



IB-RD3620SU3



IB-3620U3

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1. INTRODUCTION

1.1 GENERAL INFORMATION

1.1.1 Usage cautions

User should not modify this device. The environmental temperature should be within +5°C ~ +35°C.

Note: Port multiplier at host computer needed, if connected via eSATA

1.1.2 Power

Power voltage: DC 12 V.

When using this device, please connect the supplied AC adapter or AC adapter cable to the power jack of device. When placing the adapter cable, make sure it cannot get damaged or be subject to pressure. To reduce the risk of electric shock, unplug the adapter first before cleaning it. Never connect the adapter to the device in a humid or dusty area. Do not replace the adapter or cable's wire or connector.

1.1.3 Radio interference/compatibility

- If not properly shielded, almost all electronic devices will get radio interference. Under some conditions, your player might get interference.

- The design of this device has followed the FCC/CE standard, and has followed the following rules:

(1) This device may not cause harmful interference;

(2) This device could accept some interference received including interference that may cause undesired operation.

1.1.4 Repair

If the device has a problem, you should take it to an appointed repair center and let the specialists do the repair, never repair the player yourself, you might damage the device or endanger yourself or your data.

1.1.5 Disposing of the player

When you dispose of the device, be sure to dispose it appropriately. Some countries may regulate disposal of electrical device, please consult with your local authority.

1.1.6 Others

When using this device, please do not let the device come into contact with water or other liquid, if water is accidentally spilled on the device, please use a dry cloth to absorb the spillage.

Do not let the device come into contact with water or other liquid.

Do not disassemble the device; repair the device or change the design of the device, any damage done will not be included in the repair policy.

Avoid hitting the device with hard object, avoid shaking the player, and stay away from magnetic fields.

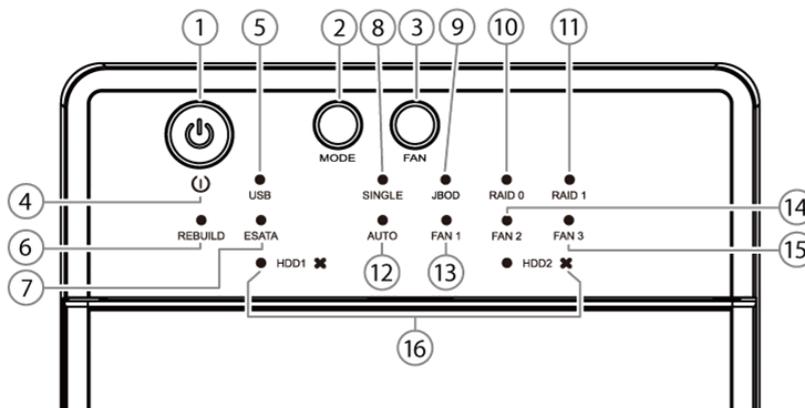
During electrostatic discharge and the strong electromagnetic field, the product will malfunction, and then unplug the power cable and the product will return to normal performance next time it is powered on.

Note: All the information contained in this manual was correct at the time of publication. However, as our engineers are always updating and improving the product, your device's software may have a slightly different appearance or modified functionality than presented in this manual.

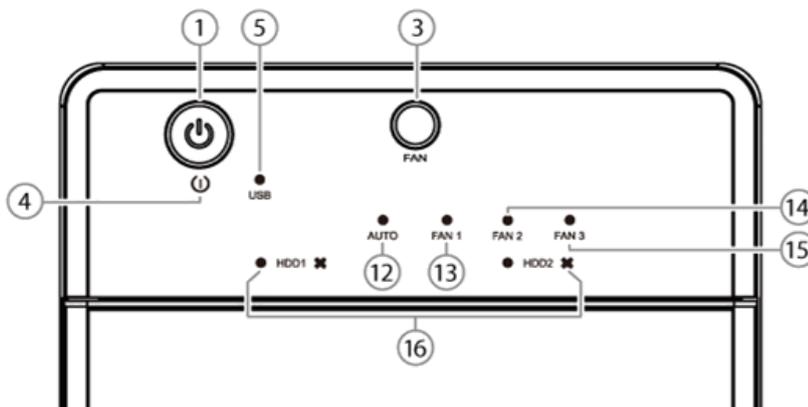
2. HARDWARE IB-3620 SERIES

2.1 LED INDICATION / BUTTON FRONT PANEL

IB-RD3620SU3



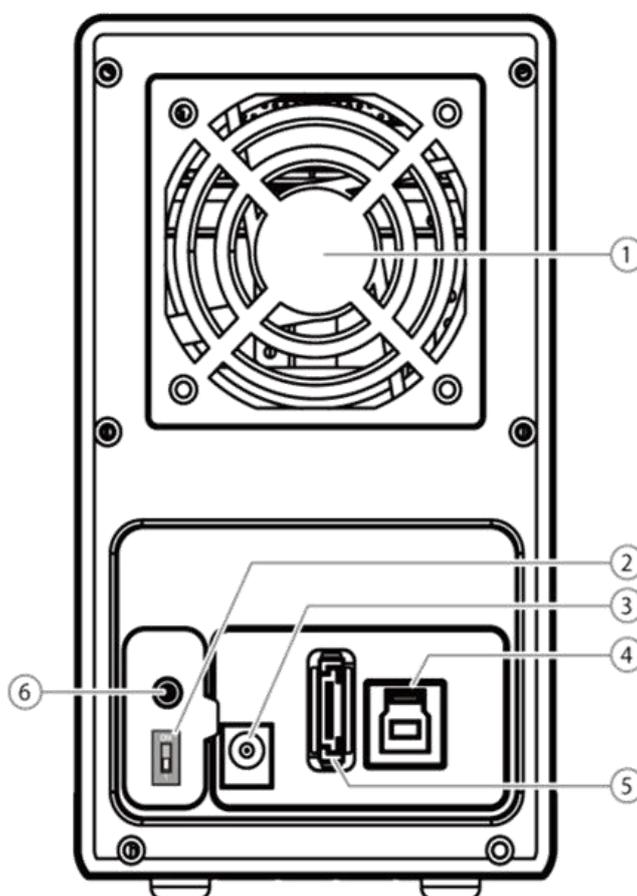
IB-3620U3



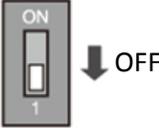
- | | |
|---------------------------------------|--|
| 1. Power Button | It needs to be PRESSED AND HELD for 3 seconds to power off. |
| 2. Mode Button | RAID mode button needs to be PRESSED AND HELD for 3 seconds to switch the device's RAID mode (only IB-RD3620SU3). |
| 3. Smart Fan Button | Auto, manual and fan speed from level 1 to level 3. |
| 4. Power LED | Green - Power on
Orange - Sleep mode on |
| 5. USB Link | USB port in use |
| 6. Rebuild | |
| 7. eSATA Link | eSATA port in use (only IB-RD3620SU3) |
| 8. Single Mode | |
| 9. RAID 0 Spanning (JBOD) Mode | |
| 10. RAID 0 Striping Mode | |
| 11. RAID 1 Mode | |
| 12. AUTO fan on | |
| 13. FAN 1 | FAN speed at level 1 (lowest) |
| 14. FAN 2 | FAN speed at level 2 (middle) |
| 15. FAN 3 | FAN speed at level 3 (highest) |
| 16. HDD1/HDD2 | Blue - HDD connected
Purple - HDD access
Red - HDD error |

2.2 REAR VIEW

IB-RD3620SU3 / IB-3620U3



1. Fan
2. Smart Power SYNC switch (see description as below)
3. DC jack
4. USB 3.0 port
5. eSATA port (only IB-RD3620SU3)
Note: Port multiplier at host computer needed, if connected via eSATA
6. RAID mode confirmation button (only IB-RD3620SU3)

SYNC switch		
	Synchronisation is off.	When the computer is off or the data cable is disconnected, the device goes to sleep mode after approximated 20 seconds.

3. HDD INSTALLATION

- Please use the provided screws to secure the handles to the 2 HDDs.
- Open the front door.
- Slide the 2 HDDs into the guide rails and push them downwards until it locks into the connector in order from left to right.
- Connect the power adapter and choose one cable to connect to your computer (depends on version) and power on the device.
- When connected and powered on, the System LED will turn green; the HDD LED's lights will turn blue.
 If there are HDDs, the HDD LED will stay blue. If the HDDs are accessed the corresponding HDD LEDs will flash purple.

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- Complete the setting inside **Disk management** of your computer system.

4. SETTING/CHANGING THE RAID MODE

IB-RD3620SU3

Note! Setting/changing the RAID mode requires formatting the drives. Make sure to backup all existing data first!

JBOD

(RAID0 Spanning)

Spanning concatenates multiple hard drives as a single large volume; resulting in a seamless expansion of virtual volumes beyond the physical limitations of separately connected hard drives. The data are written from HDD1 to HDD2. It is NOT a Single JBOD!

RAID0

(RAID0 Striping)

Striping is a method of concatenating multiple hard drives into one logical storage unit. It is the automated process of writing data across multiple drives simultaneously. Striping is used to increase the performance of disk reads. The multiple hard drives will write data in "column" effect. If one drive in a striped set fails, all of the data in the stripe set is lost.

RAID1

(RAID1 Mirroring)

Mirroring is the automated process of writing data to multiple drives simultaneously. Mirroring is used to provide redundancy. If one drive fails, the redundant drive will continue to store the data and provide access to it. The failed drive can then be replaced and the drive set can be rebuilt.

Single

Hard drives are being handled independently as separate logical volumes where files are stored.

REMARK: Default setting is **SINGLE** mode.



- For RAID mode setup, users need to press and **HOLD** the RAID button (**1**) at the front for 3 seconds until the LEDs are flashing. Press again for changing the RAID mode.



- After selecting the RAID mode you want, press and hold the confirmation button at the rear panel (behind the plastic cover) (2) until the device shuts down.
- Power on the product again and complete the setting inside **Disk management** of your computer system.

5. REPLACE FAILED DRIVE IN RAID 1 MODE

How to replace a failed drive and rebuild a RAID 1 array if a HDD has been failed (red LED besides the HDD number 1 or 2 lights).

HDD1 has been failed

1. Turn off the power and then remove the failed HDD1.
2. Turn on the power, and wait for about 20 seconds for the system to start up.
3. Install the new drive in the position of the removed HDD1 (the volume of the new HDD1 should be equal the volume of the HDD2).
4. The rebuilding will start automatically after approximated 20 seconds. The left LED of the source drive (HDD2) lights purple. Both LED's of the target drive (HDD1) lights red. The rebuilding LED starts blinking (red). This indicates that it is now rebuilding the RAID array.
5. Rebuilding of the RAID1 array will take several hours, depending on the drive capacity. When the data has been restored, the HDD LEDs will turn a steady blue.

HDD2 has been failed

1. Turn off the power and then remove the failed HDD2 (right).
2. **Remove HDD1 (left) and put it into the slot of HDD2 (right).**
3. Turn on the power, and wait for about 20 seconds for the system to start up.
4. Install the new drive in the position of the slot of HDD1 (left) (the volume of the new HDD should be equal the volume of the other HDD).
5. The rebuilding will start automatically after approximated 20 seconds. The left LED of the destination drive (HDD2) lights purple. Both LED's of the target drive (HDD1) lights red. The rebuilding LED starts blinking (red). This indicates that it is now rebuilding the RAID array.
6. Rebuilding of the RAID1 array will take several hours, depending on the drive capacity. When the data has been restored, the HDD LEDs will turn a steady blue.

Note! We recommend not turning off the power during the rebuild process but if the process is interrupted, it will continue rebuilding the data as soon as the power is turned back on.

Note! If necessary check the *device manager* and *disc manager* for the working HDD of the RAID1 array.

Note! If necessary, you need to assign a drive letter to the found HDD of the RAID1 array.

About data back up

To protect your files and help prevent the loss of your data, we strongly recommend that you keep two copies of your data, one copy on your IB-RD3620 and a second copy either on your internal drive or another storage media such as CD, DVD, Tape or an additional external drive.

Any loss or corruption of data while using the IB-RD3620 is the sole responsibility of the user, and under no circumstances will the manufacturer be held liable for compensation or the recovery of this data.

6. DISK INITIALIZATION

6.1 WINDOWS XP (32/64 BIT)

If the HDD is uninitialized, you may have to initialize it by doing steps as followed:

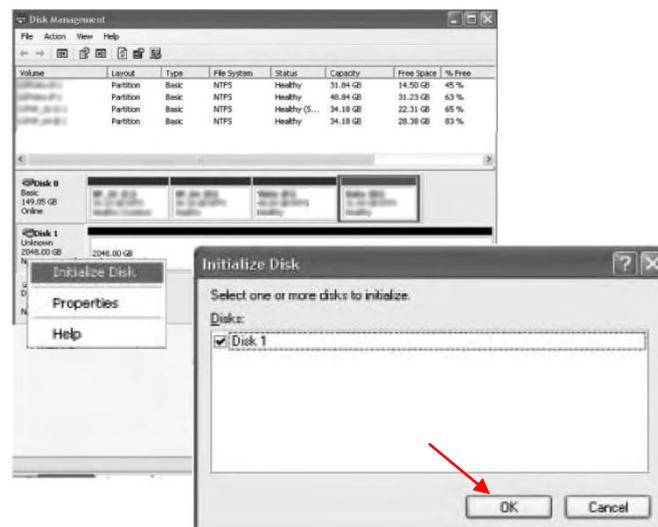
- At first click "Start", "Execute" at your PC and key in "diskmgmt. msc".
- After that please press "RETURN" key.



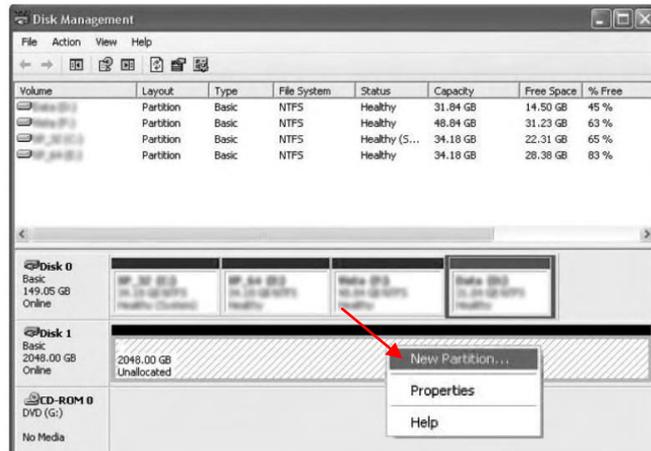
Remark: Windows XP (32 /64 bit) only support MBR.

Under Windows XP, the HDD total volume shall not be more than 2 TB, otherwise the device won't be recognized.

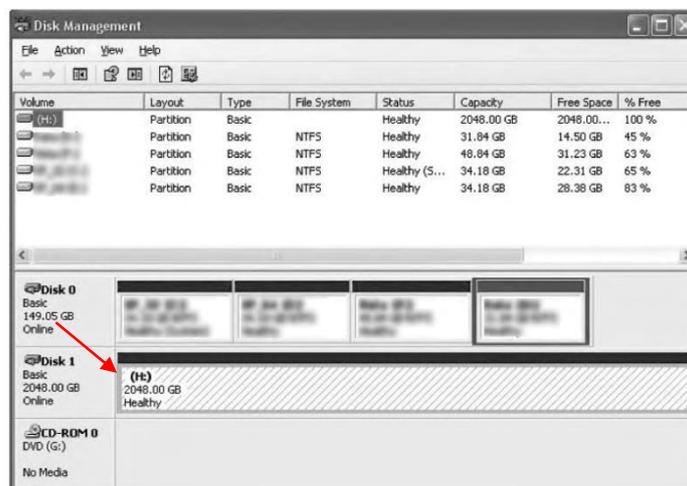
1. Start disk initialization.



2. Create new partition and format disk.



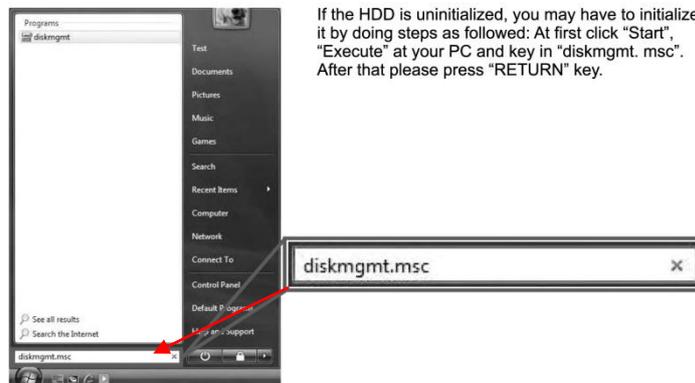
3. Disk format completed.



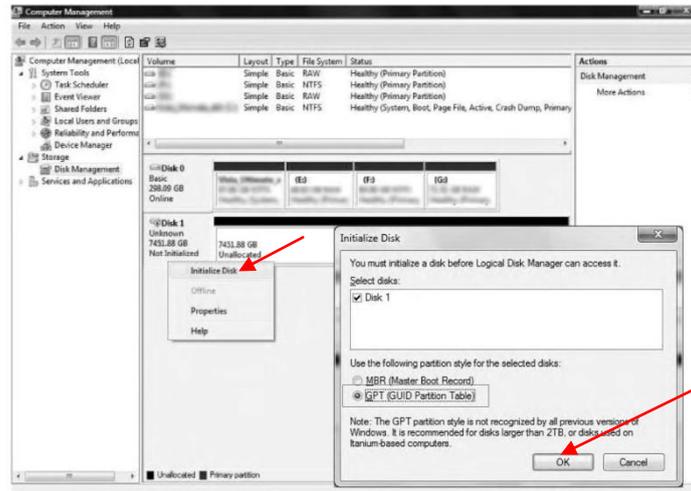
6.2 WINDOWS VISTA (32/64 BIT)

If the HDD is uninitialized, you may have to initialize it by doing steps as followed:

- At first click "Start", "Execute" at your PC and key in "diskmgmt. msc".
- After that please press "RETURN" key.

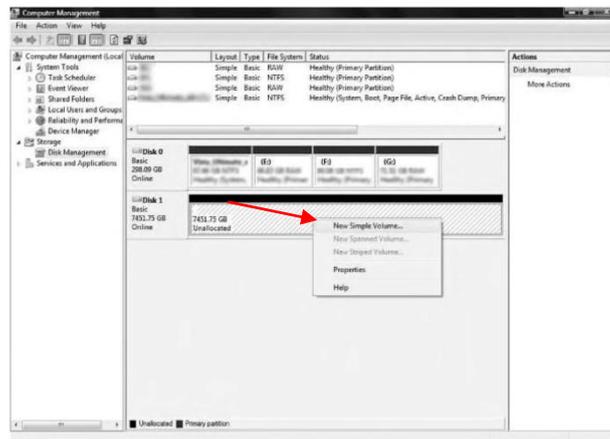


1. Start disk initialization.

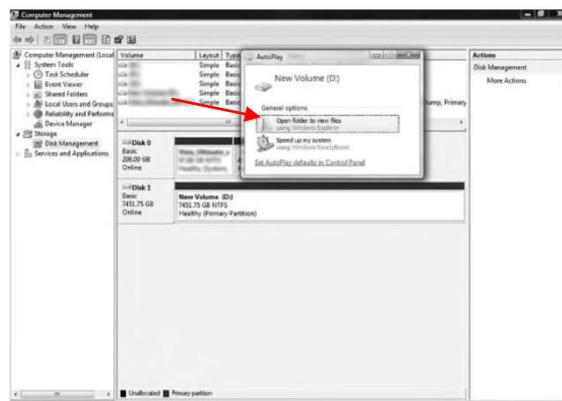


Remark: Please enable GPT if the total capacity is more than 2 TB and enable MBR if the total capacity is less than 2 TB.

2. Create new partition and format disk.



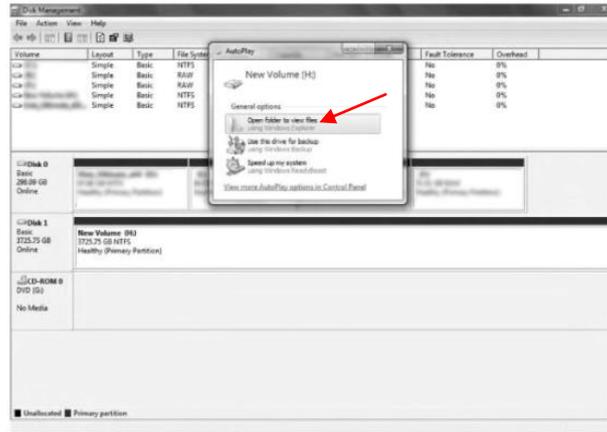
3. Disk format completed.



6.3 WINDOWS 7/8 (32/64 BIT)

If the HDD is uninitialized, you may have to initialize it by doing steps as followed:

- At first click "Start", "Execute" at your PC and key in "diskmgmt. msc".



6.4 MACINTOSH O.S. 10.X

If the HDD is uninitialized, you may have to initialize it by doing steps as followed:

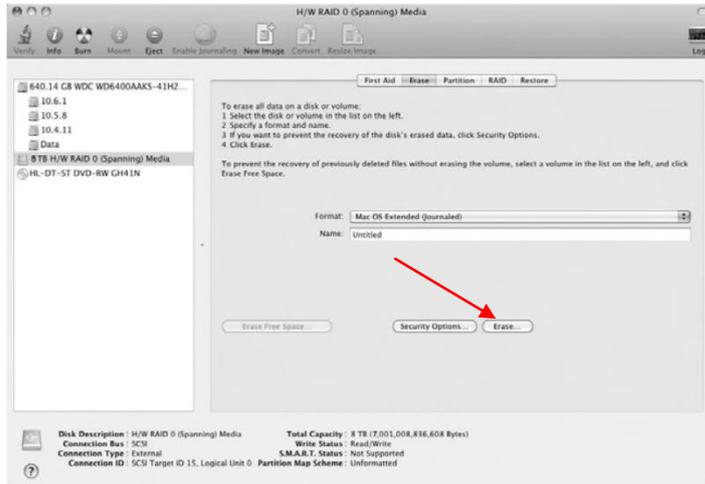
1. Click Disk Utility icon



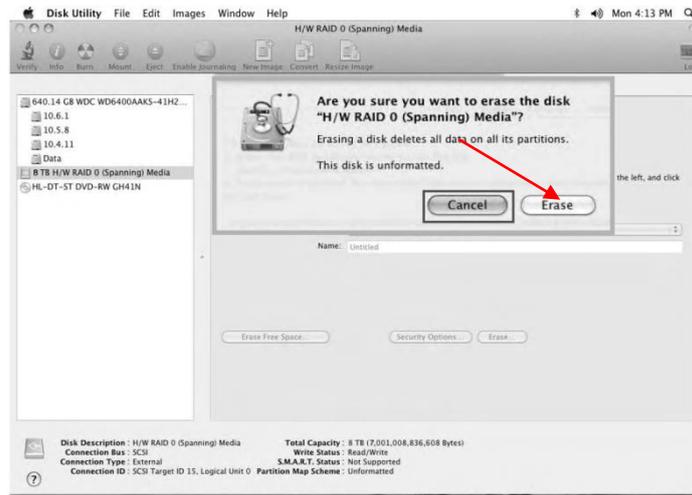
2. HDD initialise...



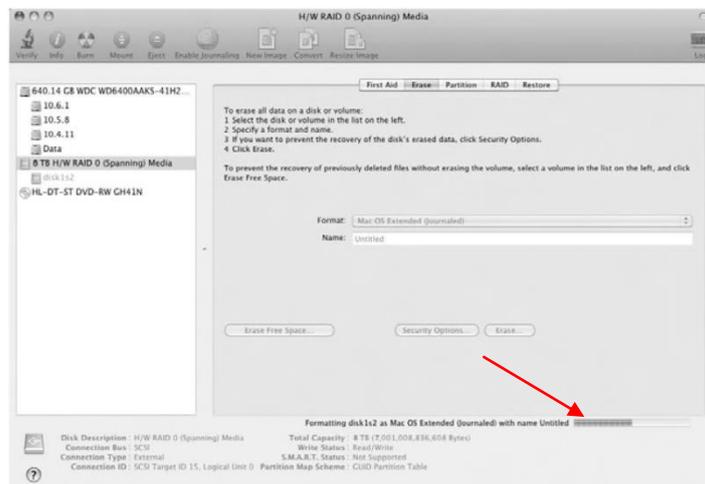
3. Click Erase



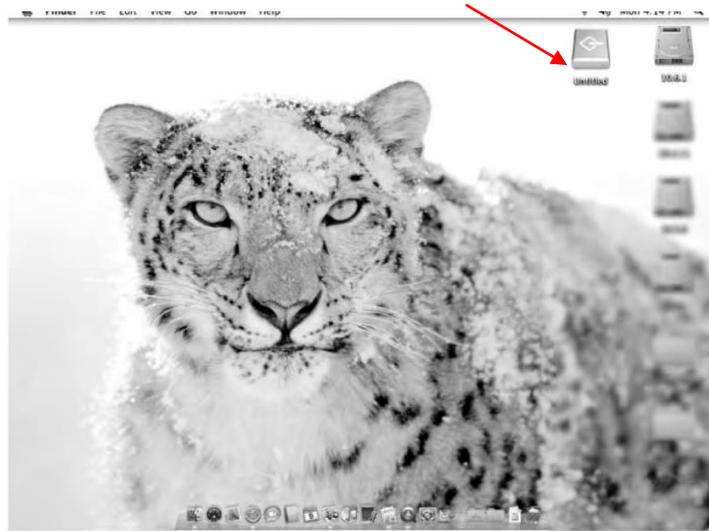
4. Click Erase



5. HDD format in process



6. Format completed



7. REFERENCES

1. Setting/changing the RAID mode requires formatting the drives. Make sure to backup all existing data first!
2. Please refer to the instructions when switching the RAID mode, otherwise the execution might fail.
3. Interface of USB / eSATA **cannot** be used at the same time.
4. When using the RAID function, HDD's with the same brand, model and capacity is strong recommended.
5. When using RAID function, more than one HDD partition is not recommended.
6. Under Windows Vista/7/8, users can enable GPT when initializing HDD with a total capacity of more than 2 TB.
7. Older OS may not recognize the device if you use a different operation system than Windows Vista/ 7/8. For more detailed information about GTP, please visit:
<http://msdn.microsoft.com/en-us/library/windows/hardware/gg463525.aspx>
8. If users enable MBR by mistake, in order to clean the partition table, you have to switch to another RAID mode and do the RAID mode switch all over again referring to Setup. Then go back to the RAID mode you want, repeat the previous actions and enable GPT when initializing HDD.
9. For Macintosh users: the total capacity of more than 2 TB could be recognized only for the operation system 10.4.11 Tiger or later.
10. Do not connect the device to the SATA on board port of the motherboard. Either use SATA to eSATA PCI-Express or SATA to eSATA PCI add-on card; otherwise the PC (Windows / Macintosh) may not recognize the device.
11. In RAID 1, HDD1 and HDD2 must be installed; otherwise the PC (Windows / Macintosh) cannot recognize the device.
12. Rebuild time is based on the capacity, e.g. it takes about 1 hour for 200 GB.
13. If SYNC switch is in ON position and the USB / eSATA cable is plugged out, the device goes to

- sleeping mode automatically after 20 seconds..
14. To take out the HDD from the device, slightly press the handle of the tray to the left and pull the HDD out.
 15. USB port of your PC must support power-off function so that the device would go to sleeping mode. Setting up motherboard's power management in S3 is recommended.
(For more details refer to the user guide of motherboard BIOS setting).
 16. If the device takes too long to initialize, please check if the HDD is securely installed or update the SATA host driver version.
 17. If there is noise with the fan, power off the device, unscrew the fan, take out the cover, clean the fan end assemble it back.
 18. If the noise is still present, you can change the fan with another identical fan of Size 60x60x10 mm.
 19. If the fan stops working, do not dismantle it. Please send back to the retail store immediately.
 20. Temperature 0 ~ 60 °C
Humidity 90 RH
 21. Smart fan controlled by the built-in thermal sensor and it comes with 2 modes (auto/manual) and 3 levels of speed:
Level 1: below 45 °C 1,200rpm ~ 1,800rpm
Level 2: 45 °C ~ 54 °C 1,800rpm ~ 2,500rpm
Level 3 : higher than 55 °C 2,500rpm ~ 3,500rpm
 22. **Operation System:**
Windows XP (32/64bit)
(with MBR enabled, supports total capacity up to 2 TB)
Vista (32/64bit) / Windows 7/8 (32/64bit)
(with GPT enabled, supports total capacity more than 2 TB)
Macintosh 10.X or later
 23. Support USB transfer speeds of low speed (up to 1.5 Mbit/s), full speed (up to 12 Mbit/s), high speed (up to 480 Mbit/s), super speed (up to 5 Gbit/s), eSATA transfer speed (up to 1.5~3.0 Gbit/s).

Note: Port multiplier at host computer needed, if connected via eSATA

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