

**RAIDON**  
Your Data Security Guardian

***SafeTANK***  
***GR3680 Series***  
*User Manual*

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## Introduction

Thank you for purchasing RAIDON products. This User Manual will introduce you the InTANK GR3680 storage product. Before using your GR3680, please read it thoroughly. Although all information contented in this User Manual had already been carefully verified before publishing, however, the actual product and its specification will be based upon the time of delivery from RAIDON. Any update to the product or its relevant information may be listed on [www.raidon.com.tw](http://www.raidon.com.tw). Product is subjected to change without prior notifications.

If you have any question regarding to the product you purchased, or you would like to know the latest product information, User Manual's update, please contact to your local supplier or visit to [www.raidon.com.tw](http://www.raidon.com.tw) for further information.

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## 1. Environmental Requirements

Operating Temperature: 0 ~ 40 °C (32 ~ 104 °F )

Storage Temperature : -20 ~ 47°C (-4 ~ 116 °F )

Line Voltage : 100 ~ 240V AC

## 2. Package Contents and Product Views

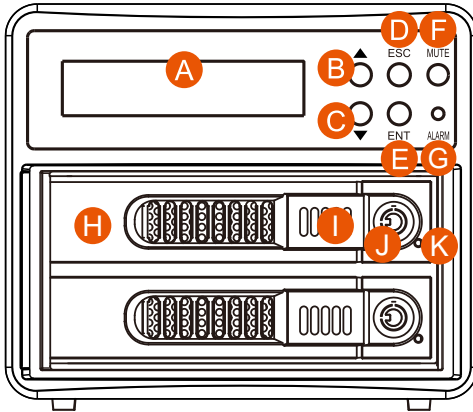
Open the package and you shall find the following parts :

GR3680-BA31 product x 1 (with removable drive tray enclosed x 2)	GR3680-B31 product x 1 (with removable drive tray enclosed x 2)	GR3680-B31A product x 1 (with removable drive tray enclosed x 2)
USB 3.2 C to C cable x1	USB 3.2 C to C cable x1	— —
USB 3.2 C to A cable x1	— —	USB 3.2 C to A cable x1
Power Cable x1	Power Cable x1	Power Cable x1
Quick Installation Guide x1	Quick Installation Guide x1	Quick Installation Guide x1
Screws & Ejector pins	Screws & Ejector pins	Screws & Ejector pins

- Please check the product and accessories for any defect or missing parts. If you have any questions, please contact your product supplier.
- Please visit the official website ([www.raidon.com.tw](http://www.raidon.com.tw)) to download drivers and other related resources.

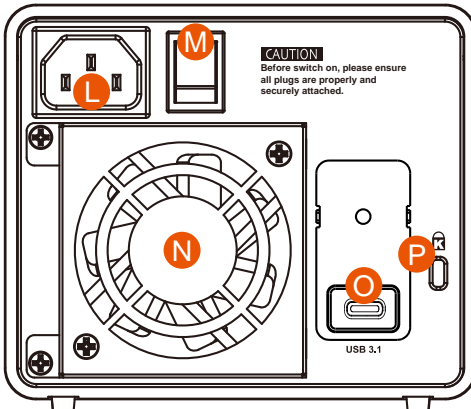
## Product View

Front View



- A. LCM
- B. UP button
- C. DOWN button
- D. ESC button
- E. ENTER button
- F. MUTE button
- G. Alarm indicator
- H. HDD enclosure handle
- I. Tray button
- J. HDD tray key lock
- K. HDD access light

Rear View



- L. Power socket
- M. Power switch
- N. Fan
- O. USB 3.2 Gen2 Type-C port (10Gbps)
- P. Anti-theft lock

## LED Indicators :

Status	HDD access light	Alarm indicator	Buzzer
No HDD	Red light always on	Red light always on	YES
Access	Purple light flashing	— —	— —
Disk Idle	Blue light always on	— —	— —
Rebuilding - Source	Blue light always on	— —	— —
Rebuilding - Target	Red light flashing	— —	— —
Fan Failed	Blue light always on	Red light always on	YES
Over Temp ( $\geq 50^{\circ}\text{C}$ )	Blue light always on	Red light always on	YES

### 3. Hardware Requirements and Precautions

1. After the hard disk is formatted, the actual total capacity of the GR3680 detected by the computer operating system will vary from the sum of all hard disk capacities stated by the manufacturer.
2. To prevent data loss, do not remove GR3680 while the system is running.
3. 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.
4. 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.
5. The product needs to be restarted after adding or changing the RAID mode, and the update is guaranteed to be the new RAID mode.
6. If the GR3680 needs to be shut down or disconnected, please ensure the HDD is safely removed through your operating system before turning off the power.
7. Users can set the RAID level and the basic functions of GR3680 using the buttons on the right side of LCM in front of the product
8. We strongly recommend backing up important data stored on the GR3680 to another storage device or a remote site. RAIDON will not be held liable for the damage or loss of data you stored on the GR3680.
9. If you need to install the operation system such like Windows or macOS into this device, please refer to the user manual for details.

## 4. Hardware Installation Procedure

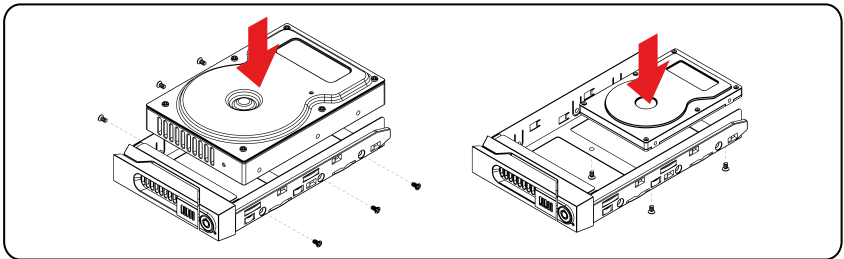
Please follow the instructions below to complete the hardware installation.

**Step 1** Place the system on a stable surface. Ensure that it is well ventilated without blockage to the vent and kept away from areas near water and damage prone areas.

**Step 2** Use the key included in the accessory kit to unlock the HDD tray key lock, and then press the HDD tray key lock. The removable drive tray will pop open and extract the removable drive tray.



**Step 3** For 3.5" HDD/SSD, please secure it by use six the larger screws included in the accessory kit. For 2.5" HDD/SSD, please secure it by use four the smaller screws included in the accessory kit.



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

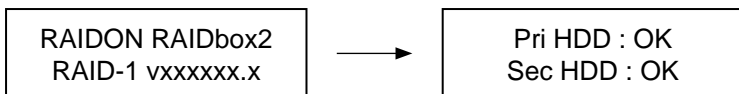
**Step 4** Once the hard disk is installed, slide the enclosure into the system and close the handle.

**Step 5** Connect power cable to your power outlet and GR3680.

**Step 6** Depending on the type of computer USB port, select the corresponding USB cable in the accessory to connect the computer to the USB port on the GR3680.

**Step 7** Turn on the GR3680, wait for the power on process to complete, the power on will be completed when the following picture is shown on the LCM.

※ The factory default value of GR3680 is RAID 1 mode.

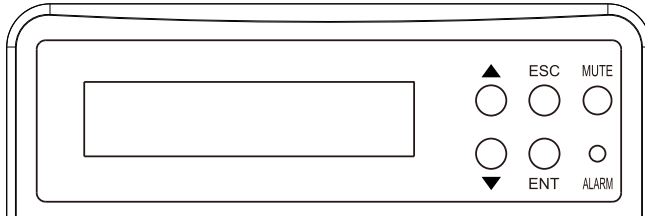


**Step 8** When the GR3680 has completed initializing, your computer's operating system should recognize the device automatically. Please follow the formatting instructions given by the operating system to format the drives. Once the formatting has been completed, the system is ready for use.

※ If you are using a USB 3.2 C to A cable, the Type-A on the host side needs to be USB 3.2 Gen2 for best access performance.

## 5. How to Switch the RAID Mode

Front Panel Operation:



- Enter: Enter to next level or Confirm
- Esc: Back to next level or Cancel
- ▲ / ▼ : Select Items
- MUTE: Turn off the buzzer when the buzzer sounds

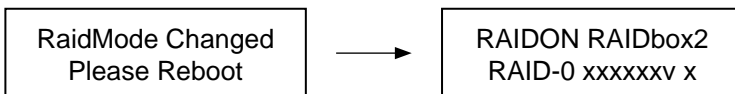
The default setting of GR3680 is RAID 1. To change the setting, please follow the steps below:  
 Step 1 Press and hold the ▲ button while turning on the power until LCM is showing as below:

Change to RAID-0  
 Ent = Yes Esc = No

Step 2 If you are sure to switch the RAID mode, press "ENT" to accept. If not, press "ESC".



Step 3 This indicates that the switch has been done successfully. Please reboot the GR3680.



## 6. Hard Drive Replacement Instructions

In normal operational state, if the LCM "Pri: X" or "Sec: M" and the audio alarm activates, this would indicate that the hard drive may be malfunctioning.

When this happens, you may choose to disable the audio alarm by pressing the MUTE button located at the front of the system and continue to operate the system normally.

When finished, you may restart the GR3680 to double check and see if the drive is in fact malfunctioning. If you are certain that the drive is in fact malfunctioning, follow the instructions below to complete the replacement of the malfunctioning drive.

RAID-1 degraded  
Pri : X Sec : O

Primary drive damage

RAID-0 failed  
Pri : O Sec : M

Secondary drive lost

**Step 1** Shut off the GR3680 power. Extract the driveing "X/M" on the LCM from the corresponding drive position and replace it with the new replacement drive. Do not switch the positions of the drives.

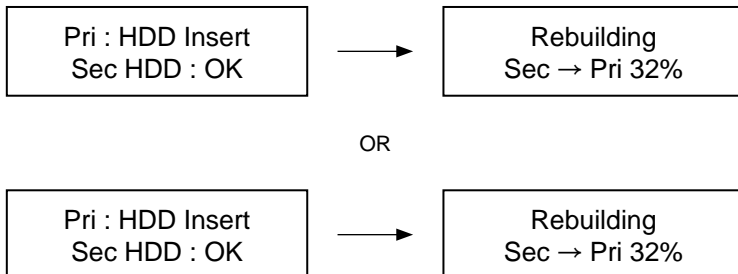
**Step 2** Once the replacement is complete, turn on the power of the GR3680. When the system completes initialization, the LCM will ask you if you wish to initiate the rebuilding procedure.

## 7. Data Rebuild

During the use of GR3680, if you are required to replace a malfunctioning drive refer to chapter 6 "Hard Drive Replacement Instructions".Once drive replacement is complete and you power on the GR3680, the system will perform data reconstruction.

The data rebuild processing time is based on the capacity of the drive. During procedures, we suggest to not use the system until the procedure(s) is complete as use of the system during procedures may cause delays to the processing time.Please wait until the procedure(s) has been completed to continue use.

During the data rebuilding process, the LCM panel will display the percentage progression rate of the rebuild. Below are sample diagrams.





If during the rebuilding process, a drive malfunctions and is unable to continue the rebuilding process, restart the GR3680 to check and see that the drive is in fact malfunctioning. If it is, please refer to chapter 6 "Hard Drive Replacement Instructions" to replace the malfunctioning drive.

Below are sample diagrams of drive malfunctioning.

Pri HDD : Fail  
Sec HDD : OK

Primary drive error during rebuild

Pri HDD : OK  
Sec HDD : Fail

Secondary drive error during rebuild

Note :

The next time you turn on the power of the unit, the system will automatically continue to process the remains. Please do not switch position of the drive at any time.

## 8. System Temperature Overheat and Fan Failure Management

If the LCM panel displays "T" on the bottom right hand corner meaning the system temperature has exceeded its allowance of 50°C or "F" at the top right hand corner meaning the system fan has malfunctioned and the audio alarm alerts, you may first press the MUTE button to disable the audio alarm. At the allowed operational state, re-start the system to double check and see if the problem is still present. If the problem persists, please turn off the system and contact your supplier or the RAIDON tech support for further assistance.

Pri HDD : OK  
Sec HDD : OK T

System temperature exceeded limitation

Pri HDD : OK F  
Sec HDD : OK

System fan malfunctioning

## 9. Additional Display Messages of System and Operation Procedures

The GR3680 frontal LCM panel is able to display additional messages such as firmware version, system temperature and fan status by pressing the ▲ or ▼ buttons to make your selection.

Continuously pressing the selection buttons allows you to scroll through the menu. If not pressed within 3 seconds, the display will revert back to its normal operational state.

System Temp.  
50 °C

System temperature message

System FAN  
xxxx RPM

System fan RPM message

## 10. GUI Monitoring Software and Firmware Update

Users can download the GUI software from the [website](#) to monitor the status of the product.

※ The HDD1 equals to Pri HDD and HDD2 equals to Sec HDD.

### 1. System Status

This GUI will auto detects the connected GR3680 and reveals relative information accordingly.

### 2. Firmware Upgrade



You may update the Firmware via this GUI, simply click on “Load” button to locate the firmware file to proceed. After update is finished, you may restart the power properly to operate with newly updated firmware.

※ Caution : Any random firmware updates may cause device in malfunction, it is strongly suggested not to update device firmware if device is operating properly.



### 3. E-Mail Notify

Configuring an e-mail address for notification of drive malfunctioning or being removed.

#### 3-1 Setup

- 1). Insert “Outgoing” SMTP and e-mail name and address.
- 2). If it is passwords required, select the option “SMTP Login Authentication” and insert the passwords.
- 3). When the configuration completed, click on the “OK” button to save.

※ Device must be connected in operational states during configurations to take effects.



#### 3-2 HDD Fail / Device Removed

- 1). Insert the e-mail address of the receiver for notification and click on “+” to add the inserted e-mail address onto the notifying list. (Maximum up to 10 e-mail addresses)
- 2). Insert the error message and descriptions from the columns of “Subject” and “Contents”.
- 3). When the configuration completed, click on the “OK” button to save.

※ Device must be connected in operational states during configurations to take effects.



## 4. S.M.A.R.T.

**RAIDON** High Speed 6G SATA Solution  
**RAIDGuide Manager**

Device1

System Status

Firmware Upgrade

E-Mail Notify

**S.M.A.R.T.**

About

SMART - HDD2 : ST9160214AS  
Updates after 60 seconds

ID	Value	Worst	Threshold	RAW	Status
01 Raw read error rate	95	93	6	00000602CA07	Good
03 Spinup time	99	99	0	00000000000000	Good
04 Start/Stop count	78	78	20	0000000005A18	Good
05 Reallocated sector count	36	36	36	000000000902	Alert
07 Seek error rate	100	253	30	000000027A74	Good
09 Power on hours count	100	100	0	0000000000049	Good
0A Spinup retry count	100	100	97	0000000000000	Good
0C Power cycle count	78	78	20	0000000005957	Good
B9 End-to-End error / IQECC	100	100	99	0000000000000	Good
B8 Repeated Unrecoverable Er	1	1	0	00000000017E	Good
B0 Command Timeout	100	89	0	001800220136	Good
B0 High Fly Writes	100	100	0	0000000000000	Good
BE Airflow Temperature	75	53	45	000019190019	Good
BF G-sense error rate	99	99	0	00000000000FF	Good

5x,08 y3,01 SC = 1x0108 IG = 2x, 08

## 5. About Indicates GUI Management Software version

**RAIDON** High Speed 6G SATA Solution  
**RAIDGuide Manager**

Device1

System Status

Firmware Upgrade

E-Mail Notify

**S.M.A.R.T.**

About

RAID Management Software

Version : v0.50.11-2

 **RAIDON**  
TECHNOLOGY, INC.

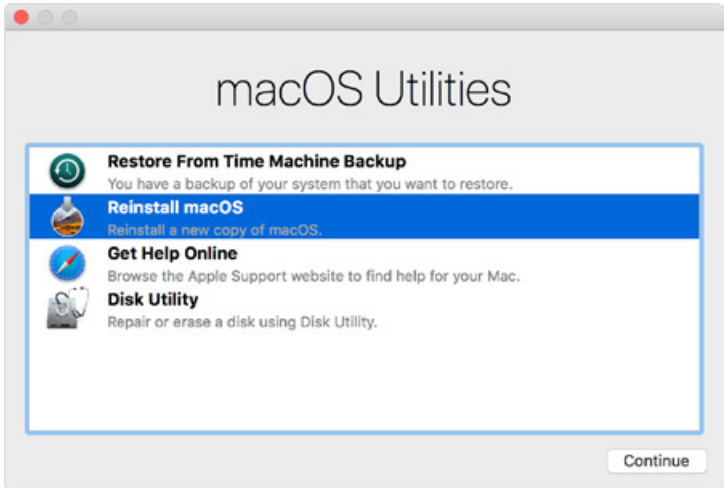
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5x,0F y3,01 SC = 1x010F IG = 2x, 0F

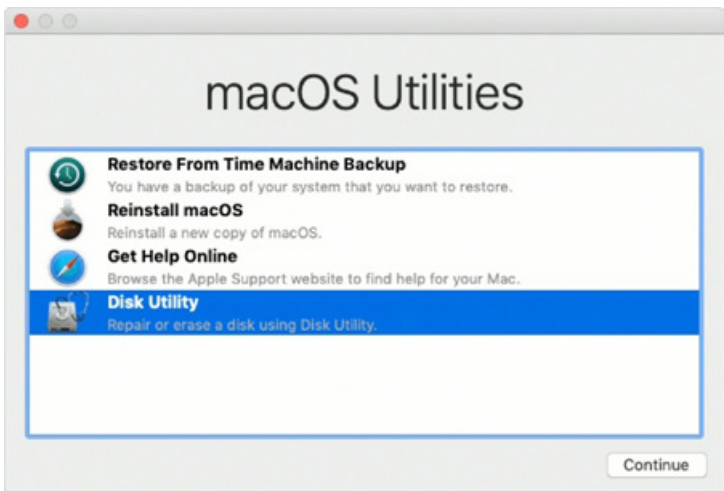
## 11. Install The Operation System Into This Device

### Install macOS (Use macOS Mojave 10.14 for example)

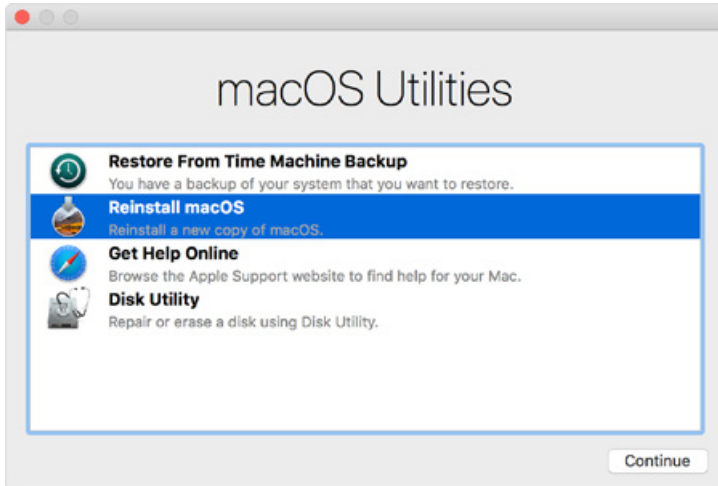
1. Need to have network online capabilities. If a wireless network is available, you can choose it from the Wi-Fi menu in the menu bar. This menu is also available in macOS Recovery.
2. Turn on your Mac and immediately press and hold Command (⌘)-R. Continue holding until you see the Apple logo or a spinning globe. Startup is complete when you see the utilities window:



3. If you need to erase your disk before installing macOS, select Disk Utility from the Utilities window, then click Continue. You probably don't need to erase, unless you're selling or giving away your Mac or have an issue that requires you to erase.



4. Install macOS. Choose Reinstall macOS from the Utilities window, and click continue.



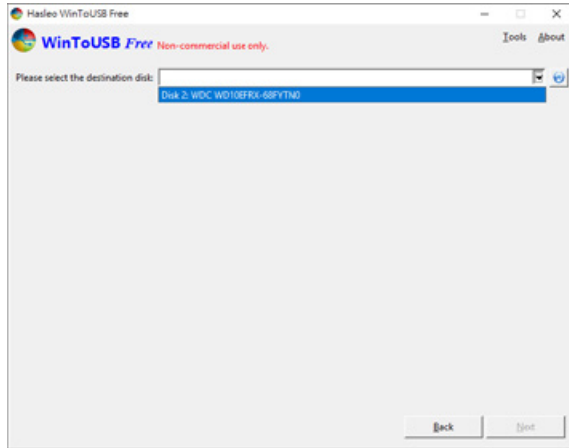
5. Follow the onscreen instructions, select agree to the software license agreement, and then select the disk to start the installation.



6. Please allow installation to complete without putting your Mac to sleep or closing its lid. During installation, your Mac might restart and show a progress bar several times, and the screen might be empty for minutes at a time.



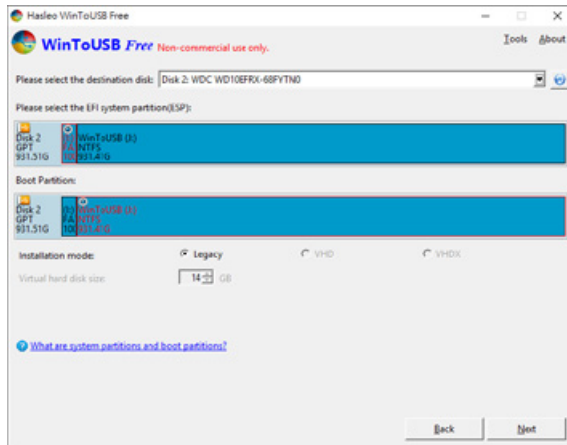
5. Select the USB external drive to install.



6. Select the version of the disk partition configuration according to your personal hardware specifications, then execute "Yes" to proceed to the next step.

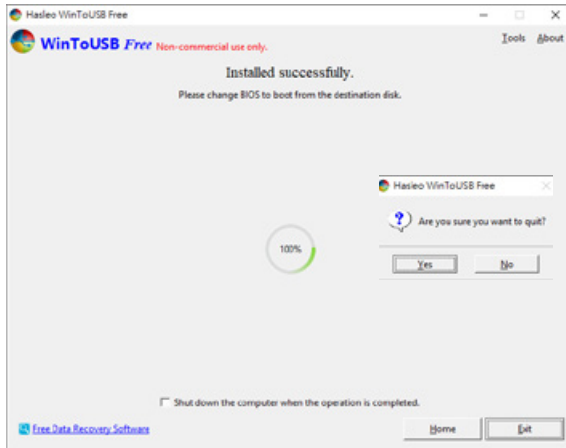


7. Follow the default and follow the next step.

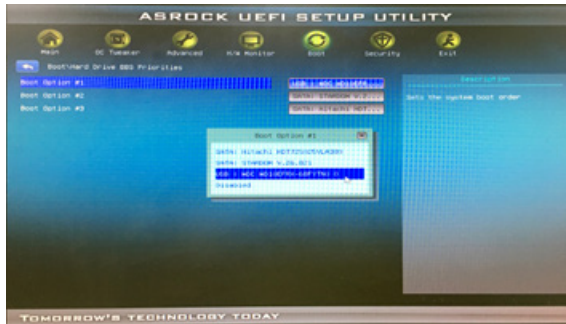




- Windows 10 is installed to an external hard drive. After the installation is complete, click the "End" button, and then confirm to leave.



- Confirm that the external hard disk is inserted in the USB slot of the computer. After rebooting, enter the BIOS or UEFI adjusts to the USB external hard disk box as the first boot sequence, and saves the settings and leaves.



Note: The screenshot is for illustration only, and the actual situation varies depending on each motherboard.

- Then start the installation process for Windows 10, and follow the system instructions and personal requirements to complete the setup.

## 12. Frequently Asked Questions

Q1. Which drive format should I choose to format the hard drives in the GR3680?

A: It depends on the computer system you most often use. See the below suggestions:

1. Use NTFS format for Windows 2000/XP/Vista/7/8/10 system
2. Use HFS+ (Mac OS Extended) format for a Mac OS X system
3. Choose FAT32 format if you'll use the GR3680 in both Windows and Mac environments (the maximum size of one single file may not exceed 4 GB).

## 關於這份手冊

感謝您使用 RAIDON 的產品。本手冊將介紹 RAIDON GR3680 產品。在您開始使用 RAIDON GR3680 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.RAIDON.com.tw](http://www.RAIDON.com.tw) 網站查詢，本公司將不另行通知。若您想獲得 RAIDON 最新產品訊息、使用手冊、韌體，或對 RAIDON 產品有任何疑問，請您聯絡當地供應商或到 [www.RAIDON.com.tw](http://www.RAIDON.com.tw) 取得相關訊息。

本手冊相關產品內容歸銳銳科技股份有限公司版權所有

## 1. 環境需求

工作溫度：0 ~ 40 °C (32 ~ 104 °F)

儲存溫度：-20 ~ 47 °C (-4 ~ 116 °F)

相對濕度：5% 至 95% 非凝滯狀態

工作電壓：100~240V AC

## 2. 產品外觀及包裝內容

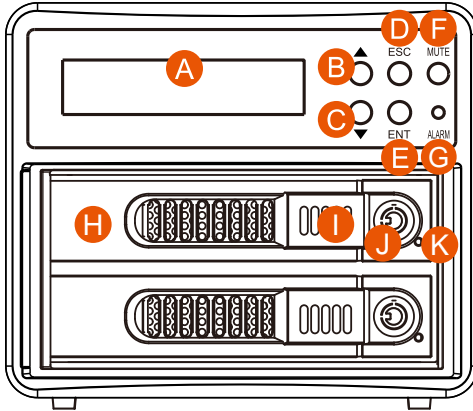
打開包裝外盒後，包裝內容應包含下列組件：

GR3680-BA31 本體 X1 (內含抽取盒 x2)	GR3680-B31 本體 X1 (內含抽取盒 x2)	GR3680-B31A 本體 X1 (內含抽取盒 x2)
USB 3.2 C to C 連接線 x1	USB 3.2 C to C 連接線 x1	— —
USB 3.2 C to A 連接線 x1	— —	USB 3.2 C to A 連接線 x1
電源線 x1	電源線 x1	電源線 x1
快速安裝導引 x 1	快速安裝導引 x 1	快速安裝導引 x 1
螺絲及頂針	螺絲及頂針	螺絲及頂針

- 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。
- 請前往官網 (<https://www.raidon.com.tw>) 的產品資料下載頁面，下載驅動程式以及其餘相關資源。

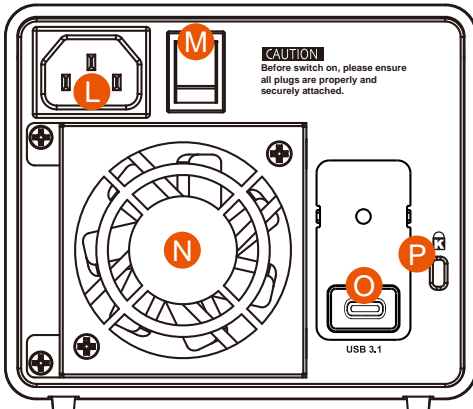
## 正面與背面示意圖

正面圖



- A. LCM 顯示螢幕
- B. UP 按鍵
- C. DOWN 按鍵
- D. ESC 按鍵
- E. ENTER 按鍵
- F. MUTE 按鍵
- G. 系統警示燈
- H. 硬碟托盤把手
- I. 硬碟托盤退出鍵
- J. 硬碟托盤鑰匙孔
- K. 硬碟讀取燈

背面圖



- L. 電源插座
- M. 電源開關
- N. 風扇
- O. USB 3.2 Gen2 Type-C 埠 (10Gbps)
- P. 防竊鎖孔

燈號一覽表：

狀態	硬碟指示燈	系統警示燈	蜂鳴器
無硬碟	紅燈恆亮	紅燈恆亮	YES
資料存取	紫燈閃爍	---	---
硬碟閒置	藍燈恆亮	---	---
資料重建 - 來源碟	藍燈恆亮	---	---
資料重建 - 資料碟	紅燈閃爍	---	---
風扇故障	藍燈恆亮	紅燈恆亮	YES
溫度過高 ( $\geq 50^{\circ}\text{C}$ )	藍燈恆亮	紅燈恆亮	YES

### 3. 硬體需求與注意事項

1. 硬碟格式化後，由電腦主機作業系統所辨識 GR3680 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。
2. 當系統運作時，請勿任意移除，以免導致資料遺失。
3. 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。
4. 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。
5. 在新增或變更 RAID 模式後需重新啟動產品，以確保完成更新為新的 RAID 模式。
6. 當您需要關閉或移除 GR3680 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。
7. 使用者可透過 LCM 顯示螢幕及其右側之按鍵來設定 RAID 層級及 GR3680 的基本功能，詳細說明請見產品使用說明書。
8. 強烈建議除了使用 GR3680 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 GR3680 的資料損毀或遺失，RAIDON 將不負任何的責任。
9. 本產品支援外接硬碟安裝 Windows 與 Mac 作業系統，詳細說明請見該產品相關使用者手冊。

## 4. 硬體安裝

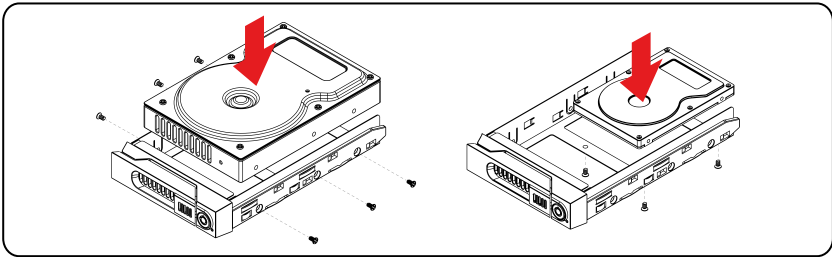
請參照以下步驟完成硬體安裝

步驟 1 將主機置放於平穩空間上，並確認散熱風扇沒有被擋住，且四周有適當的散熱空間。（請避免接近水源或是其他容易造成產品損傷的環境）

步驟 2 請使用配件中所附的鑰匙插入硬碟托盤鑰匙孔後轉開鎖頭，按下硬碟托盤退出鍵，便將硬碟托盤取出。



步驟 3 安裝 3.5 吋硬碟，請使用 6 顆配件軟件內附的大顆螺絲加以固定；安裝 2.5 吋硬碟，請使用 4 顆配件內附的小顆螺絲加以固定。



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 4 硬碟安裝完成後，請將硬碟托盤平移放入主機內，並關上把手。

步驟 5 將電源線與 GR3680 連接，再將電源線與電源插座連接。

步驟 6 視電腦 USB 埠類型選擇配件中的對應的 USB 連接線，連接電腦與 GR3680 的 USB 埠。

步驟 7 開啟 GR3680 電源，等待開機程序完成，當 LCM 顯示螢幕顯示如下圖，即完成開機。

※ GR3680 出廠預設值為 RAID 1 模式

RAID0N RAIDbox2  
RAID-1 vxxxxxx.x



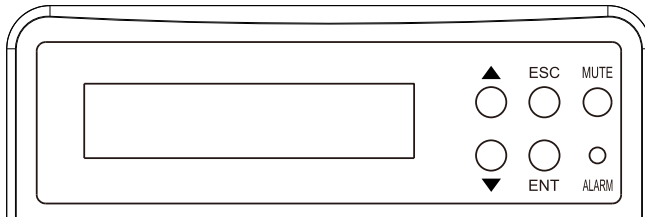
Pri HDD : OK  
Sec HDD : OK

步驟 8 此時，您的作業系統將會自行辨視 GR3680。硬體辨識成功後，請依照作業系統指示完成硬碟格式化。格式化完成後即可進行使用。

※ 若您使用的是 USB 3.2 C to A 連接線，主機端的 Type-A 需為 USB 3.2 Gen2 規格方可達到最佳存取效能。

## 5. 如何切換 RAID 模式

前面板操作：



- Enter : 進入下一層 或是 確認
- Esc : 跳回上一層 或是 取消
- ▲ / ▼ : 循序選擇項目
- MUTE : 在蜂鳴器鳴響時關閉蜂鳴器

GR3680 出廠預設值為 RAID 1，如果要變更為其它 RAID 功能時，請參照以下步驟：  
步驟 1 持續按下 "▲" 並開啟電源，直到 LCM 出現以下畫面：

Change to RAID-0  
Ent = Yes Esc = No

步驟 2 此時會出現以下畫面，如果確定要切換 RAID 模式時，請按 "ENT"，如果不同意則按 "ESC"。

Change to RAID-0  
Ent = Yes Esc = No



Pri HDD : OK  
Sec HDD : OK

步驟 3 當 LCM 出現此畫面時，代表您已切換成功，請重新啟動 GR3680。

RaidMode Changed  
Please Reboot



RAIDON RAIDbox2  
RAID-0 xxxxxxxv x

## 6. 硬碟更換步驟說明

在使用過程當中，當液晶螢幕上出現「Pri : X」或是「Sec : M」就表示主硬碟或是次硬碟可能故障，同時系統的蜂鳴器也會發出警告聲。此時，您可選按系統前端的 MUTE 靜音鍵，先將警示聲關閉並依然正常使用無故障的硬碟完成您正在處理的資料讀寫。當您完成資料處理後，您可選擇重新啟動 GR3680 確認是否硬碟已故障。一旦確認硬碟確實故障，請依照以下步驟更換故障硬碟。以下圖示範例顯示主硬碟及次硬碟故障狀態。



步驟 1 將 GR3680 電源關閉。依照 LCM 所顯示「X/M」的故障硬碟取出便從抽取盒上拆解下，再將新的硬碟鎖上抽取盒後放入原位置。請勿任意改變硬碟的位置。

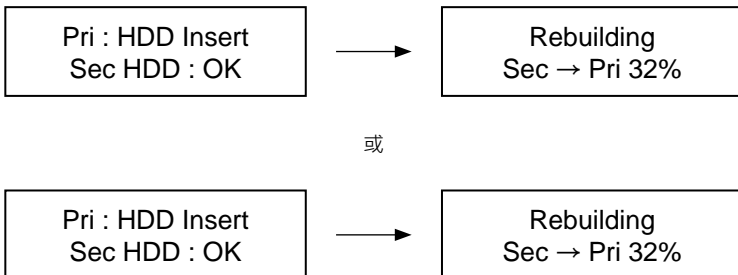
步驟 2 硬碟更換完成後，將電源開啟，系統初始化後便會詢問是否啟動資料重建功能。

## 7. 資料重建功能說明

使用 GR3680 過程當中，如硬碟故障而必須更換新硬碟時，請參考「章節 6 故障硬碟更換說明」。故障硬碟一旦完成更新並開機後，GR3680 會進行資料重建功能。

資料重建時間會依硬碟容量的大小而定。因此，也建議您在此時不要使用 GR3680，以避免資料重建時間延長。請容許資料重建完成後再繼續使用。

資料重建時，前端的 LCM 螢幕會依照重建的進度而顯示出。一旦資料重建完成後，螢幕將會回到系統正常畫面。以下為重建進度的圖示範例。





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 GR3680 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 6. 硬碟更換步驟說明](#)」進行硬碟更換。以下為重建過程中硬碟故障所會顯示的圖示。

Pri HDD : Fail  
Sec HDD : OK

資料重建過程中主硬碟有誤

Pri HDD : OK  
Sec HDD : Fail

資料重建過程中次硬碟有誤

注意：

在您下次開機時，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及順序。

## 8. 系統過熱與風扇故障狀況排除

當前端 LCM 螢幕右下角出現「T」字符號而蜂鳴器警示聲響起時表示系統溫度已超過系統所允許的溫度安全範圍 (50 °C) 或 LCM 螢幕右上角出現「F」字符號而蜂鳴器警示聲響起時您可選按系統前端的 MUTE 靜音鍵，先將警示聲關閉。在允許的狀況下關閉 GR3680 電源讓機器降溫；同時，也請先確認機體擺放環境是否通風良好，沒有任何物體擋住風扇孔，一併檢查 GR3680 的風扇是否停止運轉。待上述檢查確認後，再將電源開啟繼續使用本系統。若問題還是無法獲得解決，請與此產品供應商或 RAIDON 連絡，以便取得近一步的支援。

Pri HDD : OK  
Sec HDD : OK T

系統溫度超出允許範圍

Pri HDD : OK F  
Sec HDD : OK

系統風扇故障

## 9. 其它螢幕訊息顯示及操作說明

GR3680 前端 LCM 螢幕可另顯示系統韌體、系統溫度、風扇狀況等訊息。取得訊息只須按 ▲ 或 ▼ 選擇鍵即可進入便選擇想要得知的訊息。

持續按選擇鍵可循序顯示相關訊息。如果三秒未按選擇鍵則恢復系統預設畫面。

System Temp.  
50 °C

系統溫度訊息

System FAN  
xxxx RPM

系統風扇轉速

## 10. GUI 功能說明與韌體更新

使用者可以從網站下載來安裝 GUI 軟體，藉此監控產品的狀態。

※ HDD1 等於 Pri 硬碟，HDD2 等於 Sec 硬碟。

### 1. 系統狀態

GUI 會自動偵測 GR3680 並且顯示相關資訊。



### 2. 韌體升級

使用者可以透過此 GUI 進行韌體升級。只需簡單的點選“Load”指定韌體檔案位置後即可進行升級。升級過程或許需要重新啟動系統來完成整個升級程序。

※ 注意：任意更新韌體有可能導致系統運作不正常。強烈建議如果系統運作正常情況下不要進行韌體升級。



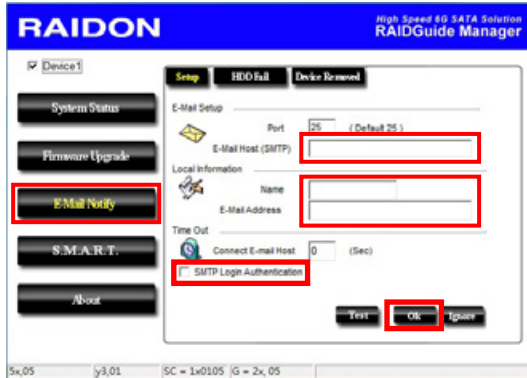
## 2. E-Mail 通知

設定 e-mail 帳號來收取系統問題或被移除通知。

### 3-1 設定

- 1). 填入 e-mail 相關名稱與完整位置，以及 SMTP 的相關資訊。
- 2). 如果需要密碼，請勾選“SMTP Login Authentication”並輸入密碼。
- 3). 相關資訊填寫完成後，點選“OK”。

※ 設定過程中，系統必須維持在正常運作狀態。



### 3-2 硬碟損毀 / 裝置被移除

- 1). 在 E-Mail Address 欄位填入要收取通知的 e-mail，點選“+”即可增加另一組。(最多可填入 10 組 e-mail)
- 2). 在“Subject”與“Contents”填入 e-mail 訊息的主旨與內容。
- 3). 相關資訊填寫完成後，點選“OK”。

※ 設定過程中，系統必須維持在正常運作狀態。



## 4. S.M.A.R.T.

**RAIDON** High Speed 6G SATA Solution  
**RAIDGuide Manager**

Device1

System Status

Firmware Upgrade

E-Mail Notify

**S.M.A.R.T.**

About

SMART - HDD2: ST9160314AS  
Warning Updates after 60 seconds

ID	Value	Worst	Threshold	RAV	Status
01 Raw read error rate	95	93	6	00000663CA07	Good
03 Spinup time	99	99	0	000000000000	Good
04 Start/Stop count	78	78	20	000000009A18	Good
05 Reallocated sector count	38	38	36	000000000502	Alert
07 Seek error rate	100	253	30	000000037A74	Good
09 Power on hours count	100	100	0	000000000049	Good
0A Spinup retry count	100	100	97	000000000000	Good
0C Power cycle count	78	78	20	000000000597	Good
09 End-to-End error / IODEC	100	100	99	000000000000	Good
0B Reported Uncorrectable Errors	1	1	0	000000000176	Good
0C Command Timeout	100	89	0	0010002010138	Good
0D High Fly Writes	100	100	0	000000000000	Good
0E Headload Temperature	75	53	45	000019190019	Good
0F G-sense error rate	99	99	0	0000000000FF	Good

5x,08 y3,01 SC = 1x0108 IG = 2x,08

## 5. 關於 GUI 軟體版本

**RAIDON** High Speed 6G SATA Solution  
**RAIDGuide Manager**

Device1

System Status

Firmware Upgrade

E-Mail Notify

**S.M.A.R.T.**

About

RAID Management Software

Version : v0.50.11.2

**RAIDON**  
TECHNOLOGY, INC.

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5x,0F y3,01 SC = 1x010F IG = 2x,0F

## 11. 外接磁碟安裝作業系統

### 安裝 macOS (以 10.14 Mojave 為例)

1. 需具備網路連線能力。若有無線網路可用，可以從選單列的 Wi-Fi 選單中選擇該網路。「macOS 復原」也提供這份選單使用。
2. 開啟 Mac 並立即按住 Command(⌘)-R，持續按住這些按鍵，直到出現 Apple 標誌或旋轉的地球。看到工具程式視窗，即表示完成啟動：



3. 若必須在安裝 macOS 之前清除磁碟，請從「工具程式」視窗選擇「磁碟工具程式」，然後按一下「繼續」。您可能不需要清除磁碟，除非要將 Mac 賣或送給別人，或是有問題需要清除磁碟。



4. 安裝 macOS · 在「工具程式」視窗中，選擇「重新安裝 macOS」，按一下「繼續」。



5. 按照螢幕上的指示，選擇同意軟體許可協議，然後選擇磁碟，開始安裝。



6. 請不要讓 Mac 進入睡眠或關上上蓋，以利安裝程序順利完成。安裝期間，Mac 可能會重新啟動並顯示進度列好幾次，而螢幕畫面也可能會一次空白幾分鐘時間。

## 安裝 Windows (以 Windows 10 家庭版為例)

1. 以下內容為使用工具軟體「WinToUSB 免費版」作為範例，相關規範與版權請到[軟體官網](#)詳閱說明。
2. 軟體安裝後，連續按兩下桌面的捷徑圖示，開啟 Hasleo WinToUSB。



3. 在界面左方選擇「鏡像到 USB」，再點選右方資料夾圖示來選擇 Windows 10 的 ISO 檔。

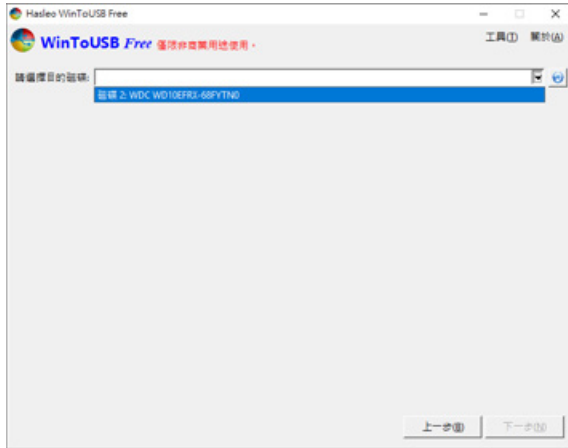


4. 選擇要安裝的 Windows 版本，執行下一步。



註：WinToUSB 免費版不支援 Windows 專業版與企業版。

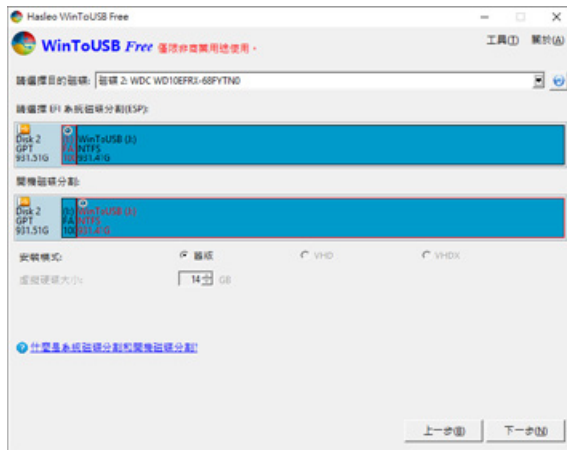
## 5. 選擇要安裝的 USB 外接硬碟。



## 6. 依照個人硬體規格選擇磁碟分割配置的版本，之後執行「是」進行下一個的步驟。



## 7. 依照預設值，執行下一步。

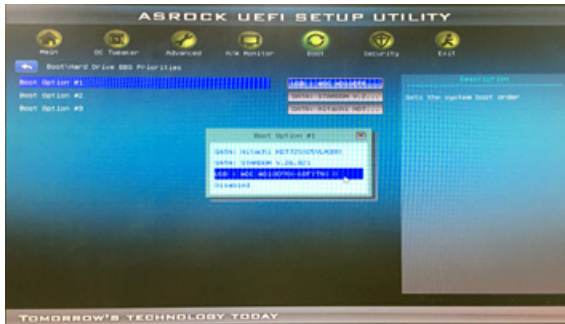




8. Windows 10 安裝到外接硬碟，待安裝完成後點選「結束」按鈕，之後再確認離開。



9. 確認外接硬碟插在電腦的 USB 插槽，重新開機後，進入 BIOS 或是 UEFI 調整成 USB 外接硬碟盒為第一開機順序，儲存設定後離開。



註：截圖僅為示意，實際情況依各家主機板而有所不同。

10. 接著開始進入 Windows 10 的安裝過程，請依系統指示以及個人需求完成設定。

## 12. 常見問題

Q1. 我應該選擇何種資料模式來格式化 GR3680 產品內硬碟？

A：這將取決於您平常所使用的電腦系統，我們有以下建議：

1. Windows 2000 / XP / Vista / 7 / 8 / 10 使用 NTFS
2. Mac OS X 使用 HFS+ (Mac OS Extended)
3. 如必須同時使用於 PC 或 Mac，請使用 FAT32 (單一檔案的最大限制是 4GB)

**RAIDON**  
Your Data Security Guardian  
[www.raidon.com.tw](http://www.raidon.com.tw)