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› [SILVEL 8KW 12V/24V All-in-One Portable Diesel Air Heater User Manual](#)

SILVEL 8KW 12V/24V

SILVEL 8KW 12V/24V All-in-One Portable Diesel Air Heater User Manual

Model: 8KW 12V/24V

1. INTRODUCTION

The SILVEL 8KW 12V/24V All-in-One Portable Diesel Air Heater is designed to provide efficient and reliable heating for various applications. This unit operates independently of the vehicle's original engine system, utilizing 12V or 24V direct current for power. It supports both automatic and manual control modes. The heater uses light diesel fuel, suitable for operation in temperatures above -40°C. Fresh air is drawn in, heated through a heat exchanger by fuel combustion, and then distributed to the desired area. This heater features a compact structure, light weight, high thermal efficiency, and is designed for easy installation and economical operation.



An overview of the SILVEL 8KW 12V/24V All-in-One Portable Diesel Air Heater, showcasing its compact design and integrated components.

This heater is suitable for a wide range of scenarios, including vehicles (RV, car, camper, trailer) and stationary use in garages, basements, shops, or homes. Its plug-and-play design eliminates complex installation, making it ideal for immediate use.

2. SAFETY INFORMATION

Please read and understand all safety warnings and instructions before operating this diesel heater. Failure to follow these instructions may result in fire, electric shock, serious injury, or property damage.

- **Ventilation:** Always ensure adequate ventilation when operating the heater to prevent carbon monoxide buildup. Do not use in enclosed, unventilated spaces.
- **Fuel Handling:** Use only light diesel fuel. Never use gasoline or other volatile fuels. Refuel in a well-ventilated area away from ignition sources. Do not overfill the fuel tank.
- **Placement:** Place the heater on a stable, non-combustible surface. Maintain a safe distance from combustible materials (e.g., curtains, furniture, fuel containers). Ensure the exhaust pipe is directed away from flammable

objects and living spaces.

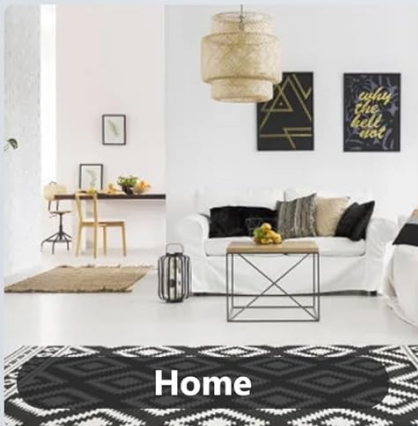
- **Electrical Safety:** Connect the heater to a power source matching the specified voltage (12V or 24V DC). Do not use damaged power cables or adapters.
- **Children and Pets:** Keep children and pets away from the heater during operation. The surface of the heater can become hot.
- **Maintenance:** Perform regular maintenance as described in this manual. Disconnect power before any maintenance or cleaning.
- **Emergency:** In case of fire, use an appropriate fire extinguisher (Class B for fuel fires). Do not use water.

3. PACKAGE CONTENTS

Verify that all items listed below are present in your package. If any items are missing or damaged, contact customer service.

SUITABLE FOR INDOOR & OUTDOOR USE ALIKE

110V-120V AC



12V/24V DC

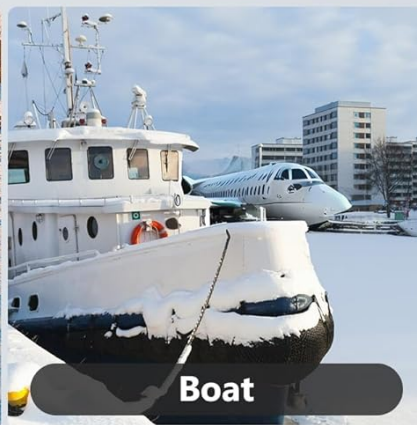
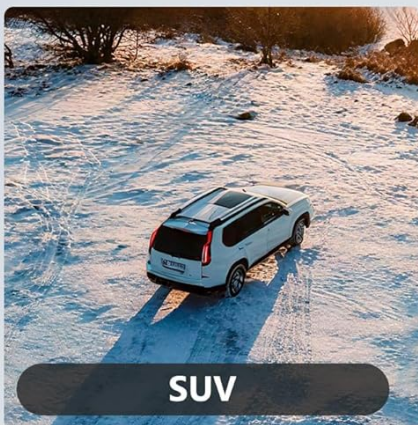


Image displaying the components included in the SILVEL Diesel Heater package, such as the main unit, LCD panel control, remote control, vent, installation parts, air filter, inlet/outlet pipes, DC 12V/24V power cable, and user manual.

- Main Heater Unit
- LCD Panel Control
- Remote Control
- Vent
- Installation Parts (screws, clamps, etc.)
- Air Filter
- Inlet/Outlet Pipes
- DC 12V/24V Power Cable
- User Manual

4. SETUP

The SILVEL diesel heater features an all-in-one plug-and-play design, minimizing complex setup procedures.

4.1 Placement

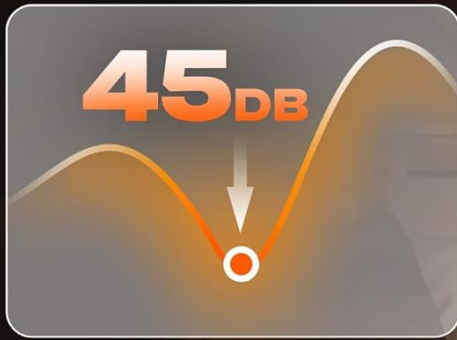
- Choose a stable, level, and non-combustible surface for the heater.
- Ensure adequate clearance around the heater for proper airflow and to prevent fire hazards.
- Position the exhaust pipe safely, directing exhaust gases away from any enclosed spaces, windows, or combustible materials.

4.2 Fuel Filling

The heater is equipped with a 4-liter fuel tank featuring an anti-leak, internally threaded cap to prevent spills, even on rough roads.

<45 DB DUAL QUIET TECH

Upgraded Silent Oil Pump and Muffler



Detailed view of the 4-liter fuel tank with a spill-proof, internally threaded cap and the location of the washable oil filter for impurity removal.

- Unscrew the fuel tank cap.
- Carefully fill the tank with light diesel fuel. Do not overfill.
- Securely fasten the fuel tank cap after filling.

4.3 Power Connection

- Connect the provided DC 12V/24V power cable to the heater's power input port.
- Connect the other end of the power cable to a compatible 12V or 24V DC power source (e.g., vehicle battery). Ensure correct polarity.

5. OPERATING INSTRUCTIONS

The SILVEL diesel heater offers smart control via an integrated LCD display and a remote control.

LOW TEMPERATURE OR HIGH ALTITUDE AREAS

Tested at an Altitude of up to **3500 Meters**



Image showing the integrated LCD control panel on the heater unit and the handheld remote control for convenient operation and temperature settings.

5.1 Powering On/Off

- **To Power On:** Press the 'ON' button on the remote control or the power button on the LCD control panel. The heater will initiate its startup sequence.
- **To Power Off:** Press the 'OFF' button on the remote control or the power button on the LCD control panel. The heater will enter a cool-down phase before shutting down completely. Do not disconnect power during the cool-down phase.

5.2 Temperature Adjustment

You can customize the warmth with a temperature range of 8°C–36°C (46.4°F–96.8°F).

- Use the '+' and '-' buttons on the remote control or the LCD panel to increase or decrease the desired temperature.
- The LCD display will show the set temperature.

5.3 Timer Settings

The LCD display and remote control allow for setting operational timers.

- Refer to the specific instructions on the LCD panel or remote control for setting the timer function.

5.4 Altitude Compensation

The heater features built-in automatic altitude compensation, making it suitable for heights up to 3,500 meters (11,483 feet).

STABLE HEAT CONTROL



❄️ -65°C/43°F



☀️ 30°C/86°F



Illustration demonstrating the heater's automatic altitude compensation capability, ensuring efficient operation at elevations up to 3500 meters (11,483 feet).

- The heater will automatically adjust its operation according to the detected altitude, requiring no manual settings.

5.5 Fuel Consumption and Quiet Operation

The heater is designed for low energy consumption and quiet operation.

ALL-IN-ONE

LCD&REMOTE CONTROL METHOD



Remote Control



LCD Control



Graphic illustrating the low fuel consumption of the SILVEL diesel heater, with rates as low as 0.12 to 0.50 liters per hour, contributing to high savings.

LOW FUEL EQUALS HIGH SAVINGS



Energy-efficient Fuel Pump

Aluminum Body

100% Combustion

SILVEL	0.12-0.5L/H
Other	0.3-0.76 L/H

Image highlighting the heater's quiet operation, featuring an upgraded silent oil pump and muffler, resulting in noise levels below 45 dB.

- Fuel consumption rates are as low as 0.12 to 0.50 liters per hour, providing up to 24 hours of continuous heating with its 4L fuel tank.
- Equipped with an advanced low-noise fuel pump and muffler, the heater operates below 45 dB.

6. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your SILVEL diesel heater.

6.1 Oil Filter

The heater includes a washable oil filter to remove impurities from the diesel fuel and improve heating efficiency.

- Periodically inspect and clean the oil filter.
- To clean, remove the filter, wash it with a suitable cleaning agent, rinse thoroughly, and ensure it is completely dry before reinstallation.

6.2 General Cleaning

- Ensure the heater is turned off and cooled down before cleaning.
- Wipe the exterior of the heater with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- Keep the air intake and outlet vents clear of dust and debris.

7. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
Heater does not start	No power, low fuel, clogged fuel line, faulty ignition.	Check power connection and voltage. Ensure sufficient fuel. Inspect fuel line for blockages. Contact support if ignition issue persists.
Low heat output	Clogged air filter, dirty fuel filter, incorrect temperature setting.	Clean or replace air filter. Clean fuel filter. Verify temperature setting on LCD or remote.
Excessive smoke	Poor fuel quality, incorrect fuel type, combustion issues.	Use recommended light diesel fuel. Ensure fuel is clean. Contact support for combustion system inspection.
Unusual noise	Loose components, fan obstruction, fuel pump issue.	Check for loose parts. Ensure fan is clear. If noise persists, contact support.
Error code on LCD	System malfunction.	Note the error code and consult the full troubleshooting guide (if available) or contact customer service with the code.

8. SPECIFICATIONS

Feature	Specification
Brand	SILVEL
Model Number	SILVEL (8KW 12V/24V)
Power/Wattage	8 KW
Voltage	12 Volts / 24 Volts
Material	Aluminium
Product Dimensions	19 x 33.48 x 43.48 cm
Item Weight	8.01 kg
Fuel Type	Diesel
Heating Method	Forced Air
Heating Coverage	200 square feet
Temperature Range	8°C–36°C (46.4°F–96.8°F)

Feature	Specification
Altitude Compensation	Up to 3,500 meters (11,483 feet)
Noise Level	Below 45 dB
Fuel Tank Capacity	4 Liters
Fuel Consumption	0.12 to 0.50 liters per hour

9. WARRANTY AND SUPPORT

SILVEL provides exclusive after-sales warranty service for this diesel heater. This includes consultation on common issues and troubleshooting assistance during product use.

- For any concerns regarding product use, maintenance, or troubleshooting, please contact SILVEL customer service.
- Our support team is available to provide full assistance from purchase to ongoing use, ensuring peace of mind.

Please refer to your purchase documentation or the official SILVEL website for specific warranty terms and contact information.