

SOHORAID ST2-B31

User Manual

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About this Manual

Thank you for choosing the STARDOM product. This manual will familiarize you with the STARDOM ST2-B31 product. We recommend reading through this manual before using the STARDOM ST2-B31 product. The information provided in this manual was checked before publication, but the actual product specifications may have changed before shipping; Latest product specifications and updates can be found at www.STARDOM.com.tw. No separate notifications will be provided by our company. If you would like to receive the latest STARDOM product information, manuals, and firmware, or have any questions regarding STARDOM products, please contact your local supplier or visit www.STARDOM.com.tw for more information.

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1. Environmental Requirements

Operating temperature: $5 \sim 35 \,^{\circ}\text{C}$ (41 $\sim 95 \,^{\circ}\text{F}$) Storage temperature : -20 $\sim 47 \,^{\circ}\text{C}$ (-4 $\sim 116 \,^{\circ}\text{F}$)

Operating voltage: 100 ~ 240V AC

2. Product Appearance and Packaging Content

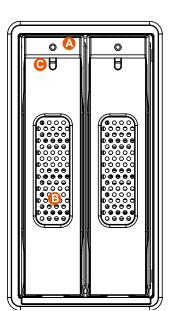
The following items should be inside the package upon opening:

ST2-B31
ST2-B31 product x1 (containing HDD enclosure x2)
USB 3.1 cable x1
Power cord x1
AC/DC adapter x1
Screws and key x2
CD x1
Quick setup guide x1

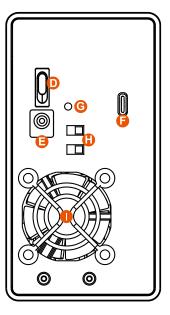
Please check the product and accessories for any defect or missing parts. If you have any questions, please contact your product supplier.

Front and rear view

Front View



Rear View



- A. HDD access light
- B. HDD enclosure handle
- C. HDD enclosure keyhole
- D. Power switch
- E. Power socket
- F. USB 3.1 port (GEN2 10Gbps)
- G. RESET hole
- H. RAID switch
- I. Fan

3. Hardware Requirements and Precautions

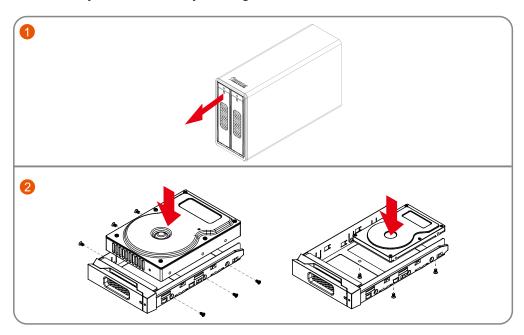
- 1. This system can only transfer data to one computer through one interface at a time.
- 2. After the hard disk is formatted, the actual total capacity of the ST2-B31 detected by the computer operating system will vary from the sum of all hard disk capacities stated by the manufacturer.
- 3. All existing data will be deleted when this product is set up for the first time. Please ensure that all data on the hard disk has been backed up before installation to avoid data loss.
- 4. Before a new HDD is installed in the ST2-B31, please make sure that there are no bad tracks or defects to avoid data loss.
- 5. If the ST2-B31 needs to be shut down or disconnected, please ensure the HDD is safely removed through your operating system before turning off the power.
- 6. To prevent data loss, do not remove any of the hard disks while the system is running.
- 7. Once the system has been initialized, do not switch hard disks around during use. Doing so may prevent the RAID from being recognized by the system.
- 8. Once RAID mode has been set up, the switching of hard drives will lead to the removal of data from the hard disks. Please be sure to backup the data on the hard disk before making any switches.
- 9. Please always connect the USB cable to the computer to ensure the energy saving function operating normally.
- 10. If the ST2-B31 needs to be shut down or disconnected, please ensure the HDD is safely removed through your operating system before turning off the power.
- 11. Once the computer turn to "Standby" or "Sleep" mode, ST2-B31 will still complete the rebuilding function. However, it will not change to "Standby" mode after rebuilding. You need to shut down the ST2-B31 manually or wake up the computer to synchronize "Standby" or "Sleep" mode together.

- 12.ST2-B31 uses a 12V/5V AC/DC Adapter. Please do not use other non-certified Power Adapter to avoid damaging to your ST2-B31 unit.
- 13.We strongly recommend backing up important data stored on the ST2-B31 to another storage device or a remote site. STARDOM will not be held liable for the damage or loss of data you stored on the ST2-B31.

4. Hardware Installation

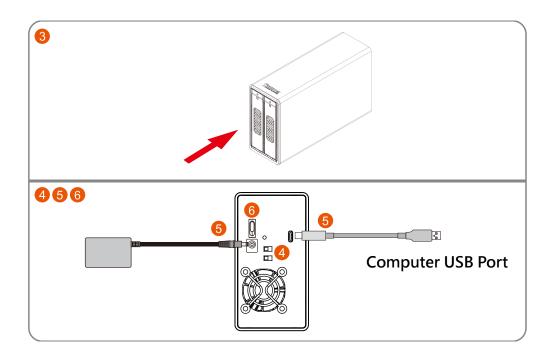
Please follow the steps below to complete the hardware installation process:

- Step 1 Use the provided key in the Accessories Kit and inserted it into the Key Access Opening to eject the Removable Drive Tray Latch and extract the Removable Drive Tray.
- Step 2 Mount your hard drives onto the removable drive tray and secure it with the screws included in the accessory kit to avoid any damage to the hard drive due to accidental movements.

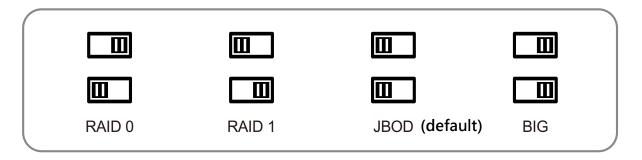


Note: Please avoid using hard disk drives from different manufacturers or different models from the same manufacturer as this may impact system performance.

- Step 3 After installing two HDDs into Trays, please insert them into ST2-B31, and then latch the handle.
- Step 4 Please set RAID mode at the back-plate of ST2-B31 unit for RAID 1, RAID 0, JBOD, and BIG.
- Step 5 Please connect the signal cable first, and then power cord later.
- Step 6 After completing hardware installation, turn on the power and follow the instruction of Disk Utility to format the two HDDs, you then could start using your new ST2-B31.



5. RAID Mode Setting



- RAID 0 : Provide a big storage capacity and the data transfer efficiency, but no data porotection feature.
- RAID 1: Because of this Mirroring feature, your two HDDs/SSDs will keep an identical data after your wtiting works. In case one of the two HDDs/SSDs is defect, ST2-B31 would still work fine with only one of them. And once inserting a good HDD/SSD as the defect replacement, it will do the rebuilding work by itself.
- JBOD: With JBOD mode, you could actually use the two HDDs/SSDs as the normal two storages for your large memory capacity requirement!
- BIG : You could enjoy a double memory capacity from this BIG feature.

The Standard Procedure to Switch RAID Setting

- Step-1: Please first connect ST2-B31 to your Mac with Thunderbolt cable..
- Step-2: Please set RAID Dip Switch to the position you choose.
- Step-3: Please use the Key to press the hidden RESET key at the back-plate, hold and wait for the end of Blue-Purple LED blinking till a stable Blue light.
- Step-4: Please turn off your ST2-B31, and re-turn it on again. You now have reset ST2-B31 with a new RAID mode successfully.

6. Description of HDD Indicators

Status	HDD Status Light		
	RAID 0, BIG	RAID 1	JBOD
HDD idle	Blue light always on	Blue light always on	Blue light always on
No HDD detected	Red light flashing	Red light flashing	Red light always on
HDD failure	Red light flashing	Red light flashing	Red light always on
RAID Failed	Red light flashing	Red light flashing	Red light always on
Data access	Blue light flashing	Blue light flashing	Blue light flashing
Rebuilding data - Source HDD	N/A	Breathing Blue Light	N/A
Rebuilding data - Target HDD	N/A	Breathing Purple Light	N/A

7. Hard Drive Replacement and Data Rebuild Instructions

- 1. During the use of ST2-B31, if you are required to replace a malfunctioning drive, refer to chapter 4"Hardware Installation". Once drive replacement is completed and it is turned on, ST2-B31 will perform data rebuilding procedure automatically.
- 2. If, during the rebuilding process, a drive malfunctions and is unable to continue the rebuilding process, please restart ST2-B31 to check and see that whether the drive is in fact malfunctioning. If it is, please refer to chapter 4 "Hardware Installation" to replace the malfunctioning drive.

Note:

ST2-B31 allows suspension during data rebuilding process. If you turn off the power during the process, the system will automatically continue to process the remains the next time you turn on the power of the unit. Please do not change the position and sequence of the drives at any time.

關於這份手冊

感謝您使用 STARDOM 的產品。本手冊將介紹 STARDOM ST2-B31 產品。在您開始使用 STARDOM ST2-B31 產品前,建議您先閱讀過本手冊。手冊裡的資訊在出版前雖已被詳細確認,實際產品規格仍將以出貨時為準;任何產品規格或相關資訊更新請您直接到 www.stardom.com.tw 網站查詢,本公司將不另行通知。若您想獲得 STARDOM 最新產品訊息、使用手冊、韌體,或對 STARDOM 產品有任何疑問,請您聯絡當地供應商或到 www.stardom.com.tw 取得相關訊息。

本手冊相關產品內容歸銳銨科技股份有限公司版權所有

1. 環境需求

工作溫度:5~35℃(41~95℉) 儲存溫度:-20~47℃(-4~116℉)

工作電壓: 100 ~ 240V AC

2. 產品外觀及包裝內容

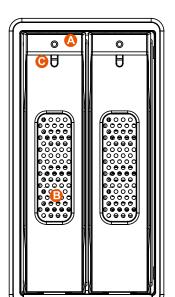
打開包裝外盒後,包裝內容應包含下列組件:

ST2-B31				
ST2-B31 產品本體 x1(內含抽取盒 x2)				
USB 3.1 連接線 x1				
電源線 x1				
電源轉接器 x1				
螺絲及鑰匙 x2				
CD x1				
快速安裝手冊 x1				

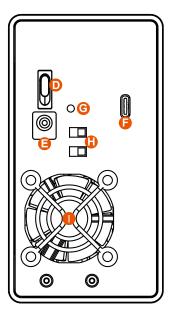
請確認相關配件與產品本身是否有受損或配件缺少,若有任何疑問請與本產品供應商聯絡。

正面與背面示意圖

前視圖



背視圖



- A. 硬碟讀取燈
- B. 硬碟抽取盒把手
- C. 硬碟抽取盒鑰匙孔
- D. 電源開關
- E. 電源插座
- F. USB 3.1 連接埠 (GEN2 10Gbps)
- G. RESET 鈕
- H. RAID 切換鈕
- I 風扇

3. 硬體需求與注意事項

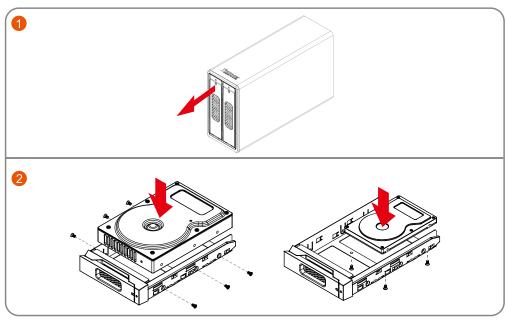
- 1. 本系統同一時間只可透過一組介面與一台電腦執行資料傳輸。
- 2. ST2-B31 的雙硬碟插槽在 RAID 0 與 RAID 1 模式下,都必須安裝硬碟才可正常運作。
- 3. 硬碟格式化後,由電腦主機作業系統所辨識 ST2-B31 的實際總容量會與硬碟廠所標示的容量加總後,將有所差異。
- 4. 第一次使用本產品進行設定時,資料會被全數清除。請於硬碟置入前,確認硬碟已備份,避免資料 遺失。
- 5. 在安裝新硬碟到 ST2-B31 之前,請先確認硬碟是沒有壞軌而且是沒有故障的,以避免資料受損。
- 6. 當您需要關閉或移除 ST2-B31 時,務必透過您所操作的作業系統中執行硬碟安全移除後,方可進行電源關閉的動作。
- 7. 當系統運作時,請勿任意移除任何一顆硬碟,以免導致資料遺失。
- 8. 完成系統初始化安裝後,在使用上請勿任意變更硬碟位置;此動作將可能導致系統無法形成 RAID。
- 9. RAID 模式一旦設定完成,若要進行切換,因切換過程中將會清除硬碟中的資料,請務必先將硬碟中的資料另行備份後再行切換。
- 10. 為了確保節能功能的正常運作,請將 USB 連接線常態性與電腦端保持連接。
- 11. 當您需要關閉或移除 ST2-B31 時,務必透過您所操作的作業系統中執行硬碟安全移除後,方進行電源關閉的動作。
- 12.在資料自動重建狀態下,若電腦端進入系統待命或是休眠狀態,ST2-B31 會持續完成重建;但當重建完成後將不會進入待命狀態。此時需用手動方式關機,或是先將電腦系統回復到正常運作狀態後,之後才能再與電腦端同步進入待命或是休眠狀態。
- 13.ST2-B31 使用 12V 規格電源轉接器,請勿使用 5V 電源轉接器以免損壞機器及資料。
- 14.本產品出廠預設值為 JBOD, 建議使用者於使用前先考慮使用用途。

- 15.ST2-B31 在 RAID 1 模式下,僅容許單顆硬碟故障。因此在 RAID 1 模式下,當您發現二顆硬碟顯示故障時,或在 RAID 0 模式下,當您發現一顆硬碟顯示故障時,您先前已存儲的資料可能已毀損或遺失。建議您可尋找專業硬碟資料救援服務,試著將您毀損或遺失的資料重新取回。
- 16.強烈建議除了使用 ST2-B31 的資料儲存功能外,請針對重要資料備份到另一個儲存裝置上或遠端備份,雙重備份您重要的資料。若您儲存在 ST2-B31 的資料損毀或遺失,STARDOM 將不負任何的責任。

4. 硬體安裝

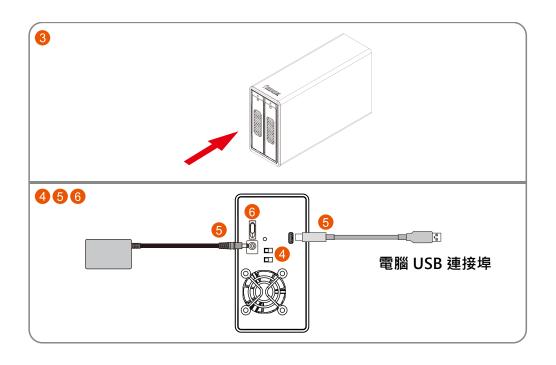
請參照以下步驟完成硬體安裝

- 步驟 1 請使用零件包中所附的頂針插入鑰匙孔,開啟硬碟抽取盒把手便將抽取盒取出。
- 步驟 2 將硬碟安裝到抽取盒上,並以零件包內附的螺絲加以固定,以避免不必要的移動對硬碟造成傷害。



注意:不建議使用不同廠牌,或是同廠牌不同型號的硬碟,避免影響效能。

- 步驟 3 硬碟安裝完成後,請將抽取盒平移放入主機內,並關上把手。
- 步驟 4 透過機體背面的 RAID 切換紐,設定所要使用的 RAID 模式。
- 步驟 5 將相關連接線接上,最後接上電源轉接器。
- 步驟 6 硬體安裝完成。開啟電源後請透過作業系統進行後續格式化設定。請依照電腦作業系統指示進行硬碟格式化,完成硬碟格式化後,便可以進行資料的讀寫。



5. RAID 模式切換設定



RAID 0:一個大的獨立資料儲存容量,並可加速資料存取但無資料保護功能。

RAID 1: 兩顆硬碟是鏡射關係因此擁有相同的資料,因此有一顆硬碟損毀仍然可以正常運作。

當放入入新硬碟取代損毀硬碟後,系統會自自動將資料重建到新的硬碟。

JBOD : 可對兩顆獨立硬碟進行管理的工作, 能大幅增加硬碟管理上的便利性。

BIG: 兩顆硬碟的容量會被加總成一個大儲存容量。

切換 RAID 設定的標準程序:

步驟 1:請在 ST2-B31 連線到電腦後,一併打開電腦和 ST2-B31 的電源開關。

步驟 2:請在藍燈恆亮時·將在 ST2-B31 背板上設定 RAID 設定的「切換開關」調到你所要的

設定位置。

步驟 3:請使用頂針插入「重置鍵」,待前面板抽取盒上的閃爍藍紫燈結束、並轉成恆亮藍燈後

鬆開頂針。

步驟 4:請您再做一次關、開 ST2-B31 電源的動作後,您已經改變、並重新設定了 ST2-B31 的

RAID •

6. 燈號說明

狀態	硬碟狀態燈		
	RAID 0, BIG	RAID 1	JBOD
硬碟閒置	藍燈恆亮	藍燈恆亮	藍燈恆亮
無硬碟	紅燈閃爍	紅燈閃爍	紅燈恆亮
硬碟故障	紅燈閃爍	紅燈閃爍	紅燈恆亮
RAID 降級	紅燈閃爍	紅燈閃爍	紅燈恆亮
資料存取	藍燈閃爍	藍燈閃爍	藍燈閃爍
資料重建 - 來源碟	N/A	呼吸燈(藍燈)	N/A
資料重建-目標碟	N/A	呼吸燈(紫燈)	N/A

7. 更換硬碟與資料重建說明

- 1. 使用 ST2-B31 過程當中,如硬碟故障而必須更換新硬碟時,請參考「章節 4_ 硬體安裝」,取出故障硬碟並更換成新硬碟。故障硬碟一旦完成更新並開機後,ST2-B31 會自動進行資料重建功能。
- 2. 在資料重建的過程當中,如其中硬碟又再次發生故障,而導致資料重建無法繼續。請將 ST2-B31 重新開機,再次確認硬碟是否故障,如果確定有故障,請參考「章節 4 硬體安裝」進行硬碟更換。

注意:

ST2-B31 容許資料重建過程中斷。如您在資料重建過程中將電源關閉,在您下次開機,過程將會從您上次關機時的階段繼續進行直到完成。請勿任意改變硬碟的位置與順序。



