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› [Hewlett Packard MSA60 Modular Smart Array \(Model AJ924A\) User Manual](#)

HEWLETT PACKARD AJ924A

Hewlett Packard MSA60 Modular Smart Array (Model AJ924A) User Manual

Model: AJ924A | Brand: HEWLETT PACKARD

1. INTRODUCTION AND OVERVIEW

The HP StorageWorks 60 Modular Smart Array (MSA60) is a 2U rack-mountable Serial Attached SCSI (SAS) disk drive array designed to support 3.5-inch Serial ATA (SATA) drives. This system provides a robust and scalable storage solution, offering data performance, availability, and storage density for various computing environments. This manual provides essential information for the proper installation, configuration, operation, and maintenance of your MSA60 unit.



Figure 1: Front view of the Hewlett Packard MSA60 Modular Smart Array. This image displays the front panel of the HP MSA60, featuring twelve 3.5-inch drive bays arranged in four columns of three. Each bay includes an indicator light, suggesting drive activity or status. The overall design is a standard rack-mountable 2U form factor.

2. SAFETY INFORMATION

Please read all safety instructions carefully before installing or operating the MSA60. Failure to follow these instructions may result in electric shock, fire, or damage to the equipment.

- Ensure the power supply is disconnected before performing any maintenance or installation procedures.
- Only use the power cords and adapters supplied or approved by Hewlett Packard.
- Install the unit in a well-ventilated area to prevent overheating.
- Do not expose the unit to moisture or extreme temperatures.
- Heavy equipment: Use proper lifting techniques or assistance when moving the unit.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon unpacking. Contact your vendor immediately if any items are missing or damaged.

- HP MSA60 Modular Smart Array unit
- Rack mounting kit
- Power cords (quantity may vary by region)
- SAS cables
- Documentation (Quick Start Guide, Warranty Information)
- Optional: 3.5-inch SATA hard drives (if purchased with the unit)

4. SETUP

4.1 Rack Installation

1. Attach the rack rails to the rack cabinet according to the instructions provided with the rack mounting kit.
2. Carefully slide the MSA60 unit onto the installed rails until it clicks into place.
3. Secure the unit to the rack using the provided screws.

4.2 Drive Installation

1. Ensure the MSA60 is powered off and disconnected from power sources.
2. Insert each 3.5-inch SATA hard drive into an available drive bay. Ensure the drive is fully seated and the latch mechanism engages.
3. Repeat for all desired drives.

4.3 Cabling

1. Connect the SAS cables from the MSA60 to the appropriate SAS controller ports on your server or host system.
2. Connect the power cords to the MSA60 power supply units and then to a grounded power outlet.

5. OPERATING INSTRUCTIONS

5.1 Powering On

After all connections are secure, power on the MSA60 by ensuring the power outlets are active. The unit will typically power on automatically. Observe the indicator lights on the front panel for system status.

5.2 Initial Configuration

The MSA60 is managed through the SAS controller in your host server. Refer to your SAS controller's documentation for instructions on how to detect the array, configure logical drives (RAID levels), and allocate storage.

5.3 Drive Status Indicators

- **Green (Solid):** Drive is active and operating normally.
- **Green (Flashing):** Drive activity (reading/writing data).
- **Amber (Solid):** Drive fault or predictive failure.
- **Off:** Drive is not present or not powered.

6. MAINTENANCE

6.1 Regular Inspections

- Periodically check all cable connections to ensure they are secure.

- Monitor the status indicator lights on the front panel for any anomalies.
- Ensure adequate airflow around the unit to prevent overheating.

6.2 Drive Replacement

In the event of a drive failure (indicated by an amber light), replace the faulty drive with a new, compatible 3.5-inch SATA drive. Consult your SAS controller documentation for specific hot-swap procedures if applicable.

7. TROUBLESHOOTING

7.1 Common Issues and Solutions

Issue	Possible Cause	Solution
Unit does not power on	Power cords disconnected; Power supply failure	Check power cord connections; Test power outlets; Contact support if power supply is faulty.
Drives not detected by host	SAS cables disconnected; SAS controller issue; Incorrect configuration	Verify SAS cable connections; Check SAS controller status; Review SAS controller documentation for configuration.
Amber light on drive	Drive failure or predictive failure	Replace the faulty drive. Back up data if possible before replacement.
Overheating	Poor ventilation; Fan failure	Ensure proper airflow in the rack; Check fan operation; Clean dust from vents.

8. SPECIFICATIONS

Feature	Detail
Product Model Number	AJ924A
Brand	Hewlett Packard
Form Factor	2U Rack-mountable
Drive Bays	12 x 3.5-inch
Supported Drive Interface	Serial ATA (SATA)
Host Interface	Serial Attached SCSI (SAS)
Digital Storage Capacity (Max)	12 TB (with 1TB drives, actual capacity depends on drives installed)
Product Dimensions	4.13 x 2.35 x 3.85 inches (10.49 x 5.97 x 9.78 cm)
Item Weight	120 pounds (54.43 kg)
Manufacturer	HP
ASIN	B001F4R2F6
UPC	884420366867

9. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty document included with your product or visit the official Hewlett Packard support website. Technical support and service options are available through Hewlett Packard's customer service channels. Please have your product model number (AJ924A) and serial number ready when contacting support.

[Visit HP Support Website](#)

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