DEWIN G2R 63A 2P

DEWIN G2R 63A 2P Automatic Transfer Switch Instruction Manual

Model: G2R 63A 2P

1. Introduction

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the DEWIN G2R 63A 2P Automatic Transfer Switch (ATS). Please read this manual thoroughly before installation and use, and keep it for future reference.
The DEWIN G2R 63A 2P ATS is designed for dual power supply systems (common power and standby power) to ensure continuous power to your load by automatically switching between sources in case of an outage. It is suitable for AC 50-60Hz systems with a rated current of 6A-63A.

2. Safety Information

WARNING: Electrical shock hazard. Installation and maintenance should only be performed by qualified personnel.

- Always disconnect all power sources before installing or servicing the ATS.
- Ensure proper grounding of the device.
- Verify all wiring connections are secure and correct according to the wiring diagram.
- Do not operate the ATS if it is damaged or malfunctioning.
- Observe all local and national electrical codes.

3. Product Features

- **High Performance:** Driven by an excitation electromagnet, offering extremely fast switching speed (less than 50ms conversion time) to effectively resolve power outage issues.
- **High Quality Construction:** Features a flame-retardant shell, resistant to extreme environments, ensuring strong adaptability and reliable operation.
- **Automatic Transfer:** Designed with common power and standby power indicators, and a load power-on indicator for clear status monitoring.
- **Arc Suppression System:** Equipped with an internal arc extinguishing system for rapid cooling and arc suppression.

- **Easy Installation:** Modular structure design with same-side wire entry for convenient wiring. Compact size (less than 0.4 kg) supports 35mm DIN rail installation, suitable for household distribution boxes.



Figure 1: DEWIN G2R 63A 2P Automatic Transfer Switch highlighting key features like millisecond switching and DIN rail type.



Figure 2: Product view emphasizing dual power supply design and control options.

4. Specifications

Parameter	Value
Material	PC + Copper
Rated Operating Current (Ie)	63A
Rated Insulation Voltage (Ui)	690V
Rated Operating Voltage (Ue)	AC 220V
Rated Frequency	50/60Hz
Number of Poles	2P (4P optional variant)

Rated Short-Circuit Current (Iq)	50kA
Short-Circuit Protection Device	Fuse
Rated Impulse Withstand Voltage	8kV
Common Circuit	2P AC 220V
Auxiliary Circuit	2P AC 220V (Urban power, Generator)
Contactor Switching Time	<50ms
Operation Transition Time	<50ms
Return Conversion Time	<50ms
Power-Off Time	<50ms
Conversion Operation Time	<50ms
Mechanical Life	8000 cycles
Electrical Life	1500 cycles
Usage Category	AC-31B
Operating Temperature Range	-5°C to +40°C (average over 24h < +35°C)
Storage Temperature Range	-25°C to +55°C (short-term up to +70°C within 24h)
Installation Altitude	< 2000 meters
Protection Level (ATS chassis)	IP30
Dimensions (approx.)	105mm (L) x 70mm (H) x 45mm (W)
Weight (approx.)	380 Grams



Figure 3: Product dimensions for installation planning.

5. Installation (Setup)

5.1 Unpacking

Carefully unpack the automatic transfer switch. The package should contain:

- 1 x Automatic Transfer Switch
- 1 x Instruction Manual

5.2 Mounting

The DEWIN G2R 63A 2P ATS is designed for 35mm DIN rail installation. Ensure the installation site meets the environmental requirements specified in Section 4 (Specifications).

1. Locate a suitable 35mm DIN rail within your distribution box.
2. Align the ATS with the DIN rail and press firmly until it clicks into place.

3. Ensure the device is securely fastened and does not wobble.

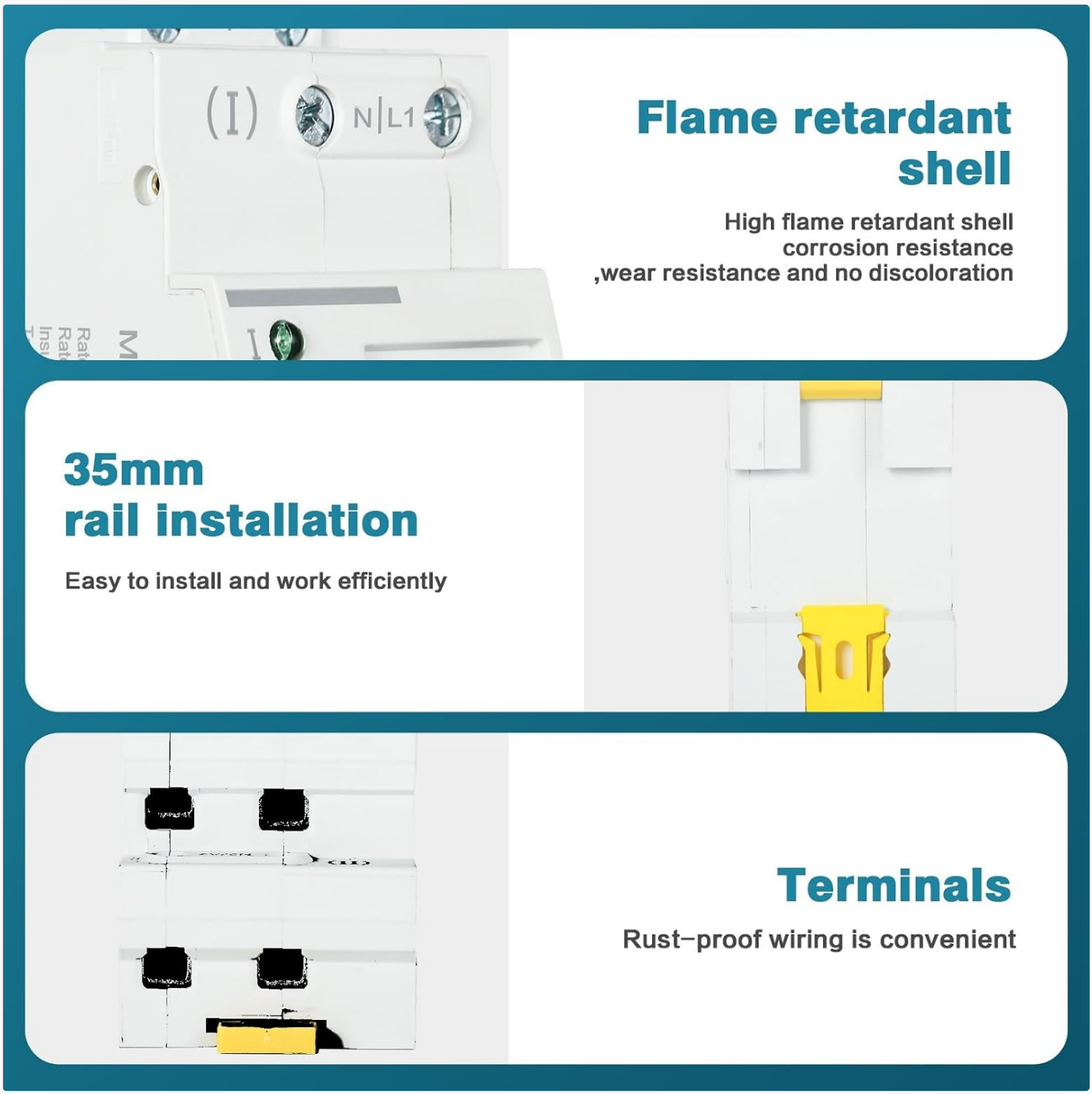


Figure 4: Features like flame-retardant shell, 35mm DIN rail installation, and rust-proof terminals.

5.3 Wiring

Refer to the wiring diagram below for correct connections. All connections must be tight and secure to prevent loose contacts and potential hazards.

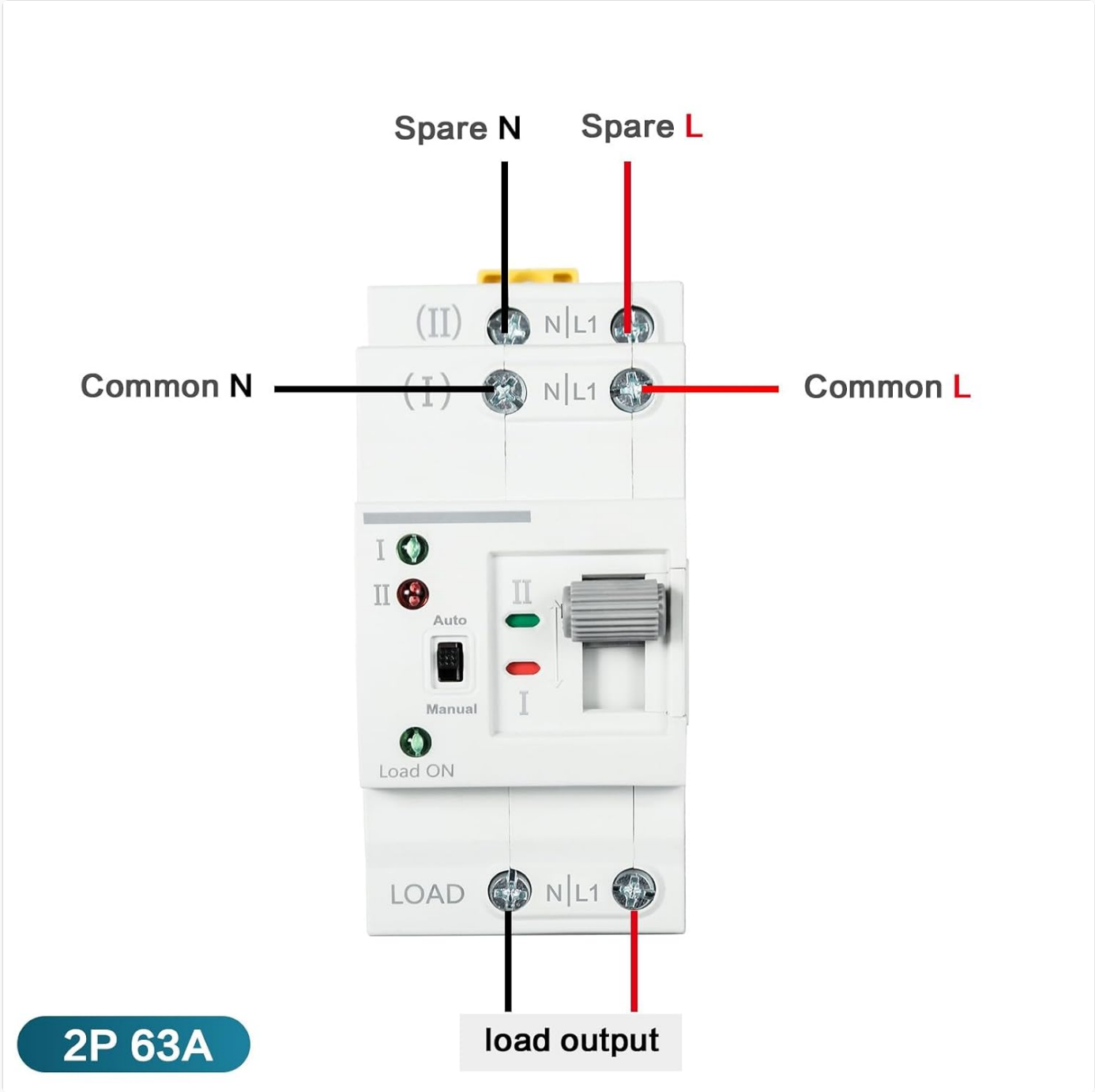


Figure 5: Wiring diagram for the 2P 63A ATS, showing Common N, Common L, Spare N, Spare L, and Load Output connections.

- Connect the Common Neutral (N) and Common Live (L) from your primary power source to the terminals labeled (I) N and (I) L1 respectively.
- Connect the Spare Neutral (N) and Spare Live (L) from your secondary (standby) power source to the terminals labeled (II) N and (II) L1 respectively.
- Connect the Load Output Neutral (N) and Load Output Live (L) to the terminals labeled LOAD N and LOAD L1 at the bottom of the switch.
- Ensure all wire entries are from the same side for convenient cabling.

6. Operation

The ATS features both automatic and manual operation modes. The status of the switch is indicated by lights and mechanical indicators.

Panel analysis

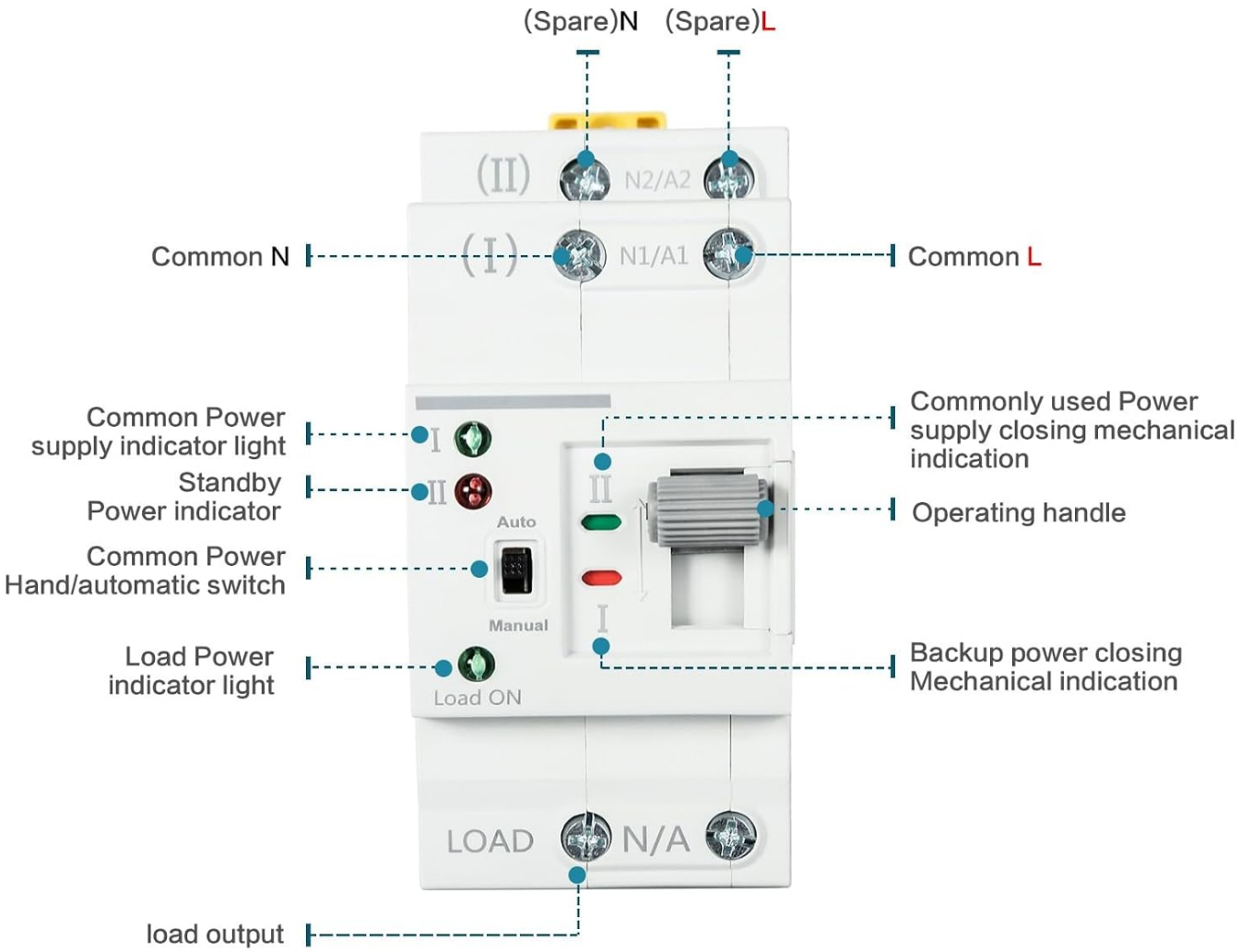


Figure 6: Detailed panel analysis showing indicators and controls.

- **Common Power Supply Indicator Light (I):** Illuminates when the primary power source is active.
- **Standby Power Indicator Light (II):** Illuminates when the secondary power source is active.
- **Load Power Indicator Light (Load ON):** Illuminates when power is supplied to the load.
- **Hand/Automatic Switch:** Allows selection between automatic and manual operation.
  - Set to "Auto" for automatic switching between power sources.
  - Set to "Manual" to manually switch using the operating handle.
- **Operating Handle:** Used for manual switching between power sources I and II when in "Manual" mode.
- **Commonly Used Power Supply Closing Mechanical Indication (I):** Mechanical indicator showing primary power source connection.
- **Backup Power Closing Mechanical Indication (II):** Mechanical indicator showing secondary power source connection.

6.1 Automatic Mode

In "Auto" mode, the ATS will automatically detect the presence of power from source I (common power) and source II (standby power). If source I fails, the ATS will automatically switch to source II. When source I is restored, the ATS will switch back to source I.

6.2 Manual Mode

In "Manual" mode, you can use the operating handle to switch between source I and source II. This mode is useful for testing or specific operational requirements.

1. Set the Hand/Automatic switch to "Manual".
2. Move the operating handle to position "I" to connect to the primary power source.
3. Move the operating handle to position "II" to connect to the secondary power source.

7. Maintenance

The DEWIN G2R 63A 2P ATS is designed for reliable operation with minimal maintenance. However, periodic checks are recommended to ensure optimal performance and safety.

- **Visual Inspection:** Regularly inspect the ATS for any signs of physical damage, discoloration, or loose connections.
- **Terminal Tightness:** Periodically check that all wiring terminals are securely tightened. Loose connections can lead to overheating and malfunction.
- **Cleaning:** Keep the ATS free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquid cleaners.
- **Environmental Conditions:** Ensure the operating environment remains within the specified temperature and humidity ranges to prevent condensation and ensure longevity.

Note: All maintenance procedures should be performed with power disconnected to prevent electrical shock.

8. Troubleshooting

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

Problem	Possible Cause	Solution
ATS does not switch automatically.	1. Switch is in "Manual" mode. 2. No power detected from either source. 3. Faulty internal mechanism.	1. Set the Hand/Automatic switch to "Auto". 2. Check power supply to both sources. Verify indicator lights. 3. Contact qualified service personnel.
No power to load.	1. No power from selected source. 2. Loose wiring connections. 3. ATS internal fault.	1. Check power supply to both sources. Ensure at least one source is active. 2. Disconnect power and check all wiring terminals for tightness. 3. Contact qualified service personnel.
Overheating or burning smell.	1. Loose connections. 2. Overload. 3. Internal component failure.	1. Immediately disconnect power. Check and tighten all connections. 2. Ensure the load current does not exceed 63A. Reduce load if necessary. 3. Disconnect power and contact qualified service personnel.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact DEWIN customer support or a qualified electrician.

9. Warranty and Support

9.1 Warranty Information

DEWIN products are manufactured to high-quality standards. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official DEWIN website. Keep your purchase receipt as proof of purchase for warranty claims.

9.2 Customer Support

For technical assistance, troubleshooting, or any questions regarding your DEWIN G2R 63A 2P Automatic Transfer Switch, please contact DEWIN customer support through the retailer where you purchased the product or via the official DEWIN contact channels.
When contacting support, please have your product model number (G2R 63A 2P) and purchase details ready.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question