

## Sunster TB10PRO-WIFI

# Sunster 8kW Portable Diesel Air Heater TB10PRO-WIFI User Manual

Model: TB10PRO-WIFI

## 1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, installation, and maintenance of your Sunster 8kW Portable Diesel Air Heater, model TB10PRO-WIFI. This portable heater is designed to provide warmth for various applications, including vehicle cabins (trucks, vans, motorhomes) and outdoor environments like camping. It features adjustable heating power up to 8kW, a compact suitcase design for portability, and advanced control options including WiFi and app connectivity.

## 2. SAFETY INFORMATION

**Read all safety warnings and instructions carefully before using this product. Failure to follow these instructions may result in fire, explosion, electric shock, or other serious injury.**

- **Ventilation:** Ensure adequate ventilation when operating the heater to prevent carbon monoxide buildup. Do not operate in enclosed, unventilated spaces.
- **Fuel Handling:** Use only diesel fuel. Do not use gasoline or other volatile fuels. Refuel in a well-ventilated area away from ignition sources.
- **Electrical Safety:** Connect the heater to appropriate power sources (12/24V DC or 110-240V AC) as specified. Ensure all electrical connections are secure and free from damage. Do not operate with damaged cords or plugs.
- **Flammable Materials:** Keep the heater away from flammable materials, liquids, and gases. Maintain a safe distance from walls, furniture, and other objects.
- **Children and Pets:** Keep children and pets away from the heater during operation and while it is cooling down.
- **Installation:** Ensure the heater is placed on a stable, non-combustible surface. Do not block air intake or exhaust vents.
- **Maintenance:** Perform maintenance only when the heater is cool and disconnected from the power source.

### 3. SETUP AND INSTALLATION

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#### 3.1 Unpacking and Inspection

Carefully remove all components from the packaging. Inspect for any damage that may have occurred during transit. Ensure all parts listed in the packing list are present.

#### 3.2 Wiring Methods

The heater supports two primary wiring methods for wide applicability:

- **DC Power (12V/24V):** Compatible with vehicle batteries for mobile use in cars, trucks, and motorhomes.
- **AC Power (110-240V):** For use with standard power outlets in tool rooms, garages, or as a backup power supply. An AC-DC power adapter is included.

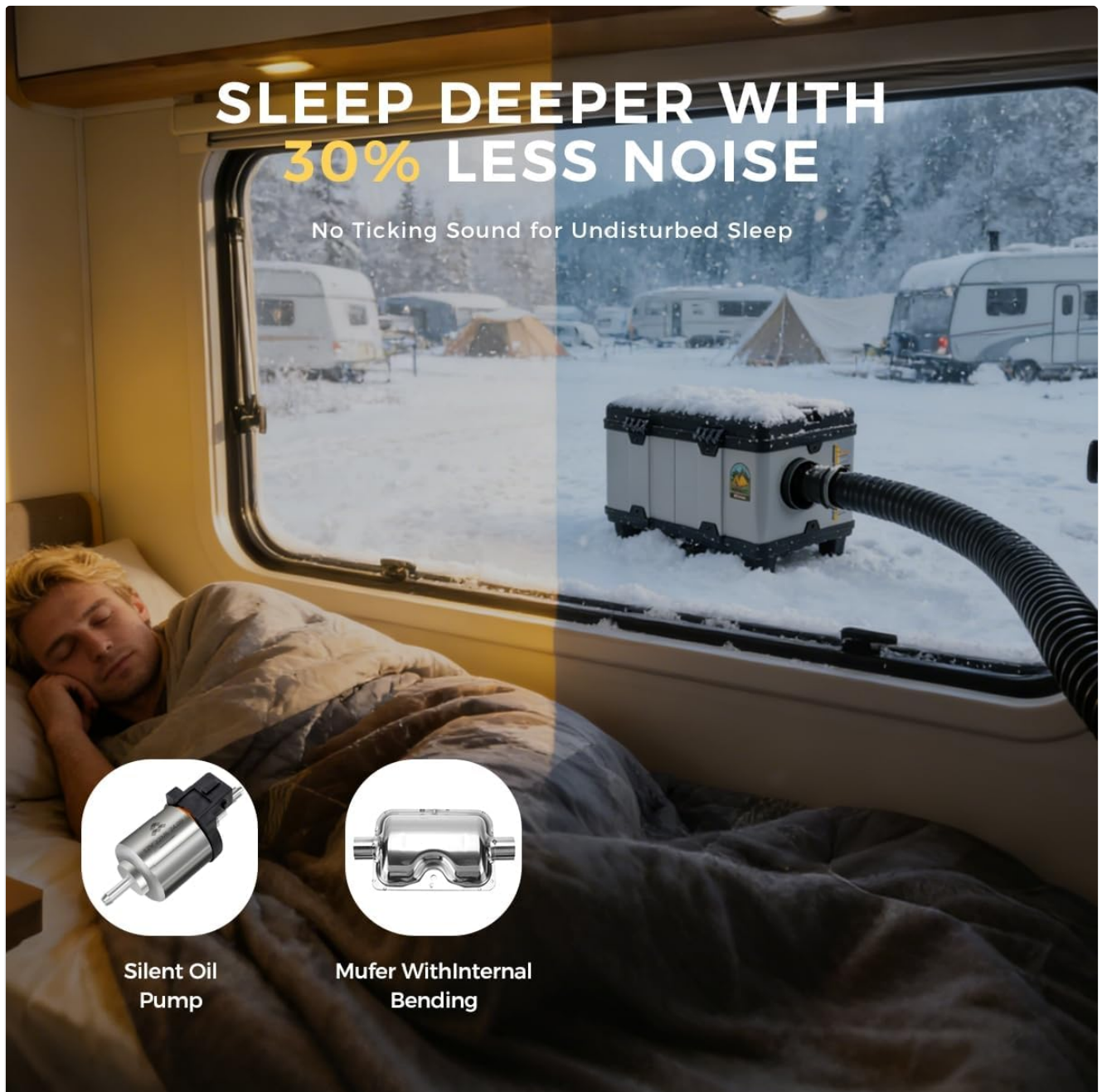


Image: Two Wiring Methods. The heater can be powered by a 12V/24V DC vehicle battery or a 110-240V AC power outlet using the included adapter.

#### 3.3 Rapid Assembly for Safer Heating

The heater is designed for quick and secure assembly:

1. **Intake Pipe:** No separate installation of the intake pipe is required; a fixed air filter is integrated at the bottom of the unit.
2. **Exhaust Pipes:** Install exhaust pipes on the side of the unit to prevent blockage issues.
3. **Exhaust Pipe Protective Cover:** Utilize the provided protective cover for the exhaust pipe to enhance safety.



Image: Rapid Assembly for Safer Heating. This diagram illustrates the simple steps for setting up the heater, highlighting the integrated air filter and proper exhaust pipe installation.

### 3.4 Enhanced Safety Features

The Sunster TB10PRO-WIFI includes several features to meet safety certification standards:

- **4-meter Switch Extension Cable:** Provides flexibility for remote control placement.
- **AC-DC Power Adapter:** Ensures safe conversion for AC power sources.
- **Exhaust Pipe Protection:** A protective cover for the exhaust pipe.
- **Upgraded Integrated Air Filter:** For cleaner air intake and efficient operation.

# ENHANCED SAFETY

Meet safety certification standards



Includes a 4 meter Switch extension cable



Include AC-DC Power adapter



Exhaust Pipe Protection



Upgraded integrated Air Filter

Image: Enhanced Safety Features. This image details the safety components such as the extended switch cable, power adapter, exhaust protection, and integrated air filter.

## 4. OPERATING INSTRUCTIONS

### 4.1 Control Panel Overview

The heater features an intuitive control panel for direct adjustments. The 2409PRO WIFI model includes advanced functionalities compared to the standard version.





Image: Control Panel Comparison. This image shows the display and controls for both the standard and WiFi-enabled versions of the heater, indicating the WiFi model's additional connectivity features.

## 4.2 Wireless Temperature Sensing and Remote Control

The A2422 Wireless Temperature Sensing Switch allows for convenient monitoring and control of the heater. It includes a built-in temperature sensor and a CO detection function for added safety.



Image: A2422 Wireless Temperature Sensing Switch. This remote control unit provides temperature sensing, CO detection, and remote operation capabilities for the heater.

### 4.3 Smart Control via WiFi/App

The TB10PRO-WIFI model offers enhanced control through a dedicated mobile application. This allows for remote management of various settings:

- **WiFi Control:** Operate the heater remotely via your smartphone.
- **Timing Function:** Schedule heating times.
- **Language Settings:** Adjust the display language.
- **Gear Settings:** Select different heating power levels.
- **Automatic Start & Stop:** Program the heater to turn on and off automatically.
- **Fan Mode:** Control the fan speed and operation.



# TWO WIRING METHODS

Include adapter & power cable for wide applicability



Image: Control Smarter and More Convenient. This image demonstrates the mobile app interface for controlling the heater, offering various settings and remote operation.

## 4.4 Fuel Efficiency and Noise Reduction

The heater is designed for efficient fuel consumption and quiet operation:

- **Fuel Consumption:** Operates at 0.16-0.45 L/h, with a 6L (1.58 GAL) visible capacity fuel tank.
- **Combustion Efficiency:** Achieves  $\geq 96\%$  combustion efficiency.
- **Noise Reduction:** Features a silent oil pump and muffler with internal bending to reduce noise by 30%, ensuring undisturbed sleep.



# ONLY 1 GAL PER NIGHT

Warmth for outdoor camping, saves on fuel costs

- 8kw** ↑  
Maximum Combustion Power
- ≥96%** ↑  
Combustion Efficiency
- 0.16-0.45L/H** ↓  
Fuel Consumption
- 6L (1.58GAL)** ↓  
Capacity Visible

Image: Fuel Efficiency. This graphic highlights the heater's maximum power, high combustion efficiency, low fuel consumption, and visible fuel tank capacity.



		
2409PRO	2409PRO WIFI	
<div><p>Sunster</p><p>Excellent -2024</p><p>2024</p><p>Gear mode,temperature mode,</p><p>32FT/10meters</p><p>Bluetooth</p><p>No network required</p><p>✓</p><p>✓</p><p>✓</p><p>✓</p><p>✓</p></div>	<div><p>App</p><p>Motherboard</p><p>Bluetooth protocol</p><p>App display function</p><p>Remote control distance</p><p>Remote mode</p><p>Access the network</p><p>Automatic Start &amp; Stop</p><p>Ventilation Function</p><p>Max Mode</p><p>Adaptive plateau</p><p>Timer switch</p></div>	<div><p>Sunster</p><p>Excellent -2025</p><p>2025</p><p>Gear mode, temperature mode, ventilation function, strong heat mode</p><p>No restrictions</p><p>Bluetooth &amp; WiFi</p><p>In network environment</p><p>✓</p><p>✓</p><p>✓</p><p>✓</p><p>✓</p></div>

Image: Sleep Deeper with 30% Less Noise. This image illustrates the heater's quiet operation, featuring a silent oil pump and a muffler with internal bending for reduced noise.

## 5. MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your Sunster diesel heater. Always disconnect the heater from the power source and allow it to cool completely before performing any maintenance.

- **Cleaning:** Periodically clean the exterior of the heater with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Air Filter:** Inspect the integrated air filter regularly for dust and debris. Clean or replace as necessary to ensure proper airflow.
- **Fuel System:** Check fuel lines and connections for any signs of leaks or damage. Ensure the fuel tank is free of contaminants.
- **Exhaust System:** Inspect the exhaust pipe and protective cover for any blockages or damage.
- **Storage:** When not in use for extended periods, store the heater in a dry, clean place. The compact portable toolbox design facilitates easy storage and organization of components.

## 6. TROUBLESHOOTING

If you encounter issues with your Sunster diesel heater, refer to the following common troubleshooting steps. For problems not listed here, contact customer support.

Problem	Possible Cause	Solution
Heater does not start	No power, low fuel, clogged fuel line, faulty ignition.	Check power connection and voltage. Ensure sufficient diesel fuel. Inspect fuel lines for blockages. Consult manual for ignition troubleshooting.
Insufficient heating	Incorrect power setting, blocked air intake/exhaust, dirty air filter.	Adjust power setting. Clear any obstructions from air intake or exhaust. Clean or replace air filter.
Excessive smoke	Poor fuel quality, incorrect fuel-air mixture, carbon buildup.	Use high-quality diesel fuel. Ensure proper ventilation. Professional inspection may be required for carbon buildup.
Unusual noise during operation	Loose components, fan obstruction, pump issue.	Check for loose parts. Ensure fan is clear of obstructions. If noise persists, contact support.
App/WiFi connectivity issues	Weak WiFi signal, incorrect app settings, router issues.	Ensure heater is within WiFi range. Restart router and heater. Verify app settings and follow pairing instructions.

## 7. SPECIFICATIONS

Feature	Specification
Brand	Sunster
Model	TB10PRO-WIFI
Power Output	8 kW
Voltage	12V/24V DC & 110-240V AC
Fuel Type	Diesel
Fuel Tank Capacity	6 Liters (1.58 Gallons)
Fuel Consumption	0.16-0.45 L/h
Combustion Efficiency	≥96%
Dimensions (L x W x H)	46.7 x 39.2 x 31.7 cm
Weight	9.85 kg

Feature	Specification
Control	Manual, Remote, WiFi/App

## 8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the documentation included with your purchase or contact Sunster customer service directly. Keep your purchase receipt as proof of purchase.

