

CENMATE



10 Bay USB 3.0 /eSATA RAID/JBOD Enclosure

PRODUCT INSTRUCTION

Model: 810RU



【Quality Assurance】 Cenmate provides lifetime technical support. Please don't hesitate to contact us if you have any questions about the product, we reply and solve your problem within 24 hours.

Technical Support Contact:
cenmate23@outlook.com

【Low Heat】 The hard drive enclosure with Aluminum-Alloy materials and built-in 2.7 Inch Fans provide better heat dissipation, maximize the security of your data. Fan noise is around 40-60 decibels, not recommended if you are sensitive to noise.

Qusetion

Q1: After connecting new hard drive to the computer, why can't I find the hard drive and display the disc letter?

A1: After the new hard drive is connected to the computer, it must be formatted before the system can be recognised and used.

Method of operation: First, right-click 'Computer', then click 'Management', open into the 'Disk Management', find the new hard drive, right-click 'Initialisation 'Select 'MBR (hard drive capacity less than or equal to 2TB)' or 'GPT (more than 2TB)', then 'New Simple Volume', the default next step to format the partition. Formatting is completed after the hard drive can be used normally, showing the new disc symbols.

Q2: The hard drive appears in RAW format in Disk Management due to improper extraction or power failure. What should I do?

A2: Recovery through the chkdsk command; operation method: administrator identity run cmd input CHKDSK i:f enter (here the i is the disk letter of the disk), scanning and repair is complete reboot can be displayed.

Q3: The hard drive is dynamically invalid in Disk Management since it was previously removed from an old computer?

A3: This is due to your system. Reinstall the hard drive into the original computer motherboard, and then backed up the data format; If your old computer has been scrapped or can't get into the system, you can download a dynamic drive conversion software to convert directly to a basic drive.

Q4: Hard drive just shows up but no disc letter?

A4: Inside Disk Management, right-click on the Disk Partition section and select Change Disk Path and Name to add a disk name for use.

Q5: It automatically disconnects during transmission and then connects itself after a while?

A5: It may be problems of usb interface on computer, usb cable, computer usb driver, hard drive, or hard drive cabinet. You need to contact our technicians to check the problems one by one.

Product Specifications

HDD Supported	Supports standard 2.5/3.5 inch SATA I/II/III HDDs and SSDs
Cooling Fan	2.7 Inch Cooling Fan
Interface	USB 3.0 Interface , eSATA
Max. Transfer Rate	5Gbps
OS Support	Windows 2000 or above, MAC OS 10.3 or above, and Linux
Power Adapter	12V Power Adapter
Enclosure	Extruded Aluminum Case
Dimension	205x132x335mm
Note	HDD/SSD is not included

CONTENT

1. 10 Bay USB 3.0 /eSATA RAID/JBOD Enclosure
2. Mounting screws and screw driver
3. USB 3.0 B/ A To C Cable
4. eSATA Cable
5. 12V Power Supply
6. User Manual

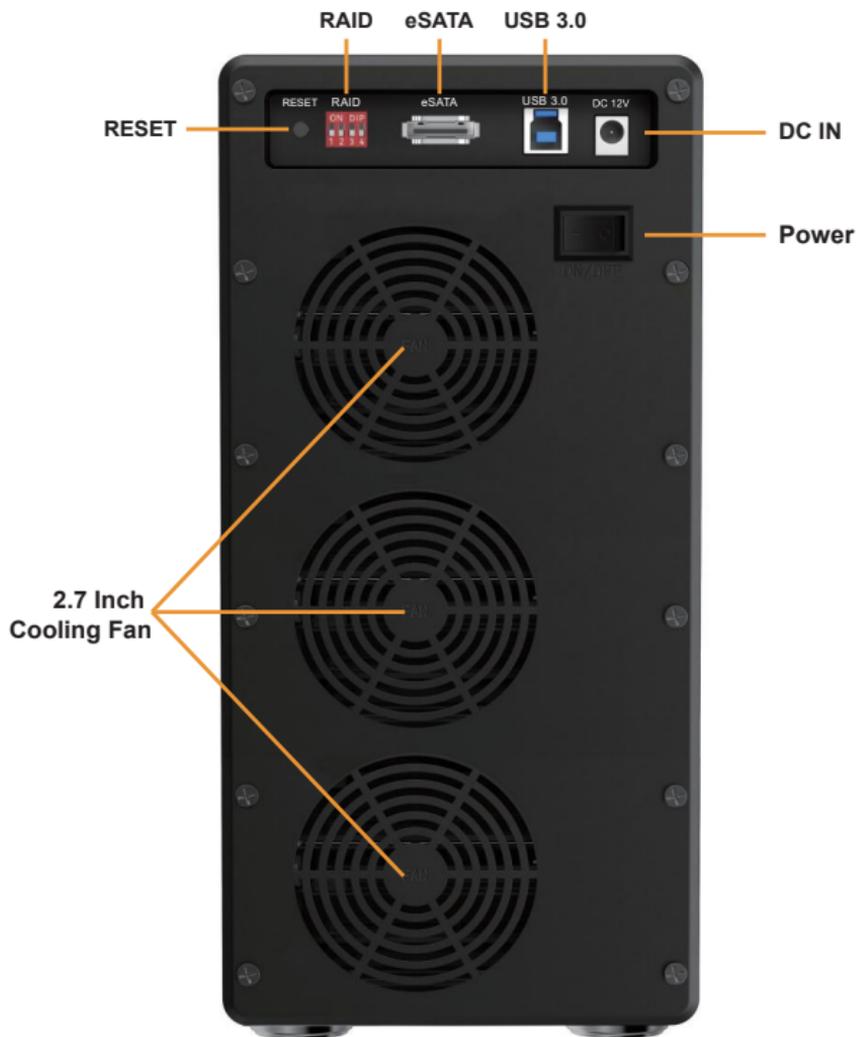
How to use

NOTE:

Detailed installation video is available on the Amazon product page for your reference.

- 1.Pull out the tray
- 2.Install the HDD/SSD
- 3.Connect USB to the computer
- 4.Plug in the power supply, turn on the power switch
- 5.The fan rotates and the hard drive light is on indicating that it is normal and you can start using it.

Feature



1. ON/OFF: Power
2. DC IN: 12V Power Supply
3. USB 3.0: USB 3.0 (MAX 5Gbps)
4. RAID: RAID Level Settings
5. RESET : Reset Button
6. eSATA: eSATA (MAX 3Gbps)
7. Cooling Fan: 2.7 Inch Fan

Steps for Installing a Hard Drive

3.5' HDD Installation

①



Pull up the blue clasp on both sides of the bracket.

②



Put hard drive gently, snap the carabiner pins into the 3.5 HDD side screw holes.

2.5' HDD/SSD Installation

①



Remove blue clasp on the side by screwdriver.

②



Use screws to secure the 2.5' HDD/SSD in the corresponding holes.

Lighting Display Instructions



3.5 HDD/2.5 SSD light prompts

① ③

⑤ ⑦

⑨ ⑪

⑬ ⑮

⑰ ⑲

The connection light is always on blue.
(indicating a normal connection)

② ④

⑥ ⑧

⑩ ⑫

⑭ ⑯

⑱ ⑳

Read / Write light flashes red.

Partition and Format

Note: Formatting is only required for new drives



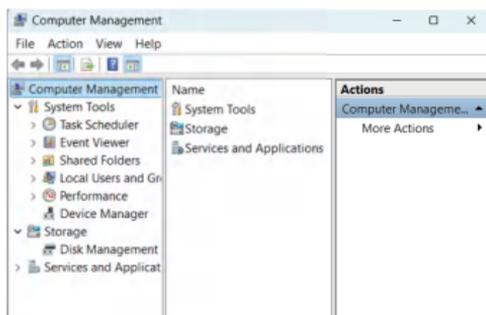
NOTE:

Please follow below information on how to partition and format the drives before use



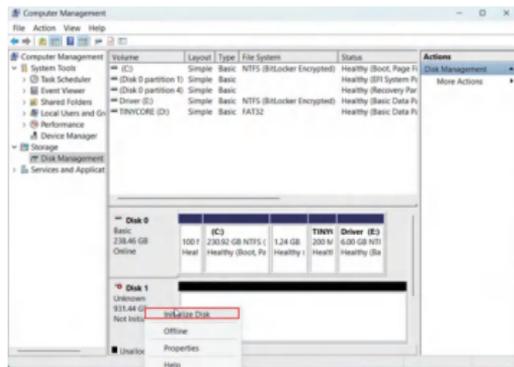
NOTE:

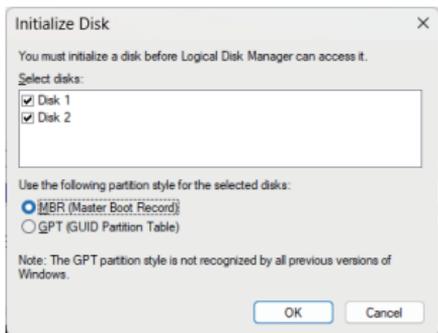
Data will be lost when you reset the unit.



Right click on “My Computer” icon and select “Manager”. When this window appears, select “Disk Management”.

Right click on the disk on “New Volume” and select “Initialize Disk”.





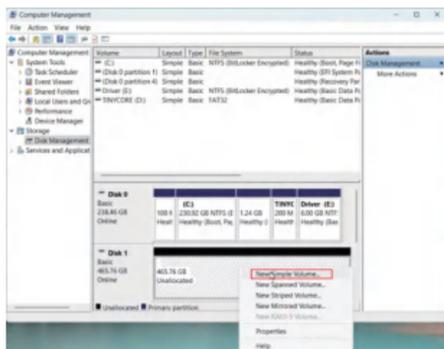
Select the new drive to start with the configuration.

Select:

MBR (hard drive capacity less than or equal to 2TB)

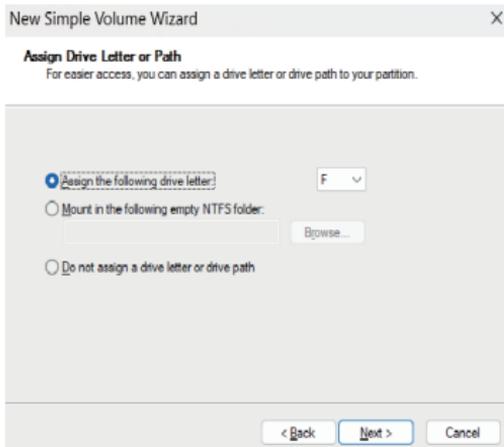
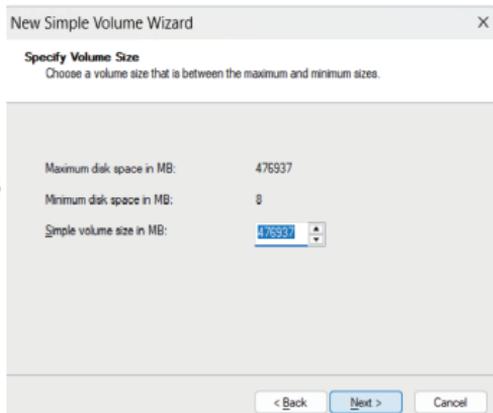
GPT (bigger than 2TB)

When new drive appears, right click on it and select “New Simple Volume”



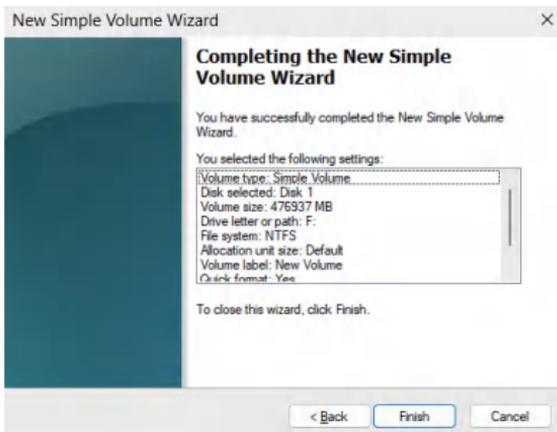
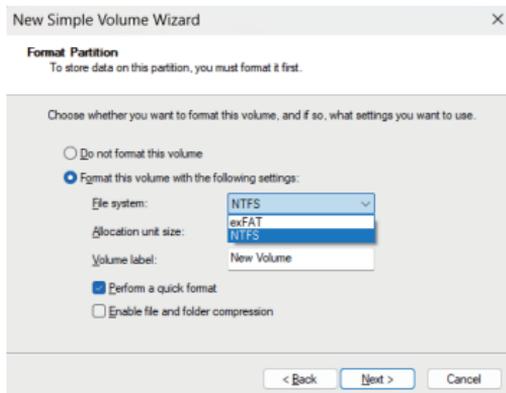
When the wizard window appears, click on [Next].

Select the partition size
We recommend to use as
maximum and click on
[Next].



Select the drive letter to
a sign the hard drive
and click on [Next].

Select the format settings: NTFS or "FAT 32", "DEFAULT" and Volume Label (Select the features that you need to format: "FAT32", "Predetermined", the hard drive label that you need (example:"New Volume") and "Perform a quick format".



New partition is complete and your hard drive is ready to be used. Click on [Finish].

RAID Level Settings

Please note the following when entering RAID settings



After the RAID, the hard drive is quite initially bought back, need to be initialized, after formatting, the partition can be used normally.



After resetting the RAID , press and hold the “Reset” button for 5 seconds while the power is on.



If you frequently switch between Mac and Windows systems, format the hard drive using the exFAT file system.

NORMAL / PM10



*Each works as a single hard disk, and the data is transferred individually to each hard drives.

*Switch 1,2,3 is on and Switch 4 is off
(Switch 1,2,3 up & Switch 4 down)

JBOD (LARGE) Mode



* JBOD mode (Spanning) join 10 hard drives capacity to provide a large volume.

No performance or redundancy in this mode

* Switch 1,3 is on and Switch 2,4 is off
(Switch 1,3 up & Switch 2,4 down)

JBOD*2 (LARGE*2) Mode

* JBOD*2 mode (Spanning) join 5 hard drives capacity to provide a large volume.

And divided into two groups

(five hard drives in one group) of capacity

No performance or redundancy in this mode

* Switch 3 is on and Switch 1,2,4 is off
(Switch 3 up & Switch 1,2,4 down)



RAID 0*2 Mode

* RAID 0*2 mode (Stripping) provides best performance, combining both drives for read/write to both drives.

And divided into two groups

(five hard drives in one group) of capacity

* Switch 1,2,3,4 is off (Switch 1,2,3,4 down).



RAID 00 Mode



* RAID 00 mode (Striping) provides best performance, combining one drives for read/write to one drives.

(ten hard drives in one group) of capacity

* Switch 1 is on Switch 2,3,4 is off

(Switch 1 up & Switch 2,3,4 down).

RAID 5*2 Mode



*RAID5*2 takes into account various factors such as storage performance, data security, and storage cost.

And divided into two groups

(five hard drives in one group) of capacity

* Switch 2 is on Switch 1,3,4 is off

(Switch 2 up & Switch 1,3,4 down).

RAID 50 Mode



*RAID50 takes into account various factors such as storage performance, data security, and storage cost.

(ten hard drives in one group) of capacity

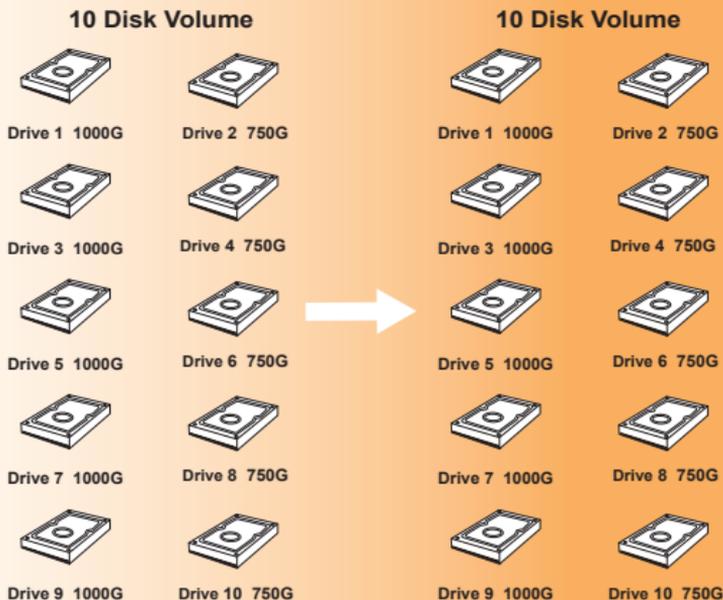
* Switch 1,2 is on Switch 3,4 is off

(Switch 1,2 up & Switch 3,4 down).

RAID Mode Status Description

NORMAL / PM10

(*A movement state of HDD)



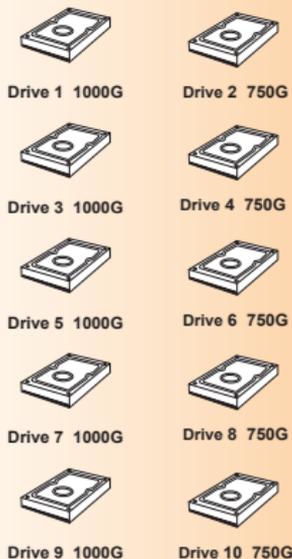
The operating system recognizes each as a single drive and uses the hard drives independently.

JBOD (LARGE) Mode

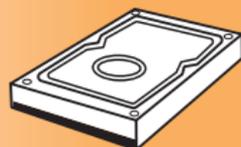
(*A movement state of HDD)



10 Disk Volume



1 Disk Volume

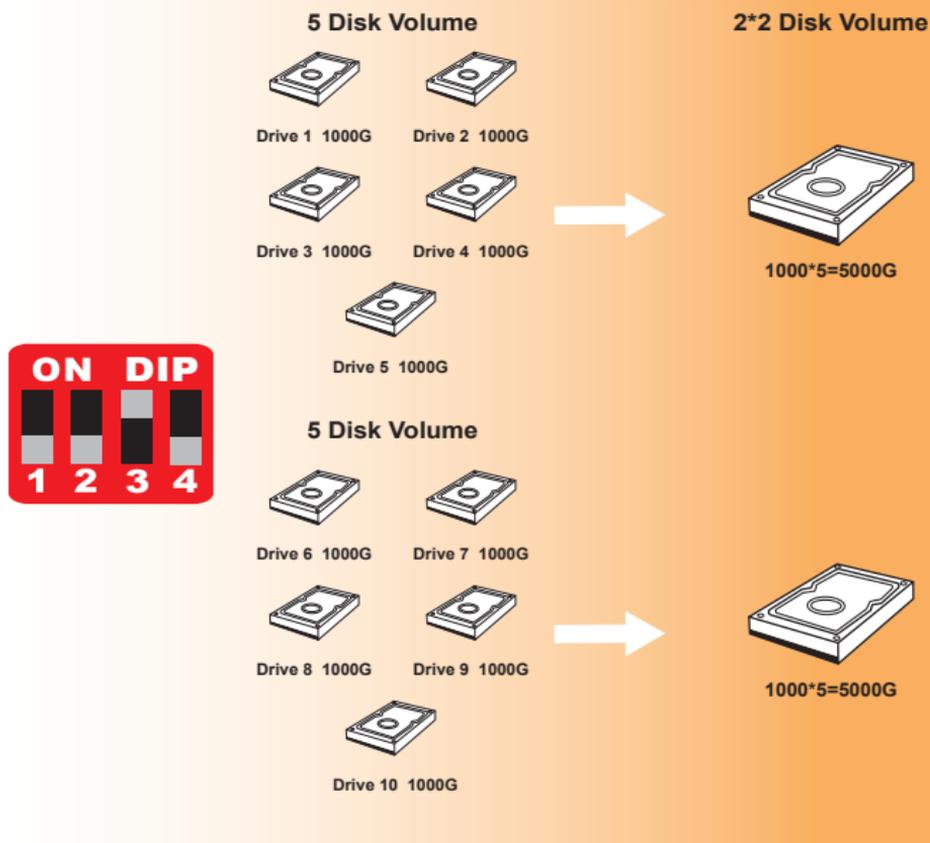


$$1000*5+750*5=8750G$$

The operating system recognizes ten hard drives as a single hard drive.

JBOD*2 (LARGE*2) Mode

(*A movement state of HDD)

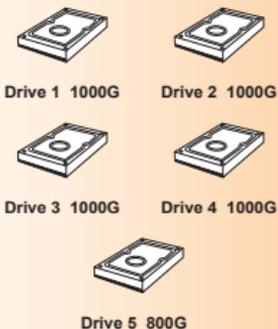


The operating system recognizes the five hard drives as a single unit, which can be divided into two groups.

RAID 0*2 Mode

(*A movement state of HDD)

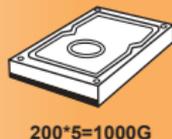
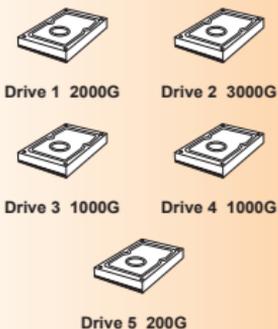
5 Disk Volume



2*2 Disk Volume



5 Disk Volume



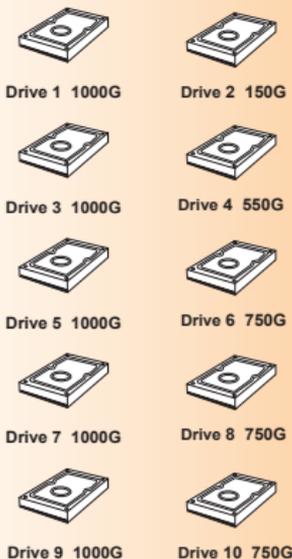
The operating system identifies the smallest hard drive among the five as a single unit, which can be divided into two groups.

RAID 00 Mode

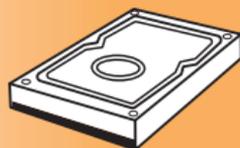
(*A movement state of HDD)



10 Disk Volume



1 Disk Volume

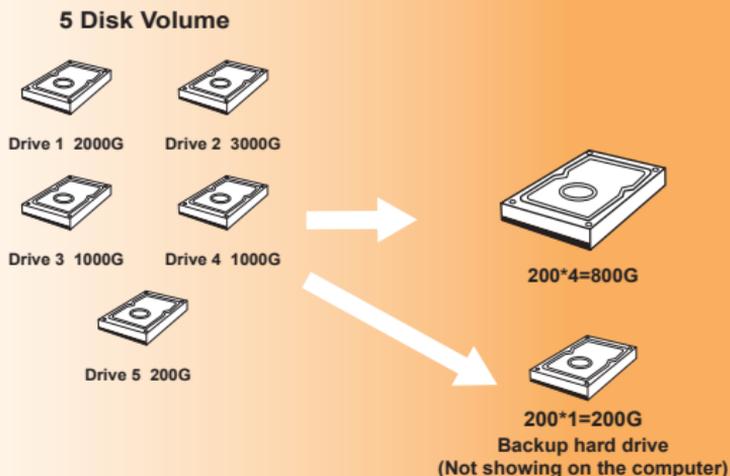
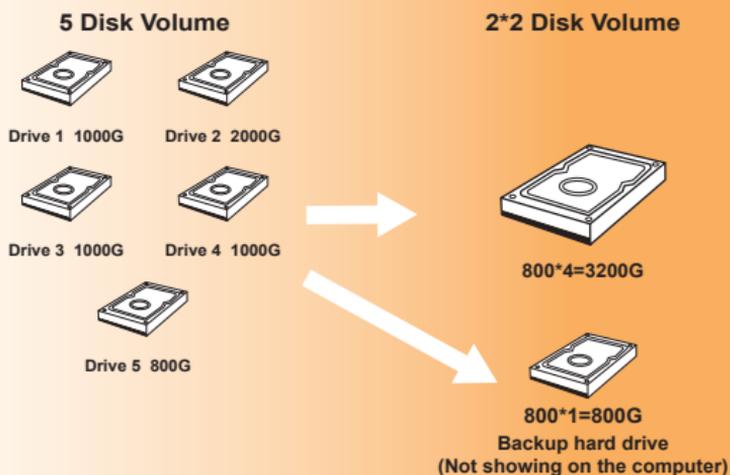


150*10=1500G

The operating system identifies the smallest hard drive among the ten as a single hard drive.

RAID 5*2 Mode

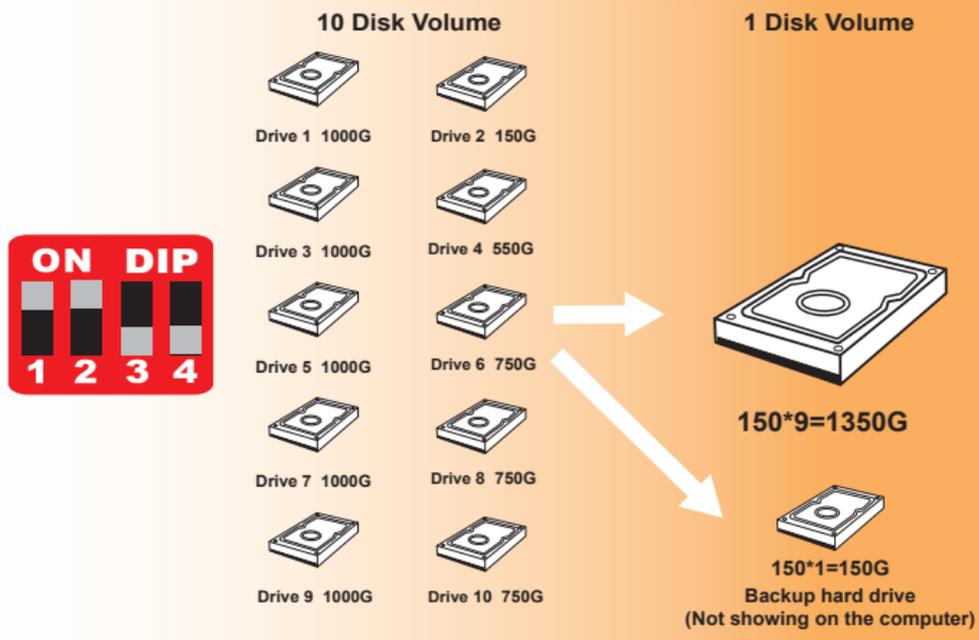
(*A movement state of HDD)



The operating system identifies the smallest capacity hard drive among the five as part of a four-drive array, with the remaining drive functioning as an independent backup drive. This configuration can be set up in two groups.

RAID 50 Mode

(*A movement state of HDD)



The operating system identifies the smallest capacity hard drive among the ten as one of nine drives forming a single array, with the remaining drive functioning as an independent backup drive. This configuration can be set up in two groups.

Data Testing and Reading Speed



10*3.5 HDD read/write speed is between 20-80MB/s

1 * 3.5 HDD read/write speed is between 200-300MB/s

2 * 3.5 HDD read/write speed is between 200-300MB/s

3 * 3.5 HDD read/write speed is between 100-200MB/s

4 * 3.5 HDD read/write speed is between 100-200MB/s

5 * 3.5 HDD read/write speed is between 80-100MB/s

6 * 3.5 HDD read/write speed is between 70-100MB/s

7 * 3.5 HDD read/write speed is between 70-100MB/s

8 * 3.5 HDD read/write speed is between 40-80MB/s

9 * 3.5 HDD read/write speed is between 30-80MB/s

Troubleshooting Self-checking Steps

1. Check if the device (hard drive) connected to the product is faulty. Connect to the SATA slot on the motherboard via a SATA hard drive to check the status. Verify that the hard drive is partitioned and formatted properly.
2. If connected to a PC, check the status of the PC. Check that the PC's USB port is working properly. Connect to another PC and check if the same condition occurs. Make sure your PC is not infected with virus.
3. Check the USB cable or adapter of the product. Use an extra USB cable (USB used for the printer) to check whether there is problem of product USB cable. Check if the adapter is faulty (if the product has a power supply).

Caution

Do not connect the 810RU and hard drive to a computer when they are not fully assembled. There is a risk of damage and electric shock to the hard drive.

We will not be liable for damages to the hard drive used in connection with this equipment. We will not be liable for loss of data recorded on the hard drive.

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