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› Perfect Aire 24,000 BTU DIY Mini-Split AC & Heat Pump – Ductless Air Conditioner & Heater, 22.5 SEER, Pre-Charged 25ft Line Set, 230V, WiFi Control, No HVAC Tech Needed, R454B

PerfectAire 4PAMSHQC24BOX

Perfect Aire 24,000 BTU DIY Mini-Split AC & Heat Pump Instruction Manual

MODEL: 4PAMSHQC24BOX

Brand: PerfectAire

1. SAFETY INFORMATION

Please read all safety warnings and instructions carefully before installing, operating, or performing maintenance on this appliance. Failure to follow these instructions may result in electric shock, fire, property damage, injury, or death.

- **Electrical Safety:** Ensure the unit is properly grounded. Disconnect power before any installation or maintenance.
- **Refrigerant:** This unit contains R454B refrigerant. Only qualified personnel should handle refrigerant.
- **Installation:** Installation must be performed in accordance with national wiring standards by authorized personnel only.
- **Children:** Keep children away from the unit during operation and maintenance.

2. PRODUCT OVERVIEW

The Perfect Aire 24,000 BTU DIY Mini-Split AC & Heat Pump is a ductless system designed for efficient cooling and heating of spaces up to 1,000 sq. ft. This system includes an indoor air handler, an outdoor condenser, and a pre-charged 25ft line set for easy DIY installation.

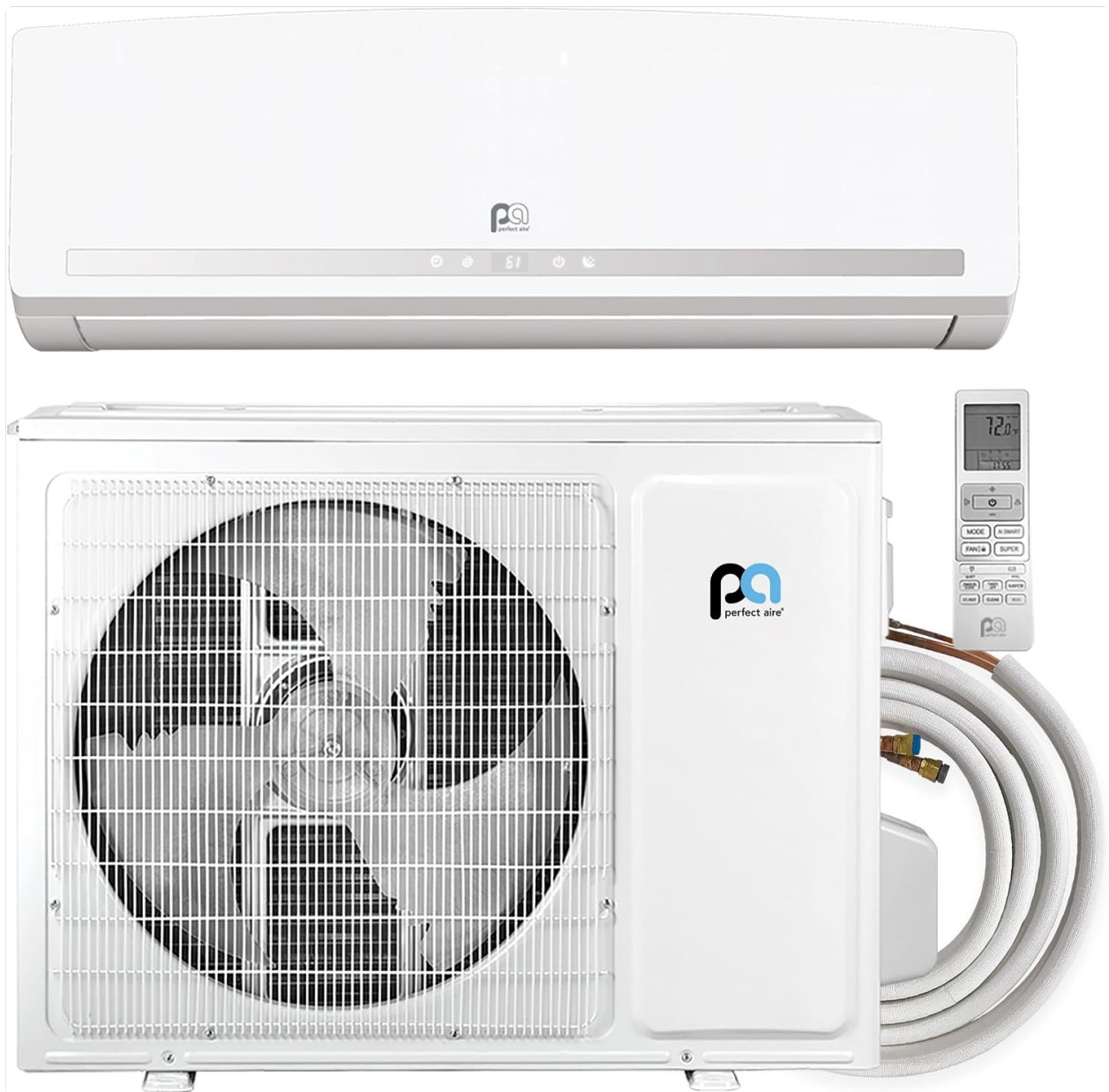


Figure 2.1: Complete Perfect Aire Mini-Split System including indoor unit, outdoor unit, and remote control.

3. SETUP AND INSTALLATION

This DIY-friendly system is designed for straightforward installation without the need for specialized HVAC equipment or experience.

3.1. Included Components

Your package includes the following:

- 1x Indoor Evaporator Unit
- 1x Mounting Bracket + Template
- 1x Optional Extra Foam Insulation (For insulating valve connections)
- 1x Drain Joint
- 1x Drain Joint Rubber Seal
- 4x Flare Nuts (For conventional installations)

- 1x Bag of Wall Anchors & Screws
- 1x Remote Control Wall Bracket
- 1x Outdoor Condenser
- 1x Drain Tube
- 1x Duct Seal (Use to fill any gaps)
- 1x Vinyl Wrap (For a cleaner look; some models may include 2 wraps)
- 1x Wall Collar
- 1x 25 ft. Line Set
- 2x Male Condenser Couplers
- 4x Condenser Anti-Vibration Pads
- 1x 5mm Valve Opener

3.2. Sizing and Placement

Proper sizing and placement are crucial for optimal performance. Consider the following:



Figure 3.1: Dimensions of the indoor and outdoor units for planning installation space.



Figure 3.2: Use this guide to ensure your unit is appropriately sized for your room.

3.3. Pre-Installation Checks

Before beginning installation, perform these essential checks:

1 **MEASURE SPACE**

Measure the square footage of your space.

$\text{LENGTH} \times \text{WIDTH} = \text{SQUARE FOOTAGE}$

Step 1: Measure the square footage of your space (Length x Width = Square Footage).

2 DETERMINE BTU

Choose the corresponding system.

9K BTU	UP TO 375 SQ. FT.
12K BTU	UP TO 500 SQ. FT.
18K BTU	UP TO 750 SQ. FT.
24K BTU	UP TO 1,000 SQ. FT.
36K BTU	UP TO 1,500 SQ. FT.

Step 2: Choose the corresponding system BTU based on your measured area.

3 CONFIRM DISTANCE

Confirm distance from indoor head to outdoor condenser. Must be within 25'.



Step 3: Confirm distance from indoor head to outdoor condenser. Must be within 25 feet.

4 CHECK ELECTRIC

Check electrical requirements/confirm power supply.

BTU	AREA (SQ. FT.)	MAX FUSE (OUTDOOR UNIT)
9K BTU	375	25A-115V
12K BTU	500	25A-115V
18K BTU	750	20A-230V
24K BTU	1,000	30A-230V
36K BTU	1,500	35A-230V

Step 4: Check electrical requirements and confirm power supply (230V for this model).

3.4. Installation Process

The installation process is designed to be straightforward. The pre-charged line set and quick-connect adaptors simplify the refrigerant line connection, eliminating the need for vacuuming or specialized tools.

Video 3.1: An overview of the 24,000 BTU Ductless Quick Connect Mini Split system, highlighting its easy installation process.

This video demonstrates the simplicity of setting up the unit without requiring professional HVAC experience or specialized equipment.



Figure 3.3: The indoor air handler unit, featuring a digital display and auto-swing louvers.





Figure 3.4: The outdoor condenser unit, which connects to the indoor unit via the pre-charged line set.

4. OPERATING INSTRUCTIONS

Your Perfect Aire Mini-Split system offers multiple ways to control your comfort.

4.1. Remote Control

The included remote control provides full functionality for your unit.



Figure 4.1: The remote control allows access to all unit functions.

Key features accessible via remote:

- **7 Fan Speeds:** Adjust airflow intensity.
- **4-Way Adjustable Swing Louvers:** Direct airflow horizontally and vertically.
- **Programmable 24-Hour Timer:** Set specific on/off times.
- **Smart, Super, and Auto Functions:** Optimize performance based on conditions.
- **Quiet Mode:** Reduces operational noise for undisturbed comfort.
- **Sleep Mode:** Adjusts temperature and fan speed for comfortable sleep.



Figure 4.2: Sleep mode ensures extremely low noise levels, as low as 39 dBA.

4.2. WiFi Control (Smart Home App)

Control your unit remotely using the free mobile app, compatible with Alexa and Google Home.

FITS ANY SPACE... INSTALL WITHIN HOURS



Mini-Split Sizing Guide

ROOM SIZE

Up to **375** square feet

Up to **500** square feet

Up to **750** square feet

Up to **1,000** square feet

Up to **1,500** square feet

SYSTEM SIZE

9,000 BTUs

12,000 BTUs

18,000 BTUs

24,000 BTUs

35,000 BTUs

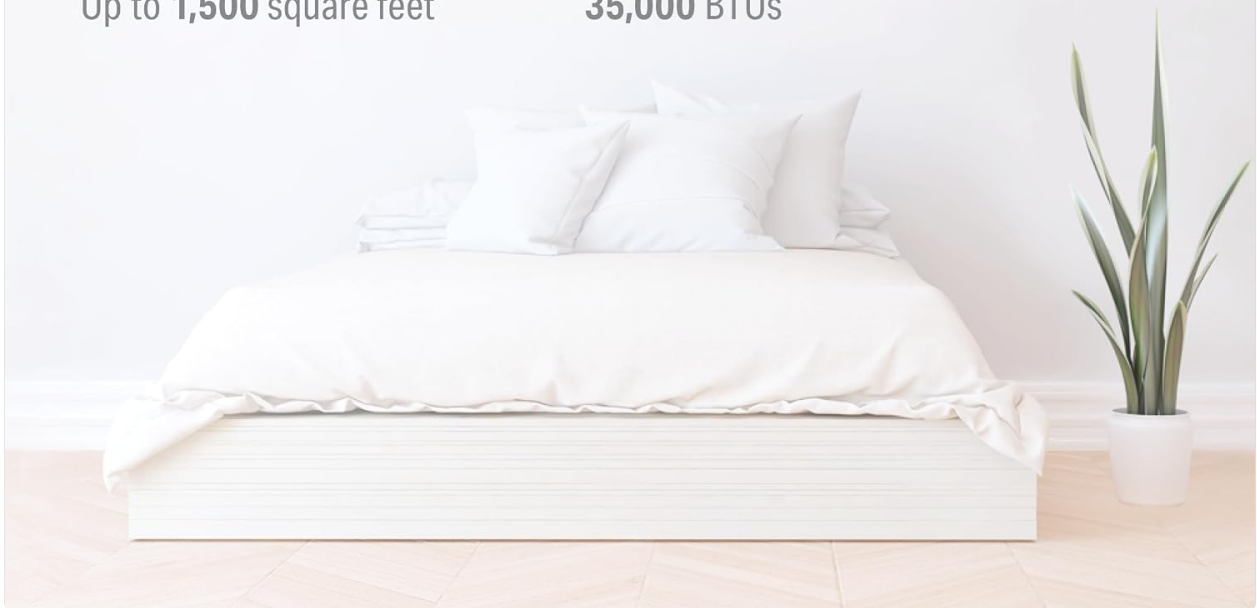


Figure 4.3: Control your Perfect Aire unit from your smartphone using the ConnectLife app.

5. MAINTENANCE

Regular maintenance ensures the longevity and efficiency of your mini-split system.

- **Filter Cleaning:** The indoor air handler features a reusable and eco-friendly filter. Simply slide it out and wash with soap and water. No replacement filters are needed. Clean regularly to maintain air quality and unit efficiency.
- **Outdoor Unit:** Keep the outdoor condenser clear of debris, leaves, and other obstructions to ensure proper airflow.

6. TROUBLESHOOTING

If you encounter issues with your Perfect Aire Mini-Split, refer to the following common troubleshooting steps. For more complex problems, contact customer support.

- **Unit Not Turning On:** Check power supply, circuit breaker, and ensure the remote control batteries are functional.
- **Insufficient Cooling/Heating:** Verify temperature settings, check for blocked air filters, ensure outdoor unit is not obstructed, and confirm windows/doors are closed.
- **Unusual Noises:** Minor operational noises are normal. If loud or unusual, check for loose parts or obstructions.
- **Water Leaks:** Ensure the drain hose is not blocked or kinked, and the indoor unit is level.

7. SPECIFICATIONS

Feature	Specification
Brand Name	PerfectAire
Model Info	4PAMSHQC24BOX
Item Weight	225 pounds
Product Dimensions	9.75 x 43.5 x 13 inches (Indoor Unit)
Capacity	2 Tons (24,000 BTU)
Annual Energy Consumption	800 Kilowatt Hours Per Year
Noise Level	39 dB
Installation Type	Split System
Form Factor	Mini-Split
Special Features	4 Way Swing, Heating & Cooling Function, Remote Controlled, Silent Mode, Sleep Mode
Color	White
Voltage	230 Volts
Wattage	2100 watts
Seasonal Energy Efficiency Ratio (SEER)	22.5
Refrigerant	R454B

8. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation included with your product or visit the official Perfect Aire website. You can also find customer support details on the product's retail page.