



Desktop 8 Bay PCI Express to SAS/SATA RAID Subsystem

Quick Installation Guide

Version 1.0

NA762A Desktop 8 Bay PCI Express to SAS/SATA RAID Subsystem

1. Overview

Netstor desktop 8-bay RAID subsystem NA762A is built with the innovative PCI Express Gen2 ×4 interface and high-performance hardware RAID for reliable storage processing and maximum data protection ideal for editors in the video editing fields of HD, 2K, 4K, and 3D format. Thoughtfully designed with the external PCIe interface on storage providing up to 20Gbps throughput to host for Mac Pro and Windows computers, the NA762A RAID subsystem is compatible with both SAS and SATA HDDs for any configuration.

2. Package Checklist

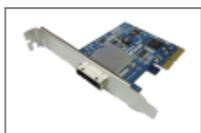
Before installing this unit, verify the package contains the following items.



A Enclosure x 1



B HDD Tray x 8
(installed in enclosure)



C PCIe ×4 host adapter with standard bracket x 1



D PCIe ×4 data cable
(1.5 meter) x 1



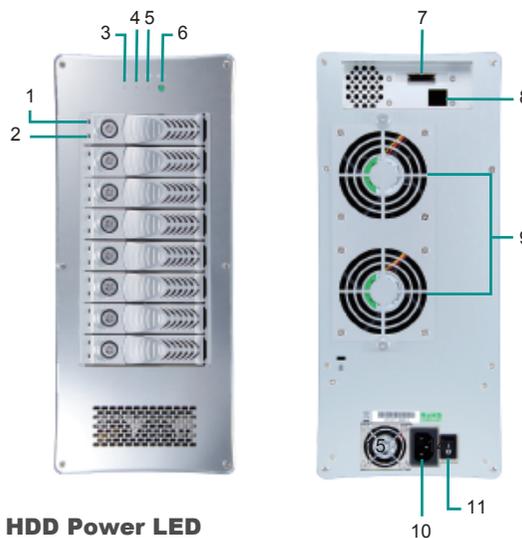
F HDD mounting screw x 32



H CD containing user manual x 1

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

3. Panel Layout



1. HDD Power LED

White - Power On Indicator

2. HDD Status LED

- Flash Blue - HDD Accessing Indicator
- Red - HDD Failure Indicator

3. Power on LED

- White - Enclosure power on

4. Fan Status LED

- Normal - Green
- Failure - Red (too slow RPM or stop)

5. Temperature LED

- Normal - Green
- Over-temperature - Red

6. Mute Button

- Reset for Buzzer Beeping

7. PCI Express Gen2 ×4 interface

- Connecting PCIe ×4 data cable to host

8. Ethernet port for management

9. How-swappable cooling fans

10. Power cord receptacle

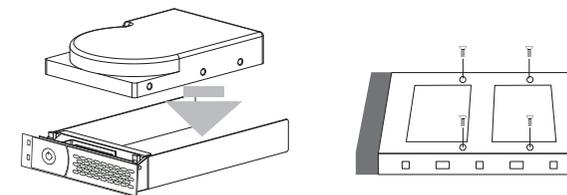
11. Power switch

4. Set Up Procedures

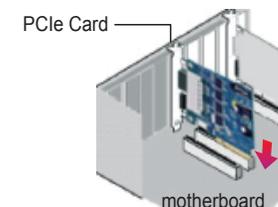
1. Place NA762A storage on a level surface on a stable table.

2. Take out all the HDD trays.

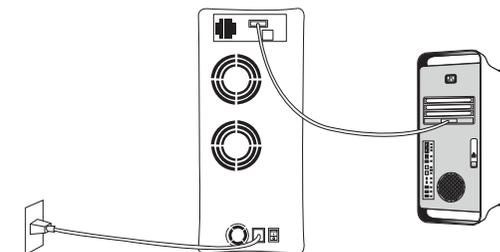
3. Place all HDDs in the trays and fix them with hard drive mounting screws. After it, put the trays with HDDs back to NA762A enclosure.



4. Install the PCIe ×4 host adapter into one PCIe slot in host. The Mac Pro or the Windows computer must have at least one PCIe slot (×4, ×8 or ×16); the slot could be PCIe ×4 even if its physical appearance is PCIe ×8 or PCIe ×16. Please check the User's Manual of Mac Pro or the motherboard to verify the specification of the PCIe slot.

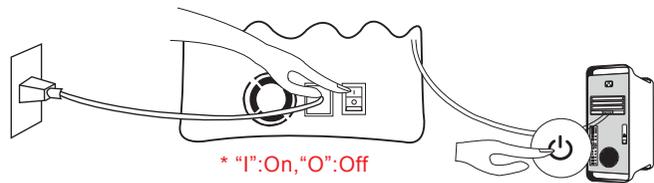


5. Connect NA762A and host with PCIe ×4 data cable, and then connect the storage with power source.



6. When the power cord is connected to NA762A from power source, in order to power on the NA762A, the user should turn on the power switch on PSU of NA762A. (namely, turn the switch to position "I" for enabling on power supply)

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Note:
The powering on procedures are: (1) power on NA762A first, and then (2) power on the Mac Pro or Windows computer.

5. Verification

The following verification steps are for Mac OS X.

1. Verify Netstor NA762A is recognized by Mac Pro. Click the Apple icon on top left of the screen, and select **About This Mac**, and then select **More Info**. Next, select **System Report**, and select **PCI Cards** on left side of the pane of System Information, and then information about NA762A RAID controller will be shown, meaning the storage is recognized by Mac Pro.

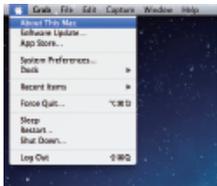


Figure 1.1



Figure 1.2



Figure 1.3



Figure 1.4

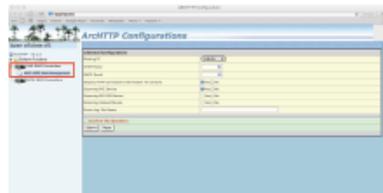
2. Verify the driver of NA762A RAID controller. Following step 1, there will be an item **Driver Installed** indicating the status of the driver of RAID controller. If your Mac OS is Mountain Lion (10.8), then the driver has already been installed on OS showing "Yes" in the info. If your Mac OS is Lion (10.7) or earlier, then you must install the driver for the RAID controller of NA762A. The Mac driver can be found in the CD-ROM or be downloaded at: <http://www.netstor.com.tw/>



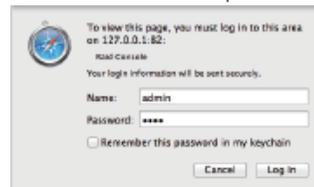
3. After verifying the driver of RAID controller, install the MRAID program from CD-ROM or downloaded from Netstor's website to configure RAID volume for NA762A storage.
4. After installing the MRAID program, open MRAID folder, and double-click **ArcHTTP64** to enter configuration page on web browser.



5. After entering configuration page, click **SAS RAID Controllers** and select **ARC-1223 Web Management**, and then a login pane will pop up.



6. Type **admin** for name and **0000** for password to enter.



7. After logging in, for quick setup of RAID volume, select **Quick Function** on left side of configuration page, and then select **Quick Create**. After RAID volume is created, a pane will pop up providing three selections for action. Select **Initialize** to initialize and format the RAID volume.

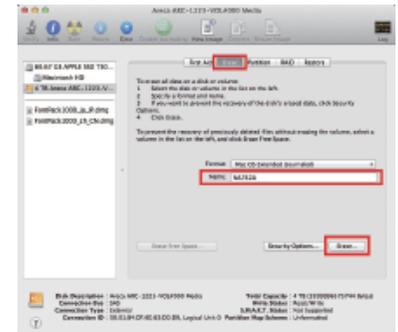


Figure 7.1



Figure 7.2

8. Select the RAID volume that has been built, and select **Erase** on top, name the RAID volume in the center part, and then select **Erase** on bottom right of the pane to format the RAID volume. After formatting, the RAID volume is ready for use.



Note:
to eject the RAID volume on Mac OS X, select **Go** on top of OS screen, and select **Computer**. Right-click the RAID volume, and then select **Eject** to safely eject the RAID volume from Mac Pro.



The following verification steps are for Windows operating system.

1. Verify Netstor NA762A is recognized by host. Right-click **Computer**, and select **Manage**. When window of Computer Management pops up, select **Device Manager** on the left, and click **View** on top, and then select **Devices by connection**.

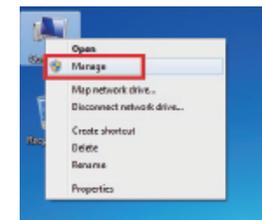


Figure 1.1

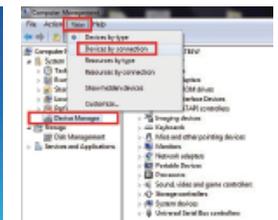
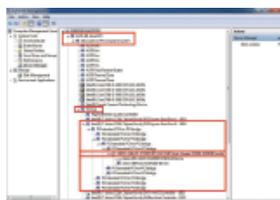


Figure 1.2

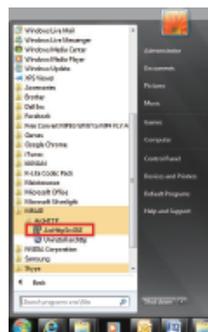
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- Click **ACPI x86-based PC**, select Microsoft **ACPI-Compliant System**, and click **PCI bus**. Then items **Intel 7 Series Chipset Family PCI Express Root Port X** will be shown. Find one of the items that shows PCI standard PCI-to-PCI bridge, and open the PCI standard PCI-to-PCI bridge to the bottommost section, and then the RAID controller of NA762A will be shown, meaning the storage is recognized by host.

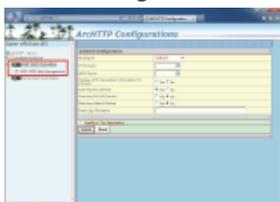


- Install the Windows driver of NA762A RAID controller and the Windows GUI program. The Windows driver and the GUI program can be found in the CD-ROM or be downloaded at: <http://www.netstor.com.tw/>

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



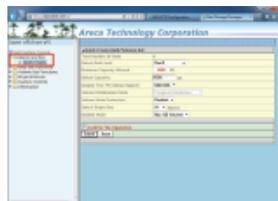
- After running ArcHttpSrvGUI application, the web-based GUI will appear. Select **SAS RAID Controllers**, and the select **ARC-1223 Web Management** to enter the GUI.



- Key in **admin** for name and **0000** for password to enter.



- After logging in, for quick setup of RAID volume, select **Quick Function** on left side of the GUI, and then select **Quick Create**.



- After creating RAID volume, right-click **Computer**, and select **Manage**. When window of Computer Management pops up, select **Disk Management** on the left, and then a window pops up. Select **GPT (GUID Partition Table)**, and click OK.

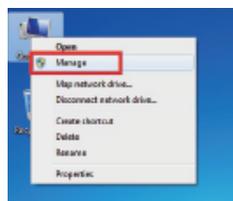


Figure 8.1

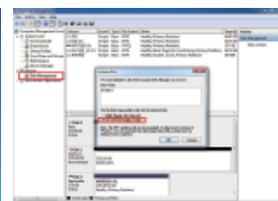
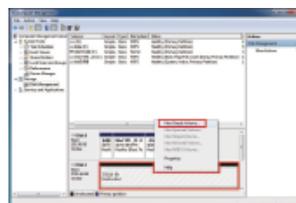
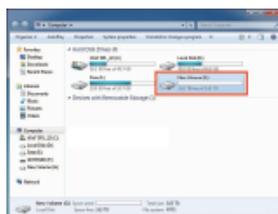


Figure 8.2

- After selecting GPT (GUID Partition Table), the RAID volume will appear in the center bottom part of the window. Right-click the rectangle of the RAID volume, and select **New Simple Volume** to format the RAID volume.



- After formatting, the RAID volume will be shown in Computer, and it is ready for use.

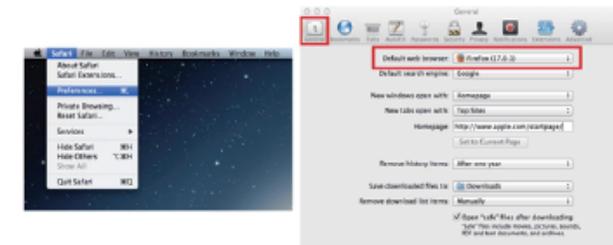


Note:
to eject the RAID volume on Windows, click the Safely Remove Hardware icon on the bottom right of the screen, and select Eject Areca ARC-1223 SCSI Disk Device.



Notice for RAID Initializing and Rebuilding

- It is strongly recommended that when under RAID initializing or rebuilding, the sleep mode be disabled temporarily for speeding up the process. While computer goes in sleep mode, the NA762A will go into sleep as well for energy saving; when computer wakes up, the initializing or rebuilding will resume automatically. Hence, the process can be completed in a short time without sleep mode interruption.
- To maximize the reliability of operation in web-based GUI, the Firefox web browser is recommended. To set Firefox the default web browser (take Mac for example), open Safari web browser, select **Safari** on top left of the screen, and select **Preferences**. When a pane pops up, select **General** on top, and select **Firefox** in the item of default web browser, and then close the pane. (The Firefox software can be downloaded free from the Internet.)



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

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