Preface

Dear Customer, We would like to thank you for choosing one of our stoves. We strongly recommend you to read this manual before starting installation and use. It contains all necessary information for correct installation, start-up, operation, cleaning, maintenance etc.

A wood pellet stove is an environmentally friendly heating appliance. Using advanced control and wood pellet combustion technology, and accomplished auto ignition, auto feeding and temperature control capability, have low emissions, high combustion valve, clean & safety advantages.

Wood pellets are a fuel made of pressed wood sawdust,
The material do not contain any extraneous substance, such as glue, lacquer or synthetic substance.

〝ECOHOUSE〞 pellet stoves allow you to enjoy a safe, warm & comfortable home living environment.

For the best heating performance, it is recommended that you read this instruction carefully .

Directory

1. Instruction before operation - - - - - - - - - - 1

2. Configuration - - - - - - - - - - - - - - - - - 2-3

3. Installation Instruction - - - - - - - - - - - - 4-5

4. Characteristics of the fuel - - - - - - - - - - - - 5-6

5. Operation Instruction - - - - - - - - - - - - 7-11

6. Trouble shooting - - - - - - - - - - - - - - - - 12

7. Operation safety measures - - - - - - - - - 12-14

8. Maintenance - - - - - - - - - - - - - - - - 14-15

1.Instruction before operation

- Children must not play with the equipment. Cleaning and maintenance intended to be carried out by the user, must not be carried out by unsupervised children.

- Do not open the combustion chamber door when there is a power failure, other abnormal shutdown or the stove is working, to prevent smoke from spreading or other safety risks.

- Do not open the hopper cover for long time to prevent other objects entering the fuel hopper and causing the discharging system working improperly.

- Do not touch the hot surfaces of the stove without protective equipment to avoid getting burned. when it is running, the outer surface reach hot temperature to the touch.

- It is forbidden to make unauthorized change to the stove.

- Routine maintenance need to carried out according to the times and methods set forth.

- Extraordinary maintenance is prompt to carried out when

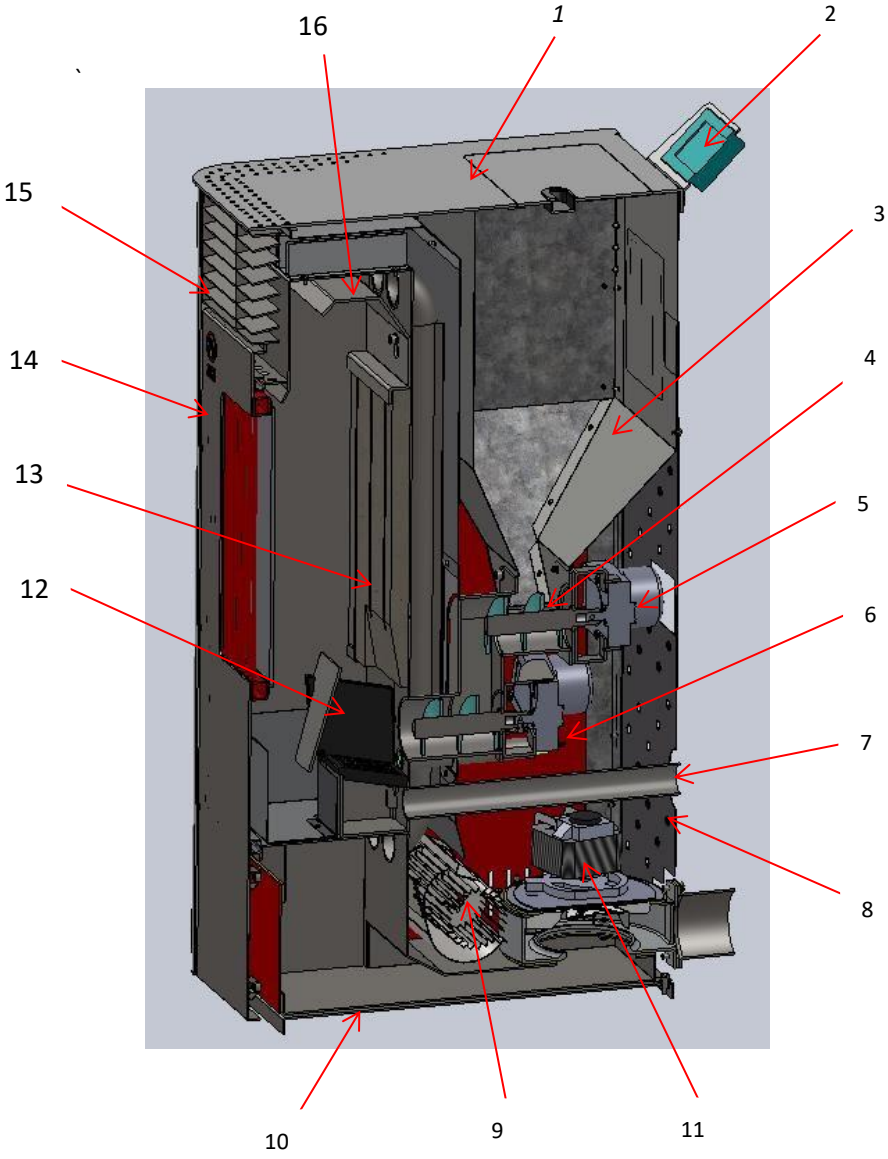
needed.
- Before completing any maintenance operation, please make sure all stove parts and the ashes are completely cold.

- During the first hours of use. The paints used for the stove finish may release an unpleasant odour. You might also smell the typical odour of metal parts subject to high temperature. Make sure sufficient air circulation is guaranteed in the room. These unavoidable inconveniences will disappear after the first hours of operation.

- To reduce your discomfort to a minimum, keep the stove on for a few hours on low power and in the beginning, do not overload it avoiding heating-cooling cycles.

- Keep this manual intact & safe with the stove So that user can consult it easily.

2. Configuration



1. Hopper lid
2. Opera tion dis play panel
3. Hopper
4. Discharging module
5. In-feed gear motor
6. Igniter
7. Air intake
8. Rear cover
9. Co nvection blo wer
10. Bottom base
11. Exhaust motor
12. Fire pot
13. Refractory stone 14. Combustion chamber door
15. Hot air passage
16. Flame trap

3.Installation instructions

The stove must be installed by a qualified technician, who must issue a declaration of conformity of the system to the purchaser, taking full responsibility for stove installation and correct operation.

The stove needs to be connected to a single chimney that

guarantees the draught declared by the Manufacturer and observes the installation regulations that apply to the installation site.

The room where the stove is installed must have an air intake.

The Manufacturer will not be held liable for installation that is not compliant with the laws in force, incorrect air circulation in the rooms and inappropriate use of the appliance. In particular, it is necessary:

- that the appliance be connected to a smoke evacuation system duly sized to guarantee the draught declared by the Manufacturer, that is tight and observes the distances from flammable materials;

- that there is a suitable combustion air intake in compliance with the type of installed product;

- that other installed combustion appliances or devices do not create a vacuum in the room where the stove is installed

- that the safety distances from flammable materials are observed.

Local administrative regulations and particular requirements of the authorities pertaining to the installation

of combustion appliances, the air intake and the smoke evacuation system, may vary based on region or nation. Check with your local authorities if there are stricter laws than set forth herein.

Smoke ducts and fitting

The term smoke duct indicates all ducts that connect the combustion equipment to the chimney. The following requirements need to be applied:

- the horizontal sections must have a minimum slope of 3% upwards;
- the length of the horizontal section must be as minimum as possible, and its projection on the horizontal plane must not exceed 2 metres;
- changes in direction must not have an angle of more than 90° (45° bends are recommended);
- the number of direction changes, including the one necessary for insertion into the chimney, must not exceed 3;
- the cross section must have a constant diameter, the same from where it exits the firebox up to the fitting into the chimney;

- it is forbidden to use flexible metal and fiber cement pipes;

- smoke ducts must not cross rooms where the installation of combustion equipment is prohibited.

  In any case, the smoke ducts must be sealed against combustion products and condensation, as well as insulated if they lead outside of the installation room.

  Creating an initial straight vertical smoke duct section of at least 1 m to ensure proper smoke ejection is mandatory.

  The chimney must be sized so as to guarantee the draught declared by the Manufacturer.

  Do not connect the stove to a collective chimney.
  The chimney must be built applying the following regulations:

- it must be made of materials that are suitable to guarantee resistance against normal mechanical, chemical and thermal stress and be correctly thermally insulated to limit the formation of condensation;

- it must be mainly vertical and not feature any bottlenecks along its entire length;

- it must be correctly spaced with an air gap and insulated from flammable materials;

- there must be a maximum of 2 changes in direction and angles must not exceed 45°;

- the chimney inside the home, however, must be insulated and can be inserted into a skylight shaft, as long as it respects standards regarding placing inside a tube;

- the smoke conduit must be connected to the chimney using a "T" fitting with an inspection collection chamber for combustion residue and especially for collecting condensation.

▲ It is forbidden to use the discharge mounted directly on the wall or directed towards indoor spaces and any other type of discharge that is not set forth by the regulation in force in the country of installation.

Chimney pot

The chimney pot, i.e. the top end of the chimney, must fulfil the following characteristics:

- The cross-section of the smoke outlet must be at least twice the internal cross-section of the chimney;

- It must stop water or snow from getting in;

- Make sure the smoke is taken away even when there is wind (wind resistant chimney pot);

- The outlet height must be outside of the reflux zone (refer to national and local regulations to calculate the reflux zone);
- It must always be built at a distance from antennas or dishes, it must never be used as support.

This type of installation (See Fig.1) requires an insulated chimney pot, even if the entire conduit is installed inside the building. Besides, the structure must be inserted into a properly ventilated skylight shaft.

In the lower part of the chimney pot there is an

The installation activities must be carried out by a technician that is qualified and/or authorized by the Manufacturer. The staff in charge of installation must issue a declaration of conformity of the system to the buyer, whereby they take full responsibility for the final installation and good operation of the installed product.

inspection cover, properly isolated from wind and rain.

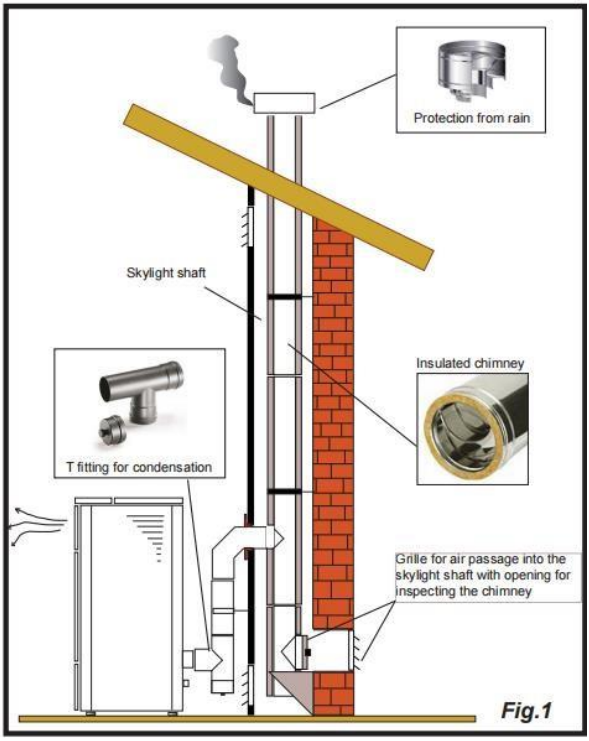
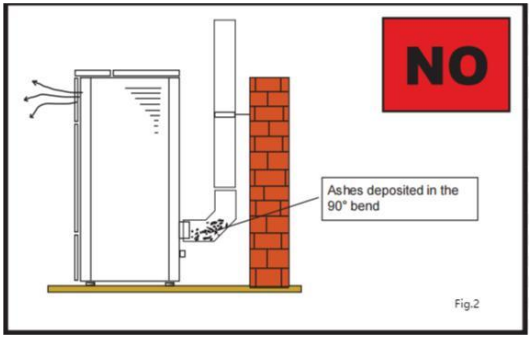
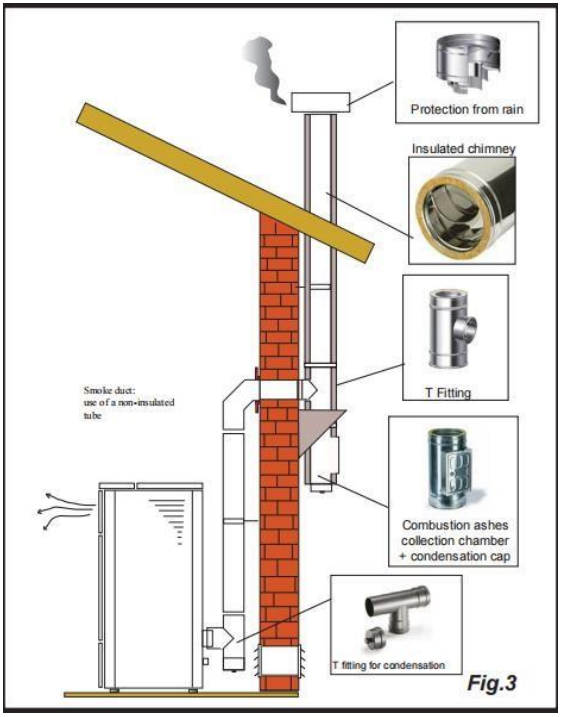


Fig.1



Installation example for a pellet stove

It is prohibited to install a 90° bend for the initial segment, since the ashes would quickly obstruct smoke passage, causing draught problems in the stove. (See Fig. 2)



It is possible to use an existing chimney or a shaft via ducting. For this type of installation the standards on ducted smoke evacuation systems must be complied with. In the lower part of the chimney pot, inside the home, there is a "T" type fitting installed; externally there is another one installed, so that the outside section can be inspected.

It is prohibited to install two 90° bend, since the ashes would quickly obstruct smoke passage, causing draught problems in the stove. (See Fig. 2)

This type of installation (See Fig.4) requires an insulated chimney pot, even if the entire smoke conduit is installed outside the building.

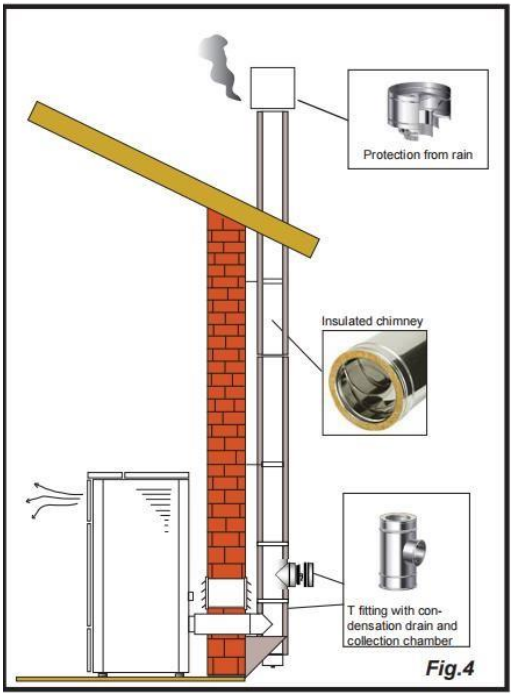


Fig.4

In the lower part of the chimney there is a "T" type fitting installed with inspection cap.

It is prohibited to install a 90° bend for the initial segment, since the ashes would quickly obstruct smoke passage, causing draught problems in the stove. (See Fig.2)

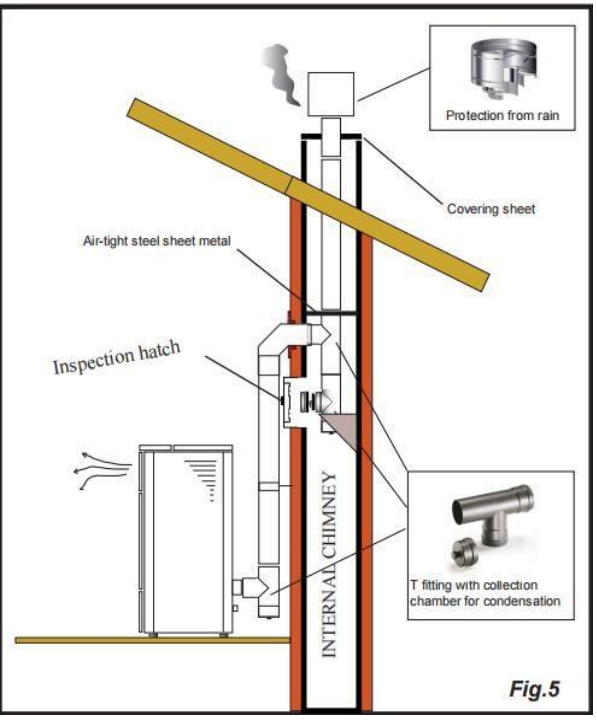


Fig.5

This type of installation (See Fig.5) requires an insulated chimney pot, since the entire smoke conduit is installed inside the building, and the part is located inside a pre-existing chimney pot.

In the lower part of the stove there is a "T" type fitting installed with inspection cap just like for the chimney pot.

It is prohibited to install a 90° bend for the initial segment, since the ashes would quickly obstruct smoke passage, causing draught problems in the stove. (See Fig.2)

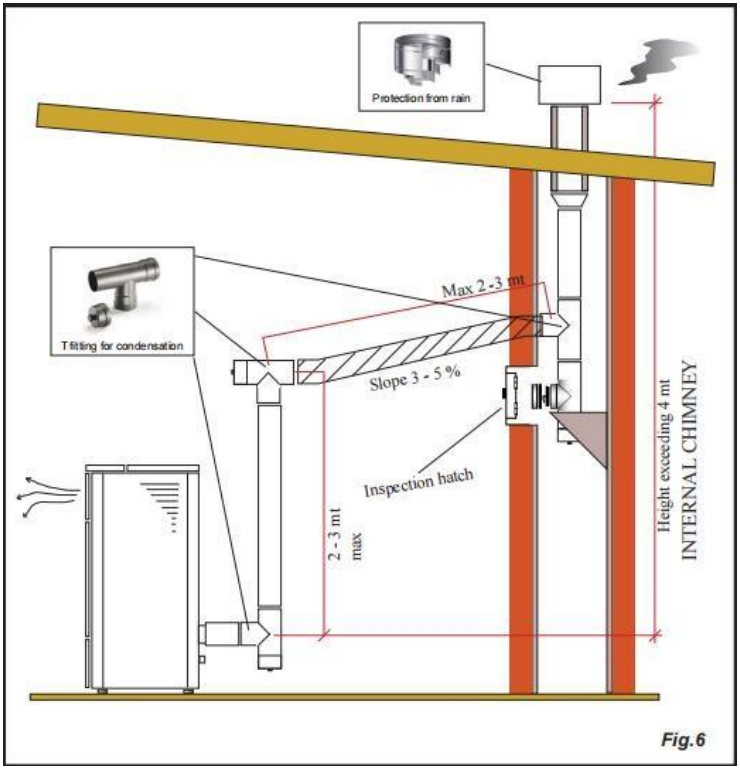


Fig.6

This type of installation (See Fig.6) requires a horizontal section to connect to a pre-existing chimney pot.

Respect the slope indicated in figure, in order to reduce the ashes depositing in the horizontal tube. In the lower part of the chimney pot, there is a "T" type fitting installed with inspection cap, in the same was as the chimney pot opening.

It is prohibited to install a 90° bend for the initial segment, since the ashes would quickly obstruct smoke passage, causing draught problems in the stove. (See Fig.2)

4.Characteristics of the fuel

Wood pellet is a fuel made of pressed wood sawdust, often recovered from processing scraps of carpentries. The material used cannot contain any extraneous substance such as, for example, glue, lacquer or synthetic substances. The sawdust, once it has been dried and cleaned from impurities, is pressed using a die with holes: as a result of high pressure, the sawdust heats up by activating the natural wood binders; this way the pellet maintains its shape even without adding artificial substances. Wood pellet density varies based on the type of wood and can exceed that of natural wood by 1.5 - 2 times. The cylinders have a diameter of 6 mm and a variable length between 10 and 40 mm. Their density is equal to approximately 650 kg/m3. Due to their low water content (< 10%) they have a high energy content. The UNI EN ISO 17225-2: 2014 standard (on which the ENplus certification is based) is the quality of the pellet that defines three classes: A1, A2 and B. We recommends using wood pellet classified A1 and A2 according to the EN ISO 17225-2:2014 standard, or certified DIN PLUS (more restrictive than the A1 class) or ONORM M 7135. Pellet may be light or dark coloured, it is normally bagged into bags that show the name of the producer, the main characteristics and classification according to standards.



Pellets must be transported and stored in a dry area. Upon contact with humidity they swell and become unusable: it is therefore necessary to protect them from humidity, both during transport and during storage.

The quality of the pellet, the stove operating mode and combustion control can affect maintenance activity frequency.

Non-permitted fuels

We recommend not using the following materials as fuel:

- wood
- treated wood (painted, lacquered, glued wood etc.);
- sawdust or chips
- liquid fuel
- coal or other fossil fuels
- plastic and derivatives
- treated paper and cardboard
- waste
- fuels that release toxic or polluting substances

Using these fuels, on top of being forbidden due to the emission of polluting and harmful substances, causes the stove to deteriorate more rapidly and debris to accumulate in the stove and in the smoke evacuation system, thereby reducing performance and safety.

The gases produced by these fuels are dangerous for the environment and for your health!

Fuel that is not compliant with the above can damage the stove.

5. Operation Instruction

Stove start-up must be preceded testing, which includes an operational check of the following elements:

- connection to the smoke evacuation system;
- checking that all materials used to build the smoke duct, chimney and chimney pot are regulation and suitable for use. The testing is positive only when all operational phases have been completed without any anomaly being detected.
- Connect the power cord to the back of the stove.
- Connect the plug of the power cord to the wall socket.

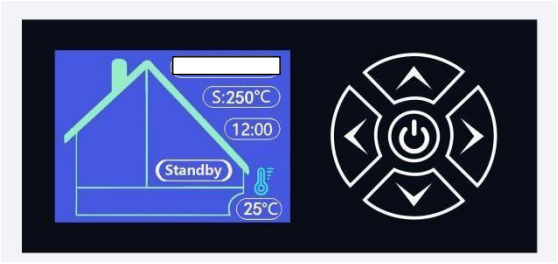
A. Please make sure the following before operation

Combustion chamber

- Fire pot is in place
- Ash-drawer is empty
- Combustion chamber door is closed
- Hopper have enough fuel for operation

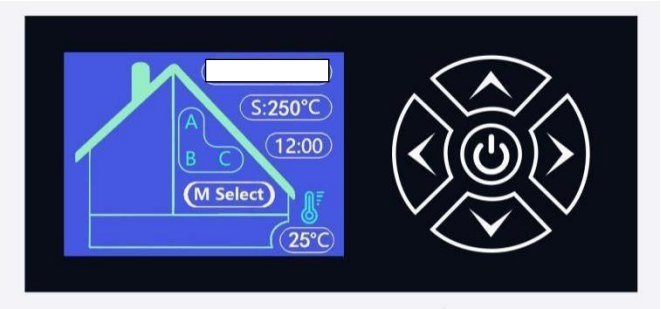
B. Operation

- Power on and enter the standby page. Press the on /off key to enter the ignition phase



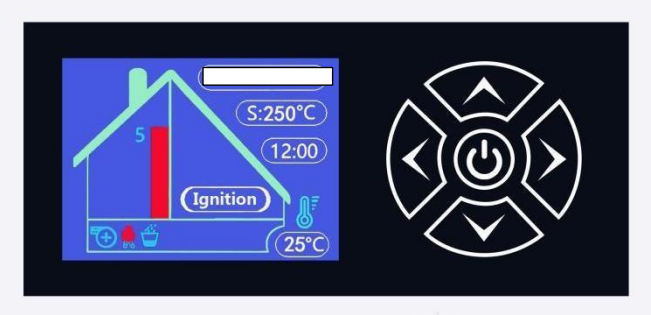
Standby screen

- After entering the ignition phase, press up key or down key to select A/B mode ignition, press on/off key to confirm ignition mode,start lighting (A mode are suitable that the fire pot without any wood pellet, B mode are suitable that the fire pot have wood pellet already)



Selective ignition phase

- After ignition mode selected, start lighting. Stove working automatically when ignition successfully.



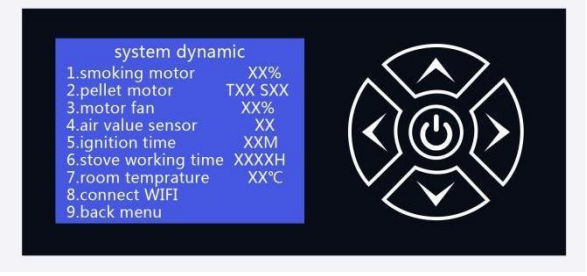
ignition phase

- When entering the working phase, firepower will adjust itself according to the set Temp. also you can press up or down key to

select firepower manually, 1-5 level can be select, level 5 is the Max. power . Pressed right and down key at the same time until the acoustic signal is heard to access the dynamic page， press up and down key to select room temperature, wifi connect or back menu. Press left key for temp. decrease, key for temp. increase when room Temp. was selected. When WiFi connection selected press on/off key to enter connecting phase, initial connection require your cell phone to be paired with the stove system, cell phone can be operate remotely after pairing is successfully compeleted.(optional) need to download phone application provided by manufaturer. Press key return to the main page by selected back menu or 30 sec. inactivity.



Working phase



Dynamic page21

- From the “stand-by” screen, keeping press the on/off key for a few seconds. An acoustic signal will warn you that the appliance has switching off Hot air blower and exhaust fan keep running 20 mins.(default setting) to cooling down the stove. It is important that never turn off the stove by unplugging the plug from the wall socket.



Turning off phase

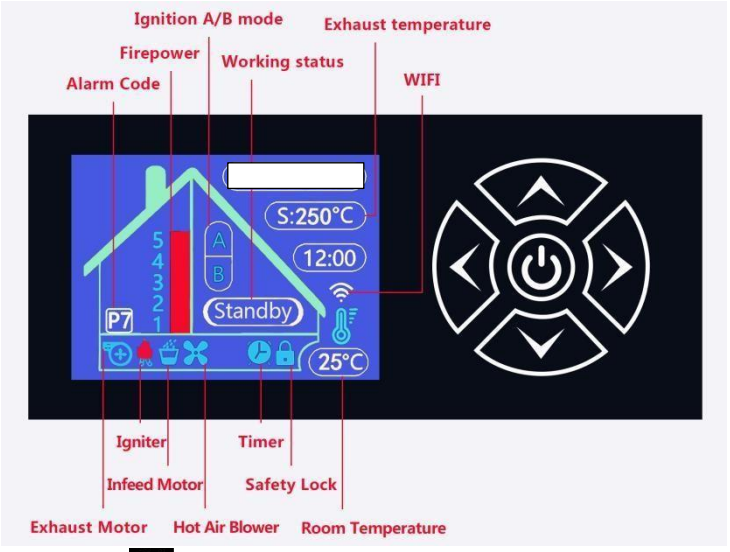
Other setting

Pressed left and down key at the same time until the acoustic signal is heard to access the other setting page，press up and down key to select clock setting Language or back menu.1. Time setting, Press left key for decrease, Right key for increase 2.Language, pressed key to set the display language to English. 3. Refresh system, pressed key to confirm and enter password to refresh the system. 4 Back menu, Press key return to the main page by selected back menu or 30 sec. inactivity.

System refresh need a password to enter and must be set up by a technician that is qualified and/or authorized by the Manufacturer.



Description of the operation panel



***on/off key** : In setting phase， press to confirm / delete, system in working phase ,

press & hold to switching off ； system in standby phase , press to turn on

***up key** : In setting phase, press to scroll up. In working phase, press to increase firepower.

***Down key**  **:** In setting phase, press to scroll down. In working phase, press to decrease firepower.

***Left key** : In setting phase, press to decrease

***Right key** : In setting phase, press to increase

Working status When the device is shut down the status bar displays standby. Switching on will displays ignition/working/or off, it also will display alarm prompt if the stove is working

out of order. **Exhaust fume temperature icon** ： indicate exhaust temperature.

Room temperature icon indicate existing room temperature.

WIFI icon WIFI connected icon active, WIFI disconnected icon out.

Exhaust fan icon Exhaust fan on, icon active. Exhaust fan off, icon out
Igniter icon Igniter working, icon active. Igniter off, icon out

In feed motor icon Motor on, icon active. Motor off icon out

Blower icon Blower on, icon active. Blower off, icon o

Key lock icon Key lock on, icon active. Key lock off, icon out

Alarm code icon When alarm prompt, icon active and reference code indicate

Ignition mode selection icon When stove switched on, icon active.

Firepower level icon: Power level icon indicate during stove is working.

6.Troubleshooting

The stove does not work.

- closely follow the directions in the dedicated chapter of this manual.
- make sure that the air intake duct is not obstructed.
- make sure that the smoke evacuation system is clean and not obstructed.
- make sure the chimney is sized for the stove power.
- make sure that the air intake in the room is clear of any obstructions and that there are no other combustion appliances or extraction hoods that create a vacuum in the room.

Difficult lighting

- closely follow the directions in the dedicated chapter of this manual.
- make sure that the air intake duct is not obstructed.
- make sure that the smoke evacuation system is clean and not obstructed.
- make sure the chimney is sized for the stove power.
- make sure that the air intake in the room is clear of any obstructions and that there are no other combustion appliances or extraction hoods that create a vacuum in the room.

Smoke leakage

- Check the draught of the chimney.
- Check whether the seals on the door and smoke evacuation system are intact.
- Make sure there is no ash obstructing the primary air flow grille.

The glass gets dirty easily.

- Only use recommended fuels.
- Check the draught of the chimney.

Downtime (end of season)

At the end of every season, we recommend vacuuming out any ash and dust that may still be inside. It is advisable to let the pellets burn out in the tank so that the pellet remains, and sawdust can be vacuumed from the bottom and from the screw.

Alarm (Table with reference codes)

Code	TITLE	Reaction	Solution
P0	Low S.T.	System Stop	Press &hold  to clear the fault
P1	Line Fault	System Stop	Contact the Support Service

P2	Low Air	System Stop	Press &hold  to clear the fault
P3	High W/T	System Stop	Press &hold  to clear the fault
P4	High S.T.	System Stop	Adjust the combustion setting the Pellet/ Air value
P5	Com.Fault	System Stop	Contact the Support Service
P6	High W/P	System Stop	Press &hold  to clear the fault
P7	Ign Fault	System Stop	Press &hold  to clear the fault

7.OPERATION SAFETY MEASURES

General safety warnings

Stove installation, system verification, operation verification and initial calibration must be carried out exclusively by qualified and authorized staff.

The stove needs to be connected to a single chimney that guarantees the draught declared by the Manufacturer and observes the distance from flammable materials and installation regulations that apply to the installation site.

The room where the stove is installed must have an air intake.

The stove must not be used as an incinerator or differently from its purpose.

Do not use any fuel other than fire pellet. It is strictly forbidden to use liquid fuels.

It is prohibited to use the stove with the door or ash drawer open or the glass broken.

Do not touch the hot surfaces of the stove without suitable protective equipment, to avoid getting burned. When it is running, the outer surfaces reach hot temperatures to the touch.

It is forbidden to make unauthorized changes to the stove.

Before using the stove it is necessary to know the position and function of the controls.

If the chimney catches fire you must call the fire brigade.

Only use original spare parts. Any tampering and/or replacements that have not been authorized by Manufacturer can pose a danger to the user's safety.

Routine maintenance is carried out according to the times and methods set forth;extraordinary maintenance is promptly carried out when needed; safety devices are not removed and/or bypassed.

Children must not play with the equipment. Cleaning and maintenance intended to be carried out by the user must not be carried out by unsupervised children.

Keep objects that are not heat and/or flame-resistant at a safe distance only and exclusively load the stove with pellet with the characteristics described herein;connect the stove to a regulation chimney;

Connect the stove to the extraction system by a pipe and the room where the stove is installed must have an air intake.

The air vent must be installed in such a way that it can not be blocked.

The maintenance operations must be carried out when the stove is cold and with the electrical power supply disconnected.

Do not close the combustion air and smoke outlet openings, whatsoever;
•Use the stove to dry laundry;

•replace or change some of the stove parts.

Do not connect the stove to a collective chimney.

8.MAINTENANCE

Safety warnings for maintenance

- ✧ **Maintenance of the stove must be performed at least once a year and should be planned in advance with the Technical Assistance Service.**
- ✧ **In some conditions, such as turning the stove on and off or inappropriate use, the combustion products can contain small soot particles that build up in the smoke evacuation system. This can reduce the cross-section of the smoke duct and pose a fire risk. The smoke evacuation system must be inspected and cleaned at least once a year.**
- ✧ **The maintenance operations must be carried out when the stove is cold and with the electrical power supply disconnected.**

Before completing any maintenance operation, adopt the following precautions:

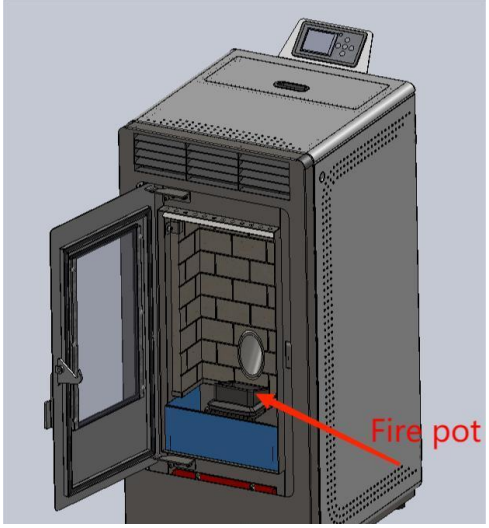
- Make sure that all stove parts are cold.
- Make sure that the ashes are completely cold.
- Always operate with equipment that is appropriate for maintenance.
- When maintenance is finished, re-install all of the disassembled parts before restarting operation.

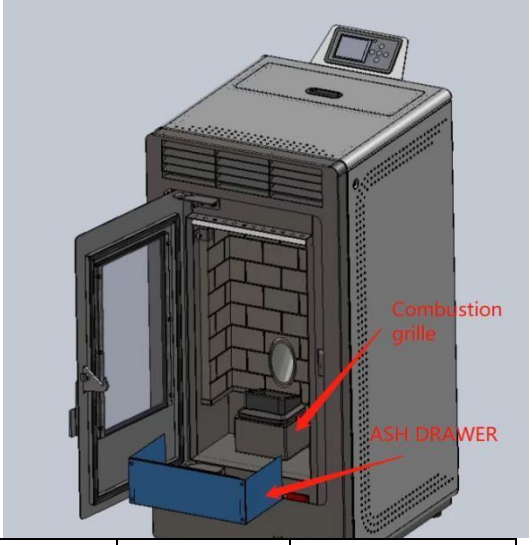
Important

The quality of the pellet, the stove operating mode and combustion control can affect maintenance activity frequency.

Perform the cleaning operations so as to guarantee correct stove operation. The table below lists the necessary cleaning operations required for correct stove operation.

PARTS/ FREQUENCY	2-3DAYS	30 DAYS	60-90 DAYS
Combustion chamber		▲	





Combustion grille	▲		
Ash drawer	▲		
Glass	▲		
Extraction duct			▲

Glass cleaning

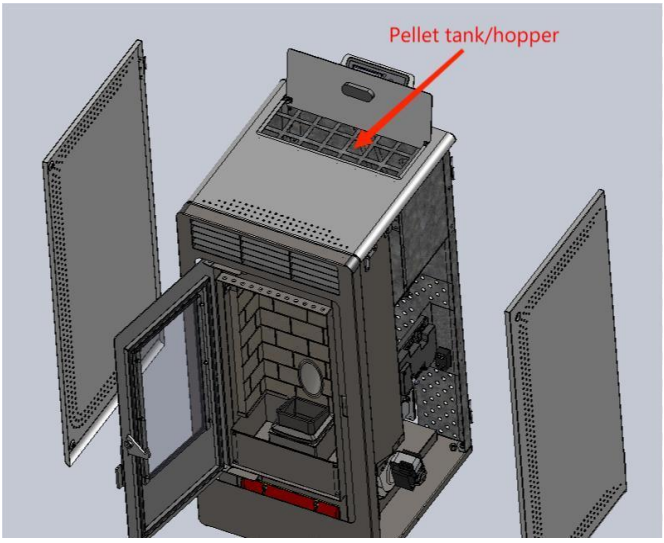
With a cold stove, clean the glass with a cloth and glass cleaner. Note: there are stove glass cleaning products available on the market.

Cleaning the ash drawer

The ash drawer must be cleaned every 3-5 days, (depending on the amount of time the stove is used and what type of pellet is used). To clean the ash drawer, proceed as follows:

Cleaning the pellet tank

To clean the pellet tank, proceed as follows: Periodically remove the wood sawdust accumulated on the bottom of the tank, using a vacuum cleaner



Extraordinary maintenance

Extraordinary maintenance activities must be carried out by a technician that is qualified and/or authorized by the Manufacturer. Do not wait for components to be deteriorated by use before proceeding with their replacement. Replace a worn component

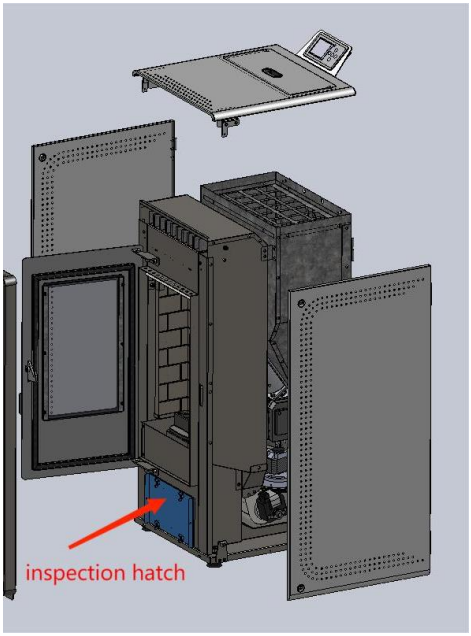
before it is completely broken to prevent any damage caused by sudden component breakage.

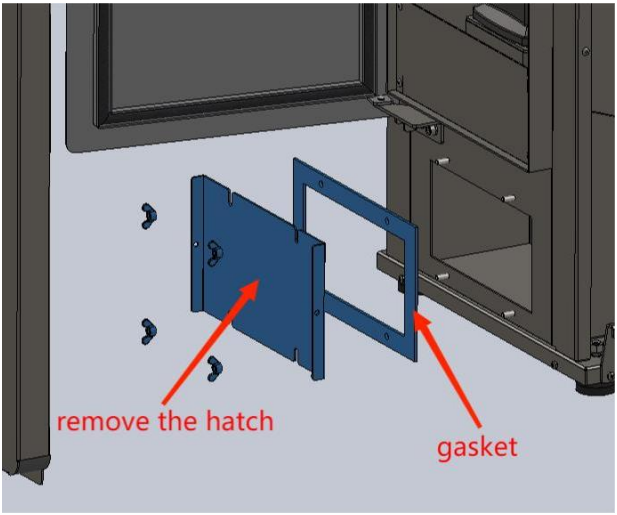
PARTS / FREQUENCY	60- 90 DAYS	1 SEASON
Deep combustion chamber cleaning	▲	
Door gasket		▲
Chimney		▲

Smoke conduit cleaning

Open the hatches

Clean the ashes, eventually use a brush or similar and reassemble everything. Note: the hatches are equipped with gaskets, therefore, before reassembling them, make sure that the gaskets are not worn This operation must be carried out by a technician that is qualified and/or authorized by the Manufacturer.


inspection hatch



Deep combustion chamber cleaning

To clean the combustion chamber, proceed as follows:

This operation must be carried out by a technician that is qualified and/or authorized by the Manufacturer.

Others

Cleaning of the fire pot – daily

Make sure that the air vents are not blocked with ashes or clinker.

Remove
The clinker using the supplied brush and vacuum the fire pot. The fire pot can be easily cleaned inside the stove. After removing the pot the area underneath Can be vacuum-cleaned.

Clean the igniter regularly
Only clean when cold, when embers are extinguisher. Do not damage the igniter.When cleaning with the brush, vacuum out the pipe of the ignition.

Checking door seal (annually)
The condition of the seals at doors and glass should be checked at least once a year. Repair or replace seals depending on condition.

The frequency with which the stove requires cleaning, and the maintenance intervals depend on the fuel you use
High moisture content, ashes, dust chips may more than double the maintenance required. We would like to point out

again that only tested and recommended pellets may be used as fuel.