

CooFel CooFel-DAI-30

CooFel 8KW 12V Diesel Air Heater Instruction Manual

Model: CooFel-DAI-30

INTRODUCTION

Thank you for choosing the CooFel 8KW 12V Diesel Air Heater. This manual provides essential information for the safe and efficient operation, installation, and maintenance of your heater. Please read this manual thoroughly before use and retain it for future reference.

IMPORTANT SAFETY INSTRUCTIONS

Failure to follow these safety instructions may result in fire, electric shock, serious injury, or death.

- Ensure proper ventilation when operating the heater. Do not operate in enclosed, unventilated spaces.
- The exhaust pipe must always be routed outdoors to prevent carbon monoxide poisoning.
- Use only diesel fuel. Never use gasoline or other volatile fuels.
- Keep flammable materials at a safe distance from the heater and its exhaust.
- Do not touch hot surfaces of the heater during or immediately after operation.
- Ensure the heater is securely mounted to prevent tipping.
- Disconnect power before performing any maintenance or cleaning.
- Do not modify the heater or its components. Use only original replacement parts.
- Keep children and pets away from the operating heater.

PRODUCT OVERVIEW

The CooFel 8KW 12V Diesel Air Heater is an all-in-one unit designed for efficient heating. It features an integrated fuel tank, heater, and fuel pump for simplified installation and operation. The internal structure, including the combustion chamber, base, and heat-dissipating scale, is constructed from aluminum for durability and uniform heat dissipation.

12V 8 KW DIESEL AIR HEATER

Warm up your whole winter


 Motorhome	 Truck	 Bus
 Boat	 Cabin	 Warehouse



Figure 1: Front view of the CooFel 8KW 12V Diesel Air Heater, showing the air outlet and control panel.



Figure 2: Side view of the heater, highlighting its compact design and integrated fuel tank level indicator.

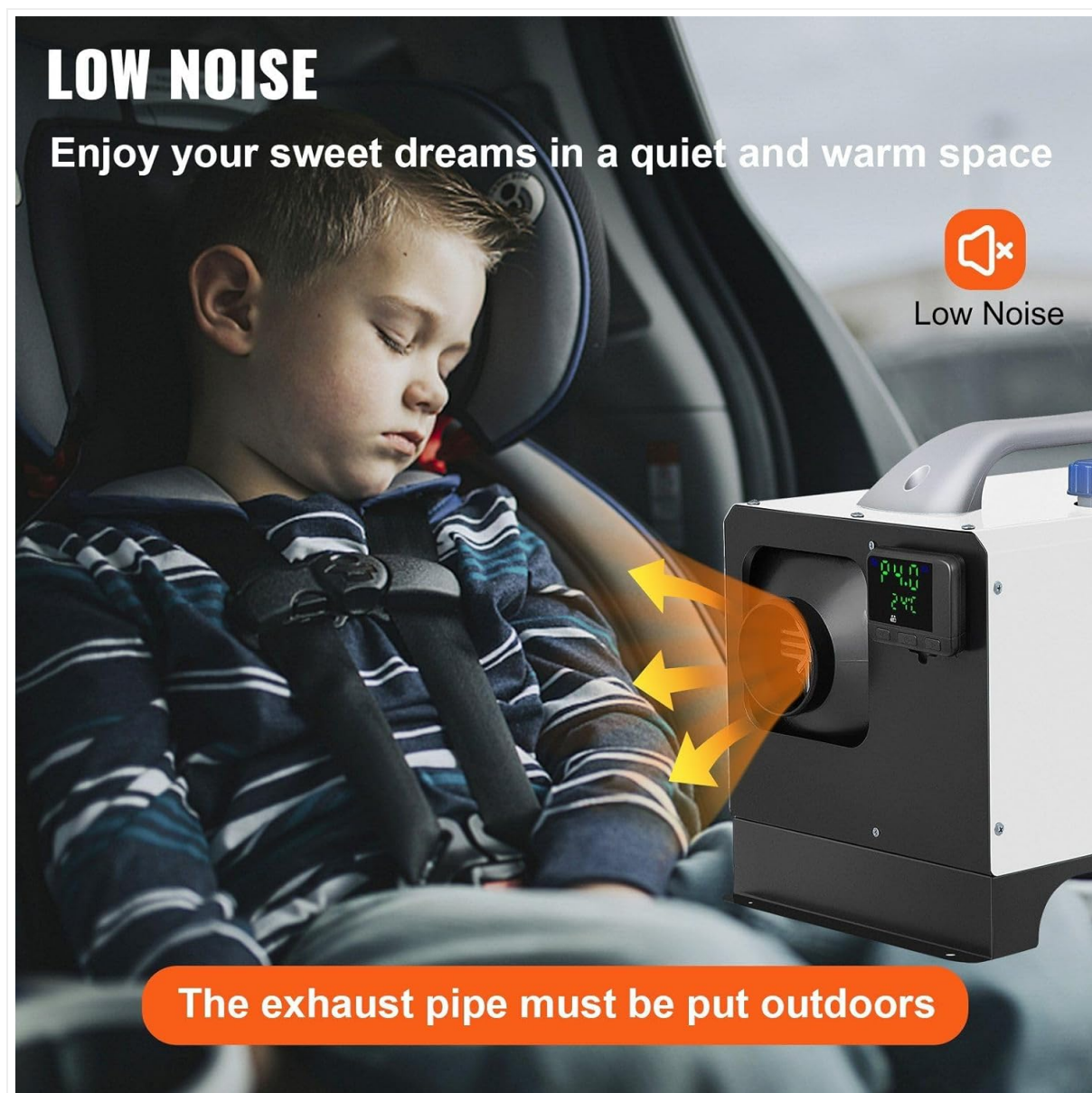


Figure 3: Diagram illustrating the internal components, including the combustion chamber and heat exchange system.

Included Components

The complete package includes the following items:

- 1 x All-in-one Diesel Heater
- 1 x Remote Control
- 1 x Silencer
- 1 x Wiring Harness
- 1 x Air Filter
- 1 x Intake Pipe
- 1 x Outlet Pipe
- 1 x Exhaust Pipe
- 1 x Installation Kit (various fasteners and clamps)

SPECIFICATIONS

Feature	Specification
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Heater Power	8KW
Rated Voltage	12V
Working Temperature	-40°C to +80°C (40°F to 176°F)
Fuel Consumption	0.1-0.24 L/H (0.026-0.063 Gal/H)
Fuel Type	Diesel Only
Product Dimensions	46 x 36 x 31 inches
Model Number	CooFel-DAI-30
Special Feature	Adjustable Speed
Power Source	AC/DC (12V DC for operation)
Heating Method	Forced Air

SETUP AND INSTALLATION

The CooFel diesel air heater is designed as an all-in-one unit, simplifying the installation process as the fuel tank, heater, and fuel pump are pre-integrated.

Placement Considerations

The heater can be flexibly installed in various locations, provided safety guidelines are followed:

- **Passenger Room:** Ensure adequate clearance from flammable materials and proper exhaust routing.
- **Trunk:** A common location for vehicle installations, ensuring exhaust is safely directed outside.
- **Under the Container:** Suitable for larger vehicles or stationary applications, with protection from elements.

POWERFUL HEATING FUNCTION

Winter travel is no trouble



Figure 4: Example placement of the heater inside a vehicle, illustrating the direction of warm air output.

Installation Steps (General)

1. **Choose Location:** Select a stable, flat surface for the heater, ensuring sufficient space for air intake and exhaust.
2. **Secure Heater:** Use the provided installation kit to securely fasten the heater to prevent movement during operation.
3. **Connect Exhaust Pipe:** Attach the exhaust pipe to the heater and route it safely outside the vehicle/enclosure. Ensure no kinks or blockages. The silencer can be installed on the exhaust pipe to reduce noise.
4. **Connect Intake & Outlet Pipes:** Attach the air intake and hot air outlet pipes. Ensure the air filter is installed on the intake pipe.
5. **Electrical Connection:** Connect the wiring harness to a 12V power source, ensuring correct polarity and a secure connection. Refer to the wiring diagram in the full manual for detailed instructions.
6. **Fueling:** Fill the integrated fuel tank with clean diesel fuel. Do not overfill.

OPERATING INSTRUCTIONS

The heater can be controlled via the intelligent LCD monitor or the remote control.

LCD Control Panel

The built-in LCD panel allows for automatic or manual adjustment of the heater's timer and thermostat. The display shows current temperature, target temperature, and operational status.

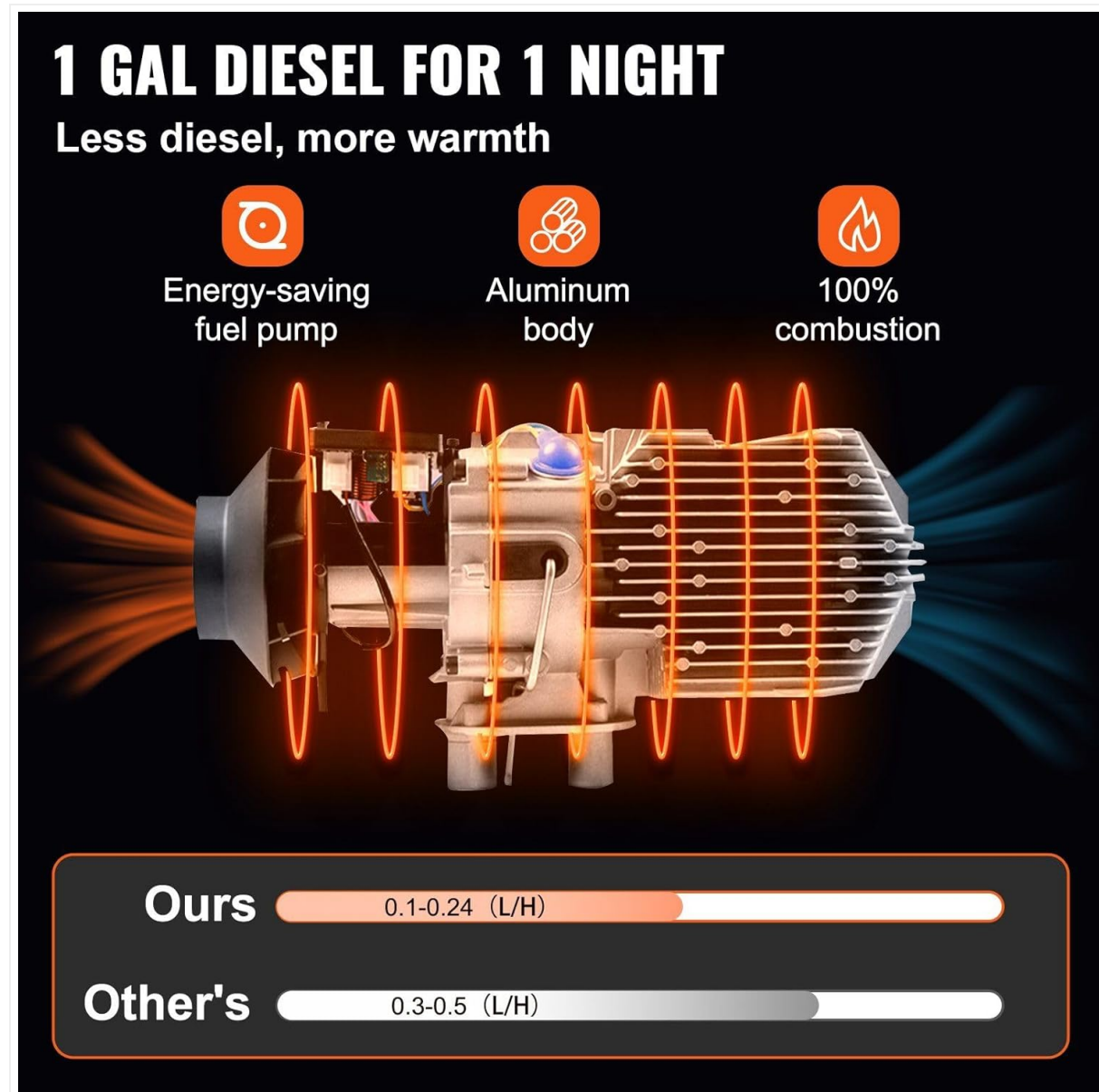


Figure 5: Close-up view of the LCD control panel, displaying temperature and operational settings.

- **Power Button:** Press to turn the heater ON/OFF.
- **Up/Down Buttons:** Adjust the target temperature or navigate menu options.
- **Menu Button:** Access settings such as timer, fan speed, and operating mode.

Remote Control

The remote control provides convenient operation from a distance, allowing you to adjust the temperature or activate the heater before entering your vehicle.

LCD THERMOSTAT & REMOTE CONTROL

Pre-heat your car before entering it



Raise



On/Off



Lower



24H Timer

30m/98 ft control distance

Automatically turn on and shut off



Figure 6: The LCD control panel alongside the remote control unit.

- **Power Button:** Turn the heater ON/OFF remotely.
- **Temperature Adjustment:** Buttons to increase or decrease the desired temperature.
- **Timer Function:** Set a timer for automatic startup or shutdown.

Initial Startup

1. Ensure the fuel tank is filled with diesel.
2. Connect the heater to a 12V power source.
3. Press the power button on the LCD panel or remote control.
4. The heater will initiate a startup sequence, including fuel priming and ignition. This may take a few minutes.
5. Adjust the desired temperature using the Up/Down buttons on the LCD or remote.

MAINTENANCE

Regular maintenance ensures the longevity and efficient operation of your diesel air heater.

- **Clean Air Filter:** Periodically check and clean the air filter to ensure unrestricted airflow. Replace if damaged.

- **Inspect Exhaust System:** Regularly check the exhaust pipe for blockages, leaks, or damage. Ensure it remains clear and securely attached.
- **Fuel System Check:** Inspect fuel lines for leaks or damage. Ensure the fuel filter (if external) is clean.
- **General Cleaning:** Keep the exterior of the heater clean and free from dust and debris. Do not use abrasive cleaners.
- **Electrical Connections:** Verify all electrical connections are secure and free from corrosion.

TROUBLESHOOTING

This section addresses common issues you might encounter. For more complex problems, contact customer support.

Problem	Possible Cause	Solution
Heater does not start	No power, low fuel, clogged fuel line, air in fuel system	Check 12V power connection, refill fuel tank, check fuel lines for blockages, prime fuel system.
Low heat output	Clogged air filter, exhaust blockage, incorrect temperature setting	Clean/replace air filter, check exhaust for obstructions, increase target temperature.
Excessive smoke	Poor fuel quality, incorrect fuel-air mixture, carbon buildup	Use clean diesel fuel, ensure proper ventilation, consider professional cleaning if carbon buildup is suspected.
Unusual noise	Loose components, fan obstruction, worn bearings	Check for loose parts, ensure fan is clear of obstructions. If noise persists, contact support.
Remote control not working	Dead batteries, out of range, interference	Replace remote batteries, move closer to the heater, check for signal interference.

APPLICATION

The CooFel 8KW 12V Diesel Air Heater is a versatile heating solution suitable for a wide range of diesel vehicles and applications. It provides independent warm air, helping to maintain comfortable temperatures without relying on the vehicle's engine.



Figure 7: The diesel air heater is suitable for various applications such as motorhomes, trucks, buses, boats, cabins, and warehouses.

Common applications include:

- Cabs of cars and trucks
- RVs and campervans
- Caravans
- Boats
- Small cabins or workshops

WARRANTY AND SUPPORT

For warranty information, please refer to the documentation provided with your purchase or contact the retailer. For technical support, troubleshooting assistance beyond this manual, or to inquire about replacement parts, please contact CooFel customer service through their official channels.

