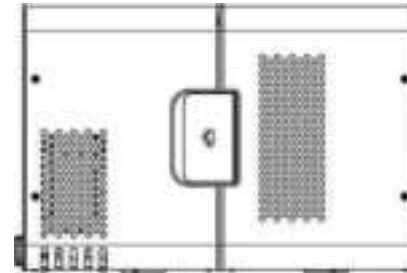


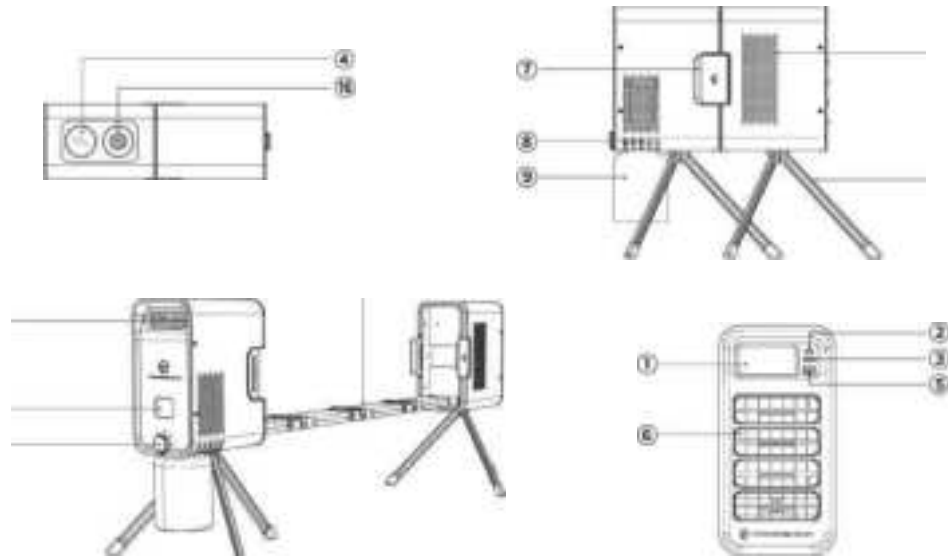
◦ POWERHINO

Portable thermoelectric heating
furnace manual

TG20600



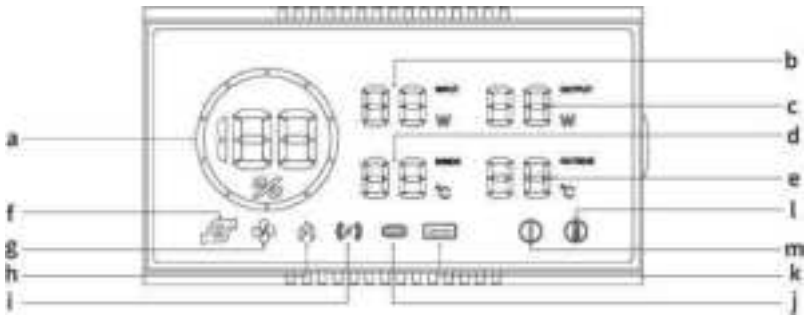
Structure description



- | | | |
|----------------------|---------------------------------|--|
| ① LCD screen | ⑦ wrench | ⑬ Combustion chamber glass window |
| ② USB-C-PD interface | ⑧ Combustion chamber air inlet | ⑭ Push-type electronic ignition gas valve knob |
| ③ USB-A port | ⑨ gas tank | • Water pipe folding rack |
| ④ wireless charging | ⑩ Inlet | ⑯ water tank inlet |
| ⑤ power button | ⑪ tripod | |
| ⑥ warm air outlet | ⑫ Combustion chamber air outlet | |

Interface indication and function description

1.LCD screen



- a. battery indicator
Displays the percentage of remaining power and the number of remaining power grids. When the power is less than 20%, the system will turn off the Type-Cx USB-A and wireless charging output functions;
- b. input power
The unit is in watts, showing the power generated by the current temperature difference or the charging power of the device itself by the Type-C port;
- c. Output power
The unit is in watts, showing the sum of the current output power of all ports, including Type-CxUSB-A and wireless charging ports;
- d. Air inlet temperature of indoor unit
Display the ambient temperature around the device in degrees Celsius;
- e. Air outlet temperature of the internal unit
Display the temperature of the warm air outlet in degrees Celsius;

Interface indication and function description

f. water pump sign

When heating, when the temperature of the combustion chamber reaches the set value, the water pump will start and the icon will be displayed automatically;

g. fan logo

When heating, when the temperature of the combustion chamber reaches the set value, the fan starts and the icon is automatically displayed;

h. fire sign

When heating, when the combustion chamber temperature reaches the set value, the icon will be displayed automatically;

i. wireless charging logo

When the power is greater than 20%, the icon is automatically displayed, and the user can use it to charge devices with wireless charging functions;

j. Type-C bidirectional charging sign

When the power is greater than 20%, the icon is automatically displayed, and the user can connect the charging cable to the Type-C interface to realize charging and discharging;

k. USB-A charging logo

When the power is greater than 20%, the icon is automatically displayed, and the user can connect the charging cable to the US B-A interface to realize charging;

l. Warning sign

1) When the combustion chamber is too high and exceeds the set value, the device will emit a "didi" alarm sound and the sign will flash at the same time. The user needs to reduce the firepower to maintain the normal operation of the equipment. When the temperature drops to the set value, the alarm sound and the flashing sign will be automatically released;

2) When the device is tilted more than 45 degrees, the device will emit a "didi" alarm sound, and the logo will flash at the same time. The user needs to place the device on a level ground to maintain the normal operation of the device. When the equipment is placed horizontally, the alarm sound and flashing signs are automatically released;

Interface indication and function description

m. Temperature protection sign

When the combustion chamber is too high and exceeds the set value, the device will emit a "didi" alarm sound and the sign will flash at the same time. The user needs to reduce the firepower to maintain the normal operation of the equipment. When the temperature drops to the set value, the alarm sound and the flashing sign will be automatically released;

2. TYPE-C-PD

- a. Two-way fast charging interface, input power 30W, output power 20W;
- b. This interface can automatically identify the TYPE-C interface device of PD protocol, compatible with 5V/9V/ 12V/ 15V/20V 3A input, and 5V/9V/ 12V/ 15V/ 20V3A output;
- c. The interface has short-circuit, overload, overcharge and over-discharge protection functions.

3. USB-A

USB-A output interface, supports 5V/2A output, with short-circuit, overload, and over-discharge protection functions.

4. Wireless charging

Wireless charging panel, output power 15W, support Apple and Android system.

5. Switch button

- a. Press and hold for 2 seconds to turn on the device, and the display will light up after the device is turned on, displaying information such as battery power and temperature, and the buzzer will sound once. Long press 2S again to power off. During heating and charging and discharging, long press cannot shut down the device, and it can be shut down normally only after the heating stops and the charging and discharging are disconnected.
- b. After power on, short press the power button to switch the display on/off.
- c. After starting up, if there is no heating, charging and discharging within 3 minutes, the device will automatically shut down.

6. Warm air outlet

When heating, blow out warm air

7. wrench

This is the wrench used to connect and fix the inner and outer units. Open the wrench to separate the inner and outer units. When using the product, it is necessary to separate the internal and external units before turning on the fire for

Interface indication and function description

8. The air inlet of the combustion chamber of the external unit

9. Gas tank

Compatible with commercially available flat and long gas tanks (via the adapter delivered with the product)

10. Indoor unit air inlet

11. Tripod

The tripod and the internal and external units are fixed through screw connections

12. Air outlet of combustion chamber

Exhaust combustion exhaust gases (carbon dioxide and water)

13. Combustion chamber glass window

Observing the burning flame through the glass window

14. Push-type electronic ignition valve knob

Press to start the electronic ignition, and you will hear the electronic ignition sound of "click", keep pressing and turn the gas valve counterclockwise until the ignition is successful. Note that after the ignition is successful, it is necessary to turn the air valve clockwise in time to reduce the firepower, and the firepower can be adjusted to the middle and high levels after the warm air starts.

15. Water pipe folding frame

Foldable storage water pipe device, connected with internal and external units, to achieve heat transfer

16. water tank water inlet

When the refrigerant is lacking, unscrew the bottle cap to add refrigerant, the refrigerant is added to half of the capacity of the water tank, no need to fill up

Interface indication and function description		h)
conventional		
product weight	6.5KG (net weight)/9KG (gross weight)	
product specification	Product size L420xW140xH280 Installation size L500xW300xH500	
Operating temperature	Operating temperature:-30~40°C	
optimal storage temperature	0~35°C	
Tested and certified	CE PSE FCC RoHS UN38.3 MSDS	
Battery Type	18650 Lithium Ion Battery	
battery capacity	14.8V7500mAh(3. 7V/3 0000mA)	
tank solution	Pre-installed -40°C glycol antifreeze (automotive grade)	
Gas source	Flat gas tank (isobutane + propane), long gas tank (butane)	
heating power generation		
heating output	600W	
Thermoelectric power generation	20W	
input (charging)		
Type-C-PD input	5V/9V/ 12V/ 15V/20V 3A(60W Max)	
output discharge		
TYPE-C-PD output	5V/9V/ 12V/ 15V/20V 3A(60W Max)	
USB-A output	5V/2A(10WMax)	
Wireless charging output	15W (Max)	
warranty		
Machine Warranty	1 year	

Usage diagram

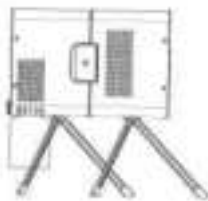
产品使用图解 产品使用图解 Product Usage diagram



1. Take the main unit of the product out.

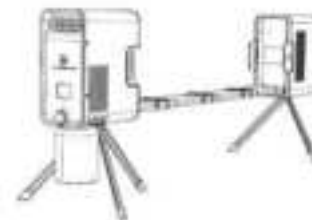
①
取出主体

O



2. Mount the tripod by rotating the thread.

②



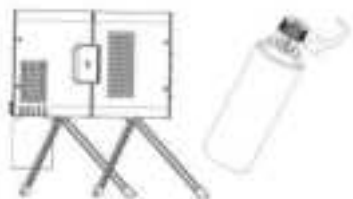
5. The external machine is placed outdoors and the internal machine is placed indoors

⑤



6. Press and hold for 2S to power on.

⑥



3. The flat gas tank can be directly installed on the machine by counterclockwise rotation of the thread; The long gas tank needs a swivel head to be installed on the machine. Align the adapter clip with the gas tank clip and rotate clockwise to install the swivel head on the gas tank. Then rotate counterclockwise with the screw thread on the machine to install the long gas tank on the machine.

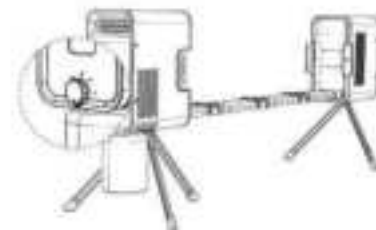
③



4. Break the wrench apart to separate the outside machine from the inside machine

掰开扳手
将外机与内机分离

④



7. Squeeze and rotate to ignite, while turn counterclockwise to turn on the gas to adjust the firepower.

⑦



8. The heat is automatically blown out after 30~60S of combustion preheating, and the direction up and down of the outlet can be adjusted through the louvers

⑧

Usage diagram

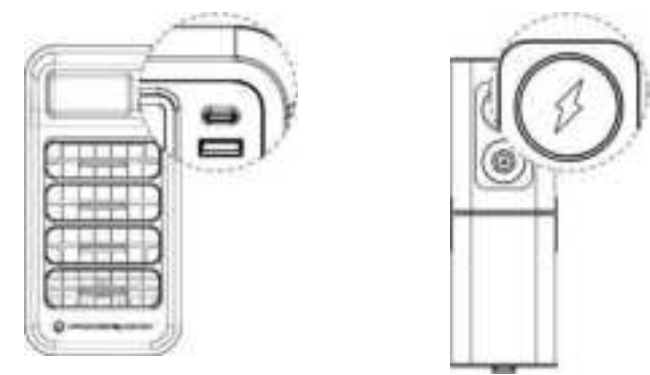
Charge usage diagram

After starting up, regardless of whether in the heating state, USB-A, Type-C, and wireless charging panel can be external power supply.

When the screen shows that the power is less than 20%, all external charging functions will automatically stop.

At this time, the user needs to start the ignition for heating, and perform thermoelectric power generation to supplement the internal battery power

Or connect the Type-C bidirectional charging and discharging interface through an external power supply device to charge the internal battery.



Major Troubleshooting

Fault Phenomenon	Troubleshooting	Solution
The device cannot be started.	a) The storage time of the device is too long (for example, the device has not been used for more than half a year or one year). The internal battery is exhausted, and the device cannot be turned on.	Use the charging cable with Type-C port to connect the device and hold down the power button for 2 seconds. The device starts up normally and enters the charging state. When the power level is greater than 5%, the device can be charged using the temperature difference power generation function of the device.
	b) The device cannot be turned on or charged.	Please contact after-sales service.
The device is powered on but cannot be charged	a) Start the fan and water pump to store the electric energy for heating. Turn off the external charging function when the electric power is less than 20%.	At this time, the user can start combustion heating for temperature difference power generation to supplement electric energy.。
	b) The charging cable is loose or damaged.	You need to check the connection or replace the charging cable.
	c) The reasons are not a and b above.	You need to check the connection or replace the charging cable.
Pressing the ignition switch fails to ignite.	a) Check whether the device is powered on and whether the battery capacity is greater than 0%.	The device needs to be charged.
	b) Non-above reasons.	Please contact after-sales service.
Rotate and press the ignition switch, unable to turn on the gas.	a) Check whether the gas tank is properly connected.	Connect the gas tank properly.
	b) Check the tank for gas.	If there is no gas, replace it with a new tank.
	c) The reasons are not a and b above.	Please contact after-sales service.
When heating, The device cannot blow out hot air.	a) Check whether there is a burning flame in the combustion chamber of the external unit	If not, the steps of ignition and gas opening are required
	b) Non-above reasons.	Please contact after-sales service.

Precautions

When using this product, these precautions should always be followed, including:

1. Use the heater only for the purpose described in the instruction manual.
2. Use of accessories not recommended or sold by professional product manufacturers may result in the risk of air leakage and fire.
3. Do not allow children to use this product.
4. When the product is not in use, please detach the gas tank from the device and turn it off.
5. It is forbidden to disassemble this product, which may cause unpredictable risks such as fire or electric shock.
6. Do not use damaged wires or plugs to charge the heater.
7. Do not use this product with damaged output cables.
8. Do not use or place a heater in high temperatures (in hot sunlight or in a hot car).
9. Do not expose the heater to fire or high temperatures.
10. Please use a heater in a well-ventilated place.
11. Do not restrict the ventilation of the product in any way.
12. Keep water or other liquids out of the heater.
13. Do not use the equipment if the heater is not working properly or is damaged, such as damage caused by dropping the heater, damage caused by the heater falling into the water or spilling water on the heater.
14. Do not place the heater in an environment of extreme temperature or humidity, and do not leave the heater in your car for a long time.
15. Do not place anything on the top of the heater.
16. Do not allow anything to fall into or into the heating grate vent.
17. It is prohibited to use heating furnaces in places with strong electromagnetic interference.
18. Do not put the device in liquid or place it where it could fall into liquid, and if the device gets wet, unplug it before touching it.
19. Use the power adapter provided or recommended by the manufacturer to charge the heating furnace. The power adapter should be placed in a position that can be easily disconnected while charging, and ventilation should be maintained.
20. When the device is plugged in, do not leave the device unattended. Please unplug the power adapter in time after charging.
21. When the product is not used for a long time, the product should be charged every three months (including the use of heating power generation) to prevent insufficient power during use.

Warranty items

The following conditions are not covered by the warranty:

- 1) The main unit of the product has been subjected to abnormal or incorrect use, abnormal conditions or improper storage, unauthorized disassembly or modification, installation resulting in damage or residual damage risk, such as not following the instructions and instructions to use, product water, dust, self-disassembly, repair, drop, etc.
- 2) Non-standard or damaged gas tanks are used, or the main unit of the product is damaged due to obvious human negligence.
- 3) Product damage caused by force majeure factors such as natural disasters, lightning, floods, earthquakes, etc.
- 4) Conceal the abnormal use of products, product water and other failure risks, resulting in maintenance failure or failure after detection and maintenance.
- 5) Any products not sold through our authorized channels and the model, number and manufacture number indicated on the products have been changed, removed, moved or are not recognizable.
- 6) Machines that have been repaired by a service center not authorized by our company.
- 7) Products such as falling, squeezing, soaking, bending caused by damage.
- 8) When the cause of the failure is something other than this product
- 9) Products that exceed the warranty period, stop production outside the warranty period, provide maintenance without relevant parts or have no maintenance value.
- 10) The shape is seriously deformed, damaged or seriously dusty, and the original shape is damaged or the internal structure is affected and has no maintenance value.

For more information, please visit [www. power ino.cn](http://www.powerino.cn) or call customer service :4000777363.

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

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 try to correct 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 help.

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. During the operation of device a distance of 15 cm surrounding the device and 20 cm above the top surface of the device must be respected.