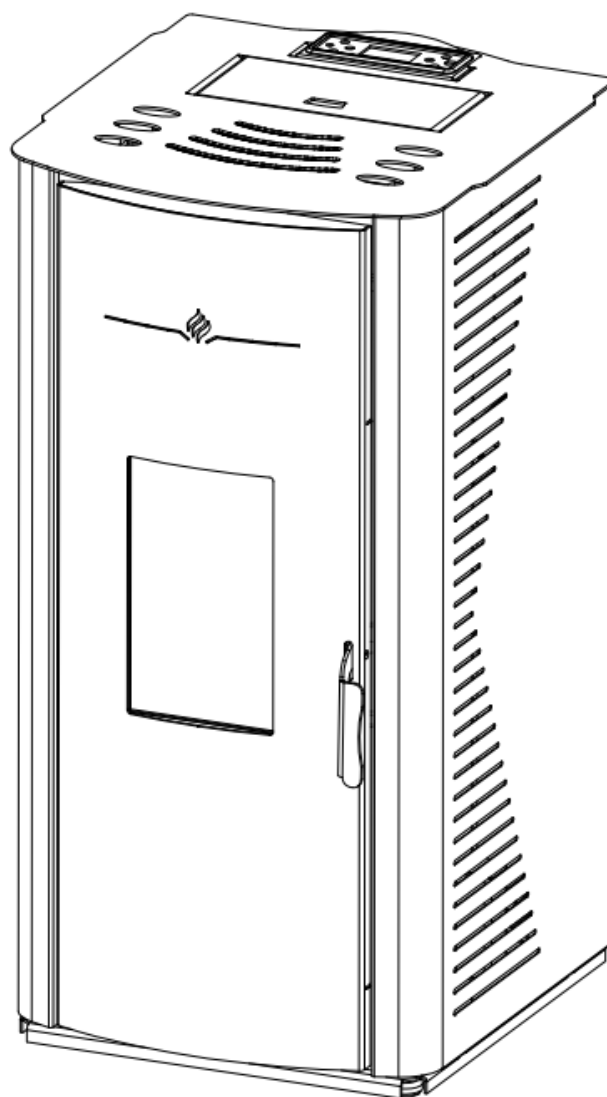


PELLET BOILER STOVE



OWNER'S MANUAL

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Dear Customer,

Thank you for choosing one of our products, the result of technological experience and continuous research to achieve superior quality in terms of safety, reliability and service.

In this manual you will find all the information and useful suggestions to use your product with the maximum safety and efficiency. Please read this manual carefully before you install and use our products.

Safety Precautions



Please comply with the following warnings:

- Read the manual carefully before first-time use.
- It is required to use handling tools to move the stove, thus to prevent personal injury.
- The stove must be installed by local qualified professionals, in accordance with the requirements of the local laws and regulations.
- The socket shall be reliably grounded when the stove is being installed.
- Under normal combustion, it is prohibited to contact the stove surface, especially the door handles, glass and flue pipes and other high-temperature parts, without proper insulation protection measures.
- During using process, the elderly, children and babies must stay away from the stove, until the stove temperature is cooled down to room temperature.
- Any heat-sensitive objects should be far away from the stove, clothes and other combustible materials are strictly prohibited to be placed on the stove.
- Do not directly dry the clothes on the stove! They might catch fire.
- The clothes racks should be far away from the stove ($\geq 1\text{m}$).
- Do not place flammable and explosive objects around the stove body while being in use.
- Pull the plug before cleaning and maintenance work.
- Use original parts only for replacement and maintenance.
- Please keep these instructions for future reference.

We might modify technology of our products to make it better without noticing you, please understand!

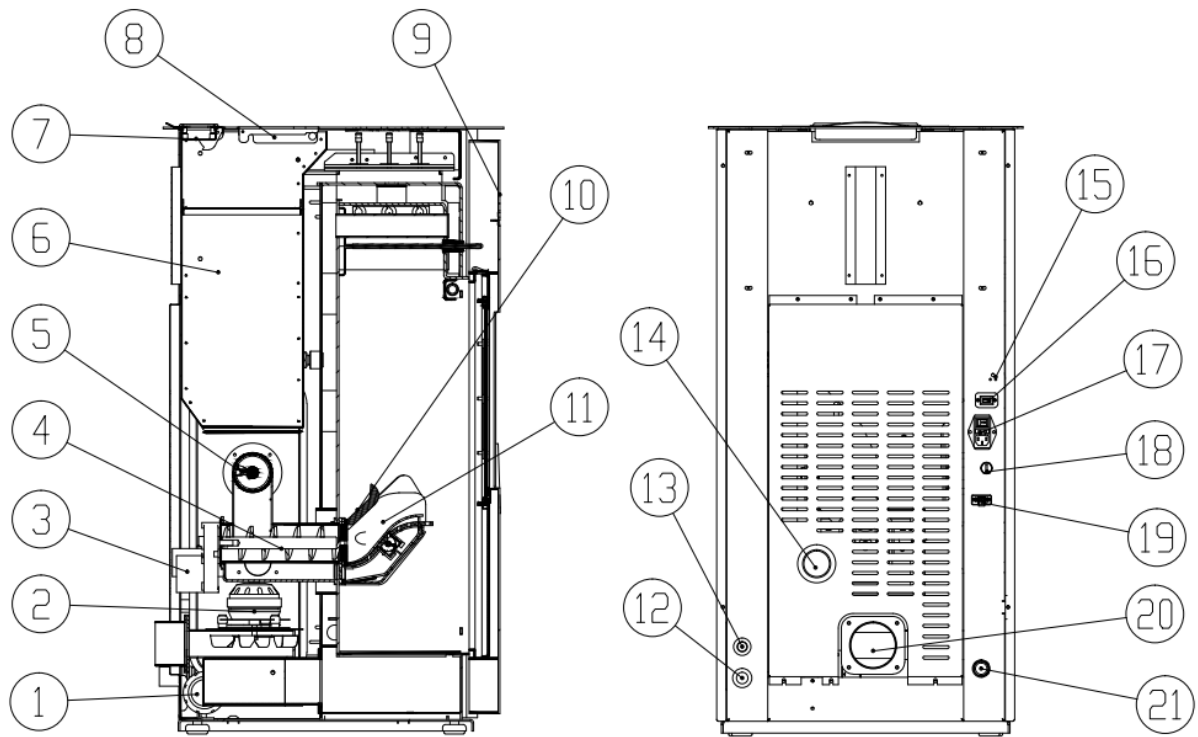
1 Technical Parameters

1.1 Data Sheet

	Unit	ZLGT20
Height	mm	1043
Width	mm	534
Length	mm	595
Weight	kg	180
Flue pipe diameter	mm	80
Air inlet diameter	mm	60
Burning efficiency	%	≥89.5
Rated power	kW	20
Minimum power	kW	5.0
Pellet Consumption	kg/h	1.3-4.1
Hopper capacity	kg	30
Power supply	V/Hz	220/50
Power consumption (Average value)	W	135
Fuse	A	5.0
Flue gas mass flow	g/s	16.5
Pump lift	m	5
Maximum working pressure	mpa	0.2
Minimum working pressure	mpa	0.05
Maximum flue gas temperature at output	°C	145
Minimum flue gas temperature at output	°C	105
Maximum work temperature of water	°C	80
Max. backwater temperature difference	°C	20
Water inlet/outlet pipe diameter	"	3/4

1.2 Graphic model and small parts

Pic.1



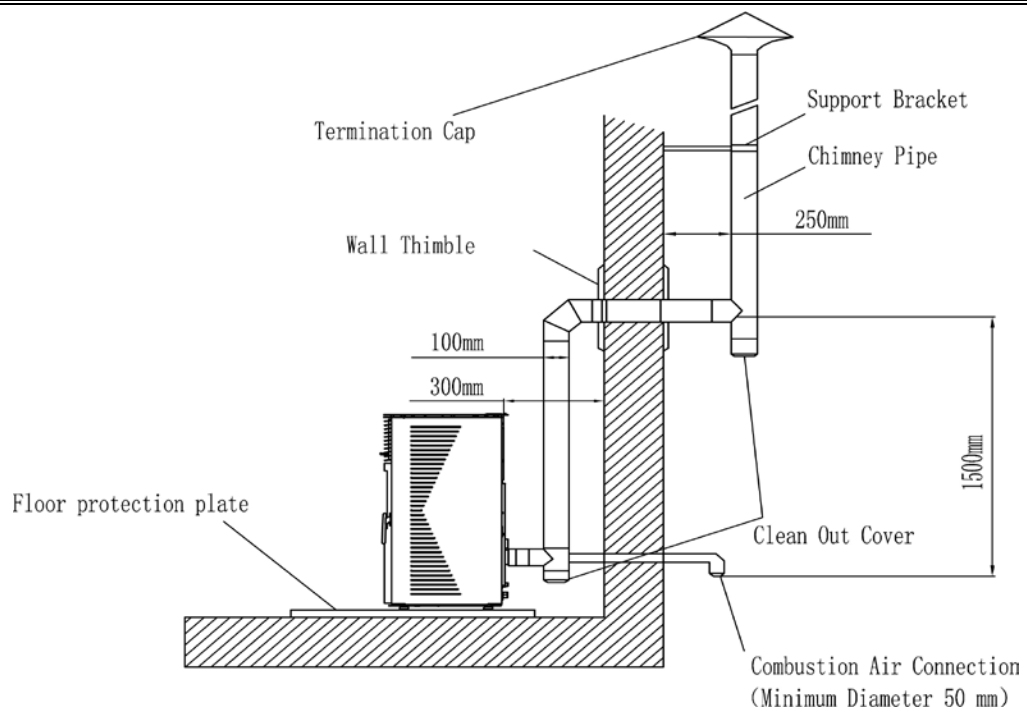
1. Negative pressure switch	12. water inlet
2. Smoke exhaust fan	13. Automatic pressure relief valve
3. Secondary feeding roller	14. Air inlet port
4. Secondary feeding motor	15. Room temperature sensor
5. Primary feeding motor	16. WIFI
6. Hoop box	17. Three-in-one switch
7. Display	18. Water temperature protection switch
8. Top cover	19. Room temperature control switch socket
9. Furnace door	20. Smoke exhaust port
10. Upper fire baffle	21. water outlet
11. Burner	

2 Installation of Stove

- The stove must be installed on a suitable, solid, and horizontal floor;
- The minimum diameter of flue pipe is 80mm, and such a tube should be made of metal;
- The joint of the flue pipe must be sealed because the stove can only work on basis of the differential pressure in stove and draft in the chimney to protect the system.
- Try to avoid horizontal connection of the flue pipe, otherwise it may cause insufficient pressure differential in the stove.
- Connection of the flue pipes should be as vertical as possible and any bending connection should be avoided. The horizontal pipe should be inclined upwards by 3-5 degrees; the vertical pipe height should be no less than 3m to facilitate the pressure difference, but the total length of the pipe should not exceed 8m.
- The flue duct must be installed separately and cannot be shared with other exhaust (gas) heaters.
- Flue pipes may be only made of heat-resistant and flame-retardant materials, such as silicon or mineral fiber materials;
- Do not place the air pipe terminal outlets in closed or semi-enclosed areas, such as carports, garages, lofts, low places, narrow walkways, etc., or any other places where smoke may accumulate; The outlet of the pipe ends should be kept at least 10m far away from combustibles.
- The pipe should not be installed at a reduced diameter, and the outlet of the pipe should be installed with anti-smoking and rain-proof devices.
- The stove must be properly connected with flue pipe by your installer, and should also be approved by local firefighters;
- Note: The installation of the stove must be in compliance with the local regulations and rules.

2.1 Assembly of Flue pipe

1. Measurement and mark for connection of flue pipes (take the floor protective plate as reference substance).
2. Drill Hole (the outlet may horizontally aligns to the stove's smoke vent, and 1.5m straight pipe may be placed outdoor; or the outlet may be vertically positioned 1.5 m higher from the stove's smoke vent, and the 1.5m straight pipe may be placed indoor).
3. After the flue pipe is inserted into the wall and the gap should be filled and sealed with mineral fiber. The hole should be sealed with high- temperature resistant cement.
4. Unless the cement is solidified, the chimney should not be connected with flue pipe.
5. The following is a standard installation drawing for your reference (1.5m straight pipe is placed indoor):Pic.3



2.2 Floor Protection

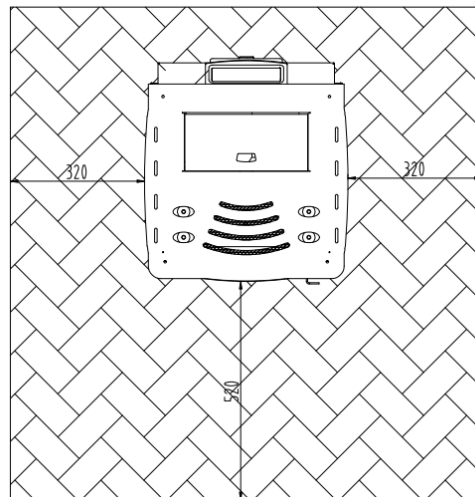
In case of a flammable flooring (such as wood or carpet floors), a fire-resistant protection mat is required, such as glass, steel, ceramic and so on.

Fire-resistant protection mat must be larger than the contacting area between the stove and floor.

Front: minimum 520mm

Side: minimum 320mm each side

As shown below: Pic4



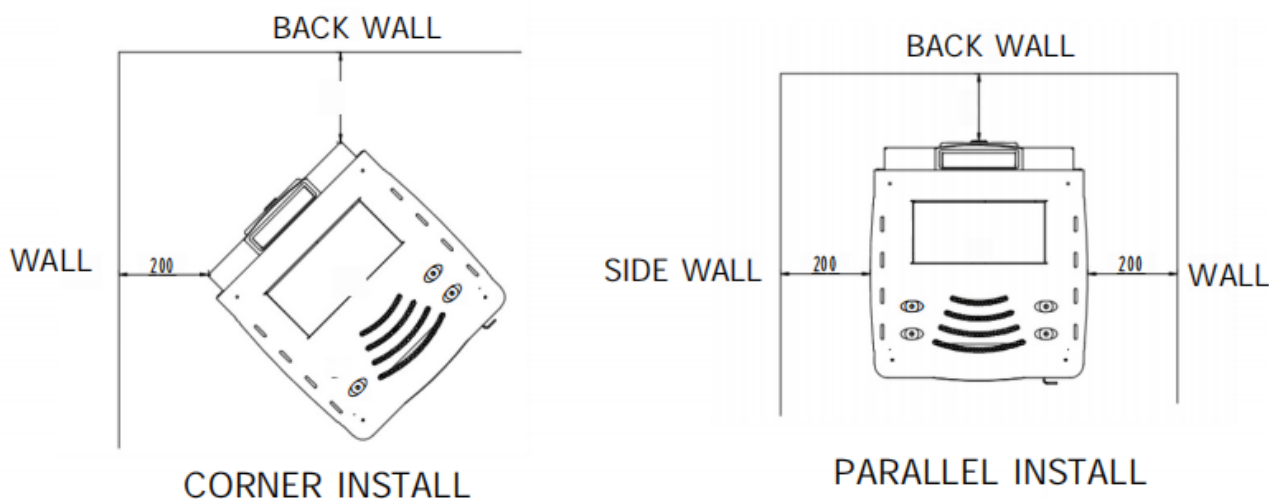
2.3 Surrounding Safe Distance

Back: Min 13" /320mm

Side: Min 17"/420mm

Front: Min 39"/1000mm

As shown below: Pic5



2.4 Power Supply

European-style / three-hole socket/plug; 220V/50Hz

Normal power consumption: Ignition phase 340W (around 5min) ; normal work phase 80W

In order to avoid safety threats, the connecting cable must be kept away from heat or sharp parts;

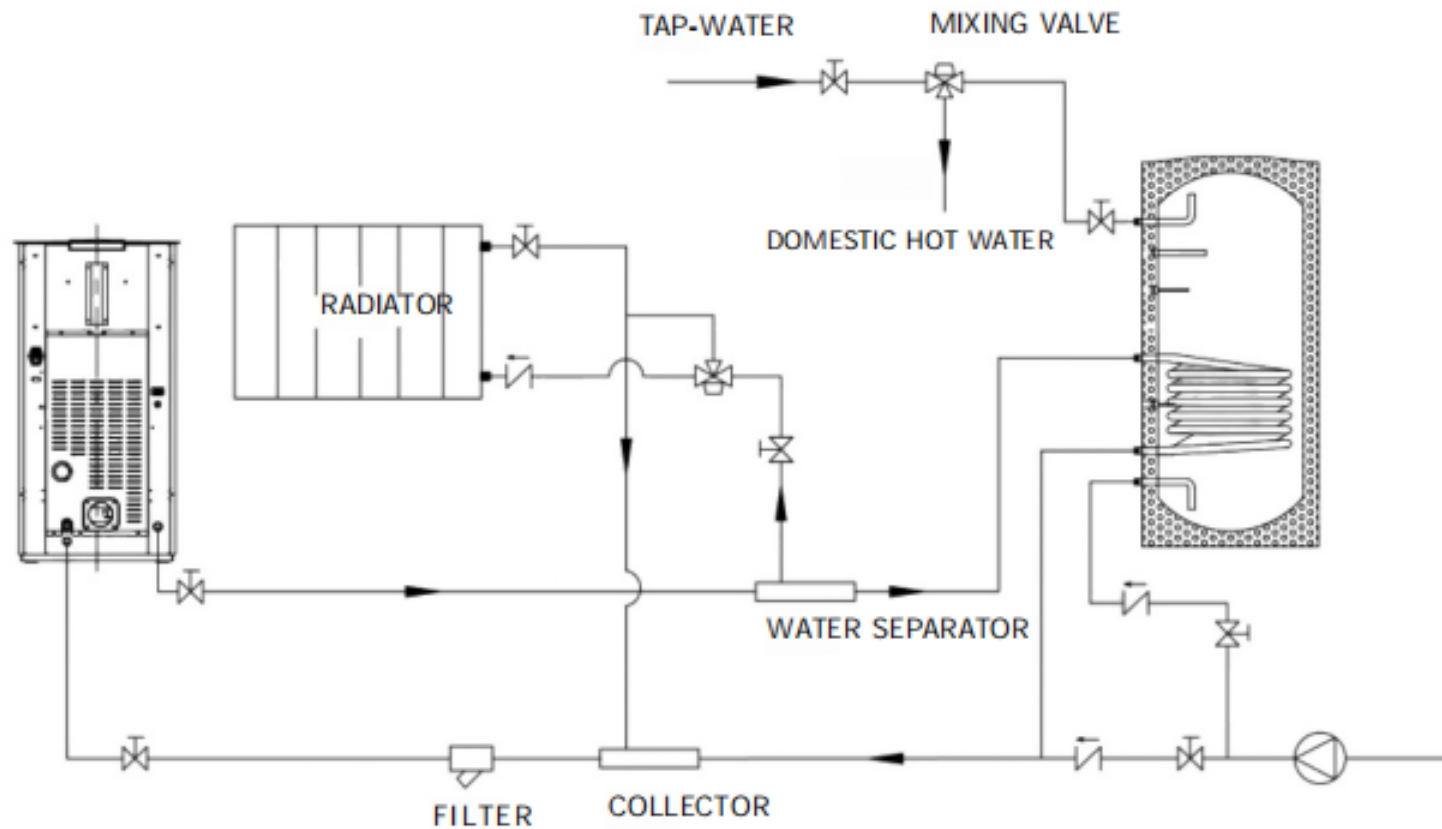
The socket must be reliably grounded.

2.5 Oxygen Supply for Combustor

During burning process, the stove must draw air from the outside room. If not, please regularly open windows or door for well ventilation, or install a proper air supply system.

2.6 Photo of normal water vascular system(domestic hot water,floor heating,radiators)

Pic.6



Notice for tube installation and usage:

1. Check all tubes, expansion water tank and circulating pump to confirm whether they are sealed well.
2. After tube system installation, inner air in tube system must be totally drained out by water flow when first use.
3. After tube system installation, clean water flush is indispensable for inner system when first use, to avoid damage to water pump and inner parts by particles in tubes.
4. After tube system installation, system pressure is better set between 0.05 Mpa and 0.25 Mpa when in operation, it is the ideal condition.
5. When the water temperature is higher than 0 ° C and lower than 5 ° C, the fireplace pump will run by itself to prevent the pipeline from freezing. When the water temperature is ≤ 0 ° C, it must be thawed.
6. Tube installation must be done by qualified installers or professional heating company.
7. Operation without water in tubes is forbidden.
8. If you don't use the stove for a long time, please specially start the circulating pump once a month to avoid stuck by rust, it is the normal maintenance of circulating pump.

3 Operation Instruction

3.1 Attention

Stove must be completely installed correct before use.

It is required to use high-quality pellets (pellet standard is DIN 51731, and OENORM M 7135, or similar), pellet diameter 6 mm, length not longer than 25 mm.

In the initial use, please try to use different brands of wood pellet, select a kind of pellet with high calorific value, low ash content and less coking. The fuel with high ash content will increase the cleaning frequency of this product, and the fuel with high moisture content may jam the feeding screw, affecting normal use.

The product is neither suitable for burning wood, nor functions as an incinerator.

It is strictly prohibited to put any waste, garbage, and a variety of plastics in the stove for burning. This is illegal, and the warranty terms and articles herein will be invalid if any above situation exists.

If used the stove in accordance with the manual, overheating is not possible.

Improper operation against instructions may damage the electrical components (such as circulating pump, fans, auger motor, control unit, etc.) and reduce their working life.

3.2 Control Unit

The stove is equipped with PC motherboard and control components.

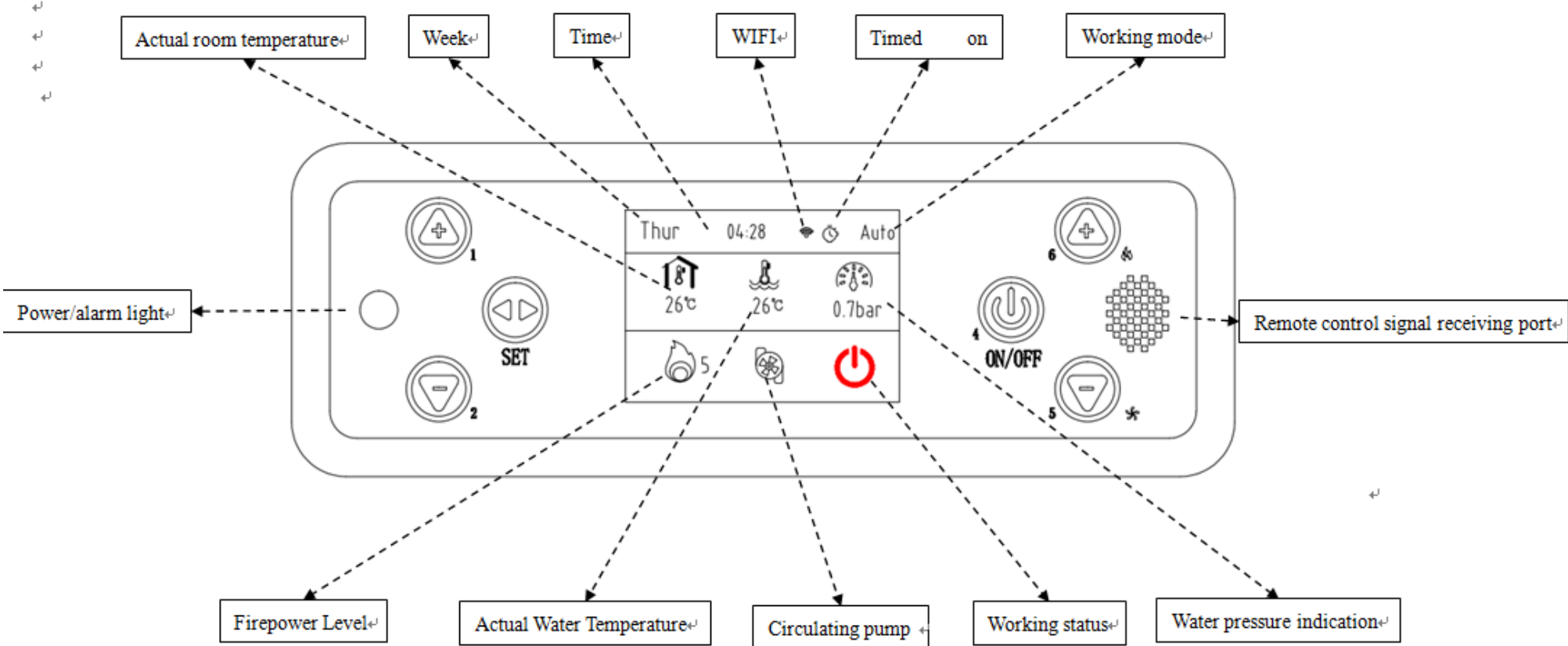
All functions and setting can be realized through the operation panel mounted on top of the stove.

Modifications to defaults should be approved by professional.

Incorrect use or settings may cause damage to the stove, and make the warranty terms and articles herein invalid.

3.3 Interface Introduction

(Pic.7)



Introduction



Plus key: press this key to set the indoor temperature / indoor temperature heating button.



Minus key: press to view the smoke temperature/indoor temperature deceleration button



Set key: press this button to enter the setup menu to set the time, mode, timing, parameters, etc.



Power key/Return button: press and hold this button for 3 seconds to turn the stove on or off; short press to cancel or return.



Heater fan position adjustment / fire power, warm air gear position reduction button.

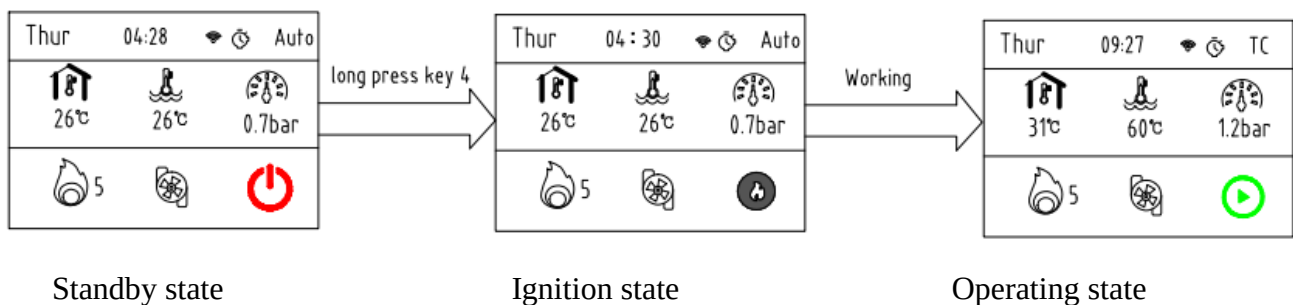


Fire gear adjustment / firepower, warm wind gear increase button.

3.4 Functions and Operation Procedures

3.4.1 Start

Plug in power supply→ Press power ON/OFF key→screen backlight lights up→  Press for two seconds→Ignition, set water temperature, present water temperature, set room temperature and ambient temperature displayed on the LCD→around 3mins(reference) later, flame appears in the chamber.



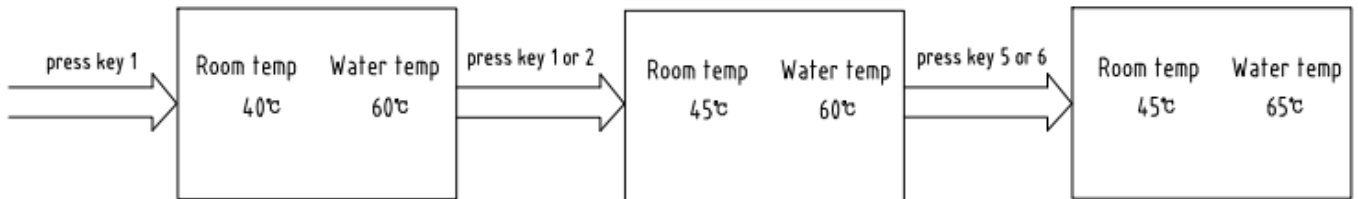
When using the fireplace for the first time, it may fail to ignite due to the absence of particles in the feed cylinder. If it fails to ignite, please clean the burner pot and place it correctly before restarting the stove.

3.4.2 Interface setting

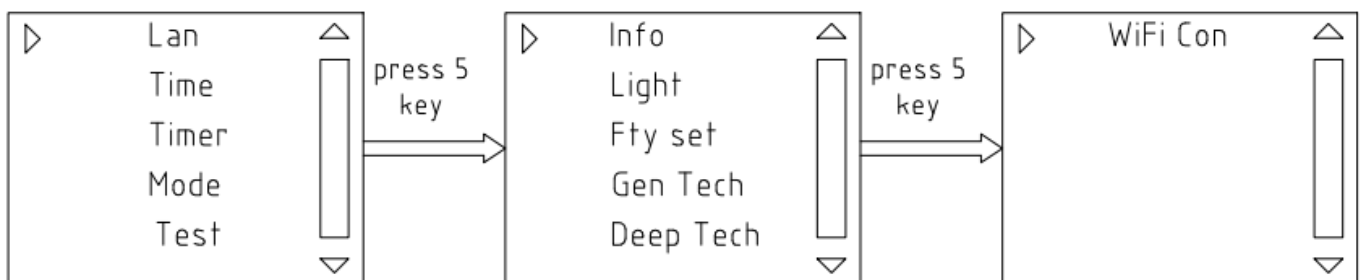
Running → press  key to enter room temperature setting, water temperature interface Press

  key to adjust room temperature setting;

press   key to adjust water temperature setting →

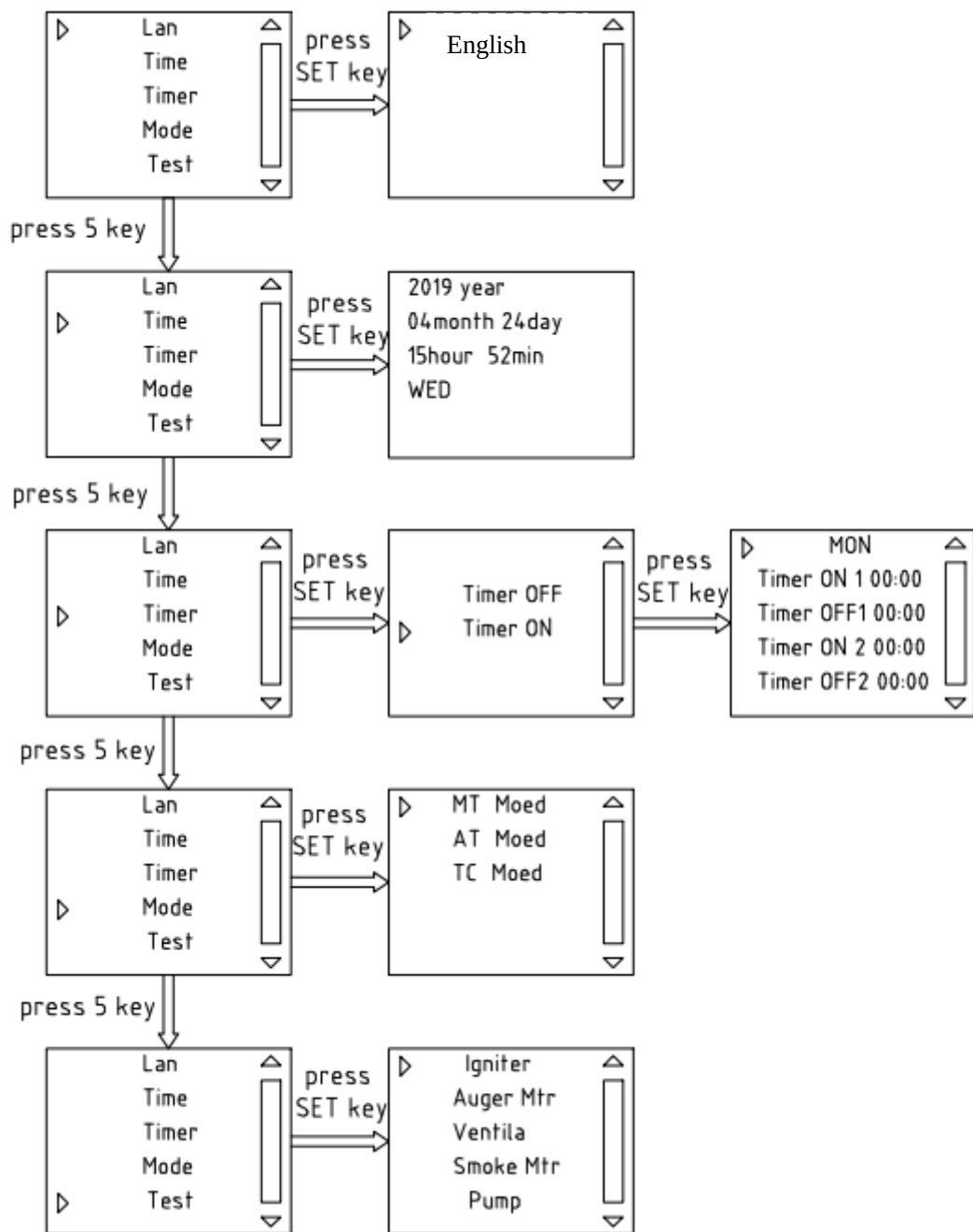


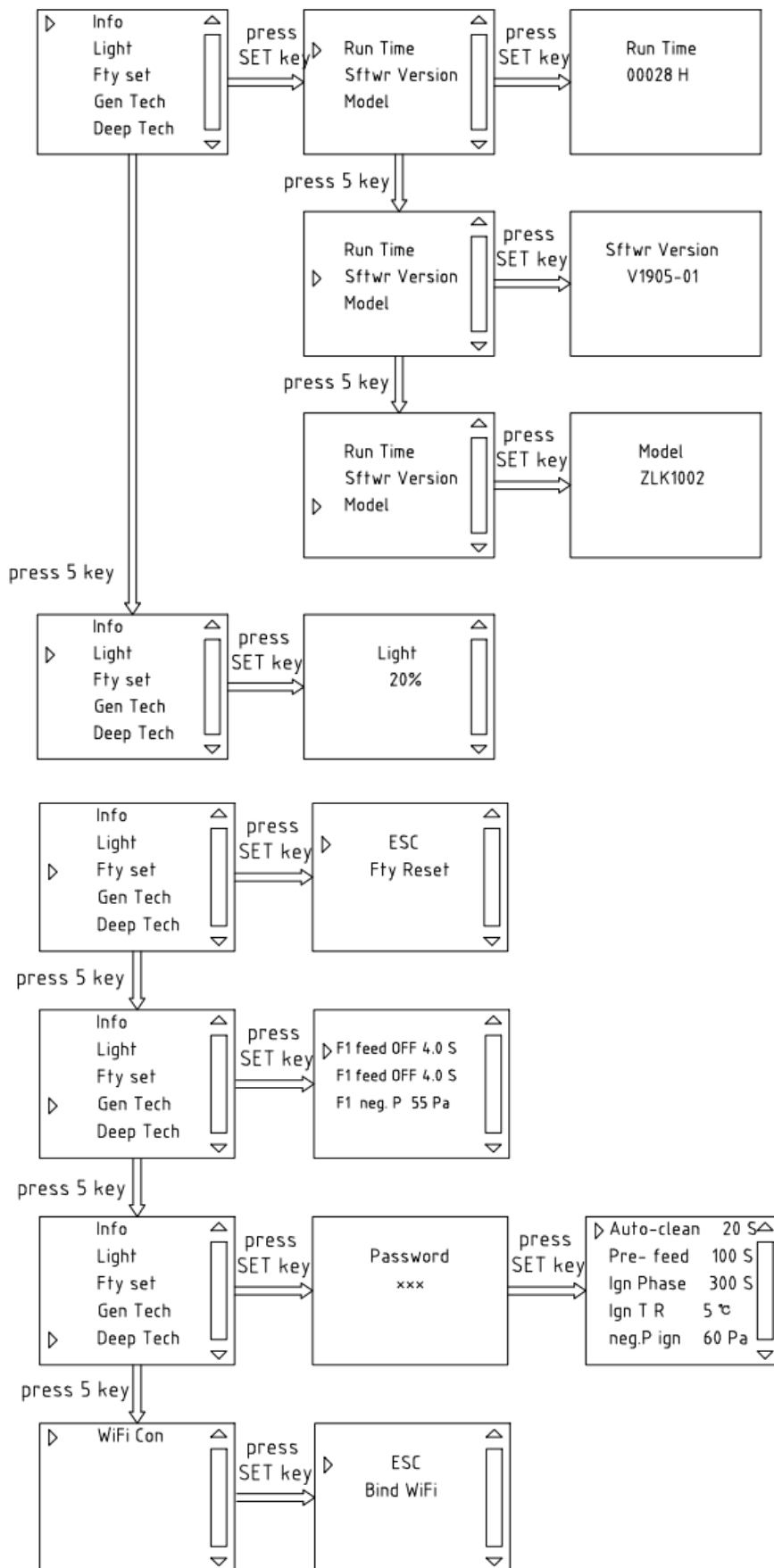
1. Press the  key button and the interface will display as follows:



2. Press the  key to display language setting, time setting, timing setting, mode setting, self-test, information, display brightness, factory setting, general parameters, depth parameter, WIFI connection (see

the above pic), press  and  key, press  key again to enter into the menu shown as below:





Language: Language settings are available in Chinese and English.

Time: The time setting is sorted by year, month, day, hour, minute, week.

Weekly timing: Time switch setting, two groups can be set in one day, and it is cycled every week after setting. Timing on: Indicates the time when the first group is scheduled to open. Timing off: Indicates the time when the first group is closed. Timing 2: Indicates the time when the second group is scheduled to open. Timing 2: Indicates the time when the second group is closed.

Mode: The fireplace has the following three working modes

Manual mode: In this mode, the gear position is manually set and does not change automatically. When the set water temperature is reached, the fireplace is turned off and will not automatically turn on again.

Automatic mode: Under this mode, the water temperature does not reach the set temperature value (X refers to the set water temperature when $X-5^{\circ}\text{C}$), and works based on the maximum gear. When the water temperature reaches the set water temperature $X-5^{\circ}\text{C}$, it will control the firepower level according to the water temperature. When every degree of water temperature rises, the firepower level is lowered by one gear until it reaches the minimum firepower level. If the set water temperature is 70°C , and the current water temperature has reached 68°C , it means that the firepower is in the third level. When operated in the minimum firepower level, the water temperature will still rise.

When $X+2^{\circ}\text{C}$ is reached, the fireplace enters into the ECO state and shuts down. When the water temperature drops to $X-2^{\circ}\text{C}$, the fireplace will automatically start.

Temperature control mode:

Indoor temperature switch diagram

Under this mode, it is combination use with the indoor temperature control switch. Closed indoor temperature switch indicates that the room temperature has not reached the set value. And disconnection means that the room temperature has reached the set value.

When the indoor temperature switch is closed and the set temperature is not reached (X refers to the set water temperature when $X-5^{\circ}\text{C}$), it will work according to the maximum level.

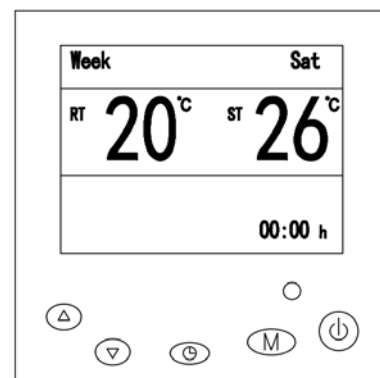
When the temperature reaches the set $X-5^{\circ}\text{C}$, it will control the firepower level according to the water temperature. When every degree of water temperature rises, the firepower level is lowered by one gear until it reaches the minimum firepower level.

If the water temperature is set to 70°C and the current water temperature has reached 68°C , it means that the firepower is in the third level. When operated in the minimum firepower level, the water temperature will still rise.

When 80°C is reached, the fireplace enters into the ECO state and shuts down. When the water temperature drops to $X-2^{\circ}\text{C}$, the fireplace will automatically start.

When the indoor temperature switch is disconnected, the running fire gear position is reduced to the minimum level. If the indoor temperature switch is not closed within 10 minutes, it will enter in to the ECO state and shut down, but the circulating water pump is always running.

After the stove is shut down in ECO state, if the indoor temperature switch is closed and the actual water



temperature(not exceed 80 °C) is higher than the set temperature, the fireplace starts to run in the lowest level.

If the actual water temperature of the fireplace is lower than X-5 °C, it will run in the fifth level.

If the actual water temperature of the fireplace is higher than X-5 °C and lower than X °C, it is operated in the downshift level. If it exceeds 80 °C, it will not start.

Self-inspection: Under the standby state, you can check the ignition rod, the unloading motor, the cooling fan, the exhaust fan, and whether the hot water pump is energized normally.

Information: Check the total running time of the fireplace, the program version, and the fireplace model.

Shown brightness: display the backlight brightness.

Factory setting: Restore factory default parameter value settings. (If you need to change, please contact the professional persons).

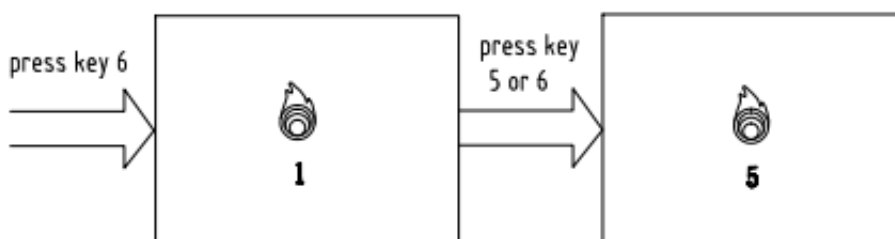
General parameters: In the general parameters, set the feeding motor stop time of each gear position and the speed of exhaust fan when the fireplace is running. (If you need to change, please contact the professional persons).

Depth parameter: In the depth parameters, set the feeding motor stop time of the fireplace at each stage of the ignition, the speed of the exhaust fan, and determines the ignition temperature. (If you need to change, please contact the professional persons).

WIFI connection: WIFI wireless module is optional, and the specific operation instructions can be found in the APP operation manual.

3.4.3 Heating power adjust

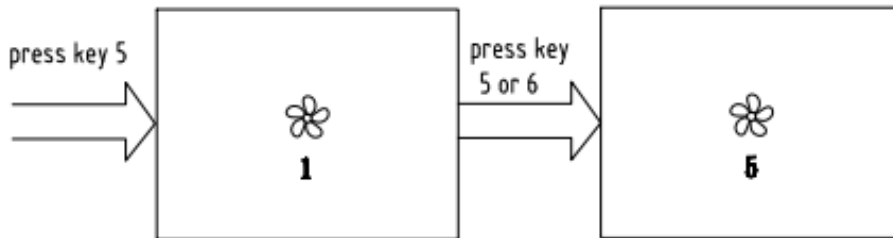
During running state→press   to adjust heating power level→5 seconds after adjustment, the system returns to burning interface. Under auto mode, it will adjust heating power level automatically. Power changes to the next lower level if the water temperature increases for 1°C after water temperature reaches to (X-5) °C(X is the preset water temperature). Stove runs at the lowest power level once the water temperature reaches to X. When water temperature is 80°C, it will automatically stops and enters into ECO mode(economic mode) , and restarts to work once the water temperature is 2°C lower than X(preset water temperature).



3.4.4 Convection blower setting

“Fan speed” stands for convection blower set menu, ranges from 0 to 5, six levels in total. 0 means that the blower does not work. The higher the value is, the larger the fan volume is. 0 means that the blower is not enabled.

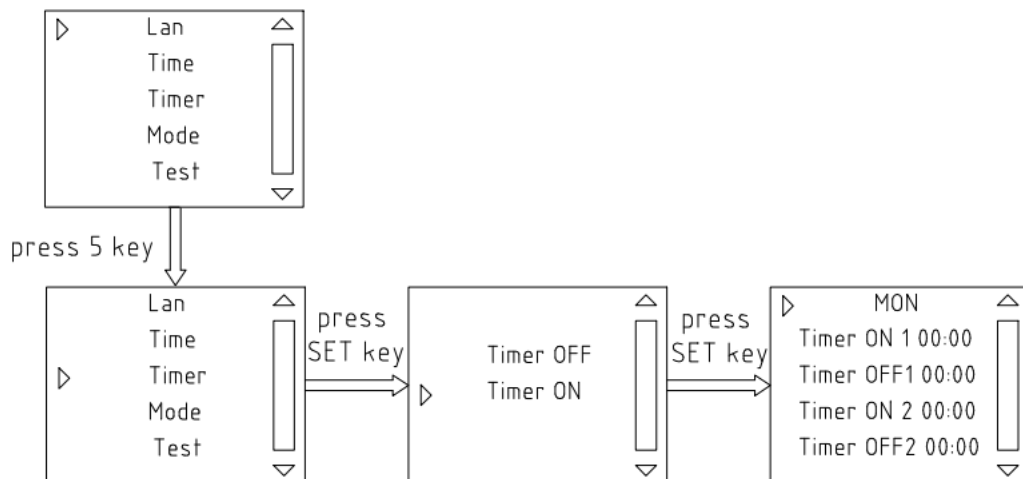
Convection blower starts to work under this condition that water temperature is 65°C or higher and the room set temperature is higher than the ambient temperature, and fan speed must be set at least 1.



3.4.5 Week Timer

In week timer function, 2 groups of timed power ON/OFF can be set, press  SET  to enter into parameter setting sheet, repress  until TIMER displays on the screen, press  or  to open week

timer function, repress  SET  to enter week timer setting menu, as following pic.



3.4.6 Parameters adjustment

During standby state or running state, press key for 8 seconds, parameter adjustment menu displays on the screen, pellet loading time and exhaust fan speed can be set. The following are the meanings of each parameter, adjustment for them are not suggested in common condition.

(Take ZLGT20 for example) general parameter settings

Item	1st level	2nd level	3rd level	4th level	5th level
Unloading motor	Stop unloading: 6.0 S Pellet release: 1.5 S	Stop unloading: 5.0 S Pellet release: 2.0 S	Stop unloading: 4.0 S Pellet release: 2.5 S	Stop unloading: 3.0 S Pellet release: 3.0 S	Stop unloading: 2.5 S Pellet release: 3.5 S
Exhaust fan motor	Air volume: 30	Air volume: 32	Air volume: 34	Air volume: 36	Air volume: 38
Pellet loading motor: The minimum scale is 0.1 S, and the stop/open adjustment range is 0-9.9S. For example: in the first level, stop unloading: 6.0 S, pellet release: 1.5 S, which means stop 6.0 S, start 1.5 S and cycle. Exhaust fan motor: The adjustment range is 15%-100% (72V-230V). The higher the value is, the larger the wind volume is. For example, the adjustment is 100: the wind volume is the largest, and if it is 15: means that the wind volume is the smallest.					

Notes: This parameter is for reference only, and its parameters should be changed due to the difference in particle calorific value!

3.4.7 Working mode

Mode: The fireplace has the following three working modes

Manual mode: In this mode, the gear is set manually and will not change automatically. When the set water temperature is reached, the fireplace is turned off and will not be turned automatically on again.

Automatic mode: In this mode, when the water temperature does not reach the set temperature value ($X-5^{\circ}\text{C}$, X refers to the set water temperature), work according to the maximum gear. When the water temperature reaches the set water temperature $X-5^{\circ}\text{C}$, the fire gear will be controlled according to the water temperature. Every time the water temperature rises, the fire gear decreases by one gear until it drops to the minimum fire gear. If the water temperature is set to 70°C , the current water temperature has reached 68°C , and the fire gear is 3. At the minimum fire gear, the water temperature still rises, When $X + 2^{\circ}\text{C}$ reaches, the fireplace enters the ECO state and stops the furnace. When the water temperature drops to $X-2^{\circ}\text{C}$, the fireplace will automatically ignite and start.

Temperature control mode:

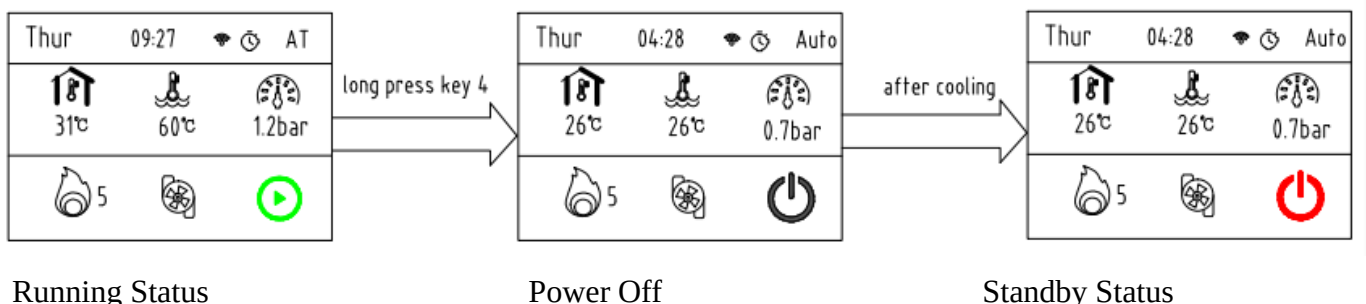
(schematic diagram of indoor temperature switch)



In the mode, this mode is used with the indoor temperature control switch, and the indoor temperature switch closes indicating the room temperature Did not reach the set point, the disconnection indicates that the room temperature reaches the set point. When the indoor temperature switch is closed, the water temperature is not When the set temperature value is reached ($X-5^{\circ}\text{C}$, X refers to the set water temperature), work at the maximum gear as water When the temperature reaches the set water temperature $X-5^{\circ}\text{C}$, the fire gear will be controlled according to the water temperature. Every time the water temperature rises, Reduce the fire gear by one gear until it is down to the minimum fire gear. If the water temperature is set to 70°C , the current water temperature It has reached 68°C , and the fire gear is 3 gears. At the minimum fire gear, the water temperature still rises, At 80°C , the fireplace enters the ECO state and turns off the furnace. When the water temperature drops to $X-2^{\circ}\text{C}$, the wall is suspended Furnace automatic ignition start. When the indoor temperature switch is disconnected, the running fire gear is reduced to the minimum gear. If the indoor temperature switch is not closed for 15 minutes, it will enter the ECO state and stop the furnace, and the circulating pump is always running. After the furnace is stopped in ECO state, if the indoor temperature switch is closed and the fireplace is restarted, and the actual water temperature of the fireplace is lower than $X-5^{\circ}\text{C}$, the maximum gear is be gear. The actual water temperature of the fireplace is higher than $X-5^{\circ}\text{C}$ and lower than $X^{\circ}\text{C}$ to operate in downgear. If over 80°C , do not start

3.5 OFF

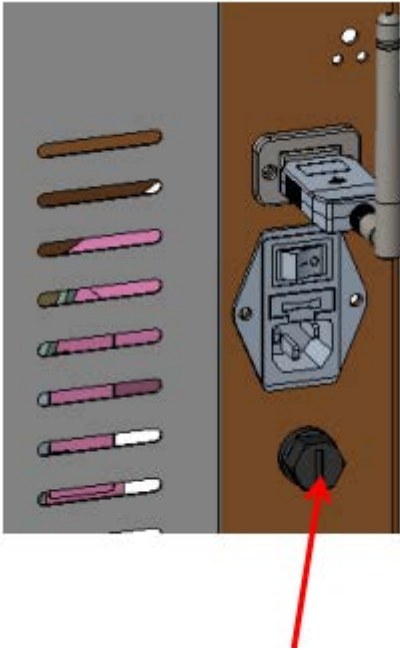
Press  key for two seconds, the fireplace enters into the shutdown state, and the LCD running status shows “stopping”. At this time, the cooling fan and the exhaust fan still work. When the smoke temperature is lower than 50°C , the operation will be completely stopped. The LCD running status will display “stop” and then enter into standby status.



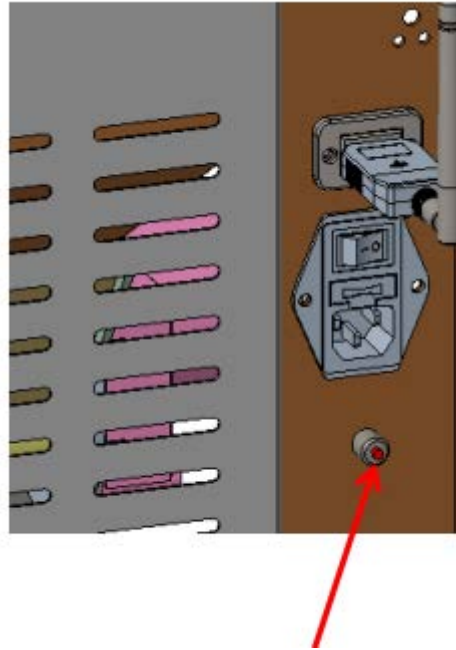
4 Automatic Safety Function

4.1 High and low water temperature protection

When the circulating water temperature is too high or too low, (the water temperature is higher than 85 °C and lower than 5 °C), the fireplace enters into the shutdown alarm state. The temperature control switch disconnects the power supply of the unloading motor, the LCD displays “water temperature abnormality”, the buzzer sounds until the water temperature is normal. After the water temperature is normal, please follow the operation below to reset the water temperature control switch, otherwise the fireplace will not be unloaded.



Unscrew the protective cover



Press the water temperature control switch button and turn the protective cover back

4.2 Water pressure protection

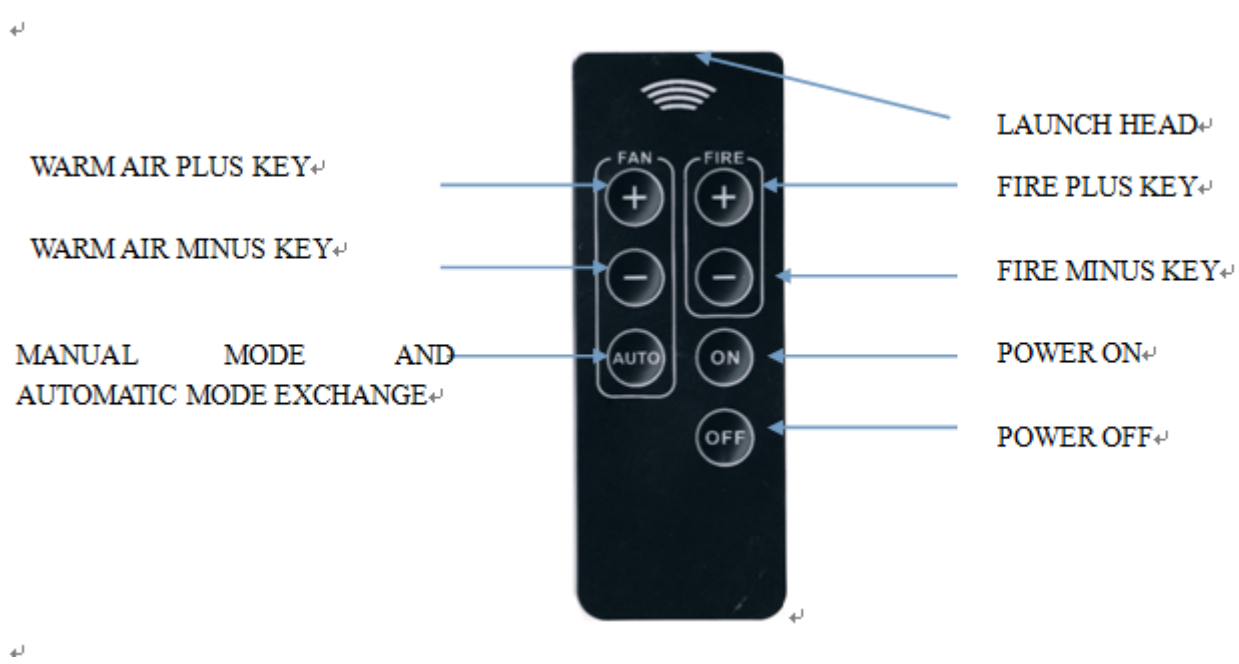
When the circulating water pressure is too high or too low, the fireplace will enter into the shutdown alarm state, the LCD will display “Water pressure abnormality”, and the buzzer will sound until the water pressure is normal. The normal water pressure is between 0.05 mpa and 0.25 mpa, and the suitable water pressure is 0.12 mpa. If it is lower than the normal water pressure, please replenish the pipeline system; if it is higher than the normal water pressure, please release the water to the pipeline system.

4.3 Hopper over-high temperature to avoid

When the temperature of the tank exceeds 85 °C, the temperature control switch will cut off the power supply of the unloading motor, and will not unload the material. After the particles in the burning bowl are burned out, the fireplace enters into the shutdown alarm state, and the LCD displays “flame abnormality”. The buzzer sounds until the fault is removed. After the temperature of the tank is normal, please

follow the operation below to reset the tank temperature control switch, otherwise the fireplace will not be unloaded.

5 Operating instruction of remote controller



Precautions when using the remote control:

When the remote control is in operation, the transmitter head must be aligned with the operation panel. When the remote control receiver is pressed, it is confirmed whether there is any reaction. If the beep is heard, it is a reaction.

The remote control battery is a lithium-ion button battery. When not in use for a long time, please unplug the battery; the battery specification is CR2025.

6 Wood pellet supply



Attention! Fire hazard!

Please keep pellets plastic bags far away from the stove while feeding pellets.

Pellets should not be overflowed from the hopper cover; the overflowed pellets must be cleaned to avoid accidents.

In order to prevent fire from extinguishing, make sure to keep the pellets in a proper filling level in the hopper. You can refill 15kg of pellets if there are only 2kg left in the hopper.

The storage height of pellets should be checked regularly.

Except for the feeding process, the hopper cover should be closed in any cases.

Attention! To prevent high-temperature burns, please always wear protective gloves to open the hopper cover.

7 Cleaning and Maintenance

Attention! Before doing any maintenance work, it is necessary to turn off the stove, pull the plug, and wait until it's cooled down to room temperature.

The cleaning interval depends on pellet quality and average heating power.

Moist or high-ash & sawdust pellets may disrupt normal cleaning interval. Therefore, please always use high-quality pellets.

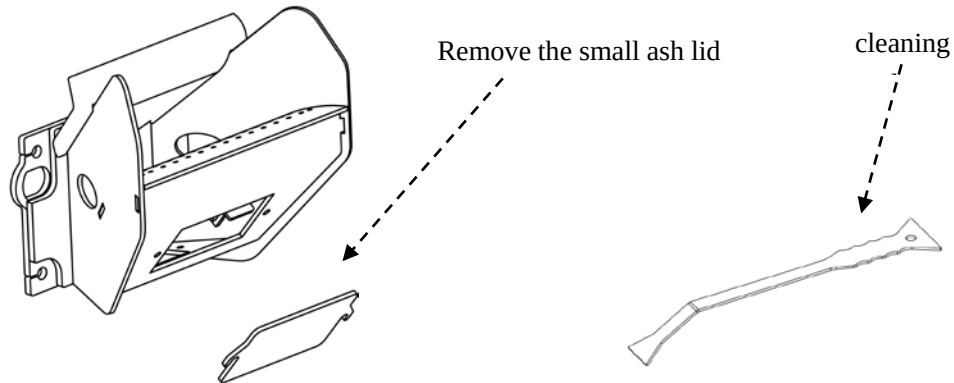
Daily maintenance interval table (recommended)

Interval Description	Every day	Every 5-10 days	Every 30 days	Every half year	Every year
Burning bowl	●				
Burning bowl Seat		●			
Upper ash box		●			
Lower ash box		●			
Glass		●			
Radiating pipe	●				
Fire shield of at the top of furnace			●		
Flue in the fireplace				●	
Fire tube					●
Seal of door frame					●
Remote control battery					●

7.1 Ash cleanup

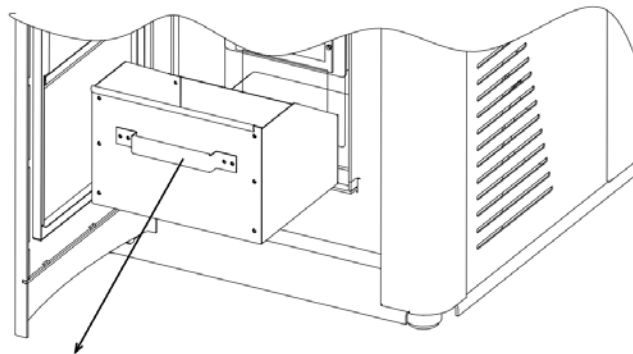
Clean up the burning seat

Every 2-3 days, when cleaning the combustion bowl before ignition, check the condition of the ash heap in the lower base furnace. Too much will cause insufficient oxygen intake and affect the combustion effect. It can be used to remove the ash of the burning seat



Grey box cleaning

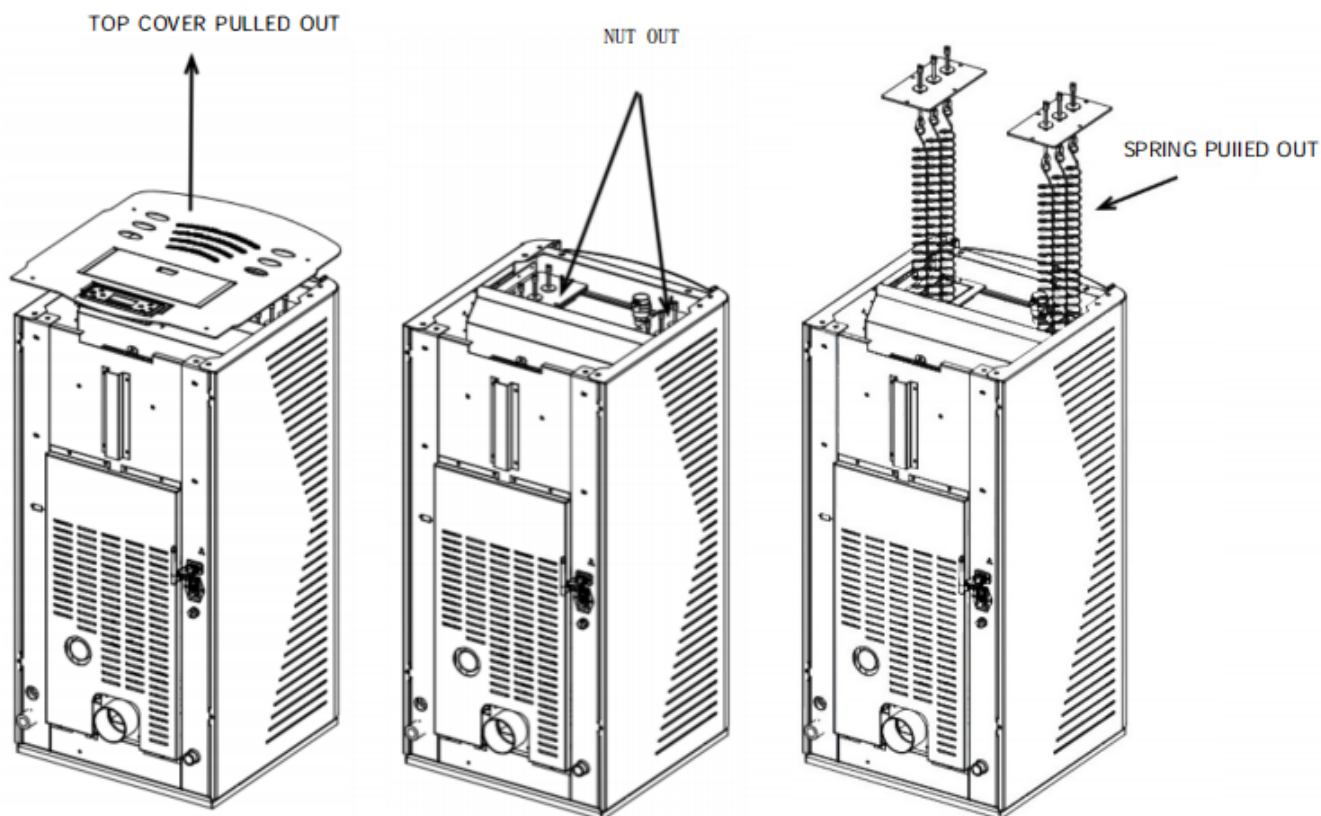
Check the ash box every 2 to 3 days and empty the ash inside.



Open the furnace door and take out the ash box to clean it up

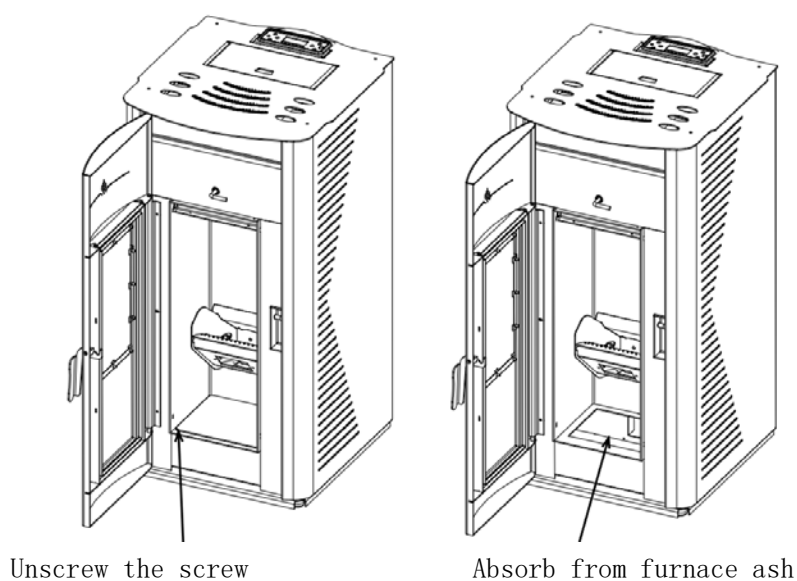
Heat exchange tube cleaning (every 500 hours)

Check and clean the heat exchange pipe, first remove the top cover, unscrew the inner hexagon bolt on the ash cover plate, remove the ash cover plate, and remove the soot.



Clean up the flue inside the fireplace

Clean at least twice a year, or every burn about 500 kilograms of particles, after 300 hours of combustion, the ends of the flue should be cleaned. The operation steps are performed as follows: Open the furnace door, first take out the ash box, unscrew the screw of the ash plate fixing plate, take out the ash baffle, absorb the ash of the inner flue with a vacuum cleaner, install the cleaning in reverse order, pay attention to the ash cover plate installed in place, sealed.

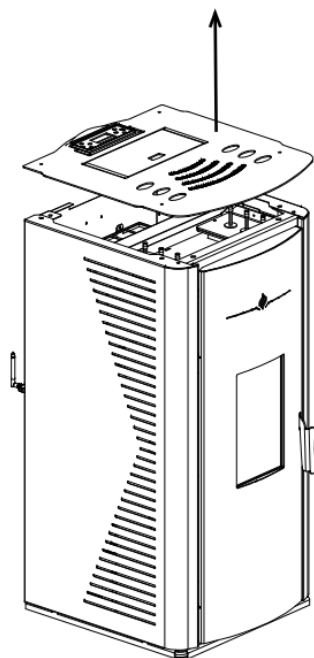


Unscrew the screw

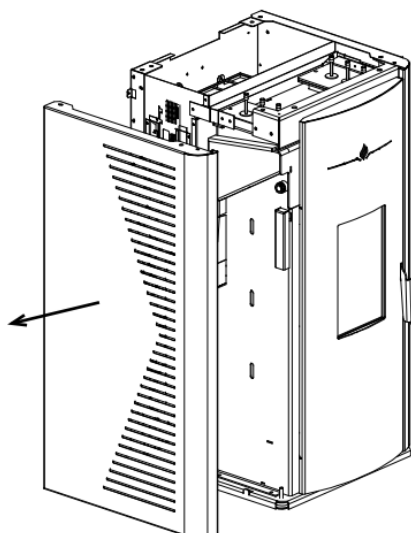
Absorb from furnace ash

Clean up the smoke exhaust fan

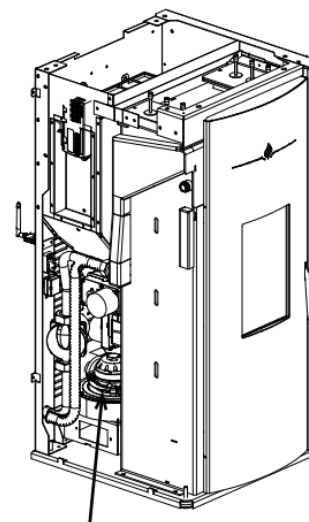
Check and clean the smoke exhaust fan at least once a year. First, remove the top cover, pull out one side plate, and unscrew the four inner hexagonal bolts fixing the smoke exhaust fan. Then slowly remove the fan with a vacuum cleaner to clear the pipe or the fan ash. When reinstalling, ensure that the installation seal is tight and free of smoke leakage.



Take out the top cover



Pull out the side plate



smoke extractor exhaust fan

Clean the fireplace

After the end of the heating season every year, pull out the clear ash cover of the T-type smoke pipe joint, clean it up and install it back. Pay attention to the tight seal and no smoke leakage.



Clear ash cover



Before cleaning up



After cleaning up

7.2 Door Glass Cleaning

When cleaning the glass, it is recommended to use a dry brush to remove dust from the glass surface. For particularly dirty glass surfaces, the dirt coating can be wiped off with a damp cloth or with a wiper. Do not use caustic cleaning agents or hard metal brush to clean fouling, otherwise, the high-temperature resistant glass may be scratched or corroded.



Before cleaning



After cleaning

7.3 Hopper Cleaning

When the annual heating season ends, the remaining particles and residue in the tank must be sucked up with a vacuum cleaner, because the remaining particles and residual slag in the tank are easily damped and agglomerated, which will influence normal use in the next heating season.

If the nozzle of the vacuum cleaner can not match with the grid on the hopper cover, please remove the grid to facilitate cleaning.



Agglomerated inferior pellets



High quality pellets

Attention: pull out the plug before cleaning.

8 Alarm failure - handling of causes

Alarm 1:

THUR	Maint	  AUTO
 26°C	 26°C	 0.7bar
 5		

Reason: The set maintenance time is expired. At this time, the fireplace should be thoroughly maintained and cleaned, mainly to clean the flue inside the fireplace.

Solution:

1. Enter into the depth parameter in the menu bar, find the maintenance time, and double the original value. For example, if the original maintenance time is set to 30, after the maintenance occurs, add 30 to 60 based on the original 30 value, and then add 30 to 90 for maintenance when it occurs again, and so on.

Alarm 2:

THUR	Ign Fail	  AUTO
 26°C	 26°C	 0.7bar
 5		

Reason: fail to ignite

Solution:

1. Confirm if the hopper has pellet. If there is no pellet, please add it in time.
2. check whether there is slagging in the burning bowl or not. If there is slagging, please clean the slag in time and put the burning bowl in place.
3. The fire has already started but still alarm. At this time, the pellet may be too less. Please adjust the general parameter 4PB 5PB and increase the amount of pellet.

Alarm 3:

THUR	H T Flue			AUTO
 26°C	 26°C	 0.7bar		
 5				

Reason: The smoke temperature is too high

Solution:

1. The current amount of material is appropriately reduced.

Alarm 4:

THUR	H T Hopper			AUTO
 26°C	 26°C	 0.7bar		
 5				

Cause: The temperature of hopper is too high

Solution:

1. The current amount of pellet should be appropriately reduced.
2. The temperature control switch of the tank is faulty, need to replace the temperature control switch.

Alarm 5:

THUR	pellet lack alm			AUTO
 26°C	 26°C	 0.7bar		
 5				

Reason: no pellet in the hopper

Solution:

1. Feed in the hopper and restart ignition.

Alarm 6:

THUR	TC Fault	 	AUTO
 26°C	 26°C	 0.7bar	
 5			

Reason: The thermocouple is damaged, or the positive and negative electrodes are connected incorrectly, or the contact is poor.

Solution:

1. Recheck the thermocouple wiring
2. Replace the thermocouple.

Alarm 7:

THUR	Low NP	 	AUTO
 26°C	 26°C	 0.7bar	
 5			

Reason: The pressure switch is faulty, the exhaust fan is faulty, the furnace door is not closed, and the flue is blocked.

solution:

1. Check and replace the negative pressure switch
2. Check and replace the exhaust fan motor
3. Check and close the furnace door
4. Check and clean the flue

Alarm 8:

THUR	NTC Famlt	 	AUTO
 26°C	 26°C	 0.7bar	
 5			

Reason: The ambient temperature sensor is faulty or has poor contact

Solution:

1. Recheck the wiring
2. Replace the ambient temperature sensor

Alarm 9:

THUR	fire down			AUTO
 26℃	 26℃	 0.7bar		
 5				

Reason: The smoke temperature is too high

Solution:

1. Reduce the feeding amount of pellet
2. Change the forced downshift temperature (after obtaining the dealer permit)

Alarm 10:

THUR	ALARM Abnormal water pressure sensor			AUTO
 26℃	 26℃	 0.7bar		
 5				

Reason: 1. Poor contact in the cable 2. Sensor damage

Solution:

1. Check if the wiring is reliable
2. Replace the sensor

Alarm 11:

THUR	ALARM Abnormal water pressure			AUTO
 26℃	 26℃	 0.7bar		
 5				

Reason: The water pressure is too high or too low

Solution: Reduce water pressure or increase water pressure

Alarm 12:

THUR ALARE water temp   AUTO		
 26°C	 26°C	 0.7bar
 5		

Reason: The water temperature in the furnace is too high

Solution: Reduce water temperature and reduce hydraulic power

Alarm 13:

THUR ALARM Abnormal water temp.sensor   AUTO		
 26°C	 26°C	 0.7bar
 5		

Reasons: 1. Poor contact 2. Water pressure sensor is damaged

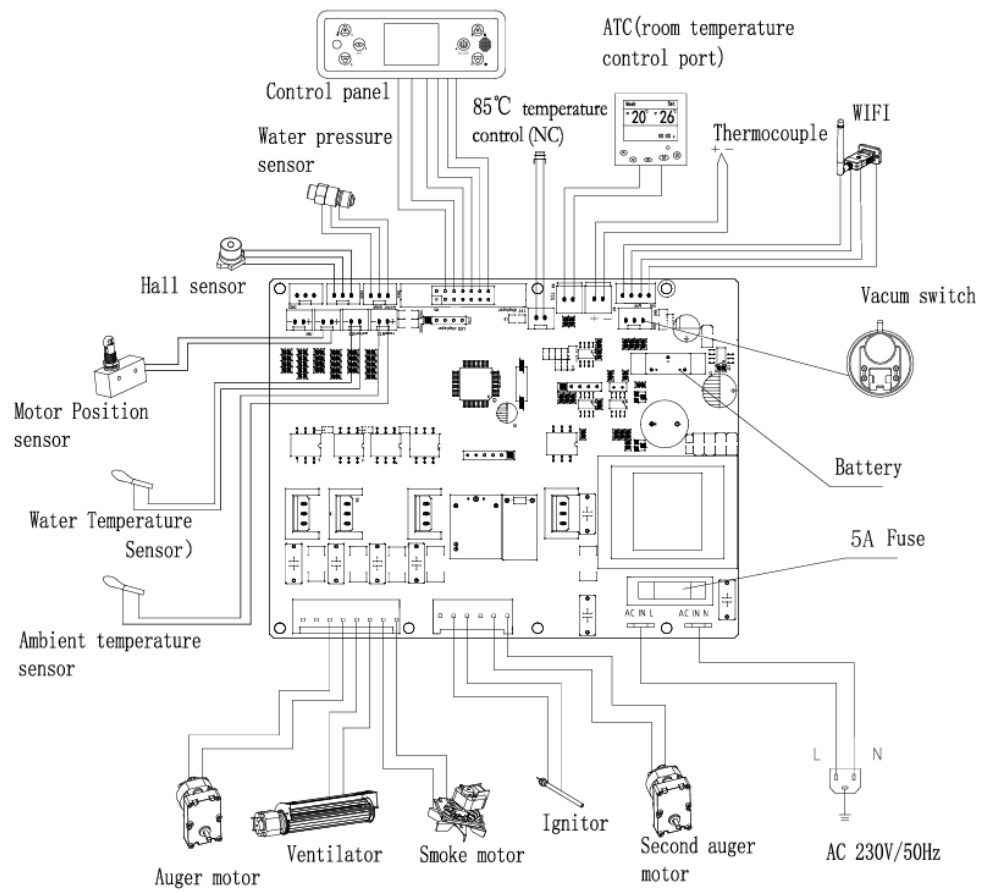
Solution:

1. Check the water temperature sensor wiring
2. Replace the water temperature sensor

Item	Faults	Cause	Solution	Remark
1	The flame burns very weakly; The color is orange; The glass on the oven door turns black; The burning bowl is full of pellets.	Intake pipe exhaust pipe is blocked; The furnace door is not closed; Air volume of the exhaust fan is small; Excessive amount of pellets;	Check the intake and exhaust pipes; make sure there are no blockages; Check if the furnace door is tightly sealed; replace the sealing rope; Check the exhaust fan; increase the air volume of the exhaust fan; Reduce the amount of feed pellet.	When the fireplace is burning normally, the flame color is red and white.
2	The fire goes out and the fireplace stops working	Lack of pellet; The pellets are not delivered; The furnace door is not closed; The quality of the pellets is not good; The fireplace is overheated and the feeding mechanism is stopped due to safe temperature restrictions; Unloading motor is in failure; The fireplace reaches the set water temperature.	The hopper is filled with pellets; Check if the pellets are being transported; clean or repair the feeding mechanism; Check if the furnace door is tightly sealed; replace the sealing rope; Check the quality of the pellets; replace the high quality pure wood pellets; Check if the fireplace is too hot, the temperature is too high; reduce the amount of pellet; No need to check, until the water temperature drops, the fireplace will automatically start.	
3	No pellets falls into the burning bowl	Lack of material; The feeding mechanism is blocked by the spiral blade; Unloading motor is in failure.	The hopper is filled with pellets; Check if the feeding mechanism is blocked; clean or repair the feeding mechanism; Check if the unloading motor is normal; replace or repair the unloading motor.	

4	Fireplace does not start	The fireplace is not connected to a power source; The fuse burned out.	Check the power connection and the voltage is sufficient; Check the switch fuse; replace the fuse.	Voltage 220V/50hz The fuse specification is 3.0a
5	There is ash outside the fireplace	The furnace door is not closed; The exhaust pipe is not sealed.	Check if the furnace door is tightly sealed; replace the sealing rope; Check the exhaust pipe for sealing; seal the hole with a anti-high temperature sealing tape.	There will be no ash when the fireplace is working normally.
6	The fireplace has abnormal noise	Unloading motor noise; Radiating fan noise; Exhaust fan motor noise; Circulating pump noise.	Check if the unloading motor is working properly; replace or repair the unloading motor; Check if the cooling fan is working properly; replace or repair the cooling fan; Check if the exhaust fan motor is working properly; replace or repair the exhaust fan motor; Check if the circulating water pump is working properly; change or repair the circulating pump.	The noise value of the fireplace during normal work is about 52db.
7	The water temperature quickly reaches the set value, actually it is not heated.	The circulating water pump is not activated or damaged; There is air circulation in the circulating water pump starting line; water cannot circulate.	Check if the circulating water pump is working properly; change or repair the circulating pump; Drain the water in the line system, refilling.	

9 Wiring Diagram



10 Warranty

According to the regulations, the warranty period of the wood pellet furnace produced by the company is one year (since the date of invoicing). During the warranty period, the company will provide free maintenance for any malfunction caused by the quality of the product under normal use.

- 1) During the warranty period, if the malfunction is caused by the quality problem of the product, please bring the completed warranty card and the purchase invoice to the repair center authorized by the company all over the country for free maintenance. The warranty card should be returned to the company within 15 days after purchase.
- 2) Do not accept machines that have failed due to unauthorized modifications or additional functions.
- 3) When the warranty card and purchase invoice are altered, the warranty will be invalid immediately.
- 4) Save the warranty card and purchase invoice as the warranty certificate of this machine, please keep it properly. If it is lost, we do not reissue it..

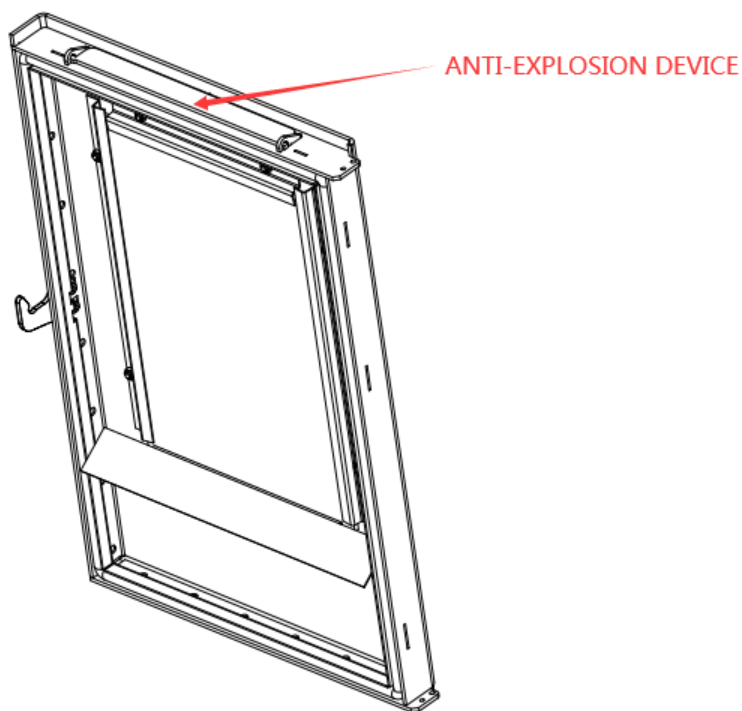
The following conditions are not free of charge:

- 1) No warranty certificate.
- 2) Malfunction caused by failure to operate the machine in accordance with the instructions. Damage caused by the dismantling of the special maintenance personnel of the company.
- 3) Failure, scratching or damage caused by movement or falling.
- 4) Damage caused by improper storage, repair, or improper use by user.
- 5) Consumables and random accessories. (Consumable parts include: glass, surface paint, sealing strips, etc.)
- 6) Failure or damage caused by force majeure.
- 7) Failure to replace parts yourself without permission may result in malfunction.

Anti-explosion

Some products are equipped with anti-explosion safety devices.

Before switching on the product or, in any case, after any cleaning operation, make sure that the device is correctly positioned in its seat. The device is located on the firebox door upper edge.



ZLG Series Pellet Boiler Stove Approved By CE Certificate