

NA762A-G3

Desktop 8 bay PCIe to SAS/SATA RAID Subsystem,
Built-in high performance hardware RAID card



User Manual

First edition, Dec. 2020

SAFETY PRECAUTIONS

Please read this section carefully before proceeding. These precautions explain the correct and safe use of the storage, thereby helping prevent injury to you or others, and also help you minimize the risk of damaging the device.

Warnings

Always follow the basic warnings listed here to avoid the risk of serious injury from electrical shock, short-circuiting, fire, and other hazards. These warnings include, but are not limited to:

- With the exception of the user-swappable parts, do not attempt to disassemble or modify the enclosure. If this device appears to be malfunctioning, contact Netstor.
- Do not drop the enclosures or any of its drive modules; dropping or mishandling of the enclosure or drive modules may result in a malfunction.
- Do not insert your fingers or foreign objects inside the enclosure; take particular care when small children are present.
- Do not expose the device to rain, use it near water or containers that contain liquids which might spill into any openings, or in damp or wet conditions.
- If unusual smells, sounds, or smoke come from the device, or if liquids enter it, switch it off immediately and unplug it from the electrical outlet.
- Follow the instructions in this manual carefully; contact Netstor for additional advice not covered in this user's manual.

1. Overview	4
2. Package Checklist	4
3. Panel Layout	5
4. Set Up Procedure	6
5. Operation and Verification	9
5.1 Connection and System Power On/Off	9
5.2 Verification	11
5.2.1 Verification Steps for macOS	11
5.2.2 Verification Steps for Windows	14
5.3 LED Status on Host Card	18

1. Overview

Netstor desktop 8-bay RAID subsystem NA762A-G3 is built with innovative PCIe 3.0 ×4 interface and high-performance hardware RAID controller for reliable data storage and highest data protection, ideal for editors in the video editing field supporting Full HD, 2K, 4K, 3D format, and so on. Thoughtfully designed with an external PCIe interface on storage providing throughput up to 32 Gbps to the host computer in support of tower Mac Pro (2019) and Windows PC, the NA762A-G3 RAID subsystem is compatible with both SAS and SATA drives for varied configuration.

2. Package Checklist

A. Enclosure × 1



E. Power cord × 1



B. HDD Tray × 8 (already installed in enclosure)



F. HDD mounting screw × 32



C. PCIe 3.0 ×4 host adapter card × 1



G. Key for HDD tray × 2

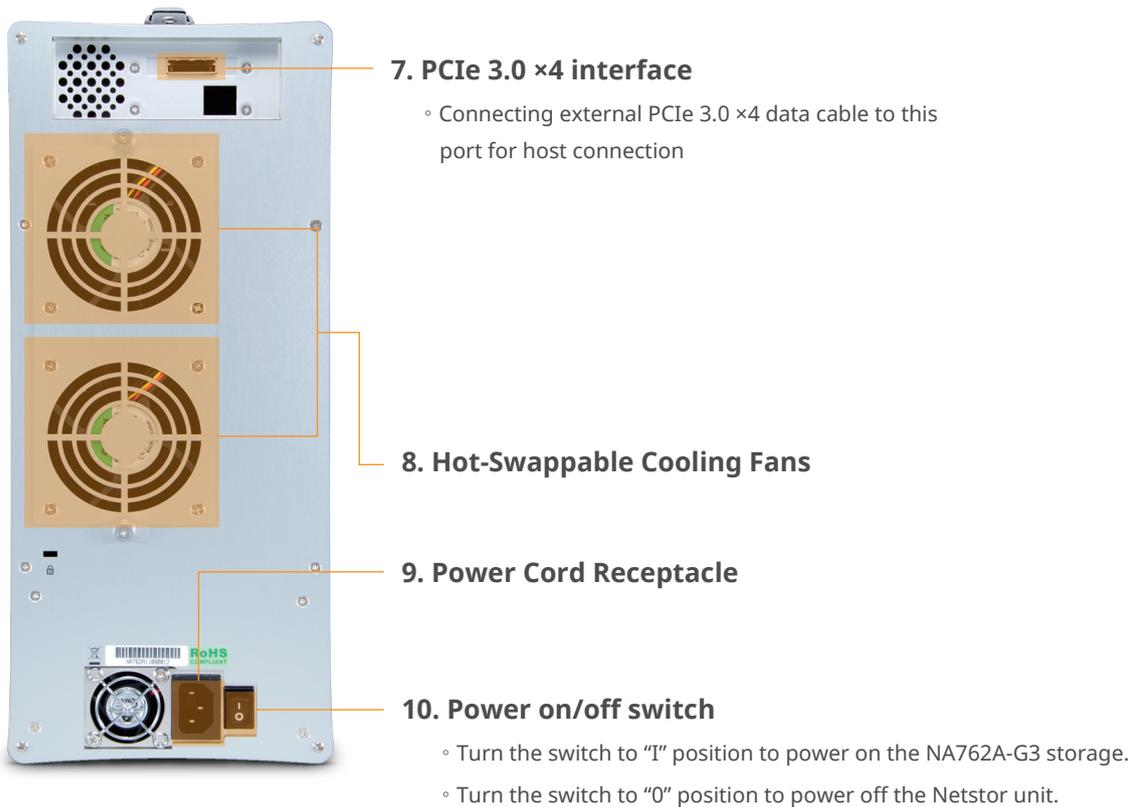
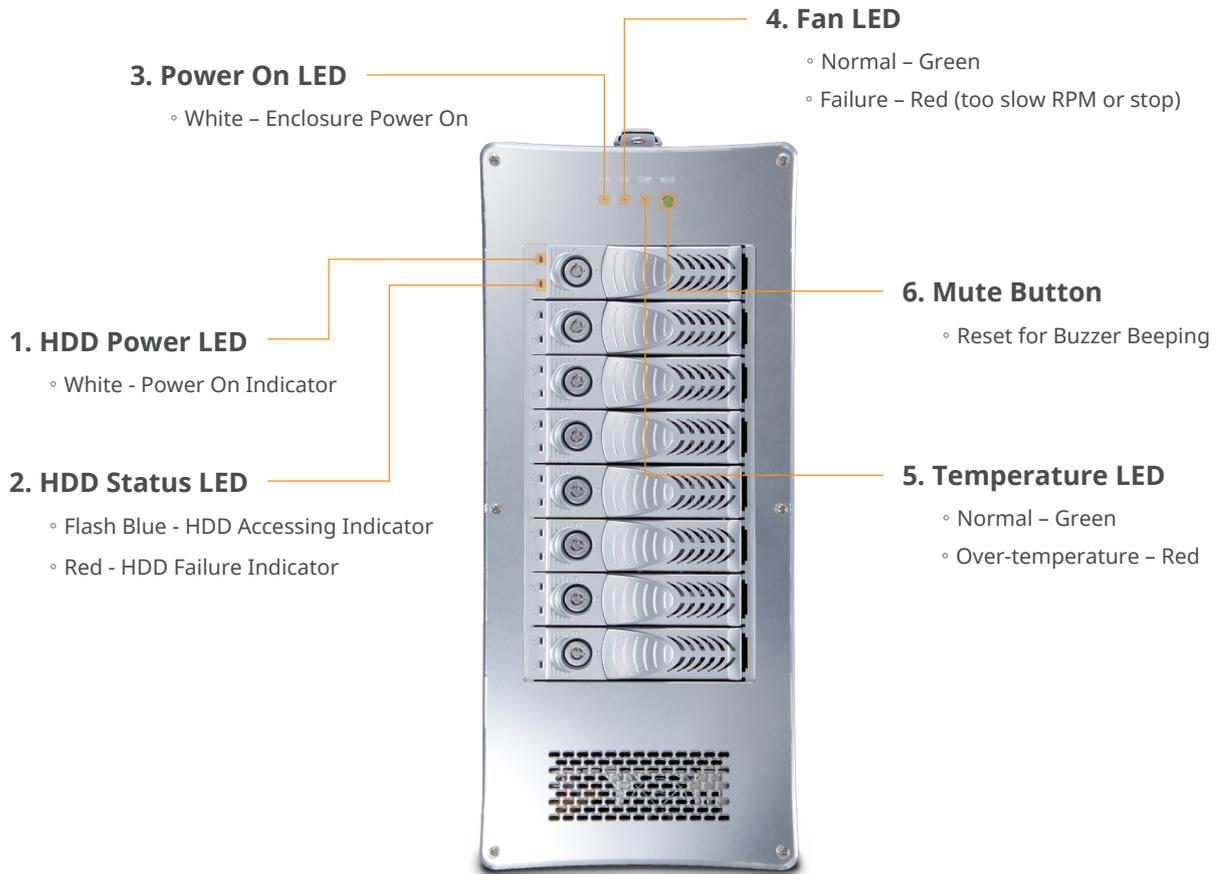


D. External PCIe 3.0 ×4 data cable (1.5 meter) × 1



Notify your sales representative if any of the above items is missing or damaged.

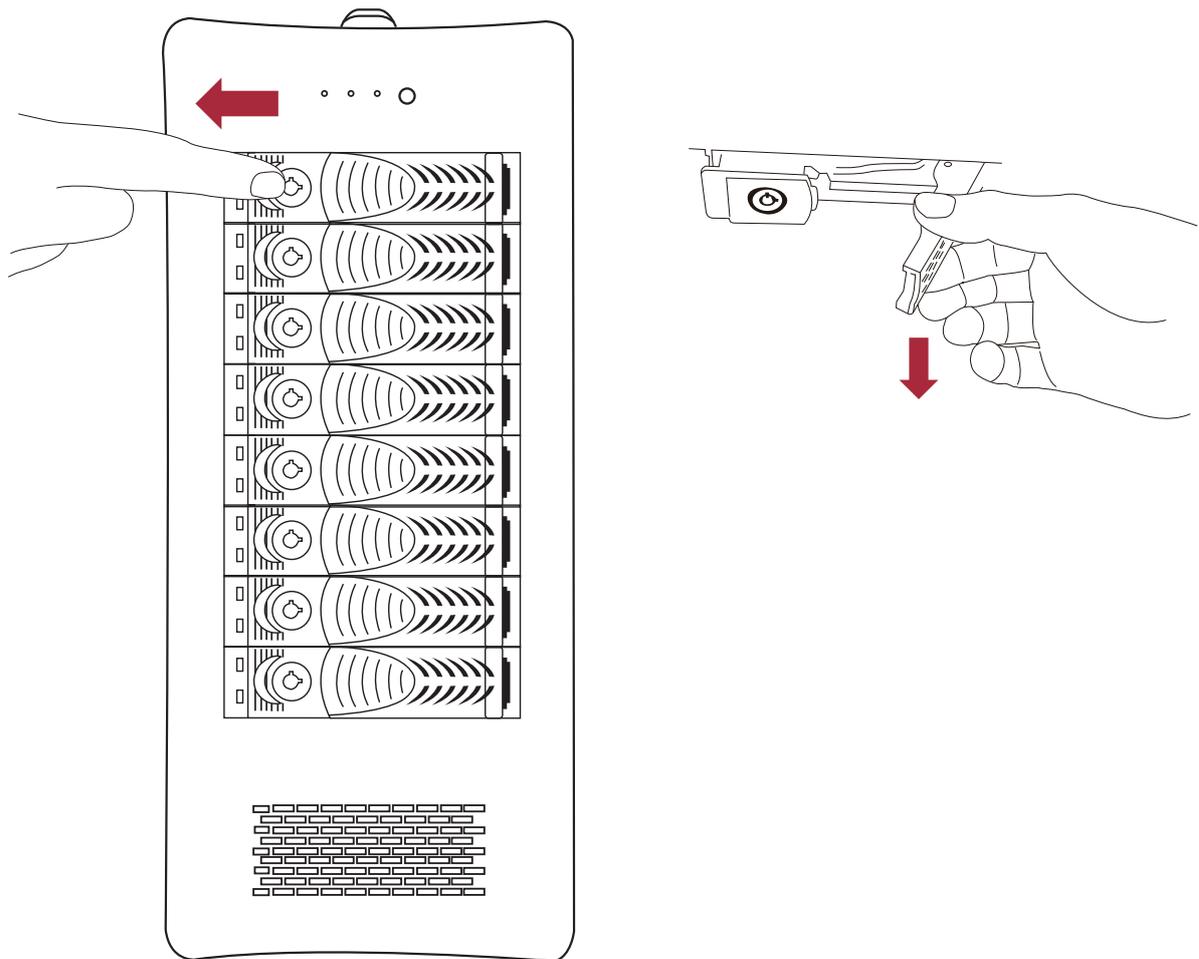
3. Panel Layout



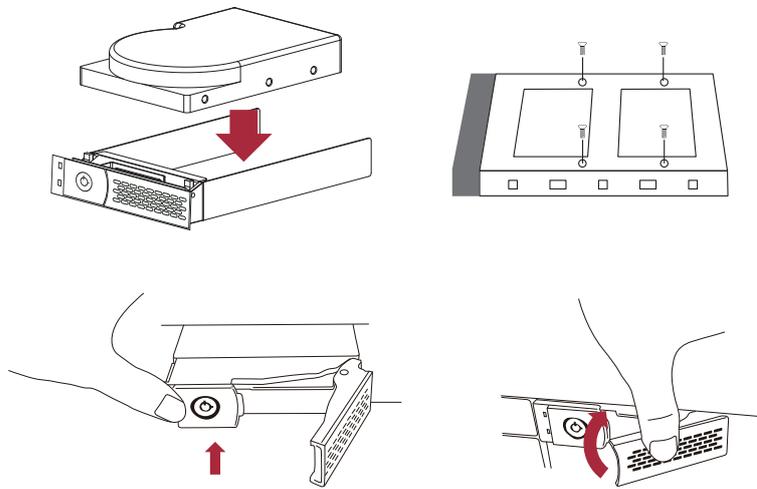
4. Set Up Procedure

1. Place NA762A-G3 storage on a level surface on a stable table.

2. Take out the HDD tray.

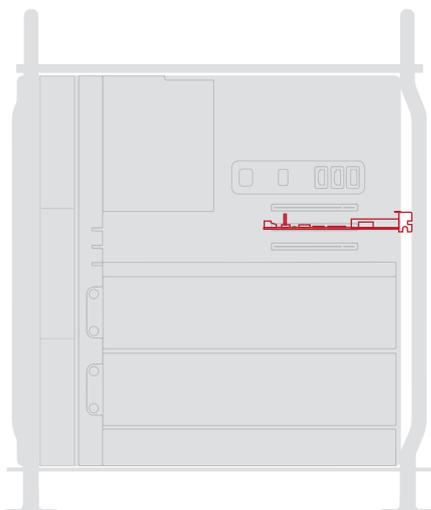


3. Place hard drive in the tray and fix HDD with the hard drive mounting screws. After that, put the tray with HDD back to the NA762A-G3 enclosure. Repeat the procedure to complete the rest of the trays with hard drives.

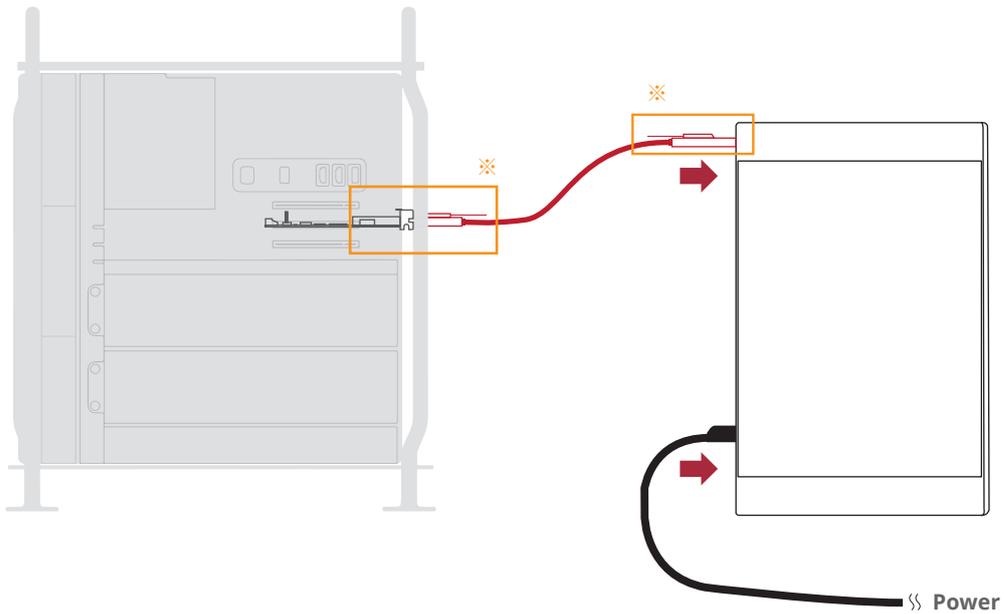


4. Install PCIe 3.0 x4 host adapter card into one available PCIe slot in the host computer.

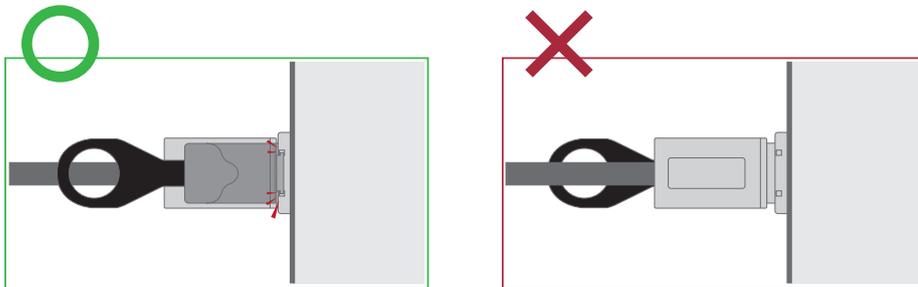
The tower Mac Pro (2019) or Windows PC must have at least one available PCIe slot (x4, x8 or x16); the slot could be PCIe x4 electrically even if its physical appearance is PCIe x8 or x16, so please check the user's manual of tower Mac Pro or PC motherboard to verify the specification of the PCIe slot.



5. Connect NA762A-G3 and host computer with external PCIe 3.0 ×4 data cable, and then connect the storage with power source.



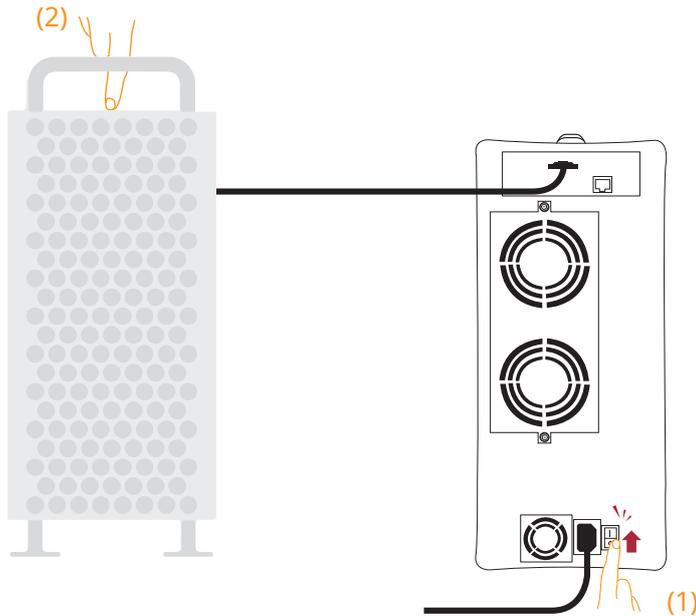
※ Note the ring-pull of the external PCIe ×4 data cable connector must be at the same side as Nestor host card's obverse side when cable is connected to the NP963AG3 host card. Also, when inserting the PCIe ×4 data cable into NA762A-G3 storage's rear port, the ring-pull of the cable must face upward.



5. Operation and Verification

5.1 Connection and System Power On/Off

1. As NA762A-G3 is connected to computer by external PCIe 3.0 ×4 data cable, and when the power cord is connected to NA762A-G3 storage from power source, to turn on NA762A-G3, the user should turn the power switch at rear of NA762A-G3 to "I" position to power on the Netstor unit.

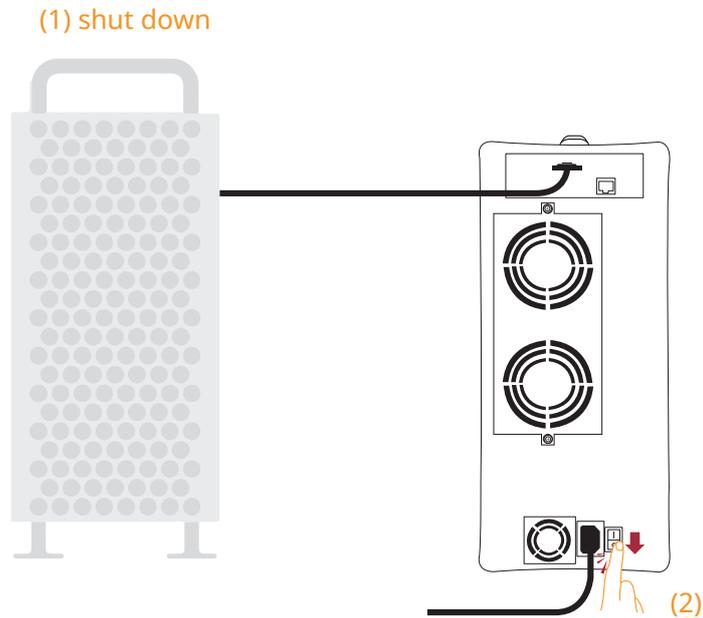


※ **Note** the powering on procedure is:

- (1) Turn the power switch at rear of Netstor unit to "I" position to power on NA762A-G3 first.
- (2) Power on tower Mac Pro (2019) or Windows PC.

By the above powering on procedure can the tower Mac Pro or Windows PC's UEFI BIOS be able to scan and detect the NA762A-G3 at the initial host power-on stage.

2. To turn off NA762A-G3, the user should turn the power switch at rear of NA762A-G3 to “0” position to power off the Netstor unit.



※ **Note** the powering on procedure is:

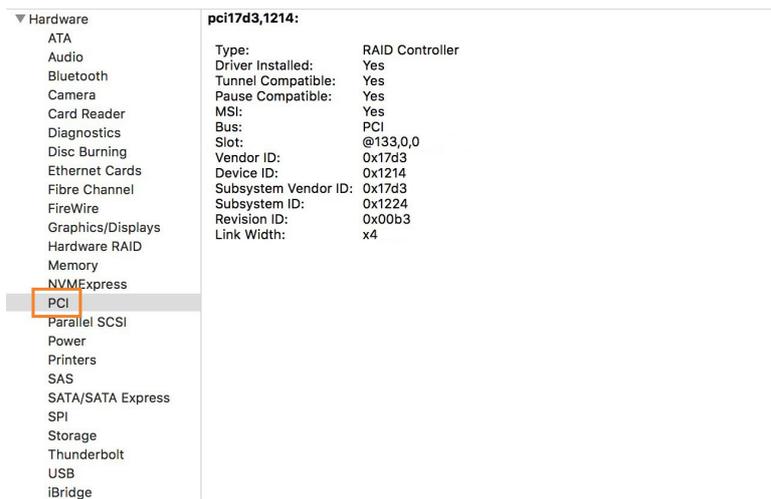
(1) Power off tower Mac Pro (2019) or Windows PC first.

(2) After the host computer is shut down, turn the power switch at rear of Netstor unit to “0” position to power off NA762A-G3.

5.2 Verification

5.2.1 Verification Steps for macOS

1. Verify Netstor NA762A-G3 is recognized by tower Mac Pro (2019). Click on the Apple icon at top left of the screen, select **About This Mac**, click on **System Report**, click on **PCI** in the left-hand column within the pane of System Information, and then information about NA762A-G3's RAID controller will be shown, meaning that the Netstor storage is recognized by tower Mac Pro (2019).

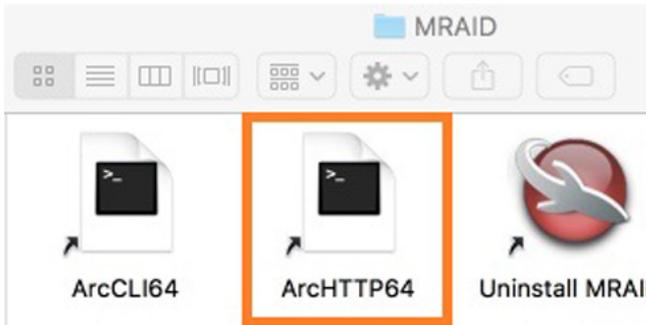


2. Verify Netstor storage RAID controller's driver. Following step 1, there will be an item **Driver Installed** indicating NA762A-G3 RAID controller's driver status; the macOS driver for NA762A-G3's RAID controller is already embedded in the macOS operating system showing "Yes" for the Driver Installed item in the information.

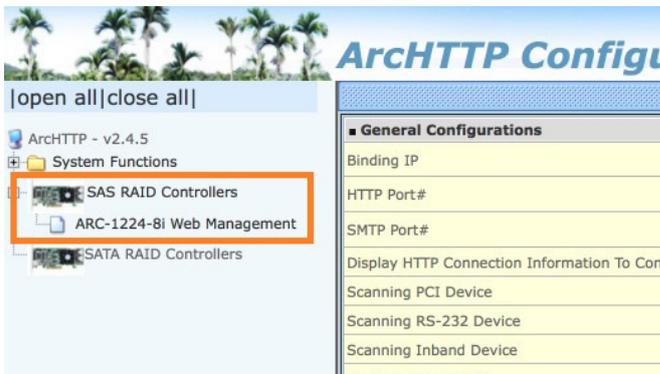


3. Install the MRAID program downloaded from Netstor's website to configure and set up a RAID volume for the NA762A-G3 storage.

4. After installing the MRAID program, open the MRAID folder, and double click on the **ArcHTTP64** icon to run the web GUI program.



5. Click on **SAS RAID Controllers** and select **ARC-122X Web Management**, and then a login pane will pop up.



6. Key in **admin** for user name and **0000** for password to enter the web GUI.

Log in to 192.168.0.196:82
Your login information will be sent securely.

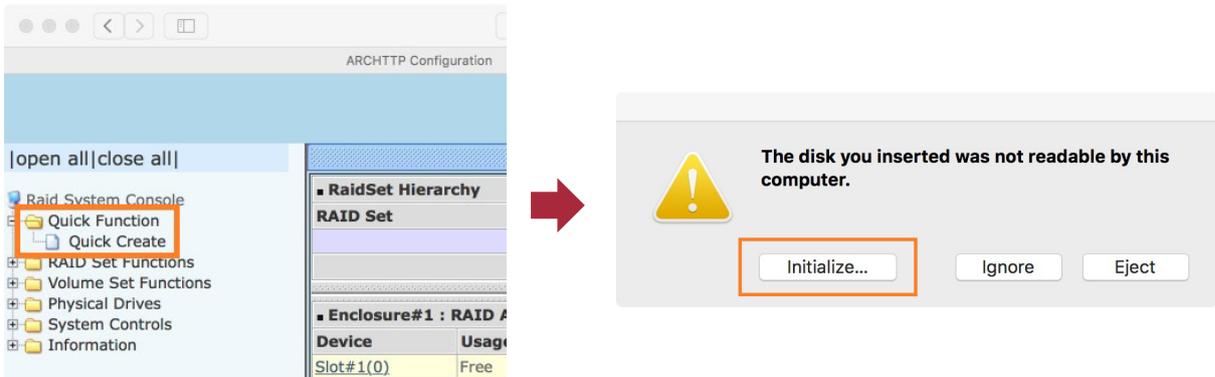
admin

••••

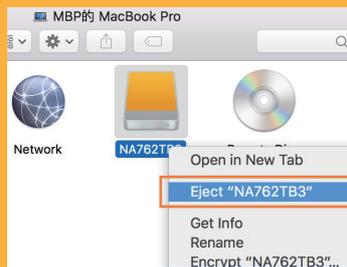
Remember this password

Cancel Log In

7. For quick setup of a RAID volume, select **Quick Function** in the left-hand column at web GUI, and then select **Quick Create**. After the RAID volume is created, a pane will pop up giving three options for action. Select **Initialize** to format the RAID volume.



8. Select the RAID volume in the left-hand column, click on **Erase** at the top, name the RAID volume in the center part, and click on **Erase** at bottom right of the pane to format the RAID volume. After formatting completes, the RAID volume is ready for use.

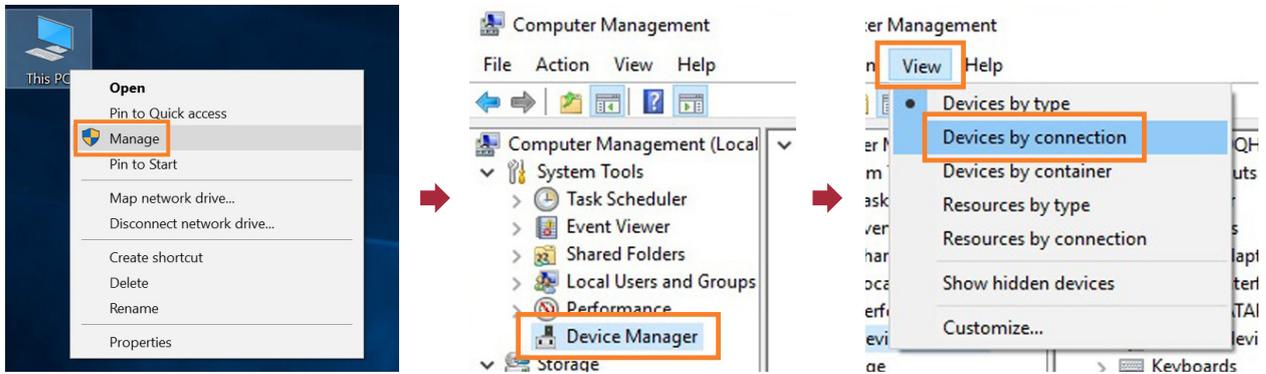


NOTE

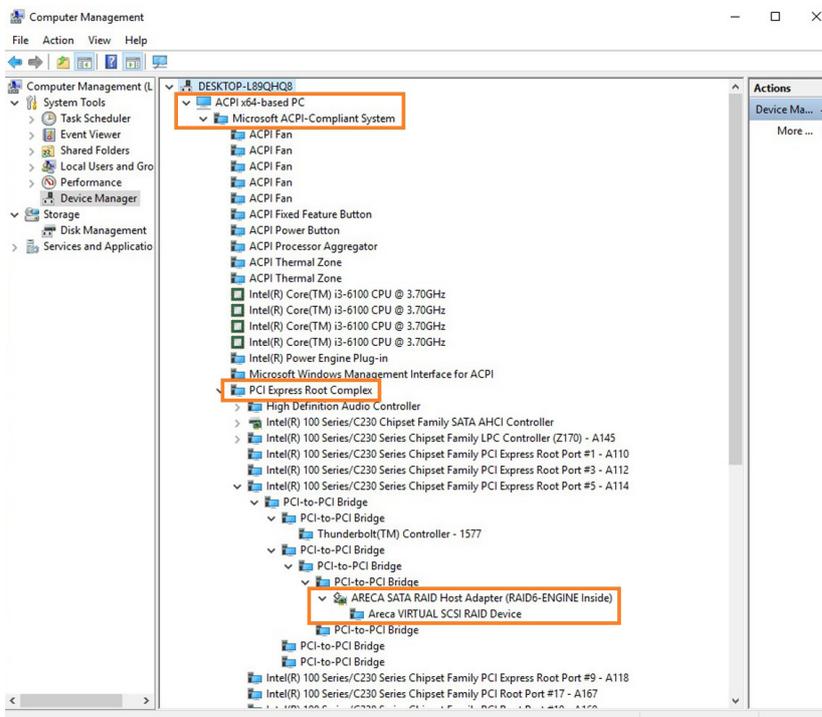
To eject the RAID volume on macOS, select **Go** at the top menu bar on macOS's desktop, and select **Computer**. Right click on the RAID volume, and select **Eject** to safely eject the RAID volume from macOS at tower Mac Pro (2019).

5.2.2 Verification Steps for Windows

1. Verify Netstor NA762A-G3 is recognized by host computer. Right click on This PC at Windows' desktop, and select **Manage**. As window of Computer Management pops up, click on **Device Manager** in the left-hand column, click on **View** at the top menu bar, and select **Devices by connection**.

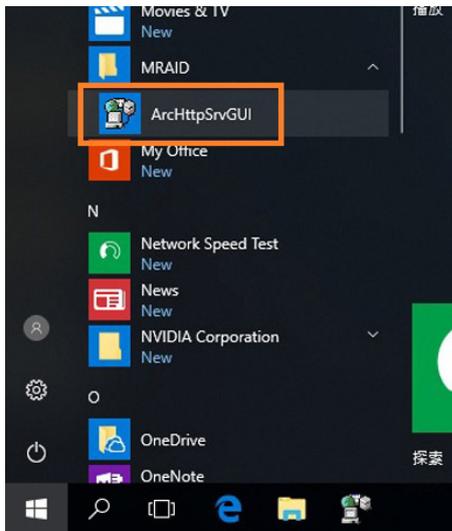


2. Click on **ACPI x64-based PC**, select **Microsoft ACPI-Compliant System**, and click on **PCI Express Root Complex**. Then items **Intel 100 Series Chipset Family PCI Express Root Port #X** will be shown. Find one of the items that shows PCI standard PCI-to-PCI bridge, open the PCI standard PCI-to-PCI bridge to the innermost tier, and NA762A-G3's RAID controller will be shown, meaning that the Netstor storage is recognized by the host computer.

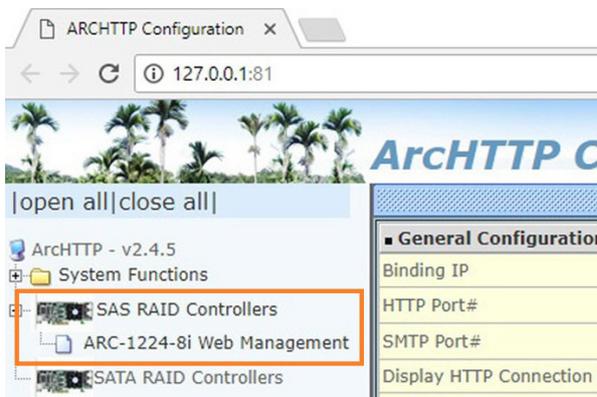


3. Install Windows driver for NA762A-G3's RAID controller and Windows GUI program on Windows 10 operating system at computer. The Windows driver and the GUI program can be downloaded at Netstor's website.

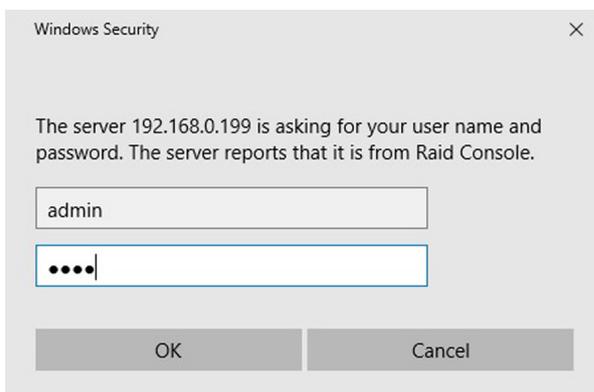
4. After installing the driver and the GUI program, launch the GUI program by selecting **ArcHttpSrvGUI** in All Programs at Windows Start to run the application.



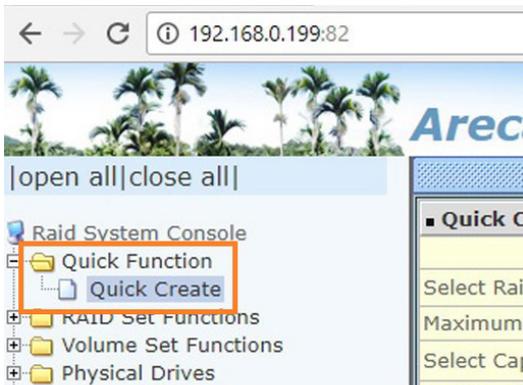
5. Following running ArcHttpSrvGUI application, the web GUI entering page will appear. Select **SAS RAID Controllers**, and select **ARC-122X Web Management**, and then a login window will pop up.



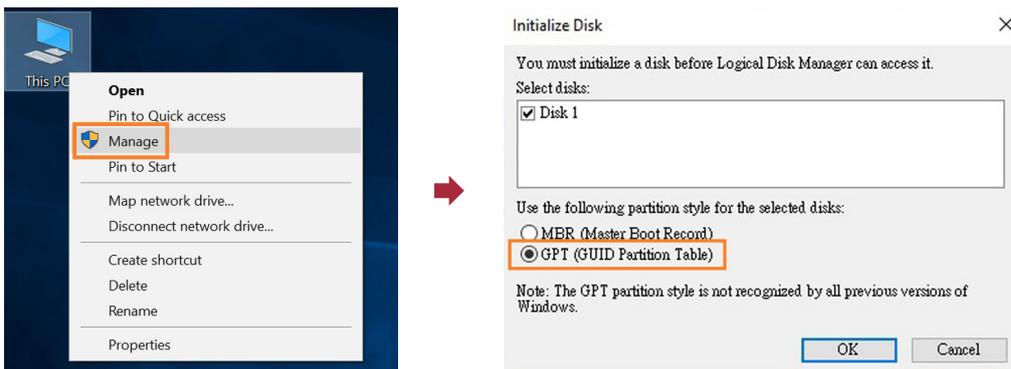
6. Key in **admin** for user name and **0000** for password to enter the web GUI.



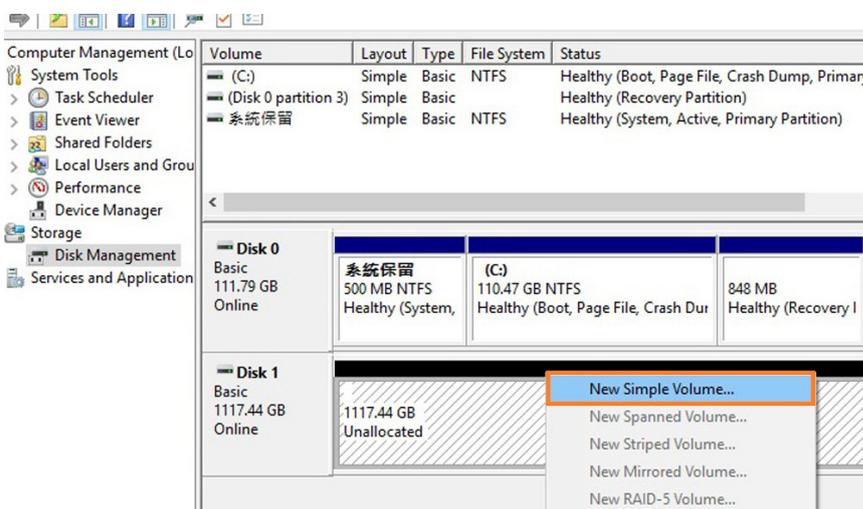
7. For quick setup of a RAID volume, select **Quick Function** in the left-hand column at web GUI, and select **Quick Create**.



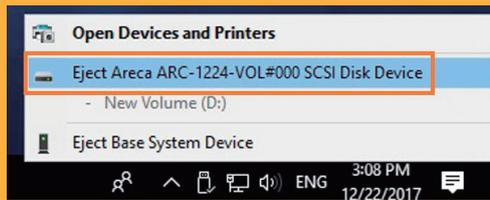
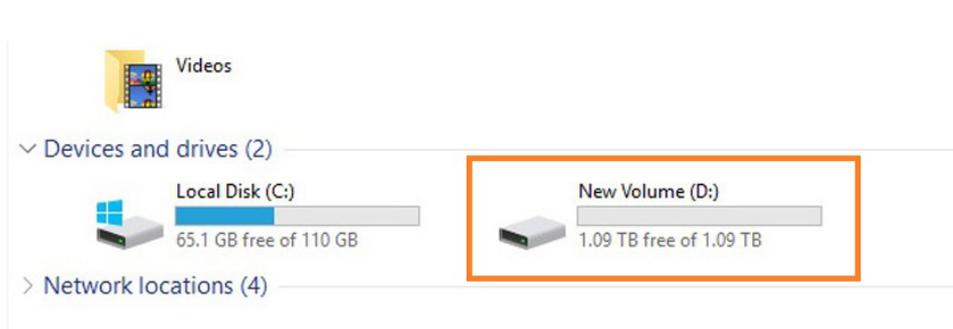
8. After creating RAID volume, right click on **This PC** at Windows' desktop, and select **Manage**. As window of Computer Management pops up, click on **Disk Management** in the left-hand column, and then a window pops up. Select **GPT (GUID Partition Table)**, and click on OK.



9. The RAID volume will appear in the center bottom part of the window. Right click on the square of the RAID volume, and select **New Simple Volume** to format the volume.



10. After formatting completes, the RAID volume will be shown in This PC, and it's ready for use.



NOTE

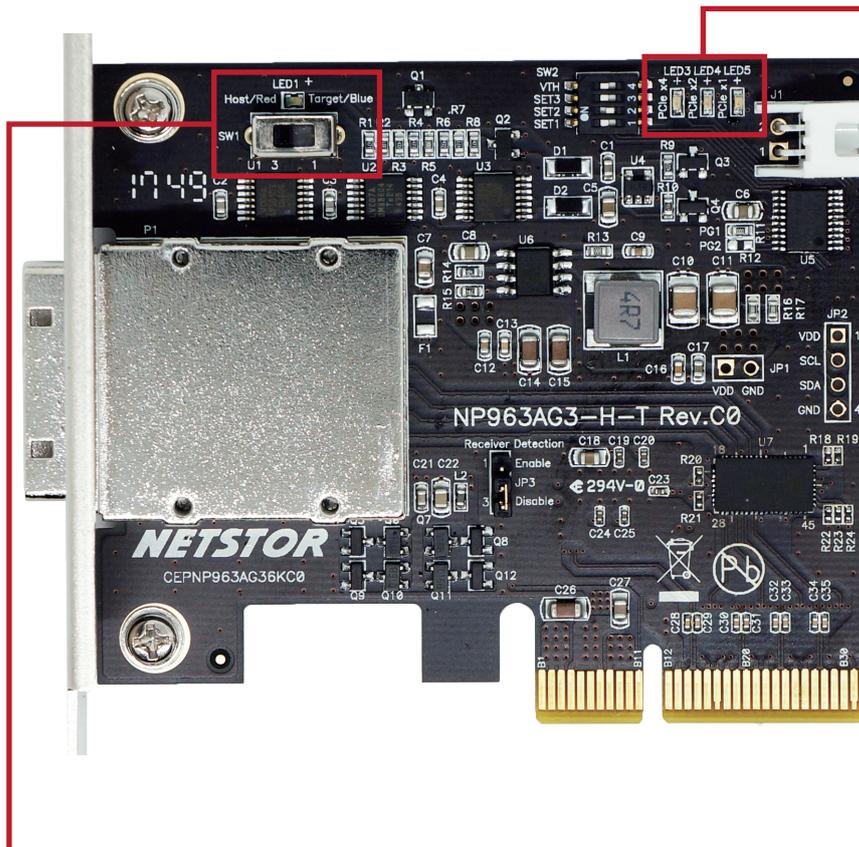
To eject the RAID volume at Windows operating system, click on the Safely Remove Hardware icon at the bottom right of the screen, and select Eject Areca ARC-122X SCSI Disk Device.

5.3 LED Status on Host Card



LED3 ~ LED5 illuminate solid green LED light: PCIe x4 connection between NA762A-G3 and host computer is linked.

LED3 ~ LED5 no light: PCIe connection between NA762A-G3 and host computer is NOT linked.



SW1 switch:

The SW1 switch on NP963AG3 host card is set to the left position **Host** by default and should always be set to **Host** as the host card. LED1 will illuminate red light to indicate that the NP963AG3 card is configured as the host card.



Host card



Target card

If you have any questions, please contact your regional distributor,
or Netstor Technology, Taiwan.



Netstor Technology Co. Ltd.

🏠 6F, No. 1, Alley 16, Lane 235, Baoqiao Rd., Xindian District,
New Taipei City 231-45, Taiwan, R.O.C.

🌐 www.netstor.com.tw

✉ sales@netstor.com.tw

☎ +886 2 2917 1500