VANTEC ®

NexStar® MX

DUAL 3.5" SATA HDD ENCLOSURE
USB 3.0 & eSATA INTERFACE

- -

USER'S MANUAL

NexStar® MX
DUAL 3.5" SATA HDD ENCLOSURE
USB 3.0 & eSATA INTERFACE

POWER
HDD 1
HDD 2

VANTEC

RAID   SS USB 3.0

MORE to STORE

MUSIC GAME PHOTO MOVIE

USB 3.0 & eSATA

www.vantecusa.com

Package Contents:

Dual 3.5" RAID Enclosure w/Fan
USB 3.0 & eSATA Interface

① NexStar MX
② USB 3.0 Cable
③ eSATA Cable
④ Power Adapter
⑤ User's Manual
⑥ Enclosure Stand
⑦ Installation Screws

Table of Contents:

1.Introduction:

Vantec NexStar® MX Dual Bay External HDD Enclosure now in the USB 3.0 and eSATA interface is a quick and simple way to expand storage capacity to your computer. It comes without the hassle of diving inside the PC and messing with all those wires, cables and connections. It provides maximum storage with the increased capacity of two spanning hard drives for your precious family photos, music, video, and games. It supports Individual, RAID 0, RAID 1, and JBOD modes for effective storage management. The sturdy drive cage protects your hard drive while the aluminum case effectively draws away the heat; the front vents and the rear fan keep your hard drive(s) cool and improve performance. The Vantec NexStar® MX is a high performance, high capacity, and durable portable storage solution and lets you store your personal data in an enclosure with style!

2.Specifications/Features:

Dual 3.5" RAID Enclosure w/Fan USB 3.0 & eSATA Interface

Features:

- Aluminum Casing Cools Down Your Hard Drive
- 40mm Rear Heat Exhaust Fan
- Easily Add Storage to Any System with USB 2.0, 3.0 or eSATA
- Hot-Swappable: Plug & Play Without Rebooting
- Attractive LED Indicates Power & HDD Activity
- Supports Individual, JBOD, RAID 0, RAID 1 Modes

Specifications:

- Model: NST-400MX-S3R
- Device Support: SATA I/II/III Hard Drives
- Device Size: 3.5"
- Internal Interface: SATA
- External Interface: USB 3.0 & eSATA
- HDD Capacity: Up To 6TB*
- Power Supply: AC Adapter
- Fan: 50mm
- Material: Aluminum & Plastic
- Dimension: 197 x 123 x 72 mm

*Check our website www.vantecusa.com for any updates

Power Adapter

USB 3.0 Cable

eSATA Cable

3.System Requirements:

Microsoft Windows XP/Vista/7

1. For USB 2.0 speeds, the system must

support USB 2.0 specifications

2. For USB 3.0 speeds, the system must

support USB 3.0 specifications

3. For eSATA Speeds, the System Must

Support eSATA Specifications

4. Port Multiplier Is Required For eSATA

Mac OS 10.4 & greater

1. For USB 2.0 speeds, the system must

support USB 2.0 specifications

2. For USB 3.0 speeds, the system must

support USB 3.0 specifications

3. For eSATA Speeds, the System Must

Support eSATA Specifications

4. Port Multiplier Is Required For eSATA

4.Parts Layout:

1 Power ON/OFF Switch

2 eSATA Port

3 USB 3.0 Port

4 Power Jack

5.Installation:

Dual 3.5" RAID Enclosure w/Fan USB 3.0 & eSATA Interface

5.1.Hardware Installation:

Installing the hard drive:

(1) Release the four screws then pull out the rear panel and tray of the NexStar MX.
(figure 5.1-A)
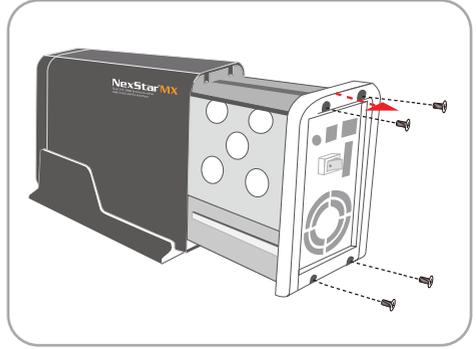
(figure 5.1-A)

(2) Place the first HDD onto the drive caddy then insert the HDD into the SATA connector.
(figure 5.1-B)
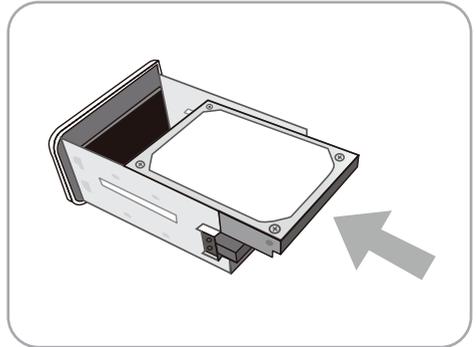
(figure 5.1-B)

(3) Place the second HDD onto the drive caddy then insert the HDD into the SATA connector.

(figure 5.1-C)

(figure 5.1-C)

Installation
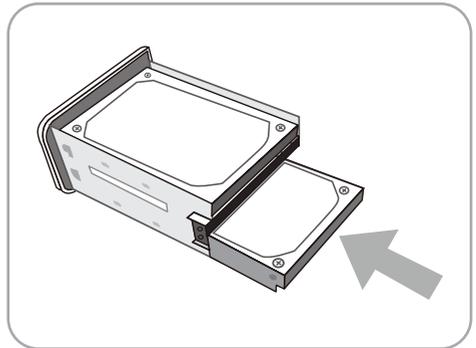
(4) Secure the hard drive onto the drive caddy with the provided screws. (figure 5.1-D)
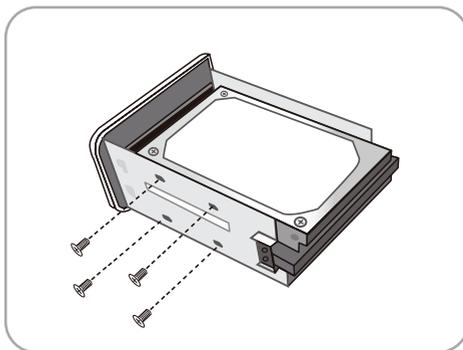
(figure 5.1-D)

(5) Choose the Mode Configuration for the NexStar MX. Connect the power adapter and power on the unit. Press the reset button and hold for 5-7 seconds.
*For Mode Configuration details, see page 9. (figure 5.1-E)
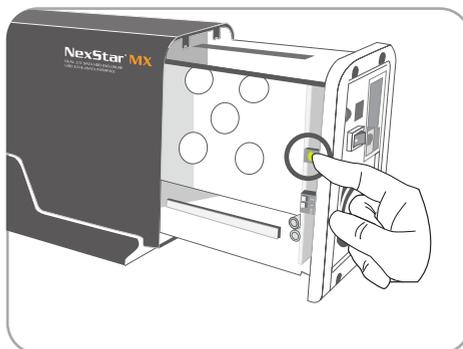
(figure 5.1-E)

(6) Insert the drive caddy back into the aluminum housing. Be sure to align and secure with the provided screws. (figure 5.1-F)

(figure 5.1-F)

Installation
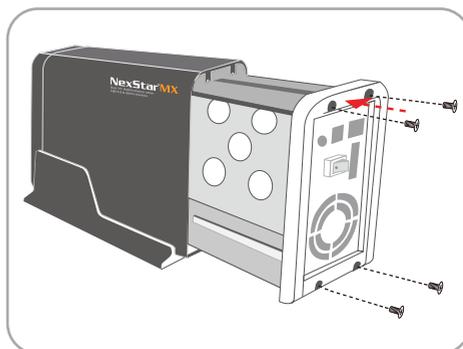
Connecting the NexStar to your computer:

USB 3.0

(1) Connect the type (B) USB connector to the NexStar and the type (A) USB connector to an available USB port on your system.

(2) Connect the power cable to the NexStar and plug the cable into an available outlet.

(3) Turn on the NexStar via the power switch.

(4) Your operating system should detect the NexStar and automatically install the necessary drivers. Once your operating system finishes setting up the NexStar , it will mount your hard drive. On Mac OS systems, the new volume should appear on desktop. On a Windows PC, the new volume will appear under My Computer.

(5) Your NexStar External Hard Drive is now ready for use.

eSATA

(1) Connect the eSATA to the NexStar and to an available eSATA port on your system.

(2) Connect the power cable to the NexStar and plug the cable into an available outlet.

(3) Turn on the NexStar via the power switch.

(4) Your operating system should detect the NexStar and automatically install the necessary drivers. Once your operating system finishes setting up the NexStar, it will mount your hard drive. On Mac OS systems, the new volume should appear on desktop. On a Windows PC, the new volume will appear under My Computer.

(5) Your NexStar External Hard Drive is now ready for use.

⊙ NOTE:

For new hard drives, you will need to initialize and partition your hard drive before it will appear in Windows Explorer or on your Mac desktop. Please refer to your hard drive manufacturer's documentation or read the"Creating a New Partition" section of this manual.

⊙ NOTE:

If you can see the USB icon in the system tray, but there is no any disk appear in your computer, please confirm your hard disk is partitioned.

6.LED Indicator:

Dual 3.5" RAID Enclosure w/Fan USB 3.0 & eSATA Interface

General Operation:

Power LED	Green	ON : Power on OFF: Power off
HDD 1 LED	Blue	ON : HDD inserted Flash Randomly: Accessing (Read/Write/Rebuild) Flash Consistently (3 flashes per second): HDD error ON: HDD in sleep mode
HDD 2 LED	Blue	ON : HDD inserted Flash Randomly: Accessing (Read/Write/Rebuild) Flash Consistently (3 flashes per second): HDD error ON: HDD in sleep mode

RAID Rebuild

LED Activity Chart: this chart describe LED activity under RAID rebuild process

● Constant On

◎ Blinks Randomly

Online: USB (or eSATA) is connected to PC.

Offline: USB (or eSATA) doesn't connect to PC.

Operations		HDD1 LED	HDD2 LED	Power LED	FAN
Online	In progress	◎	◎	●	ON
	Complete	●	●	●	ON
Offline	In progress	◎	◎	●	ON
	Complete			●	OFF

🔺 NOTE:
- -
1. RAID Rebuild Mode: RAID1
2. Rebuild speed around 250GB/HR
3. LED blinking consistently (3 flashes per second) indicates HDD failure
- -

7.Mode Configuration:

Individual Drive Mode:

This mode enables each Hard Drive to be seen as separate single drives with separate Hard Drive capacities. (figure 6-A) (figure 6-B)
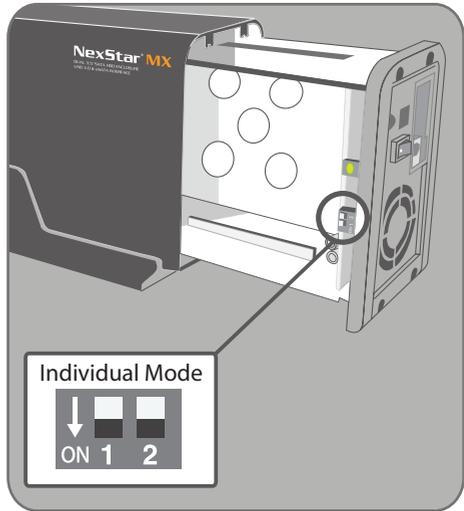
(figure 6-A)
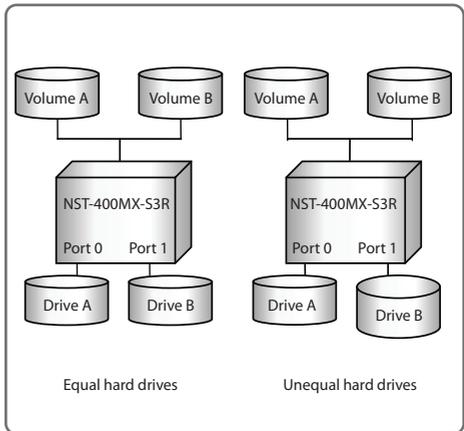
(figure 6-B)

JBOD Mode:

This mode concatenates a series of physical drives as a single large volume; Hard Drive 1 and 2 are combined into a storage capacity that is equal to the sum of each of the physical hard drives 1 and 2.

Switching to this mode will prompt to initialize and format the hard disks. If you choose to add a second hard disk at a later time, you will need to format the entire array of disks again.
(figure 6-C) (figure 6-D)

⬤ NOTE:
- -
All data previously stored on the hard drive will be lost! Please back up all data to a separate storage before continuing.
- -

JBOD Mode

ON **1   2**

(figure 6-C)

JBOD 500GB	JBOD 1000GB
NST-400MX-S3R	NST-400MX-S3R
Port 0 Port 1	Port 0 Port 1
Drive A 250GB Drive A 250GB	Drive A 250GB Drive A 750GB
Equal hard drives	Unequal hard drives
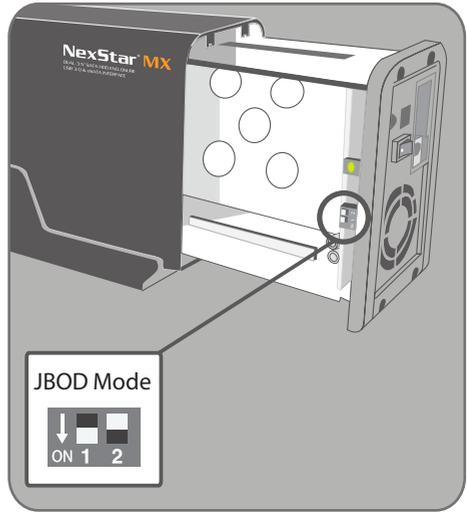
(figure 6-D)

RAID 0 Mode (Striped):

This mode splits data evenly across the two Hard
Drives resulting in capacity that is the sum of
2 times the smaller volume. Data access speed
is increased however at the cost of no data
redundancy.

Two equal hard drives: The capacity is equal to
the sum of both hard drives.

Switching to this mode will prompt to initialize
and format the hard disks.

(figure 6-E) (figure 6-F)

⬢ NOTE:

All data previously stored on the hard drive will
be lost! Please back up all data to a separate
storage before continuing.
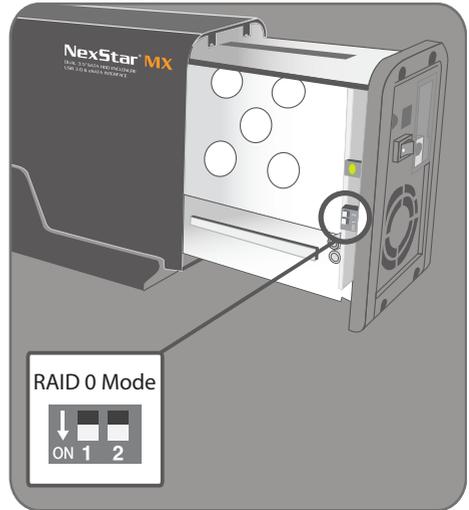
(figure 6-E)
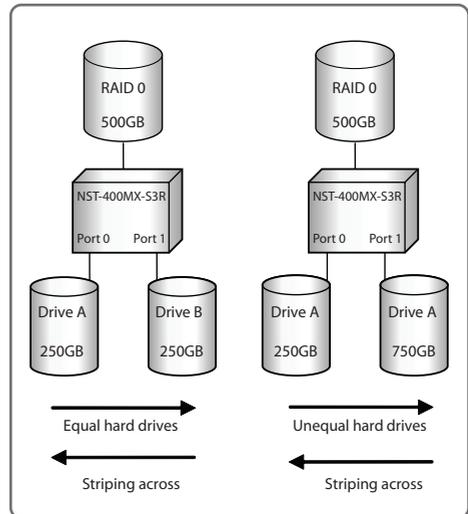
(figure 6-F)

RAID 1 Mode (Mirror):

This mode allows the device automatically to copy data to both hard drives. It stores all data in duplicate on separate drives to protect against data loss due to drive failure. It provides the highest level of data protection for critical data that you cannot afford to lose if a hard drive fails. The capacity is equal to the smaller of the two hard drives. Switching to this mode will prompt to initialize and format the hard disks. This will not work to create a mirror set from existing hard drives. (figure 6-E)

RAID 1 Mode

(figure 6-E)

🔺 **NOTE:**

All data previously stored on the hard drive will be lost! Please back up all data to a separate storage before continuing.

🔺 **NOTE:**

If one drive fails, the SAFE volume is still usable, but it is in a vulnerable state because its mirrored hard drive is inaccessible. When the offline drive comes back online, the appliance begins a rebuild process immediately to restore data redundancy. Although the volume remains available during the rebuild process, the volume is susceptible to data loss through damage to the remaining drive until redundancy is restored at the end of the rebuild and verification process. Host access takes precedence over the rebuild process. If you continue to use the SAFE volume during the rebuild, the rebuild process will take a longer time to complete, and the host data transfer performance will also be affected.

Mode Configuration
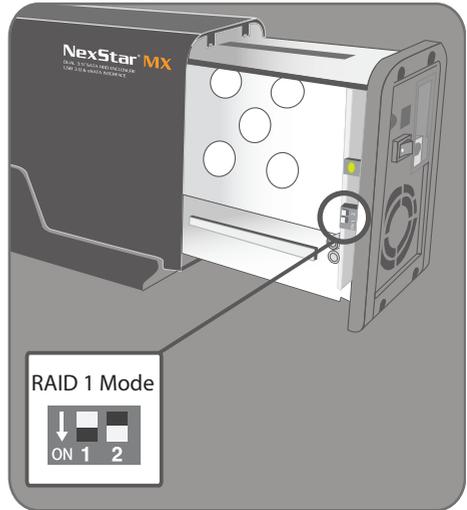
8.Disconnecting the NexStar MX:

Dual 3.5" RAID Enclosure w/Fan USB 3.0 & eSATA Interface

Microsoft Windows XP/Vista/7:

Make sure all operations using the hard drive within the NexStar MX has ceased.

Close any windows and programs pertaining to the NexStar MX

Double click the green "Safely Remove Hardware" icon in the system tray and select [Safely Remove USB Mass Storage Device]. Select the device you wish to remove and click on [Stop]. The system should prompt, "It is now safe to remove the USB device." If not, wait for any programs still using the device to finish and try again.

You may now safely turn off and disconnect the NexStar MX.

Mac OS:

Make sure all operations using the hard drive within the NexStar MX has ceased.

Close any windows and programs pertaining to the NexStar MX

From the Desktop, drag the NexStar MX hard drive to the trash.

You may now safely turn off and disconnect the NexStar MX.

⚠ WARING:
- -
NEVER remove the NexStar MX while the hard drive is in use. Doing so may corrupt the data on the hard drive or damage the hard drive, NexStar MX and the computer.
- -

9.Hard Drive Formatting Guide

Dual 3.5" RAID Enclosure w/Fan USB 3.0 & eSATA Interface

Please make sure your External Enclosure is turned on and connected to the PC before formatting the Hard Drive.

In order to use a disk volume larger than 2 TB's, you will need an operating system that supports GUID Partitioning Table. Windows 7, Windows Vista, Windows XP 64bit, Mac 10.4, and Mac 10.5 all have this capability through the GPT. The GUID partitioning scheme has the ability to partition both internal and external drives far beyond 2 TB's in size.

For PC Users:

STEP1: Right-click "My Computer" and select "Manage".
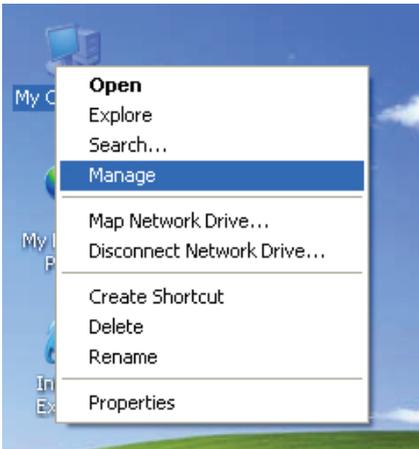
STEP2: Select "Disk Management" and you will see your Hard Drive shown as "Unallocated" (Disk number may vary)

Hard Drive Formatting Guide
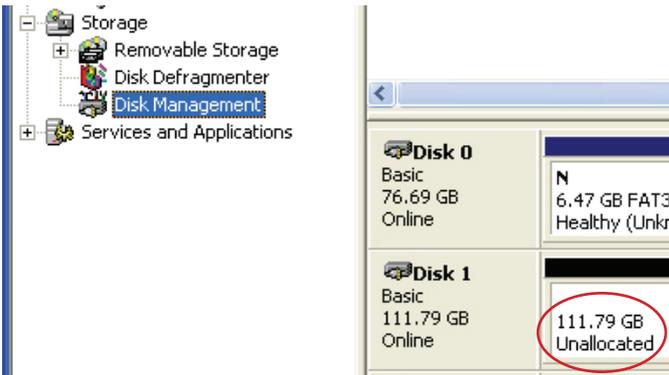
STEP3: Right-click on the "Unallocated" box and select "New Partition".
(Disk number may vary)
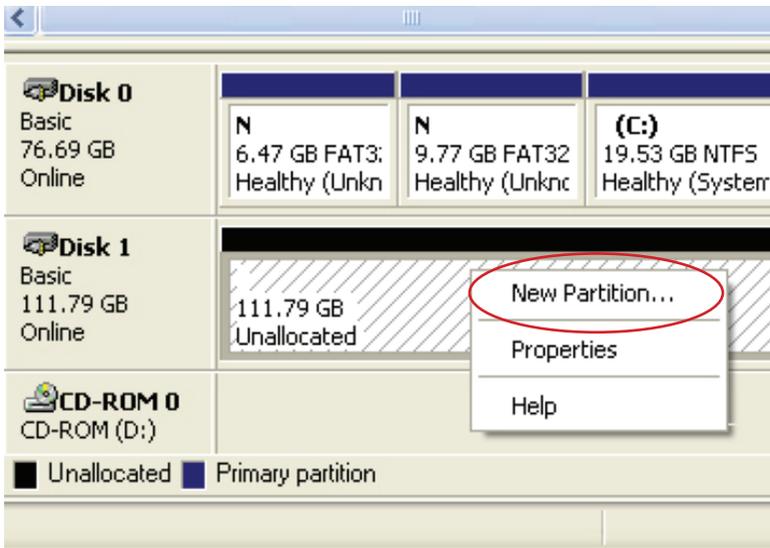
STEP4: The "New Partition Wizard" will appear. Please follow the "New Partition Wizard" step by step instructions to complete the Hard Drive formatting procedure
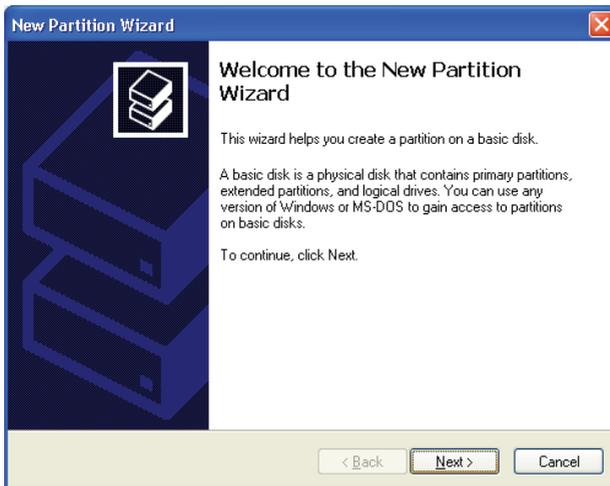
STEP5: Once the Hard Drive formatting procedure is completed, the Hard Drive will be recognized as a "New Volume" (New Volume drive letter may vary i.e. "New Volume (Z:)")
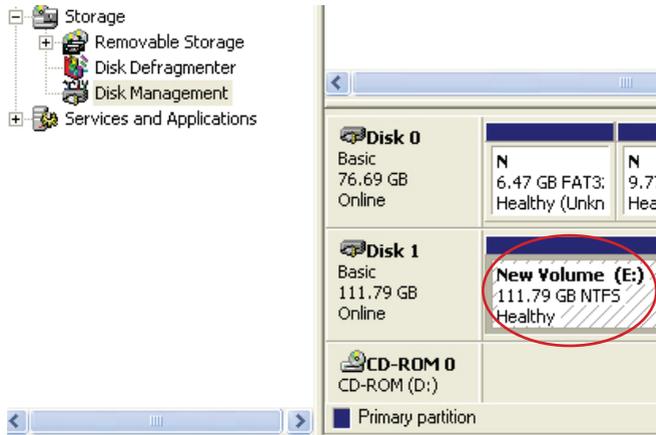
STEP6: Double-click "My Computer". You will see "New Volume" appear on your PC (Drive letter may vary i.e. "New Volume (Z:)")
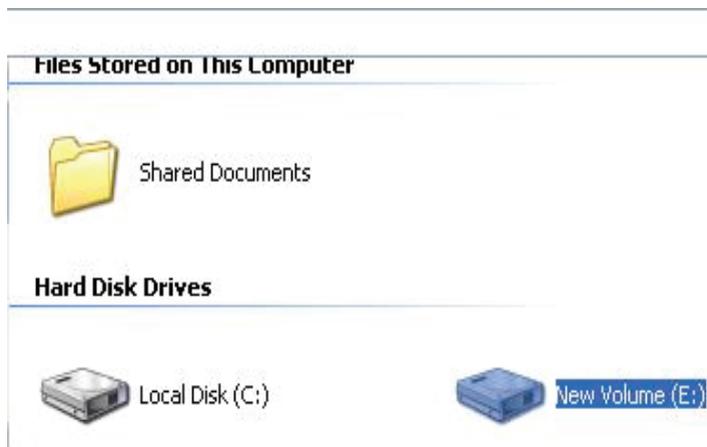
For Mac Users:

STEP1: When you connect the NexStar MX Dual to a Mac with a new hard drive, the dialog "Disk Insertion" will appear. Please select "Initialize". (A formatted HDD will not display this dialog)

Disk Insertion
The disk you inserted was not readable by this computer.

(Initialize...)   (Ignore)   (Eject)
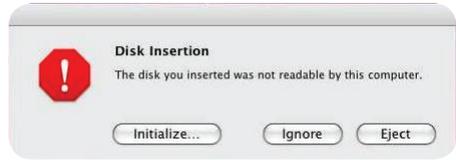
STEP2: Select which HDD you want to erase.
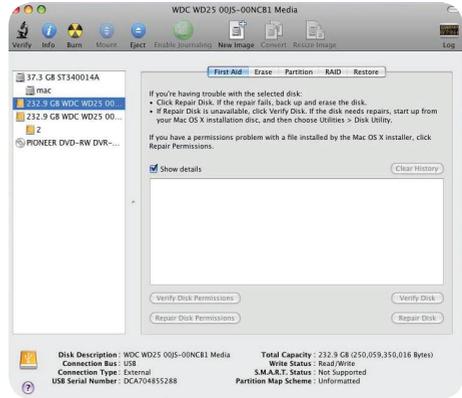
Individual Mode :
This mode can show each hard disk as individual device.
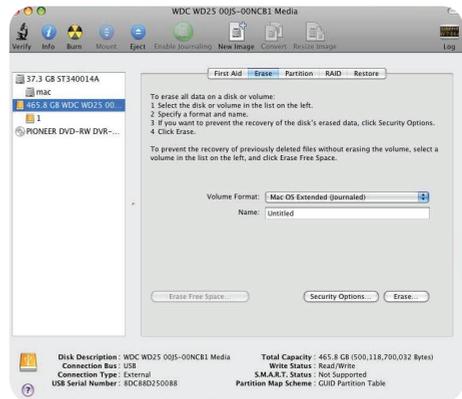
JBOD Mode :
JBOD MODE can integrate two different brands of hard drives with different capacity to a larger format hard drive.

Hard Drive Formatting Guide

RAID 0 Mode :

Raid 0 Mode can integrate two different brands of hard drives with different capacity to a larger format hard drive.

>Two hard drives of the same capacity: the total capacity is the sum of the two hard drives.
>Two hard drives of the different capacity: the total capacity is the twice volume of the smaller hard drive.
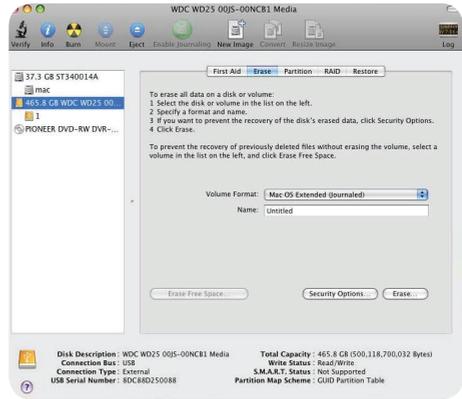
STEP3: Click "Erase" at the upper right side. Select which kind of format from Volume Format. Please input the name you wish to name your new Volume. Click "Erase" at lower right side.
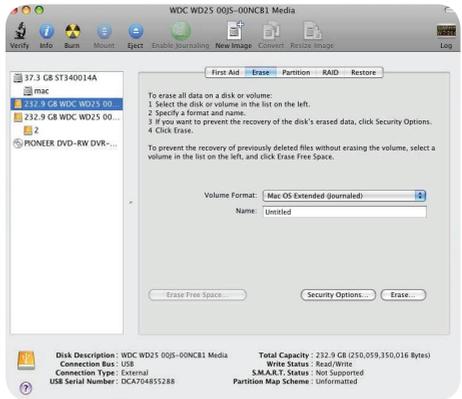
STEP4: After you hit "Enter", the dialog "Erase Disk" will appear. Please click "Erase" to begin formatting your hard drive.
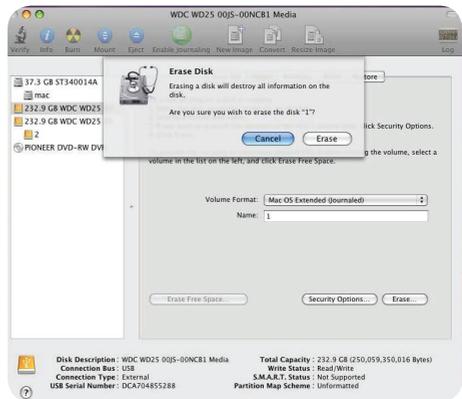
⚠ WARING:
- -
All data will be erased after the format
- -

Hard Drive Formatting Guide

Select how you want to use your new Volume or click "Cancel" if you want to use default settings.

Do you want to use "Untitled" to back up with Time Machine?

Time Machine keeps an up-to-date copy of everything on your Mac. It not only keeps a spare copy of every file, it remembers how your system looked, so you can revisit your Mac as it appeared in the past.

Cancel   Use as Backup Disk

This will conclude the Hard Drive Formatting guide.

10.Warranty:

The NexStar MX comes with a 1 year limited warranty (90 day parts) . If your unit should become defective within that time frame, please go to www.vantecusa.com for information on how to receive warranty exchange or repair. Cosmetic defects and missing parts are not covered under this warranty. Please check the contents of the unit to make sure you received all parts. Also, check for any cosmetic flaws. If any parts are missing or if there are cosmetic defects, please contact the retailer from which you purchased the unit immediately and ask for a replacement.

11.Contact:

Vantec Thermal Technologies

www.vantecusa.com