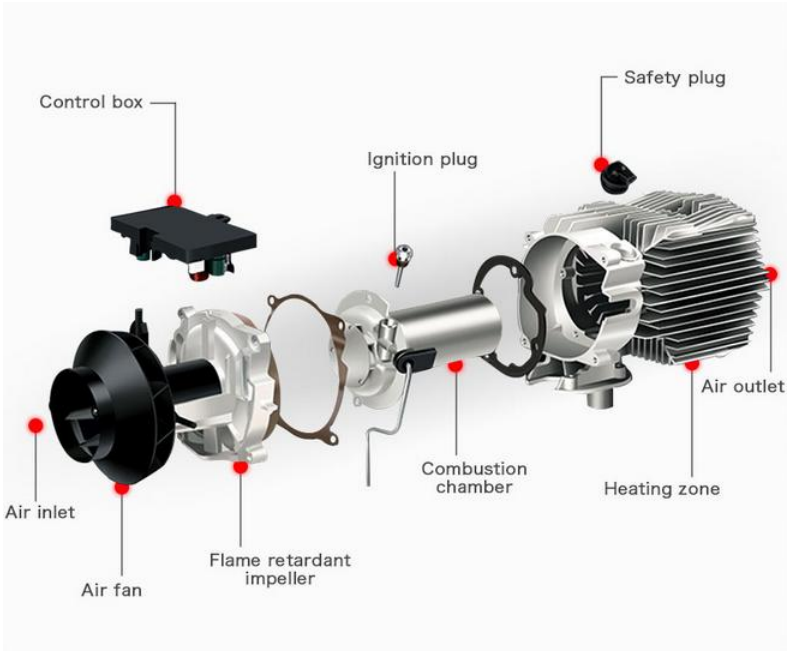
Wireless Heater

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.Heater type:

1.Horizontal All-in-One Heater



2.Vertical All-in-One Heater



3.Split Heater



4.Switch controller and Remote Control type

Modle	Modle number	Switch	Remote control	Motherboard type
Wireless remote control	S-A2013SL			
	S-A2018			

4.1 Wireless Remote Control Operation Instructions

4.1.1 S-A2013SL





Working mode :

① In gear mode, The gear setting can be adjusted within the range of 1 to 10;

② In temperature control mode, the set temperature can be adjusted within the range of 8~36℃, and the gear position of the control switch can be adjusted at any time.

Adjust the operating gear to quickly reach the set temperature, making the heater run more intelligently and economically.

③When the device is powered off, the screen displays the current time; when the device is powered on, the screen displays the running time.

④When a fault occurs during operation, the fault code will flash in the control switch display window. The code makes it easier to find the fault more accurately and intuitively.

Instructions:

Power on/off: Press the [Power button] to turn on the power when it is off; press the [Power button] to turn off the power when it is on;

Mode switch: Press the [Set button] in gear mode to switch to temperature control mode, and press the [Set button] in temperature control mode to switch to gear mode;

Gear adjustment: Press the [Up Adjustment button] to run gear/temperature +1, the maximum is 10 gears/36 ℃ , press the [Down Adjustment button] to run gear/temperature -1, the minimum is 1 gear/8℃;

Basic settings: In the power on state, press and hold the [Setting button] for 3s to enter.

Item 1: Set the current time, press the [Set Key] to set, press the [Up Adjust Key]/[Down Adjust Key] to switch; Item 2: Set the automatic start time, the setting method is the same as above;
Item 3: Set the running time after automatic start, the setting method is the same as above, and the switching unit is 0.5 hours;
Item 4: Set the automatic start function ON/OFF, the screen alarm icon is always on after the automatic start function is turned on.
Press the [Up Adjust Key]/[Down Adjust Key] to modify, and press the [Set Key] again to confirm the current data modification; After all adjustments are successful, press and hold the [Set Key] for 3s to save all basic settings and return to the running interface;

Engineering mode: Press and hold the [Up Adjust Key] and [Down Adjust Key] for 3s in the power-on state to enter the engineering mode, press the [Up Adjust Key] item +1, press the [Down Adjust Key] item -1, and the display area in engineering mode displays data items;

001 : Heater mainboard version number;	002: fault code;
003: Shell temperature ;	004: power supply voltage;
005: Heater operating position;	006: Cab temperature;
007 : altitude;	008: Language switching;

Temperature switching: long press the adjustment key in the power-on state to switch the temperature display between Fahrenheit and Celsius.
Remote control matching: long press the upper adjustment key in the power-on state, the interface displays "P-01", then press the remote control plus and minus key, minus key, mode switch key, power button, and return to the operation interface after successful matching.
Pumping oil mode: long press the [Confirm/Pump Oil] key when the version number is displayed during the first power-on self-test until the screen displays a countdown of '300s' and release the key to start pumping oil. Pumping oil will automatically end after 300s or press the [Power Button] to end pumping oil and shut down;

Description of E code display

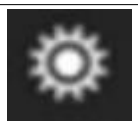
Fault light	Fault type	Troubleshooting
E-01	Abnormal voltage	Check whether the heater power supply voltage type is consistent with the actual vehicle voltage; 24V Version Check if the supply voltage is higher than 32V Or below 18V; 12V Version Check if the supply voltage is higher than 18V Or lower than 9V; check whether the main wiring harness connector is loose or not;
E-03	Ignition plug abnormality	Check whether the ignition plug is loosely connected; if the ignition plug is faulty, replace it; if the mainboard is faulty, replace it;
E-04	Oil pump abnormality	Check whether the oil pump plug is loose or not; check whether the main wiring harness is broken; if the oil pump is faulty, replace the oil pump;
E-05	Overheat protection	The furnace temperature sensor is of the wrong model or faulty, so replace the sensor; the mainboard is faulty, so replace the mainboard;
E-06	Fan abnormality	Check whether the fan impeller is stuck; check whether the fan plug is loose or not ; if the fan is faulty, replace the fan; check whether the fan wheel induction magnet is missing or has the wrong polarity ; check whether the mainboard wind speed sensor is normal; if the mainboard is faulty, replace the mainboard;
E-08	Lack of oil and flameout	Check whether the fuel tank is low on fuel;
E-09	Overheat protection sensor	Check whether the temperature sensor connector is loose or not; if the sensor is faulty, replace the mainboard; if the mainboard is faulty, replace the mainboard;
E-10	Secondary startup failure	Check whether the oil pump is working; check whether the interfaces of the oil circuit are waxed or blocked;

5.1.1 S-A2018





Button Description

Symbol	Definition	Describe
	On/Off key	1. Long press 1 second to start, screen displays ON 2. Press and hold for 1 second to turn off the device, and the screen will display OFF
	Confirm key	1. Short press to check the machine status 2. In the setting state, confirm the current setting value and enter the next parameter setting
	Setting Key	1. Enter parameter setting mode
	Up key	1. In daily use, not in the set state, increase the working temperature or oil volume 2. In the setting state, adjust the setting parameters upward
	Down key	1. In daily use, not in set state, lower the operating temperature or oil volume 2. In the setting state, adjust the setting parameters downward

Basic operation instructions

Function	operate	show	Operation Notes
Query Machine state	Short press OK button	1. Running time display (24-hour system) 2. Ambient temperature display 3. WorkTemperature\Pump oil level display 4. Supply voltage display	1. Each press switches a state. Cycle display
Manual/ Automatic Mode Switching	Short press at the same time OK key and Up Adjust the key	1. Manual temperature control mode (display P-Number HZ Representative Pump oil volume) 2. Automatic temperature control mode (display 25℃ digital represents temperature Spend)	1. In automatic mode, the oil volume of the pump will be adjusted automatically Maintain the same temperature as the set point 2. The manual mode pump oil volume is limited to The current setting value will not automatically increase or decrease the pump oil Volume and wind speed, clear gears
Temperature measurement Unit Switching	Short press at the same time and down keys	1. Celsius display digital ℃ 2. Fahrenheit display number ℉	1. According to different usage habits , select temperature Degree measurement unit
On/Off Manual fuel Raise	Short press at the same time Set the key and Adjust the key	1. Open: Initial display H-oF , short press the up key to display Show H-on 2. Off: Initial display is H-on , short press the down key to display Show H-oF 3. Short press the setting key to exit and return to the main interface	1. Manual fuel filling function is disabled by default 2.H-oF (closed state)H-on (open Enabled state) 3. When the oil reaches the oil inlet of the machine Can be stopped, too much fuel enters the machine, There will be black smoke when starting
Remote control pairing	Long press Down key	1. HF-1 display (corresponding to simple remote control) 2. Then short press the power button on the remote control at the same time , Transmit remote control signal	1. The remote control pairing function needs to be turned off when the heater is turned off. Machine status 2. If pairing is successful ,The device will automatically Exit the pairing interface, enter the power-on state; If pairing fails ,It will not enter the Machine Status 3. If no remote control signal is received within the time limit, The device will automatically exit pairing mode.

Run time set up	Short press the setting button once	1. The switch displays 00 :00, the left side is the hour, right For minutes, timekeeping is based on 24-hour system, maximum setting 23:00:59 minutes 2. Use the up and down keys to adjust the selected value, confirm the value Short press the OK button	1. open Turn off the power back, Timing Return for 00:00
Scheduled startup time	Short press the setting button twice	1. Disabled by default , displays " 1, OF ", if no setting is required Press OK to enter the next setting. 2. Turn on and short press the up key, it will display " 1, On " , short press OK Key to enter setting 3. Short press the up and down adjustment keys to select the value , confirm the value by short pressing OK button 4. After setting, short press OK button to enter the next setting	1. Set the hour and minute in sequence 2. The timing is countdown, the maximum is 99 Small Time 59 minute
Timer shutdown time	Set the timer to start Enter after machine time	1. Disabled by default , displays "2, OF ". If no setting is required Press OK to enter the next setting. 2. Turn on and short press the up key, it will display "2, On ", short press OK Key to enter setting 3. Short press the up and down adjustment keys to select the value , confirm the value by short pressing OK button 4. After setting, short press the setting button twice to return to the main interface	1. Set the hour and minute in sequence 2. The timing is countdown, the maximum is 99 Small Time 59 minute
Setting parameters	Short press the setting button three times		1. Enter parameter setting mode, enter password Code 1688 2. It is not recommended for customers to modify it at will. The default optimal parameters have been set

Fault description

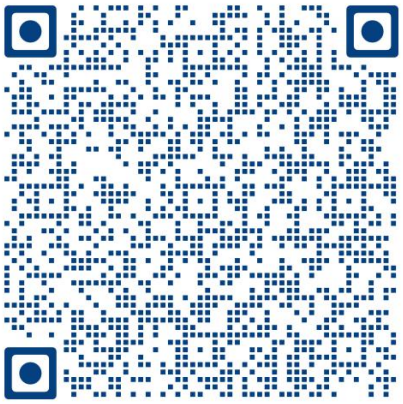
Machine failure	Switch display code	Treatment
Power supply undervoltage	E-01	The power supply voltage is insufficient and needs to be increased.
Power supply overvoltage	E-02	The supply voltage is too high. You need to reduce the supply voltage.
Glow plug failure	E-03	Check if the ignition plug is open or short-circuited
Oil pump failure	E-04	Check the oil pump and wiring harness Whether the line is broken or short circuited
Machine overheating	E-05	Check the temperature sensor on the housing or whether the fan speed is abnormal.
Motor failure	E-06	Check magnet polarity, Hall sensor position, or loose motor terminals
Disconnection failure	E-07	Check the panel connection plug, the blue harness is loose or broken
Flame extinguished	E-08	Check whether there is air or wax blockage in the oil circuit, which may cause poor oil supply.
Sensor failure	E-09	Check if the sensor plug is loose, broken or short-circuited.
Ignition failure	E-10	Check if the oil circuit is blocked, or if the oil is not flowing smoothly, the oil pump is stuck, or if the oil quality is bad. The problem caused the volatile net to be blocked and other reasons led to 2 Second ignition failed Burning

About us

Sunster is the factory's own brand and has a complete and mature technical team and production line. Sunster's product R&D team develops new products and updates product solutions every year, working with hundreds of employees to provide better heating solutions for global users, solve user problems, and make cost-effective products that customers really need. All products are certified by CE, WEE, FCC, EAC, UKCA and other authoritative organizations.

We have a 24-hour online after-sales service team. If you encounter any problems, you can directly contact the store customer service, or send an email to our after-sales email: cs@sunster.tech

For business issues, please contact :sunster@sunster.tech



Switch Function Video