



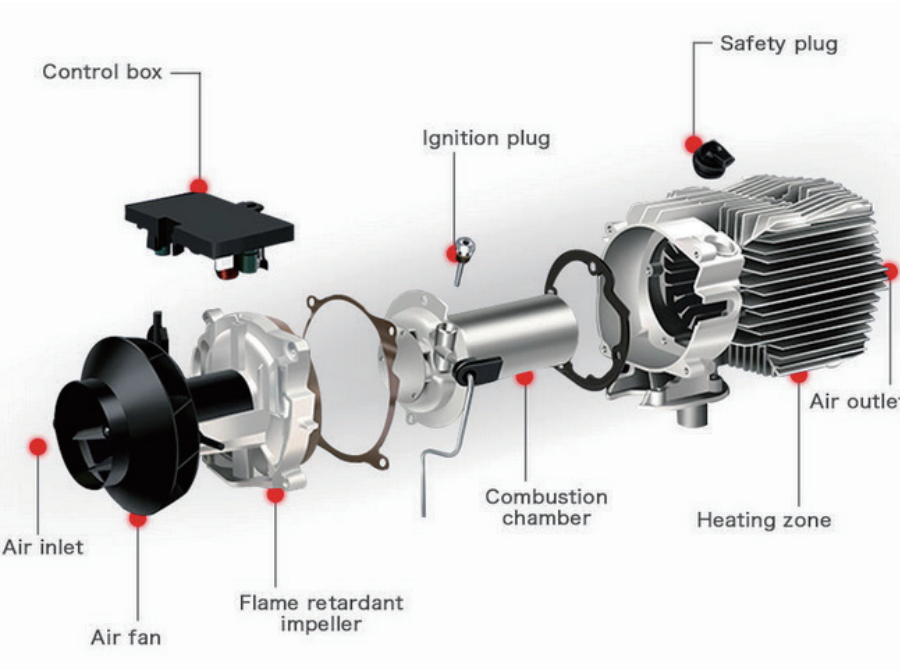
SMART HEATER

user manual

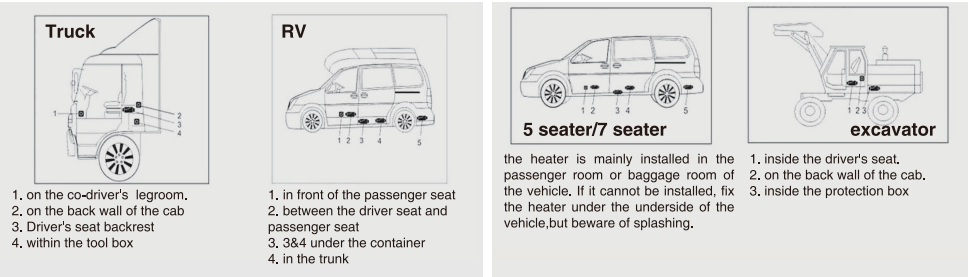
1. Function:

Get rid of damage to car causing by the sudden drop of temperature, improve the temperature inside the car, and preheat the engine coolant to avoid the engine wear at low temperature. Conducive to car interior thawing, car start, car glass defrost fog.

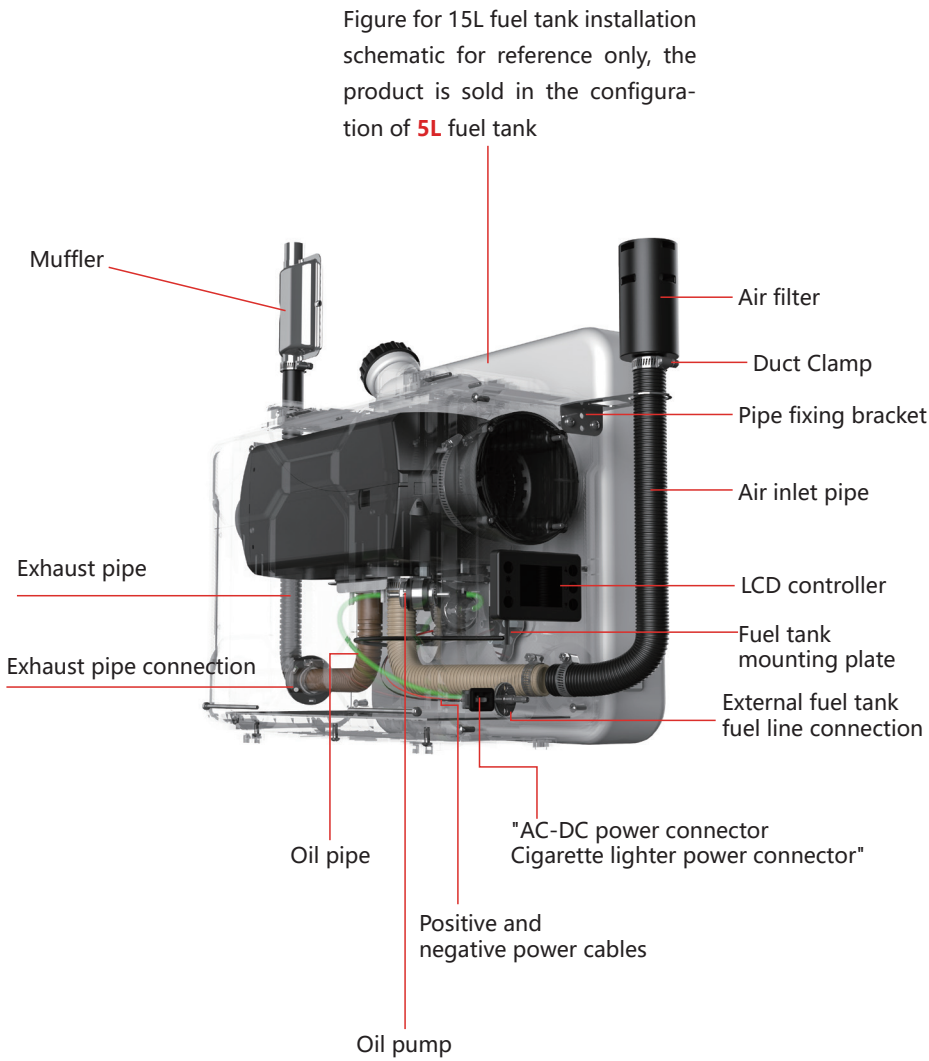
2. Internal Structure



3. Installation Position



4. Product Structure Diagram



5. Remote Control Operation Instructions



The remote control does not include the battery, please configure 1*12V 23A battery

Working mode

- ① In the gear mode, the gears can be set within the range of 1~10 gears.
 - ② In the temperature control mode, the setting temperature can be adjusted within the range of 8~36°C, and the gear of the control switch will change with the temperature in the cab.
- When the temperature rises or falls, the control switch will automatically adjust the operating gear to quickly reach the set temperature, so that the heater The operation of the heater is more intelligent and economic.
- ③ When there is a fault in the operation, the fault code will be displayed through the control switch display window flashing for more accurate and intuitive find the fault.

Operating instructions.

On/off and mode switching:

Press [] to turn on the power in the off state; press button [] to turn off the power in the on state; press [middle knob] to switch the current gear/temperature control mode.

Gear adjustment:

Turn [knob] clockwise to run gear/temperature +1, maximum to 10 gears/36°C, turn [knob] counterclockwise to run gear/temperature -1, minimum to 1 gear/8°C.

Basic setting:

After power on, press and hold the [] key for 3s to enter the basic setting interface, the upper left corner shows the setting items, and the interface shows the specific data under the setting items.

F0:Current time

F1:auto-start time

F2:Running time [after auto-start]

F3:Auto-start switch setting

F4:Language switch [Chinese (C), English (E), Russian (R)]

F5:Temperature compensation

F6: tank oil volume [5-50L (switch unit 5L)] [display --- on behalf of not monitoring the tank situation]

F7: oil pump power [16/22/28/32UL (default is 22UL)]

F8: Bluetooth switch

F9: automatic start/stop heater; (in automatic mode, when the cab temperature reaches the set tempera-

ture, it will automatically turn off after 30s delay; when the cab temperature is lower than the set temperature by 2°C, it will automatically turn on after 30s delay)

Press [Knob] to modify, press [Knob] again to confirm the current data modification.

Rotate [knob] to adjust the setting items, after all the adjustments are successful, long press [] for 3s to save all the basic settings

Engineering Mode:

Power on the state while holding down [] [] 3s into the project mode, the upper right corner shows the current project, the interface shows the specific data under the project, rotate the [knob] to adjust the project.

View data:

En00:Heater main board version number [scrolling display]

En01:Fault code [see the following table for details]

En02:Case temperature

En03:Power supply voltage

En04:Heater operating gear

En05:Cab temperature

En06:Altitude [top left corner]

En07:Pump oil enable

En08:Remote control match

En09:Bluetooth match

Remote control matching:

Enter the En08 interface, the interface shows "rte", long press the [knob] 3s to start matching, the screen shows "P1", then tap the remote control "adjustment plus +" button, the screen shows "P2" means "adjustment plus +" match successfully, P2, P3, P4 similarly, P4 automatically exit the project mode to return to the operating interface after a successful match, the specific key definitions are as follows

P1: Adjust plus button;

P2: Adjust minus button;

P3: Mode switch button;

P4: Switch on/off button.

Clear the last remote control matching data: press and hold [] for 7s when power on self-test, the interface shows "CLr" to start clearing, when the interface shows "SUC" to clear successfully.

Pump oil mode:

Press and hold the [lower left pumping] key during the power-on self-test until the screen displays '-P-' after the pumping icon lights up, the display area starts 300s countdown to release the key, start pumping, countdown the end of the countdown automatically exit, this operation needs to be completed when the power is on, the power self-test is over and cannot be entered.

Fill up the tank:

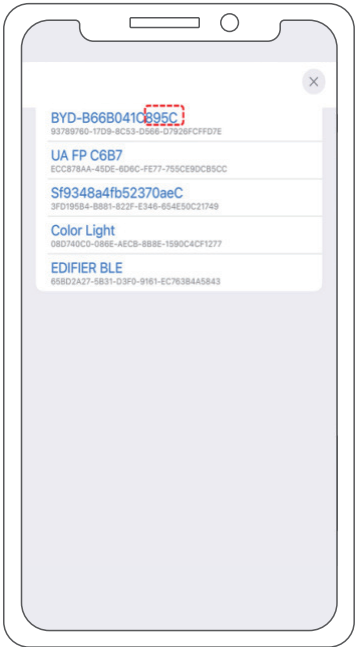
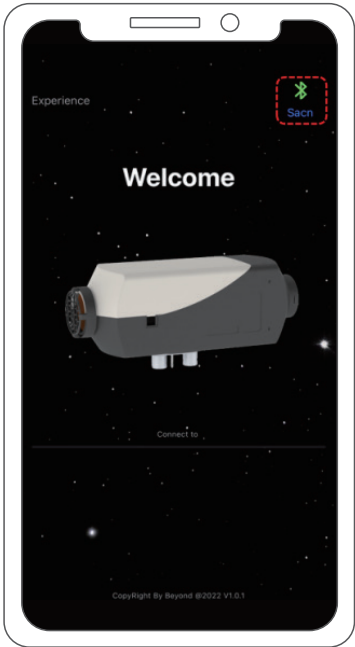
After the power is on, long press the [pump oil] key for 7s to fill up the interface tank display icon.

Bluetooth matching : Search and download the corresponding APP name "airHeaterBle" in IOS or Android APP store, then please follow below step to connect and control heater with mobile phone .

1.Query the Bluetooth name: press [⚙️] [Knob] 3s at the same time after power on, the screen displays 'bLE', the Bluetooth version of the upper side of the screen displays the 6-digit character name (0-F).



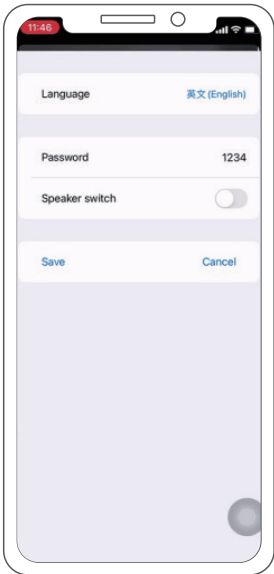
2.Connect to the mobile phone via Bluetooth : Click on the Bluetooth symbol in the upper right corner, find the corresponding local Bluetooth number : BYD + MAC address of the Bluetooth device + 4 digits from the controller(Refer to the picture above),then click on the Bluetooth number to connect;



3. Long press the [🔌] to turn on/turn off the heater ;



4. Click the [⚙️] button to go to the settings screen, you can set the language(English/Chinese), password and click "save" to save the settings;
After setting the password, adjust the switch to enter the engineering mode En09, the interface display "BLE" long press [knob] 3s, the upper right corner from flashing the original password to display the set password, the interface display changes to "SUC", after the successful match automatically return to run Interface



5.Click "mode" button to switch the gear mode or temperature control mode, then Click “up +” /“down -”button to increase + or decrease- the level(leavel1-10) / temperature(8°C ~ 36°C);



6.Fault display: when the heater fails, it will display the fault code E-xx, see the following table for the type of fault.



Panel display	type of fault	Solution
E-01	Start-up failure	Check whether the oil pump is working; check whether the interfaces of the oil circuit are hanging wax or blocked.
E-02	Lack of oil and stalling	Checking the fuel tank for lack of oil.
E-03	Abnormal voltage	1. check that the heater supply voltage type matches the actual vehicle voltage. 2. check that the supply voltage is not higher than 32V or lower than 18V for the 24V version. 3. check that the supply voltage is not higher than 18V or lower than 9V for 12V version. 4. check that the main harness connector is not loosely connected.
E-04	Air outlet temperature sensor failure	1. detecting whether the outlet air temperature sensor connector is loose and falsely connected. 2. failure of the outlet air sensor, replace the main board. 3. main board failure, replace the main board.
E-05	Inlet air temperature sensor	Inlet air sensor failure, replacement of the motherboard.
E-06	Oil pump abnormality	1. check the oil pump plug for loose false connections. 2. check the main wiring harness for disconnection. 3. oil pump failure, replace the oil pump.
E-07	Fan abnormalities	1. check whether the fan impeller of the car is jammed. 2. check whether the fan plug is loose and falsely connected. 3. fan failure, replacement of the fan. 4. check whether the wind wheel induction magnet is missing or has the wrong polarity. 5. check whether the main board wind speed sensor is normal. 6. main board failure, replace the main board.
E-08	Ignition plug abnormalities	1. check the ignition plug for false connections. 2. faulty ignition plugs, replace the ignition plugs. 3. main board failure, replace the main board.
E-09	High temperature protection	1. incorrect or faulty furnace temperature sensor type, replace the sensor. 2. main board failure, replace the main board.
E-10	Furnace temperature sensor abnormal	1. check the furnace temperature sensor connector for loose false connection. 2. incorrect or faulty type of furnace temperature sensor, replace the sensor. 3. main board failure, replace the main board.

FAQ

For any questions you may have about the Hcalory product, please kindly copy this link hcalory.com or scan below code to contact us . we will help you solve it as soon as possible.

If you are satisfied with our items, please leave a 5 star feedback on website to help others to know the items more. Appreciate your kind feedback and support.

About US

Hcalory Official Store is the only official store authorized directly from Hcalory without any transfer link.

It is committed to sell 100% original authentic products.

We have official store sales on all major platforms:

AliExpress: <https://fr.aliexpress.com/store/1875556>

ebay : <https://www.ebay.com.au/usr/hcalory>

<https://www.ebay.de/usr/hcalory>

Email: hcalory@hcalory.com

