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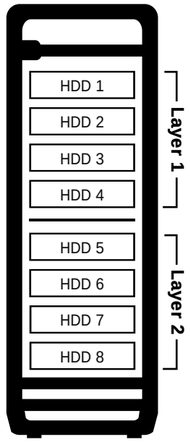
STEP 6 RAID mode setup

● Set-up

First install the HDD from up to down in the enclosure. Power on the device, press and **hold** RAID button for 3 seconds until LED flashes. Press it again, select the RAID mode you want to use and press the Confirmation Button on the rear panel till the device shuts down. Power the device on again and the RAID mode setup is completed.



Spanning Mode (BIG)

(Layer 1 and layer 2 combined and shown as 1 HDD capacity icon)

RAID MODE									
Layer	HDD No.	4 HDDs	5 HDDs		6 HDDs			7 HDDs		8 HDDs
Layer 1	1.	●	●	●	●	●	●	●	●	●
	2.	●	●	●	●	●	●	●	●	●
	3.	○	○	●	●	●	○	●	●	●
	4.	○	○	○	○	●	○	●	○	●
Layer 2	5.	●	●	●	●	●	●	●	●	●
	6.	●	●	●	●	●	●	●	●	●
	7.	○	●	○	●	○	●	●	●	●
	8.	○	○	○	○	○	●	○	●	●
		shown as 1 HDD capacity icon								

●: Installed ○: Empty Figure-1

RAID 0 (Striping Mode)

(layer 1 and layer 2 combined and shown as 1 HDD capacity icon)

RAID MODE			
4 HDDs	6 HDDs		8 HDDs
●	●	●	●
●	●	●	●
○	●	●	●
○	○	●	●
●	●	●	●
●	●	●	●
○	●	●	●
○	○	●	●
shown as 1 HDD capacity icon			

●: Installed ○: Empty Figure-2

2 X Spanning (BIG)

(layer 1 and layer 2 shown individually as 1 or 2 HDD capacity icons)

2 X RAID 0 (Striping)

(layer 1 and layer 2 shown individually as 1 or 2 HDD capacity icons)

RAID MODE															
Layer	HDD No.	2 HDDs		3 HDDs		4 HDDs			5 HDDs		6 HDDs			7 HDDs		8 HDDs
Layer 1	1.	●	○	●	○	●	○	●	●	●	●	●	●	●	●	●
	2.	●	○	●	○	●	○	●	●	●	●	●	●	●	●	●
	3.	○	○	●	○	●	○	○	○	●	●	○	●	●	●	●
	4.	○	○	○	○	●	○	○	○	○	●	○	○	●	○	●
Layer 2	5.	○	●	○	●	○	●	●	●	●	●	●	●	●	●	●
	6.	○	●	○	●	○	●	●	●	●	●	●	●	●	●	●
	7.	○	○	○	●	○	●	○	●	○	○	●	●	●	●	●
	8.	○	○	○	○	○	●	○	○	○	○	●	○	○	●	●
		shown as 1 HDD capacity icon							shown as 2 HDD capacity icons							

●: Installed ○: Empty Figure-3

2 X RAID 5

(layer 1 and layer 2 shown individually as 1 or 2 HDD capacity icons)

RAID MODE								
Layer	HDD No.	3 HDDs		4 HDDs		6 HDDs	7 HDDs	8 HDDs
Layer 1	1.	●	○	●	○	●	●	●	●
	2.	●	○	●	○	●	●	●	●
	3.	●	○	●	○	●	●	●	●
	4.	○	○	●	○	○	○	●	●
Layer 2	5.	○	●	○	●	●	●	●	●
	6.	○	●	○	●	●	●	●	●
	7.	○	●	○	●	●	●	●	●
	8.	○	○	○	●	○	●	○	●
		shown as 1 HDD capacity icon				shown as 2 HDD capacity icons			

●: Installed ○: Empty Figure-4

RAID 50

(layer 1 and layer 2 combined and shown as 1 HDD capacity icon)

RAID MODE			
Layer	HDD No.	6 HDDs	8 HDDs
Layer 1	1.	●	●
	2.	●	●
	3.	●	●
	4.	○	●
Layer 2	5.	●	●
	6.	●	●
	7.	●	●
	8.	○	●
		shown as 1 HDD capacity icon	

●: Installed ○: Empty Figure-5

2 X RAID 10

(layer 1 and layer 2 shown individually as 1 or 2 HDD capacity icons)

RAID MODE				
Layer	HDD No.	4 HDDs	4 HDDs	8 HDDs
Layer 1	1.	●	○	●
	2.	●	○	●
	3.	●	○	●
	4.	●	○	●
Layer 2	5.	○	●	●
	6.	○	●	●
	7.	○	●	●
	8.	○	●	●
		shown as 2 HDD capacity icons		

●: Installed ○: Empty Figure-6

ICY BOX

IB-RD3680SU3

8-bay external RAID enclosure
3.5” SATA I/II/III HDD

Quick Installation Guide

STEP 1 Brief Notes

● Operation System

Windows Vista (32bit/64bit) / Windows 7 (32bit/64bit)
Windows 8 (for PC version only)
(under MBR partition, supports total capacity up to 2 TB only)
Windows Vista (32bit/64bit) / Windows 7 (32bit/64bit)
Windows 8 (for PC version only)
(with GPT partition enabled, supports total capacity of more than 2TB)
Mac OS X 10.8 or later

● Operation Environment

Temperature 0 ~ 50 °C Humidity 90 % RH

● References

1. Smart fan controlled by the built-in thermal sensor and it comes with 2 modes (auto / manual) and 3 levels of speed:
   Level 1: higher than 55 °C 2,500rpm ~ 3,500rpm
   Level 2: 45 °C ~ 54 °C 1,800rpm ~ 2,500rpm
   Level 3: below 45 °C 1,200rpm ~ 1,800rpm
2. Support USB transfer speeds up to Super Speed (5 Gbit/s), eSATA transfer speed (1.5~3.0 Gbit/s)
3. Changing the RAID mode will cause data lost.
4. Please refer to the instructions when switching the RAID mode, otherwise the execution might fail.
5. Interface of USB / eSATA can not be used at the same time.
6. When using RAID function, HDDs with the same brand, model and capacity is strongly recommended.
7. Under Windows Vista / 7, users can enable GPT when initializing HDD with a total capacity of more than 2 TB.

STEP 2 Reminders

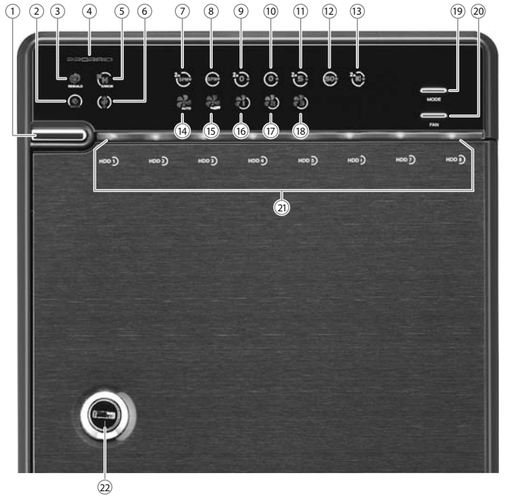
- Follow all instructions.
- Do not place this device near water.
- Clean only with dry cloth.
- Do not block any ventilation openings.
- Install in accordance with the manufacturer’s instructions.
- Do not place near any heat sources such as radiators, heat registers, stoves, or the devices (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon them or against them.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the devices has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the devices, the devices has been exposed to rain or moisture, does not operate normally, or has been dropped.
- Carefully read and follow the Quick Install Guide and User Manual.
- Do not drop or shake the device.
- Do not move the device when it is powered on.
- Do not overload wall outlets.

Please visit our website for latest manual

http://www.raidsonic.de

STEP 3 Front Panel Overview

● LED Indication / Button



Descriptions

1. Power button It needs to be pressed and **held** for 3 seconds to power off.
   ❗ This design prevents accidental power off.
2. eSATA in use / access
3. Rebuild
4. Blue Power on
   Orange Sleep mode
5. HDD error When any of HDD1~HDD8 has error, HDD error is on.
6. USB in use / access
7. 2 x Spanning Mode (BIG)
8. Spanning Mode (BIG)
9. 2 x RAID 0 Striping Mode
10. RAID 0 Striping Mode
11. 2 x RAID 5
12. RAID 50
13. 2 x RAID 10
14. Smart Fan automatic mode
15. Smart Fan manual mode
16. Fan speed level 1
17. Fan speed level 2
18. Fan speed level 3
19. Mode RAID mode button needs to be pressed and **held** for 3 seconds to switch the device's RAID mode.
    ❗This design will prevent accidental execution of this function.
20. Fan button Controls auto & manual modes and fan speed from level 1 to level 3.
21. HDD1 / HDD2 / HDD3 / HDD4 / HDD5 / HDD6 / HDD7 / HDD8
    Blue active
    Purple access
    Red rebuild
22. Key slot

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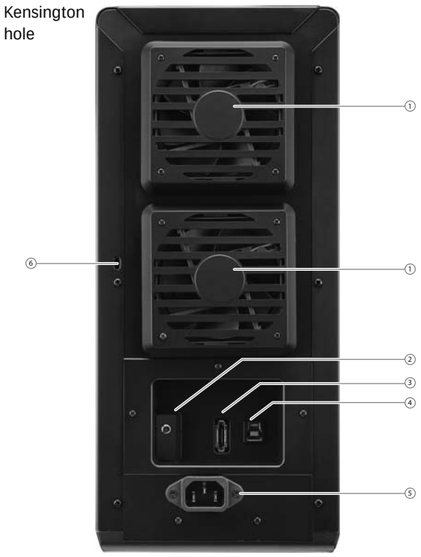
STEP 4 Rear Panel Overview

● **Rear Panel**

Descriptions

1. Fan
2. RAID Mode confirmation button
3. eSATA port
4. USB 3.0 port
5. 220 V AC Input port
6. Kensington hole

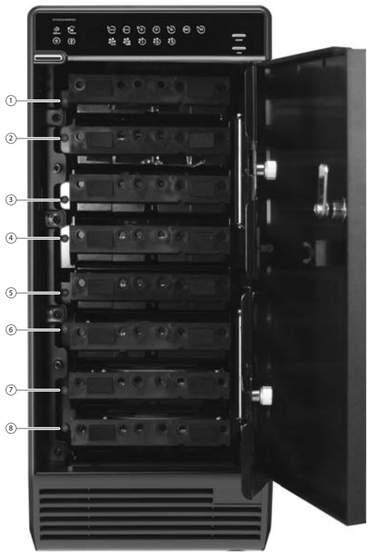


Inside Overview

● **Inside Panel**

Descriptions

1. HDD1 Error
2. HDD2 Error
3. HDD3 Error
4. HDD4 Error
5. HDD5 Error
6. HDD6 Error
7. HDD7 Error
8. HDD8 Error



● **HDD Handle**

● **Keys**

STEP 5 Quick Installation Guide

a. Please use the provided screws to secure the handles to the HDDs.

b. Unlock the cover with the key supplied and press the curricular depression to open the cover.

c. Release the inner covers anti-clockwise!

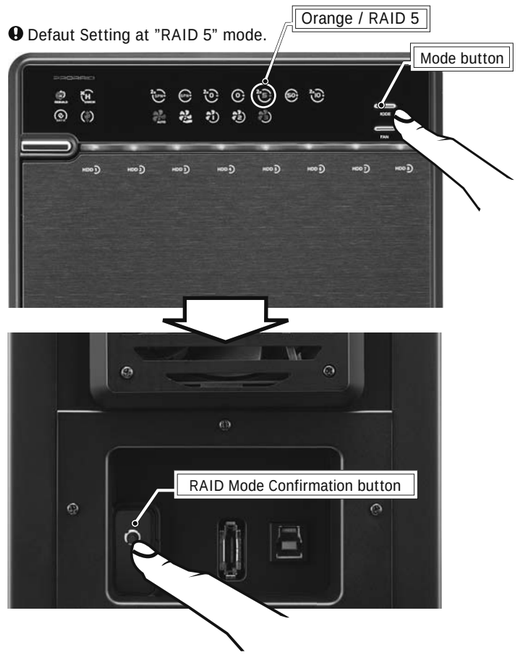
d. Install the HDDs from up to down. Please refer STEP 6 for details.

e. Close and secure the covers.

f. Plug in USB or eSATA cable.

g. RAID mode setup, users need to press and **HOLD** the "RAID" button for 3 seconds till the LED flashes, press again to change the mode.

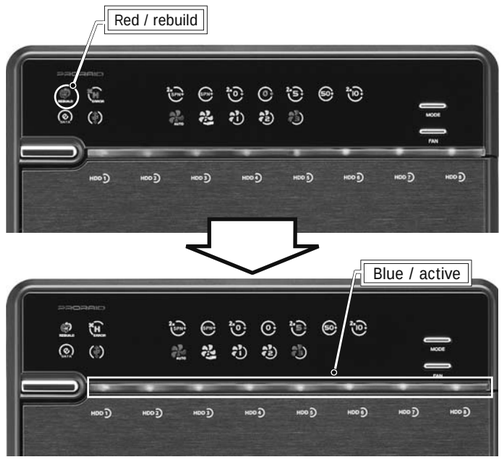
❗ Defaut Setting at "RAID 5" mode.



After selecting the RAID you want, press and **HOLD** the confirmation button in the rear panel till the device shuts down.

h. Initialize the HDD accordingly to your operating system.

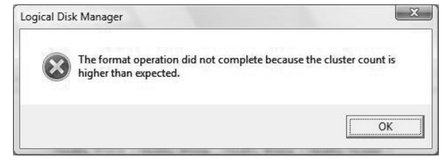
i. Rebuild time varies depending on the HDD volume, say about 1 hour for 200GB.



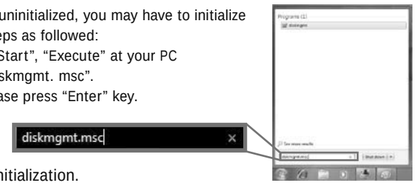
When rebuild completes, rebuild LED goes off.

❗ Trouble Shooting

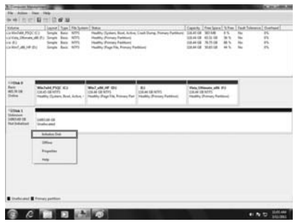
Under Windows Vista (32/64-bit) / Windows XP (64-bit), if the total capacity is more than 16 TB.



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 “Enter” key.

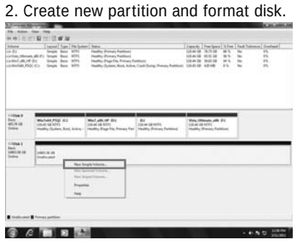


1. Start disk initialization.

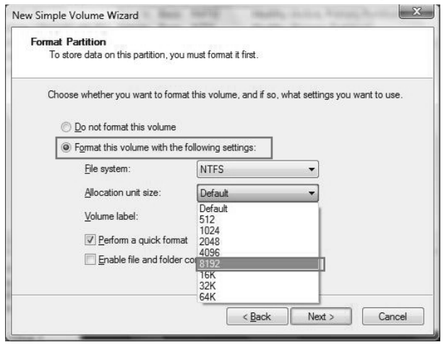


Note: Please enable GPT if the total capacity is more than 2TB and enable MBR if the total capacity is less than 2TB.

2. Create new partition and format disk.



Under Windows Vista (32/64-bit) / Windows XP (64-bit), if the total capacity is more than 16 TB, it's strongly recommend to choose “Allocation unit size” at **8192** when formatting the HDD.



Cluster size	Maximum NTFS Volume Size (bytes RAW)
512	2,199,023,255,040 (2TB)
1,024	4,398,046,510,080 (4TB)
2,048	8,796,093,020,160 (8TB)
4,096	17,592,186,040,320 (16TB)
8,192	35,184,372,080,640 (32TB)
16,384	70,368,744,161,280 (64TB)
32,768	140,737,488,322,560 (128TB)
65,536	281,474,976,645,120 (256TB)

Users could find more information about cluster allocation at : http://support.microsoft.com/kb/302873