## HCALORY AH003

# HCALORY 12V Diesel Air Heater User Manual

Model: AH003 | Brand: HCALORY

## Introduction

This manual provides essential information for the safe and efficient operation of your HCALORY 12V Diesel Air Heater. This all-in-one unit is designed for portable heating, featuring an upgraded fan for stable operation and reduced noise. It utilizes volatile technology with a ceramic ignition plug for fast ignition and full combustion, ensuring low emissions and fuel consumption. The heater is equipped with a remote control and LCD monitor for convenient temperature adjustment and monitoring. Its compact design allows for easy installation and portability across various vehicles and settings.

## Safety Information

Please read and understand all safety warnings and instructions before operating the heater. Failure to follow these instructions may result in fire, explosion, electric shock, or other hazards, which could cause property damage, personal injury, or death.

- **Ventilation:** Always ensure adequate ventilation when operating the heater to prevent carbon monoxide buildup. Carbon monoxide is an odorless, colorless gas that can cause serious injury or death. Consider using a carbon monoxide detector.
- **Fuel Handling:** Use only diesel fuel. Do not refuel while the heater is operating or hot. Avoid spilling fuel. Store fuel in a safe, well-ventilated area away from ignition sources.
- **Exhaust:** Ensure the exhaust pipe is routed safely outside and away from flammable materials or living spaces. The exhaust can reach very high temperatures.
- **Placement:** Place the heater on a stable, non-flammable surface. Maintain clear space around the heater for proper airflow and to prevent overheating.
- **Electrical Connections:** Ensure all electrical connections are secure and correct. Use the specified 12V power source.
- **Children and Pets:** Keep children and pets away from the heater during operation.
- **Flammable Materials:** Do not place flammable materials (e.g., clothing, paper, chemicals) near the heater.

## What's in the Box

Your HCALORY Diesel Air Heater package includes the following components:




Image: All components included in the HCALORY Diesel Air Heater package, such as the main unit, remote control, LCD switch, intake pipe, exhaust pipe, air outlet pipe, air filter, exhaust silencer, and various fixture accessories.

- 1 x Air Heater Host with LCD Display
- 1 x LCD Remote control
- 1 x Intake pipe
- 1 x Air Outlet pipe
- 1 x Exhaust pipe
- 1 x Filter
- 1 set Fixture Accessories
- 1 x Instructions (User Manual)

## SPECIFICATIONS

| Feature | Detail |
|---|---|
| Manufacturer | HCALORY |
| Brand | HCALORY |
| Model | A6 |
| Item Model Number | AH003 |
| Item Weight | 20.6 pounds |
| Package Dimensions | 19.6 x 18.6 x 7.9 inches |
| Exterior | Painted |
| Manufacturer Part Number | Heater 20 |
| Voltage | 12 Volts, 24 Volts |
| Internal Fuel Tank | 5L |
| Rated Power | 5-8KW |
| Fuel Consumption | 0.1L - 0.35L/hour (feature bullets) / 0.1-0.48L/hour (image) |
| Remote Control Effective Distance | 100 meters |
| Radiator Working Temperature | -40~+50°C |
| Operating Temperature of Oil Pump | -40~+40°C |

# Specification




| | |
|---|---|
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| Rated voltage: 12V | Fuel consumption: 0.1-0.48L/ hour |
| Remote control effective distance: 100 meters | |
| Radiator working temperature: -40~+50°C | |
| Operating temperature of oil pump: -40~+40°C | |

Image: Visual representation of the heater's dimensions and a summary of key specifications.

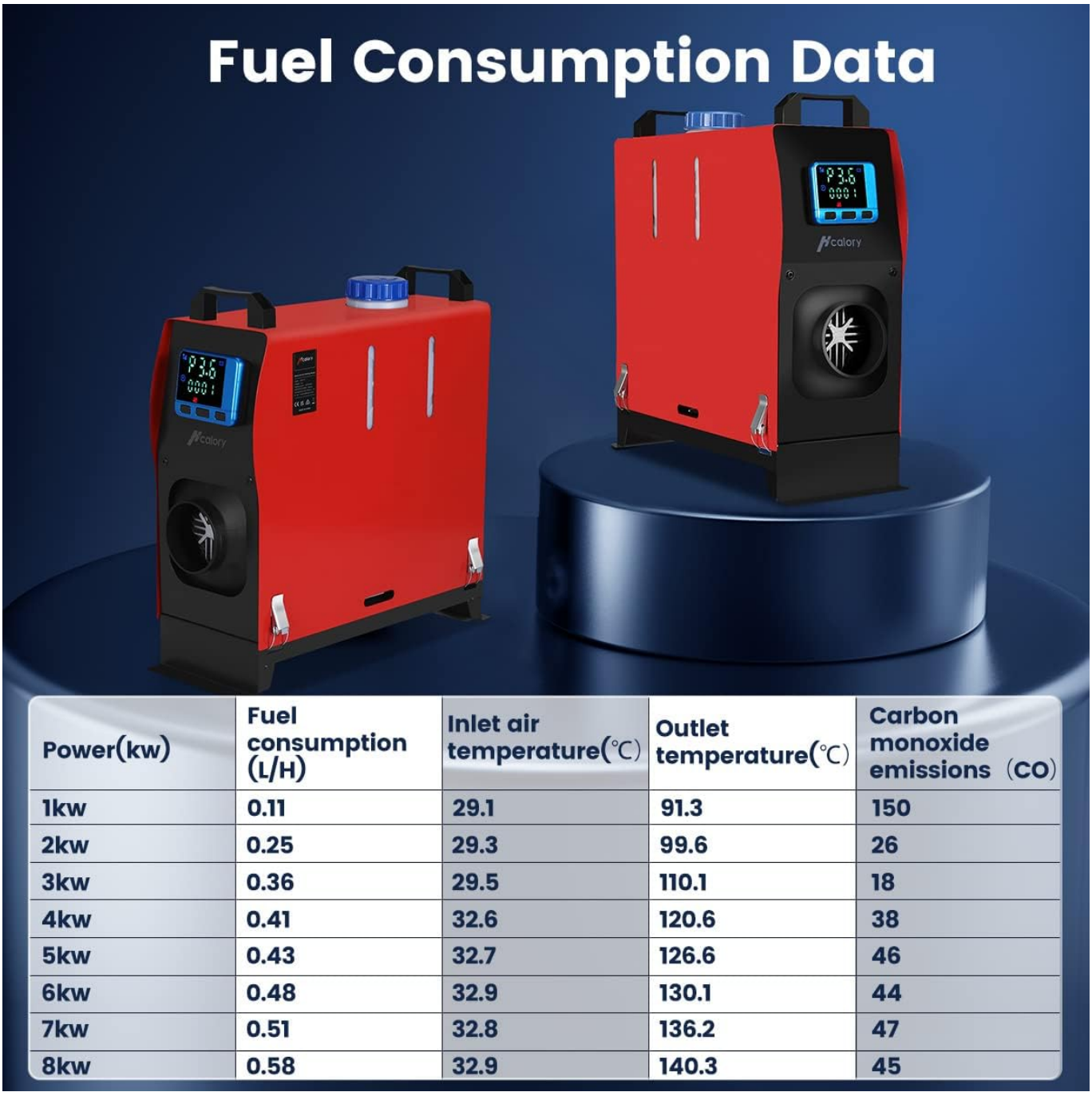



Image: Detailed fuel consumption data and carbon monoxide emissions at various power settings.

## Setup

The HCALORY Diesel Air Heater is designed as an all-in-one unit for ease of setup. Proper installation of the intake and exhaust systems is crucial for safe and efficient operation.

### Installation Location Considerations:

The heater can be installed in various locations depending on the vehicle type. Always ensure the exhaust is routed safely outside and away from any living or enclosed spaces.




Image: Recommended installation locations for various vehicle types, including trucks, passenger cars, RVs, and excavators. Note the importance of external exhaust routing.

- **Truck:** On the co-driver's legroom, on the back wall of the cab, driver's seat backrest, or within the toolbox.
- **5/7 Seater Vehicle:** Mainly installed in the passenger room or baggage room. If not possible, fix under the underside of the vehicle, being cautious of splashing.
- **RV:** In front of the passenger seat, between the driver seat and passenger seat, under the container, or in the trunk.
- **Excavator:** Inside the driver's seat, on the back wall of the cab, or inside the protection box.

## Connecting Components:

Connect the intake pipe, air outlet pipe, and exhaust pipe using the provided clamps and accessories. Ensure all connections are tight to prevent leaks and ensure proper airflow.

[redacted]

Video: An official product video demonstrating the setup and features of the HCALORY 12V Diesel Air Heater, including connection of pipes and general operation.

Before starting, ensure the 5L fuel tank is filled with diesel. The durable oil pump should be installed at a 45-degree angle for optimal performance.

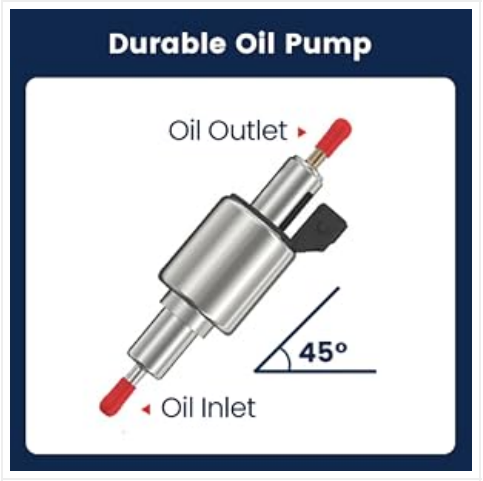



Image: Illustration of the durable oil pump, highlighting the recommended 45-degree installation angle for proper fuel flow.

## Operating Instructions

The HCALORY Diesel Air Heater can be operated via its integrated LCD display or the included remote control.




Image: The main unit of the HCALORY Diesel Air Heater, showing the integrated LCD display and the separate remote control.

## Remote Control Pairing:

To pair the remote control with the heater unit:

1. Ensure the heater unit is completely off.
2. Press and hold the **RIGHT arrow** button on the blue LCD control panel attached to the unit until "HFA-" appears on the display.
3. While "HFA-" is displayed, simultaneously press **BOTH the power button and the small gear-looking button** on the remote control.
4. The remote control should now be paired with the heater.

## Basic Operation:

- **Power On/Off:** Use the power button on the LCD display or remote control to turn the unit on or off.
- **Temperature Adjustment:** Adjust the desired temperature using the up/down arrows on the LCD display or remote. The heater will regulate its output (5KW-8KW) to reach and maintain the set temperature. Temperature is displayed in Celsius.
- **Countdown Mode:** The heater supports a countdown timer for operation, with a maximum setting duration of 99 hours and 59 minutes. Refer to the detailed user manual (PDF) for specific instructions on setting the timer.




Image: Visual representation of the heater's countdown mode, allowing users to set an operating duration of up to 99 hours.

The heater features an overheating protection system that automatically cuts off power if the internal temperature becomes too high, ensuring safe operation.




Image: Depiction of the overheating protection mechanism, which activates and cuts off the circuit when the temperature exceeds safe limits.

## Maintenance

Regular maintenance ensures the longevity and efficient operation of your HCALORY Diesel Air Heater.

- **Cleaning:** Periodically clean the exterior of the unit with a soft, damp cloth. Ensure air intake and outlet vents are free from dust and debris.
- **Air Filter:** Check and clean or replace the air filter as needed to maintain optimal airflow and prevent internal contamination.
- **Fuel System:** Inspect fuel lines for any signs of leaks or damage. Ensure the fuel tank is clean and free of contaminants.
- **Exhaust System:** Verify that the exhaust pipe is clear of obstructions and securely connected.
- **Storage:** When storing the heater for extended periods, ensure the fuel tank is empty and the unit is clean and dry. Store in a cool, dry place.

## Troubleshooting

If you encounter issues with your HCALORY Diesel Air Heater, refer to the following common troubleshooting steps:

| Problem | Possible Cause | Solution |
|---|---|---|
| Heater does not turn on. | No power, loose connections, low voltage. | Check power supply and connections. Ensure battery voltage is sufficient (12V). |
| Remote control does not work. | Not paired, dead batteries, out of range. | Attempt remote pairing as described in the Operating Instructions. Replace remote batteries. Ensure remote is within 100 meters of the unit. |
| Heater produces little to no heat. | Low fuel, clogged fuel line, air intake/outlet blocked. | Check fuel level and refill if necessary. Inspect fuel lines for blockages. Clear any obstructions from air intake and outlet vents. |
| Excessive smoke or unusual odor. | Improper combustion, exhaust blockage, incorrect fuel. | Turn off the unit immediately. Check exhaust for blockages. Ensure only diesel fuel is used. Seek professional assistance if the problem persists. |
| Unit shuts off unexpectedly. | Overheating, low fuel, electrical issue. | Allow unit to cool down. Check fuel level. Verify stable power supply. |

For issues not covered here, or if troubleshooting steps do not resolve the problem, please contact customer support.

## Warranty and Support

HCALORY is committed to providing high-quality, safer, and more user-friendly products. For detailed warranty information, please refer to the official user manual provided with your product or contact HCALORY customer service.

- **Official User Manual (PDF):** For comprehensive instructions and additional details, you can download the official PDF user manual here.
- **HCALORY Store:** Visit the official HCALORY store on Amazon for product information and support:HCALORY Store.
- **Customer Service:** For technical assistance or warranty claims, please contact HCALORY customer support through the vendor's contact information provided at the point of purchase or on their official website.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

**Name**

Anonymous

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**Question**

Example: How do I reset this device or fix this error?

**Details**

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question