BougeRV

USER MANUAL

Portable Diesel Heater



Model:

US: DHG001 JP: DHG003

DE: DHG002 GB: DHG004

SUV RV Tent Engineering Vehicle Truck

Please read this manual carefully before use and store it in a safe place for future reference.

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1. Safety Information (Read Before Use)

Please read all safety warnings, instructions, illustrations, and manuals provided with this diesel heater. Failure to follow these instructions may result in electric shock, fire, or serious injury.

Initial Startup and Reuse
White smoke may appear during the first startup or after a long period of inactivity due to incomplete combustion. This is normal and will stop once the heater operates normally.

Parts Replacement
Do not replace important parts without authorization. Contact customer service for correct specifications and product models to avoid damage to the combustion system.

Flammable Environments
Do not use the heater in areas with flammable vapors or dust (e.g., fuel depots, carbon depots, timber depots, granaries, and gas stations). Keep away from fuel tanks, compression tanks, fire extinguishers, clothing, and other flammable items.

Proximity to Flammable Materials
The exhaust pipe reaches very high temperatures. Ensure no flammable or explosive materials are near the exhaust pipe during installation, use, maintenance, and disposal to prevent fires.

Safety Around Children
Ensure that children do not play with the heater. Cleaning and maintenance must be supervised by an adult.

Ventilation
Keep the area well ventilated and ensure pipes remain open. Place the silencer or exhaust pipe outdoors to prevent carbon monoxide poisoning.

Enclosed Spaces
Do not use the heater in enclosed or unventilated spaces.

Refueling
Turn off the heater before adding diesel.

During Operation
Do not cut off the power supply directly. After turning off the heating program, allow 3–5 minutes for the equipment to extinguish and cool down. Abrupt power cuts can cause abnormal shutdowns and affect the next startup.

Abnormal Shutdowns
If the heater stops due to a direct power cut, it may not cool effectively, affecting its service life. It may need to be restarted during the next startup.

Fuel System Leaks
Contact after-sales personnel for repairs if the heater's fuel system leaks.

Exhaust Port Placement
Ensure the exhaust port is placed outdoors to prevent exhaust gases from entering indoor spaces.

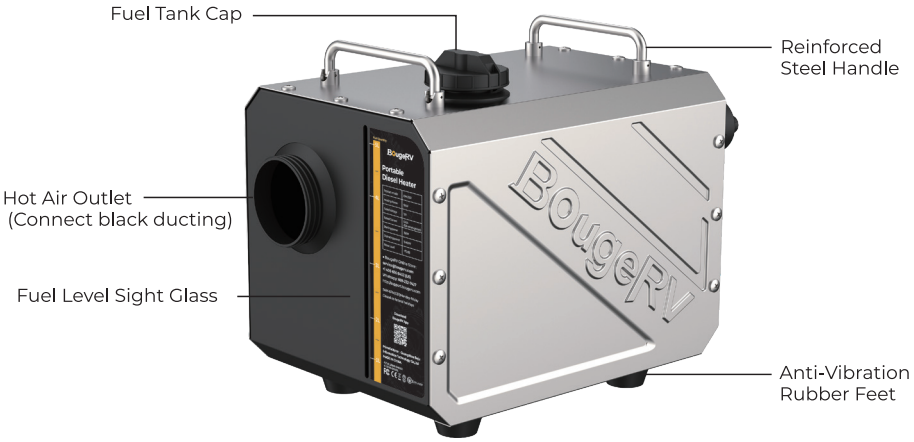
Pipeline Installation
Ensure the pipeline remains unblocked and is not squeezed or obstructed during installation.

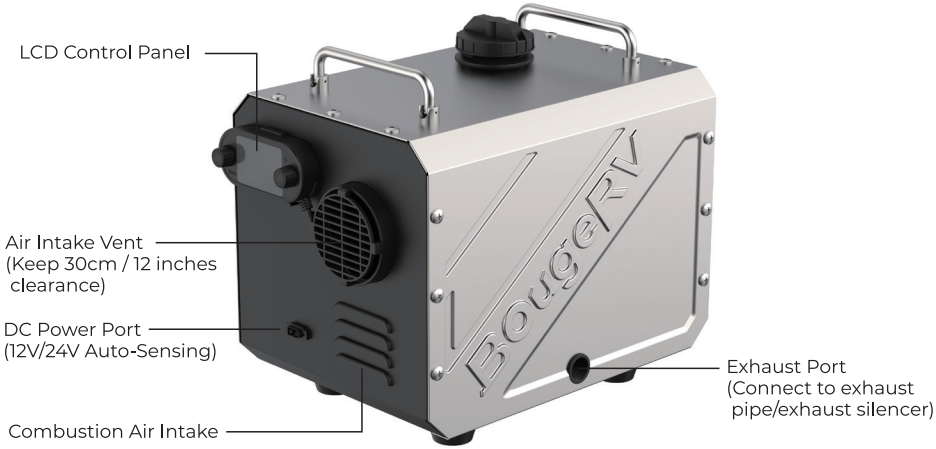
Overheating Protection
If the machine stops heating due to overheating protection, allow it to cool naturally before shutting it down and restarting.

Preheating and Ignition
The first 3–5 minutes after startup are for preheating and ignition. Hot air will emerge shortly—please wait patiently.

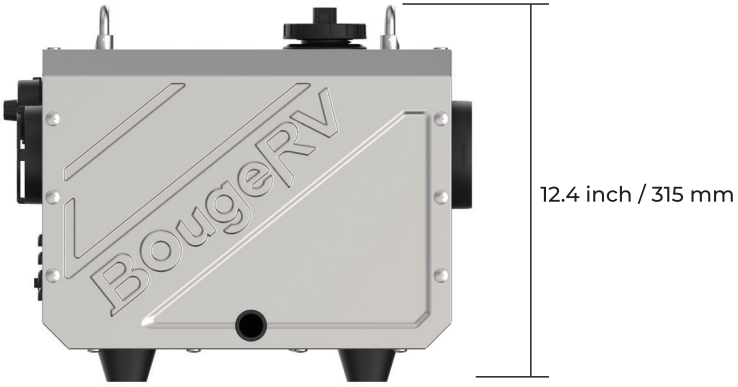
Power Supply
During startup, use a power supply rated for at least 15A as the ignition plug requires a high current (12V/12A or higher). Once ignited, the heater operates continuously at 5–6A.

2. Product Overview





Product Size





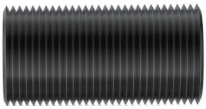
3. In the Box



Main Heater Unit*1



Air Duct Adapter*1
(Ø 3 inch / 75 mm)



Air Outlet Pipe *1
(Ø 75mm/ L 150cm)



Heater Duct Vent Outlet*1
(Ø 75 mm)



Stainless Steel Hose Clamps *1
(Ø 75 mm)



Exhaust Pipe
Muffler Silencer*1



110~240V AC Power Cord*1



XT60 Car Adapter Cable
(L 150cm)



Positive/Negative Power
Cord *1(L 150cm)



User Manual*1



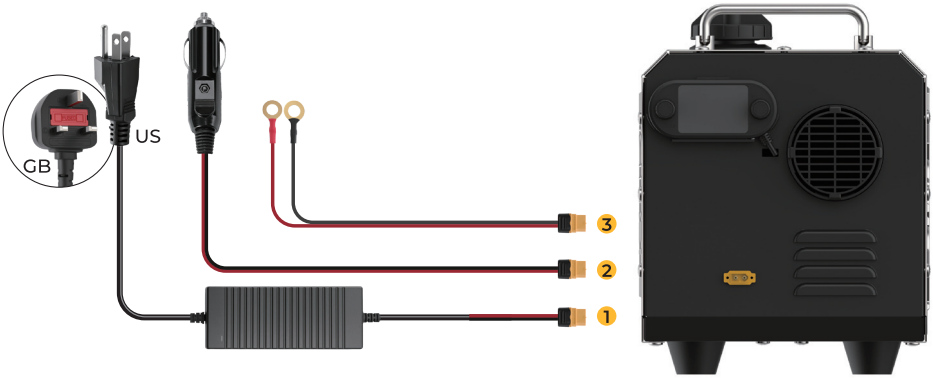
Smoke exhaust plug*1

Note:
The Air Outlet Pipe and Heater Duct Vent Outlet are shipped pre-assembled.

4. Setup

Insert at a 45° angle
Ensure the drain hole faces downward





Note: If using the XT60 Car Adapter Cable to connect to a portable power station, ensure the outlet supports a minimum of 15A.

Follow these 3 easy steps for setting up your heater:

1. Install the Exhaust Muffler (Standard Setup)

-Attach the Muffler: Plug the included muffler directly and securely into the exhaust port at the bottom of the heater.

-Outdoor Use Only: Ensure the heater is placed in a well-ventilated outdoor area so that exhaust gases disperse safely away from tents or living spaces.

-Indoor/Enclosed Spaces: If you plan to operate the heater indoors (such as in an RV, trailer, or garage), an extended exhaust pipe is required to safely vent gases outside.

2. Connect the Power Supply

-Plug in the Power: Connect the power supply (AC-DC adapter or 12V DC car cable) to a suitable power source. **(Please use a power supply rated for at least 15A.)**

-Connect to Heater: Securely connect the power cord to the heater's power input port.

3. Start the Heater

-Verify Connections: Once the muffler (or the separately purchased exhaust pipe) is securely in place and the power supply is connected, you can safely start the heater.

Important Safety Notice

-EXTREME HEAT WARNING: The surface temperature of the muffler and exhaust system can reach up to 250°C (482°F). Do not touch these components during operation or immediately after shutdown while they are cooling to avoid severe burns.

-CARBON MONOXIDE HAZARD: NEVER run the heater indoors or in enclosed spaces with only the muffler installed. Carbon monoxide is colorless, odorless, and deadly. You must use an extended exhaust pipe (sold separately) to route all exhaust gases completely outdoors.

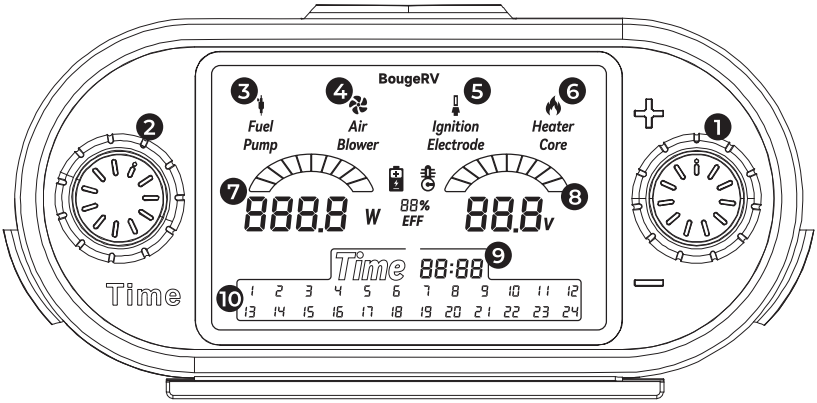
-Keep Clear: Keep the hot muffler, exhaust components, and heat outlets away from children, pets, and flammable materials.

-Ground Protection: Maintain a safe distance between the exhaust outlet and the ground to prevent heat damage to lawns, wooden decks, or plastic tarps.

5. Control Guide



5.1 Control Panel



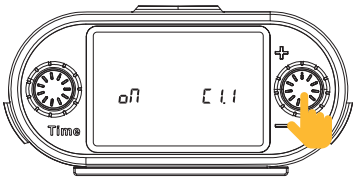
1. On/Off
2. Adjust Timer
3. Fuel Pump
4. Air Blower
5. Ignition Indicator
6. Heater Status
7. Power Level
8. Voltage
9. Clock
10. Timer & Schedule

5.2 Icons

	1. Fuel Pump Active
	2. Blower Active
	3. Ignition Active
	4. Core Heating Active
	5. Power Level Indicator
	6. Voltage Alert
	7. Overheat Warning
	8. Voltage Display
	9. Local Time (Manual Adjust)
	10. 24-hour Setting Function

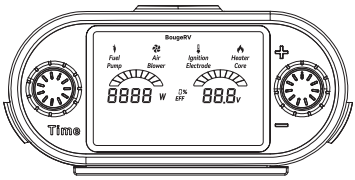
6. Operation

6.1 On/Off

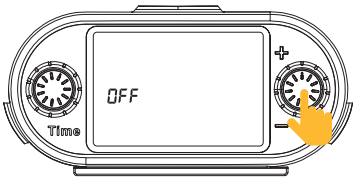


Turning On the Heater

- Power On: Press the power knob ' ' . The screen will light up, and the buzzer will sound once. Release the button to turn on the heater.



- Component Check:
  - Fuel pump starts (' ' icon lights up).
  - Air blower begins (' ' icon lights up).
  - Ignition indicator activates (' ' icon lights up).
  - Preheating set-test process starts (' ' lights up).

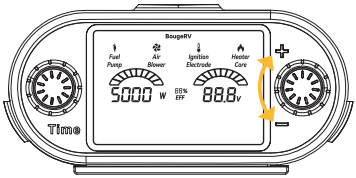


Turning Off the Heater

- Initiate Shutdown: In standby mode, press and hold the power knob ' ' for more than 3 seconds. The screen will display "OFF," and the heater will begin its shutdown cooling process.
- Complete Shutdown: Wait until the cooling process finishes, the screen turns off, and the heater stops running.

Warning: Do not cut off power during the shutdown. Wait 3–5 minutes until the screen and fan are turned off before disconnecting the power supply.

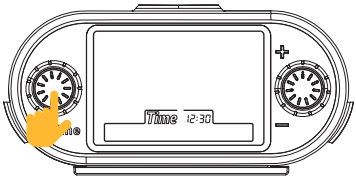
6.2 Power Mode



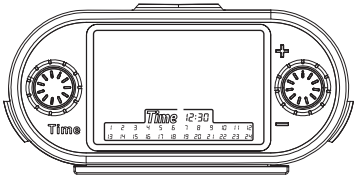
- Switching Modes: In standby mode, short press the power knob ' ' to switch modes.
- Adjusting Power:
  - Turn the power knob clockwise to increase power.
  - Turn the power knob counterclockwise to decrease power.
- Power Display: The screen will show power levels ranging from P1.4kW to P5.0kW. After adjusting, the selected power level will remain fixed, and heating will continue at that setting.

6.3 Timer Settings

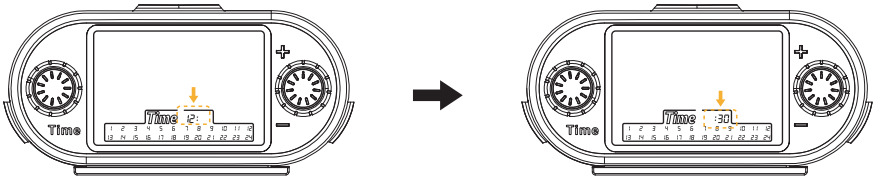
6.3.1 Clock Calibration



To set the clock:
- Ensure the heater is off
- Press and hold the timing knob until the time icon appears.

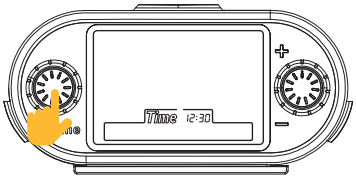


- Quickly press the timing knob three times within three seconds until the numbers 1 to 24 flash.
- Rotate the timing knob right until the Time frame icon flashes.
- Short-press the timing knob to enter clock adjustment mode.

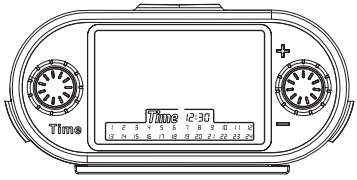


Example (e.g., 12:30) :
- When the "Time" icon flashes, press the knob to adjust hours.
- Rotate to "12" and press to confirm.
- Rotate to "30" for minutes and press to confirm.
- Wait three seconds for a beep, indicating the clock is set.

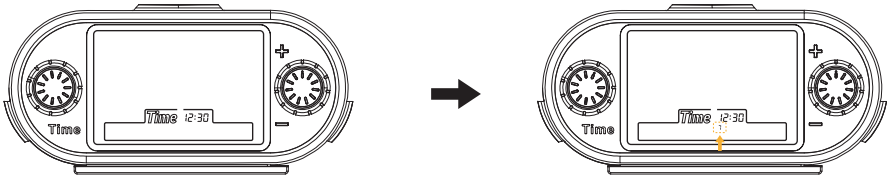
6.3.2 Single-Period Timing



Activate Timing Mode
With the device off, press and hold the timing knob button until the clock icon appears.

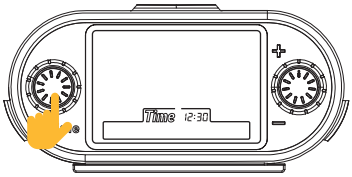


Enter Timing Setup
Quickly press the timing knob button three times within three seconds. Numbers 1 to 24 will flash at the bottom of the screen.

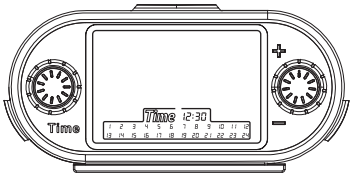


Select and Confirm Time
Rotate the knob to select a number (1-24). Example: For 7:00 AM, select "7." Press the knob once and wait for five seconds. The buzzer will beep, indicating that the timer setting is complete.

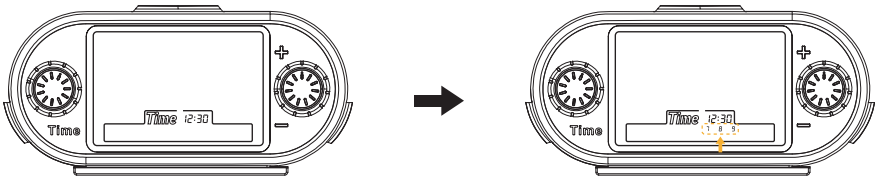
6.3.3 Multi-Period Timing



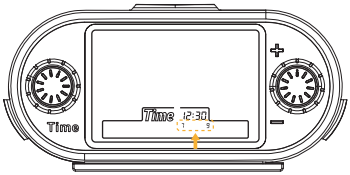
Activate Timing Mode
With the device off, press and hold the timing knob button until the clock icon appears.



Enter Multi-Period Setup
Quickly press the timing knob button three times within three seconds. Numbers 1 to 24 will flash at the bottom of the screen.

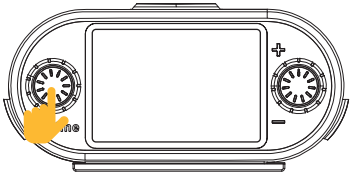


Adjust Time
Turn the timing knob to the right to select the desired hour (e.g., "7").
Confirm Selection
Tap the timing knob.
Add More Periods
Adjust the knob to select additional hours (e.g., "8" and "9"). Confirm each selection by tapping the knob button.
Finish Setting
Wait five seconds to confirm all selections. The system is now set for multiple periods.



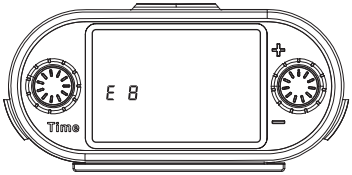
Example:
To set the system to work continuously for three hours at 7, 8, and 9 AM:
1. Turn the timing knob to "7".
2. Tap the timing knob. A dot will appear under "7".
3. Repeat for "8" and "9".
4. Wait five seconds to save the settings.

6.4 Turning Off the Timer Setting



Deactivate Timing Mode
In clock mode, press and hold the timing knob button until a single beep sounds, and the screen turns off.

6.5 Errors and Protection



Error Codes
If error codes E0-E15 are displayed and the buzzer emits a high-frequency sound, refer to the error code table for troubleshooting.

7. Maintenance Instructions

Prohibited Environments
The device must not be used in environments with:
- High humidity
- Conductive dust
- Flammable or explosive gases, dust, or materials
- Corrosive media
- Strong light exposure
- Strong magnetic fields, high voltage, or high-current equipment

Replacement of Damaged Components
- Replacements must use devices with the same model and specifications.
- Replacement must be performed by qualified professionals.

Unauthorized Access
Do not open the controller casing without proper authorization.

Installation Requirements
- The device must be installed strictly according to specified requirements.
- Ensure operation under safe conditions.

Temperature Management
High Temperature
If the device's temperature becomes excessively high and the fan malfunctions:
- Cool the device immediately.
- Blow cool air into the air inlet from the combustion-supporting mechanism.
- Reduce the temperature to below 176°F (80°C).
- Prevent damage to components caused by high temperatures or the risk of fire.

Air Duct and Pipeline Maintenance
- Ensure air ducts are unobstructed.
- Ensure pipelines are free from damage, compression, or blockages.
- Maintain heating efficiency and ensure normal operation.
- Blocked air ducts can result in:
- Excessively high temperatures
- Reduced heating efficiency
- Shortened service life
- Potential device damage
- Use standard fuel to ensure proper operation and extend device lifespan.

Liability Disclaimer

The company assumes no responsibility for:

- Losses or liabilities caused by improper connections
- Short circuits
- Damage to the controller resulting from external devices or wiring

The company shall not be held responsible for any losses or liabilities resulting from failure to install or operate the heater according to the above conditions.

Error Code	Fault Description	Fault Analysis	Troubleshooting Steps
E0	Mainboard Failure	Excessive dust accumulation or damaged electronic components	Clean dust or replace mainboard
E1	Startup Failure	① Fuel depletion	Refill fuel
		② Air bubbles in fuel line	Contact customer service for repair
		③ Fuel pump fails to deliver oil or insufficient flow	Check intake/exhaust pipes and ignition plug assist holes for blockages; clear if necessary
		④ White smoke emission	Check whether the outlet and exhaust pipes, as well as the ignition plug combustion-assist hole, are blocked, and ensure they are clear.
		⑤ Oil dripping from exhaust pipe	Inspect and clear intake/exhaust pipes
E2	Flame Extinguished	① Outlet/exhaust is obstructed	Check if the outlet and exhaust pipes are clear.
		② Fuel pump malfunction	Fuel pump flow instability; contact customer service or replace pump
E3	Voltage Anomaly	① Voltage mismatch	Ensure machine voltage matches power supply; replace power source if incompatible
		② Poor electrical contact	Check wire harness and power connections for secure attachment
		③ Unauthorized wiring modifications	Verify compliance with wiring specifications
		④ Insufficient startup power	Confirm power supply meets 150W requirement
E4	Premature Ignition	① Residual fuel in combustion chamber	Restart unit after full shutdown (caused by abnormal prior shutdown)
E6	Mainboard Sensor Failure	① Damaged temperature sensor or overheating	Check for overheating at intake; replace mainboard if no overheating is detected
E7	Fuel Pump Failure	① Disconnected wiring	Inspect pump wiring and connectors; re-secure
		② Pump hardware failure	Replace fuel pump
		③ Mainboard damage	Replace mainboard after ruling out other causes

Error Code	Fault Description	Fault Analysis	Troubleshooting Steps
E8	Mainboard Failure	① Disconnected wiring	Check if the machine casing is deformed and reposition it if necessary. If the fan blade is damaged, please contact customer service.
		② Pump hardware failure	Contact customer service
		③ Mainboard damage	Inspect sensor alignment and fan-mainboard spacing; reset components
		④ Short circuit or open circuit in wiring	Re-secure motor wiring connections to mainboard
E9	Ignition Plug Failure	① Ignition plug short circuit	Check for fused terminals; separate or replace plug if damaged
		② Mainboard damage	Contact customer service
E10	Overheating	① Outlet/exhaust is obstructed	Check if the outlet and exhaust are obstructed. Ensure they are clear.
		② Faulty temperature sensor	Contact customer service
E11	Heating Element Sensor Failure	① Loose sensor connection	Re-secure sensor connector
		② Sensor hardware failure	Contact customer service
E11	Heating Element Sensor Failure	② Sensor hardware failure	Contact customer service
E12	Ignition Plug Open Circuit	① Poor contact	Re-secure ignition plug connector
		② Mainboard damage	Contact customer service
C4	Control Panel Failure	① Overheated or damaged electronic components	Relocate control panel from heat sources; contact service if unresolved
C7/CONN	Control Panel/ Mainboard Failure	① Signal transmission failure	Re-secure control panel connectors
		② Damaged electronic components	Contact customer service

8. Disposal

Recycling Packaging Materials

Whenever possible, place all packaging materials into appropriate recycling bins to minimize environmental impact.



Disposing of the Product

Consult your local recycling center or specialized distributor for detailed instructions on how to dispose of the product in compliance with applicable disposal regulations.

9. Specifications

Product Model	DHG001	**Packaging Size**	16.3*15.8*14.8inch 415 x 402 x 378mm
Thermal Power	5kW	**Operation Noise**	<70dB
Working Voltage	12V	**Fan Speed:**	2000-4400Rpm
Working Current	5-6A (15A when ignited)	**Fuel Pump Frequency**	1.4-5.0Hz
Starting Power	150W	**Operating Altitude**	1000-3000M
Operating Power	10-60W	**Fuel Consumption Range**	0.18-0.53L/H
Net Weight	22lb/10kg	**Shell Material**	304 Stainless Steel
Package Weight	28.6lb/13kg		

Due to continuous product improvements, technical specifications may differ from the actual product. Always refer to the rating label on the product for accurate information.

10. FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correcting the interference by one or more of the following measures:

↘ Reorient or relocate the receiving antenna.

↘ Increase the separation between the equipment and receiver.

↘ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

↘ Consult the dealer or an experienced radio/TV technician for assistance.

11. Warranty and Support

Warranty

BougeRV Portable Diesel Heater comes with a 2-year warranty starting from the date of purchase on BougeRV Online Store or BougeRV Official Website, except in the following situations:

- Contrived damage.
- Damage caused by force majeure (e.g., earthquake, conflagration).
- Damage from inappropriate use or violation of instructions.
- Damage or malfunction caused by disassembling.

Note: This product also includes a 2-year limited warranty and lifetime technical support.

2-Year limited warranty
Lifetime technical support

Customer Service

If you encounter any issues with operating the product, please contact us.

Support Hub:
If you encounter any issues, please visit support.bougerv.com first to find solutions. (Scan the QR code on the right)

App Download:
Scan the QR code on the right to download the BougeRV App.

- **BougeRV Online Store**

Email: service@bougerv.com
Phone: +1 408 656 8402 (US)
WhatsApp: 669-232-7427
Hours: 9AM-6PM (CST), Monday-Friday
(Closed on federal holidays)

- **BougeRV Website**

Email: support@bougerv.com
Phone: +1 408 656 8402 (US)
WhatsApp: 669-232-7427
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