

Polar Series

Generic 12,000 BTU 21 SEER 220 Volt Cooling Only TGM Polar Series Mini-Split Air Conditioner

USER MANUAL

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1. INTRODUCTION

Thank you for choosing the Generic 12,000 BTU 21 SEER 220 Volt Cooling Only TGM Polar Series Mini-Split Air Conditioner. This manual provides essential information for the safe installation, operation, and maintenance of your new appliance. Please read this manual thoroughly before installation and use, and retain it for future reference.

This mini-split system is designed to provide efficient cooling for your space. Its 21 SEER rating indicates high energy efficiency, and the 12,000 BTU capacity is suitable for cooling medium-sized rooms. The system operates on a 220-volt power supply and uses R410A refrigerant.



Image 1.1: The Generic 12,000 BTU 21 SEER 220 Volt Cooling Only TGM Polar Series Mini-Split Air Conditioner, showing both the indoor and outdoor units.

2. SAFETY INFORMATION

Your safety and the safety of others are paramount. Please read and follow all safety instructions carefully to prevent injury or property damage.

2.1 General Safety Precautions

- Installation must be performed by qualified personnel in accordance with national wiring standards.
- Ensure the power supply matches the unit's specifications (220 Volts).
- Do not operate the unit with wet hands.
- Keep children away from the unit.
- Do not insert objects into the air outlet or inlet.
- Turn off the power supply before cleaning or maintenance.

2.2 Electrical Safety

- This unit requires a dedicated 220V circuit.
- Ensure proper grounding to prevent electric shock.
- Do not use extension cords or multi-outlet adapters.

2.3 Refrigerant Safety (R410A)

- The refrigerant R410A is non-flammable but should only be handled by certified technicians.
- Avoid direct contact with refrigerant. In case of contact, seek medical attention.
- Ensure proper ventilation during installation and servicing.

3. PACKAGE CONTENTS

Please check that all the following items are included in your package. If any items are missing or damaged, contact your retailer immediately.

- Indoor Unit (Evaporator)
- Outdoor Unit (Condenser)
- Remote Control with Batteries
- Installation Plate for Indoor Unit
- Drain Hose
- Insulation Tape
- User Manual (this document)
- Warranty Card

Note: Refrigerant lines and electrical wiring are typically purchased separately and are not included in the standard package.

4. SETUP

Proper installation is crucial for the efficient and safe operation of your mini-split system. It is highly recommended that installation be performed by a certified HVAC technician.

4.1 Pre-installation Checklist

- **Location:** Choose a location for both indoor and outdoor units that allows for proper airflow, drainage, and easy access for maintenance. Ensure the outdoor unit is not exposed to direct sunlight or heavy rain.
- **Structural Support:** Verify that the wall for the indoor unit and the ground/wall for the outdoor unit can support their respective weights.
- **Electrical Supply:** Confirm a dedicated 220V power supply is available near the outdoor unit.
- **Tools:** Gather necessary tools including drills, wrenches, vacuum pump, manifold gauge, pipe cutter, flaring tool, and safety equipment.

4.2 Installation Steps (Overview)

1. **Mounting the Indoor Unit:** Secure the mounting plate to the wall, ensuring it is level. Drill a hole through the wall for refrigerant lines and drainage.
2. **Mounting the Outdoor Unit:** Place the outdoor unit on a stable, level surface or mount it on a sturdy wall bracket. Ensure adequate clearance around the unit for airflow.
3. **Connecting Refrigerant Lines:** Connect the flared ends of the refrigerant lines to the indoor and outdoor units.

Ensure connections are tight to prevent leaks.

4. **Electrical Connections:** Connect the power supply and communication wires between the indoor and outdoor units, and to the main power source (220V). Follow the wiring diagram provided with the unit.
5. **Drainage:** Connect the drain hose from the indoor unit, ensuring it slopes downwards to allow for proper condensate drainage.
6. **Vacuuming and Charging:** Use a vacuum pump to evacuate air and moisture from the refrigerant lines. Check for leaks. The unit comes pre-charged with R410A refrigerant, but additional charging may be required depending on line length.
7. **Insulation:** Insulate all refrigerant lines and connections to prevent condensation and improve efficiency.

5. OPERATING INSTRUCTIONS

This section details how to use your mini-split air conditioner for optimal cooling performance.

5.1 Remote Control Overview

The unit is controlled via a wireless remote control. Ensure batteries are correctly inserted.

- **ON/OFF Button:** Powers the unit on or off.
- **MODE Button:** Selects the operating mode. This unit supports COOLING ONLY.
- **TEMP ▲/▼ Buttons:** Adjusts the desired temperature.
- **FAN Button:** Adjusts fan speed (Auto, Low, Medium, High).
- **SWING Button:** Controls the louver's vertical swing.
- **TIMER Button:** Sets the auto-on or auto-off timer (refer to remote manual for detailed instructions).

5.2 Basic Operation

1. **Power On:** Press the ON/OFF button on the remote control.
2. **Select Mode:** Press the MODE button until 'COOL' mode is displayed on the remote.
3. **Set Temperature:** Use the TEMP ▲/▼ buttons to set your desired room temperature. A comfortable range is typically between 72°F (22°C) and 78°F (26°C).
4. **Adjust Fan Speed:** Press the FAN button to select your preferred fan speed. 'Auto' mode is recommended for general use.
5. **Power Off:** Press the ON/OFF button again to turn the unit off.

6. MAINTENANCE

Regular maintenance ensures optimal performance, energy efficiency, and extends the lifespan of your air conditioner. Always disconnect power before performing any maintenance.

6.1 Air Filter Cleaning

Clean the air filters every two weeks, or more frequently if the unit is used heavily or in dusty environments.

1. Open the front panel of the indoor unit.
2. Remove the air filters.
3. Wash the filters with lukewarm water and a mild detergent. Rinse thoroughly.
4. Allow filters to dry completely in a shaded area before reinstalling. Do not expose to direct sunlight.
5. Reinstall the dry filters and close the front panel.

6.2 Outdoor Unit Cleaning

Periodically check and clean the outdoor unit's coils and fan blades. This should be done at least once a year, or more often if located in a dusty or leafy area.

- Ensure the power to the outdoor unit is completely disconnected.
- Remove any leaves, dirt, or debris from around the unit.
- Gently spray water through the condenser coils from the inside out to remove accumulated dirt. Avoid spraying water directly onto electrical components.
- Ensure the drainage holes at the base of the unit are clear.

6.3 Seasonal Maintenance

- Before the cooling season, inspect all electrical connections and refrigerant lines for any signs of wear or damage.
- Check refrigerant levels (this should be done by a qualified technician).

7. TROUBLESHOOTING

Before contacting customer support, please refer to the following table for common issues and their solutions.

Problem	Possible Cause	Solution
Unit does not turn on	No power supply; Remote control batteries dead; Circuit breaker tripped	Check power connection; Replace batteries; Reset circuit breaker
Insufficient cooling	Dirty air filters; Blocked outdoor unit; Temperature setting too high; Low refrigerant	Clean air filters; Clear obstructions from outdoor unit; Lower temperature setting; Contact technician for refrigerant check
Water leaking from indoor unit	Clogged drain hose; Improper installation	Clear drain hose; Contact technician for inspection
Unusual noise	Loose parts; Fan obstruction; Compressor issue	Check for loose panels; Clear obstructions; Contact technician

If the problem persists after attempting these solutions, please contact a qualified service technician.

8. SPECIFICATIONS

The following table outlines the key technical specifications for the Generic 12,000 BTU 21 SEER 220 Volt Cooling Only TGM Polar Series Mini-Split Air Conditioner.

Feature	Specification
Brand	Generic
Model Name	Polar Series
Cooling Capacity	12,000 BTU (1 Ton)
Seasonal Energy Efficiency Ratio (SEER)	21
Voltage	220 Volts

Feature	Specification
Refrigerant Type	R 410A
Power Source	Corded Electric
Form Factor	Mini-Split
Controller Type	Remote Control
Item Weight (Approx.)	110 pounds

9. WARRANTY AND SUPPORT

This product comes with a limited warranty. Please refer to the warranty card included in your package for specific terms, conditions, and duration of coverage. Retain your proof of purchase for warranty claims.

9.1 Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact your retailer or the manufacturer's customer service department. Contact information is typically provided on the warranty card or the manufacturer's official website.

When contacting support, please have your model number (Polar Series) and proof of purchase readily available.

