CENMATE

Hybrid 2*3.5 HDD+3*M.2 NVMe Enclosure for 2.5/3.5" SATA HDD/SSD and 2230/42/60/80/110 (Support RAID 1/0/JBOD/NORMAL)

PRODUCT INSTRUCTION **Model: 803SN23RAID**

【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 CHKDSKi:/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

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 2.5/3.5 inch SATA HDDs and SSDs M.2 SSD Supported Supports 2230/42/60/80/110 NVMe SSD
Cooling Fan	2.7 Inch Cooling Fan
Interface	USB 3.2
Max. Transfer Rate	10Gbps
OS Support	Windows 2000 or above, MAC OS 10.3 or above, and Linux
Power Adapter	12V Power Adapter
Enclosure	Extruded Aluminum Case
Dimension	205x130x112mm
Note	HDD/SSD is not included

CONTENT

1. Hybrid 2*3.5 HDD+3*M.2 NVMe Enclosure
2. Mounting screws and screw driver
3. USB 3.2 A/C Cable
4. 12V Power Supply
5. User Manual

How to use

1.Pull out the tray

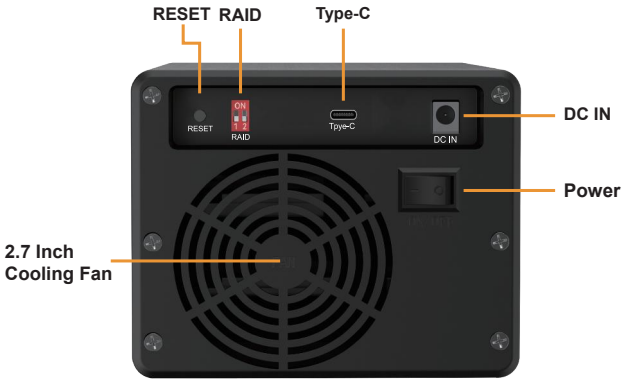
2.Install the HDD/SSD and M.2 SSD

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.

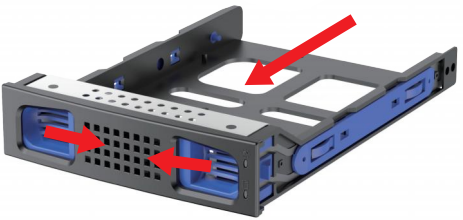
Feature



1. ON/OFF : Power
2. DC IN : 12V Power Supply
3. Type-C : USB 3.2 (MAX 10Gbps)
4. RAID : RAID Level Settings
5. RESET : Reset Button
6. Cooling Fan : 2.7 Inch Fan

Steps for Installing a Hard Drive

Bracket Removing



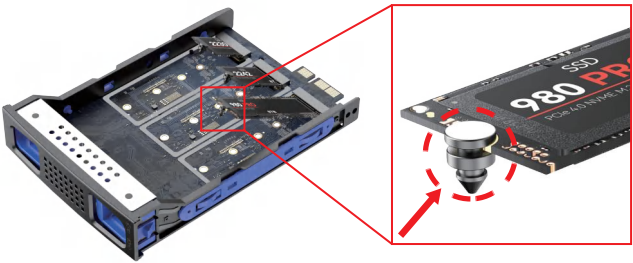
Squeeze the blue spring clip to wards the centre and pull the bracket outwards.

M.2 SSD Installation

①

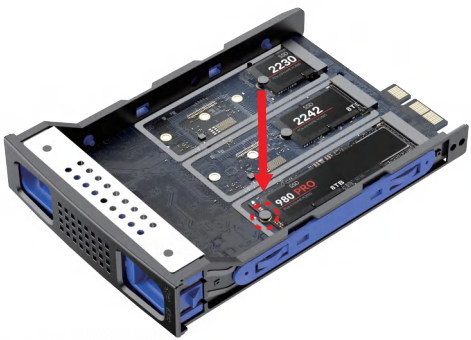
Insert M.2 SSD into slot until they cocked.

②



Snap the rubber plug into the metal half-circle of the M.2 SSD.

③



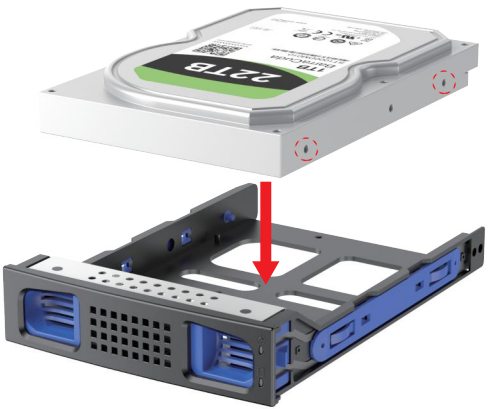
Press the rubber plug with the M.2 SSD down into the bayonet until it's secure.

3.5' HDD Installation

①

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

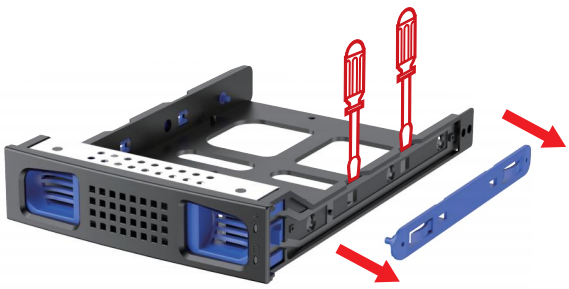
②



Put hard drive gentlely, 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

M.2 NVMe light prompts

① M.2-1 and M.2-2 share this light, when connected red +blue, will show purple light.

① The blue light is the M.2-1 light, it will always on when connected, flashes when read/write.

① The red light is the M.2-2 light, it will always on when connected, flashes when read/write.

② The red light is for M.2-3 light, it will always on when connected, flashes when read/write.

3.5 HDD/2.5 SSD light prompts

③ ⑤ The connection light is always on blue. (indicating a normal connection)
(When there is incompatibility or damage on your hard drive, the blue light will show red)

④ ⑥ Read / Write light flashes red.

Partition and Format

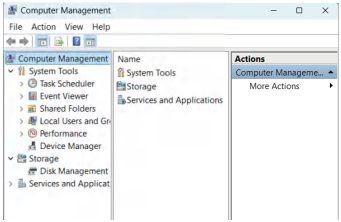
Note: Formatting is only required for new drives

NOTE:

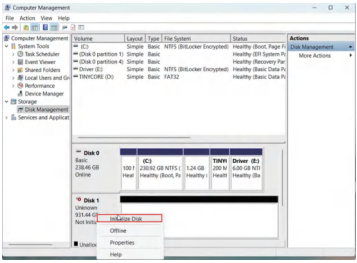
Please follow below information on how to partition and format the drives before use

NOTE:

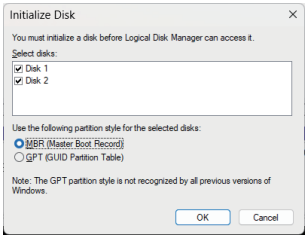
Data will be lost when you reset the unit.



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

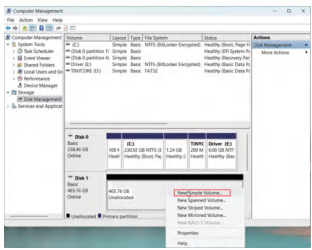


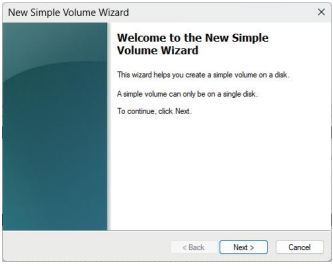
Right click on the disk on “New Volume” and select “Initialize Disk”.



Select the new drive to start with the configuration.
Select:
MBR (hard drive capacity less than or equal to 2TB)
GPT (bigger than 2TB)

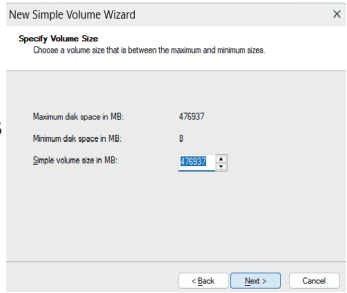
When new drive appears, right click on it and select “New Simple Volume”

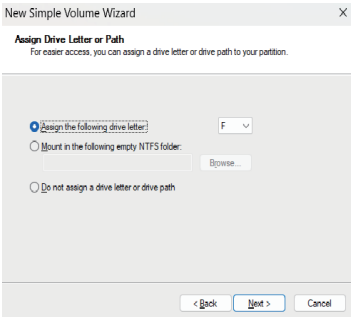




When the wizard window appears, click on [Next].

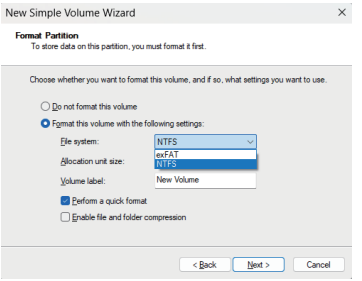
Select the partition size
We reccomend to use as maximum and click on [Next].

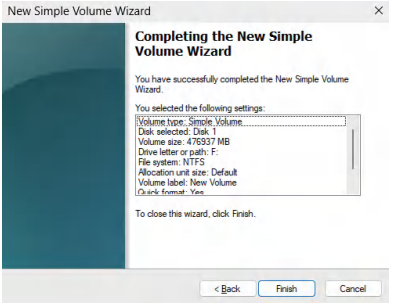




Select the drive letter to a sign the hard drive and click on [Next].

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

When the blue light is always on and the red light keeps blinking, it means that RAID1 is being rebuilt, and when the red light changes from blinking all the time to always on, it means that the RAID rebuild is complete. If you have set up RAID on other brand RAID enclosure, you can't rebuild it on our RAID enclosure.

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.

NORMAL

*Each works as a single hard disk, and the data is transferred individually to each hard drives.
*Both Switch 1& 2 are off (Both Switch 1 & 2 are down)

JBOD Mode

* JBOD mode (Spanning) join both hard drives capacity to provide a large volume.
No performance or redundancy in this mode
* Switch 1 is off and Switch 2 is on
(Switch 1 down & Switch 2 up)

RAID 0 Mode

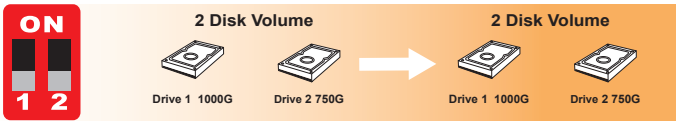
* RAID 0 mode (Stripping) provides best performance, combining both drives for read/write to both drives.
* Switch 1 is on and Switch 2 is off
(Switch 1 up & Switch 2 down).

RAID 1 Mode

*RAID 1 mode (Mirroring) will provide RAID 1 protection against HDD failure
* Switch 1 and 2 are on.(Both Switch 1 & 2 are up.)

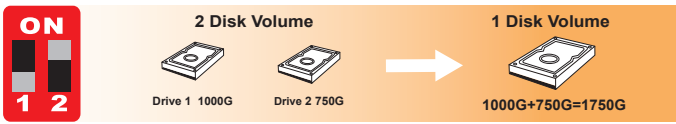
RAID Mode Status Description

Normal **A movement state of HDD**



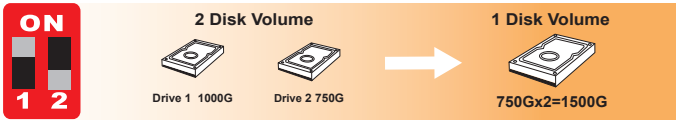
The operating system recognizes each as a single drive and uses the hard drives independently.

JBOD **A movement state of HDD**



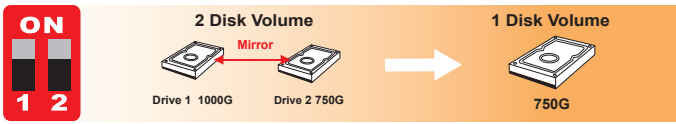
Multiple hard disks are logically combined to form a single disk, but do not offer any advantages over using each hard disk independently.

RAID0 **A movement state of HDD**



It consists of two or more hard disks that are striped and used as a single volume with a combined capacity. When recording data continuously, each hard disk alternately records or reads different data at the same time, resulting in fast transmission speeds. However, if one hard disk fails, the rest of the data stored on other hard disks will also lost!!! So data reliability is low. Utilization of RAID0 Mode: It is suitable for temporary storage data such as real-time rendering data or logs that require high performance.

RAID1 **A movement state of HDD**



Mirroring is a method of using two hard disks, each hard disk stores the same data, even if one hard disk is damaged, the data can be recovered because there is another hard disk with the same data.

RAID Setup Software

Please download 2 Bay RAID Manager for WINDOWS

Need more support, feel free to contact: cenmate23@outlook.com

Only for Windows

https://www.cenmate.com/index.php?m=home&c=Lists&a=ndex&tid=4

Data Testing and Reading Speed

2*3.5 HDD+3 * M.2 read/write speed is between 100-200MB/s

1 * 3.5 HDD read/write speed is between 100-200MB/s

2 * 3.5 HDD read/write speed is between 100-200MB/s

1 * M.2 read/write speed is between 500-600MB/s

2 * M.2 read/write speed is between 400-500MB/s

3 * M.2 read/write speed is between 200-300MB/s

Troubleshooting Self-checking Steps

1. Check if the device (hard drive) connected to the product is faulty.
Connect to the SATA or NVME/PCIE 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 (USBA-B 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 803SN23RAID 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.