

Sunster L01

Sunster 8KW Diesel Heater L01 Instruction Manual

Model: L01

INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation of your Sunster 8KW Diesel Heater L01. Designed for versatile heating in vehicles and outdoor settings, this all-in-one portable unit offers dual power supply options (DC 12/24V and AC 110-240V) and features an LCD monitor with remote control. Please read all instructions carefully before use.

1. SETUP

Proper setup is crucial for the safe and optimal performance of your diesel heater. Ensure all components are present and undamaged before proceeding.

1.1 Unpacking and Component Check

Carefully unpack all items and verify against the packing list. Ensure all accessories are complete.



Figure 1: Unpacked Sunster 8KW Diesel Heater L01 and included accessories.

1.2 Warm Air Duct Installation

1. Open the warm air duct by gently expanding it.
2. Place a clamp at the pipe opening of the duct.
3. Attach the duct to the air outlet of the heater.
4. Tighten the clamp securely using a screwdriver.

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Video 1: Detailed steps for installing the warm air duct on the Sunster diesel heater.

1.3 Exhaust Pipe and Muffler Installation

1. Straighten the flexible exhaust pipe.
2. Place a clamp on one end of the exhaust pipe.
3. Screw the exhaust pipe onto the heater's exhaust port.
4. Tighten the clamp at the interface.
5. Install the thermal insulation cloth over the exhaust pipe and secure it with clamps at both ends.

6. Attach the muffler to the end of the exhaust pipe using a clamp and tighten securely.

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Video 2: Step-by-step guide for installing the exhaust pipe, insulation, and muffler.

1.4 Power Supply Connection (AC 110-240V)

1. Insert the power adapter plug into the designated AC input on the heater.
2. Remove the plastic cover from the power strip plug and insert it into a standard AC outlet.
3. Verify that the power adapter lights up green, indicating successful power connection.



Figure 2: The heater supports both DC 12/24V and AC 110-240V power sources.

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Video 3: Demonstration of connecting the 110V power adapter to the diesel heater.

1.5 Power Supply Connection (DC 12/24V)

1. Connect the positive (red) and negative (black) copper rings of the DC power cable to a 12V or 24V battery,

ensuring correct polarity.

2. Plug the DC power cable into the designated DC input on the heater.
3. Ensure the voltage used is within the product's specified range.

1.6 Remote Control Extension Cable (Optional)

If you wish to use the remote control from a distance, you can connect the extension cable:

1. Open the heater's shell.
2. Disconnect the internal connection plug from the LCD switch.
3. Remove the LCD switch from its housing.
4. Connect the extension cable to the LCD switch.
5. Feed the other end of the extension cable through the top hole of the heater.
6. Connect the internal plug of the extension cable to the heater's internal connection point.

2. OPERATING INSTRUCTIONS

The Sunster diesel heater features an intuitive LCD monitor and remote control for easy operation.

2.1 Powering On/Off

1. To power on: In shutdown state, press the power button to wake up the display. Then, press and hold the power button until "ON" appears on the screen.
2. To power off: Long press the power button until "OFF" appears on the screen. The heater will enter a cool-down phase before fully shutting down.

2 INTELLIGENT CONTROLS



Figure 3: LCD monitor for controlling the heater.

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Video 4: Demonstration of LCD switch operation, including powering on/off.

2.2 Basic Settings (Language, Mode, Temperature Unit)

1. Press the "Settings Key" to enter the basic settings menu.
2. Use the Up/Down buttons to navigate through options.
3. **Language Selection:** Select the desired flag (e.g., English, German, Russian) and press "OK" to confirm.
4. **Mode Selection:** Switch between "MT" (Manual Mode) and "AT" (Automatic Mode) using the "OK" key.
5. **Temperature Unit:** Toggle between Celsius (°C) and Fahrenheit (°F) using the "OK" key.
6. **Automatic Start/Stop:** Enable or disable automatic start/stop functionality.
7. Press the "Settings Key" again to save changes and exit the menu.

2.3 Manual Oil Pump

This function allows manual priming of the fuel pump, useful during initial setup or after running out of fuel.

1. From the basic settings menu, select "Manual Oil Pump" and press "OK".
2. Press the "Up" button to activate the pump (fuel icon will animate).
3. Press the "Down" button to stop the pump.
4. Press the "Settings Key" to exit.

2.4 Timing Function (Automatic Start/Stop Schedule)

Set specific times for the heater to automatically turn on and off.

1. From the basic settings menu, select "Timing Setting Up" and press "OK".
2. Select the alarm icon on the right (timer icon) and press "OK" to enter calibration time.
3. Adjust the current date and time using the Up/Down buttons and confirm with "OK".
4. Return to the timing menu and select the first alarm clock (left icon).
5. Navigate to the desired day (e.g., SUN for Sunday).
6. Set the automatic start time and automatic shutdown time for that day.
7. Select "ON" to activate the timer for that day.
8. Press the "Settings Key" to return and save.

2.5 Bluetooth Connection (App Control)

Control your heater via a smartphone app.

1. From the basic settings menu, navigate to the QR code option.
2. Scan the QR code displayed on the screen using your smartphone's camera.
3. Download the "AirHeater" app (available for iOS and Android).
4. Open the app and ensure Bluetooth is enabled on your phone.
5. The app will search for the device. Select your heater from the list and connect.
6. Once connected, the Bluetooth icon will appear on the heater's display, and you can operate it via the app.

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Video 5: Detailed guide on LCD switch operations, including language, mode, timing, and Bluetooth app connection.

3. MAINTENANCE

Regular maintenance ensures the longevity and safe operation of your Sunster diesel heater.

- **Cleaning:** Periodically clean the exterior of the heater and ensure air intake/outlet vents are free from obstructions.
- **Fuel Quality:** Always use high-quality diesel fuel. Poor fuel quality can lead to blockages and reduced efficiency.
- **Exhaust System:** Inspect the exhaust pipe and muffler for any damage or blockages. Ensure all clamps are secure.
- **Air Filter:** Check and clean or replace the air filter as needed to maintain optimal airflow.
- **Professional Inspection:** It is recommended to have the heater professionally inspected annually, especially before the cold season.

4. TROUBLESHOOTING

If you encounter issues with your heater, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Heater does not start	No power, low fuel, clogged fuel line, ignition failure.	Check power connections and battery voltage. Refill fuel tank. Check fuel lines for blockages. Consult professional for ignition issues.
No heat or insufficient heat	Low power setting, air intake/outlet blocked, low fuel, faulty sensor.	Increase power level. Clear any obstructions from vents. Refill fuel. Check app for sensor readings or consult professional.
Excessive smoke	Poor fuel quality, clogged exhaust, incorrect fuel-air mixture.	Use recommended diesel fuel. Inspect and clear exhaust pipe. Professional adjustment may be required.
Error codes on LCD	Various internal faults (e.g., overheating, short circuit, motor failure).	Refer to the app's troubleshooting section (via QR code) for specific error code meanings and solutions. Disconnect power, wait, and restart. If persistent, seek professional help.

For detailed error codes and solutions, scan the QR code on the LCD monitor to access the digital instruction manual or app.

5. SPECIFICATIONS

Feature	Detail
Brand	Sunster
Model Number	SKUCAL025002
Power/Wattage	8 KW
Voltage	DC 12/24V & AC 110-240V
Product Dimensions	49 x 20 x 47 cm
Item Weight	9.24 kg
Material	Aluminum, Plastic
Special Features	Dual Power Options, Fast Heating, Multiple Protection
Fuel Consumption	0.16-0.45 L/H
Fuel Tank Capacity	5L (1.3 GAL)

6. WARRANTY & SUPPORT

Sunster products are designed for reliability and performance. For warranty information or technical support, please contact Sunster customer service directly. Keep your purchase receipt as proof of purchase.
Contact Information: sunster202@163.com

