

ARC-72xx series

8/12/16-bays 12Gb/s SAS to SAS RAID Subsystem

Quick Installation Guide

ARC-72xx RAID subsystem kit

Item list:

- ※ SAS RAID subsystem
- ※ Rack mounting kit
- ※ Power cords
- ※ RJ11 to DB9 serial communications null-modem cable
- ※ Quick installation guide

Rack mounting kit

Item list:

- ※ One pair of mounting-bracket rail
- ※ One pair of length rail
- ※ 10-32 x 0.5-inch flange-head Phillips screws (8)



Thank you for purchasing the ARC-72xx series 8/12/16 bays 12Gb/s SAS to SAS RAID subsystem as your data storage. This quick installation guide gives simple step-by-step instructions for installing and configuring the RAID subsystem.

To install the ARECA® subsystem, follow these steps:

STEP 1: Installing RAID Rack

To install the ARC-72xx Series subsystem into a rack with the supplied mounting rails:

1. Using supplied screws to secure the mounting-bracket rail and length rail and then secure them on the vertical rails, as shown below.

Make sure that all connections are tightened before continuing.

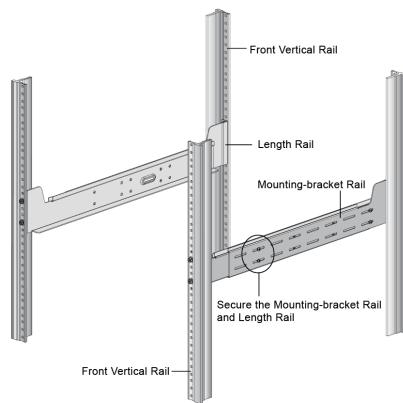


Figure 1, Attaching the Mounting Rails to the Cabinet

2. Slide the rear side of RAID subsystem fully onto the rack until the RAID subsystem front panel touched the front vertical rails. Align the mounting holes of the RAID subsystem on the front vertical rail holes.
3. Secure the RAID subsystem to the front vertical rail and mounting bracket rail on both sides.

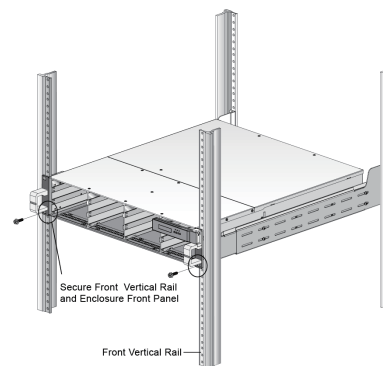


Figure 2, Attaching the Front of the RAID subsystem

STEP 2: Installing Drives

1. Install the drives into the drive tray and make sure the holes of the disk trays align with the holes of the drive.

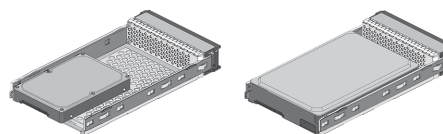


Figure 3, Put 2.5/3.5-inch Drive into 3.5-inch Tray

2. Turn the drive tray upside down and using a screwdriver to secure the drive to the drive tray by four of the mounting screws.



Figure 4, Secure the 2.5/3.5-inch Drive to the Tray

3. After installing the drive into the drive tray completely, make sure the drive tray latch is open, then slide the drive tray with the attached drive into the subsystem drive slot.

STEP 3: Host Connection

The external host connector is provided on the back of the SAS RAID subsystem for connecting the array to server host adapter.

The ARC-72xx RAID controller has two (2) SFF-8644 SAS IN Port connectors and one (1) SFF-8644 SAS Expansion Port connector.

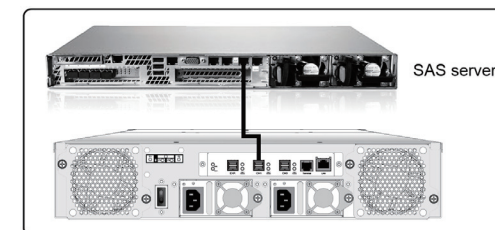


Figure 5, Direct Attached Storage (DAS)

STEP 4: Expansion Connection

ARC-72xx RAID subsystem is a device that contains two expansion ports on each controller. Expansion port supports being attached to JBOD. The maximum drive no. is 512 through this RAID subsystem with JBOD enclosures. Enclosures installed with SAS disks or SATA disks can be included in the same daisy-chain. The following figure shows how to connect the SFF-8644 cable from the SAS RAID subsystem to the JBOD.

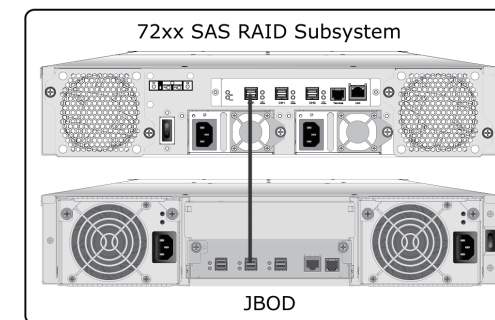


Figure 6, Single Module Daisy-chain

STEP 5: Connecting Monitor Port

This section describes how to establish a management connection to the ARC-72xx RAID subsystem. The SAS RAID subsystem is normally delivered with LCD preinstalled. Your ARC-72xx SAS RAID subsystem can be configured by using the LCD with keypad, a serial device (terminal emulation) or LAN port.

※ RS232C Port Connection

ARC-72xx series can be configured via a VT-100 compatible terminal or a PC running a VT-100 terminal emulation program. You can attach a serial (Character-Based) terminal or server com port to the ARC-72xx D-Sub Connector" for access to the text-based setup menu.

Please configure the SW1(2-1) settings on the RAID controller to define the Terminal connector function for RAID controller and expander.

SW1-2	SW1-1	Terminal Port (J5) Function
OFF	OFF	Expander Terminal
OFF	ON	Expander Debug
ON	OFF	Controller Terminal
ON	ON	Controller Debug

The SAS RAID subsystem package includes one RJ11-to-DB9 serial data cable. Use the RJ11 serial port on the controller module to establish the serial communication link.

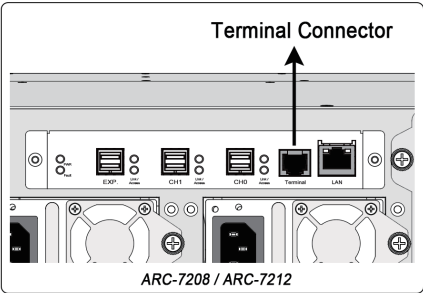


Figure 7, RS-232C Monitor Port Location

※ LAN Port Connection

The SAS RAID subsystem has embedded the TCP/IP & web browser-based RAID manager in the firmware. User can remote manage the SAS RAID subsystem without adding any user specific software (platform independent) via standard web browsers directly connected to the RJ45 LAN port. Connect Ethernet port of the SAS RAID subsystem using the included LAN cable and then to a LAN port or LAN switch.

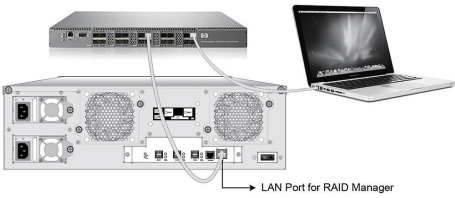


Figure 8, ARC-72xx Lan Management Connection

STEP 6: Power On

ARC-72xx series RAID enclosures are equipped with two power supplies for each unit. Using the included power cords, connect each power supply to a suitable AC power source.

There is one main power on/off switch located on the rear side of the RAID subsystem. This on/off power switch is used to apply or remove power from the power supply to the RAID subsystem.

Turning off subsystem power with this switch removes the main power but keeps standby power supplied to the RAID subsystem. Therefore, you must unplug the power cord before subsystem servicing.

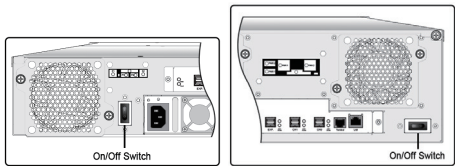


Figure 9, On/Off Switch Location

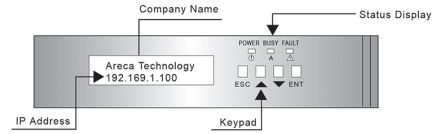
The installation is completed. You can use your SAS RAID subsystem.

STEP 7: Configuring Volume

Your SAS RAID subsystem can be configured by using the LCD with keypad, a serial device (terminal emulation) or LAN port.

※ Method 1: LCD Panel Management

You can use LCD front panel and keypad function to simply create the RAID volume. The LCD status panel also informs you of the disk array's current operating status at a glance. The LCD provides a system of screens with areas for information, status indication, or menus. The manufacture default password is set to 0000. The initial screen is as following:



For additional information on using the LCD to configure the RAID subsystem see the Chapter 4 of LCD Configuration Menu.

※ Method 2: RS-232 Port Management

You can attach a serial (Character-Based) terminal or server com port to the RAID subsystem for access to the text-based setup menu via a VT-100 compatible terminal or a PC running a VT-100 terminal emulation program to configure RAID sets and volume sets. The firmware-based terminal array management interface can access the array through this RS-232 port. The manufacture default password is set to 0000. To ensure proper communications between the RAID controller and the VT-100 Terminal Emulation, please configure the VT100 terminal emulation settings to the values shown below:

Terminal Requirement	
Connection	Null-modem cable
Baud Rate	115,200
Data bits	8
Stop	1
Flow Control	None

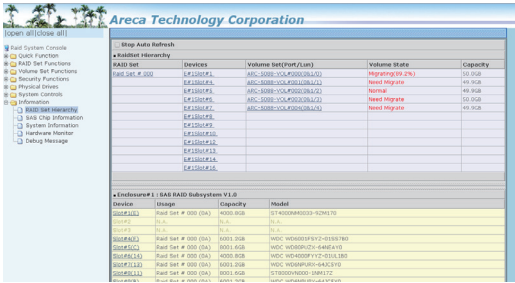
For additional information on using the RS-232 port to configure the RAID subsystem see the Chapter 5 of VT-100 Utility Configuration.

※ Method 3: LAN Port Management

User can remote manage the ARC-72xx series RAID subsystem without adding any user specific software (platform independent) via standard web browsers directly connected to the Gigabit Ethernet RJ45 LAN port. The IP address default shows in the LCD screen. Launch the Web Browser-based RAID manager by entering [http://\[IP Address\]](http://[IP Address]) in the web browser.



Type the User Name and Password. The RAID controller default User Name is "admin" and the Password is "0000". After entering the user name and password, click the button to access the McRAID storage manager.



See the chapter 6 of Web Browser-based Configuration on the user manual detailing the McRAID Storage Manager to customize your RAID configuration.

If you need more detail information, please download ARC-72xx user manual from the website below:

<http://www.areca.com.tw/support/main.htm>