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› APC Rack ATS, Rack-Mount Transfer Switch 120V/20A, (10) 5-20R Outlets (AP4452) User Manual

APC AP4452

APC Rack ATS, Rack-Mount Transfer Switch 120V/20A, (10) 5-20R Outlets (AP4452) User Manual

Model: AP4452

1. INTRODUCTION

This manual provides instructions for the installation, operation, and maintenance of the APC Rack ATS, Model AP4452. This device is designed to provide redundant rack mount power to single-corded equipment, ensuring continuous power availability and enhanced reliability for critical systems.

2. SAFETY INFORMATION

Please read and understand all safety instructions before installing or operating this product. Failure to follow these instructions may result in equipment damage, personal injury, or death.

- **Indoor Use Only:** This unit is intended for indoor use in a controlled environment.
- **Grounded Connection:** Always connect the unit to a properly grounded electrical outlet.
- **No User Serviceable Parts:** Do not open the unit. There are no user-serviceable components inside. Refer all servicing to qualified service personnel.
- **Ventilation:** Ensure adequate airflow around the unit to prevent overheating. Do not block ventilation openings.
- **Power Disconnection:** Disconnect power from both input sources before performing any maintenance or installation procedures.

3. PACKAGE CONTENTS

Upon unpacking, verify that all the following items are included:

- APC Rack ATS (AP4452) Unit
- Rack Mounting Hardware Kit
- User Manual (this document)

4. SETUP

Follow these steps to properly install and connect your APC Rack ATS.

1. **Rack Mounting:** Securely mount the AP4452 unit into a standard 19-inch equipment rack using the provided mounting hardware. Ensure the unit is stable and properly aligned.
2. **Power Input Connection:** Connect the two input power cords (labeled Source A and Source B) from the AP4452 to independent, dedicated 120V/20A power sources. These sources should ideally be from different circuits or UPS systems for true redundancy.
3. **Equipment Connection:** Connect your single-corded IT equipment to the (10) 5-20R output outlets on the AP4452. Distribute the load as evenly as possible across the outlets to optimize performance.
4. **Initial Power On:** Once all physical connections are secure, apply power to both Source A and Source B. The unit will perform a self-test and indicate its operational status via its front panel display or indicators.



Image: Front view of the APC Rack ATS AP4452, illustrating the ten 5-20R output receptacles and the two incoming power cables (Source A and Source B) on the left side. This image helps visualize the connection points for equipment and power inputs.

5. OPERATING

The APC Rack ATS AP4452 is designed for automatic operation, providing seamless power redundancy to connected equipment.

5.1. Automatic Transfer Operation

The unit continuously monitors the primary power source (Source A). In the event of a power failure or degradation on Source A, the ATS will automatically and instantaneously transfer the connected equipment to the secondary power source (Source B) without interrupting power to the load. When Source A recovers, the ATS will automatically transfer the load back to Source A (if configured for preferred source operation).

5.2. Load Monitoring

The AP4452 provides advanced load monitoring capabilities. The front panel display typically shows real-time current draw and other operational parameters. For more detailed monitoring and historical data, connect the unit to a network management system (if equipped with a network management card).

5.3. Remote Switching Control (for Switched Models)

If your AP4452 model includes switched outlets, individual outlets can be remotely controlled. This functionality allows for power cycling of connected equipment, delayed power sequencing during startup, and granular outlet use management. Refer to the specific documentation for the network management card or integrated web interface for detailed instructions on configuring and utilizing these features.



Image: Rear view of the APC Rack ATS AP4452, highlighting the dual power input connections and the rack-mounting

points. This view is crucial for understanding how the unit integrates into a rack and connects to power infrastructure.

6. MAINTENANCE

The APC Rack ATS AP4452 is designed for reliable, low-maintenance operation. Regular checks can help ensure its continued performance.

- **Visual Inspection:** Periodically inspect the unit, power cords, and connected equipment cables for any signs of damage, fraying, or loose connections.
- **Environmental Check:** Ensure the operating environment remains clean, dry, and within the specified temperature and humidity ranges. The upper temperature rating is 113 Degrees Fahrenheit (45°C).
- **Firmware Updates:** If your unit has network capabilities, regularly check the official APC website for any available firmware updates. Applying updates can improve performance, add features, or address security vulnerabilities.
- **Cleaning:** Keep the unit free of dust and debris. Use a soft, dry cloth for cleaning. Do not use liquid cleaners or solvents.

7. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your APC Rack ATS.

7.1. No Power to Outlets

- **Check Input Power:** Verify that both input power sources (Source A and Source B) are active and properly connected to the ATS.
- **Circuit Breakers:** Inspect the circuit breakers on your facility's electrical panel for tripped conditions. Reset if necessary.
- **Cable Connections:** Ensure all power cords are securely plugged into the ATS and the connected equipment.

7.2. Unit Not Transferring Power

- **Source Availability:** The unit will only transfer if one power source fails. Confirm that one of the input sources is indeed unavailable or degraded.
- **Status Indicators:** Consult the unit's front panel display or status indicators for any error messages or warnings.
- **Load Condition:** Ensure the connected load is within the unit's capacity.

7.3. Overload Indication

- **Reduce Load:** The unit indicates an overload when the total power draw from connected equipment exceeds its rated capacity. Reduce the load by disconnecting non-essential equipment. The maximum output wattage is 20 Watts.
- **Short Circuit:** Check for any short circuits in the connected equipment that could cause excessive current draw.

8. SPECIFICATIONS

Key technical specifications for the APC Rack ATS Model AP4452:

Feature	Specification
Brand	APC
Model Number	AP4452
Voltage	120 Volts
Output Wattage	20 Watts
Item Weight	9.7 Pounds
Form Factor	Rack-mountable
Input Connector Type	IEC 60320 C14
Output Receptacles	(10) 5-20R
Upper Temperature Rating	113 Degrees Fahrenheit (45°C)
Dimensions (L x W x H)	23.63 x 4.5 x 14 inches
UPC	731304333500

9. WARRANTY AND SUPPORT

This APC Rack ATS (AP4452) is covered by a **2-year manufacturer warranty**. This warranty covers defects in materials and workmanship under normal use.

For technical support, warranty claims, or further assistance with your product, please contact APC customer service directly. You can find contact information and additional resources on the official APC website.

Note: Warranty details are subject to change. Please refer to the official APC warranty statement provided with your product or on the APC website for the most current and complete information.