliant disk drives with a sustained throughput of 150MB/sec. The performance-optimized AES hardware engine performs all encryption and decryption. There are no extra software components, eliminating entirely the memory and interrupt overheads. *X-Wall MX* requires no device driver and is independent from and invisible to all known Operating Systems including embedded OS. As long as the drive is SATA1.0a & 2.0 compliant, *X-Wall MX* will work in the system. Once authenticated, its operation is completely transparent to all users. There is no complex GUI involved therefore your regular computing behavior is unchanged.

Key Management

Amphibious Key Management with *X-Wall M* includes PIN/Password through Pre-boot authentication a USB type external key token.

Key Benefits

- Offers wire speed performance at sustained 150MB/sec on all encryption strengths
- Operating System independent (No software installations required)
- FIPS (US Federal Information Processing Standard) 140-2 Level 3 Cryptographic Engine validated for Physical Security
- Provides iron-clad security through hardware-based NIST & CSE certified cryptographic AES engine
- Simplify engineering design for security targets

As the entire SATA hard drive is encrypted, there is no possibility of any secret being left unprotected on the drive, including password and "Secret Key." In an *X-Wall MX* protected system (drive), there is no simple way to read the data without the right "Secret Key." Only YOU have the right Key to unlock your data.
The *X-Wall MX* technology is compatible with all system designs incorporating SATA hard drive technologies

Features

- Power-On-Self-Test (POST) ability to ensure product reliability
- Versatile Key Management through either serial interface or built-in API (Application Programming Interface)
- 100% hardware AES (ECB mode) cryptographic engine producing a sustained 150MB/sec wire speed performance
- 80-pin TQFP small form factor
- RoHS & Lead-free compliant
- Very low power consumption at less than 350mW at 1.8V under constant burst mode

System Requirement

- All Microsoft Windows Operating Systems
- Linux OS with SATA support
- All embedded OS with SATA support
- SATA1.0a & 2.0 compliant hard drive

How to Daisy-Chain through FireWire ports to your Amphibious Drive at one time

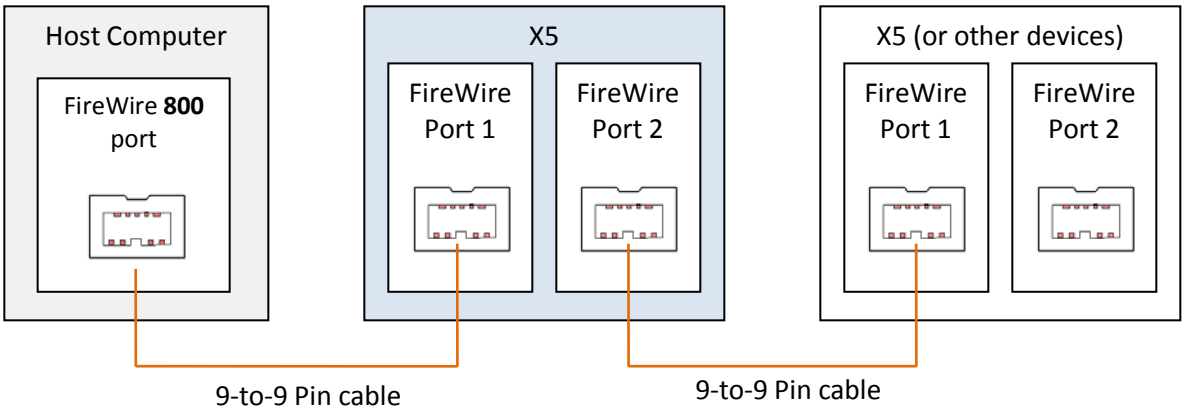
Daisy-Chain (Connecting Multiple Devices) means that device A is connected to device B and device B is connected to device C and so forth. All connections are made only through FireWire ports.

- Do not mix interfaces. Select FireWire ports only. For example, do not use USB and FireWire to Daisy-Chain.
- Mixing FireWire 400 and 800 connectors to Daisy- Chain will reduce the transfer speed to FireWire 400.
- Daisy-Chain allows you to connect multiple devices, such as cameras, external read/write drives and other external devices such as hard disk drive to your computer via FireWire ports.

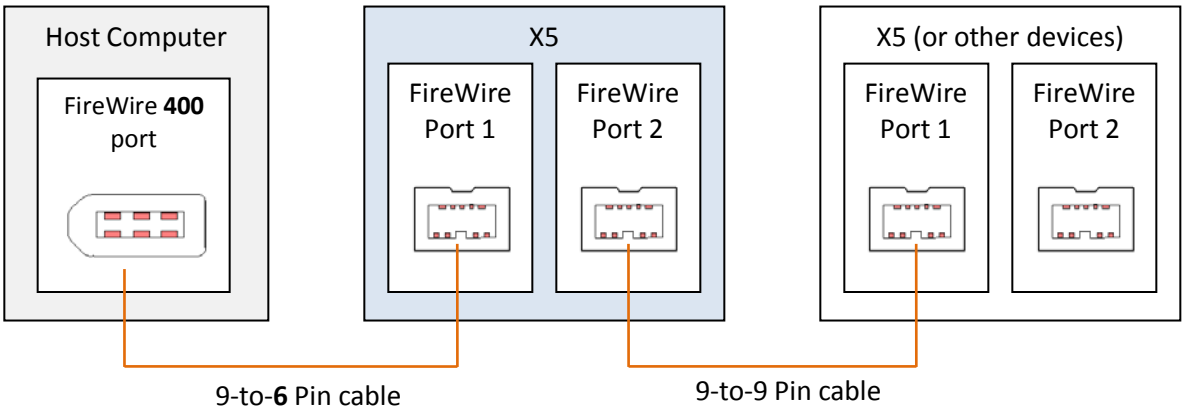
Daisy chaining X5

Two FireWire ports are available on X5 to allow daisy chaining of two or more X5s and/or other FireWire-enabled hard drives. To daisy chain, simply refer to the following configuration:

Configuration 1: Connecting to a host computer that supports FireWire 800

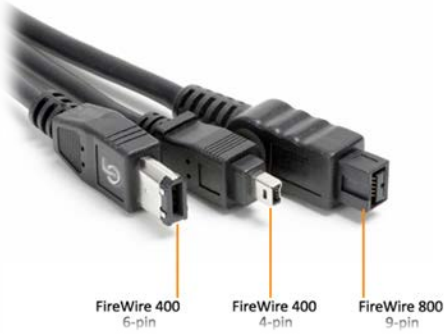


Configuration 2: Connecting to a host computer that supports FireWire 400



Introductions: Interfaces (ports) and Cables

FireWire is Apple Inc.'s brand name for the IEEE **1394** interface (although the 1394 standard also defines a backplane interface). FireWire is also known as **i.LINK** (Sony's name) and **DV** (Panasonic's name, not to be confused with DV camcorder tapes). It is a serial bus interface standard for high-speed communications and isochronous real-time data transfer, frequently used in a personal computer and digital audio / digital video.



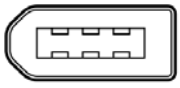
Standards and versions

FireWire 400 (IEEE 1394) 6-Pin connector can transfer data between devices at 100, 200, or 400 Mbits/s half-duplex data rates (the actual transfer rates are 98.304, 196.608, and 393.216 Mbits/s, i.e. 12.288, 24.576 and 49.152 megabytes per second respectively). These different transfer modes are commonly referred to as S100, S200, and S400.

Cable length is limited to 14.8 ft (4.5 meters), although up to 16 cables can be daisy-chained using active repeaters, external hubs, or internal hubs often present in FireWire equipment. The S400 standard limits any configuration's maximum cable length to 230Ft (72 meters.) The 6-pin connector is commonly found on desktop computers and can supply the connected device with power.

The 6-pin powered connector adds power output to support external devices. Typically a device can pull about 7 to 8 watts from the port. However, the voltage varies significantly from different devices. Voltage is specified as unregulated and should nominally be about 25 volts (range 24 to 30). Apple's implementation on laptops is typically related to battery power and can be as low as 9 V but more likely about 12 V.

FireWire 400 (IEEE 1394a)
1394a also standardized the 4 pin connector already widely in use. The 4-pin version is used on many consumer devices such as camcorders, some laptops and other small FireWire devices. Though fully data compatible with 6-pin interfaces, it lacks power connectors.

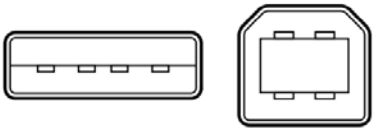


FireWire 800 (IEEE 1394b) 9-pin FireWire 800/3200 (IEEE 1394b) connector was introduced commercially by Apple in 2003. This newer 1394 specification (1394**b**) and corresponding products allow a transfer rate of 786.432 Mbits/sec full-duplex via a new encoding scheme termed beta mode. It is backwards compatible to the slower rates and 6-pin connectors of FireWire 400. However, while the IEEE 1394**a** and IEEE 1394**b** standards are compatible, the FireWire 800's connector is different from FireWire 400's connector, making the two cables incompatible. An adapter or adapter cable, purchased from a local electronics store allows the connection of older devices to the newer port.

The full IEEE 1394b specification supports data rates up to 3200 Mbits/sec over beta-mode optical connections up to 320 Ft (100 meters) in length.

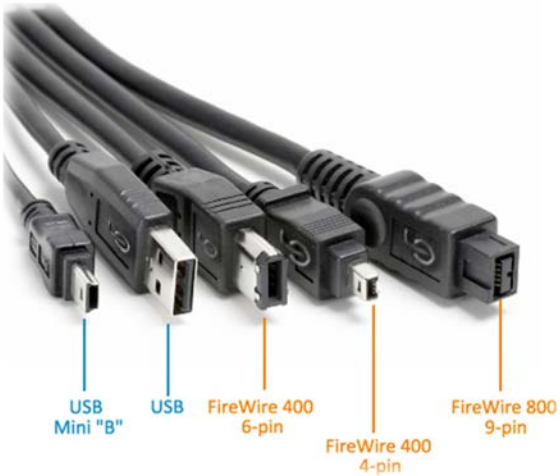
Universal **S**erial **B**us (**USB**) is a serial bus standard to interface devices. USB was designed to allow peripherals to be connected using a single standardized interface socket and to improve Plug-and-play capabilities by allowing devices to be connected and disconnected without rebooting the computer (hot-swapping). Other convenient features include providing power to low-consumption devices without the need for an external power supply and allowing many devices to be used without requiring manufacturer specific, individual device drivers to be installed.

USB can connect computer peripherals such as external hard drives storage devices, keyboards, PDAs, scanners, digital cameras, printers, personal media players and flash drives. For many of those devices USB has become the standard connection method.



USB supports four data transfer rates:

- USB 3.0: A Supper-Speed (USB 3.0) rate of up to 5,000 Mbits/s (1GB/3.3sec)
- USB 2.0: A Hi-Speed rate of 480 Mbits/s (60 MB/s). All Rocstor devices are integrated with USB 2.0, *Hi-Speed*.
- USB 1.1: A **Full Speed** rate of 12 Mbits/s (1.5 MB/s). All USB Hubs support Full Speed.
- USB 1.0: A **Low Speed** rate of 1.5 Mbits/s (187 KB/s)



Compassion Chart:

	Raw Bandwidth (Mbits/s)	Transfer Speed (Mbits/s)	Max. Cable Length Feet (meters)	Power Provided	Device per channel
SAS	3000	375	26 Ft (8 m)	No	4
eSATA	3000	375	6.5 Ft (2 m)	No	1 (15 W/ port multiplier)
SATA 300	3000	375	3.3 Ft (1 m)	No	1 per line
SATA 150	1500	187.5	3.3 Ft (1 m)	No	1 per line
PATA (133)	1064	133	18 inches (0.46 meters)	No	2
FireWire 3200	3144	393	100; (Cables available for 100m+)	12–25 V, 15 W	63
FireWire 800	786	98.25	100 [11] m	12–25 V, 15 W	63
FireWire 400	393	49.13	15 Ft (4.5 m)	12–25 V, 15 W	63
USB 2.0	480	60	5 [14] m	5 V, 2.5 W	127
USB 3.0	4800	600	TBD	5 V, 2.5 W	127
Ultra -320 SCSI	2560	320	39 Ft (12 m)	No	16
Fiber Channel Over Copper Cable	4000	400	39 Ft (12 m)	No	126 16777216 with switches
Fiber Channel Over Fiber	10520	2000	6.5- 164000 Ft (2–50000 m)	No	126 16777216 with switches
Infiniband 12x quad-rate	120000	12000	> 32 Ft (>10 m) Copper <32,800 Ft (<10000 m) Fiber	No	1 with point to point Many W/switched Fabric

Introductions: Formatting

File Allocation Table (**FAT**)
FAT is a file system developed by Microsoft for MS-DOS and is the primary file system for consumer versions of Microsoft Windows.

The FAT file system is relatively uncomplicated and is supported by virtually all existing operating systems for personal computers. This makes it an ideal format for hard drives and other storage devices and a convenient way of sharing data between disparate operating systems installed on the same computer (a dual boot environment).

FAT 32 is a disk formatting scheme which allows a maximum file size of 4 GB. Larger files require another formatting type such as HFS+ or NTFS.

Microsoft's Scan-Disk utility, included with Windows 95/98, places a volume limit of 127.53 gigabytes.

FAT 32 was introduced with Windows 95 OSR2. Windows 98 introduced a utility to convert existing hard disks from FAT16 to FAT32 without loss of data. In the NT line, native support for FAT32 arrived in Windows 2000.

Windows 2000 and Windows XP can read and write to FAT32 file systems of any size, but the format program included in Windows 2000 and higher can only create FAT32 file systems of 32 GB or less. This limitation is by design and was imposed because many tasks on very large FAT32 files become slow and inefficient when file systems exceed 32GB. This limitation can be bypassed when using the Windows command line Format utility or by using third-party formatting utilities.

The maximum possible size for a file on a FAT32 volume is 4 GB minus 1 byte. Video capture and editing applications and some other software can easily exceed this limit.

Until mid-2006, those who run dual boot systems or who move external data drives between computers with different operating systems had little choice but to stick with FAT32. Since then, full support for NTFS has become available in Linux and many other operating systems, by installing the FUSE library (on Linux) together with the NTFS-3G application. Data exchange is also possible between Windows and Linux by using the Linux-native ext2 or ext3 file systems through the use of external drivers for Windows, such as ext2 IFS. However, Windows cannot boot from ext2 or ext3 partitions.

HFS Plus or HFS+

This is a file system developed by Apple Inc. to replace their Hierarchical File System (HFS) as the primary file system used in Macintosh computers (or other systems running Mac OS). It is also one of the formats used by the iPod digital music player. HFS Plus is also referred to as **Mac OS Extended** (or, erroneously, "HFS Extended"), where its predecessor, HFS is also referred to as *Mac OS Standard* (or, erroneously, as "HFS Standard"). During development, Apple referred to this file system with the codename *Sequoia*.

HFS Plus is an improved version of HFS, supporting much larger files (block addresses are 32-bit length instead of 16-bit) and using Unicode (instead of Mac OS Roman or any of several other character sets) for naming the items (files, folders). Names were normalized to a form very nearly the same as NFD (there are some minor differences derived from the fact that the HFS Plus format was finalized before Unicode had standardized the NFD format). HFS Plus permits filenames up to 255 UTF-16 characters in length, and n-forked files similar to NTFS, though almost no software takes advantage of forks other than the data fork and resource fork. HFS Plus also uses a full 32-bit allocation mapping table, rather than HFS's 16 bits. This was a serious limitation of HFS, meaning that no disk could support more than 65,536 allocation blocks under HFS. When disks were small, this was of little consequence, but as larger-capacity drives became available, it meant that the smallest amount of space that any file could occupy (a single allocation block) became excessively large, wasting significant amounts of space. For example, on a 1 GB disk, the allocation block size under HFS is 16 KB, so even a 1 byte file would take up 16 KB of disk space.

HFS Plus volumes are divided into sectors (called logical blocks in HFS), that are usually 512 bytes in size. These sectors are then grouped together into allocation blocks which can contain one or more sectors. The number of allocation blocks depends on the total size of the volume. HFS Plus uses a larger value to address allocation blocks than HFS, 32 bits rather than 16 bits. This means it can access 4,294,967,296 ($=2^{32}$) allocation blocks rather than the 65,536 ($=2^{16}$) allocation blocks available to HFS.

LIMITED WARRANTY

This Limited Warranty is provided by Rocstorage, Inc. (hereinafter: Rocstor) for all lines of products.

General Terms

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This Limited Warranty applies to the Rocstor branded hardware products sold by or leased from Rocstorage, Inc., its worldwide subsidiaries, affiliates, authorized resellers, or country distributors (collectively referred to in this Limited Warranty as “Rocstor“) with this Limited Warranty. This Limited Warranty is applicable in all countries and may be enforced in any country where Rocstor or its authorized service providers offer warranty service subject to the terms and conditions set forth in this Limited Warranty. However, warranty service availability and response times may vary from country to country and may also be subject to registration requirements in the country of purchase.

Rocstor warrants that the Rocstor hardware product and all the internal components of the product that you have purchased or leased from Rocstor are free from defects in materials or workmanship under normal use during the Limited Warranty Period. The Limited Warranty Period starts on the date of purchase or lease from Rocstor. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving warranty service. You are entitled to warranty service according to the terms and conditions of this document if a repair to your Rocstor branded hardware is required within the Limited Warranty Period. This Limited Warranty extends only to the original purchaser or lessee of this Rocstor branded product and is not transferable to anyone who obtains ownership of the Rocstor branded product from the original purchaser or lessee.

Rocstor products are manufactured using new materials or new and used materials equivalent to new in performance and reliability. Spare parts may be new or equivalent to new. Spare parts are warranted to be free from defects in material or workmanship for thirty (30) days or for the remainder of the Limited Warranty Period of the Rocstor hardware product in which they are installed, whichever is longer.

Rocstor’s Obligation under the Limited Warranty

During the Limited Warranty Period, Rocstor will repair or replace the defective component parts or the hardware product. All component parts or hardware products removed under this Limited Warranty become the property of Rocstor. The replacement part or product takes on either the Limited Warranty status of the removed part or product or the thirty (30) day limited warranty of the spare part. In the unlikely event that your Rocstor product has a recurring failure, Rocstor, at its discretion, may elect to provide you with a replacement unit of Rocstor‘s choosing that is at least equivalent to your Rocstor branded product in hardware performance. Rocstor reserves the right to elect, at its sole discretion, to give you a refund of your purchase price or lease payments (less interest) instead of a replacement. This is your exclusive remedy for defective products. The original Limited Warranty is not extended when the product, or a part of the product, is repaired or replaced during the Limited Warranty period. Rocstor shall not be responsible or liable for backing up any data that is on a drive being returned for service

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE DATA STORED ON YOUR HARD DRIVE OR OTHER STORAGE DEVICES AS A PRECAUTION AGAINST POSSIBLE FAILURES, ALTERATION, OR LOSS OF THE DATA. BEFORE RETURNING ANY UNIT FOR SERVICE, BE SURE TO BACK UP DATA AND REMOVE ANY CONFIDENTIAL, PROPRIETARY, OR PERSONAL INFORMATION. ROCSTOR IS NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA, OR REMOVABLE STORAGE MEDIA. ROCSTOR IS NOT RESPONSIBLE FOR THE RESTORATION OR REINSTALLATION OF ANY PROGRAMS OR DATA OTHER THAN SOFTWARE INSTALLED BY ROCSTOR WHEN THE PRODUCT WAS MANUFACTURED.

Rocstor does not warrant that the operation of this product will be uninterrupted or error-free. Rocstor is not responsible for damage that occurs as a result of your failure to follow the instructions that came with the Rocstor branded product.

This Limited Warranty does not apply to expendable parts. This Limited Warranty does not extend to any product from which the serial number has been removed or that has been damaged or rendered defective (a) as a result of accident, misuse, abuse, or other external causes; (b) by operation outside the usage parameters stated in the user documentation that shipped with the product and/or posted on the Rocstor website; (c) by the use of parts not manufactured or sold by Rocstor; (d) as a result of normal wear; or (e) by modification or service by anyone other than (i) Rocstor, (ii) a Rocstor authorized service provider, or (iii) your own installation of end-user replaceable Rocstor or Rocstor approved parts if available for your product in the servicing country.

These terms and conditions constitute the complete and exclusive limited warranty agreement between Rocstor and you regarding the Rocstor branded product you have purchased or leased. These terms and conditions supersede any prior agreements or representations including representations made in Rocstor sales literature or advice given to you by Rocstor or an agent or employee of Rocstor-that may have been made in connection with your purchase or lease of the Rocstor branded product. No change to the conditions of this Limited Warranty is valid unless it is made in writing and signed by an authorized representative of Rocstor.

Buyer's Obligation under the Warranty

The person requesting coverage under this warranty shall prove that he or she is the original purchaser and declares that the product has not been sold, leased, bartered or otherwise changed possession. **The purchaser shall frequently backup the Amphibious hard drive and backup the data immediately prior to returning the drive for warranty service.**

The buyer must notify Rocstor and show proof of notification, through any reasonable means of communication. See Full Street address email address and toll free phone numbers below or updated contact information are available on Rocstor.com website. The notification shall identify any defect, malfunction, or nonconformity promptly upon discovery. Rocstor will acknowledge receipt of the communication and issue a Return Merchandise Authorization (RMA) code. The buyer is obligated to securely and safely package(s) the product, preferably in the original packing materials, WITH THE RMA number, and deliver it together with a copy of the original purchase receipt and a description of the problem to the Rocstor home office. Buyer is responsible for the product until it is received by Rocstor. It is recommended that the product be insured during transportation by the sender. You must prepay any shipping charges, taxes, or duties associated with transportation of the product. In addition, you are responsible for insuring any product shipped or returned for service. You assume risk of loss during shipping.

Limitation of damages (Liability)

IF YOUR ROCSTOR BRANDED HARDWARE PRODUCT FAILS TO WORK AS WARRANTED ABOVE, THE ORIGINAL PURCHASER'S SOLE AND EXCLUSIVE REMEDY SHALL BE REPAIR OR REPLACEMENT. ROCSTOR'S MAXIMUM LIABILITY UNDER THIS LIMITED WARRANTY IS EXPRESSLY LIMITED TO THE LESSER OF THE PRICE YOU HAVE PAID FOR THE PRODUCT OR THE COST OF REPAIR OR REPLACEMENT OF ANY ROCSTOR HARDWARE COMPONENTS THAT

MALFUNCTION IN CONDITIONS OF NORMAL USE. ROCSTOR IS NOT LIABILE FOR ANY DAMAGE TO ANY OTHER PRODUCT CONNECTED TO A ROCSTOR PRODUCT.

Limitation on Consequential Damages

ROCSTOR IS NOT LIABLE FOR ANY DAMAGES CAUSED BY THE PRODUCT OR THE FAILURE OF THE PRODUCT TO PERFORM, INCLUDING ANY LOST PROFITS OR SAVINGS OR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. ROCSTOR IS NOT LIABLE FOR ANY CLAIM MADE BY A THIRD PARTY OR MADE BY YOU FOR A THIRD PARTY. THIS LIMITATION OF LIABILITY ALSO APPLIES WHETHER DAMAGES ARE SOUGHT OR A CLAIM IS MADE UNDER THIS LIMITED WARRANTY OR AS A TORT CLAIM (INCLUDING NEGLIGENCE AND STRICT PRODUCT LIABILITY), A CONTRACT CLAIM OR ANY OTHER CLAIM. THIS LIMITATION OF LIABILITY CANNOT BE WAIVED OR AMENDED BY ANY PERSON. THIS LIMITATION OF LIABILITY WILL BE EFFECTIVE EVEN IF YOU HAVE ADVISED ROCSTOR OR AN AUTHORIZED REPRESENTATIVE OF ROCSTOR OF THE POSSIBILITY OF ANY SUCH DAMAGES.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS THAT MAY VARY FROM STATE TO STATE OR FROM COUNTRY TO COUNTRY. YOU ARE ADVISED TO CONSULT APPLICABLE STATE OR COUNTRY LAWS FOR A FULL DETERMINATION OF YOUR RIGHTS.

Disclaimer

We accept no liability for any loss of data, damages and the inability of Rocstor products to work with any third party equipment. Nor can Rocstor accept any liability or responsibility for software or third party hardware products.

Limited Warranty Period

The limited warranty period for Amphibious X5 is one (1) Year Parts and Labor. This Limited Warranty extends only to the original purchaser or lessee of this Rocstor branded product and is not transferable to anyone who obtains ownership of the Rocstor branded product from the original purchaser or lessee.

Types of Limited Warranty Service

Your Rocstor Limited Warranty consists of repair or replacement of defective parts, including hard drives identified by Rocstor Support Organization as “pre-failure.”

Carry-in Limited Warranty Service Available Monday - Friday

Under the terms of carry-in service, you may be required to deliver your Rocstor product to the Rocstor Service Center or an authorized service location for warranty repair. You must prepay any shipping charges, taxes or duties associated with transportation of the product. In addition, you are responsible for insuring any product shipped or returned for service. You assume risk of loss during shipping.

YOU SHOULD MAKE PERIODIC BACKUP COPIES OF THE DATA STORED ON YOUR HARD DRIVE OR OTHER STORAGE DEVICES AS A PRECAUTION AGAINST POSSIBLE FAILURES, ALTERATION OR LOSS OF THE DATA. BEFORE RETURNING ANY UNIT FOR SERVICE, BE SURE TO BACK UP DATA AND REMOVE ANY CONFIDENTIAL, PROPRIETARY OR PERSONAL INFORMATION. ROCSTORAGE IS NOT RESPONSIBLE FOR DAMAGE TO OR LOSS OF ANY PROGRAMS, DATA OR REMOVABLE STORAGE MEDIA. ROCSTORAGE IS NOT RESPONSIBLE FOR THE RESTORATION OR REINSTALLATION OF ANY PROGRAMS OR DATA OTHER THAN SOFTWARE INSTALLED BY ROCSTORAGE WHEN THE PRODUCT WAS MANUFACTURED.

Rocstorage shall not be responsible or liable for backing up any data that is on a drive being returned for service. Expect that all data on the drive will be destroyed and not retrievable when returned for warranty service.

Rocstor Replaceable Parts Program
Where available, the Rocstor Replaceable Parts program ships approved replacement parts directly to you to fulfill your warranty. This will save considerable repair time. After you call the Rocstor Technical Support Center at **888.877.8777** a replaceable part can be sent directly to you. Once the part arrives, call the Rocstor Technical Support Center. A technician will assist you over the phone to ensure that the installation is quick and easy.

Service Upgrades
Rocstor offers extra coverage for your product. For information on service upgrades, visit www.rocstor.com. Service upgrades purchased in one country are not transferable to another country.

Capacity Disclaimer
Actual accessible hard drive capacity will indicate up to 10% lower than stated under different Operating Systems and formatting.

The storage volume is measured in total bytes before formatting. References to round numbers of gigabytes or terabytes are an approximation only. For example, a disk drive labeled as having 500GB (Gigabytes) has space for approximately 500,000,000 bytes before formatting. After formatting, the drive capacity is reduced by about 5% to 10% depending on the operating system and formatting used or "1GB = 1,000,000,000 bytes.

Options and Software
The Limited Warranty terms and conditions for Rocstor options are as indicated in the Limited Warranty applicable to Rocstor options. ROCSTOR DOES NOT WARRANTY SOFTWARE PRODUCTS, INCLUDING ANY SOFTWARE PRODUCTS OR THE OPERATING SYSTEM PREINSTALLED BY ROCSTOR. Rocstor's only obligations with respect to software distributed by Rocstor under the Rocstor brand name are set forth in the applicable end-user license or program license agreement. Non-Rocstor hardware and software products are provided "AS IS" and without any Warranty. However, non-Rocstor manufacturers, suppliers or publishers may provide their own warranties directly to you.

The data stored in Rocstor and Rocsecure storage product lines are not guaranteed by Rocstor (or the hard disk manufacturer.) We are not responsible for any loss of data. Always back up data regularly

TECHNICAL SUPPORT

Software Technical Support
Software technical support is defined as assistance with questions and issues about the software that was either preinstalled by Rocstor on the Rocstor branded product or that was included with the Rocstor branded product at the time of your purchase or lease of the product. Technical support for software is available for the first ninety (90) days from date of product purchase or lease. Your dated sales or delivery receipt, showing the date of purchase or lease of the product, is your proof of the purchase or lease date. You may be required to provide proof of purchase or lease as a condition of receiving software technical support. After the first ninety (90) days, technical support for software that was either preinstalled by Rocstor on the Rocstor branded product or included with the Rocstor branded product at the time of your purchase or lease of the product is available for a fee.

WARNING: The individual user should take care to determine prior to use whether this device is suitable, adequate or safe for the use intended. Since individual applications are subject to great variation, the manufacturer

"Rocstor" makes no representation or warranty as to the suitability or fitness of these devices for any specific application.

Technical Support

All Rocstor hard drives are backed by free telephone technical support for two (2) years from the date of purchase. Please register your product with Rocstor. To register, fill in the Limited Warranty Registration form in the Support tab at www.rocstor.com.

Free telephone technical support is available weekdays from 9 AM until 6 PM Pacific Standard Time. Customers in the United States and Canada can call toll-free: **(888) 877-8777**; all others must call **(818) 449-2000**.

When calling for support, please have the product's serial number (printed on the label on the bottom of the drive) and system hardware information available.

Trademarks Acknowledgements

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This product is (may also be) integrated with SATA hard drives from the following manufactures:
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Rocstor wishes to acknowledge the use of tables, charts, graphs and texts from the Wikipedia website.
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Corporate, Government and Academic Customers

Our Corporate Sales Team's goal is to help our U.S.A. and Canadian customers find a storage solution that best serves their needs. We will help you determine your best purchasing options. For more information please contact the appropriate department below or call us at +1 (888) 877-7716

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In U.S., call: 888.877.7716
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AMPHIBIOUS

Thank you for purchasing Amphibious X5

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