

# **Quick Installation Guide**

## ARC-8042-12

12-bays 12Gb/s SAS to SAS Desktop RAID Subsystem



## Step 1: Unpack the ARC-8042-12 Unit

Inspect ARC-8042-12 enclosure. If it appears damaged, or if any items of the contents listed below are missing or damaged, please contact your dealer or distributor.

#### Checklist

- 1 x Power cord
- 1 x RJ11 to RS-232 DB9 cable
- 1 x RJ-45 LAN cable
- 48 x drive mounting screws (4 per drive tray)
- 1 x ARC-8042-12 quick installation quide

## Step 2: Install SAS/SATA Drives

Secure the drive to the tray by four of the mounting screws, then slide them into enclosure.

#### Step 3: Connect to Host Computer or Next JBOD

The ARC-8042-12 has two SFF-8644 SAS IN Port connectors and two SFF-8644 SAS Expansion Port connectors.

#### **Host Port Connection**

Connect ARC-8042-12 to a single host using a SFF-8644 cable.



## **Expansion Port Connection**

ARC-8042-12 contains two expansion ports. 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.



## Step 4: Connect Monitor Port

This section describes how to establish a management connection to the ARC-8042-12. The SAS RAID subsystem is normally delivered with LCD preinstalled. Your ARC-8042-12 SAS RAID subsystem can be configured by using the LCD with keypad, a serial device (terminal emulation) or LAN port.

#### **※ RS232C Port Connection**

The ARC-8042-12 JBOD enclosure 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 SAS JBOD enclosure 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.



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.





#### Step 5: Power Up the Enclosure

Using the included power cord, connect the 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.

## Step 6: Configure RAID Volumes

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

## % Method 1: 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-modern 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 2: LCD Panel with Keypad (Optional)**

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 LCD manual. You can download it from the website below:

http://www.areca.us/support/download/RaidCards/Documents/Manual\_Spec/LCD\_ manual.zip

## **% Method 3: LAN Port Management**

User can remote manage the ARC-8042 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] in the web browser.

	Windows Security
iexplore.ex The server 192	e .168.0.94 is asking for your user name and password. The
server reports	that it is from Raid Console.
	User name
Р	Password
	Remember my credentials
	OK Cancel

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.

St	Stop Auto Refresh								
• Rair	RaidSet Hierarchy								
S RAID	RAID Set		1	(olume Set(Port/Lun)	Volume State	Capacity			
Raid (	Set # 000	E#15lot#1	6	VRC-5088-V0L#000(081/0)	Migrating(89.2%)	\$0.0GB			
		E#15lot#4	4	VRC-5089-VOL#001(081/1)	Need Migrate	49.968			
		E#15lot#5	4	VRC-5089-V0L#002(0R1/2)	Normal	49.968			
		E#15lot#6	6	RC-5088-VOL#003(0R1/3)	Need Migrate	S0.0G8			
		E#15lot#7	6	RC-5089-VOL#004(08:1/4)	Need Migrate	49.9GB			
	E#1Slot#8								
	E#15lot#9								
	E#1Slot#10								
	E#1Slot#1								
		E#15lot#13							
		E#15lot#14							
		E#15lot#16							
	0/10081 184	RAID Subcusto	um 1/1 0						
	ionales 1 . are	10		(assured					
Devic	or Usa	1	Capacity	MOUNI					
Devic Slot#	1(E) Raid	Set # 000 (0A)	4000.868	ST4000NM0033-9ZM170					
Devie Slot#	1(E) Raid 2 N.A.	Set # 000 (0A)	4000.868 N.A.	ST4000NM0033+92M170 N.A.					
Slot#	1(E) Raid 2 N.A. 3 N.A.	Set # 000 (0A)	4000.868 N.A. N.A.	5T4000NM0033-9ZM170 N.A. N.A.					
Slot# Slot# Slot#	2 N.A. 3 N.A. 4(E) Raid	Set # 000 (0A)	Capacity 4000.868 N.A. N.A. 0001.268	N.6. N.6. N.6. WDC WD5001F5YZ-0155781	3				
Slot# Slot# Slot# Slot#	USa   1(E) Raid   2 N.A.   3 N.A.   4(E) Raid   5(C) Raid	Set # 000 (0A) Set # 000 (0A) Set # 000 (0A)	Capacity 4000.868 N.A. N.A. 6001.268 8001.668	N.A. WDC WD5001F5YZ-0155781 WDC WD5001F5YZ-0155781	1				
Slot# Slot# Slot# Slot# Slot# Slot#	USA   1(E) Raid   2 N.A.   3 N.A.   4(E) Raid   5(C) Raid   5(14) Raid	Set # 000 (0A) Set # 000 (0A) Set # 000 (0A) Set # 000 (0A)	Capacity 4000.868 N.A. N.A. 6001.268 8001.668 4000.868	NA.   N.A.   N.A.   WDC WD6001FSY2-01SS78I   WDC WD6001FSY2-01VL180   WDC WD6000FYY2-01UL180	1				
Devis Slot# Slot# Slot# Slot# Slot# Slot#	USa   1(E) Roid   2 N.A.   3 N.A.   4(E) Roid   5(C) Roid   5(L4) Roid   5(14) Roid	Set # 000 (0A) Set # 000 (0A) Set # 000 (0A) Set # 000 (0A) Set # 000 (0A)	Capacity 4000.868 N.A. N.A. 6001.268 8001.668 4000.868 6001.268	MODUL   ST-4000MM0033-92M170   N.A.   WDC   WDC	1				

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-8042 user manual from the website below:

- http://www.areca.com.tw/products/8042.htm
- http://www.areca.com.tw/support/main.htm



Form Factor	Desktop 12-bay		
Disk Port	12 x 12Gb/s SAS/SATA		
External Port	2 x SFF-8644 Host Port / 2 x SFF-8644 JBOD Port		
Cooling Fan	2 x 2700rpm		
Power Supply	270W		
Dimension(W/H/D)	8.1 x 12.2 x 11.4 in (206x310x290 mm)		
Weight	20.8 lbs / 9.5Kg		
Management	1 x 6-pin UART RJ-11 connector / 1 x RJ-45 LAN connector / LCD module		



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