

QUAD BAY RAID BOX USER'S MANUAL

1. Product Overview

USB2.0+ eSATA QUAD-BAY RAID BOX is a function-friendly and cost-effective storage solution for home and SOHO users. With smart RAID technology supports RAID 0+1 to provide a total data protection by mirroring your files to the second hard drive, and RAID 0 can utilize four hard drives to maximize data transfer speed and increase storage capacity.

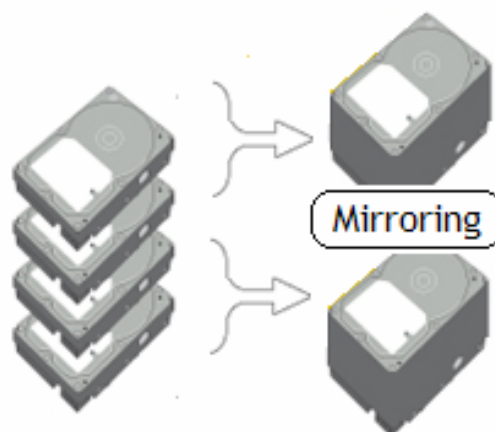
2. Product features

- Portable desktop design
- Easy HDD removable design
- Aluminum body design
- Support USB 2.0 specification transfer rate up to 480Mbps
- Support eSATA specification transfer rate up to 3Gbps
- Support Plug and Play functions
- Support SATA II Hard Drive
- Support system power on/off function
- Support RAID 0 / 0+1 / JBOD Mode

RAID Level supported

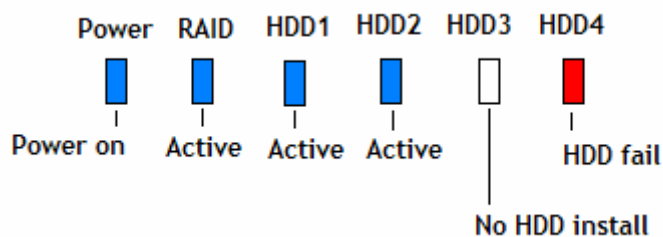


RAID 0 Mode



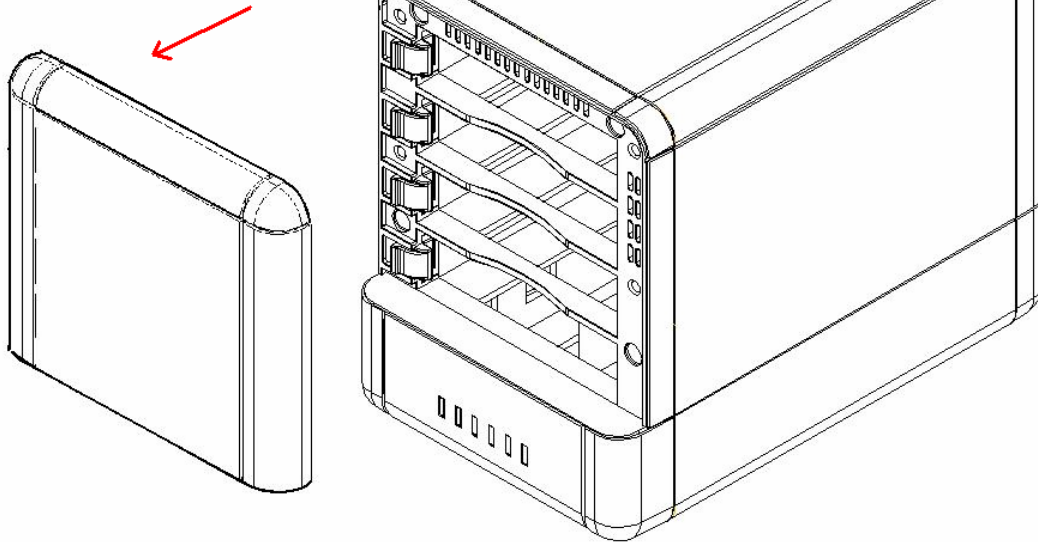
RAID 0+1 Mode

3. LED indications

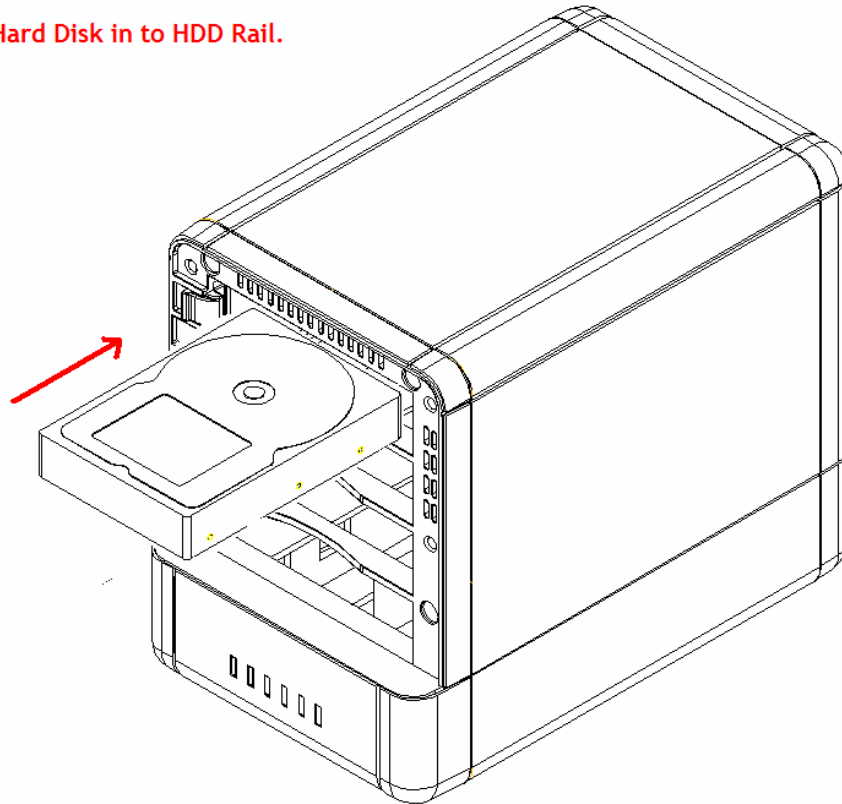


4. Hardware installation

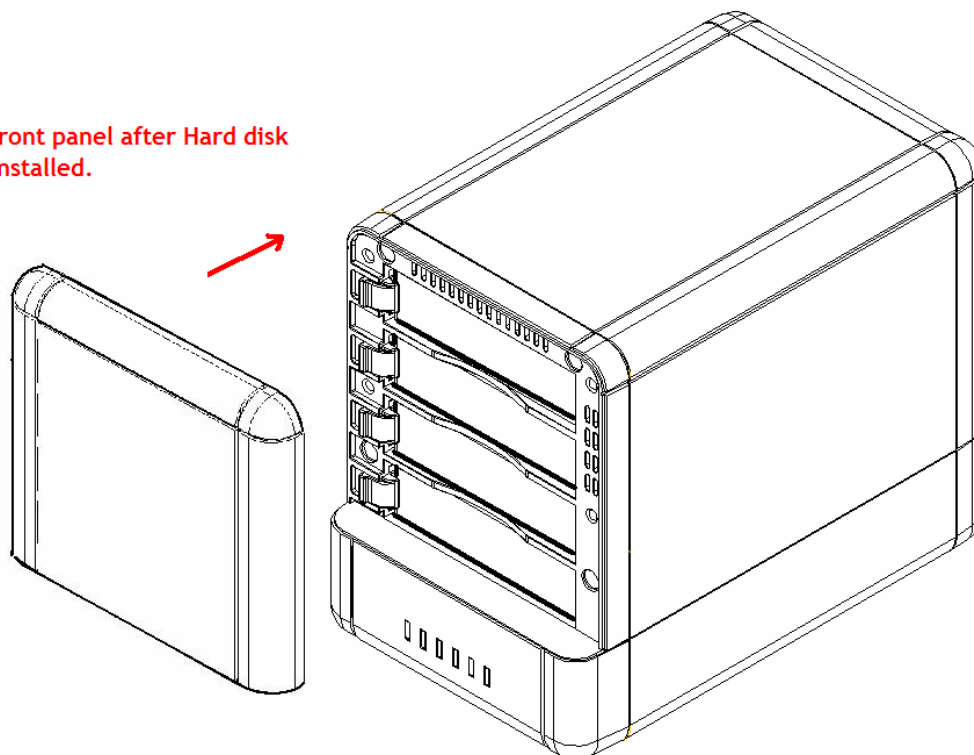
① Remove the front Panel



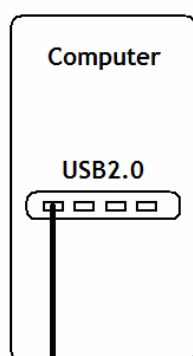
② Slowly insert Hard Disk in to HDD Rail.



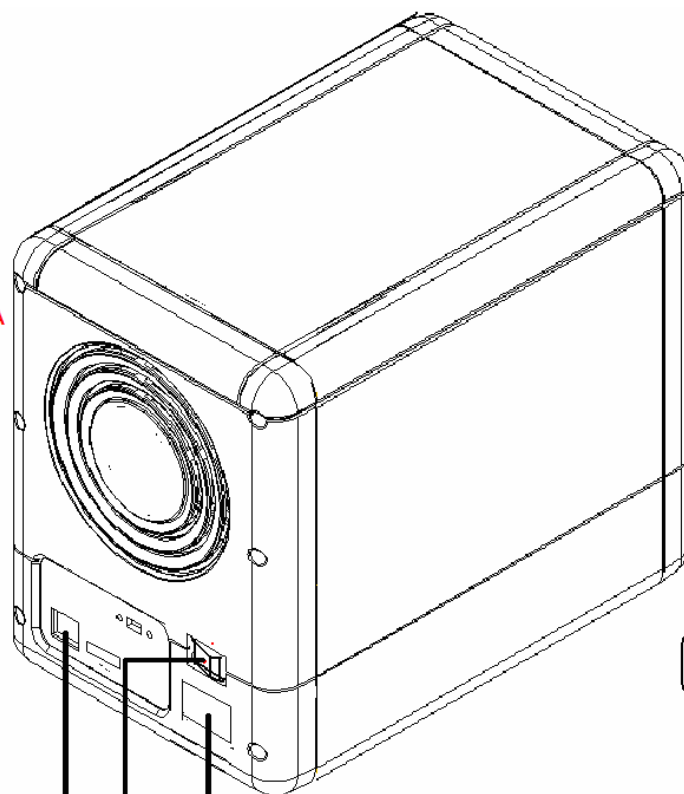
- ③ Close the front panel after Hard disk complete installed.



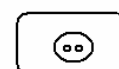
- ④ Connect either USB2.0 or eSATA Cable in to computer.



- ⑥ Turn on the power switch.



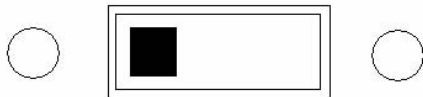
- ⑤ Connect power cable.



5. System startup function (Only Available in USB2.0 interface)

System start up function is to synchronize the Quad BAY RAID box power with PC power, it turns on automatically while PC turns on, and vice versa when PC turns off.

This function only support in USB2.0 Mode, Please switch off at all time while connect to eSATA port.



ON<-> OFF
System Startup



Supported in USB2.0
switch on to activate.



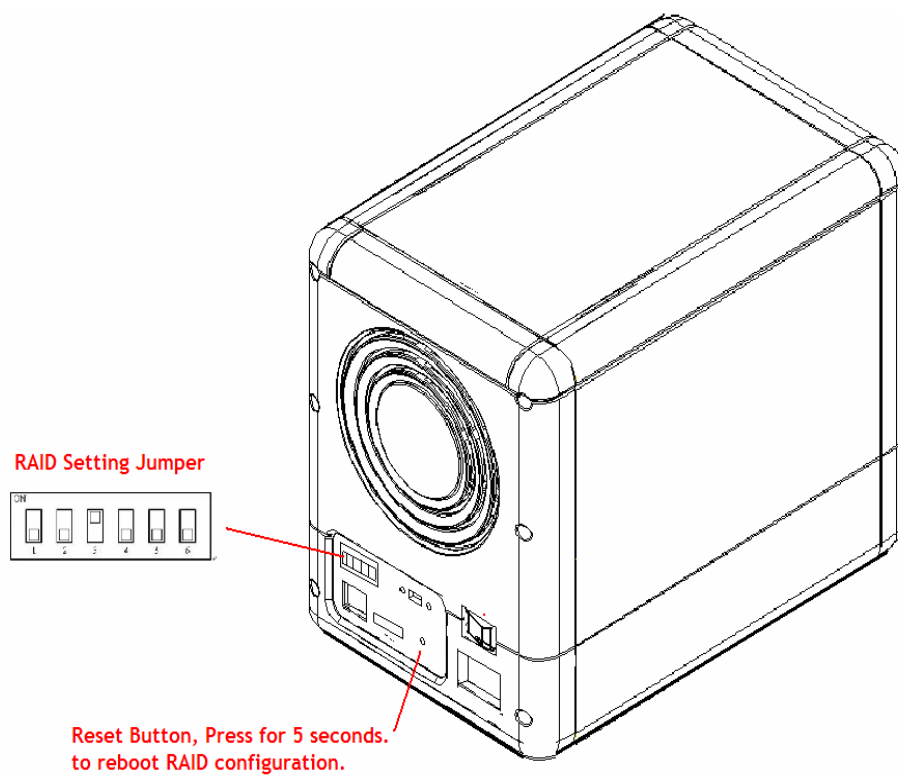
ON<-> OFF
System Startup



Not supported in eSATA
switch off when use eSATA port.

6. Setting up RAID level.

USB2.0+ eSATA QUAD-BAY RAID BOX support Hardware RAID function, allow user easily setup form JBOD, RAID 0, and RAID 0+1 to suit individual needs.



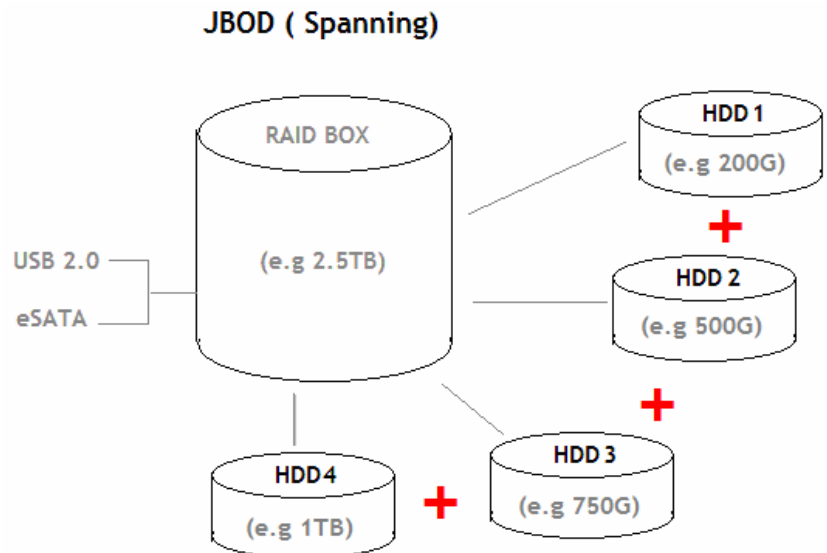
Important info:

All data will be lost after change RAID settings. Therefore, please back-up your data before running RAID level change.

a. JBOD Mode (Spanning)

HDD Required: 2-4 HDD

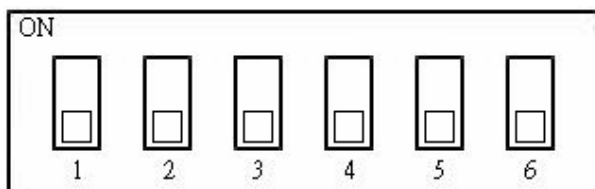
The RAID Box shows up as one large single volume. Spanning is an array which written sequentially across the drives, it does not provide any performance redundancy benefits, use this if you have installed either 2 , 3 or 4 hard drivers with different capacities.



Step1: Insert two or four hard disk drive.

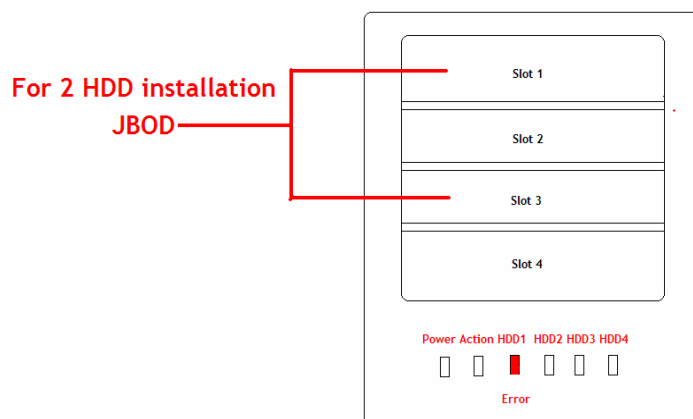
Step2: Power on the Quad BAY RAID Box.

Step3: Adjust the switch to the indication below:



Step4: Press the reset button for 5 seconds. RAID box will reboot automatically and change the JBOD mode.

Important info: For 2 HDD installation in JBOD mode, Please install in slot 1/3

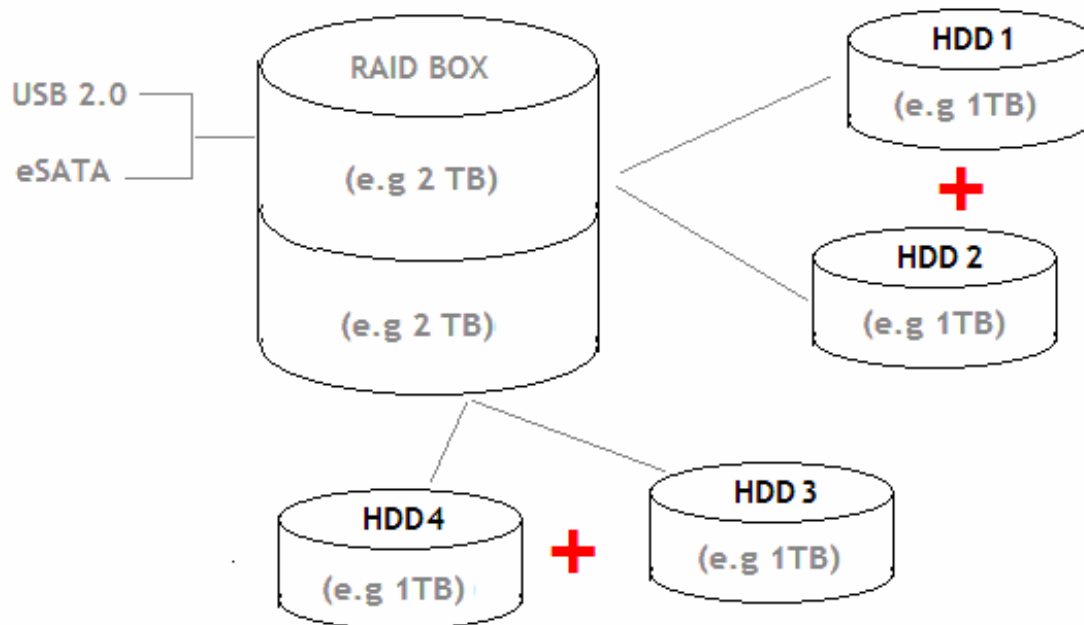


B. 2 x JBOD Mode

HDD require: 4 HDD (when HDD capacity over 750GB)

Due to the HDD capacity support limitation from Microsoft windows, single drive volume can only shows up to 2TB in Microsoft Windows, therefore to be able to support 4 x 750GB capacity or above hard drive in Microsoft windows the 2 x JBOD mode is required.

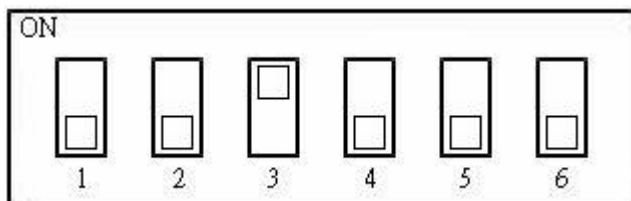
2 X JBOD Mode



Step1: Insert 4 hard disk drive.

Step2: Power on the unit.

Step3: Adjust the switch to the indication below:



Step4: Press the reset button for 5 seconds. RAID box will reboot automatically and change the 2 x JBOD mode.

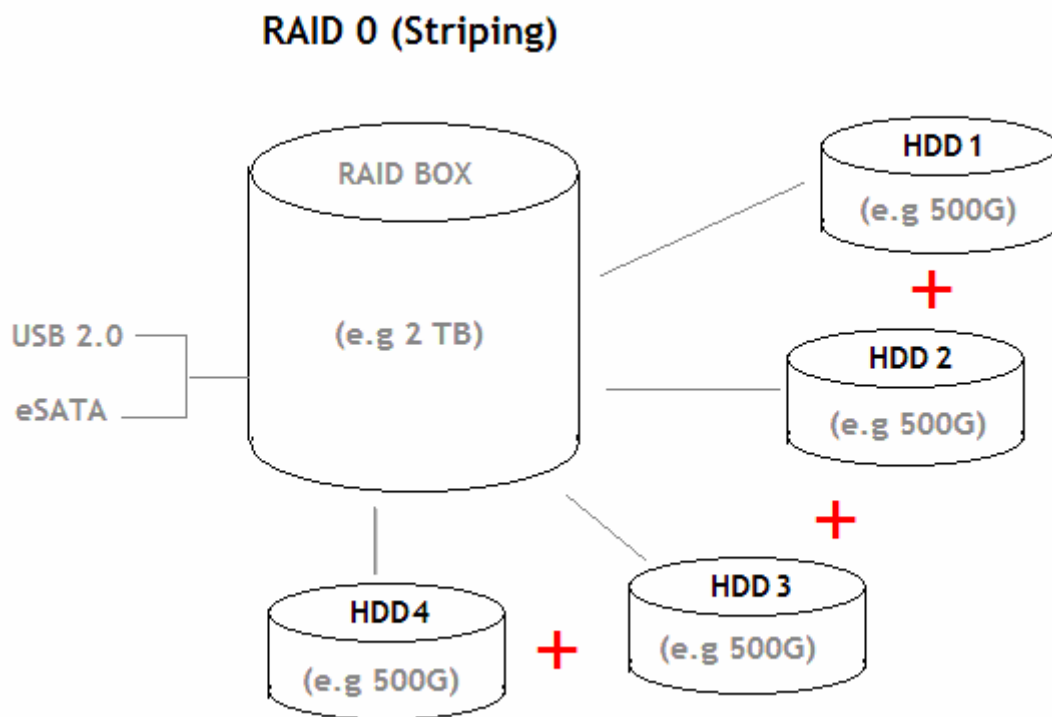
Important info:

For Windows VISTA 64 bit version, it **"Do Not"** have 2TB limitation support problem.

C. RAID 0 (striping+striping)

HDD required: 4 HDD

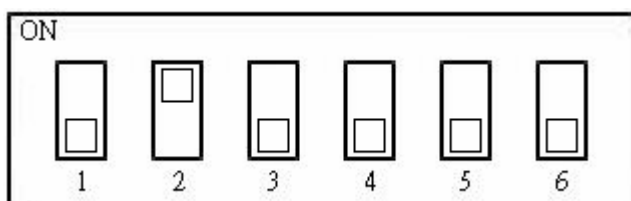
The drives show up as one large single volume. This mode requires 4 identical drives to implement. Used where speed is the primary objective, RAID Level 0 (also called striping) is not redundant. This form of array splits each piece of data across the drives in segments; since data is written without any form of parity data-checking, it allows for the fastest data transfer of all other modes. However, if one drive becomes damaged, the whole array can become corrupted.



Step1: Insert at least four hard disk drive.

Step2: Power on the Quad BAY RAID Box.

Step3: Adjust the switch to the indication below:



Step4: Press the reset button for 5 seconds. RAID box will reboot automatically and change the RAID 0 mode.

Important info:

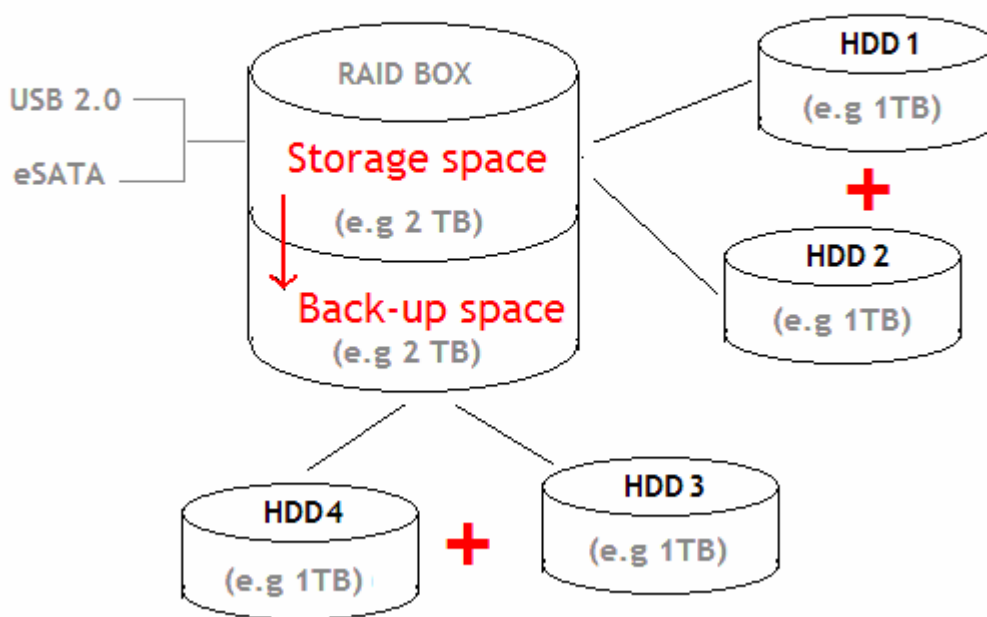
For the RAID 0 mode, hard drives of identical capacity and make are recommended! If the capacity is different, the total amount of the space that can be used will depend on the drive with the smallest capacity..

D .RAID 0+1 (Mirroring + Striping)

HDD required: 4 HDD

The drives show up as one single volume. This mode requires 4 identical drives to implement. RAID 1 creates an exact copy (or mirror) of a set of data. This is useful when reliability and backup are more important than data capacity. The available capacity to the user will only be as large as 50% of the total capacity of all drives combined but when one hard drive fails, it can be replaced and the data rebuilt automatically.

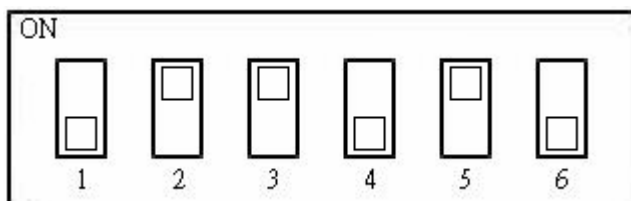
RAID 0+1 (Mirroring + Striping)



Step1: Insert four hard disk drive.

Step2: Power on the Quad BAY RAID Box.

Step3: Adjust the switch to the indication below:



Step4: Press the reset button for 5 seconds. RAID box will reboot automatically and change to the 0+1 mode.

Important info:

To use RAID 0+1 mode the hard drives of identical capacity and maker are recommended! If the capacity is different, the total amount of the space that can be used will depend on the drive with the smallest capacity.

6. Rebuilding data (Only in RAID 0+1 mode)

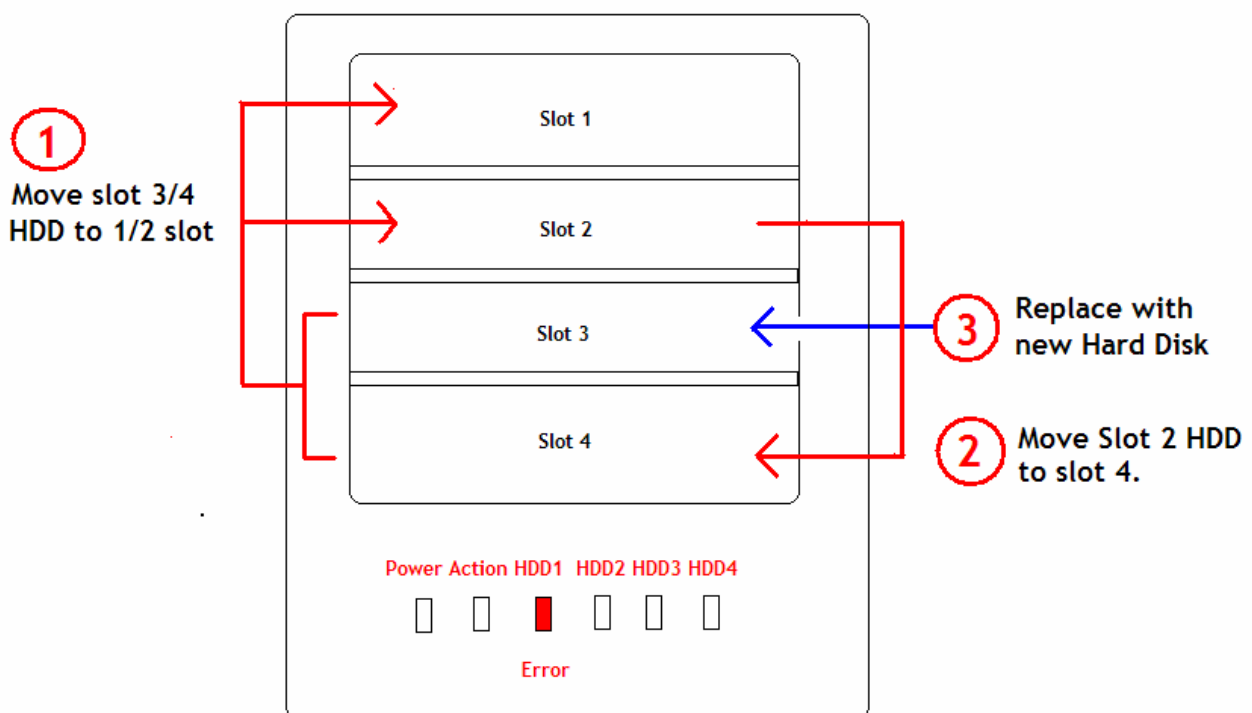
Under the RAID 0+1 mode when one hard drive fails, after replaced with new one the data goes to rebuilt automatically. Simply follow the steps below:

Step1. Make sure fail HDD slot number, if fail happened in slot 3 & 4, simply replace with new HDD drive for data rebuilding.

Step2. when fail happened in Slot 1 & 2 please remove both HDD, and swap slot 3 & 4 hard disk in to Slot 1 & 2 to become master recovery disk.

Step3. Replace with new dick drive in slot 3 or 4 for data rebuilding.

Below is the example when slot 1 HDD fails.



7. Technical Tips:

(1) USB2.0 +eSATA QUAD HDD Enclosure is using Silicon image chipset, and support latest port-multiplier specification, and therefore, host card must support either port-multiplier function or follow INTEL ICH9 specifications. (e.g. Silicon image host controller SLi3124, SLi3132, or SLi3531)

(2) We highly suggest user in order to perform RAID 0+1 (Mirroring + Striping) mode must install same capacity HDD at the same time, otherwise system is likely to rebuilding the HDD every time restart the device.